Draft Candidate Conservation Agreement with Assurances for Fisher for the Stirling Management Area

between

Sierra Pacific Industries

and

U.S. Fish and Wildlife Service

This Candidate Conservation Agreement with Assurances (CCAA), effective and binding on the date of the last signature below, is between Sierra Pacific Industries (SPI) (Applicant) and the U.S. Fish and Wildlife Service (FWS), referred to as "Parties." The Administrators of this CCAA are:

Sierra Pacific Industries designates the following as the Agreement Administrator;

Sierra Pacific Industries Corporate Office P.O. Box 496014 Redding, CA 96049-6014 19798 Riverside Ave. Anderson, CA 96007 (530) 378-8000 (Phone) (530) 378-8139 (Fax)

U. S. Fish and Wildlife Service designates the following as the Agreement Administrator; Yreka Fish and Wildlife Office 1829 South Oregon Street Yreka, CA 96097 (530) 842-5763 (Phone) (530) 842-4517 (Fax)

Tracking Number:

I. <u>Authorities and Purpose</u>

Sections 2, 7, and 10 of the Endangered Species Act of 1973, as amended (ESA), and the Fish and Wildlife Coordination Act, allow the FWS to enter into this CCAA. Section 2 of the ESA states that encouraging interested parties, through Federal financial assistance and a system of incentives, to develop and maintain conservation programs is a key to safeguarding the Nation's heritage in fish, wildlife, and plants. Section 7 of the ESA requires the FWS to review programs that it administers and to utilize such programs in furtherance of the purposes of the ESA. By entering into this CCAA, the FWS is utilizing its Candidate Conservation Programs to further the conservation of the Nation's fish, wildlife, and plants. Section 10(a) of the ESA authorizes the issuance of permits to "enhance the survival" of a listed species. The FWS' implementing regulations at 50 CFR 17.22 (d) and 17.32(2) provide the application requirements and issuance criteria for CCAAs.

SPI enters into this CCAA under the inherent authority of the corporate management of Sierra Pacific Industries.

The purpose of this CCAA is for SPI to implement conservation measures for fisher (*Martes pennanti*) in California. The conservation measure consists of management of fisher denning and resting habitat on SPI lands in the Sierra Nevada. This CCAA will meet the conservation goals of the FWS in that it provides incentive for SPI to implement habitat conservation measures for fishers. In addition this CCAA provides incentive to SPI to accept reintroduced fisher onto enrolled lands that historically contained fisher, but currently do not. If the California Department of Fish and Game (CDFG) should implement a reintroduction action with SPI's approval of the plan, this CCAA will provide the opportunity to evaluate future larger scale reintroduction efforts based on monitoring mortality, movement patterns, and habitat use of released fisher. If reintroduction should occur, this CCAA directly benefits the status of the fisher in currently unoccupied habitat, and provides SPI regulatory certainty concerning land use restrictions that might otherwise apply should fisher become listed under the ESA.

II. <u>Responsibilities of the Parties</u>

SPI will accomplish the objective of this CCAA through programs of habitat management and development of fisher denning habitat on the enrolled lands, totaling approximately 160,000 acres (Figure 1, Appendix A). Monitoring of the habitat conservation measure (e.g., increase in acreage of fisher resting and denning habitat) will be reported every 5 years. Monitoring for colonizing fisher will occur at a minimum every 5 years. Additionally, if fisher colonize the enrolled lands, or are reintroduced onto enrolled lands, changes to habitat will be reported on an annual basis (see reporting section of this document). Monitoring of habitat and habitat elements and reintroduced fisher will be agreed upon by CDFG, SPI, and FWS prior to a reintroduction.

Upon approval of the CCAA, the FWS will issue SPI a section 10(a)(1)(A) permit, in accordance with 50 CFR 17.22 (a)/17.32(d), that would provide SPI with authorization for incidental take of



Figure 1. Map of Enrolled Lands

fisher on the enrolled lands and provide regulatory assurances, consistent with 50 CFR 17.22 (a)(5)/17.32(d)(5), should the species be listed under the ESA in the future. The permit would authorize incidental take of fisher consistent and associated with this CCAA, resulting from the otherwise lawful activities, including forest management activities, on the SPI lands enrolled in this agreement. Covered forest management activities include felling and bucking timber, yarding timber, loading and landing operations, salvage of timber, transport of timber and rock, road construction and maintenance, rock pit construction and use, site preparation, tree planting, vegetation control, pre-commercial thinning and pruning, minor forest products, grazing, and fire suppression. Covered activities may be conducted by SPI employees, contractors, agents, or other assigns. The duration of the Agreement is 20 years.

Conservation Opportunities on Private Lands

Opportunities exist on private lands to enhance the ability to support fisher reintroduction and management of fisher habitat that are more limited on public lands. These opportunities and advantages indicate that conservation activities for the fisher on private lands have an important role in aiding the CDFG and FWS conservation efforts for the fisher in California. Some examples of these opportunities include the following:

1. Private landowners can actively manage forest stands and landscapes to allow for the design and implementation of studies to determine how fishers respond to various management practices;

2. Reintroduction and other conservation methods can be implemented on private lands in a relatively short time frame, potentially providing invaluable application of a particular conservation technique;

3. The maintenance and growth of fisher habitat on private lands can substantially improve the baseline condition for fishers. Private lands comprise an important low-elevation component of the fisher's former range in the central and northern Sierra Mountains in California; and

4. Private land managers can efficiently and effectively control access to their lands, reducing non-habitat based potential threats on fisher.

III. Enrolled Lands

The enrolled properties are lands owned or managed by SPI in Butte, Plumas, and Tehama Counties in California, and are located in the Stirling Management Area. The enrolled lands are industrial forestlands in California that are characterized by a mix of primarily second growth pine and mixed conifer forests. Fishers are believed to have been extirpated from these lands (Zielinski et al. 2005). The enrolled lands in Butte, Plumas, and Tehama Counties are primarily large tracts of private holdings. The enrolled lands are the largest unoccupied contiguous SPI tract within the historic range of fishers. These lands were chosen for the CCAA because the area has been identified by CDFG as a likely location for an experimental introduction, should it occur.

IV. <u>Conservation Measure</u>

The objective of this CCAA is to increase the capability of the enrolled lands to support fisher. SPI commits to management under the 20-year period of this CCAA that will move the enrolled SPI forestlands to a condition that supports more resting/denning habitat for fishers than that which exists today. In order to achieve this conservation measure SPI will utilize their forest management plan, as embodied in SPI's Northern District Option A demonstration of Maximum Sustained Production of High Quality Timber Products (SPI Northern District Option A, 2002) and other management policies. Maintaining and increasing the habitat capability of fisher habitat in unoccupied areas is important to allow for future planned reintroduction efforts or colonization by fisher through natural dispersal events. Resting/denning habitat has been identified as one of the likely factors limiting fisher populations. Therefore, the conservation measure in this CCAA specifically address fisher resting/denning habitat. Currently the enrolled lands contain approximately 23% fisher resting/denning habitat. During the 20-year period of this CCAA, the enrolled lands will maintain a minimum level of 20% of fisher resting/denning habitat at any given time period, and by the end of the permit period fisher resting/denning habitat will increase to approximately 33%. This means that, over the next 20 years, 100% of the resting/denning habitat committed to in this CCAA will be provided by timber stands that currently exist on the enrolled lands today.

V. Expected Benefits

Implementation of this CCAA is expected to maintain and increase fisher resting/denning habitat on the enrolled lands.

In the future, if fisher re-occupy their historic range in the Sierra Nevada Mountains, the enrolled lands are expected to provide support for fisher populations.

An additional purpose of this CCAA is to provide incentive for the Applicant to accept translocated fisher onto the enrolled lands that historically contained fisher, but currently do not.

This CCAA may encourage other necessary properties to enter into conservation agreements with the Service that will conserve fishers and their habitat.

VI. Background of Existing Distribution of Fisher in Western North America

Historically, the west coast population of fishers extended south from the Cascades, Hozameen, and Okanagan Ranges in British Columbia, through the Cascades and the coast ranges of Washington and Oregon, the north coast ranges in California, Klamath-Siskiyou Mountains in Oregon and California, and the Sierra Nevada in California (Powell and Zielinski 1994). Fishers currently occur in portions of the Cascade, Hozameen, and Okanagan Ranges in British Columbia; the descendants of a reintroduced population of fishers in the southern Cascade Range in Oregon (Aubry and Lewis 2003); the Klamath-Siskiyou Mountains of northern California and southern Oregon; the north coast ranges of California; and isolated populations occurring in the southern Sierra Nevada in California (Zielinski et al. 1995). In California, fishers historically occurred in portions of seven ecological subregion sections: Northern California Coast, Klamath

Mountains, Northern California Coast Ranges, Northern California Interior Coast Ranges, Southern Cascades, Sierra Nevada, and Sierra Nevada Foothills (Grinnell et al. 1937, McNab and Avers 1994).

The FWS, in response to a petition to list the west coast population of fisher (USDI Fish and Wildlife Service 2004), determined that unregulated trapping throughout North America for furs beginning in the 1700s, predator bounties that began in the 1800s and continued until 1960, predator and animal damage control programs operating until the 1970s, and the loss and fragmentation of habitat from urban development, forest management activities, and road construction all resulted in the decline in distribution and abundance of fisher (Dixon 1925, McKelvey and Johnston 1992, Powell 1993, Lewis and Zielinski 1996). Fisher harvests occurred in California from 1919 to 1946 (mean harvest = 18.5/year; range: 1-102), and declined steadily until the trapping season was closed in 1946 (Lewis and Zielinski 1996). The fisher season has remained closed in California, but despite protection from commercial harvest, the current fisher range is greatly reduced as compared to range described by Grinnell et al. (1937) (Zielinski et al. 2005).

The northwestern California-southwestern Oregon population now occurs in the southern portions of Curry, Josephine, and Jackson Counties in southwestern Oregon and in Del Norte, Siskiyou, Humboldt, Trinity, western Shasta, and northern Mendocino Counties in northwestern California (Zielinski et al. 1995, Slauson and Zielinski 2007, Yaeger, pers. comm., Aubry forest carnivore database). Contemporary surveys and recent field studies suggest that the above population is the largest in the western United States, though formal estimates of the number of individuals have not been reported (Powell and Zielinski 1994). The southernmost fisher population occurs in the southern Sierra Nevada where the range extends from Yosemite National Park south to northern Kern County (Zielinski et al. 2005). This population no longer extends to the northern Sierra Nevada and California Cascades as it once did, and is ~400 km from the northwestern California-southwestern Oregon population (Zielinski et al. 2005). Lamberson et al. (2000) for modeling purposes estimated the number of fisher in this population at 100-500 individuals.

