

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

Big Creek Resource Managers

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

**CERTIFICATION REGISTRATION NUMBER
SCS-FM/COC-00054G**

Submitted to:

Big Creek Lumber Company

Lead Author: Andrea Jung

Date of Field Audit: December 10-11, 2007

Date of Report: May 2008

Updated: December, 2009 (See section 6.1)

Recertified: June 2, 2008

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 Big Creek Lumber Company.

FOREWORD

Scientific Certification Systems, a certification body accredited by the Forest Stewardship Council (FSC), was retained by Big Creek Lumber Company (BCLC) to conduct a recertification evaluation of its group certification program – Big Creek Resource Managers (BCRM). 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 December 2007, 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 two day field and office audit of the subject properties 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 certification evaluation is the 10-year recertification of the company’s group scheme. BCRM is a landowner assistance program that involves all Big Creek foresters as well as management and support staff that provide management advise to non-industrial landowners. BCRM program participants enter into agreements with Big Creek Lumber Company that provide the terms and conditions under which advisory services are provided. BCRM foresters offer management assistance as well as oversight of harvesting operations on participant lands. BCRM is headquartered at Big Creek Lumber Company’s offices in Davenport, CA.

This report is issued in support of a recommendation to re-award FSC-endorsed certification to Big Creek Resource Managers for the management of their group member forestlands. As detailed below, certain pre-conditions (also known as Major Corrective Action Requests) that were stipulated by the audit team upon completion of the field audit were addressed by BCRM and cleared by SCS prior to finalization of this report. 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).

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SECTION A- PUBLIC SUMMARY AND BACKGROUND INFORMATION

1.0 GENERAL INFORMATION

1.1 FSC Data Request

Applicant entity	Big Creek Resource Managers
Contact person	Janet Webb
Address	3564 Highway 1 Davenport, CA 95017
Telephone	1-831-457-5023
Fax	1-831-423-2800
E-mail	janetw@big-creek.com
Certificate Number	SCS-FM/COC-00054G
Certificate/Expiration Date	June 2, 2008 - June 2, 2013
Certificate Type	Group certificate
SLIMF	Group SLIMF certificate
Group Members	7 group members
Number of FMUs in scope that are	
less than 100 ha in area	2
100 - 1000 ha in area	5
1000 - 10 000 ha in area	--
more than 10 000 ha in area	--
Location of certified forest area	
Latitude	Degrees ° Minutes' Seconds" N/S
Longitude	Degrees ° Minutes' Seconds" E/W
Forest zone	temperate
Total forest area in scope of certificate which is included in FMUs that:	
are less than 100 ha in area	240 acres
are between 100 ha and 1000 ha in area	5645 acres
meet the eligibility criteria as <i>low intensity</i> SLIMF FMUs	5885 acres
Total forest area in scope of certificate which is:	
privately managed ¹	5885 acres
state managed	
community managed ²	
Number of forest workers (including contractors) working in forest within scope of certificate	Approximately 8 to 15 Big Creek Lumber employees Approximately 15 to 30 private contractor employees
Area of forest and non-forest land excluded from commercial harvesting of timber and managed primarily for conservation objectives	Not available
Area of forest excluded from commercial harvesting of timber and managed primarily for the production of NTFPs or services	none
Area of forest classified as 'high conservation value	Variable per group member

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.

forest'	
List of high conservation values present ³	HCV 1
Chemical pesticides used	Roundup and Garlon rarely applied
Total area of production forest (i.e. forest from which timber may be harvested)	5885 acres
Area of production forest classified as 'plantation' for the purpose of calculating the Annual Accreditation Fee (AAF)	--
Area of production forest regenerated primarily by replanting ⁴	--
Area of production forest regenerated primarily by natural regeneration	5885 acres
List of main commercial timber and non-timber species included in scope of certificate (botanical name and common trade name)	Coast redwood (<i>Sequoia sempervirens</i>), Douglas-fir (<i>Pseudotsuga menziesii</i>)
Approximate annual allowable cut (AAC) of commercial timber	Variable by group member property
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.)	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

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.

1 cubic foot = 0.028317cubic meters

1,000 cubic feet = 28.317 cubic meters

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 Management Context

BCRM is subject to an array of regulations at the local, county, sub-state, state, and federal level. The principal regulations of greatest relevance to forest managers in California are associated with the following statutes:

Pertinent Regulations at the Federal Level, as Promulgated under the Following Statutes:

Endangered Species Act

Clean Water Act

Occupational Safety and Health Act

National Historic Preservation Act

Archaeological and Historic Preservation Act

Americans with Disabilities Act

U.S. ratified treaties, including CITES

Pertinent Regulations at State Level:

California Forest Practice Rules for the Southern Sub-district of the Coast Forest District

Porter-Cologne Water Quality Control Act

California Endangered Species Act

BCRM's compliance with the state Forest Practice Rules is evaluated on a continual basis by a Forest Practices Inspector from the California Department of Forestry (CDF). Inspections occur throughout the implementation of the Timber Harvest Plan (THP) and Non-Industrial Timber Management Plan (NTMP) processes before and after harvests. BCRM is also subject to inspections from the Central Coast Regional Water Quality Control Board and is required to conduct water quality monitoring as part of conditional waiver of waste discharge requirements. .

