Forest Management and Stump-to-Forest Gate Chain-of-Custody Recertification Evaluation Report for the:

Swanton Pacific Ranch-California Polytechnic State University Foundation

Conducted under auspices of the SCS Forest Conservation Program
SCS is an FSC Accredited Certification Body

CERTIFICATION REGISTRATION NUMBER
SCS-FM/COC-00071N

Submitted to:

Swanton Pacific Ranch – Davenport California

Lead Author:
Kyle Meister

Date of Field Audit:
March 18-19, 2009

Date of Report:
May 1, 2009

Certified: May 3, 2009

By:

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Organization of the Report

This report of the results of our evaluation is divided into two sections. Section A provides the public summary and background information that is required by the Forest Stewardship Council. This section is made available to the general public and is intended to provide an overview of the evaluation process, the management programs and policies applied to the forest, and the results of the evaluation. Section A will be posted on the SCS website (www.scscertified.com) no less than 30 days after issue of the certificate. Section B contains more detailed results and information for the use of the California Polytechnic State University Foundation, Swanton Pacific Ranch (SPR).

FOREWORD

Scientific Certification Systems, a certification body accredited by the Forest Stewardship Council (FSC), was retained by the California Polytechnic State University Foundation, Swanton Pacific Ranch (SPR) to conduct a certification evaluation of its forested lands on the ranch as well as the Valencia Tract near Aptos, CA that is also owned and managed by the Foundation. Under the FSC/SCS certification system, forest management operations meeting international standards of forest stewardship can be certified as "well managed", thereby enabling use of the FSC endorsement and logo in the marketplace.

In March 2009, an interdisciplinary team of natural resource specialists was empanelled by SCS to conduct the evaluation. The team collected and analyzed written materials, conducted interviews and completed a 2 day field and office audit of the subject property as part of the certification evaluation. Upon completion of the fact-finding phase of the evaluation, the team determined conformance to the 56 FSC Criteria in order to determine whether award of certification was warranted.

This report is issued in support of a recommendation to award FSC-endorsed certification to California Polytechnic State University Foundation, Swanton Pacific Ranch (SPR), for the management of its forested lands. In the event that a certificate is awarded, Scientific Certification Systems will post this public summary of the report on its web site (www.scscertified.com).

SECTION A- PUBLIC SUMMARY AND BACKGROUND INFORMATION

1.0 GENERAL INFORMATION

1.1 FSC Data Request

Applicant entity	California Polytechnic State University Foundation, Swanton Pacific Ranch
Contact person	Steve Auten
Address	125 Swanton Road, Davenport, CA 95017
Telephone	(831) 427-1718
Fax	(831) 458-5411
E-mail	sauten@calpoly.edu
Certificate Number	SCS-FM/COC-00071N
Certificate/Expiration Date	May 2, 2014
Certificate Type	Single FMU
SLIMF	i) a small SLIMF certificate ii) low intensity SLIMF certificate
Number of FMUs in scope that are	
less than 100 ha in area	0
100 - 1000 ha in area	1
1000 - 10 000 ha in area	0
more than 10 000 ha in area	0
Location of certified forest area	
Latitude	*37° 1' 59.5128"*
Longitude	*-122° 13' 10.0524"*
Forest zone	Temperate
Total forest area in scope of certificate which is included in FMUs that:	
are less than 100 ha in area	0
are between 100 ha and 1000 ha in area	0
meet the eligibility criteria as *low intensity* SLIMF FMUs	2100 ac
Total forest area in scope of certificate which is:	
privately managed[1]	2100 ac
state managed	0
community managed[2]	0
Number of forest workers (including contractors) working in forest within scope of certificate	10
Area of forest and non-forest land protected from commercial harvesting of timber and managed primarily for conservation objectives	12 ac
Area of forest protected from commercial harvesting of timber and managed primarily for the production of NTFPs or services	0 ac
Area of forest classified as 'high conservation value forest'	1000 ac
List of high conservation values present[3]	HCV 1, 3 and 4

[1] The category of 'private management' includes state owned forests that are leased to private companies for management, e.g. through a concession system.

[2] A community managed forest management unit is one in which the management and use of the forest and tree resources is controlled by local communities.

Chemical pesticides used	
Total area of production forest (i.e. forest from which timber may be harvested)	1182 ac
Area of production forest classified as 'plantation' for the purpose of calculating the Annual Accreditation Fee (AAF)	0
Area of production forest regenerated primarily by replanting[4]	1182 ac
Area of production forest regenerated primarily by natural regeneration	1182 ac
List of main commercial timber and non-timber species included in scope of certificate (botanical name and common trade name)	Coastal redwood (*Sequoia sempervirens*) and Douglas-fir (*Pseudotsuga menziesii*)
Approximate annual allowable cut (AAC) of commercial timber	Approximately 703,445 bf/ac/year
Approximate annual commercial production of non-timber forest products included in the scope of the certificate, by product type	
List of product categories included in scope of joint FM/COC certificate and therefore available for sale as FSC-certified products (include basic description of product - e.g. round wood, pulp wood, sawn timber, kiln-dried sawn timber, chips, resin, non-timber forest products, etc.)	Coastal redwood and Douglas-fir logs.

Conversion Table English Units to Metric Units

Length Conversion Factors

To convert from	to	multiply by
mile (US Statute)	kilometer (km)	1.609347
foot (ft)	meter (m)	0.3048
yard (yd)	meter (m)	0.9144

Area Conversion Factors

To convert from	to	multiply by
square foot (sq ft)	square meter (sq m)	0.09290304
acre (ac)	hectare (ha)	0.4047

Volume Conversion Factors

Volume

To convert from	to	multiply by
cubic foot (cu ft)	cubic meter (cu m)	0.02831685
gallon (gal)	liter	4.546

1 acre = 0.404686 hectares
1,000 acres = 404.686 hectares
1 board foot = 0.00348 cubic meters
1,000 board feet = 3.48 cubic meters
1 cubic foot = 0.028317cubic meters
1,000 cubic feet = 28.317 cubic meters

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[3] High conservation values should be classified following the numbering system given in the ProForest High Conservation Value Forest Toolkit (2003) available at www.ProForest.net

[4] The area is the *total* area being regenerated primarily by planting, *not* the area which is replanted annually. NB this area may be different to the area defined as a 'plantation' for the purpose of calculating the Annual Accreditation Fee (AAF) or for other purposes.

Breast height = 1.4 meters, or 4 1/2 feet, above ground level

Although 1,000 board feet is theoretically equivalent to 2.36 cubic meters, this is true only when a board foot is actually a piece of wood with a volume 1/12 of cubic foot. The conversion given here, 3.48 cubic meters, is based on the cubic volume of a log 16 feet long and 15 inches in diameter inside bark at the small end.

1.2.1 Environmental Context

The setting of SPR is dominated by the Santa Cruz Mountains, the most southerly extension of the coast redwood forest type in Central California, USA. Many active faults, including the San Andreas, are located northeast of SPR. Much of SPR is underlain by Tertiary Santa Cruz Mudstone, a medium to thick siliceous mudstone. Landslides are common on steeper slopes. Forest soils are typically well-drained and loamy in texture. Scotts, Little, Querseria, and Valencia Creeks are major hydrological features locally that influence forest and fisheries management.

Coast Redwood Forest Type

Coast Redwood (*Sequoia sempervirens*) has limited distribution from southwestern Oregon southward to Salmon Creek in Monterey County, California. It generally grows near sea level to about 2,500 feet in elevation and mainly on the seaward side of the coastal mountains within the fog belt.

Average rainfall throughout its range is 35 to 100 inches, with dense dripping fog in the summer. The growing season is 6 to 12 months, with 200 to 350 frost-free days. Temperature fluctuation is minimal both diurnally and seasonally; the mean summer maximum is 68°-84°F and the mean winter minimum is 33°-40°F.

South of San Francisco, Coastal redwood is found almost exclusively on the seaward side of the coast range, covering crests and west slopes in usually mixed associations with other tree and shrub species (*Pseudotsuga menziesii*, *Myrica californica*, *Lithocarpus densiflora, Vaccinium ovatum*, *Rhododendron macrophyllum*, *Oxalis oregona*, *Polystichum munitum,* and others). Throughout the Santa Cruz Mountains, the most common habitat associated with the Coastal redwood type is the Coast Oak Woodland (CWHR habitat type).

According to the CWHR system, Coastal redwood ecosystems provide food, cover or special habitat elements (for at least one season) for 193 species. This list includes 12 reptiles, 18 amphibians, 109 birds and 54 mammals. Of these species, 18 are considered harvestable. Depending on geographic location, sensitive species associated with the Coastal redwood type include: red-legged frog, *Ensatina*, osprey, ringtail, fisher and marbled murrelet.

Central Coast Ranges

Many sources do not separate the North Coast Range from the Central Ranges since geologically they are very similar. Selecting a southern terminus for this range is somewhat controversial since there is no sharp distinction between the Central Coast Ranges and the western Transverse Ranges.

The Central Coast Province is approximately 250 miles long and 50 miles wide. The mountains are not high, principally between 2,000 feet and 4,000 feet in altitude. Viewed from the sea, they appear as a continuous mountain wall rising from the sea with few intermittent breaks of small valleys and plains. Wide or long beaches are the exception; rather high coastal terraces are the norm.

The Santa Cruz Range, part of the larger Central Coast Range, is about 75 miles long and ranges in altitude from 2,000 feet just south of San Francisco to nearly 3,800 feet in the south. The eastern slope is determined by the San Andreas Fault line, which continues to traverse this region southward along the western base of the Diablo and Temblor Ranges. The Range is generally flat crested between San Francisco and Santa Cruz. South of Monterey Bay the Santa Cruz Ranges, interrupted by the Pájaro River Valley, are renamed the Gabilan Range.

As described in the *Draft Swanton Ranch Draft Management Plan* (2004) approximately 1,435 acres of SPR are forested (including the 80 acres owned by Al Smith's family for which Cal Poly has timber rights), of which 1,160 acres are dominated by conifers and 275 acres by hardwoods. In addition SPR owns and manages 633 acres of redwood and Douglas-fir forestland in the Valencia Creek drainage.

1.2.2 Socioeconomic Context

Santa Cruz County relies heavily upon agriculture and tourism, with significant employment also in the areas of electronics-related manufacturing, information technology, government, and education. Although Santa Cruz County is rural in many respects, it has also developed traits and qualities of a more urban or metropolitan area, and thus, attracts local and tourist populations of diverse cultures and lifestyles. SPR's main influence to the socio-economic setting is its contribution of many educational opportunities to the community and students of various disciplines- which are continually being developed with expanded educational facilities.

1.3 Forest Management Enterprise

1.3.1 Land Use

The Swanton Pacific Ranch has lands dedicated to conservation, native grasslands, forestry, ranching, and agriculture. There are also areas dedicated to housing, education, logging competitions, and storage of vehicles and farming equipment.

SPR has documented the land use history of the property in its *Draft Management Plan* (2004). In a span of just over a hundred years, the property has passed from local indigenous tribes to large Mexican land grants interspersed with smaller landowners, and then through the transition of California from Mexico to the United States, which brought an influx of settlers from all over the world. The United States honored many of the land grants, although many of them started to break up after the 1850s.

The 3,000 acres of SPR comprise much of the original Agua Puerca y Las Trancas Land Grant, which changed ownership several times from the 1860s onward and part of which was subdivided into smaller tracts and sold to smaller landholders. Al Smith, benefactor of the Swanton Pacific Ranch, took ownership of the area in the late 1940s. Agricultural land uses during this time included beef and dairy cattle, flowers, and Brussels sprouts, artichokes and other row crops. Clear-cutting of the forested areas occurred in the 1920s followed 30 years later by high-grading in the 1950s. The construction of dams and the divvying up of water rights were essential to the development of many of these land uses.

The Valencia Creek property was added to the largest land grant in Santa Cruz County, the Rancho Soquel, in 1844. This rancho was granted to Martina Castro and later patented to her in 1860. In the early 1900s, this tract was clear-cut. The resultant stand became second-growth Coastal redwood-Douglas-fir with some areas of tanoak and brush. At least two re-entries of selection harvest took place in the 1960s and 1970s under ownership prior to Al Smith (who purchased the tract in 1980). The NTMP was approved in 2001 for the Valencia Creek Division and SPR performed a selection harvest in 2002-2003.

Al Smith purchased the parcels that eventually became Swanton Pacific Ranch over a 40-year period. Al Smith led a very active life and was the founder and original owner of Orchard Supply Hardware, which he and his family sold in the 1970s. Mr. Smith emphasized how important Cal Poly's "learning by doing" philosophy was instrumental in his personal and professional development. He donated most of his assets, including Swanton Pacific Ranch and its original endowment, to Cal Poly.

Currently at SPR rangeland management, organic agriculture, forestry, water management and monitoring, research, and hunting are all regulated activities.

1.3.2 Partial Certification – Land outside Scope of Certification

All of SPR's forested lands are included in the scope of its FSC certification.

1.4 Management Plan

1.4.1 Management Objectives

From the 2004 Draft Management Plan:

2.1. Donor's Vision
Al Smith, the donor of Swanton Pacific Ranch, wished to maintain Swanton Pacific Ranch "intact and natural, a lab and a classroom for the College of Agriculture for 'Learn by Doing' forever". He had the vision of acquiring as much of the land contained in the original Agua Puerca y Las Trancas land grant as possible. He wanted the property to remain as open space, the railroad to be maintained intact and available to the public and the remaining large redwoods, including the tree known as General Smith, left untouched.

2.2. CAGR Cal Poly College of Agriculture Vision

'To provide Cal Poly students, staff, faculty, and the general public a unique interdisciplinary environment in which to live and learn. To foster the 'learn by doing' philosophy by providing learning experiences on a working ranch with diversified agricultural and forest resources.

2.3. Swanton Pacific Ranch Vision

1. *To foster Al Smith's vision and Cal Poly's "learn by doing" philosophy by providing collaborative, interdisciplinary, and technology-mediated learning experiences on a working ranch with diversified agricultural and natural resources in California's coastal region.*
2. *To provide Cal Poly students, staff, faculty, and the general public with a unique interdisciplinary environment in which to live and learn.*
3. *To explore such interdisciplinary areas as: experimental agriculture; agri-Tourism; environmentally conscious architectural design and construction; sustainable uses of the land; and environmental, conservation and ecology studies.*
4. *To offer educational programs that emphasize pedagogies and formats appropriate to Cal Poly's commitment to active and applied learning.*
5. *To provide an opportunity for residential living/learning, co-curricular learning, and participation in applied research projects and community service activities.*
6. *To assist and guide the University in its realization of the goal to develop a comprehensive environmental vision through teaching environmental literacy and protecting the environmental quality of the Ranch.*

2.3.1. Ranch Projects' Goals

The following are general goals for each of the principal activities at Swanton Pacific Ranch:

<u>Education</u>
To expand the present educational facilities and curriculum so as to offer additional 'learn by doing' experiences including 'learning by living' at Swanton Pacific Ranch

<u>Agriculture</u>
To foster healthy crop production with minimal cost and artificial inputs

<u>Forestry</u>
To develop and demonstrate uneven-aged forest management and sustainable yields

<u>Grassland</u>
To improve the grassland and the water supply, resulting in a sustainable rangeland that supports biodiversity and protects the natural habitat for animals and plants

<u>Natural Habitat Management</u>
To protect and enhance the natural functions and diversity of the varied ranch ecosystems
The Swanton Pacific Railroad Society
To preserve, protect, and expand the Swanton Pacific Railroad

2.3.2. Ranch Specific Goals

The College of Agriculture, Food and Environmental Sciences (CAFES) is responsible for deciding the future specific goals of Swanton Pacific Ranch with input from the Ranch Director. The overall management plans and annual budgets are approved by the Cal Poly Foundation Board of Directors.

Facilities Expansion

It is planned to develop an institute that supports the educational and research opportunities at Swanton Pacific Ranch. This will require expansion of the facilities so that up to 24 students at a time can be accommodated, as well as interns, research students, Ranch staff and visiting faculty.

Field Study Term Program

The Forest and Natural Resources (FNR) department will offer the field study term program for a quarter each year once the existing facilities have been remodeled to accommodate the students.

Upgrade of Existing Infrastructure

All residences, except Al Smith's House and the Staub House, have potable water from a filtration system. The Al Smith House and the Staub House should have potable water in the near future. The Al Smith House has high speed internet after a cable was installed along Swanton Road. The Staub house is likely to have high speed internet next year. Repairs and remodels on all buildings will be implemented as time and resources permit.

Sustainable Agriculture

Continue leasing the majority of crop fields to an approved organic operation with whom students can participate and learn. Offer other learning opportunities through apple, Christmas trees, hay and pumpkin crops that are not labor-intensive and offer both economic returns and a diversity of learning.