Historical information regarding the distribution of fishers is limited primarily to the work of Grinnell et al. (1937). Grinnell et al. (1937) provided a general account of distribution of fisher in California, but did not provide a detailed assessment of habitat associations; their reports of habitat use were largely anecdotal and generally made with reference to observations of foraging fishers. Grinnell et al. (1937) states that fisher "belongs to middle altitudes, 2000 ft (near sea level occasionally) to 5000 ft" at the northern part of their range; in the Mount Whitney region they occur "ordinarily 4000 ft to 8000 ft;" and vagrant individuals occur "as high as 10,900 ft near Mount Lyell." The distribution of trapping records suggests fishers occurred in many forest types not specifically mentioned in the species account (Grinnell et al. 1937).

VII. <u>Habitat</u>

The recovery and long-term survival of populations of fishers in California is dependent on habitat on public and private lands. Within the fisher's range in California, there are many important areas that are currently or may potentially be used by fishers occurring on privately

owned lands. SPI and the FWS recognize the importance of conservation efforts on non-Federal lands as being crucial to the future connectivity of fisher populations in California.

Information regarding the life history attributes of fishers in general, and the status of habitat and potential threats to fishers in the west coast distinct population segment can be found in the FWS' 12-month finding (USDI Fish and Wildlife Service 2004). However, the information in the 2004 12-month finding is not specific to the conditions, current and projected, on the enrolled lands. Findings and preliminary analysis from recent, post 2004, fisher habitat studies that are more applicable to the enrolled lands are discussed below.

General Habitat Description

Based on many studies of fisher habitat in the west coast population, the important components of fisher habitat appear to be; species composition, site productivity, management history, and the ecological and disturbance processes of the forest. Fisher populations need landscapes that provide protective cover, adequate prey, and tree cavities for rest and reproductive den sites.

Fishers do not appear to rely on a specific forest type in any given area. The most consistent predictors of fisher occurrence at large spatial scales appear to be forested habitat and relatively high amounts of cover (Carroll 1997, Dark 1997, Weir and Harestad 1997) rather than any particular type of forest community. While at smaller spatial scales, several studies have documented fishers using or selecting particular forest types (Buck et al. 1983, Dark 1997, Klug 1997, Self and Kerns 2001) the patterns of use at these spatial scales appear to be related to various local conditions (e.g., composition and adjacency of habitat types, forest age, disturbance history, etc.). These local conditions likely influence the abundance of suitable den structures critical for reproduction, suitable resting sites, and diversity or abundance of prey populations rather than characteristics that are inherently unique to a particular forest type.

At the largest scale, large tracts of forest with denser canopy cover and productive prey habitat are important for population persistence. Across the west coast populations, fishers generally have a positive association with increasing canopy at all spatial scales investigated (Carroll et al. 1999, Slauson et al. 2001, Weir and Harestad 2003, Yaeger 2005, Aubry and Raley 2006). It has been observed that often in stands that are used for resting, where the values of canopy cover may be low, fishers may be able to compensate by using microsites within stands with higher than average stand values of canopy closure (Self and Kerns 2001). Self and Kerns (2001) also suggest that a dense shrub layer, which would provide a high level of overhead cover for a fisher traveling on the ground, may contribute to the overall canopy layer in relatively sparse forested areas for activities such as traveling or foraging.

Hardwood trees are important but their value varies by ecological region. Hardwood mast production has been indicated as an important contributor to fisher prey density and thus potentially indicative of high quality fisher habitat (Zielinski et al. 2004b, Yaeger 2005). However, large parts of occupied fisher range do not contain mast producing hardwoods; thus they are not requisite for sustainable fisher populations in such areas. Where mast production by hardwoods is substantive, (Zielinski et al. 2004b, Yaeger 2005), small fisher home ranges sizes and/or high densities indicate that this can be an important contributor to fisher habitat and

productive fisher populations. Fisher commonly use cavities in hardwood trees for denning and resting (Zielinski et al. 2004a, Yaeger 2005, Higley and Matthews 2006, Self and Callas 2006). It is unclear whether these differences in use patterns result from fisher resource selection or merely reflect the relative prevalence of tree species with cavities within each study area.

Within forests, trees with cavities and other atypical microsite structures are necessary for denning and resting. In areas where both hardwoods and conifers occur, hardwoods are typically used for denning more frequently than conifers, presumably because hardwoods develop cavities more readily than conifers. Although live trees and snags of both hardwoods and conifers are used, most dens in hardwoods are in live trees while a high proportion of dens in conifers are snags (Aubry and Raley 2006, Higley and Matthews 2006, Self and Callas 2006). Structures used for both denning and resting sites are typically more abundant (although low in density) in habitats with characteristics of older forests (large trees, large snags, and logs and associated pests and pathogens). The ecological processes typically associated with older forests such as disease, decay, tree mortality, and mechanical damage resulting in snags require time to develop larger diameter trees and microsites with the specific structural elements fisher use (Zielinski et al. 2004a, Yaeger 2005, Aubry and Raley 2006). These ecological processes are specific to tree species, disturbance history, overall stand conditions, and other environmental factors.

Fisher use of and selection for structural elements found in older forests has likely led to the belief that fisher require complex forest ecosystems and are dependent upon old growth forest in the western U.S. Studies in British Columbia (Weir and Harestad 1997, Davis 2003, Weir and Corbould 2006) and California (Klug 1997, Self and Callas 2006) have shown that fisher persist in areas with little old growth habitat. The perception of fisher being dependent on old growth forests stems from the fact that fisher use structural elements for denning and resting which, unless provided for by management, are often rare or absent in heavily managed landscapes.

Research on fisher resting and denning habitat has occurred on both national forest and private lands in California. Tables 1 and 2 describe rest and den sites (including the den, rest tree, and nearby stand characteristics).

Table 1. Values associated with resting locations of radio-collared fisher at various study areas in California and Southern Oregon.

Study Area	Source	n indiv fisher	Rest Tree Type	n structure	Average DBH of Rest Tree (in)	StDev of Rest Structure (in)	Average QMD ^a of Rest Site (in)	StDev of Rest Site QMD (in)
			Hardwood	250 ^b	25.1m:24.6f			
Southern Oregon Cascades	Aubry and Raley 2006	19	Conifer	239	23.111.54.01			
	5		Snag	54 ^c	47.6m:44.9f			
			Hardwood	32	34.5	11.9		
North Coast (Six	Zielinski et	22	Conifer	64	49.1	14.9		
Rivers)	al. 2004a		Snag	50 ^d	46.8	12.9		
			Log	10	37.4	17.4		
			Hardwood	86	29.6	10.2		
			Conifer	52	43.1	15.9	14.4	
Coastal Klamath Province (Hoopa)	Yaeger 2005	19	Hardwood snag	5	28.7	9.0		5.5
			Conifer snag	7	45.1	19.3		
			Conifer Log	5	36.6	2.6		
	Yaeger 2005	19	Hardwood	26	28.3	10.7		
Interior Klamath			Conifer	154	38.8	16.1		
Province (Trinity Lake)			Hardwood snag	4	26.6	6.6		
			Conifer snag	18	39.5	11.9		
			Conifer Log	9	92.3	19.8		
Interior Klamath	Selfners		Hardwood	2	29.0	11.7		
Province	comm.	3	Conifer	0	-		11.6	
(Weaverville)			Snag	1	47.5	11.4		
Interior Klamath	Self and	2	Tree	27	30	12	12.2	2.0
Creek)	Kerns 2001	3	Snag	5	42		13.5	3.0
			Log	2	38			
			Hardwood	146	25.6	8.4		
Southern Sierra	Zielinski et	23	Conifer	/0	43.4	14.9		
Nevada	al. 2004a	23	Snag	93 ^c	47.4	20.0		
			Log	33	51.8	36.1		
Southern Sierra	(Mazzoni	9	All Live	53	37.5	11.0		
Nevada	2002)		All Snag	9	40	17.5		

^a - QMD calculations do not include rest structure
 ^b - less than 2% hardwood
 ^c - n = 3 hardwoods
 ^d - conifer only
 ^e - giant sequoias removed from calculations of dbh

			/			0		
Study Area	Source	n indiv fisher	Den Tree Type	n structure	Average DBH of Den Tree (in)	StDev of Den Structure (in)	Average QMD ^a of Den Site (in)	StDev of Den Site QMD (in)
Southern Oregon	Aubry and	6	Live tree	7	36.2			
Cascades (natal dens)	Raley 2006	6	Snag	6	35.0			
Southern			Live tree	8	38.2			
Oregon Cascades	Aubry and Raley 2006	6	Snag	5	51.9			
(maternal dens)	-		Log	5	41.3			
North Coast	Truex et al.	4	Hardwood	1	20.9			
(Six Rivers)	1998	4	Conifer	4	46.0			
Coastal			Hardwood snag	1	24			
Klamath Province	Yaeger 2005	5	Hardwood	8	25.1	5.6	13.0	5.1
(Hoopa)			Conifer Snag	1	37.9			
Coastal Klamath	Higley and	16	Live tree	37	10.0			
Province (Hoopa)	2006	16	Snags	10	40.9			
Interior Klamath	Yaeger		Hardwood	5	28.2	13.8		
Province (Trinity Lake)	2005		Conifer Snag	1	30.7			
Interior Klamath	Self and		Hardwood	8	29.2	12.6	11.1	1.2
Province (Weaverville)	Callas 2006	2	Conifer snag	1	67.7		11.6	
Southern Sierra	Truex et al.	4	Hardwood	4	26.3			
Nevada 1998	4	Conifer	3	49.3				

Table 2. Values associated with reproductive den (natal and maternal combined) locations of radio-collared fisher at various study areas in California and Southern Oregon.

^a - QMD calculations do not include den structure.

The data in Tables 1 and 2 provide insight into the range of characteristics of fisher rest and den sites. These data serve as the foundation for the use of Lifeform 4 as a conservation measure on the enrolled lands.

Habitat Conditions on the Enrolled Lands

Sierra Pacific Industries manages habitat for over 240 species of wildlife across their ownership. Habitat for these species are grouped into Lifeforms (stand structural categories) based upon the breeding and feeding habitat needs of each species. Lifeform 4, which SPI uses to describe fisher resting/denning habitat, is identified as a "large tree dense forest" condition. The structural requirements for this Lifeform were developed from the data collected from a variety of species associated with Lifeform 4, including fisher rest and den sites on SPI managed forestlands.