Pertinent Regulations at the County Level:

Of principal significance is the zoning and land use restriction authorities of the counties in which BCRM group members own land: Santa Cruz, San Mateo, and Santa Clara.

1.2.1 Environmental and Socioeconomic Context

Big Creek Resource Managers is part of Big Creek Lumber Company, a corporation whose shares are held exclusively by members of the McCrary family. The company has been in

continuous operation since 1946. The company owns and manages approximately 7,600 acres of commercial timberland in the central coast region of California. The BCRM manages other privately owned lands (through the Big Creek Landowners Group, BCLG).

The company operates a sawmill located north of Davenport in Santa Cruz County. It also owns and operates five retail yards located in the region as well as a wholesale facility at the Davenport site. The bulk of logs processed are procured from private landowners within the Santa Cruz Mountains. Big Creek has long-term relationships with numerous timberland owners within its supply region; most are considered part of the BCLG.

Coast Redwood Forest Type

Forested areas on BCRM member lands are dominated by second-growth Coast Redwood (*Sequoia sempervirens*). Redwood has limited distribution from southwestern Oregon southward to Salmon Creek in Monterey County, California. The species generally grows near sea level to about 2,500 feet 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, the mean winter minimum is 33°-40°F.

South of San Francisco redwood is found on the seaward side of the coast range, covering crests and west slopes of the coast range 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 redwood type is the Coast Oak Woodland (CWHR habitat type).

According to the CWHR system, the redwood habitats provide food, cover, or special habitat elements (for at least one season) for 193 species. The list includes 12 reptiles, 18 amphibians, 109 birds and 54 mammals. See below for listed species occurring on Big Creek properties.

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 dictated 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 Pajaro River Valley are renamed the Gabilan Range.

The Coast redwood type has been predominantly privately owned and managed for timber production since the late 19th century. As a result, the primeval forest that existed prior to European settlement has been reduced to 5% of its historical range. The remaining 95% of the redwood forest has been converted to a much younger age class through repetitive timber harvests throughout its range.

1.3 Forest Management Enterprise

1.3.1 Land Use

Big Creek Resource Managers is part of Big Creek Lumber Company, a corporation whose shares are held exclusively by members of the McCrary family. The company has been in continuous operation since 1946. The company owns and manages approximately 7,600 acres of commercial timberland in the central coast region of California. The BCRM manages other privately owned lands (through the Big Creek Landowners Group, BCLG).

The company operates a sawmill located north of Davenport in Santa Cruz County. It also owns and operates five retail yards located in the region as well as a wholesale facility at the Davenport site. The bulk of logs processed are procured from private landowners within the Santa Cruz Mountains. Big Creek has long-term relationships with numerous timberland owners within its supply region; most are considered part of the BCLG.

The private group member lands enrolled in the BCRM certificate primarily manage their forestlands for investment and recreational purposes.

1.3.2 Land Outside Scope of Certification

Enrolment in the BCRM group scheme is voluntary; landowners receiving advisory services from Big Creek may opt to join the group at any time. All of Big Creek's company-owned lands are covered under a separate FSC forest management certificate, SCS-FM/COC-00009N.

1.4 Management Plan

1.4.1 Management Objectives

BCRM objectives include meeting the landowners goals as well as providing for a sustainable flow of high quality timber from BCLG lands; managing for fish and wildlife habitat; providing recreational opportunities; and being a good neighbor.

1.4.2 Forest Composition

BCRM client forestlands almost exclusively consist of stands of coast redwood (*Sequoia sempervirens*). Douglas-fir (*Pseudotsuga menziesii*) is the only other commercial species of any significance, and it is a minor component in some units. Please refer to section 1.2.1, Environmental Context, for more information on the Coast Redwood forest type.

1.4.3 Silvicultural Systems

Big Creek manages its client lands using selection silviculture under an uneven-age system. It must be noted that the State Forest Practice Rules for the Southern Sub-District of the Coast Forest District provide restrictions on commercial harvesting in the area. Specifically, no more than 60% of the trees greater than 18 inches diameter-breast-height (DBH) and 50% of the trees 12-18" dbh may be harvested in any ten-year period. Within Santa Cruz County, BCRM operates under the further constraint that if harvest rates are 51-60% of trees greater than 18" dbh, re-entry may only occur at a minimum every 14 years. Additionally, no more than 40% of trees between between 14"-18" dbh may be harvested. Big Creek's silvicultural prescriptions stay well within these legal limits and are focused on maximizing sawlog values while protecting forest ecosystems over time.