Timber Harvesting

Integrate Valencia Creek's forest harvest plans with Swanton's to provide students with ongoing opportunities in all aspects of forest timberland management. Maintain forest certification through the Forest Stewardship Council (FSC) to improve financial returns and demonstrate sustainable practices.

Enterprise Projects

Offer opportunities for students to participate in enterprise projects in a variety of existing and potential Ranch activities. Existing enterprise projects include the Stocker Enterprise, Natural Beef Enterprise and Christmas Tree Enterprise.

Scotts Creek Watershed

Cal Poly Foundation and Swanton Pacific Ranch are committed to protecting the Scotts Creek Watershed. The Ranch plans to continue hosting Watershed Council meetings and to participate in implementing actions recommended in the Scotts Creek Watershed Roads and

Landslide Inventory (SCWC, 2000) and the Scotts Creek Watershed Assessment (SCWC, 2003). Representatives of the Ranch will also assist in the educational and cooperative efforts of the Council to ensure long-term viability of the area.

Queseria Creek Restoration Project
Restore the hydrological functioning and riparian habitat of the Queseria Creek to avoid flood damage and improve riparian habitat for salmonids and other pertinent species.

Scotts Creek Marsh
Explore the potential of restoring the hydrological functioning of the marsh in conjunction with the rebuilding of the Highway 1 bridge by CalTrans. Work with other interested stakeholders to obtain funding and permits for the proposed modifications.

2.4. Project Action Plan
In addition to the general goals of the property, the various elements of the Management Plan contains a summary of goals in the form of recommended specific actions.

These shall be designated as either ongoing or with a specific time period as follows:
0 - Ongoing maintenance action
1 - Action desired within the next 2 years
2 - Action desired in the next 2 - 5 years
3 - Action desirable when resources are available.

These specific actions provide a management basis that can be reviewed and modified as needed. They are developed by the project leaders and a time frame identified based on budget allocations and the time available by Ranch staff. They are summarized both in the beginning of each relevant section and on the summary of actions spreadsheet. The five-year summary of actions plan identifies in more detail the year in which these actions are to be implemented and also who is to be involved for approximately how many hours and how much money each action will cost.

1.4.2 Forest Composition

The main tree species on SPR and the Valencia property are Coast redwood, Douglas-fir and mixed hardwood with a predominance of live oak and tanoak. The majority of all the forestlands were clear-cut at the turn of the century, creating an even-aged 100 year old forest. Curiously, due to its central location on a bio-geographical scale, SPR contains sites on which Monterey pine is considered either exotic or native. Monterey pine was planted on sites of SPR where it does not occur naturally in the late 1970s and 1980s using seed stock from New Zealand. Many of the native stands suffer from pitch canker.

The species component of the forest tends to change with elevation and soil moisture content, with Coastal redwood being most prevalent closer to the valleys, changing to a greater preponderance of Douglas-fir mid-slope and Monterey pine and Tanoak predominately on ridges and other dry sites.

1.4.3 Silvicultural Systems

As has been the long-term norm for this region (pursuant to forest practice regulations), SPR practices selection silviculture that results in continuous forest cover. Harvest prescriptions are normally oriented towards sanitation and salvage activities designed to capture mortality and to improve the health of timber stands. As the extent of mortality and inferior trees within a stand decreases from successive entries, the harvest orientations turn more towards spacing and concentration of growth on the best phenotypes of the desired species. Unless dictated by inordinate mortality, the SPR selection harvest entries are planned to occur on 10-15 year intervals within a given stand. Eventual stand conversion to uneven-aged management is planned to occur between 30 to 50 years.

Where naturally occurring, Monterey pines are managed to improve the vigor of the remaining stock while removing trees affected by pitch canker and creating regeneration openings for more resistant varieties to seed in. On sites where Monterey pine was planted outside of its natural range, it is removed to the extent possible to promote the growth and regeneration of native tree species. Hardwoods are managed for firewood production or controlled with spot herbicide when a certain species composition is desired.

1.4.4 Management Systems

Whenever possible, SPR bases its management on watershed divisions. The conifer area is divided into three management units: the Little Creek Unit, the Scotts Creek unit and the Satellite Stands. The Valencia property is divided into three units, with Unit 1 having 213 acres, Unit 2 having 254 acres and Unit 3 with 37 acres. A Non-Industrial Timber Management Plan (NTMP) was approved for Valencia Creek in June 2001 and another for the SPR forested areas was approved in June 2008.

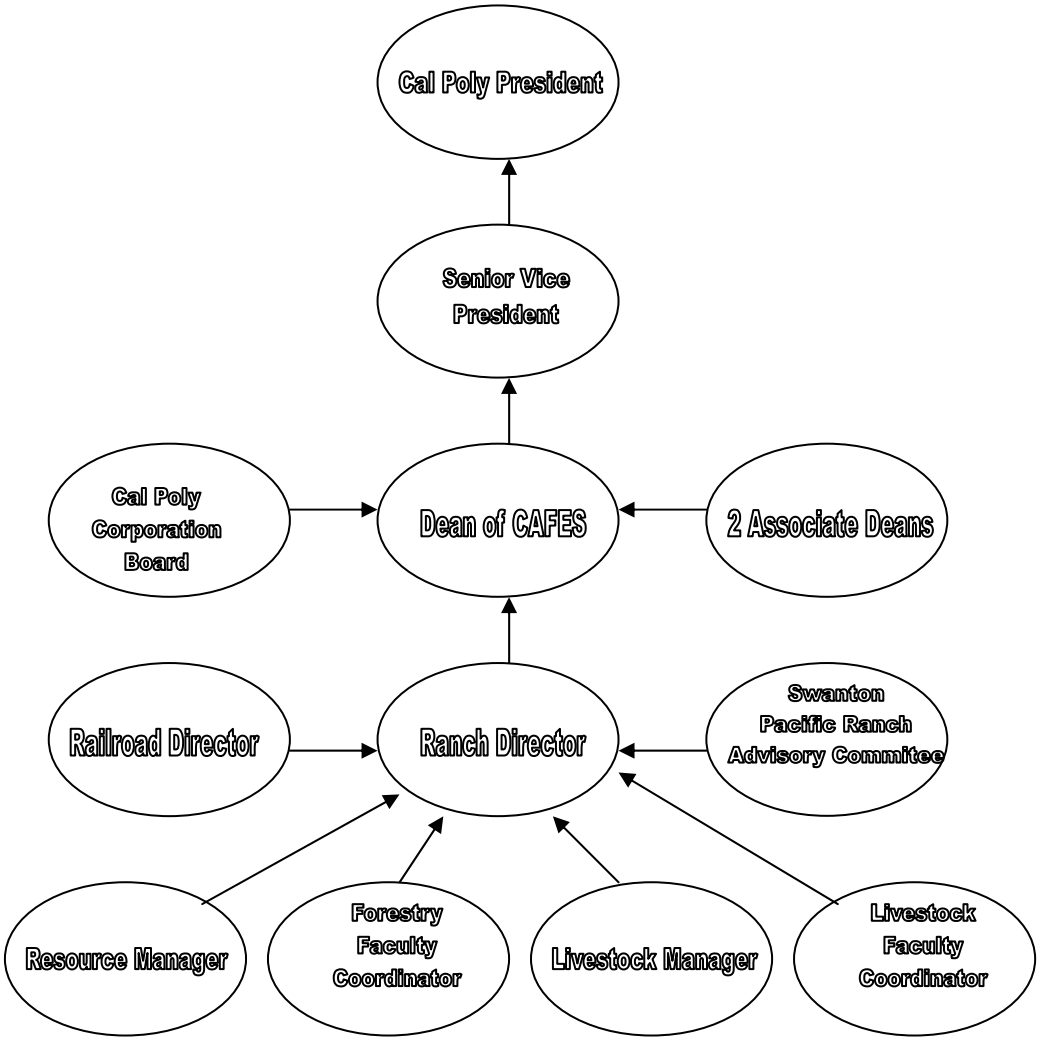
SPR's division of responsibilities is detailed in the organizational chart on the next page (Fig. 1). SPR's Director is responsible for planning the educational curriculum, supervising special projects, senior projects, and intern activities. The Resource Manager and Livestock Manager propose projects to the director, in consultation with the appropriate faculty coordinator. This budget is reviewed and approved by the Director before being approved by the Dean of Agriculture and the Cal Poly Corporation Board. SPR's planning is coordinated by the Director and the Director reports program activities to the Dean of the College of Agriculture who in turn advises the Senior Vice President who advises the President of the college.

The SPR advisory committee is made up of Cal Poly faculty within the College of Agriculture, Food and Environmental Sciences (CAFES). This entity acts as a positive attribute to supplying valued opinions on a variety of different issues that Swanton Pacific Ranch encounters in its land management.

The Forestry Program relies on outside services for timber harvest planning, road maintenance, harvesting operations, and reforestation. The Resource Manager administers

contracts and supervises the projects they are assigned. SPR most recently collaborated with Big Creek Lumber Company on its NTMP including significant upgrades to the forest road in Little Creek. SPR employs contractors for forest unit measurements, vehicle and equipment repairs, construction, and geological and botanical surveys. Provisional/seasonal labor is used on an as-needed basis and paid hourly and must meet federal/local wage requirements. SPR has an intern program that provides students with hands-on experience in forestry, ranching, farming, resource management, and research projects.

Figure 1. Organizational Chart for Ranch Operations



1.4.5 Monitoring System

SPR's monitoring program includes an extensive network of flumes for water quality assessment and paired watershed studies, in addition to Salmonid recovery monitoring in cooperation with NOAA. Under the NTMP, SPR is required to monitor habitat for a number of protected species, including the California red-legged frog and Marbled Murrelet.

SPR monitors forest growth dynamics and regeneration using a continuous forest inventory (CFI) system consisting of permanent plots. Road monitoring occurs frequently, especially after rain events. SPR also performs environmental impact assessments of harvesting and other management activities, monitoring of flora and fauna compositional changes, and an evaluation of timber harvest yield, cost and revenue. Students and other researchers are responsible for a myriad of research and monitoring activities, including riparian zone restoration/ rehabilitation, herbicide application, Sudden Oak Death, Pitch Canker resistance, rare plant communities, and the effects of selective silvicultural systems on streams.

In addition to the advisory committee, the NTMP process provides a mechanism for public input and comment on SPR's forest management activities. However, SPR lacks a cohesive initiative for performing social impact assessments and monitoring. See CAR 2009.3

1.4.6 Estimate of Maximum Sustainable Yield

As previously mentioned, the area of active timber management on SPR is divided into three units. Additionally, the Valencia property is regulated as its own unit. On the Valencia property growth rates over the last 20 years, were 636 and 391 board feet per acre per year for units 1 and 2, respectively. To meet the SPR goal of increased growth, harvesting will remain below 80% of growth for the Valencia property. SPR uses two types of inventory for sustained yield analysis: a continuous forest inventory (CFI) and cluster plots. CFI is an intense sampling method employing fixed plots for re-measurement of the forest every 10 years. CFI was conducted by Bonner (31 plots) and Andersen (79 plots) in 1997 and 2003, respectively, on the SPR units. SPR uses less intensive cluster plots to supplement sampling for silvicultural prescriptions of harvesting and timber inventory. Most recently, Haupt (2006) and Gilbert and McClung (2007) conducted cluster plots measuring over 30 plots each. Based on stand typing, sampling, and growth projections, the SPR units will be harvested every 10-20 years. Each entry will harvest approximately 30% of the standing volume based on CFI measurements. Updates to the sustained yield analysis will occur in conjunction with CFI cycle. The 2007 estimate of redwood on the SPR units is 32,763 bf/ac of redwood and Douglas-fir.

1.4.7 Estimated, Current and Projected Production

The CFI and cluster plot system cited in SPR's NTMP (2008) provide the raw data for input into estimated current and projected volumes. SPR also tallies harvested timber. For example, harvests on the Little Creek Unit in 1990-91 and 1993-95 yielded a total of 3.0 million bf.

On SPR units, two projection cycles were calculated: one from 2007-2022 and another from 2022-2037. Most stands are modeled on 15 year harvest reentry cycles, with the exception of the RW IV stand, which has a 20 year cycle. Estimated annual growth rates for redwood and Douglas-fir on SPR is 1,007.9 bf/ac for stand RW III, 1,111.6 bf/ac for RW II, 864.7 bf/ac for RW IV, 257.8 bf/ac for the DF stand, and finally 224.2 bf/ac for the DF HW stand. The total available harvest of all of these stands is approximately 12,000 bf/ac per harvest based on current CFI data that is updated every 10 years..

On the Valencia Creek Property the NTMP estimated growth rates in Unit 1 to be 636 bf/ac and a 15-year cutting cycle would allow 2,030,750 bf for the unit. For Unit 2 the estimated growth rate is 391 bf/ac and the 15-year cutting cycle would allow 1,489,238 bf for the unit.

Further details growth, volume and harvest projections can be found in the SPR and Valencia NTMPs.

1.4.8 Chemical Pesticide Use

SPR occasionally uses chemical herbicides to control Tanoak in sites where it has the potential to outcompete conifer regeneration. Chemicals are applied by hand.

See Recommendation 2009.4.

1.5 SLIMF Qualifications

Under FSC rules, a forest management operation is eligible to be a SLIMF based on size or a low intensity harvest rate. In the United States of America, the threshold size for SLIMFs under FSC rules is 1,000 ha, or approximately 2,471 acres. SPR is approximately 2,100 acres of forest land and thus qualifies under the size-limit rule.

2.0 GUIDELINES/STANDARDS EMPLOYED

As SPR is located in Central California, the certification evaluation was conducted against the Pacific Coast Regional FSC Standard, Version 9.0, as approved on May 9, 2005. The standard is available at the FSC-US web site (http://www.fscus.org/documents/) or is available, upon request, from Scientific Certification Systems (www.scscertified.com).

3.0 THE CERTIFICATION ASSESSMENT PROCESS

3.1 Assessment Dates

The field and office audit took place March 18-19, 2009 on location at SPR and Valencia Creek.

Preliminary Evaluation:

As this was a 5-year re-evaluation, no preliminary evaluation was conducted.

Main Evaluation:

3.2 Assessment Team

Dr. Robert J. Hrubes, Ph.D. – Lead auditor, Scientific Certification Systems. Dr. Hrubes is a California registered professional forester (#2228) and forest economist with over 30 years of professional experience in both public and public forest management issues. He is the principal architect of the SCS Forest Conservation Program, accredited by the Forest Stewardship Council since 1995. He is currently Senior Vice-President of Scientific Certification Systems. Dr. Hrubes has served as lead auditor for a large number of SCS Forest Conservation Program certification evaluations of North American public forests, industrial forest ownerships and non-industrial forests, as well as operations in Scandinavia, Chile, Brazil, Papua New Guinea, Japan, Malaysia, Australia and New Zealand. Dr. Hrubes holds graduate degrees in forest economics, economics and resource systems management from the University of California-Berkeley and the University of Michigan. His professional forestry degree (B.S.F. with double major in Outdoor Recreation) was awarded from Iowa State University.

Kyle Meister, M.F. – Assistant auditor, Scientific Certification Systems. Mr. Meister is a Certification Forester with Scientific Certification Systems. Recent audits include the Mendocino Redwood Company's Resource Manager Program, Michigan DNR, Trout Mountain Forestry, Collins-Lakeview, Humboldt Redwood Company, Los Olivos y Otros, and Fort Lewis. He holds a B.S. in Natural Resource Ecology and Management and a B.A. in Spanish from the University of Michigan. He recently completed a Master of Forestry degree at the Yale School of Forestry and Environmental Studies. He has experience as an environmental educator and natural resource consultant in the U.S., Mexico, Ecuador, Costa Rica, and Colombia.

3.3 Assessment Process

3.3.1 Itinerary

March 18, 2009 – Office
On the first day, the SCS auditors met with management staff from SPR and their contracted RPF from Big Creek Lumber Company to finalize the itinerary and do the office portion of the audit. The auditors selected various stakeholders to contact later on.

SPR staff reviewed the NTMP for the SPR units and presented a summary of educational activities that occurred in 2008, as well as an overview of SPR's management philosophy and objectives.