Lifeform 4 is described as stands with a quadratic mean diameter (QMD) of 13 inches or greater, a canopy closure of 60% or greater, and a minimum average of 9 trees per acre at least 22 inches diameter at breast height (dbh). In even-aged stands the definition of Lifeform 4 is a stand with a canopy closure of 60% or greater and a minimum average of 20 trees per acre at least 22 inches dbh. Stands meeting all three of the above structure conditions combined with one or more potential fisher denning structures (conifer tree \geq 30 inches dbh or hardwood tree \geq 22 inches dbh, with the potential of containing a cavity, basal hollow or other suitable defect) are used to identify Lifeform 4 stands.

Lifeform 4 (the large tree dense forest condition) is the stand definition used in describing the current and future amounts of fisher resting/denning habitat on SPI land throughout the range of the fisher in California. To best describe Lifeform 4, and ensure its benefit to a variety of wildlife species, fisher data (from rest and den sites) were combined with similar data from other species that are associated with the large tree, dense forest condition. Specifically, data on nest sites located on SPI land for the northern goshawk and spotted owl (both "northern" and "California"), rest and den sites for the American marten, and maternal day roost sites for the silver-haired bat were used in this analysis. Over 250 rest, den, nest, and maternal roost sites located on SPI land comprise this data set. The parameters developed from this data set were used to describe the "large tree dense forest" Lifeform.

The Lifeform 4 habitat description for fisher resting/denning on SPI land is used to determine the percent of land that is suitable for resting/denning by fisher. The Lifeform 4 description is applied to SPI forest inventory data to determine current amounts of Lifeform 4 stands. This same inventory data then can be applied to growth models to estimate future amounts of Lifeform 4 habitat on SPI lands by applying that description to SPI's forest inventory. In addition, using this resting/denning habitat description coupled with SPI's proposed management and appropriate forest growth models, we can predict the trend in the amount of resting/denning fisher habitat that will occur on the enrolled lands in the future. SPI provides this projection based on compliance with the current California Forest Practice Act's Maximum Sustained Production regulation (14 CCR 913.11, 933.11 and 953.11) and other state and federal laws. This inventory and projection provides an accurate assessment of SPI's current and future ability to provide resting/denning habitat for the fisher on its ownership, and specifically on the enrolled lands.

SPI currently manages about 1,218,000 acres of forestland within the range of the fisher in California. The lands predominantly lie at lower elevations with over 90% distributed below

6,000 feet. The portion of the SPI ownership enrolled to meet the Conservation Measure is located in Butte, Tehama, and Plumas Counties and comprises approximately 160,000 acres. Currently, the enrolled lands contain approximately 23% fisher resting/denning habitat (Lifeform 4).

VIII. Threats Addressed by this CCAA

Current information indicates that the greatest long-term risk to fishers in the western United States is likely extinction due to isolation of small populations (Heinemeyer and Jones 1994). Truex et al. (1998) conclude: "Recolonization of the central and northern Sierra Nevada may be the only way to prevent fisher extinction in the isolated southern Sierra Nevada population."

Habitat throughout the fisher's range has historically been lost or fragmented by logging, fire, farming, and human development (Douglas and Strickland 1987, Powell 1993, Powell and Zielinski 1994). The extent of past timber harvest is one of the primary causes of fisher decline across the United States (Powell 1993), and has been suggested as one of the main reasons fishers have not recovered in Washington, Oregon, and portions of California (Aubry and Houston 1992, Powell and Zielinski 1994, Lewis and Stinson 1998, Truex et al. 1998).

The impact of past timber harvest operations on fishers specifically, or the degree to which fisher would be affected by current timber harvest operations, is difficult to quantify. Fishers exist in areas where timber is actively managed (Klug 1997, Self and Kerns 2001, Yaeger 2005, Self and Callas 2006), and additional research is needed to better understand this interaction. On the enrolled lands, the primary risks to existing and future fisher habitat focus on the loss of resting and denning habitat and structures. Emphasis on conifer production on other forest lands within the DPS in the past has often led to silvicultural treatments, which simplify the forest by permanently removing large trees, snags and down wood, and the exclusion of undesirable timber production species of both hardwoods and conifers. Forest practices that do not provide forest structural elements important to fisher, when implemented successfully over large areas, alter the ecological function of the landscape and its ability to sustain fishers may be compromised. Threats exist to a landscape's ability to support fishers if current forest management activities substantially reduce the amount or quality of resting and denning habitat. However, on the enrolled lands as discussed below, SPI proposes to increase the amount of resting and denning habitat during the 20-year time period of this agreement. Most importantly, because the enrolled lands are not currently occupied by fisher, this agreement provides an opportunity to provide for habitat conditions that may contribute to suitability for fisher habitation and to measure and better understand the interaction between timber management and fisher ecology, if a reintroduction should occur.

IX. Management Practices and Policies on Enrolled Lands

SPI implements a suite of management practices and policies that are not included as conservation measures within this CCAA, but are expected to benefit fisher, should they reoccupy the enrolled lands. These management practices and policies will provide a range of seral stages across the enrolled lands, which will provide an increasing trend in additional support for use by fisher, during but primarily after the 20-year life of this CCAA. Originally instituted under the auspices of the Z'berg-Nejedly Forest Practice Act of 1973, the Forest Practice Rules (FPRs) contain resource protection requirements via two avenues. First, they set prescriptive standards for minimum protection levels for all activities. Additionally, a Registered Professional Forester proposes a harvest accompanied by an associated cumulative effects analysis; then a State multidisciplinary team reviews and must find that a specific Timber Harvest Plan (THP) does not result in a significant adverse impact. In addition to the FPRs, SPI implements a number of company policies which provide benefit to fisher conservation. SPI policies are described below.

Managing Disturbance

Whenever possible, SPI uses even-aged management techniques to minimize the number of forest management entries necessary over the life of a stand. In even-aged management stands, SPI limits activities within stands to final harvest; re-establishment, including site preparation, planting, vegetation control; one pre-commercial thinning and potential pruning; commercial thinning; and a potential second commercial thinning.

Managing Amount of Habitat

Landscape assessment areas, generally planning watersheds averaging about 10,000 acres in size, are managed to remain within a defined set of habitat Lifeforms. SPI uses variable rates of entry, a variety of silvicultural systems, timing of entry, and location of management activities to manage and maintain habitats within a target range, as follows:

- Lifeform 1: 5-25% early seral habitat. Early seral habitat on SPI lands is described as stands with a QMD of less than 6 inches with 0-100% canopy closure;
- Lifeform 2: 20-40% small tree or moderately dense forest. Small tree or moderately dense forest habitat on SPI lands is described as stands with a QMD of 6-13 inches with 40-100 percent canopy closure, and stands with a 24 inches QMD or greater, and a canopy closure of 40-60%;
- Lifeform 3: 5-15% open forest. Open forest habitat on SPI lands is described as stand with a QMD greater than 6 inches with canopy closures ranging from 0-40 percent; and
- Lifeform 4: 10-60% large tree dense forest habitat. Large tree dense forest habitat on SPI lands are described as stands with a QMD of 13 inches or greater, a canopy closure of 60% or greater, and a minimum average of 9 trees per acre at least 22 inches dbh. In even-aged stands the definition of Lifeform 4 is a stand with a canopy closure of 60% or greater and a minimum average of 20 trees per acre at least 22 inches dbh. Stands meeting all three of the above structure conditions combined with one or more potential fisher denning structures (conifer tree ≥30 inches dbh or hardwood tree ≥ 22 inches dbh, with the potential of containing a cavity, basal hollow or other suitable defect) are used to identify Lifeform 4 stands.

Regeneration units (exclusive of rehabilitation areas) average no more than 20 acres and will not exceed 40 acres in size. As feasible, regeneration units are "grouped" to create areas 20 to 60 acres in size to eventually provide contiguous larger habitat patches of generally the same age and structure class to benefit wildlife species.

SPI reduces the risk of wildfire by (1) making use of commercial and biomass thinning techniques, (2) using prescribed fire as necessary to treat harvest areas and underburn strategic stands to reduce fuel loading, and (3) pre-commercial thinning and pruning where feasible to reduce fuel ladders so that ground fires do not become crown fires.

Managing Habitat Elements within Stands

Snags and Green Wildlife Trees

Within assessment areas, SPI retains all snags containing less than 25% sound board foot volume (generally decay classes $2\&3^1$), not posing hazards to operators, and not obstructing operations. SPI emphasizes snag retention in Water and Lake Protection Zones (WLPZs) (see definitions in CAFPR 14 CCR 936). Hazardous or obstructive snags ≥ 15 inches dbh (generally decay classes $2\&3^2$), which are felled are retained, as often as operationally possible, for the purposes of providing down wood. In assessment areas not meeting or suspected of not meeting snagretention minimums (SPI Snag Retentions Policy, 2001, Table 5 on pg 6), snag retention is emphasized within regeneration-unit green tree retention areas. Islands of un-harvested trees will be left unmanaged over the life of the stand within which they reside to provide legacy features and ecological processes associated with tree damage and mortality from insects, disease and inter-tree competition.

When present, SPI retains an average of two or more green wildlife trees per regeneration harvest unit². Retention is emphasized in WLPZs. Primary candidate trees for retention are large conifer and hardwood species (>30 inches dbh and >22 inches dbh, respectively) that contain cavities, basal hollows, reformed tops, obvious signs of heart rot, or a number of large diameter branches.

Within tractor regeneration units, hardwood conversions, or rehabilitation units, SPI retains at least an average of 2% of the unit area in islands of green trees 0.1 acre or larger in size with dominant and co-dominant trees ranging between 8 and 18 inches dbh. Where available, the focus for the green tree retention areas is oaks greater than 22 inches dbh. In other cases, SPI locates green tree retention areas to include important existing stand components such as green wildlife trees, large snags or logs, mast-producing hardwoods (hardwood trees >8 inches dbh), or at the confluence of topographic draws. In the future, at the time of the next harvest entry, these islands will be available for consideration as prime candidates for continued retention of forest structural diversity.

Mast-Producing Hardwoods

SPI will not convert stands dominated by mast producing hardwood trees (e.g. Quercus spp.et al) to conifer stands unless at least 5% of the capable assessment area³ is comprised of similar stands with trees capable of producing significant mast crops (hardwood trees >8 inches dbh). In assessment areas, where less than 5% of the capable area is in stands with hardwoods large

¹ As described in Bull et al. (1997), snag class 2 "represents those snags that show some evidence of decay and have lost some bark and branches, and often a portion of the top. Most nesting by woodpeckers, as well as extensive foraging in and under the bark and in the interior of the wood, is in this structural class."

² Average regeneration harvest unit on SPI land is 16 acres in size.

³ An area determined for each project for SPIs' potential cumulative effects analysis.

enough to produce significant mast crops, SPI protects up to two regenerating hardwood trees per acre from herbicide application. In addition, SPI will retain two individual hardwoods in all regeneration and rehabilitation units, which will be greater than 22 inches dbh, when available. In individual marked tree harvest areas, when present SPI retains at least two hardwoods per acre, which will be greater than 22 inches dbh, when available.