1.4.4 Management Systems

BCRM manages its client lands as separate forest management units. A list of group members and their enrolled acreage is included in Section B of this report, or is available from SCS upon request.

The BCLC Forestry department employs four full-time California Registered Professional Foresters (Janet Webb, Bob Reynolds, Matt Dias, Nadia Hamey), one full-time administrative assistant (Kristin Lovett) and a communications/public relations assistant (Bob Berlage). Big Creek is one of the few forest management companies in the region that has retained its company logging crew, who are kept employed throughout the year performing maintenance and other tasks when not harvesting.

1.4.5 Monitoring System

The BCRM "Annual Monitoring Protocol for Group Member Landowners" describes the ways in which BCRM and landowners may jointly monitor various conditions on member properties:

Annual Monitoring Protocols:

The landowner must decide how they intend to fulfil the monitoring requirement. The BCRM are open to different ideas in which compliance with monitoring protocols can be

achieved. The monitoring program is intended to be beneficial to the landowner by recognizing areas of concern at an early stage. Early recognition of improper road drainage, blocked culverts, clogged trash racks and failed waterbars will not only reduce environmental impacts but will also reduce repair expenses. Currently, two general configurations of the monitoring program exist:

The BCRM are contracted to take responsibility for monitoring protocol requirements

The BCRM would implement a continual monitoring program, whether qualitative or quantitative, to determine the potential impact of any management activity. Depending on the property, monitoring could include, but not be limited to, the following:

- The certified land would become part of our road inventory program where roads are assessed during or after a 2-2 ½ inch rainstorm event, especially if soils are saturated, to determine if all erosion control structures are functioning or require work. This monitoring program would follow the completion of a harvest unit on a Non-industrial Timber Management Plan (NTMP).
- Photo points to determine changes on the ownership over time.

The landowner assumes responsibility for monitoring protocol requirements

The landowner would be required to have a continual monitoring program in place, whether qualitative or quantitative, to determine the potential impact of any management activity. The monitoring program could follow some of the bullet points above. BCRM would also require that an annual briefing be provided that described the results of the monitoring activities undertaken by the landowner. Under this configuration, the BCRM must visit each property annually where there have been ground disturbing activities such as harvesting or road building.

1.4.6 Estimate of Maximum Sustainable Yield

A detailed sustainability analysis is contained within each state approved Non-industrial Timber Management Plan (see page 44). Copies of these NTMP documents can be acquired from CalFire at 6059 Highway 9, Felton, CA 95018.

1.4.7 Estimated, Current and Projected Production

An analysis of future production, silvicultural methodologies and other relevant data are contained within each state approved Non-industrial Timber Management Plan (see page 44). Copies of these NTMP documents can be acquired from CalFire at 6059 Highway 9, Felton, CA 95018.

1.4.8 Chemical Pesticide Use

Chemical herbicides are only used on Big Creek's forests for the purposes of controlling invasive exotic weed species, such as pampas grass. BCRM does not use pesticides for site preparation or

other chemical-dependent silvicultural practices. Neither of the two pesticides (Garlon and Roundup) used for control of invasives appear on the FSC's Prohibited Chemicals List.

1.5 SLIMF Qualifications

The BCRM program qualifies as a group of SLIMFs, in that each of the member properties is below the 2400 acre (1000 hectare) threshold for small forests.

2.0 GUIDELINES/STANDARDS EMPLOYED

As the applicant forest property is located in northern California, the certification evaluation that is the subject of this report was conducted against the duly-endorsed FSC Pacific Coast Regional Forest Stewardship Standard, Version 9.0, May 9, 2005. The standard is available at the FSC-US web site (www.fscus.org) or is available, upon request, from Scientific Certification Systems (www.scscertified.com).

3.0 THE CERTIFICATION ASSESSMENT PROCESS

3.1 Assessment Dates

The field portion of the recertification assessment took place December 10-11, 2007. The evaluation was performed in conjunction with the 2007 annual audit of the Big Creek Lumber Company certificate.

3.2 Assessment Team

Robert Hrubes, Ph.D. Forest Economist and Registered Professional Forester

Project Role: FSC Team Leader

Dr. Hrubes is a California registered professional forester (#2228) and forest economist with over 30 years of professional experience in both private and public forest management issues. He has served as Senior Vice-President of Scientific Certification Systems since February, 2000. He served as the lead auditor on the 2003 and 2005 BCLC annual audits. Dr. Hrubes worked in collaboration with SCS to develop the programmatic protocol that guide all SCS Forest Conservation Program evaluations, and has led numerous SCS Forest Conservation Program evaluations of North American (U.S. and Canada) industrial forest ownerships, as well as operations in Scandinavia, Chile, and Japan. He also has professional work experience in Brazil, Germany, Guam (U.S.), Hawaii (U.S.), and Malaysia. Dr. Hrubes holds graduate degrees in forest economics (Ph.D.), economics (M.A.) and resource systems management (M.S.) 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.