March 18, 2009 – Field

Lower Little Creek Unit

- Bridge removal site – educational video for road decommissioning
- Various road repairs and upgrades – extensive amounts of rock laid and retention systems put in place.
- Old Boy Scout Camp – Class I Stream with Steelhead and Coho habitat; explanation of flume network (good pre-harvest data from 2001 onward).
- Monitoring – photo points, flumes, rain gauges, botanical study of UC-SC, NOAA fish traps, Mountain Lion GPS collars, Marbles Murrelet surveys, LiDAR and groundtruthing study, rare plant/floristic survey, forest health, CFI
- Timber Harvest – Northfork – 2008 selection harvest with retention of Douglas-fir, Redwood, Tanoak, Madrone, and snags. Very minimal stand damage. Goal was to reduce Tanoak competition. Supplementary understory planting of Redwood.
- Timber Harvest – Tranquility Flats – road repair, culvert installation, Class II watercourse with facultative wetland plants, 4 permanently retained trees for cultural values. Selection harvest with yarding operation. Erosion control on landings and roads was good (i.e., utilization of rock, slash, seed and straw as appropriate)

3/19/2009 – Field

Valencia Unit

- French broom controlled w/ mowing
- SPR staff mentioned that timber harvest schedule here needs to be updated.
- Past issues with illicit activity on property – SPR has involved local law enforcement and repaired damaged gates.

3/19/2009 – Office
Stakeholder consultation
Exit meeting with SPR and issuance of preliminary CARs and recommendations.

3.3.5 Stakeholder Consultation

Pursuant to SCS protocols, consultations with key stakeholders were an integral component of the evaluation process. Consultation took place prior to, concurrent with, and following the field audit. The following were distinct purposes to the consultations:

- To solicit input from affected parties as to the strengths and weaknesses of Cal Poly's management of the Swanton Pacific Ranch and Valencia forests, relative to the FSC Pacific Coast Regional Standard, and the nature of the interaction between the University's forest managers and the surrounding communities.

- To solicit input on whether the forest management operation has consulted with stakeholders regarding identifying any high conservation value forests.

Principal stakeholder groups of relevance to this evaluation were identified based upon

results from the scoping evaluation (if applicable), lists of stakeholders provided by Swanton forest managers, and additional stakeholder contacts from other sources (e.g., chair of the regional FSC working group).

Prior to the field work, a public notice was widely distributed in which stakeholder comments were solicited. As with many FSC certification projects, the response elicited from the email notification was small. Prior to, during, and following the site evaluation, a cross-section of stakeholders from the regional area were consulted in regard to their relationship with the Swanton forest managers, and their views on the management of the Swanton Ranch and Valencia forested properties. Stakeholders included FSC contact persons, state regulatory personnel involved in non-federal forest management in California, local citizens and groups, and employees.

3.3.5.1 Summary of Stakeholder Concerns and Perspectives and Responses from the Team Where Applicable

Below is summary of the comments (observations, commendations, concerns) expressed by the stakeholders that were consulted during the course of this evaluation.

Economic Concerns

Comment/Concern	Response
• Lumber markets are poor right now, so we have not been buying as much timber as in past years.	Cal Poly harvesting is intermittent and not driven by a financial imperative; as such, reduced demand for timber in the regional market, due to the global downturn in the economy, does stress the managers' commitment to adhering to the management plan.

Social Concerns

Comment/Concern	Response
• Key stakeholders should have better opportunities to provide input into management planning on the Swanton Ranch	FSC standards emphasis opportunities for stakeholder input and the Swanton managers have initiated discussions

	with interested stakeholders to assure that opportunities for input are being provided.
• Swanton personnel, including consulting foresters, are very helpful and easy to work with on state forest practice regulatory matters	Noted

Environmental Concerns

Comment/Concern	Response
• There is a risk of flooding and landslides at the bottom of Little Creek, as evidenced by the flood event back in the 1950's	Based upon our assessment of management activities in the lower Little Creek watershed, we concluded that Swanton managers are not taking actions that increase the risk of flooding and landslides
• Swanton Ranch management practices may be threatening old growth resources	We have looked into this concern and determined that Swanton forest management practices are in full conformance with the old growth management requirements found in the Pacific Coast Regional Standard
• Swanton forest managers and their consulting foresters demonstrate an exemplary sensitivity to water quality considerations	Noted
• Very high quality maps are generated and submitted to agency personnel for review purposes	Noted
• Data on the area of impact associated with the road and skid trail system on the property is not as robust as it could be	Swanton managers are aware of this particular stakeholder

	perspective and are in active dialogue with this individual. From a certification standpoint, we are satisfied that Swanton managers are pursuing this issue in an appropriate manner
• There is a lack of clear goals and inventory information regarding large woody debris within the forest.	See REC 2009.3
• There is an opportunity for Swanton managers to take the lead in initiating a greater level of multi-ownership planning coordination.	This suggestion has been forwarded onto Swanton managers.

3.4 Total Time Spent on audit

Approximately 4.5 auditor days were spent in the field and office portions of the audit and 3 days spent writing and reviewing the report.

3.5 Process of Determining Conformance

FSC accredited forest stewardship standards consist of a three-level hierarchy, principle, then the criteria that make up that principle, then the indicators that make up each criteria. Consistent with SCS Forest Conservation Program evaluation protocols, the team collectively determines whether or not the subject forest management operation is in conformance with every applicable indicator of the relevant forest stewardship standard. Each non-conformance must be evaluated to determine whether it constitutes a major or minor non-conformance at the level of the associated criterion or sub-criterion. Not all indicators are equally important, and there is no simple numerical formula to determine whether an operation is in non-conformance. The team must use their collective judgment to assess each criterion and indicator to determine if it is in conformance. If the forest management operation is determined to be in non-conformance at the criterion level, then at least one of the indicators must be in major non-conformance.

Corrective action requests (CAR's) are issued for every instance of non-conformance. Major non-conformances trigger major CAR's and minor non-conformances trigger minor CAR's

Interpretations of Major CAR's (Preconditions), Minor CARs and Recommendations

Major CARs/Preconditions: Major non-conformances, either alone or in combination with non-conformances of other indicators, result (or are likely to result) in a fundamental failure to achieve the objectives of the relevant FSC Criterion given the uniqueness and fragility of each forest resource. These are corrective actions that must be resolved or closed out prior to

award of the certificate. If major CAR's arise after an operation is certified, the timeframe for correcting these non-conformances is typically shorter than for minor CAR's. Certification is contingent on the certified operations response to the CAR within the stipulated time frame.

Minor CARs: These are corrective action requests in response to minor non-conformances, which are typically limited in scale or can be characterized as an unusual lapse in the system. Corrective actions must be closed out within a specified time period of award of the certificate.

Recommendations: These are suggestions that the audit team concludes would help the company move even further towards exemplary status. Action on the recommendations is voluntary and does not affect the maintenance of the certificate. Recommendations can be changed to CARs if performance with respect to the criterion triggering the recommendation falls into non-conformance.

4.0 RESULTS OF THE EVALUATION

Table 4.1 below, contains the evaluation team's findings as to the strengths and weaknesses of the subject forest management operation relative to the FSC Principles of forest stewardship. The table also presents the corrective action request (car) numbers related to each principle.

Table 4.1 Notable strengths and weaknesses of the forest management enterprise relative to the P&C

Principle/Subject Area	Strengths Relative to the Standard	Weaknesses Relative to the Standard	CAR/REC #s
P1: FSC Commitment and Legal Compliance	▪ The development of the NTMP demonstrates SPR's commitment to compliance with laws ▪ Most of SPRs documents are available to the public	▪ SPR has not conducted an analysis of applicable international agreements to its forest management.	▪ **CAR 2009.1**
P2: Tenure & Use Rights & Responsibilities	▪ SPR describes the land use history and land rights in detail in its management plan. ▪ SPR regularly consults with its neighbors	▪ SPR could improve its stakeholder conflict resolution process.	▪ **CAR 2009.2**
P3: Indigenous Peoples' Rights	▪ The NTMP process ensures much consultation with local American Indian tribes. ▪ SPR keeps archeological site confidential	▪ SPR could engage in more outreach to local American Indian tribes to work collaboratively.	▪ **REC 2009.1**
P4: Community Relations & Workers' Rights	▪ SPR employs many local workers and contractors. ▪ SPR offers many educational opportunities for students and community members.	▪ SPR lacks a social impact assessment.	▪ **CAR 2009.3**
P5: Benefits from the Forest	▪ Utilization and forestry operations are carried out in near textbook-style fashion. ▪ SPR's wood is bought and sold locally. ▪ SPR realizes the benefit of non-economic uses of its forest.	▪ Objectives for snags and woody debris retention have not been defined for the entire property.	▪ **REC 2009.2, REC 2009.3**

P6: Environmental Impact	▪ SPR environmental impact assessments and mitigation efforts remain strong and steady. ▪ SPR's care of its roads reduces impacts to streams and soils.	▪ SPR could improve its regional collaboration efforts in identifying representative samples of existing ecosystems. ▪ SPR could consult the FSC pesticide guidance policy to better integrate its strategy for the use of chemical herbicides in its management activities.	▪ **CAR 2009.4, REC 2009.4, REC 2009.5**
P7: Management Plan	▪ SPR has a publically available management plan. ▪ SPR's management plan is highly informative and presents clear objectives.	▪ SPR's management plan is still in draft form.	▪ **REC 2009.6**
P8: Monitoring & Assessment	▪ SPR engages in a number of monitoring activities, including water courses and forest inventory. ▪ Student and faculty research is often treated as monitoring and considered in the management plan.	▪ SPR does not yet have a written chain of custody strategy should it ever wish to sell its own products. ▪ SPR does not have a formal mechanism for receiving public comment.	▪ **CAR 2009.3, REC 2009.1**
P9: Maintenance of High Conservation Value Forest	▪ SPR's HCV assessment involved several local and federal agencies. ▪ For a small landowner, SPR has much of its land in HCV status. ▪ SPR HCV assessment was coordinated with an interdisciplinary team.	▪ The HCV document does not describe the nature of how conservation efforts were coordinated with other forest managers of HCVFs.	▪ **None**

4.2 Preconditions

Preconditions are major corrective action requests that are placed on a forest management operation after the initial evaluation and before the operation is certified. Certification cannot be awarded if open preconditions exist.

No preconditions were placed on SPR during the re-certification evaluation.

5.0 CERTIFICATION DECISION

5.1 Certification Recommendation

As determined by the full and proper execution of the SCS *Forest Conservation Program* evaluation protocols, the evaluation team hereby recommends that SPR be awarded FSC certification as a "Well-Managed Forest" subject to the corrective action requests stated in Section 5.2. SPR has demonstrated that their system of management is capable of ensuring that all of the requirements of the Pacific Coast Regional Standard, Version 9.0, are met over the forest area covered by the scope of the evaluation. SPR has also demonstrated that the described system of management is being implemented consistently over the forest area covered by the scope of the certificate.

5.2 Initial Corrective Action Requests

Background/Justification: While there is no evidence that SPR is in non-compliance with U.S. government ratified treaties and international agreements, SPR has not conducted an analysis of all applicable agreements to its forest and ecosystem management.	
CAR 2009.1	SPR must conduct an analysis of treaties and other international agreements that are relevant to its forest and ecosystem management operations.
Deadline	Annual Audit 2010
Reference	*FSC Indicator 1.3.a*

Background/Justification: SPR did not inform certifier of a dispute with a landowner in the 80 acre timber easement parcel.	
CAR 2009.2	SPR must develop policy and/or procedure of informing the certifier of disputes over tenure and use rights and keeping the certifier updated on any resolutions or agreements that have been made.
Deadline	Annual Audit 2010
Reference	*FSC Indicator 2.3.b*

Background/Justification: SPR conducts many monitoring activities and shares this information with researchers, government agencies, and the public through its educational programs. However, a public summary of SPR's monitoring activities is not yet available. SPR also lacks a centralized, formal mechanism to carry out social impact

assessments and incorporate the results into planning and operations.	
CAR 2009.3	SPR shall maintain a registry of public comments and document any concerns provided from interested parties. These comments and concerns shall be addressed in management plans and operations. SPR shall develop a comprehensive public summary of its monitoring program, incorporating the elements detailed in criterion 8.2.d.
Deadline	Annual Audit 2010
Reference	*FSC Indicators 4.4.b, 8.2.d, and 8.5.a*

Background/Justification: SPR's floristic survey and analysis and assessment of protected areas on its land go above and beyond what most landowners in the Central California region are doing. However, SPR has not conducted a regional analysis of the adequacy of representation of their forest types in protected areas across the landscape.	
CAR 2009.4	SPR shall conduct a regional analysis per indicator 6.4.a., including collaboration with relevant state natural heritage programs, public agencies and other groups as detailed in the indicator.
Deadline	Annual Audit 2010
Reference	*FSC Indicator 6.4.a and 6.4.b*

Background/Justification: The California Forest Practice Rules provide many opportunities for notification of local indigenous tribes on archaeological issues and SPR has been exemplary in its outreach efforts to local indigenous communities. There is an opportunity, however, to seek participation of tribal representatives in planning management operations that affect American Indian resources.	
REC 2009.1	SPR should engage in more affirmative outreach to local indigenous tribes to develop plans for the management and protection of American Indian resources on SPR lands.
Reference	*FSC Indicators 3.2.a., 3.3.b, and 8.2.d.5*

Background/Justification: The auditors observed severe girdling damage caused by mounting cables onto a tree in a yarding operation. Upon consultation with SPR and the Big Creek Lumber Co. forester, the auditors discovered that it was the only one which straps were not used.	
REC 2009.2	SPR should ensure greater consistency in use of straps in yarding operations to protect anchor trees.
Reference	*FSC Indicator 5.3.b*

Background/Justification: SPR does retain woody debris of various types, but has no targets for woody debris retention.	
REC 2009.3	SPR should develop targets and guidelines for the retention and recruitment of snags, cavity trees, and downed woody debris throughout the property. This is a restatement of REC 2003.5.
Reference	*FSC Indicator 5.3.c*

Background/Justification: SPR practices a high level of diligence in identifying old growth trees and stands, for which there is little- if any- chance of them cutting an old growth tree. Current guidelines on old growth management are located at various points in the management plan, however. Mendocino Redwood Company's old growth policy could be a good reference. See also REC 2003.4.	
REC 2009.4	SPR should develop a more formal policy on old growth trees.
Reference	*FSC Indicator 6.3.d.3*

Background/Justification: SPR uses mechanical control of invasive species on the Valencia property. However, in the SPR NTMP, herbicide use is allowed as a control method for invasive species as long as it is in compliance with local laws and FSC P&C.	
REC 2009.5	SPR should consult current FSC guidelines on chemical herbicide and pesticide use before using them in operations.
Reference	*FSC Indicator 6.6.a and 6.9.b*

Background/Justification: SPR's management plan has been a working draft since 2004.	
REC 2009.6	SPR should finalize the draft management plan.
Reference	*FSC Criterion 7.1*

6.0 SURVEILLANCE EVALUATIONS

If certification is awarded, surveillance evaluations will take place at least annually to monitor the status of any open corrective action requests and review the continued conformance of SPR to the Pacific Coast Standard, Version 9.0, as approved on May 9, 2005. Public summaries of surveillance evaluations will be posted separately on the SCS website (www.scscertified.com).

7.0 SUMMARY OF SCS COMPLAINT AND APPEAL INVESTIGATION PROCEDURES

The following is a summary of the SCS Complaint and Appeal Investigation Procedures, the full versions of the procedures are available from SCS upon request. The SCS Complaint and Appeal Investigation Procedures are designed for and available to any individual or organization that perceives a stake in the affairs of the SCS Forest Conservation Program and that/who has reason to question either the actions of SCS itself or the actions of a SCS certificate holder.

A **complaint** is a written expression of dissatisfaction, other than **appeal**, by any person or organization, to a certification body, relating to the activities of staff of the SCS Forest Conservation Program and/or representatives of a company or entity holding either a forest management (FM) or chain-of-custody (CoC) certificate issued by SCS and duly endorsed by FSC, where a response is expected (ISO/IEC 17011:2004 (E)). The SCS Complaint Investigation Procedure functions as a first-stage mechanism for resolving complaints and avoiding the need to involve FSC.

An "**appeal"** is a request by a certificate holder or a certification applicant for formal reconsideration of any adverse decision made by the certification body related to its desired certification status. A certificate holder or applicant may formally lodge an appeal with SCS against any adverse certification decision taken by SCS, within thirty (30) days after notification of the decision.

The written Complaint or Appeal must:

- Identify and provide contact information for the complainant or appellant
- Clearly identify the basis of the aggrieved action (date, place, nature of action) and which parties or individuals are associated with the action
- Explain how the action is alleged to violate an SCS or FSC requirement, being as specific as possible with respect to the applicable SCS or FSC requirement
- In the case of complaints against the actions of a certificate holder, rather than SCS itself, the complainant must also describe efforts taken to resolve the matter directly with the certificate holder
- Propose what actions would, in the opinion of the complainant or appellant, rectify the matter.

Written complaints and appeals should be submitted to:

Dr. Robert J. Hrubes
Senior Vice-President
Scientific Certification Systems
2200 Powell Street, Suite 725
Emeryville, California, USA94608
Email: rhrubes@scscertified.com

As detailed in the *SCS-FCP Certification Manual*, investigation of the complaint or appeal will be confidentially conducted in a timely manner. As appropriate, corrective and preventive action and resolution of any deficiencies found in products or services shall be taken and documented.