Large Down Wood

SPI retains existing down wood containing less than 25% sound board foot volume, generally decay classes 2 and 3 (Bull et al. 1997), at least 20 inches diameter at the large end and at least 10 feet in length. Exceptions to this policy may occur as needed to ensure successful regeneration, reduce fire risk, reduce potential drainage-structure damage, or as unavoidably consumed by prescribed burning. Mechanical disturbance to existing down logs is minimized. Down wood will be provided through time due to the recruitment of snags, green culls, and residual material to the forest floor from natural processes and forest management activities.

Riparian Inclusions

SPI identifies and protects riparian vegetation adjacent to permanent and intermittent water sources within project areas. SPI identifies and uses equipment limitation zones to prevent damage to existing riparian vegetation. Except as approved for specific rehabilitation projects, pesticides will not be used within Class I, II, and IV WLPZs (see definitions in CA FPR 14 CCR 936). If the FPRs are amended to allow, SPI will at its discretion, and with FWS concurrence, implement management prescriptions designed to provide for a variety of age classes of hardwood riparian vegetation.

Shrub and Grass Layers

SPI uses pruning, commercial and biomass thinning prescriptions, as feasible, to encourage development of shrub and herbaceous layers within forest stands. SPI will minimize the use of herbicides after trees are "released" (growing freely) to allow for the establishment and growth of herbaceous and shrub layers. In accordance with air quality limitations, SPI will use underburning as a method of reducing fire hazard and to stimulate development of shrub and herbaceous layers in strategically located forest stands.

X. Incidental Take

In accordance with ESA regulations, the fisher will be treated as if it were listed under the ESA, regardless of its current regulatory status. Upon approval of the CCAA, the FWS will issue SPI a section 10(a)(1)(A) permit, in accordance with 50 CFR 17.32 (d), that would provide SPI with authorization for incidental take of fisher and provide regulatory assurances should the species be listed under the ESA in the future. The permit would authorize incidental take of fisher consistent and associated with this CCAA resulting from the otherwise lawful activities, including forest management activities, on the enrolled lands, in Butte, Plumas, and Tehama Counties. Covered forest management activities include felling and bucking timber, yarding timber, loading and landing operations, salvage of timber products, transport of timber and rock, road construction and maintenance, rock pit construction and use, site preparation, tree planting, vegetation control, pre-commercial thinning and pruning, minor forest products, grazing, and fire

suppression. Covered activities may be conducted by SPI employees, contractors, agents, or other assigns.

XI. Expected Level of Potential Take

Unless fishers colonize or are reintroduced onto enrolled lands, take is not expected to occur. Take may result from (1) disturbance to pregnant or nursing female fishers during the early denning season, (2) cutting down a den tree containing a late term pregnant fisher or fisher kits, (3) reduction in the amount of habitat to a level that significantly impairs a fisher's ability to breed, feed, or shelter, and (4) fisher mortality caused by vehicle traffic associated with otherwise lawful activities. This take will be in the form of harm, harass, wound, and kill, as defined in the ESA section 3.

Fishers occupy large home ranges, and hence, at any time there are only a few in any given area. Mean estimates of fisher home ranges from 7 study areas in California ranged from 1.7 to 23.5 km² for females and 7.4 to 58.1 km² for males (Buck et al. 1983, Self and Kerns 2001, Mazzoni 2002, Zielinski et al. 2004b, Yaeger 2005, Self and Callas 2006). Individual fishers are very mobile animals, capable of traveling across their entire home range within a 24-hour period (Higley, pers. comm. 2006). In addition, fishers are rarely encountered in the forest, and are believed to generally avoid human contact whenever possible.

(1) The potential for take, in the form of harass, due to disturbance from forest management activities is most likely limited to the situation where a female fisher is disturbed to the degree she abandons her young when she is nursing non-mobile young. However, the probability of such take is low because females have not been observed abandoning their young even after researchers handled young at dens (Higley, pers. comm. 2006). It is unlikely that any forest management activities would be more disruptive than such invasive research activities. It is unknown how a persistent, non-discrete activity such as harvest may affect a den site. Female fishers regularly move young to new den locations.

(2) The potential for take, in the form of wounding or killing, of a fisher exists from felling of den trees. In the instance of a late-term pregnancy or non-mobile young, the likelihood of take from cutting down an occupied den tree is quite low. This is the result of the inherent low density of fishers, their primary den tree characteristics (hardwoods, and cull live trees and snags), and the breeding biology of fisher. These natural history attributes in conjunction with the minimal harvest activity that occurs on the enrolled lands during March through May (the most vulnerable period) minimize the potential of this take.

(3) Fishers use landscapes with a wide variety of stand conditions for foraging, resting and denning activities. Of these habitats, resting and denning habitat is thought to be the most at risk from forest management activities. The loss of or a significant reduction in the amount of resting/denning habitat or structural elements in an individual fisher home range may cause individual fishers to discontinue use of the area, which would result in take in the form of harm. The provisions within this CCAA providing for a net increase in the amount of fisher

resting/denning habitat improve the ability of the enrolled lands to provide for individual fisher home ranges should fisher be reintroduced or re-occupy the area.

(4) Fishers have been killed attempting to cross both paved and unpaved roads. Fisher road kills have occurred on forest dirt roads as well as high use roads such as state and interstate highways (Truex et al. 1998), Klug pers. comm., Yaeger pers. comm.). Thus, as fishers will attempt to cross roads, it seems that the size and type of road are less important than the traffic on the road (Dark 1997). Various levels of vehicle traffic occur on the enrolled lands, are intermittent in nature, and are likely to continue at current levels. However, the levels of traffic that do and will occur on the enrolled lands are much less than occur on public roads and other public use areas, including National Forest lands. Mortality of fisher related to vehicle collision from use of roads associated with otherwise legal activities is a potential source of take, in the form of harm, wound, and kill, within this CCAA. However, the potential for take from vehicle traffic is believed to be very low due to the ability of vehicle traffic to be regulated on the enrolled lands. Forest roads on SPI's private lands are regulated by gates and seasonal restrictions.

The potential of take occurring from cutting of an occupied rest trees is so low that take is not likely to occur. The fishers' inherent low density, high mobility, and avoidance of human contact allows individual fishers to easily avoid areas of human activity associated with active logging operations.

We recognize that take of reintroduced or newly colonized individuals is possible from covered forest management activities. However, based upon the best survey data available, the enrolled lands are presumed to be unoccupied and therefore the fisher baseline on enrolled lands is defined as zero individuals. If fishers occupy enrolled lands through reintroduction, there is also the possibility that reintroduced fisher may not survive as an artifact of stress or other factors related to reintroduction efforts. This mortality to reintroduced fisher is not attributable to covered forest management activities. Whether the loss is due to covered forest management activities or reintroduction processes, the loss of the reintroduced animals would not reduce the baseline on the enrolled lands.

In summary, although difficult to quantify, incidental take and the resulting effects to fisher are expected to be minimal. Because habitat maintenance and enhancement measures will be in place, impacts from land use activities are expected to be generally limited to disturbance, are likely to occur sporadically, and are not expected to nullify the conservation benefit expected to accrue under the CCAA. We estimate take as follows:

- During the first 5 years colonization (i.e., sustained occupancy by fisher emigrating from outside the area) is not expected to occur; therefore, take is unlikely to occur.
- Fishers would be monitored, if experimentally reintroduced, during the first 5 years and take would be avoidable, except from road mortality (per 4 above) or habitat reduction (per 3 above). We would expect no more than 1 mortality during that time.
- Probability of take of either re-introduced or colonizing fishers during the balance of this agreement (15 years) is still low, and is expected to be limited to road kill or habitat

reduction (1 every 5 years; 3 total) and the incidental felling of 1 den tree (per 1 or 2 above) (containing 1 female and 2 kits; 3 total).

Therefore, we anticipate that take over the life of this permit will be no more than 7 fishers. The FWS recognizes that the level of take as described above, when combined with those benefits that would be achieved if conservation measures are also implemented on other necessary properties, would preclude or remove the need to list the species.

Mitigation Measures Designed to Minimize and Mitigate any Potential for Take

In order to minimize the potential when disturbance could potentially cause the loss of a breeding female or one or more of her young, harvest activities within the breeding season (Late February to mid-May) will be minimized, for the duration of the CCAA. No more than 25 percent of SPI's yearly volume harvested from the enrolled lands will come from this time period in any one year and a rolling 3-year average will not exceed 20 percent. The normal logging season for SPI can be year-round, but over 95% of harvest activities occur from mid-February through mid-November.

If SPI agrees to accept reintroduced fisher, release sites will not be located within ¹/₄ mile of active logging, to minimize take of newly introduced animals. SPI agrees to modify its harvest scheduling and will not initiate vegetation disturbing activities within ¹/₄ mile of a known occupied den tree for the period of March 15th through July 15th.

XII. Assurances Provided

In accordance with the ESA regulation 50 CFR 17.32(d)(5) and through this CCAA, the FWS provides Sierra Pacific Industries assurances that no additional conservation measures or additional land, water, or resource use restrictions, beyond those voluntarily agreed to and described in this CCAA, will be required should the fisher become listed as a threatened or endangered species for the duration of the permit period. Unless otherwise stated, these assurances will be authorized with the issuance of an enhancement of survival permit under section 10(a)(1)(A) of the ESA.

XIII. <u>Assurances Provided to Property Owner in Case of Changed or Unforeseen</u> <u>Circumstances</u>

The regulatory assurances provided by the Permit are linked to the existence of changed circumstances and unforeseen circumstances. "*Changed circumstances* means changes in circumstances affecting a species or geographic area covered by a conservation plan or agreement that can reasonably be anticipated by SPI and the FWS and that can be planned for (e.g., the listing of new species, or a fire or other natural catastrophic event in areas prone to such events)" 50 CFR 17.3. "*Unforeseen circumstances* means changes in circumstances affecting a species or geographic area covered by a conservation plan or agreement that could not reasonably have been anticipated by SPI and the FWS at the time of the conservation plan's or agreement's negotiation and development, and that result in a substantial and adverse change in the status of the covered species" 50 CFR 17.3. In the event of changed and unforeseen

circumstances the Agencies are committed to working with SPI to implement measures that limit the level of authorized take of fishers and allow SPI to continue to implement their site-specific plan in compliance with this Agreement and the Permit.

The assurances listed below apply to Sierra Pacific Industries. The assurances apply only to the enrolled properties, where the Section 10(a)(1)(A) permit and the CCAA itself are being properly implemented and are applicable only with respect to the species covered by this CCAA (fisher).