Andrea Jung, Audit team member

Andrea Jung works in the SCS Forest Management department as the Forest Certification Coordinator, where she provides logistical and programmatic support for SCS' 70+ FSC

endorsed forest management certificates. She received her B.S. in Forestry from the University of California, Berkeley in 2004. She has related experience interning with a large forest products company in Oregon, and studying plantation forestry in New Zealand. Ms. Jung also participated in the 2005 and 2006 annual audits of BCLC and BCRM. She is the principal author of this audit report.

Sarah McKay, COC Program Associate and Certification Trainee

Sarah McKay has been working as a Natural Resources Program Associate in the SCS Chain of Custody Certification Department since August 2007. Prior to that she worked for three years in the Policy and Standards Unit of FSC International in Bonn, Germany. Ms McKay has a degree in Biology from the University of Guelph.

3.3 Assessment Process

3.3.1 Itinerary

Monday, December 10th

AM: Opening meeting, Headquarters

Staff Present: Janet Webb, Matt Dias, Bob Reynolds, Nadia Hamey, Bob Berlage.

The 10-year recertification evaluation commenced at Big Creek's Davenport, CA Forestry division office with an opening meeting. Auditor Robert Hrubes gave an overview of the recertification process and FSC developments, and Janet Webb presented an overview of the current situation of the Big Creek Resource Managers group. The status of the previous year's CARs was discussed, and the field visit itinerary was finalized. It should be noted that the recertification evaluation was performed in conjunction with the 2007 annual audit of the BCLC certification (SCS-FM/COC-00009N).

PM: Field visits

Stop 1: Whitehouse

For the past several years, BCLC has relied exclusively on logs purchased from other landowners to support their company mill. However, the Whitehouse unit in Santa Cruz County, owned by the company, is the only feelands tract scheduled for harvesting in 2008. The unit itself covers 20 acres, and is part of a larger 80-acre THP (Timber Harvest Plan). Harvesting prescriptions include taking up to 50% of trees that are 12-18 inches in diameter, and up to 60% of trees 18" or larger. It is estimated that roughly 200,000 board feet will be removed during the operation. Whitehouse Creek, which runs through the property, has been designated a Class I fish-bearing watercourse by Big Creek foresters.

Stop 2: King's Grove

King's Grove is an 1,800-acre forested property managed under a non-industrial timber management plan (NTMP) overseen by Big Creek. The unit was purchased by a group of 17 people after World War II, and a number of the shareholders still live on the property. The site visited had been logged in August 2007 by the Big Creek logging crew; roughly 800,000 board

feet were removed. The particular 30-acre unit harvested boasts some of the oldest second-growth redwood in the Santa Cruz mountains and is one of the best sites in terms of productivity (site class I). The last entry in this harvest unit had been in 1963.

Tuesday, December 11th

AM: Field visits

Stop1: Johnson/Noda

The Johnson/Noda tract is a company-owned unit located in southern Santa Cruz County. It covers a total of 87 acres (53 forested) and is slated for harvesting in 2008. An issue on this particular unit is trespassing by neighbors who have deposited trash and built illegal structures and sheds over the property line. Big Creek has responded by sending written notification to the neighbors that there may be a boundary discrepancy, and seems to be making a good faith effort to resolve any potential disputes before they occur. Another feature of this property is the presence of invasive exotic species, including pampas grass and scotch broom. Current actions to minimize the effects of these invasives include mowing and hand removal, though the situation has improved over the years by natural canopy closure.

Stop 2: Bodfish (Walsh-Fletcher)

The Bodfish (Walsh) property is a roughly 2300-acre parcel (1800 forested) that has been managed by Big Creek since the early 1980s, and under an NTMP since 1996. It was heavily cutover in the late 1950s/early 1960s, and currently hosts 3-4 age classes of second-growth redwood. In 2006 two units were logged using a combination of helicopter and tractor yarding. In 2007, two units totaling 150 acres were tractor-logged, yielding 500,000 board feet.

PM: Audit Team Deliberations and Closing Meeting, Headquarters

In the afternoon, the audit team reconvened at Big Creek Lumber Company headquarters to deliberate on the company's conformance to the FSC Pacific Coast Regional Standard. During the closing meeting, the team's overall findings from the audit were presented to Big Creek forestry staff, and four new Corrective Action Requests were stipulated.