SECTION B DETAILED RESULTS OF THE FULL EVALUATION

1.0 DETAILED EVALUATION OF CONFORMANCE

The findings and observations of the evaluation team are presented in this section, structured according to the 9 applicable FSC Principles. To follow are brief descriptions of each Principle, Criterion, and Indicator and the team's findings and judgments at the Criterion and Indicator level.

C = Conformance with Criterion
C/NC = Overall Conformance with Criterion, but there are Indicator non-conformances
NC = Non-Conformance with Criterion

Requirement	C/NC	Comment/CAR
P1 Forest management shall respect all applicable laws of the country in which they occur, and international treaties and agreements to which the country is a signatory, and comply with all FSC Principles and Criteria.		
C1.1 Forest management shall respect all national and local laws and administrative requirements.	C	SPR is in high conformance with this criterion.
1.1.a. The applicant's forest management plans and operations in the region demonstrate compliance with federal, state, county, municipal, and tribal laws, as well as case law and regulations. *For example: Records are on file documenting any instances of violations (whether actual or purported) of any applicable laws and regulations as listed above, including actions that were taken by the forest owner or manager to address these violations.*	C	Swanton Pacific Ranch (SPR) has completed an NTMP for the SPR lands in June of 2008. The Valencia Creek parcel has had an NTMP since 2001. The NTMP exemplifies the commitment of the management to legal constraints.
1.1.b. Forestry operations meet or exceed the current state forest-practice regulations, best management practices for forestry, roads, wildlife, and/or water quality that exist within the state(s) or other appropriate jurisdiction(s) in which the operations occur.	C	Practices on Swanton exceed state forest practice regulations.
1.1.c. Where required by law, forest (*see Glossary*) owners and managers share public information, provide open records, and conduct procedures for public participation.	C	Most all planning and management documents are available publically, such as on the SPR website.
C1.2. All applicable and legally prescribed fees, royalties, taxes and other charges shall be paid.	C	
1.2.a. Taxes on forestland and timber, and other fees related to forest management, are paid in a timely manner and in accordance with federal, state, county, municipal, and tribal laws.	C	No evidence of issues with taxes, especially since SPR is a 501(3)c registered non-profit organization. Swanton must pay yield taxes, but otherwise is exempt from taxes.
C1.3. In signatory countries, the provisions of all binding international agreements such as CITES, ILO Conventions, ITTA, and Convention on Biological Diversity, shall be respected.	C	There is no evidence that SPR is in non-compliance with this criterion.
1.3.a. Forest owners or managers comply with treaties, including those with American Indian tribes, and other international agreements that have been signed by the President of the United States, ratified by the Senate and have entered into force. (Note: see Analysis of US Government Procedures for Abiding with Treaties, FSC-US, 3/10/03)	C/NC	The NTMP process ensures that significant outreach to American Indian tribes occurs regarding archaeological sites and potential treaty obligations. **CAR 2009.1**: SPR should conduct an analysis of treaties and other international agreements that are relevant to its forest and ecosystem management operations.
C1.4. Conflicts between laws, regulations and the FSC Principles and Criteria shall be evaluated for the purposes of certification, on a case by case basis, by the certifiers and by the involved or affected parties.	C	The California Forest Practice Rules are among the most stringent in the country and present no conflict with the FSC P&C.
1.4.a. Any perceived, possible conflict between US law and FSC P&C shall be referred to FSC ABU.	C	SPR's management presents no conflict between relevant laws and regulation and the FSC P&C.
C1.5. Forest management areas should be protected from illegal	C	SPR staff take appropriate measures to protect the property

harvesting, settlement and other unauthorized activities.		from illegal and unauthorized activities and actively respond to intrusions.
1.5.a. Forest owners or managers implement measures to prevent illegal and unauthorized activities in the forest. *For example, efforts may include posting boundary notices, using gates, making periodic inspections, and reporting suspected illegal or unauthorized activities to the proper authorities.*	C	Valencia property has been a frequent site of illegal entry and illicit activity, for which SPR has taken appropriate action.
C1.6. Forest managers shall demonstrate a long-term commitment to adhere to the FSC Principles and Criteria. *Applicability note to Criterion 1.6.: Assessment of this criterion is guided by both FSC Policy and Guidelines: Partial Certification for Large Ownerships (BM19.24, May 2000 available at http://www.fsc.org/en/whats_new/documents/Docs_cent/2 and the FSC Guidelines for Certification Bodies FSC STD 20-001 (version 2.1).*	C	
1.6.a Forest owners or managers provide written statements of commitment to the FSC Principles and Criteria. The commitment is stated in the management plan [see 7.1], a document prepared for the certification process, or another official document.	C	SPR provides a written statement of their commitment to FSC on their website.
1.6.b Forest owners or managers document the reasons for seeking partial certification.	C	SPR contains many prairie, range and agricultural lands that fall outside the scope of FSC certification.
1.6.c Forest owners or managers document strategies and silvicultural treatments for several harvest entries that meet the FSC Principles and Criteria (see Principle 7)	C	SPR documents silvicultural strategies and treatments in the NTMP and its management plan.
P2 Long-term tenure and use rights to the land and forest resources shall be clearly defined, documented and legally established.		
C2.1. Clear evidence of long-term forest use rights to the land (e.g., land title, customary rights, or lease agreements) shall be demonstrated.	C	SPR's draft management plan and NTMP detail rights to the land, customary uses, rights-of-way, and easements.
2.1.a. Forest owners or managers make available information on legal and customary rights associated with the forest. These rights include both those held by the party seeking certification and those held by other parties. *For example, tribal claims to customary uses, non- timber forest products (NTFPs), such as firewood and botanical products, hunting and fishing, and recreational uses, are addressed.*	C	Rights-of-way are all documented in the NTMP. SPR has timber rights to land on the Spafford parcels (which they do not own). The Spafford parcels fall under the scope of the FSC certification.
2.1.b. Land boundaries are clearly identified on the ground by the forest owner or manager prior to commencement of management activities adjacent to the boundary.	C	SPR clearly identifies property boundaries and sale boundaries prior to operations.
C2.2. Local communities with legal or customary tenure or use rights shall maintain control, to the extent necessary to protect their rights or resources, over forest operations unless they delegate control with free and informed consent to other agencies.	C	
2.2.a. Forest owners or managers allow lawful customary uses of the forest to the extent they are consistent with the conservation of forest resources and the stated objectives in the management plan, and do not present a legal liability. *Examples of legally recognized rights include:* ▪ *public rights of way* ▪ *public use of water* ▪ *established easements* ▪ *treaty rights*	C	SPR has easements to some roads to access portions of its property and allows foot and limited OHV access to it forested parcels.
2.2.b. The forest owner or manager allows customary and lawful uses of the forest to the extent they are consistent with conservation of the forest resource, forest management objectives, and do not present a legal liability.	C	SPR allows limited access to local residents for hiking and is open to coordinated access for research purposes. SPR allows access to all regulatory agencies for the purposes of harvest activity evaluation and forest management.

For example: ▪ *collecting firewood for personal use or sale* ▪ *collecting non-timber forest products for personal use or sale* ▪ *recreation* ▪ *gathering plant materials for traditional cultural purposes by American Indians* ▪ *use of water* ▪ *hiking, hunting, and fishing on non-posted property* ▪ *visiting ancestral gravesites*		
2.2.c. On ownerships where customary use rights and traditional and cultural areas/sites exist, forest owners or managers consult with stakeholders in the planning and implementation of forest management activities.	C	SPR consults with relevant stakeholders and neighbors on old cultural sites, such as the abandoned Boy Scout camp, and contacts them regarding active timber harvest operations. SPR consults with landowners in the Spafford parcels on forest management planning and operations.
C2.3. Appropriate mechanisms shall be employed to resolve disputes over tenure claims and use rights. The circumstances and status of any outstanding disputes will be explicitly considered in the certification evaluation. Disputes of substantial magnitude involving a significant number of interests will normally disqualify an operation from being certified.	C	The NTMP process, SPR advisory committee, and informal communication while in the field provide mechanisms for receiving information on disputes and use rights claims.
2.3.a. The forest owner or manager maintains relations with community stakeholders and/or American Indian groups to identify disputes in their early stages. If disputes arise, the forest owner or manager initially attempts to resolve them through open communication, negotiation, and/or mediation. If negotiation fails, federal, state, local, and/or tribal laws are employed to resolve land tenure *(see Glossary)* claims.	C	The NTMP process requires a public review period and contact with American Indian groups to identify areas of cultural significance.
2.3.b. The forest owner or manager provides information regarding disputes over tenure and use rights to the certifying body.	NC	**CAR 2009.2**: SPR must develop policy and/or procedure of informing the certifier of disputes over tenure and use rights and keeping the certifier updated on any resolutions or agreements that have been made.
P3The legal and customary rights of indigenous peoples to own, use and manage their lands, territories, and resources shall be recognized and respected.		
C3.1. Indigenous peoples shall control forest management on their lands and territories unless they delegate control with free and informed consent to other agencies.	NA	
3.1.a. Managers of tribal forests secure informed consent regarding forest management activities from tribes or individuals (such as allottees *(see Glossary)*) whose forest is being considered for management.		
3.1.b. When requested to do so by the tribal landowner, forest owners or managers use tribal experience, knowledge, practices, and insights in forest management planning and operations on tribal lands.		
3.1.c. Areas of restricted access are delineated with the consent of affected tribal people and in accordance with their laws and customs on legally recognized tribal lands and/or customarily used non-tribal.		
C3.2. Forest management shall not threaten or diminish, either directly or indirectly, the resources or tenure rights of indigenous peoples.	C	
3.2.a. Forest owners or managers identify and contact American Indian groups that have current legal or customary rights to use the management area. The recommended priority for tribal contacts is: 1) Tribal government, such as tribal chairpersons of federally recognized tribes and traditional cultural and religious leaders. 2) Tribal contact persons identified by tribal governments. 3) Representatives of non-recognized tribes or tribal groups with no	C	Under Forest Practice rules, SPR must notify tribes under NTMPs and THPs. SPR has hosted one member of the tribes who had an interest in the Valencia property.

formal governments. 4) Lineal descendants of American Indians with ties to the land. Unsuccessful attempts to contact tribal representatives are documented.		
3.2.b. Forest owners or managers invite the participation of tribal representatives in jointly planning forestry operations that affect tribal and other American Indian resources.		**REC 2009.1**: SPR should engage in more affirmative outreach to local indigenous tribes to develop plans for the management and protection of American Indian resources on SPR lands.
3.2.c. On lands adjacent to tribal lands, and on other lands where operations might affect tribal lands or resources, steps are taken by the forest owner or manager to ensure that tribal resources are protected from adverse effects of management activities.		
C3.3. Sites of special cultural, ecological, economic or religious significance to indigenous peoples shall be clearly identified in cooperation with such peoples, and recognized and protected by forest managers.	C	
3.3.a. Forest owners or managers request the participation of tribal representatives in identifying sites of current or traditional significance within the property proposed for certification. *For example, areas of special significance may include:* ▪ *ceremonial, burial, or village sites* ▪ *areas used for hunting, fishing, or trapping* ▪ *current areas used for gathering culturally important or ceremonial materials, such as basket materials, medicinal plants, or plant materials used in dances* ▪ *current areas used for subsistence gathering, such as mushrooms, berries, or acorns*	C	The NTMP process requires this.
3.3.b. Forest owners or managers and tribal representatives jointly develop measures to protect or enhance areas of special significance.		**REC 2009.1**: SPR should engage in more affirmative outreach to local indigenous tribes to develop plans for the management and protection of American Indian resources on SPR lands.
3.3.c. Confidentiality of disclosures is maintained in keeping with applicable laws and requirements of tribal representatives.	C	Any archaeological sites discovered remain confidential and are known only to SPR. American Indian tribes and relevant regulatory agencies.
C3.4. Indigenous peoples shall be compensated for the application of their traditional knowledge regarding the use of forest species or management systems in forest operations. This compensation shall be formally agreed upon with their free and informed consent before forest operations commence.	NA	
3.4.a. Forest owners or managers respect the confidentiality of tribal knowledge and assist in the protection of tribal intellectual property rights.		
3.4.b. A written agreement is reached with individual American Indians and/or tribes prior to commercialization of their indigenous intellectual property, traditional ecological knowledge, and/or forest resources. The individuals and/or tribes are fairly compensated when such commercialization takes place.		
P4 Forest management operations shall maintain or enhance the long-term social and economic well-being of forest workers and local communities.		
C4.1. The communities within, or adjacent to, the forest management area should be given opportunities for employment, training, and other services.	C	
4.1.a. Forest work is packaged and offered in ways that create a high-quality work environment for employees, contractors, and their employees. *For example, a high quality work environment may include the following attributes:* ▪ *employee and contractor relationships that are long term and stable* ▪ *a mixture of diverse tasks that require varying levels of*	C	SPR maintains long-term relationships with local loggers and contractors due to the quality of their work. Contractors are required for many varied tasks, including brush control and invasive species removal. While the auditors were on site, SPR was considering expanding an invasive species control contract already underway to a local.

skill ▪ *opportunities for advancement* ▪ *a comprehensive package of benefits* ▪ *opportunities for employee and contractor participation in decision-making* ▪ *forest owners or managers provide and/or support training opportunities for workers to improve their skills*		
4.1.b. The conditions of employment are as good for non-local workers as they are for local workers doing the same job (e.g., remuneration, benefits, safety equipment, training, and workman's compensation).	C	SPR maintains long-term relationships with local loggers and contractors due to the quality of their work. All loggers must be licensed timber operators (LTOs) in the State of California, which requires a certain level of training and safety standards. Cal Poly students recently had the opportunity to take a chainsaw instruction and safety course, which was open to a few members of Cal Fire.
4.1.c. Employee compensation and hiring practices meet or exceed standards for comparable forest workers within the region.	C	Contractors interviewed were happy with arrangements with SPR.
4.1.d. Forest owners or managers use qualified local foresters, loggers, and contractors. Forest managers and their contractors give preference to qualified local workers.	C	SPR maintains long-term relationships with local loggers and contractors due to the quality of their work.
4.1.e. Forest owners or managers demonstrate a preference for the local procurement of goods and services.		Do they give preference to local suppliers? Has purchased vehicles, tractors, and trailers locally. Hires Big Creek for forestry work.
4.1.f. Forest owners or managers and their contractors comply with the letter and intent of applicable state and federal labor laws and regulations *(see also 1.1.a).*	C	SPR defines objectives of timber harvests and other management operations and communicates them with contractors. Experienced LTOs are preferred.
4.1.g. Forest owners and managers contribute to public education about forest ecosystems and their management. *For example, forest managers use forests as a training and educational resource.*	C	Cal Poly students recently had the opportunity to take a chainsaw instruction and safety course, which was open to a few members of Cal Fire. SPR has many public education events throughout the year and videotapes many of them for later use in courses and to show demonstrations to interested groups.
C4.2. Forest management should meet or exceed all applicable laws and/or regulations covering health and safety of employees and their families.	C	
4.2.a. The forest owner or manager and their contractors develop and implement safety programs and procedures. *For example:* ▪ *well-maintained machinery and equipment* ▪ *use of safety equipment appropriate to each task* ▪ *documentation and posting of safety procedures in the workplace* ▪ *educational efforts (such as Forest Industry Safety Training Alliance and Game of Logging)* ▪ *contracts with safety requirements* ▪ *safety records, training reports, and certificates*		SPR posts CalOSHA posters. Training programs for students on chainsaw and other machine use. Cal Poly has mandated safety program. Every field has to have a risk analysis done and reviewed. No alcohol policy (except for special groups). SPR's primary mission is education. It has educational events for Cal Poly and non-Cal Poly students as well as for the public.
4.3 The rights of workers to organize and voluntarily negotiate with their employers shall be guaranteed as outlined in Conventions 87 and 98 of the International Labour Organization (ILO). *Applicability Note for 4.3: Compliance with this criterion can be accomplished with guidance from:* FSC Certification and the ILO Conventions, FSC Policy Paper and Guidelines, 20 May 2002.	C	
4.3.a. Forest owners or managers and their contractors develop effective mechanisms to resolve disputes between workers and management. *For example:* ▪ *Language translators and cultural interpreters are*	C	All contractors and loggers seemed satisfied with working relationships with SPR. No known disputes were uncovered.