Changed Circumstances Provided for in the CCAA

Wildfire or pest infestation that cumulatively removes more than 2000 acres of Lifeform 4 on the enrolled lands will constitute a changed circumstance. SPI will notify the Service within 30 days of reaching such a changed circumstance. Within 90 days of notification, the parties will meet and evaluate the conservation measures and identify actions, which will be employed to address the change in circumstances. If a change in the conservation measure is determined to be necessary and agreed to by both parties, the CCAA and all supporting documents will be modified and/or amended as appropriate.

Changed Circumstances not Provided for in the CCAA

If additional conservation measures are necessary to respond to changed circumstances that are not provided for in this CCAA, the FWS will not require any conservation measures in addition to those provided for in the CCAA without the consent of the property owner, provided the CCAA is being properly implemented.

Unforeseen Circumstances

If the FWS determines that additional conservation measures are necessary to respond to unforeseen circumstances, the Field Supervisor of the Yreka Fish and Wildlife Office may require additional measures of SPI, but only if such measures maintain the original terms of the CCAA to the maximum extent possible. Additional conservation measures will not involve the commitment of additional land, water, or financial compensation, or additional restrictions on the use of land, water, or other natural resources available for development or use under the original terms of the CCAA without the consent of SPI. The FWS will have the burden of demonstrating that unforeseen circumstances exist, using the best scientific and commercial data available. These findings must be clearly documented and based upon reliable technical information regarding the status and habitat requirements of fishers. Refer to 50 CFR 17.22(d)(5)(iii)/17.32(d)(5)(iii).

XIV. Monitoring

Generally there will be two foci of monitoring: 1) monitoring of the habitat to ensure that Conservation Measures are being met; and 2) monitoring for fisher in currently unoccupied areas to determine if the otherwise suitable habitat becomes occupied. Monitoring of habitat conservation measures (increases in fisher resting and denning habitat) will be reported every 5 years. Monitoring for colonizing fisher will occur at least every 5 years. Additionally, if fishers colonize the enrolled lands, or if fishers are reintroduced onto enrolled lands, changes to habitat will be reported on an annual basis. Monitoring of habitat and habitat elements and reintroduced fisher will be agreed upon by CDFG, SPI, and FWS prior to reintroduction.

Habitat Monitoring Methods

Sierra Pacific Industries is constantly re-inventorying the enrolled lands, on a pace to complete all enrolled lands every ten years. As updated inventory data becomes available, projections will be validated, and fully reported every 10 years of the permit period. Sierra Pacific Industries also annually updates stands for harvests, fires, and other significant changes. Thus, for monitoring periods shorter than 10 years, SPI can use the updated stands and existing growth rates to project expected amounts of fisher resting/denning habitat throughout the enrolled lands.

Population Monitoring Methods

To monitor if fisher have colonized currently unoccupied areas, a strategically located system of camera/track stations, using the Zielinski and Kucera (1997) protocol, will be implemented at least every 5 years on portions of SPI's ownership. If fishers are detected, continued monitoring of the "colonized population" will likely be necessary to determine whether the population is persisting in the area and whether reproduction is occurring. This further monitoring will be designed and implemented jointly by the parties to this CCAA, as determined necessary to ascertain the status of any "new" population.

XV. <u>Reporting</u>

SPI will be responsible for completion of an annual report on Agreement implementation by March 31 each year. This report will include, but is not limited to: 1) a summary of acres (and overall percent of the management area) of fisher resting/denning habitat changed over the past year by cause, including cumulative totals after the first year; 2) changes in ownership; 3) a summary of the estimated take from the implementation of conservation measures, monitoring activities, and any other take obviously resulting from land and water use related to the Agreement's covered activities; and 4) any amendments to the CCAA that occurred that year.

At year 5, 10, and 15 the annual report will also include, but is not limited to: 1) the projected increase in fisher resting/denning habitat over the five year period (years 5 and 15 will be projected from growth and yield models; year 10 will be validated with updated plot inventory data); and 2) a summary of the methods, location, and outcome of population monitoring. If fishers are reintroduced to the enrolled lands, the monitoring report will be agreed upon by CDFG, SPI, and FWS prior to reintroduction. If fishers recolonize the enrolled lands, the future contents of the monitoring report will be agreed to by SPI and the FWS.

XVI. Notification of Take Requirement

By signature of this CCAA, Sierra Pacific Industries, to the extent they can determine an actual potential take is going to occur, agrees to provide the FWS with an opportunity to rescue individuals of the covered species before any authorized take occurs. The FWS will be notified

at least 30 days in advance of the activity that would cause such a take.

XVII. Duration of CCAA and Permit

This CCAA will be for the duration of 20 years from the date the FWS issues the permit. The section 10(a)(1)(A) permit will become effective on the date of a final rule that lists fisher as threatened or endangered and continues through the end of the CCAA term. The permit will cover Sierra Pacific Industries from the date their lands are enrolled under the CCAA until the end of the CCAA and permit term (if the permit is issued). Enrolled lands will be maintained in their existing and/or improved states as outlined, from the date the land is enrolled under the CCAA until the end of the permit term. The permit and CCAA may be extended beyond the specified terms prior to permit expiration through the permit renewal process and with the agreement of the Parties.

XVIII. Modifications

After approval of the CCAA, the FWS may not impose any new requirements or conditions on, or modify any existing requirements or conditions applicable to, SPI or successor in interest to SPI, to compensate for changes in the conditions or circumstances of any species or ecosystem, natural community, or habitat covered by the CCAA except as previously agreed to in this Agreement in Changed or Unforeseen Circumstances and/or stipulated in 50 CFR 17.22(d)(5) and 17.32(d)(5).

XIX. Modification of the CCAA

Any party to this CCAA may propose modifications or amendments to this CCAA by providing written notice to, and obtaining the written concurrence of, the other Parties. Such notice shall include a statement of the proposed modification, the reason for it, and its expected results. The Parties will use their best efforts to respond to proposed modifications within 60 days of receipt of such notice. Proposed modifications will become effective upon the other Parties' written concurrence.

Modifications to the CCAA will occur occasionally, through the removals or additions of land to the enrolled lands through sale, purchases, or land exchanges. These changes are not expected to annually comprise more than 5 percent of the aggregate acreage of the enrolled lands. These changes are considered minor in nature, and at the landowner's discretion, and shall be included or excluded from the CCAA, with written notification to the FWS in the annual report. Removals or additions of land in the enrolled lands exceeding 5% annually or 10% cumulatively over the life of the permit will require SPI to provide written notice and obtain written concurrence from the FWS and may require the FWS to amend the permit in accordance with all applicable legal requirements.

If the policies regarding managing wildlife habitat described in "<u>Management Practices and</u> <u>Policies on Enrolled Lands</u>" are modified, resulting in the likely reduction in the expected future capability of the land to support fisher, this would require a modification of this CCAA. Such a modification will require SPI to provide written notice and obtain written concurrence from the FWS, and may require the FWS to amend the permit in accordance with all applicable legal requirements.

If a fisher reintroduction program is implemented on enrolled lands, and monitoring efforts (as identified above) determine that reintroduced individuals or their progeny moved beyond the boundaries of enrolled lands of this CCAA, the enrolled lands of this CCAA will be expanded to include the newly occupied areas. The boundary of the expanded enrolled lands will be established upon mutual agreement by FWS and SPI, and will require the FWS to amend the permit in accordance with all applicable legal requirements. This process for modifying and amending the CCAA will provide certainty to SPI regarding land use restrictions that might otherwise apply should fisher become listed under the ESA.

XX. Amendment of the Permit

The permit may be amended in accordance with all applicable legal requirements including, but not limited to the ESA, the National Environmental Policy Act, and the FWS' permit regulations at 50 CFR 13 and 50 CFR 17. Both SPI and FWS can propose an amendment. The party proposing the amendment shall provide a statement describing the proposed amendment and the reasons.

XXI. Termination of the CCAA

As provided for in Part 8 of the FWS' CCAA Policy (64 FR 32726, June 17, 1999), SPI may, for good cause, terminate implementation of the CCAA's voluntary management actions prior to the CCAA's expiration date, even if the expected benefits have not been realized. If the CCAA is terminated, SPI is required to surrender the enhancement of survival permit at termination, thus relinquishing take authority (if fishers have become listed at time of termination) and the assurances granted by the permit. SPI is required to give 60 days written notice to the other Parties of intent to terminate the CCAA. SPI must give the FWS and CDFG an opportunity to relocate affected species.

If SPI and the FWS agree to a subsequent CCAA that includes the enrolled lands in this CCAA, this CCAA will terminate upon signing of such a new CCAA, and SPI will surrender the permit for this CCAA in accordance with 50 CFR 13.26.

XXII. Permit Suspension or Revocation

The FWS may suspend or revoke the permit for cause in accordance with the laws and regulations in force at the time of such suspension or revocation (50 CFR 13.28(a)). The FWS may also revoke the permit if continuation of permitted activities would likely result in jeopardy to any listed species, or directly or indirectly alter designated critical habitat such that it would result in adverse modification or destruction of the critical habitat, in accordance with 50 CFR

17.22/32(d)(7). Before revoking a permit, the FWS, with the consent of SPI, will pursue all appropriate options to avoid revocation.

XXIII. <u>Remedies</u>

Each party shall have all remedies otherwise available to enforce the terms of this CCAA and the permit, except that no party shall be liable in damages for any breach of this CCAA, any performance or failure to perform an obligation under this CCAA or any other cause of action arising from this CCAA.

XXIV. Dispute Resolution

The FWS and SPI agree to work together in good faith to resolve any disputes, using dispute resolution procedures agreed upon by all Parties.

XXV. Succession and Transfer

This CCAA and its ESA section 10(a)(1)(A) permit shall be binding on and shall inure to the benefit of SPI and respective successors and transferees in accordance with applicable regulations in 50 CFR 13.24 and 13.25.

In accordance with 50 CFR 13.24, successors other than the permittee will have the same obligations and rights with respect to the enrolled lands under the CCAA and ESA section 10(a)(1)(A) permit if all provisions and qualifications for a successor are met.

Pursuant to 50 CFR 13.25, the rights and obligations under this CCAA and the ESA section 10(a)(1)(A) permit are transferable to subsequent nonfederal property owners. If the CCAA and permit are transferred, the new landowner(s) will have the same obligations and rights with respect to enrolled lands as SPI. The new landowner(s) must agree, in writing, to be come a party to the original agreement and permit. In accordance with 50 CFR 17.22/17.32(d)(3)(i), SPI shall notify the FWS, in writing, of any transfer of ownership of any portion of CCAA enrolled lands.