3.3.2 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 evaluation. The following were distinct purposes to the consultations:

To solicit input from affected parties as to the strengths and weaknesses of Sample Company's management, relative to the standard, and the nature of the interaction between the company 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 from the Sample Company, and additional stakeholder contacts from other sources (e.g., chair of the regional FSC working group). The following types of groups and individuals were determined to be principal stakeholders:

- BCLC employees, including headquarters and field
- Contractors
- Adjacent property owners
- Members of the local environmental community
- Local and State regulatory agency personnel

Stakeholder comments were received principally through phone interviews. Due to the relatively smaller scope and complexity of the Big Creek Resource Managers certificate (compared to larger, more intensive industrial timber operations), a smaller sample of stakeholder interviews as deemed appropriate. A summary of stakeholder comments is shown below.

Economic Concerns

Comment/Concern	Response
No economic concerns were conveyed by stakeholders.	n/a

Social Concerns

Comment/Concern	Response
<ul style="list-style-type: none"> ▪ Big Creek contractors appreciate being employed year-round to harvest or work in the mill, as opposed to the prevalent situation in Humboldt County where employment is seasonal and workers are laid off for part of the year 	Comment noted by audit team
<ul style="list-style-type: none"> ▪ Big Creek makes a positive impact on the community at large; they contribute to social programs as well as environmental; they make donations to land trusts for reserves/parks 	Comment noted by audit team
<ul style="list-style-type: none"> ▪ Community members in general are supportive of the high-quality work that Big Creek foresters carry out; Big Creek is highly reputed as a forestry company and family-owned, local business 	Comment noted by audit team
<ul style="list-style-type: none"> ▪ Log truck accidents are a concern of some community members, given the nature of harvesting and hauling in a very intermixed urban/wildland interface 	Big Creek has a demonstrated track record of OSHA compliance; safety is taken very seriously. See Principle 4.

Environmental Concerns

Comment/Concern	Response
<ul style="list-style-type: none"> • Some mitigation measures written into NTMPs were not implemented prior to harvesting 	The audit team took this into consideration when

	assessing Criterion 6.1
<ul style="list-style-type: none"> • Big Creek has a cooperative partnership with a salmon and steelhead restoration project, and allows annual monitoring to take place on their land 	While this pertains to Big Creek's feelands certificate, demonstrating cooperation with others in managing for HCV attributes is a point in Principle 9, Criterion 3.
<ul style="list-style-type: none"> • Extreme care is taken when selecting and marking which trees to harvest; yarding corridors are very precise 	Duly noted by audit team

3.4 Total Time Spent on audit

The total time spent on the audit was roughly 8 person-days, including the tasks of management documents and plans review, field visits, stakeholder consultation, and report writing.

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 judgement to assess each criterion and 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	<ul style="list-style-type: none"> ▪ Big Creek RM has been committed to the Principles and Criteria of the FSC since its inception; this is their 10-year re-certification. ▪ Lead Forester Janet Webb is actively involved in FSC policy development and deliberation; she also maintains active communications with SCS, thereby providing a means for promptly resolving any conflicts between regulatory requirements and the FSC certification standards. ▪ No violations have occurred 	<ul style="list-style-type: none"> ▪ Although it is implied that Big Creek has a long-term commitment to the FSC Principles and Criteria, as evidenced by their engagement in this 10-year recertification process, there is no written statement thereof for the BCRM group as required by Indicator 1.6.a. 	<ul style="list-style-type: none"> ▪ Minor CAR 2008.1 ▪ REC 2008.1
P2: Tenure & Use Rights & Responsibilities	<ul style="list-style-type: none"> ▪ Tenure and use rights for the private client lands enrolled in the BCRM group must be proven in order for NTMPs to be approved. 		
P3: Indigenous Peoples' Rights	<ul style="list-style-type: none"> ▪ The aboriginal presence in Santa Cruz County has long been removed from the area. BCRM continues to look for sites. ▪ Timber harvest planning includes a solicitation of input from neighboring rancherías 		
P4: Community Relations & Workers' Rights	<ul style="list-style-type: none"> ▪ BCRM has long-term, stable relationships with both its employees and contractors ▪ Working conditions meet or exceed regional norms. 		