employed as needed. ▪ *Cross-cultural training is employed as needed to integrate the workforce.*		
4.4. Management planning and operations shall incorporate the results of evaluations of social impact. Consultations shall be maintained with people and groups directly affected by management operations. *Applicability Note: People and groups directly affected by management operations may include: employees and contractors of the landowner; neighbors; fishers and hunters, as well as other recreational users; local water users; processors of forest products; and representatives of local and regional organizations concerned with social impacts.*	C	
4.4.a. Forest owners or managers of large-scale operations provide opportunities for people, as individuals and/or groups, to offer input into management planning when they are affected by forestry operations.	NA	
4.4.b. People and groups affected by management operations are apprised of proposed forestry activities (e.g., logging, burning, spraying, and traffic) and associated environmental and aesthetic effects in order to solicit their comments or concerns. Such concerns are documented and addressed in management plans and operations.	NC	**CAR 2009.3**: SPR shall maintain a registry of public comments and document any concerns provided from interested parties. These comments and concerns shall be addressed in management plans and operations. SPR shall develop a comprehensive public summary of its monitoring program, incorporating the elements detailed in criterion 8.2.d.
4.4.c. Significant archeological sites and sites of cultural, historical, or community significance, as identified through consultation with state archeological offices, tribes, universities, and local expertise, are designated as special management zones or otherwise protected during harvest operations.	C	The NTMP process requires this analysis and consultation.
C4.5. Appropriate mechanisms shall be employed for resolving grievances and for providing fair compensation in the case of loss or damage affecting the legal or customary rights, property, resources, or livelihoods of local peoples. Measures shall be taken to avoid such loss or damage.		
4.5.a. The forest owner or manager attempts to resolve grievances and mitigate damage resulting from forest management activities through open communication and negotiation prior to legal action.	C	SPR is attempting to deal with a current stakeholder issue over the NTMP with a landowner of an adjacent parcel.
4.5.b. Forest owners or managers and their contractors have adequate liability insurance.	C	SPR requires that contractors have liability insurance. SPR itself has liability insurance as it is part of a major public university.
P5 Forest management operations shall encourage the efficient use of the forest's multiple products and services to ensure economic viability and a wide range of environmental and social benefits.		
C5.1. Forest management should strive toward economic viability, while taking into account the full environmental, social, and operational costs of production, and ensuring the investments necessary to maintain the ecological productivity of the forest.	C	As SPR is an NGO, all profits are invested in the property and management of SPR.
5.1.a. The forest owner or manager is financially able to support long-term (i.e., decades rather than quarter-years or years) forest management (and if necessary restoration), such as planning, inventory, resource protection, and post-harvest management activities. *For example, investment and reinvestment in forest management are sufficient to fulfill management objectives and maintain and/or restore forest health and productivity.*	C	SPR's mission is long-term sustainability and timber supply. It also has a diverse revenue stream as it has many agricultural activities.
5.1.b. Responses (e.g., increases in harvests or debt load) to short-term financial factors, such as fluctuations in the market, requirements for immediate cash flow, need for sawmill equipment and log supplies, are limited to levels that enable fulfillment of the management plan.	C	SPR's diverse revenue stream helps it to hedge losses during hard economic times.
C5.2. Forest management and marketing operations should	C	Big Creek is major local buyer and redwood lumber is the

encourage the optimal use and local processing of the forest's diversity of products. *Applicability note to C5.2: Optimal use is a balance of activities that allows the continual use of resources, while maintaining the ecological, social, and economic potentials of the system from which these resources are drawn.*		highest and best use for this species. Due to down timber markets and competition with Eastern US and tropical species, firewood production is most appropriate for hardwoods. Sales are small scale which allows local bidders to bid on contracts. SPR supports the local economy well.
5.2.a. Preference is given to local, financially competitive, value-added processing and manufacturing facilities.	C	Big Creek is a local lumber mill that is a major buyer of local redwood logs. Firewood sales are small and put out to bid locally.
5.2.b. New markets are explored and developed for common, but less-used, species (e.g., alder, tanoak, and madrone), grades of lumber, and/or an expanded diversity of forest products (e.g., small diameter logs, flooring).	C	Firewood is the best use for less-used species in this region.
5.2.c. The technical and financial specifications of some sales of forest products are scaled to promote successful competition by small businesses.	C	Although Big Creek is major buyer, SPR reserves the right to sell logs to higher bidders. Firewood sales are at a scale that is competitive for smaller businesses.
5.2.d. When non-timber products are harvested or utilized, the management and use of those products are incorporated into the management strategy.	NA	
C5.3. Forest management should minimize waste associated with harvesting and on-site processing operations and avoid damage to other forest resources.	C	
5.3.a. Felling, skidding/yarding, bucking, sorting, and handling are carried out in a way that maximizes volume and value.	C	Utilization on SPR lands is exemplary. Yarding corridors are amazing with very little residual stand damage.
5.3.b. Harvest is implemented in a way that conserves the integrity of the residual stand. Provisions concerning acceptable levels of residual damage are included in operational contracts. *For example, bumper trees are used and equipment is selected and used in a way that minimizes unintentional damage to crop trees.*	C	**REC 2009.2**: SPR should ensure greater consistency in use of straps in yarding operations to protect anchor trees.
5.3.c. Tree limbs, tops, snags, down logs, and other biomass are retained on site in adequate quantities and quality for ecosystem function, wildlife habitat, and future forest productivity. After adequate woody debris has been left on site to provide nutrient cycling and habitat, additional byproducts of harvest and in-the-field milling operations are considered for use in other productive processes. *For example:* ▪ *Chips and sawdust are used for mulch, filler, or fuel.* ▪ *Small diameter boles are used for fence posts, flooring, and furniture stock.*	C	**REC 2009.3**: SPR should develop targets and guidelines for the retention and recruitment of snags, cavity trees, and downed woody debris throughout the property. This is a restatement of REC 2003.5. SPR does have snag and cavity tree retention standards. Will remove snags if they present a hazard to roads, public or timber fallers or insect disease control. General Smith stand has DWD guidelines, but SPR does not have guidelines for property in general. There is an ongoing effort to assess DWD in CFI.
C5.4. Forest management should strive to strengthen and diversify the local economy, avoiding dependence on a single forest product.	C	
5.4.a. Forest uses and products are diversified through management, while maintaining forest composition, structures, and functions. *For example, compatible uses may include recreation, ecotourism, hunting, fishing, and specialty products.*	C	SPR has very diverse uses of its forested areas, some of which provide alternative revenue streams. SPR has research, education, commercial harvesting, trainings and other activities in its forests.
5.4.b The forest owner or manager reinvests in the local economy and the community through both active civic engagement and ongoing capital investment. *For example:* ▪ *Facilities and equipment are regularly maintained and updated.* ▪ *Absentee owners maintain a local office.* ▪ *The owner or manager supports local business development by working with organizations, such as the*	C	SPR's educational programs and public tours make it exemplary in terms of civic engagement. SPR's management activities employ almost exclusively local people on its forest lands. SPR has been upgrading its facilities and takes excellent care of onsite equipment.

chamber of commerce.		
C5.5. Forest management operations shall recognize, maintain, and, where appropriate, enhance the value of forest services and resources such as watersheds and fisheries. *Note: The Working Group considers this criterion sufficiently explicit and measurable. Indicators are not required.*	C	There is lots of effort in fisheries monitoring and restoration. This includes long term monitoring efforts with the NOAA in regards to anadromous salmonids.
C5.6. The rate of harvest of forest products shall not exceed levels that can be permanently sustained.	C	Completed sustainability analysis. Inventories are building over time and clearly establishing well stocked stands
5.6.a. The level of sustainable harvest is based on clearly documented projections that use growth and regeneration data, site index models, and the classification of soils. The level of documentation is determined by the scale and intensity of the operation. *(see also 7.1.d)*	C	SPR classifies stands based on site productivity and species composition. The CFI and cluster plot system ensure that robust sampling data are used to conduct growth and regeneration analyses. Much of this is explained in the NTMP.
5.6.b. Growth rates equal or exceed average harvest rates over rolling periods of no more than 10 years. In cases where owners or managers harvest timber at intervals longer than ten years, the allowable harvest is determined by the target stocking levels and the volume of re-growth since the previous harvest.	C	SPR harvests less than growth and growth rates have exceeded average harvest rates.
5.6.c. The rate and methods of harvest lead to well-stocked stands across the forest management unit (FMU). Under-stocked and over-stocked stands are returned to fully stocked levels at the earliest practicable time.	C	SPR has developed stand re-entry intervals based on growth models using data from its CFI and selective logging practices. SPR relies on natural regeneration and supplemental planting to ensure future stocking levels. 9600 redwood seedlings were planted in 2009.
P6 Forest management shall conserve biological diversity and its associated values, water resources, soils, and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest.		
C6.1. Assessments of environmental impacts shall be completed -- appropriate to the scale, intensity of forest management and the uniqueness of the affected resources -- and adequately integrated into management systems. Assessments shall include landscape level considerations as well as the impacts of on-site processing facilities. Environmental impacts shall be assessed prior to commencement of site-disturbing operations. *Applicability Note: Small landowners that practice low-intensity forestry may meet this requirement with brief, less rigorous assessments. More extensive and detailed assessments (e.g., formal assessments by experts) are expected from large landowners and/or those who practice more intensive forestry (see Glossary) management.*	C	Under Forest Practice Rules, SPR must perform an array of assessments, such as pre-harvest environmental impact assessments. Overall good conformance. History of land use is well covered in the management plan.
6.1.a. Using available science and local expertise, forest owners and managers identify and describe: (1) ecological processes, such as disturbance regimes; (2) common plants, animals, and their habitats; (3) rare plant community types *(see Glossary and Appendix D)*; (4) rare species and their habitats (see Glossary); (5) water resources; and (6) soil resources *(see also 7.1.a and b).*	C	SPR conducts a robust ecological assessment of floristic communities, disturbance regimes, wildlife, salmonids, rare species and habitats, and water and soil resources. It has been active in local watershed management and soil surveying efforts.
6.1.b. Using available science and local expertise, current ecological conditions are compared to the historical conditions within the landscape context, considering the elements identified in 6.1.a.	C	SPR, as it is part of a research institution, has documented the land use history of its lands. There are many research projects and ecological surveys to document ecological conditions. SPR recently completed a stream restoration project to encourage the recovery of salmonids and vegetated riparian corridors.
6.1.c. Prior to the commencement of management activities, potential environmental impacts and their cumulative effects are evaluated.	C	The NTMP requires as assessment of environmental impacts prior to harvesting taking into account the re-entry intervals.
6.1.d. Using assessments derived from the above information, options are developed and implemented to maintain and/or restore the long-term ecological functions of the forest *(see also 7.1.c).* Actions needed to avoid and mitigate negative environmental impacts are identified, and a mitigation plan is formulated *(see also*	C	SPR currently has plans underway to restore sites of non-native Monterey pine to a mix of native tree species. The stream restoration project is attempting to restore forest cover in the riparian corridor. SPR's management takes action to avoid and reduce identified environmental impacts. For example,

criterion 7.1).		harvesting occurs during dry weather and yarding equipment is used whenever appropriate to reduce impacts on sensitive soils.
6.1.e. Assessments developed under 6.1.a. – d. for public lands are made available to the public.	NA	
C 6.2. Safeguards shall exist which protect rare, threatened and endangered species and their habitats (e.g., nesting and feeding areas). Conservation zones and protection areas shall be established, appropriate to the scale and intensity of forest management and the uniqueness of the affected resources. Inappropriate hunting, fishing, trapping, and collecting shall be controlled.	C	SPR takes protection measures and performs habitat enhancement for protected species. SPR regularly consults with regulatory agencies on habitat monitoring and enhancement for the California red-legged frog and Marbled Murrelet.
6.2.a. If consultation of databases for rare species and/or plant community types *(see Glossary and 6.1)* indicate the likely presence of a rare species (see Glossary), then either a survey is conducted prior to the commencement of management activities (to verify the species' presence or absence) or the forest owner or manager manages as though the species were present. If a rare species is determined to be present, its location is reported to the manager of the species' database.	C	SPR conducts its own rare plant and animal surveys and consults these databases as necessary.
6.2.b. When a rare species and/or plant community type is present or assumed to be present, modifications are made in both the management plan and its implementation in order to maintain, improve, or restore the species and its habitat.	C	When rare species and/or plant communities are found, SPR has included these into the management plan and/or the NTMP. Local and federal law requires certain protection zones for these species and/or modified management activities.
6.2.c. Conservation zones *(see Glossary)* and other protected areas for existing rare species and/or plant community types are created and/or maintained to enhance the viability of populations and their habitats, including their connectivity within the landscape. Forest managers consult recovery plans and specialists, such as biologists or ecologists, to determine species' habitat needs.	C	SPR has a large network of protected zones for a landowner of its size. SPR consults with researchers and regulatory agencies on the requirements of protected species.
6.3. Ecological functions and values shall be maintained intact, enhanced, or restored, including: **a) Forest regeneration and succession.** **b) Genetic, species, and ecosystem diversity.** **c) Natural cycles that affect the productivity of the forest ecosystem.** **d) Old-growth stands and forests** **e) Retention** **f) Even-aged silvicultural systems** *Applicability note: Indicators under 6.3.a. & b. may have limited applicability for managers of small and mid-sized forest properties because of their limited ability to coordinate their activities with other owners within the landscape, or to significantly maintain and/or improve landscape-scale vegetative patterns.*	C	
C6.3.a. Forest regeneration and succession	C	
6.3.a.1. Forest owners or managers use the following information to make management decisions regarding regeneration: landscape patterns (e.g., successional processes, land use/land cover, non-forest uses, habitat types); ecological characteristics of adjacent forested stands (e.g., age, productivity, health); species' requirements; and frequency, distribution, and intensity of natural disturbances.	C	SPR considers all of these factors when managing for forest regeneration and succession. For example, the auditors observed an area where microsite conditions favored Tanoak and Madrone next to a predominantly Redwood/Douglas-fir stand. This microsite was not entered while harvesting and replanting with Redwood occurred.
6.3.a.2. Forest owners or managers maintain or restore portions of the forest to the range and distribution of age classes of trees that would result from natural processes inherent to the site.	C	SPR practices selective silviculture that mimics natural gap dynamics. SPR has adopted plans to manage the forest to a mix of age classes, rather than the even-aged stands that developed after clear-cutting in the 1920s.
6.3.a.3. Silvicultural practices generate stand conditions (species composition, physical structures, habitat types, and ecological processes) that are similar to those produced by disturbance regimes typical for the site	C	SPR's selective silviculture mimics natural gap dynamics. The auditors also observed wildlife trees, masting trees, snags, and other retained forest structural attributes in harvesting areas.
C6.3.b. Genetic, species, and ecosystem diversity	C	
6.3.b.1. The forest owner or manager selects trees for harvest,	C	SPR's selective silviculture retains healthy, vigorous trees of all

retention, and planting in a manner that maintains or enhances the productive capacity, genetic diversity and quality, and species diversity of the residual stand.		ages and retains lesser-used timber species for other ecological values, such as wildlife food and habitat.
6.3.b.2. Native seeds of known provenance are used for artificial regeneration.	C	Native stock from local nurseries is used for artificial regeneration.
6.3.b.3. Habitat components necessary to support native species are protected, maintained, and/or enhanced within the harvest unit and across the FMU *(see also 6.3.e.1).* *For example:* ▪ *vertical and horizontal structural complexity* ▪ *understory species diversity* ▪ *food sources* ▪ *nesting, denning, hibernating, and roosting structures* ▪ *habitats and refugia for sedentary species and those with special habitat requirements*	C	Selective silvilculture results in vertical and horizontal complexity. SPR retains snags and wildlife trees.
6.3.b.4. At the FMU level, a comprehensive range of native species, habitats, stand types, age and size classes (including large and old trees), and physical structures is maintained over time.	C	In addition to HCVFs and native grasslands, SPR takes habitat, succession, and old growth presence into account resulting in a number of ecosystem types and structural features.
C6.3.c. Natural cycles that affect the productivity of the forest ecosystem	C	
6.3.c.1. If a decline in soil fertility or forest health is observed, forest owners or managers determine the source of the decline through tests and investigation. If soil degradation is found to be the source of the decline, forest owners or managers modify soil-management techniques. *For example:* ▪ *Primary management objectives shift from commercial production to restoration.* ▪ *Site preparation is minimized.* ▪ *The lightest practical equipment with the lowest ground pressure is used.* ▪ *Whole-tree harvesting is discontinued, and tops are left in the forest.* ▪ *Longer rotations and a diversity of species are used in lieu of artificial fertilization.* ▪ *Natural, early successional processes are allowed or encouraged.*	C	No declines in soil fertility have been detected. Pitch canker has affected native stands of Monterey pine. SPR removes diseased trees to favor healthy trees when possible.
6.3.c.2. Forest managers identify and apply site-specific fuels management practices, based on: (1) natural fire regimes, (2) risk of wildfire, (3) potential economic losses, and (4) public safety.	C	Some SPR researchers are investigating the use of prescribed fire on some of SPR's lands. SPR currently manages to reduce fire risk in managed stands, including an HCVF in order to protect remnant old growth trees.
6.3.c.3. Post-harvest management activities maintain soil fertility, structures, and functions. *For example:* ▪ *Slash is randomly distributed across the harvest area.* ▪ *Burning is used where it is appropriate to the natural disturbance regime.*	C	Low impact logging techniques are used whenever possible. Slash is packed in landings to reduce erosion potential.
6.3.c.4. Prescriptions for salvage harvests balance ecological and economic considerations. *For example:* ▪ *Coarse woody debris is maintained.* ▪ *Den trees and snags are maintained.* ▪ *Natural, background levels of 'pest' populations are allowed exist before measures to control such populations are implemented.*	C	Natural Monterey pine stands are managed to maintain health and remove heavily infested trees. Sometimes infested parts of trees are removed rather than the whole tree. SPR's salvage efforts are concentrated are the Satellite Stands to improve forest health, age class distribution, and structural components, such as snags and woody debris. Some of these areas have the potential for student research projects.
C6.3.d. Old-growth stands and forests	C	For a landowner of its size, SPR has exemplary old growth