XXVI. Availability of Federal Funds

The Parties acknowledge that the FWS will not be required under this CCAA to expend any federal agency's appropriated funds unless and until an authorized official of that agency affirmatively acts to commit to such expenditures as evidenced in writing. Implementation of this CCAA is subject to the requirements of the Anti-Deficiency Act and the availability of appropriated funds. Nothing in this CCAA will be construed by the Parties to require the obligation, appropriation, or expenditure of any money from the U.S. Treasury.

XXVII. No Third-Party Beneficiaries

This CCAA does not create any new right or interest in any member of the public as a third-party beneficiary, nor shall it authorize anyone not a party to this CCAA to maintain a suit for personal

injuries or damages pursuant to the provisions of this CCAA. The duties, obligations, and responsibilities of the Parties, SPI and FWS, to this CCAA with respect to third Parties shall remain as imposed under existing law.

XXVIII. Notices and Reports

Any notices and reports, including monitoring and annual reports, required by this CCAA shall be delivered to the persons/position listed below, as appropriate:

Sierra Pacific Industries designee:

Dan Tomascheski Vice President for Resources Sierra Pacific Industries P.O. Box 496014 Redding, CA 96049-6014 19798 Riverside Ave. Anderson, CA 96007

FWS designee:

Phil Detrich Field Supervisor Yreka Fish and Wildlife Office 1829 South Oregon St. Yreka, CA 96097

IN WITNESS WHEREOF, THE PARTIES HERETO have executed this Agreement to be in effect as of the date that the FWS issues the permit.

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County	Assessed Parcel	Fee Parcel	MTRS	Assessed acres
Butte	056070002	056070002	M24N02E01	124.47
Butte	056070004	056070004	M24N02E02	21.7
Butte	056070015	056070015	M24N02E12	240
Butte	056070016	056070016	M24N02E12	20
Butte	056070018	056070018	M24N02E12	40
Butte	056070019	056070019	M24N02E12	40
Butte	056070050	056070050	M25N02E36	140.41
Butte	056070065	056070065	M24N02E01	240.37
Butte	056070066	056070066	M24N02E01	240.01
Butte	056130007	056130007	M24N02E25	520
Butte	056190003	056190003	M24N03E02	642
Butte	056190004	056190004	M24N03E01	638
Butte	056190005	056190005	M24N03E10	80
Butte	056190006	056190006	M24N03E10	560
Butte	056190008	056190008	M24N03E12	620
Butte	056190009	056190009	M24N03E12	20
Butte	056190011	056190011	M24N03E03	644.64
Butte	056190012	056190012	M24N03E11	640
Butte	056200002	056200002	M24N03E06	53.93
Butte	056200003	056200003	M24N03E06	481.17
Butte	056200004	056200004	M24N03E05	640
Butte	056200009	056200009	M24N03E07	695.56
Butte	056200010	056200010	M24N03E08	160
Butte	056200032	056200032	M24N03E06	7.27
Butte	056200033	056200033	M24N03E06	7.27
Butte	056200036	056200036	M24N03E06	7
Butte	056200038	056200038	M24N03E06	7.27
Butte	056200039	056200039	M24N03E06	6.8
Butte	056200047	056200047	M24N03E06	6.8
Butte	056200048	056200048	M24N03E06	7
Butte	056200050	056200050	M24N03E06	7.27
Butte	056200055	056200055	M24N03E06	7.27
Butte	056200056	056200056	M24N03E06	7.27
Butte	056200057	056200057	M24N03E06	7.27
Butte	056200058	056200058	M24N03E06	7.27
Butte	056200060	056200060	M24N03E06	7.27
Butte	056200061	056200061	M24N03E09	592.67
Butte	056200067	056200067	M24N03E04	446.06
Butte	056210012	056210012	M24N03E17	520
Butte	056210013	056210013	M24N03E17	40
Butte	056210014	056210014	M24N03E17	80

Appendix A. Legal Description of Enrolled Lands

County	Assessed Parcel	Fee Parcel	MTRS	Assessed acres
Butte	056210016	056210016	M24N03E19	535
Butte	056210017	056210017	M24N03E19	160
Butte	056210019	056210019	M24N03E20	320
Butte	056210043	056210043	M24N03E16	615.73
Butte	056220001	056220001	M24N03E15	640
Butte	056220004	056220004	M24N03E14	80
Butte	056220013	056220013	M24N03E23	80
Butte	056220018	056220018	M24N03E24	93.99
Butte	056220019	056220019	M24N03E24	20.66
Butte	056220023	056220023	M24N03E14	560
Butte	056220024	056220024	M24N03E13	630
Butte	056220026	056220026	M24N03E23	560
Butte	056220027	056220027	M24N03E22	470
Butte	056220028	056220028	M24N03E24	507.1
Butte	056230007	056230007	M24N03E26	7.34
Butte	056230010	056230010	M24N03E26	286.72
Butte	056230011	056230011	M24N03E25	560
Butte	056230018	056230018	M24N03E35	564.88
Butte	056240028	056240028	M24N03E33	480
Butte	056240039	056240039	M24N03E29	557.17
Butte	056250001	056250001	M24N03E32	20
Butte	056270015	056270015	M24N03E36	74
Butte	056270023	056270023	M24N04E31	1.88
Butte	056270025	056270025	M24N04E31	2.76
Butte	056270026	056270026	M24N04E31	1.73
Butte	056270038	056270038	M24N03E36	3.59
Butte	056270038	056270038	M24N04E31	2
Butte	056270039	056270039	M24N03E36	0.1
Butte	056270039	056270039	M24N04E31	1.7
Butte	056410009	056410009	M24N03E21	35
Butte	056440012	056440012	M24N02E13	107
Butte	056440012	056440012	M24N02E24	26.5
Butte	058020002	058020002	M23N05E06	547
Butte	058020003	058020003	M23N05E05	643
Butte	058020006	058020006	M23N05E07	627
Butte	058020010	058020010	M23N05E09	160
Butte	058020011	058020011	M23N05E04	642
Butte	058020012	058020012	M23N05E08	640
Butte	058030011	058030011	M23N05E18	131.63
Butte	058030013	058030013	M23N05E17	320
Butte	058080002	058080002	M23N04E03	40
Butte	058080005	058080005	M23N04E02	320
Butte	058080012	058080012	M23N04E11	640

County	Assessed Parcel	Fee Parcel	MTRS	Assessed acres
Butte	058080014	058080014	M23N04E01	563
Butte	058080015	058080015	M23N04E03	225.62
Butte	058080016	058080016	M23N04E03	379.22
Butte	058090004	058090004	M23N04E06	510
Butte	058090008	058090008	M23N04E04	636
Butte	058090020	058090020	M23N04E08	20
Butte	058090021	058090021	M23N04E05	30
Butte	058090021	058090021	M23N04E08	150
Butte	058090022	058090022	M23N04E08	54
Butte	058090025	058090025	M23N04E09	600
Butte	058090026	058090026	M23N04E09	40.89
Butte	058090056	058090056	M23N04E05	589.19
Butte	058090095	058090095	M23N04E08	40
Butte	058090110	058090110	M23N04E08	10
Butte	058100004	058100004	M23N04E17	40
Butte	058100009	058100009	M23N04E17	160
Butte	058100019	058100019	M23N04E21	640
Butte	058100082	058100082	M23N04E17	160
Butte	058100116	058100116	M23N04E18	80.47
Butte	058110001	058110001	M23N04E15	640
Butte	058110002	058110002	M23N04E14	640
Butte	058110003	058110003	M23N04E13	560
Butte	058110006	058110006	M23N04E22	640
Butte	058110007	058110007	M23N04E23	640
Butte	058110018	058110018	M23N04E24	398.9
Butte	058120001	058120001	M23N04E27	640
Butte	058120009	058120009	M23N04E35	640
Butte	058120011	058120011	M23N04E25	598.9
Butte	058120013	058120013	M23N04E25	40
Butte	058120013	058120013	M23N04E26	480
Butte	058130016	058130016	M23N04E28	160
Butte	058130018	058130018	M23N04E28	160
Butte	058130021	058130021	M23N04E31	240
Butte	058130024	058130024	M23N04E32	120
Butte	058130025	058130025	M23N04E33	600
Butte	058130038	058130038	M23N04E29	600
Butte	058150001	058150001	M22N04E05	609.56
Butte	058150005	058150005	M22N04E04	160
Butte	058150005	058150005	M22N04E05	40
Butte	058250001	058250001	M22N04E03	211.21
Butte	058360003	058360003	M22N04E01	656.14
Butte	058790XXX	058790XXX	M23N05E15	110
Butte	059010001	059010001	M24N04E03	636.4

County	Assessed Parcel	Fee Parcel	MTRS	Assessed acres
Butte	059010002	059010002	M24N04E02	633
Butte	059010003	059010003	M24N04E01	638.55
Butte	059010004	059010004	M24N04E10	640
Butte	059010005	059010005	M24N04E11	640
Butte	059010006	059010006	M24N04E12	320
Butte	059010007	059010007	M24N04E12	320
Butte	059020001	059020001	M24N04E06	622
Butte	059020003	059020003	M24N04E04	638
Butte	059020004	059020004	M24N04E07	480
Butte	059020009	059020009	M24N04E09	640
Butte	059020011	059020011	M24N04E05	437.24
Butte	059020012	059020012	M24N04E08	510
Butte	059020013	059020013	M24N04E05	200
Butte	059020013	059020013	M24N04E07	140
Butte	059020013	059020013	M24N04E08	90
Butte	059020014	059020014	M24N04E07	20
Butte	059030004	059030004	M24N04E16	320
Butte	059030005	059030005	M24N04E16	320
Butte	059030008	059030008	M24N04E20	640
Butte	059030011	059030011	M24N04E18	507
Butte	059030013	059030013	M24N04E17	640
Butte	059030014	059030014	M24N04E19	622
Butte	059030015	059030015	M24N04E21	640
Butte	059040004	059040004	M24N04E14	640
Butte	059040005	059040005	M24N04E13	640
Butte	059040006	059040006	M24N04E22	640
Butte	059040007	059040007	M24N04E23	640
Butte	059040008	059040008	M24N04E24	640
Butte	059040009	059040009	M24N04E15	640
Butte	059050005	059050005	M24N04E26	640
Butte	059050006	059050006	M24N04E25	640
Butte	059050008	059050008	M24N04E34	40
Butte	059050011	059050011	M24N04E34	80
Butte	059050013	059050013	M24N04E35	640
Butte	059050014	059050014	M24N04E36	638.49
Butte	059050016	059050016	M24N04E27	300
Butte	059050019	059050019	M24N04E34	270
Butte	059050020	059050020	M24N04E34	250
Butte	059050021	059050021	M24N04E27	332
Butte	059060001	059060001	M24N04E30	621.4
Butte	059060002	059060002	M24N04E29	640
Butte	059060011	059060011	M24N04E32	602.72
Butte	059060034	059060034	M24N04E31	474.79