P5: Benefits from the Forest	<ul style="list-style-type: none"> ▪ BCRM practices conservative selection silviculture, and has increasingly relied on timber procurement from other sources to feed the Big Creek sawmill. ▪ Minimal residual stand damage 		<ul style="list-style-type: none"> ▪ REC 2008.2
P6: Environmental Impact	<ul style="list-style-type: none"> ▪ BCRM strictly adheres to the California Forest Practice Rules for the Southern Sub-District of the Coast Forest Region and often exceeds expectations 	<ul style="list-style-type: none"> ▪ No explicit comparison has been performed of current forest conditions to historical conditions for the landscape types represented by BCRM group member properties. 	<ul style="list-style-type: none"> ▪ REC 2008.3
P7: Management Plan	<ul style="list-style-type: none"> ▪ BCRM group members each have an approved NTMP which describes the forest resource in depth, presents management goals and objectives, and is appropriate in breadth and detail given the relatively small size and low intensity of the forest management operation. 		
P8: Monitoring & Assessment	<ul style="list-style-type: none"> ▪ Level of monitoring is appropriate for the scale of the BCRM group management operation 	<ul style="list-style-type: none"> ▪ No publicly available monitoring summary document exists for conveying the results of annual monitoring efforts on Big Creek group member lands 	<ul style="list-style-type: none"> ▪ Minor CAR 2008.2
P9: Maintenance of High Conservation Value Forest	<ul style="list-style-type: none"> ▪ Forests with HCV attributes are adequately protected and maintained in the BCRM properties 		<ul style="list-style-type: none"> ▪ Minor CAR 2008.3

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 Big Creek Resource Managers during the recertification 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 the Big Creek Resource Managers group be awarded FSC certification as a “Well-Managed Forest” subject to the corrective action requests stated in Section 5.2. BCRM has demonstrated that their system of management is capable of ensuring that all of the requirements of the Pacific Coast Regional Standard are met over the forest area covered by the scope of the evaluation. BCRM 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 Corrective Action Requests & Recommendations

Corrective Action Requests:

Background/Justification: Although it is implied that Big Creek has a long-term commitment to the FSC Principles and Criteria, as evidenced by their engagement in this 10-year recertification process, there is no written statement thereof for the BCRM group as required by Indicator 1.6.a.	
Minor CAR 2008.1	BCRM should provide a written statement of commitment to the FSC Principles and Criteria in their group management policy document (see also CAR 2008.4).
Deadline	One month from receipt of recertification report
Reference	FSC Pacific Coast Standard Indicator 1.6.a.

Background/Justification: The Big Creek Feelands FSC certificate has a monitoring summary document in place which is updated on an annual basis. However, no such document exists for conveying the results of annual monitoring efforts on Big Creek group member lands.	
Minor CAR 2008.2	BCRM must provide SCS with an updated summary of monitoring efforts on group member properties, including results for the items listed in FSC Criterion 8.2.d.1-4. This document should serve as a template for reporting monitoring results future years, and should be

	made accessible to the public, if requested.
Deadline	2008 annual audit
Reference	FSC Pacific Coast Standard Indicators 8.2.d.1 - 8.2.d.4 and 8.5.a

Background/Justification: While many aspects of NTMPs address, in practice, the Principle 9 requirements for HCV attribute identification, consultation, and maintenance/enhancement, there is no explicit reference to HCVF in group member NTMPs or other BCRM group member planning documents.	
Minor CAR 2008.3	Big Creek needs to create a “crosswalk” summary document which demonstrates which steps in the NTMP development process correspond to each of the requirements of Principle 9.
Deadline	One month from receipt of recertification report
Reference	FSC Principal 9, Criteria 1-4.

Background/Justification: Although the auditors were presented with Eligibility Requirements and Annual Monitoring Protocol documents for the BCRM group scheme, the audit team found that they were not sufficiently up-to-date, and that they did not fully cover the breadth of requirements listed in the FSC Group Criteria checklist.	
Minor CAR 2008.4	Big Creek Resource Managers needs to further develop and elaborate the group member policy and program documents (including a consent form template, group admission policies, member responsibilities, etc.) to fully comply with each of the requirements listed in FSC Group Management Criteria 1-3.
Deadline	One month from receipt of recertification report
Reference	FSC Pacific Coast Standard Indicator 1.6.a; FSC Group Management Criteria 1-3

Recommendations:

Background/Justification: Although it is implied that BCRM will seek guidance/clarification if conflicts arise between pertinent regulations and the FSC Standards, no such written policy exists to ensure this will occur.	
REC 2008.1	BCRM should adopt and memorialize a policy assuring that when discrepancies arise between federal, state, or local law and the FSC P&C with respect to management of the BCRM group member lands, such conflicts will be referred to SCS for resolution.
Reference	FSC Pacific Coast Standard Indicator 1.4.a

Background/Justification: BCRM should consider carbon offsets when taking into account the full range of ecosystem services provided by group member forestlands.	
REC 2008.2	BCRM should continue to track the development of carbon credit markets and consider possible opportunities for entrance.