Note: Failure to meet the provisions of Criterion 6.3.d. will be considered a major failure (fatal flaw).		protection.
This section uses the following definitions: ▪ *Type 1* stands are those stands of at least 20 contiguous acres that have never been logged and that display late successional/old-growth characteristics. Stands that have never been logged, but which are smaller than 20 acres, are assessed for their ecological significance, and may also be classified as Type 1 stands. Areas containing a low density of existing roads may still be considered Type 1 stands, provided the roads have not caused significant, negative ecological impacts. ▪ *Type 2* stands are old unlogged stands smaller than 20 acres that are not classified as Type 1, and other stands of at least 3 contiguous acres that have been logged, but which retain significant late-successional/old-growth structure and functions. ▪ *Type 3* stands are those that have residual old-growth trees and/or other late-successional/old-growth characteristics, but do not meet the definition of a Type 2 stand. *Applicability note: When forest management activities (including timber harvest) create and maintain conditions that emulate Type 2 or 3 stands, the management system that created those conditions may be used to maintain them. Such areas may be considered as representative samples for the purposes of meeting criterion 6.4.*		
6.3.d.1. Non-tribal Type 1 stands are not harvested. Timber harvests may be certifiable on Type 1 American Indian lands, in recognition of their sovereignty and unique ownership. Requirements for certification of tribal operations that include harvest in Type 1 stands are: ▪ Type 1 forests comprise a significant portion of the tribal ownership ▪ A history of forest stewardship by the tribe exists ▪ High Conservation Value Forest attributes are maintained ▪ Old-growth structures are maintained in the managed stand ▪ Conservation zones representative of Type 1 stands have been established ▪ Landscape level considerations have been addressed ▪ Rare species *(see Glossary)* are protected	NA	There are no type 1 stands on SPR.
6.3.d.2. Management activities adjacent to Type 1 stands are conducted to minimize abrupt forest/opening edge effects and other negative impacts on the ecological integrity of these areas.	NA	
6.3.d.3. Timber harvests in Type 2 and Type 3 stands maintain late-successional/old-growth structures, functions, and components, including individual trees that function as refugia. There is no net decline in the area or the old-growth characteristics of Type 2 or Type 3 stands due to forest management, with the exception of Type 3 stands that are elevated to Type 2 stands.	C	**REC 2009.4**: SPR should develop a more formal policy on old growth trees. SPR could consider patterning it after the MRC/HRC old growth policy with considerations for the southern subdistrict. See also REC 2003.4.
6.3.d.4. Where Type 1, 2, and 3 stands are under-represented in the landscape, a portion of the forest is managed to create late-successional/old-growth characteristics.	C	SPR has stands managed for late successional characteristics.
6.3.e. Retention *Applicability note: Several types of retention are required by this standard with respect to green trees, snags, and woody debris. The amounts of each of the following types of retention and/or set-asides are not necessarily cumulative.* *Retention and set-aside provisions include:* ▪ *habitats of sensitive, threatened, and endangered species (criterion 6.2)* ▪ *old-growth and late successional trees (6.3.d)* ▪ *post-harvest, within-stand tree retention (6.3.e.5)* ▪ *green trees around snags (6.3.e.2)* ▪ *native hardwoods (6.3.e.3)* ▪ *representative stand types (criterion 6.4)* ▪ *riparian management zones (criterion 6.5)* ▪ *late-seral management areas (10.5.a)*	C	
6.3.e.1. Forest owners and managers retain (or, if absent, recruit) legacy trees, old and large trees, snags and woody debris to sustain populations of native plants, fungi, and animals, both within the harvest unit and across the FMU.	C	The General Smith stand has management in place to recruit snags and downed woody debris.

For example: ▪ *Old trees with irreplaceable characteristics are retained.* ▪ *In some dry regions, retaining approximately 10 tons of debris per acre may be sufficient. In wetter regions, retaining 20 tons of debris per acre may be sufficient.* ▪ *Debris is well distributed spatially and by size and decay class, with a goal of at least 4 large pieces (approximately 20" diameter X 15' length) per acre.* ▪ *Three to 10 snags per acre (averaged over 10 acres) are maintained or recruited.* ▪ *Snags are well represented by size, species, and decay class.*		
6.3.e.2. Where necessary to protect against wind throw and to maintain microclimate, green trees and other vegetation are retained around snags, down woody debris, and other retention components.	C	Snags and other green trees are retained in groups.
6.3.e.3. Native hardwoods and understory vegetation are retained as needed to maintain and/or restore the natural mix of species and forest structure.	C	SPR retains native hardwoods for wildlife and to diversify the species mixture. The auditors observed the retention of understory vegetation in sensitive areas.
6.3.e.4. Live trees and native understory vegetation are retained within the harvest unit in proportions and configurations that are consistent with the characteristic natural disturbance regime in each community type *(see Glossary)*, unless retention at a lower level is necessary for purposes of restoration.	C	Individual and group selection methods allow for a complex arrangement of vegetation, including dispersed individual trees and clumped groups with minimal or no entry, which of course promote the survival of existing understory vegetation.
6.3.e.5. Within harvest openings larger than 6 acres, 10-30% of pre-harvest basal area is retained. The levels of green-tree retention depend on such factors as: opening size, legacy trees, adjacent riparian zones, slope stability, upslope management, presence of critical refugia, and extent and intensity of harvesting across the FMU. Retention is distributed as clumps and dispersed individuals, appropriate to site conditions. Retained trees comprise a diversity of species and size classes, which includes large and old trees.	C	SPR does not harvest more than approximately 30% of the standing volume in a given harvest.
6.3.f. Even-aged silvicultural systems	NA	SPR does not practice even-aged silviculture.
6.3.f.1. Even-aged silviculture *(see Glossary)* may be employed where: 1) native species require openings for regeneration or vigorous young-stand development, or 2) it restores the native species composition, or 3) it is needed to restore structural diversity in a landscape lacking openings, while maintaining connectivity of older, intact forests.		
6.3.f.2. When trees are planted, the plantings maintain or enhance the composition and/or diversity of the forest ecosystem.		
6.3.f.3. If regeneration harvest ages do not approach culmination of mean annualincrement (CMAI, *see Glossary*), retention approaches the upper end of the range required in 6.3.e.5.		
6.3.f.4. Regeneration harvest blocks in even-aged stands average 40 acres or less. No individual block is larger than 60 acres *(see 6.3.e.4. and 6.3.e.5. for provisions of within-stand retention in openings larger than 6 acres).*		
6.3.f.5. Regeneration in previously harvested areas reaches a mean height of at leastseven feet or achieves canopy closure *(see Glossary)* before adjacent areas are regeneration harvested.		
C6.4. Representative samples of existing ecosystems within the landscape shall be protected in their natural state and recorded on maps, appropriate to the scale and intensity of operations and the uniqueness of the affected resources. *Applicability Note: When forest management activities (including timber harvest) create and maintain conditions that emulate an intact, mature forest or other successional phases that may be under-represented in the landscape, the management system that created those conditions may be used to maintain them, and the area may be*	C	

considered as a representative sample for the purposes of meeting this criterion. *Ecologically viable representative samples are designated to serve one or more of three purposes: (1) to establish and/or maintain an ecological reference condition, (2) to create or maintain a representative system of protected areas (i.e., includes samples of all successional phases, forest types, and plant communities (see Glossary and Appendix D), and/or (3) to protect a feature that is sensitive, rare, or unique in the landscape. Areas serving the purposes of (1) and (2) may move across the landscape as under-represented conditions change, or may be fixed in area and manipulated to maintain the desired conditions. Areas serving the purposes of (3) are fixed in location.* *Forests of all sizes may be conducive to protection of fixed features, such as rock outcrops and bogs. Medium-sized and large forests may be more conducive than small forests to the maintenance of successional phases and disturbance patterns.* *While public lands (see Glossary) are expected to bear primary responsibility for protecting representative samples of existing ecosystems, FSC certification of private lands (especially those with large contiguous areas of forest) can contribute to such protection.* *In some cases, the forest owner or manager may designate set-asides by formal means (conservation easements or purchase of conservation areas) on lands other than the certified FMU. Any off-FMU designation will be made to better implement or meet regional, state, and landscape level forest ecosystem and wildlife habitat restoration needs, plans, and objectives.*		
6.4.a. Forest owners or managers assess the adequacy of representation of their forest types in protected areas across the landscape. This assessment entails collaboration with state natural heritage programs; public agencies; regional, landscape, and watershed planning efforts; universities; and/or local conservationists. It may also include gap analysis.	NC	**CAR 2009.4**: SPR shall conduct a regional analysis per indicator 6.4.a., including collaboration with relevant state natural heritage programs, public agencies and other groups as detailed in the indicator.
6.4.b. Where existing protected areas within the landscape are not of a size and configuration to serve one or more of the three purposes described in the applicability note above, forest owners or managers, whose properties are conducive to the establishment of such areas, designate ecologically viable areas that serve these purposes. The size and arrangement of on-site and off-site representative sample areas are documented.	C/NC	SPR's network of protected areas is quite diverse and extensive. Follow-up with this criterion should occur after SPR conducts the analysis detailed in 6.4.a. **CAR 2009.4**: SPR shall conduct a regional analysis per indicator 6.4.a., including collaboration with relevant state natural heritage programs, public agencies and other groups as detailed in the indicator.
6.4.c. The size and extent of representative samples on public lands being considered for certification is determined through a science-based (e.g., gap analysis, regional reserve design principals and methodologies), transparent planning process that is accessible and responsive to the public. **Note: Failure to meet the provisions of 6.4.c. or 6.4.d. is a major failure (fatal flaw) for mid- and large-sized public forests.**	NA	
6.4.d. Managers of large, conterminous public forests *(see Glossary)* establish and maintain representative protected areas sufficient in size to maintain species dependent on interior core habitats**.** **Note: Failure to meet the provisions of 6.4.c. or 6.4.d. is a major failure (fatal flaw) for mid- and large-sized public forests.**	NA	
C6.5. Written guidelines shall be prepared and implemented to control erosion; minimize forest damage during harvesting, road construction, and all other mechanical disturbances; and to	C	Forest road management on SPR is exemplary. Logging practices and BMPs are also.

protect water resources. *Applicability note: Soil cover and fertility are maintained in a condition that is sufficient to: (1) minimize soil erosion, (2) protect soil microbial communities, (3) protect inherent site productivity, (4) protect surface water quality, and (5) protect the natural processes in aquifers. The type and extent of canopy cover and groundcover required to accomplish the above is dependent on the following: slope; stability of the soil; potential for soil compaction; and characteristics of the climate, such as the intensity and frequency of precipitation.*		
<u>Logging and Site Preparation</u> 6.5.a. Logging operations and the use of roads and skid trails occur only when soil compaction, erosion, and sediment transport do not result in degradation of water quality, site productivity, or habitats. *For example, soils are either dry enough or frozen enough to minimize disturbance and compaction.*	C	SPR conducts operations when the weather is dry and class 2 and 3 water courses contain little water.
6.5.b. Logging damage to regeneration and residual trees is minimized during harvest operations.	C	Damage levels are very low.
6.5.c. Areas in which the risk of landslides is extreme (considering factors, such as slope, soil, and concavity), are neither logged nor roaded.	C	SPR conducts extensive geological analysis of landslide-prone areas. Legacy roads in such areas receive extensive amounts of protective measures.
6.5.d. On sites with a high risk of landslides, the forest owner or manager assures that such risks will not be exacerbated by management operations, especially where landslide "runout" may affect water bodies.	C	SPR conducts extensive geological analysis of landslide-prone areas. Legacy roads in such areas receive extensive amounts of protective measures.
6.5.e. In order to minimize soil disturbance, silvicultural techniques and logging equipment are selected in accordance with slope and the hazard rating for soil erosion. *For example:* ▪ *On slopes greater than 30 percent, ground-based yarding is used only when it is possible to do so without exacerbating soil erosion.* ▪ *On slopes greater than 50%, cable or helicopter yarding is used if it is technically feasible and will not result in adverse environmental effects due to the management operations.*	C	SPR employs yarding equipment whenever possible to minimize impacts to soils. Occasionally, skidders or helicopters are used.
6.5.f. Plans for site preparation either minimize impacts to forest resources or specify the following mitigations: (1) Slash is concentrated only as much as necessary to achieve the goals of site preparation and the reduction of fuels to moderate or low levels of fire hazard. (2) Scarification of soils is limited to the minimum necessary to achieve successful regeneration of desired species. (3) Topsoil is minimally disturbed.	C	Slash is packed around the landing to reduce erosion. Slash is distributed on site to promote regeneration and maintain soil health. Topsoil is affected minimally in yarding and helicopter operations.
<u>Transportation System (including permanent and temporary haul roads, skid trails, and landings)</u> 6.5.g. The transportation system is pre-planned, designed, located, constructed, maintained, and/or reconstructed to minimize the extent and impact of the system and its potential cumulative adverse effects: *For example:* ▪ *As a part of watershed assessments on public lands, habitats for salmonids and other threatened and endangered aquatic species are identified. If shown to be necessary, road density is reduced in such habitats and/or*	C	Roads, landings and skid trails are minimized and pre-planned to protect soil and water quality.