County	Assessed Parcel	Fee Parcel	MTRS	Assessed acres
Butte	059060047	059060047	M24N04E28	28.14
Butte	059060053	059060053	M24N04E28	305.59
Butte	059060054	059060054	M24N04E33	607.46
Butte	059060055	059060055	M24N04E28	0.8
Butte	059060055	059060055	M24N04E33	3
Butte	059060056	059060056	M24N04E28	185.2
Butte	059100001	059100001	M24N05E06	560
Butte	059100010	059100010	M24N05E08	140
Butte	059100015	059100015	M24N05E07	160
Butte	059100017	059100017	M24N05E05	553.12
Butte	059100018	059100018	M24N05E09	320
Butte	059110001	059110001	M24N05E18	640
Butte	059110005	059110005	M24N05E17	80
Butte	059110007	059110007	M24N05E16	320
Butte	059110010	059110010	M24N05E20	640
Butte	059110013	059110013	M24N05E17	500
Butte	059110014	059110014	M24N05E19	640
Butte	059110015	059110015	M24N05E21	640
Butte	059120001	059120001	M24N05E30	640
Butte	059120002	059120002	M24N05E29	640
Butte	059120003	059120003	M24N05E31	643
Butte	059120004	059120004	M24N05E32	640
Butte	059120005	059120005	M24N05E33	640
Butte	059130001	059130001	M25N04E03	93
Butte	059130006	059130006	M25N04E10	80
Butte	059140001	059140001	M25N04E06	344
Butte	059140002	059140002	M25N04E05	391
Butte	059140003	059140003	M25N04E04	128
Butte	059140004	059140004	M25N04E04	10
Butte	059140006	059140006	M25N04E04	93.77
Butte	059140008	059140008	M25N04E07	135
Butte	059140010	059140010	M25N04E07	320
Butte	059140013	059140013	M25N04E08	360
Butte	059140015	059140015	M25N04E09	640
Butte	059140019	059140019	M25N04E05	20
Butte	059150003	059150003	M25N04E17	-* 640
Butte	059150005	059150005	M25N04E16	440
Butte	059150006	059150006	M25N04E19	617
Butte	059150007	059150007	M25N04E20	640
Butte	059150008	059150008	M25N04E21	600
Butte	059150010	059150010	M25N04E18	616.5
Butte	059160001	059160001	M25N04E15	320
Butte	059170008	059170008	M25N04E34	320
Butte Butte Butte Butte Butte Butte Butte Butte Butte Butte	059140015 059140019 059150003 059150005 059150006 059150007 059150008 059150010 059160001 059170008	059140015 059140019 059150003 059150005 059150006 059150007 059150008 059150010 059160001 059170008	M25N04E09 M25N04E05 M25N04E17 M25N04E16 M25N04E19 M25N04E20 M25N04E21 M25N04E18 M25N04E15 M25N04E34	640 20 640 440 617 640 600 616.5 320 320

County	Assessed Parcel	Fee Parcel	MTRS	Assessed acres
Butte	059170010	059170010	M25N04E35	320
Butte	059170012	059170012	M25N04E27	20
Butte	059170019	059170019	M25N04E27	240
Butte	059180002	059180002	M25N04E30	37
Butte	059180003	059180003	M25N04E30	20.26
Butte	059180005	059180005	M25N04E30	303
Butte	059180009	059180009	M25N04E29	400
Butte	059180010	059180010	M25N04E29	80
Butte	059180014	059180014	M25N04E28	480
Butte	059180015	059180015	M25N04E31	543
Butte	059180016	059180016	M25N04E31	75
Butte	059180017	059180017	M25N04E32	550
Butte	059180019	059180019	M25N04E33	40
Butte	059180020	059180020	M25N04E33	280
Butte	059180033	059180033	M25N04E28	23.4
Butte	059180035	059180035	M25N04E28	20.7
Butte	059200001	059200001	M25N05E06	98.33
Butte	059200003	059200003	M25N05E06	48.76
Butte	059210008	059210008	M25N05E19	638.84
Butte	059210014	059210014	M25N05E21	320
Butte	059220006	059220006	M25N05E28	240
Butte	059220008	059220008	M25N05E31	478.72
Butte	059240016	059240016	M25N05E31	18.39
Butte	060010001	060010001	M25N03E02	160
Butte	060010007	060010007	M25N03E11	600
Butte	060010008	060010008	M25N03E12	640
Butte	060010009	060010009	M25N03E10	114.39
Butte	060010010	060010010	M25N03E01	492.7
Butte	060020002	060020002	M25N03E14	640
Butte	060020003	060020003	M25N03E13	640
Butte	060020005	060020005	M25N03E23	640
Butte	060020006	060020006	M25N03E24	640
Butte	060020007	060020007	M25N03E15	456.79
Butte	060020008	060020008	M25N03E22	616.17
Butte	060030002	060030002	M25N03E26	640
Butte	060030006	060030006	M25N03E35	640
Butte	060030007	060030007	M25N03E36	640
Butte	060030008	060030008	M25N03E27	612.75
Butte	060030009	060030009	M25N03E34	631.65
Butte	060030010	060030010	M25N03E25	640
Butte	060040001	060040001	M25N03E28	160
Butte	060040002	060040002	M25N03E31	347
Butte	060040003	060040003	M25N03E32	320

County	Assessed Parcel	Fee Parcel	MTRS	Assessed acres
Butte	060040007	060040007	M25N03E33	401.23
Butte	060040008	060040008	M25N03E33	59.75
Butte	060050001	060050001	M26N04E14	80
Butte	060050001	060050001	M26N04E15	160
Butte	060050006	060050006	M26N04E22	560
Butte	060050007	060050007	M26N04E23	480
Butte	060050013	060050013	M26N04E21	364.13
Butte	060060002	060060002	M26N03E24	160
Butte	060060004	060060004	M26N04E19	638
Butte	060060009	060060009	M26N04E20	40
Butte	060060010	060060010	M26N03E24	135
Butte	060060012	060060012	M26N04E20	440
Butte	060070004	060070004	M26N04E27	640
Butte	060070005	060070005	M26N04E26	320
Butte	060070007	060070007	M26N04E33	640
Butte	060070028	060070028	M26N04E28	538.3
Butte	060080010	060080010	M26N03E36	640
Butte	060080014	060080014	M26N04E32	320
Butte	060080018	060080018	M26N03E25	627.5
Butte	060080020	060080020	M26N04E30	507.64
Butte	060080021	060080021	M26N04E31	640
Butte	060080026	060080026	M26N04E29	409.53
Butte	060100001	060100001	M26N04E29	17.76
Butte	060100002	060100002	M26N04E29	11
Butte	060150009	060150009	M26N04E24	320
Butte	060160001	060160001	M26N04E25	160
Butte	060160007	060160007	M26N04E36	360
Butte	060160009	060160009	M26N05E31	40
Butte	060160015	060160015	M26N05E31	120
Butte	065010053	065010053	M23N03E12	69.83
Butte	065520014	065520014	M23N04E07	240.44
Butte	065530039	065530039	M23N04E07	151.99
Butte	065530039	065530039	M23N04E18	1
Butte	90400005	056200065	M24N03E04	128.6
Butte	90400006	056220021	M24N03E24	12.9
Butte	90400007	056230005	M24N03E27	45.23
Butte	90400007	056230005	M24N03E34	1
Butte	904000011	058070001	M23N05E30	38.56
Butte	904000013	058110004	M23N04E13	40
Butte	904000014	058110005	M23N04E13	40
Butte	904000015	058110011	M23N04E24	10
Butte	904000016	058110012	M23N04E24	30
Butte	904000020	058130039	M23N04E29	40

County	Assessed Parcel	Fee Parcel	MTRS	Assessed acres
Butte	90400020	058130039	M23N04E32	40
Butte	90400020	058130039	M23N04E33	40
Butte	904000022	059030012	M24N04E18	120
Butte	90400023	059100008	M24N05E08	130
Butte	904000024	059110004	M24N05E17	60
Butte	90400025	059140005	M25N04E04	117
Butte	90400027	059200004	M25N05E05	169
Butte	90400028	059200009	M25N05E04	40
Butte	90400028	059200009	M25N05E09	120
Butte	90400029	060070010	M26N04E35	160
Butte	904000031	060150014	M26N05E20	80
Butte	904000032	060250002	M26N04E13	0.7
Butte	904000033	060160006	M26N05E29	120
Butte	904000033	060160006	M26N05E30	40
Butte	904000034	060160008	M26N04E36	280
Plumas	002210001	002210001	M25N05E21	320
Plumas	002210003	002210003	M25N05E23	80
Plumas	0022500011	0022500011	M24N05E03	643
Plumas	0022500031	0022500031	M24N05E11	640
Plumas	002250004	002250004	M24N05E10	640
Plumas	0022500051	0022500051	M24N05E09	320
Plumas	0022500061	0022500061	M24N05E16	320
Plumas	002250007	002250007	M24N05E15	640
Plumas	002250008	002250008	M24N05E14	640
Plumas	0022500091	0022500091	M24N05E13	217.24
Plumas	002270001	002270001	M24N05E22	640
Plumas	0022700021	0022700021	M24N05E23	640
Plumas	002270003	002270003	M24N05E24	160
Plumas	0022700041	0022700041	M24N05E25	215.96
Plumas	002270005	002270005	M24N05E26	640
Plumas	002270006	002270006	M24N05E27	640
Plumas	002270007	002270007	M24N05E28	640
Plumas	002270013	002270013	M24N05E24	56.92
Plumas	002280003	002280003	M24N06E18	100
Plumas	002280003	002280003	M24N06E19	372.84
Plumas	0022900011	0022900011	M23N05E03	644.36
Plumas	002290002	002290002	M24N05E34	80
Plumas	002290003	002290003	M24N05E34	560
Plumas	0022900041	0022900041	M24N05E35	640
Plumas	002290005	002290005	M24N05E36	189.13
Plumas	002290013	002290013	M24N05E36	20
Plumas	002290013	002290013	M24N06E31	789.59
Tehama	01719005	01719005	M28N04E32	120