Reference	FSC Pacific Coast Standard Indicators 5.2.b, 5.4.a
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Background/Justification: No explicit comparison has been performed of current forest conditions to historical conditions for the landscape types represented by BCRM group member properties.	
REC 2008.3	For each group member landscape type (i.e. redwood/Douglas-fir, oak woodland, etc.), BCRM should perform a comparison of current ecological conditions to historical (pre-settlement) conditions, considering the elements in 6.1.a.
Reference	FSC Pacific Coast Standard Indicators 6.1.a and 6.1.b.

6.0 SURVEILLANCE EVALUATIONS

If recertification 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 BCRM to the Pacific Coast Regional Standard. Public summaries of surveillance evaluations will be posted separately on the SCS website (www.scs-certified.com).

6.1. 2009 Annual Audit

6.1.1 Assessment Dates

The 2009 annual audit took place on December 15, 2009. It was performed jointly with the 2009 annual audit of SCS-FM/COC-0009N, the Big Creek Lumber Company feelands certificate.

6.1.2 Assessment Personnel

Robert Hrubes, Ph.D. Forest Economist and Registered Professional Forester

Project Role: FSC Team Leader

Dr. Hrubes is a California registered professional forester (#2228) and forest economist with over 30 years of professional experience in both private and public forest management issues. He has served as Senior Vice-President of Scientific Certification Systems since February, 2000. He served as the lead auditor on the 2003 and 2005 BCLC annual audits. Dr. Hrubes worked in collaboration with SCS to develop the programmatic protocol that guide all SCS Forest Conservation Program evaluations, and has led numerous SCS Forest Conservation Program evaluations of North American (U.S. and Canada) industrial forest ownerships, as well as operations in Scandinavia, Chile, and Japan. He also has professional work experience in Brazil, Germany, Guam (U.S.), Hawaii (U.S.), and Malaysia. Dr. Hrubes holds graduate degrees in forest economics (Ph.D.), economics (M.A.) and resource systems management (M.S.) 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. Dr. Hrubes is the principal author of this audit report.

Christie Pollet-Young, SCS GHG Program Associate

Project Role: FSC Forest Management Certification Trainee

Ms. Pollet-Young is a Program Associate for SCS's Greenhouse Gas Verification Program. Ms. Pollet-Young has over a decade of experience in forestry, ranging from forest ecology research to conservation planning to carbon offset verification in both tropical and temperate climates. She has previously worked for the Smithsonian Tropical Research Institute's Center for Tropical Forest Science and The Nature Conservancy in Peru. Ms. Pollet-Young completed a Master of Forest Science from the Yale School of Forestry and Environmental Studies, and graduated with high honors from the University of California, Berkeley with a Bachelor of Science in natural resources and forestry. Ms. Pollet-Young is a lead auditor with SCS who has validated and verified forest projects under the California Climate Action Registry, the Chicago Climate Exchange and the Climate, Community and Biodiversity Standards.

Rachel Lem, SCS FSC Chain of Custody Program Associate

Project Role: FSC Forest Management Certification Trainee

Rachel Lem received her B.S. from UC Berkeley in Conservation and Resource Studies, where she worked on several projects involving the efficacy of third-party certification in effecting international environmental governance. She has worked at SCS for over a year as both a Certification Coordinator and Program Associate and specializes in trademark use.

6.1.3 Assessment Process

December 15th

AM: Opening meeting, Headquarters

Staff Present: Janet Webb, Matt Dias, Bob Reynolds, Nadia Haney, Bob Berlage, Colin Noyes, Kristen Lovett

This second annual surveillance audit of the second 5-year certificate held by Big Creek Resource Managers commenced at Big Creek's Davenport, CA Forestry division office with an opening meeting. Auditor Robert Hrubes gave an overview of the certification process and FSC developments, and Janet Webb presented an overview of the current situation of the Big Creek Fee Lands and Resource Managers group. There are two personnel changes at Big Creek Lumber since the last audit; Janet Webb is now President and Colin Noyes has joined the staff as a Forest Technician. In June, about 20 acres of the 1200 acre property were harvested from the Estrada Ranch client lands.

During the opening meeting, a large focus of the discussion was the Lockheed Fire which started on August 12, 2009, and spread over 7,800 total acres. About 1700 acres of the blaze were on Big Creek lands. With CalFire, Big Creek staff were instrumental in the fire suppression activities through scouting efforts and aiding agencies in mobilization efforts through GIS. Due to the significant impact of the fire, it was decided that the site visit would highlight the effects of the Lockheed fire on the BCLC lands. Additionally, a client site was added to the field visit itinerary.

It should be noted that the annual audit was performed in conjunction with the 2009 annual audit

of the BCLC certification (SCS-FM/COC-00009N).