mitigated within the watershed. ▪ *Roads, landings, and skid trails are minimized.* ▪ *Displacement of soil, sedimentation of streams, and impacts to water quality are minimized.* ▪ *Patches of habitat and migration corridors are conserved.* ▪ *Roads constructed across slopes in excess of 60 percent are full bench cuts or with minimal side-cast.* ▪ *Roads are built on flat areas or stable slopes.* ▪ *The integrity of riparian zones and buffers surrounding other valuable ecological elements are conserved (e.g., wetlands, habitat for sensitive species, and interior old-growth forest).* ▪ *Permanent roads have structures to control soil erosion year-round and are managed under a winter maintenance plan.* ▪ *Cooperative transportation planning with agencies, such as watershed councils, is used to minimize negative cumulative environmental impacts across the landscape.*		
6.5.h. Landings are designed and constructed to minimize soil erosion. *For example:* ▪ *Landings are located on ecologically suitable sites.* ▪ *Landings are limited to the smallest practical safe area.* ▪ *Landings are sloped to divert runoff to non-erosive areas.* ▪ *Landings are seeded and mulched or covered with slash after use.*	C	Landings are kept to a minimum and located on sites suitable for drainage and access.
6.5.i. Access to temporary and permanent roads is controlled to minimize impacts to soil and biota while simultaneously allowing legitimate access as addressed by Principles 3 & 4 and identified in the management plan. *For example: Roads without a weather resistant surface (e.g., soil, or native-surfaced roads) are used only during periods of weather when conditions are favorable to minimize road damage, surface erosion, and sediment transport.* Access is restricted to roads that are not immediately needed for purposes of management.	C	SPR's access system contains roads with measures to make them year round accessible for management and monitoring activities. Seasonal or temporary roads are blocked using slash and debris when necessary or activity is limited on them.
6.5.j. Failed drainage structures or other areas of active erosion caused by roads and skid trails are identified, and measures are taken to correct the drainage and erosion problems.	C	SPR inspects road after all major precipitation events. Recently, major repairs and preventive measure were taken in the Little Creek Unit.
6.5.k. Access is restricted and erosion is controlled on infrequently used roads.	C	Seasonal or temporary roads are blocked using slash and debris when necessary or activity is limited on them.
6.5.l. Unnecessary roads are permanently decommissioned or put to bed. *For example:* ▪ *Bridges and culverts are removed; water bars are installed.* ▪ *Slopes are re-contoured and/or re-vegetated.* ▪ *Ecologically functional drainage patterns are established.*	C	SPR did an analysis of its road system several years ago and decommissioned some roads.
<u>Stream and Water Quality Protection</u> *Applicability Note: The following water quality requirements of this standard are superceded when and where state or federal laws, regulations, or other contractual requirements are more stringent. This section uses the following definitions:* ▪ *Category A stream: A stream that supports or can support populations of native fish and/or provides a domestic water supply.* ▪ *Category B stream: Perennial streams that do not support native fish and are not used as a domestic water supply.* ▪ *Category C stream: An intermittent stream that never the less has sufficient water to host populations of non-fish aquatic species* ▪ *Category D stream: A stream that flows only after rainstorms or melting snow and does not support populations of aquatic species*		
6.5.m. Streams, vernal pools, lakes, wetlands, seeps, springs, and associated riparian areas are managed to maintain and/or restore	C	SPR's hydrological modeling and water course protection and monitoring go above and beyond what most landowners on the

hydrologic processes, water quality, and habitat characteristics *(see NMFS (1996);* state water quality standards*; Karr (1981)),* which may include: ▪ the capacity for water to infiltrate the soil ▪ habitat for riparian species ▪ moderating water temperature ▪ controlling sedimentation ▪ clean gravel for spawning ▪ physical structures to protect the integrity of the stream channel, ▪ including pools used by anadromous fish		Pacific Coast perform.
6.5.n. Forest owners or managers retain and recruit sufficient large, green trees; snags; understory vegetation; down logs; and other woody debris in riparian zones to provide shade, erosion control, and in-channel structures.	C	SPR's riparian management is exemplary. Harvesting is limited or prohibited in these areas, which allows for recruitment of woody debris.
6.5.o. For Category A streams, and for lakes and wetlands larger than one acre, an inner buffer zone is maintained. The inner buffer is at least 50 feet wide (slope distance) from the active high water mark (on both sides) of the stream channel and increases depending on forest type, slope stability, steepness, and terrain. Management activities in the inner buffer: ▪ maintains or restore the native vegetation ▪ are limited to single-tree selection silviculture ▪ retain and allows for recruitment of large live and dead trees for shade and stream structure ▪ retain canopy cover and shading sufficient to moderate fluctuations in water temperature, to provide habitat for the full complement of aquatic and terrestrial species native to the site, and maintain or restore riparian functions ▪ exclude use of heavy equipment, except to cross streams at designated places, or where the use of such equipment is the lowest impact alternative ▪ avoid disturbance of mineral soil; where disturbance is unavoidable, mulch and seed are applied before the rainy season ▪ avoid the spread of pathogens and noxious weeds ▪ avoid road construction and reconstruction	C	California Forest Practice Rules ensure adequate conformance with this indicator.
6.5.p. For Category A streams, and for lakes and wetlands larger than one acre, an outer buffer zone is maintained. This buffer extends from the outer edge of the inner buffer zone to a distance of at least 150 feet from the edge of the active high water mark (slope distance, on both sides) of the stream channel. In this outer buffer, harvest occurs only where: ▪ single-tree or group selection silviculture is used ▪ post harvest canopy cover maintains shading sufficient to moderate fluctuations in water temperature, provide habitat for the full compliment of aquatic and terrestrial species native to the site, and maintain or restore riparian functions ▪ new road construction is avoided and reconstruction enhances riparian functions and reduces sedimentation ▪ disturbance of mineral soil is avoided; where disturbance is unavoidable, mulch and seed are applied before the rainy season	C	California Forest Practice Rules ensure adequate conformance with this indicator.
6.5.q. For Category B streams, a 25-foot (slope distance) inner buffer is created and managed according to provisions for inner buffers for Category A. A 75-foot (slope distance) outer buffer (for a total buffer of 100 feet) is created and managed according to provisions for outer buffer for Category A *(see 6.5.n).*	C	California Forest Practice Rules ensure adequate conformance with this indicator.
6.5.r. For Category C streams, and for lakes and wetlands smaller than one acre, a buffer zone 75 feet wide (on both sides of the stream) is established that constrains management activities to those that are allowed in outer buffer zones of Category A streams.	C	California Forest Practice Rules ensure adequate conformance with this indicator.
6.5.s. For Category D streams, management: ▪ maintains root strength and stream bank and channel stability ▪ recruits coarse wood to the stream system	C	SPR identifies seasonal drainages and takes measures to ensure stream bank stability.

▪ minimizes management-related sediment transport to the stream system		
6.5.t. Grazing by domestic animals is controlled to protect the species composition and viability of the riparian vegetation and the banks of the stream channel from erosion. *For example, the numbers of livestock, as well as the seasonality and duration of grazing, are controlled to protect the aquatic-riparian habitat, with special emphasis afforded sensitive aquatic and riparian species.*	C	No grazing damage was observed. Ranch managers carefully watch animals to make sure that they do not intrude sensitive forest resources, such as streams.
6.5.u. Stream crossings are located and constructed to minimize fragmentation of aquatic habitat *(see Glossary)*, maintain water quality, and either to accommodate a 100-year peak flood event or to limit the consequences of an unavoidable failure. Road crossings, dams, and other human-made structures that impede fish passage are removed or modified to enable passage, taking legal or environmental constraints into account. *For example:* ▪ *Crossings of riparian management zones are minimized.* ▪ *Stream crossings are installed at an angle that causes the least ecological disturbance to the waterway.* ▪ *Culverts allow free passage of aquatic organisms.*	C	SPR clearly minimizes stream crossings and has even decommissioned one. Bridges are preferred, which favors fish and invertebrate populations due to minimized stream channel impact. Culverts of adequate size are installed in other areas.
C6.6. Management systems shall promote the development and adoption of environmentally friendly non-chemical methods of pest management and strive to avoid the use of chemical pesticides. World Health Organization Type 1A and 1B and chlorinated hydrocarbon pesticides; pesticides that are persistent, toxic or whose derivatives remain biologically active and accumulate in the food chain beyond their intended use; as well as any pesticides banned by international agreement, shall be prohibited. If chemicals are used, proper equipment and training shall be provided to minimize health and environmental risks.	C	Covered in NTMP and management plan.
6.6.a. Forest owners and managers demonstrate compliance with FSC Policy paper: "Chemical Pesticides in Certified Forests, Interpretation of the FSC Principles and Criteria, July 2002" and comply with prohibitions and/or restrictions on World Health Organization Type 1A and 1B and chlorinated hydrocarbon pesticides; pesticides that are persistent, toxic or whose derivatives remain biologically active and accumulate in the food chain beyond their intended use; as well as any pesticides banned by international agreement.		**REC 2009.5**: SPR should consult current FSC guidelines on chemical herbicide and pesticide use before using them in operations.
6.6.b. Forest owners or managers employ silvicultural systems, integrated pest management, and strategies for controlling pests and/or unwanted vegetation that result in the least adverse environmental impact, with the goal of reducing or eliminating chemical use. Chemical pesticides, fungicides, and herbicides are used only when and where research or empirical experience has demonstrated that less environmentally hazardous, non-chemical pest/disease management practices are ineffective. *For example, components of silvicultural systems, integrated pest management, and strategies for controlling vegetation may include:* ▪ *creation and maintenance of habitat that discourages pest outbreaks* ▪ *creation and maintenance of habitat that encourages natural predators* ▪ *evaluation of pest populations and establishment*	C	SPR uses buffers and selective silviculture to avoid the introduction of invasive species onto the property. Pitch canker has been the subject of many research activities on SPR properties.

of action thresholds ▪ *diversification of species composition (see Glossary) and structure* ▪ *use of mechanical methods* ▪ *use of prescribed fire*		
6.6.c. When and where chemicals are applied, the most environmentally safe and efficacious chemicals are used. Chemicals are narrowly targeted, and minimize affects on non-target species.	C	SPR does not currently use chemicals, but has reserved the right to do so in the NTMP.
6.6.d. Chemicals are used only when and where they pose no threat to supplies of domestic water, aquatic habitats, or habitats of Rare species.	C	
6.6.e. When chemicals are used, the effects and impacts are monitored and the results are used for adaptive management. Records are kept of pest occurrences, control measures, and incidences of worker exposure to chemicals.	C	
6.6.f. Forest owners or managers develop written strategies for control of pests as a component of the management plan (criterion 7.1), which comply with official FSC policy.	C	The management plan has a section on invasive species management and is in compliance with FSC.
6.6.g When chemicals are used, a written prescription is prepared that fully describes the risks and benefits of their use and the precautions that workers will employ.	C	
C6.7. Chemicals, containers, liquid and solid non-organic wastes including fuel and oil shall be disposed of in an environmentally appropriate manner at off-site locations.	C	
6.7.a Forest Owners and managers prevent the unintended release of chemicals, petroleum products, containers and nonorganic wastes, and minimize health and environmental risks due to their disposal. *For example forest owners and managers minimize health and environmental risks by:* ▪ *Immediately containing spills of hazardous material, as required by applicable regulations, and then engaging qualified personnel to perform the appropriate removal and remediation.* ▪ *Routinely checking equipment for leaking fluids. Broken and/or leaking equipment and parts are repaired or removed from the forest; discarded parts are taken to a designated disposal facility.* ▪ *Parked equipment outside of riparian management zones and away from vernal pools and supplies of ground water to prevent toxic fluids from leaking into them* ▪ *Disposing of contaminated water and containers in a location and manner that is environmentally sound.*	C	No spills or containers were observed on site. According to California Forest Practice rules, equipment maintenance cannot occur in sensitive areas.
6.7.b. In the event of a spill of hazardous material, forest owners or managers immediately contain the material, report the spill as required by applicable regulations, and engage qualified personnel to perform the appropriate removal and remediation.	C	
6.7.c. Equipment is routinely checked for leaking fluids. Broken and/or leaking equipment and parts are repaired or removed from the forest; discarded parts are taken to a designated disposal facility.	C	SPR maintains its own equipment well. Contractors regularly check for leaking fluids, especially because they are so expensive.
6.7.d. Equipment is parked outside of riparian management zones and away from vernal pools and supplies of ground water to prevent toxic fluids from leaking into them.	C	Equipment left temporarily onsite is on landings or other flat, dry areas where the risk ground water contamination is minimal.
6.7.e. If washing chemical containers is necessary, the contaminated water and containers are disposed of in a location and manner that is environmentally sound.	C	
C6.8. Use of biological control agents shall be documented, minimized, monitored, and strictly controlled in accordance with national laws and internationally accepted scientific protocols. Use of genetically modified organisms shall be prohibited. *Applicability Note: Genetically improved organisms (e.g., Mendelian*	NA	

crossed) are not considered to be genetically modified organisms, and may be used. (See FSC policy on genetically modified organisms at http://www.fsc.org/en/whats_new/documents/Docs_cent/2. The prohibition of genetically modified organisms applies to all organisms including trees.		
6.8.a. Exotic (i.e., non-indigenous), non-invasive predators or biological control agents are used only as part of a pest management strategy for the control of exotic species of plants, pathogens *(see Glossary)*, insects, or other animals when other pest control methods are ineffective, or can reasonably be expected to be proven ineffective. Such use is contingent on peer-reviewed scientific evidence that the agents in question are noninvasive and are safe for indigenous species.	NA	
C6.9. The use of exotic species shall be carefully controlled and actively monitored to avoid adverse ecological impacts.	C	
6.9.a. The use of exotic plant species *(see Glossary)* is contingent on peer-reviewed scientific evidence that any species in question is non-invasive and does not diminish biodiversity. If non-invasive exotic plant species are used, their provenance and the location of their use are documented, and their ecological effects are actively monitored.	C	SPR uses exotic grasses in landings to control erosion and stabilize soil. The species selected is short-lived and not persistent as to allow for native species to recolonize.
6.9.b. Forest owners or managers develop and implement control measures for invasive exotic plants.	C	SPR has a section dedicated to invasive species control in the Management Plan. **REC 2009.5**: SPR should consult current FSC guidelines on chemical herbicide and pesticide use before using them in operations.
6.10. Forest conversion to plantations or non-forest land uses shall not occur, except in circumstances where conversion: **a) Entails a very limited portion of the forest management unit; and** **b) Does not occur on High Conservation Value Forest areas; and** **c) Will enable clear, substantial, additional, secure, long-term conservation benefits across the forest management unit.** *Note: The Working Group considers this criterion sufficiently explicit and measurable. Indicators are not required.*	NA	
P7 A management plan -- appropriate to the scale and intensity of the operations -- shall be written, implemented, and kept up to date. The long-term objectives of management, and the means of achieving them, shall be clearly stated.		
7.1. The management plan and supporting documents shall provide: **a) Management objectives.** **b) Description of the forest resources to be managed, environmental limitations, land use and ownership status, socio-economic conditions, and a profile of adjacent lands.** **c) Description of silvicultural and/or other management system, based on the ecology of the forest in question and information gathered through resource inventories.** **d) Rationale for rate of annual harvest and species selection.** **e) Provisions for monitoring of forest growth and dynamics.** **f) Environmental safeguards based on environmental assessments.** **g) Plans for the identification and protection of rare, threatened and endangered species.** **h) Maps describing the forest resource base including protected areas, planned management activities and land ownership.** **i) Description and justification of harvesting techniques and equipment to be used.** *Applicability Note: The management plan may consist of a variety of documents not necessarily unified into a single planning document but which, nevertheless, represents an integrated strategy for*	C	**REC 2009.6**: SPR should finalize the draft management plan.

managing the forest.		
7.1.a. Management objectives	C	
7.1.a.1.A written management plan is prepared that: (1) includes the landowner's vision (ecological, silvicultural, social, and economic), desired future conditions, potential future outcomes, goals, and objectives, as well as short-term and long-term actions and (2) incorporates strategies for the maintenance, enhancement, and/or restoration of forest resource. The actions and objectives are specific, achievable, measurable, and adaptive. (The elements of a comprehensive forest management plan are found in Appendix H.)	C	SPR's management plan contains objectives and Al Smith's vision for the property as a living-learning tool for students. SPR's management plan contains the goals of forest management and the desired ecological, silvicultural, social, and economic conditions.
7.1.b. Description of forest resources to be managed, environmental limitations, land use and ownership status, socioeconomic conditions, and profile of adjacent lands	C	
7.1.b.1. Using data collected proportionally to the scale and intensity of management, the forest owner or manager describes the following resources: ▪ timber ▪ fish and wildlife ▪ harvested non-timber forest products (e.g., botanical and mycological) ▪ non-economic natural resources	C	SPR's management plan includes descriptions of its timber, fish, wildlife, and non-economic resources.
7.1.b.2. Descriptions of special management areas, Rare species and their habitats, Rareplant communities, and other ecologically sensitive features in the forest are included in the management plan.	C	The management plan and NTMP utilized information gathered from various ecological surveys. Of note is a comprehensive floristic survey.
7.1.b.3. A description of past land uses is included in the management plan and incorporated into the goals and objectives.	C	SPR's management plan includes land use history and ties this into the donor's vision.
7.1.b.4. The legal status of the forest and its resources is identified in the management plan (e.g., ownership, usufruct rights, treaty rights, easements, deed restrictions, and leasing arrangements).	C	Legal issues, such as property boundaries and timber easements, are described.
7.1.b.5. Relevant cultural and socioeconomic issues (e.g., traditional and customary rights of use, access issues, recreational uses, and issues of employment), conditions (e.g., composition of the workforce, stability of employment, and changes in forest ownership and tenure), and areas of special significance (e.g., ceremonial and archeological sites) are identified in the management plan.	C	The management plan includes a section on several cultural and socioeconomic issues, such as the organizational structure, desired conditions for the educational environment, and protection of areas of cultural importance.
7.1.b.6. Landscape-level considerations within the ownership and among adjacent and nearby lands, including major bodies of water, critical habitats, and riparian corridors shared with adjacent ownerships, are incorporated in the management plan.	C	SPR's landscape-level considerations in its management plan, especially on the scale of watersheds, go above and beyond what most landowners of its size do.
7.1.c. Description of silvicultural and/or other management system	C	
7.1.c.1. The choice of silvicultural system(s) and prescriptions are based on the integration of ecological and economic characteristics (e.g., successional processes, soil characteristics, existing species composition and physical structures, desired future conditions, and market conditions) *(see also 6.3.a).*	C	SPR describes its silvicultural objectives and bases them on ecological and long-term economic characteristics.
7.1.c.2. Prescriptions are prepared prior to harvesting, site preparation, pest control, burning, and planting and are made available to people who carry out the prescriptions.	C	SPR reviews prescriptions with contractors prior to all management activities.
7.1.d. Rationale for the rate of annual harvest and species selection	C	
7.1.d.1. The management plan is based on the best available data on growth, yield, stocking, and regeneration. *(see also 5.6.b).*	C	SPR's CFI and cluster plot system and how the data is used are described in the management plan.
7.1.d.2. Species selection meets the economic goals and objectives of the forest owner or manager, while maintaining or improving the ecological composition, structures, and functions of the forest.	C	SPR manages for ecological composition, structures, and functions of the forest through a system of reserves and considerations made in prescriptions. Less-used species, such as hardwoods, are managed for future growth and composition. Conifers are the main commercial species. Through retention and selective silviculture, SPR manages for economic and ecological considerations for these species.