County	Assessed Parcel	Fee Parcel	MTRS	Assessed acres
Tehama	01719007	01719007	M28N04E33	320
Tehama	01720006	01720006	M28N04E26	320
Tehama	01720008	01720008	M28N04E25	80
Tehama	01720011	01720011	M28N04E34	80
Tehama	01720014	01720014	M28N04E35	360
Tehama	01725002	01725002	M28N05E30	159
Tehama	01725010	01725010	M28N05E31	160
Tehama	01725014	01725014	M28N05E32	80
Tehama	05303008	05303008	M27N03E09	640
Tehama	05304001	05304001	M27N03E03	512
Tehama	05304015	05304015	M27N03E12	80
Tehama	05307002	05307002	M27N03E17	331.3
Tehama	05307004	05307004	M27N03E17	308.7
Tehama	05307005	05307005	M27N03E16	640
Tehama	05307007	05307007	M27N03E19	535.04
Tehama	05307009	05307009	M27N03E20	320
Tehama	05307012	05307012	M27N03E21	320
Tehama	05308003	05308003	M27N03E14	120
Tehama	05308006	05308006	M27N03E14	120
Tehama	05308007	05308007	M27N03E13	640
Tehama	05308009	05308009	M27N03E23	640
Tehama	05308010	05308010	M27N03E24	200
Tehama	05308011	05308011	M27N03E24	80
Tehama	05311003	05311003	M27N03E30	320
Tehama	05311006	05311006	M27N03E29	320
Tehama	05311011	05311011	M27N03E33	640
Tehama	05312004	05312004	M27N03E26	80
Tehama	05312005	05312005	M27N03E25	598.51
Tehama	05312008	05312008	M27N03E25	0.91
Tehama	05312010	05312010	M27N03E34	560
Tehama	05312011	05312011	M27N03E35	640
Tehama	05312014	05312014	M27N03E36	347.07
Tehama	05312015	05312015	M27N03E36	282.18
Tehama	05315004	05315004	M26N03E04	394.38
Tehama	05315009	05315009	M26N03E09	280
Tehama	05316001	05316001	M26N03E03	642.26
Tehama	05316002	05316002	M26N03E02	640.3
Tehama	05316005	05316005	M26N03E10	560
Tehama	05316007	05316007	M26N03E11	640
Tehama	05316008	05316008	M26N03E12	40
Tehama	05316010	05316010	M26N03E12	0.03
Tehama	05316011	05316011	M26N03E12	599.3
Tehama	05316012	05316012	M26N03E01	480.92

County	Assessed Parcel	Fee Parcel	MTRS	Assessed acres
Tehama	05316013	05316013	M26N03E01	149.24
Tehama	05319008	05319008	M26N03E21	160
Tehama	05320001	05320001	M26N03E15	640
Tehama	05320002	05320002	M26N03E14	640
Tehama	05320005	05320005	M26N03E22	640
Tehama	05320006	05320006	M26N03E23	640
Tehama	05320007	05320007	M26N03E24	160
Tehama	05320011	05320011	M26N03E13	431.39
Tehama	05320012	05320012	M26N03E13	198.06
Tehama	05323004	05323004	M26N03E28	560
Tehama	05323007	05323007	M26N03E33	640
Tehama	05324001	05324001	M26N03E27	640
Tehama	05324002	05324002	M26N03E26	430.45
Tehama	05324006	05324006	M26N03E34	320
Tehama	05324008	05324008	M26N03E35	320.51
Tehama	05324009	05324009	M26N03E35	311.93
Tehama	05501004	05501004	M27N04E06	280
Tehama	05501006	05501006	M27N04E05	109.6
Tehama	05501010	05501010	M27N04E05	474.55
Tehama	05501011	05501011	M27N04E04	538
Tehama	05501015	05501015	M27N04E07	40
Tehama	05501021	05501021	M27N04E08	440
Tehama	05501025	05501025	M27N04E09	80
Tehama	05502002	05502002	M27N04E03	349.28
Tehama	05502005	05502005	M27N04E02	458.55
Tehama	05502009	05502009	M27N04E01	34.64
Tehama	05509006	05509006	M27N04E31	639
Tehama	05509009	05509009	M27N04E31	0.48
Tehama	05512003	05512003	M26N04E05	641.46
Tehama	05512005	05512005	M26N04E04	160
Tehama	05512008	05512008	M26N04E08	600
Tehama	05512009	05512009	M26N04E08	40
Tehama	05512010	05512010	M26N04E09	320
Tehama	05512012	05512012	M26N04E09	160
Tehama	05512013	05512013	M26N04E09	40
Tehama	05512014	05512014	M26N04E09	40
Tehama	05512017	05512017	M26N04E07	581.86
Tehama	05512018	05512018	M26N04E06	636.51
Tehama	05512019	05512019	M26N04E06	2.47
Tehama	05512020	05512020	M26N04E07	58.03
Tehama	05513008	05513008	M26N04E10	160
Tehama	05515001	05515001	M26N04E18	120
Tehama	05515002	05515002	M26N04E18	480

County	Assessed Parcel	Fee Parcel	MTRS	Assessed acres
Tehama	05515003	05515003	M26N04E18	40
Tehama	05515004	05515004	M26N04E17	640
Tehama	05515005	05515005	M26N04E16	640
Tehama	05516001	05516001	M26N04E15	400
Tehama	05516006	05516006	M26N04E14	80
Tehama	08104007	08104007	M25N02E11	160
Tehama	08104008	08104008	M25N02E11	160
Tehama	08104010	08104010	M25N02E12	320
Tehama	08105002	08105002	M25N03E06	176
Tehama	08105003	08105003	M25N03E05	391.78
Tehama	08105005	08105005	M25N03E04	336
Tehama	08105006	08105006	M25N03E07	693.5
Tehama	08105007	08105007	M25N03E08	640
Tehama	08105008	08105008	M25N03E09	640
Tehama	08106001	08106001	M25N03E03	440
Tehama	08106002	08106002	M25N03E02	73.13
Tehama	08106003	08106003	M25N03E02	223.13
Tehama	08106004	08106004	M25N03E10	471.13
Tehama	08106005	08106005	M25N03E10	7.13
Tehama	08106006	08106006	M25N03E15	160
Tehama	08110006	08110006	M25N02E13	640
Tehama	08110012	08110012	M25N02E24	640
Tehama	08111012	08111012	M25N02E14	40
Tehama	08112001	08112001	M25N03E18	694.66
Tehama	08112002	08112002	M25N03E17	640
Tehama	08112003	08112003	M25N03E16	640
Tehama	08112004	08112004	M25N03E19	692.9
Tehama	08112005	08112005	M25N03E20	640
Tehama	08112006	08112006	M25N03E21	640
Tehama	08113009	08113009	M25N02E23	21.17
Tehama	08113010	08113010	M25N02E23	20.91
Tehama	08113011	08113011	M25N02E23	31.4
Tehama	08113012	08113012	M25N02E23	10.47
Tehama	08113013	08113013	M25N02E23	20.96
Tehama	08113017	08113017	M25N02E23	38.96
Tehama	08113018	08113018	M25N02E23	10.59
Tehama	08113021	08113021	M25N02E23	10.59
Tehama	08113026	08113026	M25N02E23	20.5
Tehama	08113027	08113027	M25N02E23	20
Tehama	08113028	08113028	M25N02E23	20.53
Tehama	08117001	08117001	M25N02E27	320
Tehama	08117004	08117004	M25N02E26	240
Tehama	08117012	08117012	M25N02E35	80

County	Assessed Parcel	Fee Parcel	MTRS	Assessed acres
Tehama	08117013	08117013	M25N02E35	240
Tehama	08117016	08117016	M25N02E25	40
Tehama	08117017	08117017	M25N02E25	40
Tehama	08117018	08117018	M25N02E25	200
Tehama	08117019	08117019	M25N02E25	160
Tehama	08117020	08117020	M25N02E25	160
Tehama	08117021	08117021	M25N02E25	20
Tehama	08117023	08117023	M25N02E36	160
Tehama	08117024	08117024	M25N02E36	157.5
Tehama	08117025	08117025	M25N02E36	160
Tehama	08117026	08117026	M25N02E36	23.47
Tehama	08117027	08117027	M25N02E26	160
Tehama	08117028	08117028	M25N02E26	160
Tehama	08117029	08117029	M25N02E26	40
Tehama	08118002	08118002	M25N03E30	240
Tehama	08118003	08118003	M25N03E29	640
Tehama	08118004	08118004	M25N03E28	480
Tehama	08118005	08118005	M25N03E31	347.2
Tehama	08118007	08118007	M25N03E32	240
Tehama	08118008	08118008	M25N03E33	160
Tehama	08122004	08122004	M24N02E02	144.8
Tehama	08122005	08122005	M24N02E01	36.82
Tehama	08130001	08130001	M25N02E14	80
Tehama	08130012	08130012	M25N02E14	80

Appendix B.

Glossary of Terms

As referenced in the

Candidate Conservation Agreement with Assurances for the Fisher (*Martes pennanti*) by the U.S. Fish and Wildlife Service

Candidate Conservation Agreement with Assurances: Formal agreement between the FWS and one or more parties to address the conservation needs of proposed or candidate species, or species likely to become candidates, before they become listed as endangered or threatened. This approach provides non-Federal property owners who voluntarily agree to manage their lands or waters to remove threats to candidate or proposed species assurances that their conservation efforts will not result in future regulatory obligations in excess of those they agree to at the time they enter into the agreement.

Candidate Species: Species for which the FWS has sufficient information on file relative to status and threats to support issuance of proposed listing rules.

CCAA: see Candidate Conservation Agreement with Assurances

Conservation measures for fishers: Actions that a non-Federal property owner voluntarily agrees to undertake when entering into a CCAA.

Enhancement of Survival Permit: A permit issued by the FWS under the authority of section 10(a)(1)(A) of the Endangered Species Act. It allows an otherwise prohibited action that benefits the conservation of a listed species. These permits are issued as part of a Candidate Conservation Agreement with Assurances.

Enrolled lands: Lands that have been enrolled in this CCAA that have been issued a Certificate of Inclusion.

ESA: The Endangered Species Act of 1973. The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species 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 the treaties and conventions set forth.

FWS: United States Fish and Wildlife Service

FPRs; California Forest Practice Rules. www.fire.ca.gov

HCP; Habitat Conservation Plan: A FWS management plan designed to offset any harmful effects the proposed activity might have on a species that is listed as endangered or threatened. The HCP process allows development to proceed while promoting listed species conservation.

Incidental take: "Take" is defined in the Endangered Species Act (ESA) as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct of any threatened or endangered species 16USC 1532 (19). The incidental take of the threatened or endangered species results from but is not the purpose of otherwise lawful activities conducted by the applicant.

Participating landowner: Landowners who have developed a FWS-approved site specific plan for fishers and are actively implementing conservation measures for the species.

Regulatory assurances: Assurances that provide non-Federal property owners who voluntarily agree to manage their lands or waters to remove threats to candidate or proposed species that their conservation efforts will not result in future regulatory obligations in excess of those they agree to at the time they enter into the Agreement.

Safe Harbor Agreement: A voluntary arrangement between the FWS with the purpose to promote voluntary management for listed species on non-Federal property while giving assurances to participating landowners that no additional future regulatory restrictions will be imposed.