Late AM: Field visits

Stop 1: East of Lud McCrary's House

The main parcel of the Big Creek fee lands was visited to see the impacts of the Lockheed Fire. From this area, the extensive damage of the fire was seen across the landscape. Drier south-facing slopes were particularly impacted as evidenced by charred soil, minimal ground cover, few trees remaining, and holes left by roots which had been burned belowground. Limited salvage activities have taken place on the land due to both cost and Watercourse and Lake Protection Zone (WLPZ) restrictions. Destabilization was noted in the creek and some log jams were been incinerated. Nonetheless, regeneration was noted throughout the burn area.

Due to the unique opportunity to have a baseline study from the Lockheed Fire, several researchers have asked Big Creek for permission to access their lands. Big Creek has granted various researchers and scientific institutions access in exchange for receiving the results from these studies.

Stop 2: Fish Hatchery

The forests near the Hatchery contain lands owned by both PG&E and Big Creek, which were also affected by the Lockheed Fire. Throughout the footprint of the transmission lines and in this area, PG&E cleared potential hazard trees and ignition sources. On Big Creek's property, a 3-acre Emergency Notice was approved to remove substantially damaged trees. Both dead redwood and fir were salvaged on these lands. During the site visit it was not that the removal was conservative and trees continue to fall. There is little or no ground cover in the area and fungal conks were observed on standing trees. Though stump sprouts are present on many trees, Big Creek plans to replant in the stand.

PM: Audit Team Deliberations and Closing Meeting, Headquarters

After the first two stops, the audit team reconvened at Big Creek Lumber Company headquarters to deliberate on the company's conformance to the FSC Pacific Coast Regional Standard. During the closing meeting, the team's overall findings from the audit were presented to Big Creek forestry staff, and one Observation was presented.

Stop 3: King's Grove

King's Grove is a 1,800-acre forested property managed under a non-industrial timber management plan (NTMP) overseen by Big Creek. The unit was purchased by a group of 17 people after World War II, and a number of the shareholders still live on the property. The particular 30-acre unit harvested boasts some of the oldest second-growth redwood in the Santa Cruz mountains and is one of the best sites in terms of productivity (site class I). The site was not logged in 2009 due to the down timber market.

6.1.4 Status of Corrective Action Requests

There were two open Corrective Action Requests at the time of this audit (Minor CAR 2008.1 and Minor CAR 2008.2). Both Minor CARs were closed during the audit when Big Creek Resource Managers presented documentation to satisfy each of the corrective actions.

Background/Justification: Although it is implied that Big Creek has a long-term commitment to the FSC Principles and Criteria, as evidenced by the fact that this is their 11 th year of certification, there is no written statement thereof for the Feelands as required by Indicator 1.6.a.	
Minor CAR 2008.1	BCRM should provide a written statement of commitment to the FSC Principles and Criteria.
Deadline	One month from receipt of recertification report
Reference	FSC Pacific Coast Standard Indicator 1.6.a.
Disposition of CAR	A written state of commitment to the FSC Principles and Criteria were reviewed. With this documentation, this CAR is closed .

Background/Justification: In response to CAR 2006.2, Big Creek created a monitoring summary document in place which is updated on an annual basis. However, the document does not incorporate any social assessment metrics or results.	
Minor CAR 2008.2	BCRM must provide SCS with an updated summary of monitoring efforts on the feelands, including results for the items listed in FSC Criterion 8.2.d.1-4. This document should serve as a template for reporting monitoring results future years, and should be made accessible to the public, if requested.
Deadline	2008 annual audit
Reference	FSC Pacific Coast Standard Indicators 8.2.d.1 - 8.2.d.4 and 8.5.a
Disposition of CAR	An updated summary of monitoring efforts was reviewed. With this documentation, this CAR is closed .

6.1.5 General Observations

The lead auditor's overall assessment of the Big Creek forestry staff remains that they are an exceptionally qualified and competent group of foresters and resource professionals operating in a forest management business notable for its environmental and social sensitivity. The Big Creek operations remain in solid overall conformance with what is expected of all FSC-certified operations.

6.1.6 New Corrective Action Requests and Observations

Observation:

Background/Justification: Management plans should be periodically revised to respond to changing environmental circumstances.	
OBS.2009.1	BCRM should consider updating their management plan to include

	the recent Lockheed Fire.
Reference	FSC Pacific Coast Standard Indicator 7.2

6.1.7 General Conclusions of the Annual Audit

Based upon information gathered through site visits, interviews, and document reviews, the SCS auditors conclude that Big Creek Lumber Company’s management of its feeland forest estate and the client lands that are part of its group certificate continues to be in overall conformance with the FSC Principles and Criteria, as further elaborated by the Pacific Coast Regional Standard. That is, the SCS audit team has concluded from this annual audit that Big Creek Resource Managers is in superlative compliance with FSC Principles 1 through 9 (Principle 10 is not applicable as the operation is classified as “natural forest management under the FSC definitions). As such, continuation of this certification is warranted.

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.