7.1.e. Provisions for monitoring forest growth and dynamics (see also Principle 8) *Note: The Working Group considers this criterion sufficiently explicit and measurable. Indicators are not required.*	C	SPR's CFI and cluster plots systems occur on regular intervals to monitor growth and dynamics.
7.1.f. Environmental safeguards based on environmental assessments (see also Criterion 6.1.) *Note: The Working Group considers this criterion sufficiently explicit and measurable. Indicators are not required.*	C	SPR conducts a robust ecological assessment of floristic communities, disturbance regimes, wildlife, salmonids, rare species and habitats, and water and soil resources. It has been active in local watershed management and soil surveying efforts.
7.1.g. Plans for the identification and protection of rare, threatened, and endangered species. (see also Criterion 6.3.) *Note: The Working Group considers this criterion sufficiently explicit and measurable. Indicators are not required.*	C	SPR's management plan contains several sections on endangered management that satisfies this indicator. The NTMP process also requires safeguards for endangered species management and monitoring. The recent floristic survey is a good example of efforts that SPR has made in the botanical world.
7.1.h. Maps describing the forest resource base including protected areas, planned management activities, and land ownership.	C	
7.1.h.1. Appropriate to the scale and intensity of the operation, and to the relevance of the management of the FMU, the following maps are included in the management plan: ▪ property boundaries ▪ roads ▪ areas of timber production ▪ forest types by age class ▪ topography ▪ soils ▪ riparian zones ▪ streams, springs, and wetlands ▪ archaeological sites ▪ areas of cultural and customary use ▪ locations of and habitats for rare species ▪ designated High Conservation Value Forests Maps of some features may be kept confidential to protect their integrity.	C	Maps contain all of these elements.
7.1.i. Description and justification of harvesting techniques and equipment to be used. (see also Criterion 6.5) *Note: The Working Group considers this criterion sufficiently explicit and measurable. Indicators are not required.*	C	SPR's management plan describes the rationale for the silvicultural system in place and what kind of equipment is to be used in harvesting.
C7.2. The management plan shall be periodically revised to incorporate the results of monitoring or new scientific and technical information, as well as to respond to changing environmental, social and economic circumstances.	C	
7.2.a. Relevant provisions of the management plan are modified: (1) every 10 years or in accordance with the frequency of harvest for the stand or forest, whichever is longer; (2) in response to effects from illegal and/or unauthorized activities (e.g., damage to roads, depletion of timber and non-timber resources), (3) in response to changes caused by natural disturbances.	C	SPR management plan is based on a 5 year update matrix. Other updates to the management plan are to coincide with updates in the CFI and cluster plot analysis (10 year cycle). The NTMP will provide other information to update the management plan.
C7.3. Forest workers shall receive adequate training and supervision to ensure proper implementation of the management plans. *Note: The Working Group considers this criterion sufficiently explicit and measurable. Indicators are not required.*	C	SPR offers chainsaw safety courses onsite for students and community members. Loggers must be LTOs in the State of California.
C7.4. While respecting the confidentiality of information, forest managers shall make publicly available a summary of the primary elements of the management plan, including those listed in Criterion 7.1. *Applicability Note: Forest owners or managers of private forests may withhold proprietary information (e.g., timber volumes by size and age class, marketing strategies, and other financial*	C	SPR's management plan is available on its website, which is publically accessible.

information). (see also Criterion 8.5) *Note: The Working Group considers this criterion sufficiently explicit and measurable. Indicators are not required.*		
P8 Monitoring shall be conducted -- appropriate to the scale and intensity of forest management -- to assess the condition of the forest, yields of forest products, chain of custody, management activities and their social and environmental impacts. *Applicability Note: On small and medium-sized forests, an informal, qualitative assessment may be appropriate. On large and/or intensively managed forests, formal, quantitative monitoring is probably required.*		
C8.1. The frequency and intensity of monitoring should be determined by the scale and intensity of forest management operations, as well as, the relative complexity and fragility of the affected environment. Monitoring procedures should be consistent and replicable over time to allow comparison of results and assessment of change.	C	
8.1.a. Implementation of the management plan is periodically monitored to assess: ▪ the degree to which management vision, goals, and objectives have been achieved ▪ deviations from the management plan ▪ unexpected effects of management activities ▪ social and environmental effects of management activities	C	SPR's CFI/cluster plots for forest measurements and network of flumes for watershed analysis provide information to make decisions. Review of the management plan occurs every 5 years to determine accomplishments, deviations, and the next course of action.
8.1.b. Inventories noted under section 8.2 below, are updated over periods not to exceed ten years, or the harvest frequency on the ownership, whichever is longer. Relevant ecological indicators (e.g., the status of and capacity for regeneration, habitat qualities of rare species, impacts to the quality of soil and water) are monitored before and after field management activities take place. Detailed monitoring is implemented at sites of special ecological significance *(see Appendix G)*.	C	CFI occurs every 10 years.
8.2. Forest management should include the research and data collection needed to **monitor, at a minimum, the following indicators:** **a) Yield of all forest products harvested.** **b) Growth rates, regeneration and condition of the forest.** **c) Composition and observed changes in the flora and fauna.** **d) Environmental and social impacts of harvesting and other operations** **e) Cost, productivity, and efficiency of forest management**	C	
8.2.a. Yield of all forest products harvested	C	
8.2.a.1. The forest owner or manager maintains records of timber-harvest volumes.	C	SPR maintains yield records.
8.2.a.2. The forest owner or manager maintains records of the yield of harvested non-timber forest products.	NA	
8.2.a.3. Significant, unanticipated removal (e.g., theft and poaching) of forest products is monitored, and recorded, and appropriate action is taken.	C	SPR maintains regular contact with neighbors and local law enforcement to attend to these issues should they arise.
8.2.b. Growth rates, regeneration, and condition of the forest	C	
8.2.b.1. An inventory system is maintained to monitor: ▪ growth, mortality, stocking, and regeneration of the timber ▪ stand composition and structure ▪ effects of disturbances to the resources (e.g., disease, wind, fire, damage by insects and/or mammals) ▪ abundance, regeneration, and habitat conditions of non-timber forest products ▪ characteristics of water quality, such as temperature, sedimentation, and chemical loads *(see Appendix G; Karr 1981)* ▪ characteristics of terrestrial and aquatic habitats ▪ Soil characteristics	C	The CFI and system of water flumes covers most of these elements. SPR collaborates with the Soil Survey on soil classification.
8.2.c. Composition and observed changes in the flora and fauna	C	
8.2.c.1. Forest owners or managers periodically monitor and assess (1) their contribution toward recovery goals for threatened and	C	SPR monitors endangered wildlife habitat, streams, and conducts floristic surveys and CFI.

endangered species in relation to changes in major habitats and populations, (2) changes in major habitat elements, and (3) presence and/or absence of and changes in the occurrence of Rare species.		
8.2.d. Environmental and social impacts of harvesting and other operations	C/NC	**CAR 2009.3**: SPR shall maintain a registry of public comments and document any concerns provided from interested parties. These comments and concerns shall be addressed in management plans and operations. SPR shall develop a comprehensive public summary of its monitoring program, incorporating the elements detailed in criterion 8.2.d.
8.2.d.1. The environmental impacts of site-disturbing activities (e.g., road construction and repair, harvesting, and site preparation) are monitored after completion.	C	SPR is exemplary is this regard.
8.2.d.2. A monitoring program is in place to assess the condition and environmental impacts of the forest-road system.	C	SPR is exemplary is this regard.
8.2.d.3. Generation or maintenance of local jobs and public responses to management activities are monitored.	NC	See CAR 2009.3
8.2.d.4. The influence of forest management on the viability of forest-based livelihoods is monitored, especially in the case of large forest holdings. *For example, the destination of forest resources is documented.*	NC	See CAR 2009.3
8.2.d.5. The opportunity to jointly monitor sites of special significance *(see also criteria 3.2 and 3.3)* is offered to tribal representatives in order to determine adequacy of the management prescriptions.	C	**REC 2009.1**: SPR should engage in more affirmative outreach to local indigenous tribes to develop plans for the management and protection of American Indian resources on SPR lands.
8.2.e. Cost, productivity, and efficiency of forest management	C	
8.2.e.1. Forest owners and managers monitor cash flows, costs, revenues, profit margins, and other financial indicators, to assure long-term financial viability.	C	SPR monitors cash flow and how timber sales will pay into its endowment.
8.2.e.2. Forest owners and managers take into account the economic benefits of all forest goods and services, including water quality, fish and wildlife, aesthetics, recreational uses, and carbon sequestration, and identify ways in which they might generate income.	C	SPR has a highly diverse income stream and invests in ecological restoration activities, which it showcases in conference and other educational events.
C8.3. Documentation shall be provided by the forest manager to enable monitoring and certifying organizations to trace each forest product from its origin, a process known as the "chain of custody." *Note: The Working Group considers this criterion sufficiently explicit and measurable. Indicators are not required.*	C	All forest products on SPR are FSC-certified and there is no danger of mixing with non-certified product. SPR puts its FSC identification number in all sales prospectuses. Should a buyer wish to purchase FSC-certified logs, it must possess CoC certification.
C8.4. The results of monitoring shall be incorporated into the implementation and revision of the management plan.	C	
8.4.a. Discrepancies between outcomes (i.e., yields, growth, ecological changes) and desired future conditions (i.e., plans, projections, anticipated impacts) are appraised. Management plans and actions are revised to better achieve the desired future conditions.	C	The CFI and 5 year management plan revision cycle ensure that this occurs.
C8.5. While respecting the confidentiality of information, forest managers shall make publicly available a summary of the results of monitoring indicators, including those listed in Criterion 8.2. *Applicability Note: Forest owners or managers of private forests may withhold proprietary information (e.g., timber volumes and age classes, marketing strategies, and other financial information).*	C	SPR's management plan, NTMP, and other documents are all on its website. Its education and outreach programs ensure that the results of its monitoring and research reach a wide audience.
8.5.a. A summary of monitoring results is maintained up-to-date and is made available to the public on request, either at no cost or at a nominal price.	NC	SPR conducts many monitoring activities and shares this information with researchers, government agencies, and the public through its educational programs. **CAR 2009.3**: SPR shall maintain a registry of public comments and document any concerns provided from interested parties.

		These comments and concerns shall be addressed in management plans and operations. SPR shall develop a comprehensive public summary of its monitoring program, incorporating the elements detailed in criterion 8.2.d.

P9 Management activities in high conservation value forests shall maintain or enhance the attributes which define such forests. Decisions regarding high conservation value forests shall always be considered in the context of a precautionary approach.

High Conservation Value Forests are those that possess one or more of the following attributes:
a) forest areas containing globally, regionally or nationally significant : concentrations of biodiversity values (e.g. endemism, endangered species, refugia); and/or large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance
b) forest areas that are in or contain rare, threatened or endangered ecosystems
c) forest areas that provide basic services of nature in critical situations (e.g. watershed protection, erosion control)
d) forest areas fundamental to meeting basic needs of local communities (e.g. subsistence, health) and/or critical to local communities' traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities).
Applicability note: Classification of a forest as a "high conservation value forest" (HCVF) does not automatically preclude active management. In addition to the forest types listed in sections (a) through (d) of the HCVF definition, HCVFs in the Pacific Coast region include:

- forest types listed in Appendix D (i.e., rare communities in the region), unless further refined by consultations with heritage programs, local native plant societies, local experts, and NGOs
- primary, late-successional, or old-growth forests *(see also criterion 6.3.)*
- roadless areas (areas that have never had logging roads, skid trails, etc.) larger than 500 acres or that have unique attributes
- habitats for rare species, and may include:
    - water catchments that provide water supplies to municipalities
    - buffers and corridors within landscape-level plans that are critical to the maintenance of processes and functions of high conservation value areas (see also criteria 6.3 - 6.5); and
    - native grasslands, wetlands, and other ecologically important non-forested sites within the forest.

Note: The status of HCVFs on American Indian lands requires special consultation between certifying teams and the affected tribe or nation.

C9.1. Assessment to determine the presence of the attributes consistent with High Conservation Value Forests will be completed, appropriate to scale and intensity of forest management.	C	SPR's HCV assessment is available on its webpage.
9.1.a. Attributes and locations of High Conservation Value Forests are determined by the identification of globally, nationally, regionally, and locally unique HCV attributes *(see Appendix D)* that may be present in or adjacent to the forest, and their delineation by habitat descriptions and maps.	C	SPR has defined HCV areas using information available from local and federal agencies, such as endangered species lists and monitoring programs in place.
C9.2. The consultative portion of the certification process must place emphasis on the identified conservation attributes and options for the maintenance thereof.	C	
9.2.a. Consultations are held with stakeholders and scientists to confirm that proposed HCV locations and attributes have been accurately identified. On public forests, a transparent and accessible public review of proposed HCV attributes and areas is carried out. Information from stakeholder consultations and other public review is integrated into HCVF descriptions and delineations.	C	SPR's HCV document is available publically on its website. SPR consulted with local and federal agencies on its HCV planning and designation. In some cases, protected species monitoring falls under these agencies jurisdiction.
C9.3. The management plan shall include and implement specific measures that ensure the maintenance and/or enhancement of the applicable conservation attributes consistent with the precautionary approach. These measures shall be specifically included in the publicly available management plan summary.	C	SPR's HCV document is available publically on its website.
9.3.a. Where the identification of HCVF attributes and areas is incomplete at the time of certification, forest owners or managers identify HCVF attributes and areas, develop a plan to maintain and/or enhance them, and begin implementation of the plan within one year of certification.	C	SPR's HCV assessment is complete.
9.3.b. Stands and forests designated as HCVFs, which have been entered for timber harvest, are managed over the long term to assure that both the quality of their HCVF attributes and their area are	C	Stands, such as the General Smith, have specific plans and prescriptions in place to maintain and enhance their high conservation values.

maintained.		
9.3.c. Forest owners and managers of HCVFs (forests and/or stands) coordinate conservation efforts with owners and managers of other HCVFs within their landscape.	C	SPR coordinated its HCV assessment with local heritage programs, local native plants societies, NGOs, and government agencies. The HCV document does not describe the nature of how conservation efforts were coordinated with other forest managers of HCVFs.
C9.4. Annual monitoring shall be conducted to assess the effectiveness of the measures employed to maintain or enhance the applicable conservation attributes. *Applicability note: Except where HCV attributes change rapidly or demonstrate ecological instability, annual monitoring may be informal and may be combined with other field activities. Attributes and locations that are highly vulnerable (e.g., small and/or unstable populations) and those that are intensively managed are monitored formally on an annual basis.*	C	SPR's monitoring program includes its HCVAs and HCVFs, especially in regards to endangered species surveys, CFI, photo points, hydrology, water quality and fishes.

1.1 Controversial Issues

There were no exceptionally controversial issues in this re-certification audit.

2.0 TRACKING, TRACING AND IDENTIFICATION OF FOREST PRODUCTS

This section of the report addresses the procedures employed by the forest managers to track the flow of wood products from the point of harvest through to the point where custody is assumed by another entity (i.e., the wood products purchaser). The fundamental requirement that must be demonstrated by the forest management operation is that product from the certified forest area not be mixed with product from non-certified sources. This requirement is attained by compliance with the FSC Criteria for chain of custody. It is against these Criteria that SCS evaluated SPR for potential award of chain of custody certification.

2.1 Evaluation of Risks of Mixing Certified and Un-Certified Product

There are no non-certified sources on SPR, so the risk of mixing non-certified with certified product is extremely low.

2.2 Description of the Log Control System

SPR has a system in place, which is to include their FSC registration code on sale prospectuses, for selling standing timber as FSC certified. However, if SPR wishes to sell delivered logs or other products as FSC certified, procedures that ensure Chain of Custody must be put in place.

2.3 End Point of Chain of Custody (CoC)

The end point chain of custody on SPR is on any of its landings, where the timber sale purchaser can pick up logs for transport offsite. SPR guarantees that the product is certified on all of its landings as it has no non-certified forest.

Big Creek Lumber Co. conducts most timber harvesting operations and is the principal buyer of SPR timber. Big Creek Lumber Co. no longer carries CoC and does not sell its products as FSC-certified.

2.4 Visual Identification at End Point of Chain of Custody

SPR includes its FSC registration code on all sale prospectuses. Should a log buyer wish to purchase certified logs, all timber from SPR is certified and can be marked and reserved in the landing for the buyer.