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Rainforest Alliance

SmartWood Program

Forest Management Certification Assessment Report for:

Humboldt Redwood Company,
LLC
In
Humboldt County, California USA

Report Finalized:	December 3, 2009
Audit Dates:	August 3-7, 2009
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INTRODUCTION

This report presents the findings of an independent certification assessment conducted by a team of specialists representing the SmartWood Program of the Rainforest Alliance. The purpose of the assessment was to evaluate the ecological, economic and social performance of Humboldt Redwood Company's (HRC) forest management as defined by the Forest Stewardship Council.

This report contains four main sections of information and findings and several appendixes. The whole report, plus appendixes, will become public information about the forest management operation, which may be distributed by SmartWood or the Forest Stewardship Council (FSC) to interested parties. The remainder of the appendixes are confidential, to be reviewed only by authorized SmartWood and FSC staff and reviewers bound by confidentiality agreements.

The purpose of the SmartWood program is to recognize conscientious land stewardship through independent evaluation and certification of forestry practices. Forestry operations that attain SmartWood certification may use the SmartWood and FSC labels for public marketing and advertising.

Standard Conversions

1 mbf = 5.1 m³
1 cord = 2.55 m³
1 gallon (US) = 3.78541 liters

1 inch = 2.54 cm
1 foot = 0.3048 m
1 yard = 0.9144 m
1 mile = 1.60934 km
1 acre = 0.404687 hectares

1 pound = 0.4536 kg
1 US ton = 907.185 kg
1 UK ton = 1016.047 kg

1. SCOPE OF THE CERTIFICATE

1.1. Scope of the certificate

Humboldt Redwood Company, LLC (HRC™) is a relatively a new company formed principally with capital provided by members of the Fisher family of San Francisco. Donald and Doris Fisher, San Francisco founders of retailer Gap, who acquired all 211,000 acres of Pacific Lumber Co.'s (PALCO) land and its historic sawmill in the town of Scotia. HRC and Mendocino Redwood Company, LLC (MRC®), founded in 1998 and also owned by the Fisher family, collectively consists of approximately 440,000 acres of redwood and Douglas-fir forest lands along the north coast of California. MRC is currently FSC-certified in accordance with the rules of the Forest Stewardship Council and is a supplier of FSC-certified saw logs to HRC. HRC's forest management staff has significant experience with FSC forest management conformance. Senior Forest Management staff were recently employed by MRC.

HRC now owns 209,300 acres in Humboldt County, California. The property is located in a north-to-south band lying 5 to 50 miles inland from the Pacific Ocean and is generally centered along U.S. Highway 101. The landscape is a diverse series of ridges uplifted as the oceanic plates collide with the North American continent, producing a mountainous terrain with elevations rising from 40 to 3,600 feet above sea level.

Some early owners of what now comprise HRC forest lands were the Holmes-Eureka Lumber Co., Hammond Lumber Co., Dolbeer & Carson Lumber Co., Arcata Redwood Co., Freshwater Lumber Co., Hicks Vaughan Redwood Co., Van Duzen River Redwood Company and PALCO. Over the years, the most productive timberlands owned by many of these original logging businesses were acquired and consolidated by PALCO. HRC acquired this property on July 31, 2008 as a result of PALCO's financial restructuring.

Vegetation on HRC lands is primarily Coastal Redwood and Douglas-fir Mixed Conifer Forests (approximately 153,000 acres). Areas that lie farther inland from the influence of the marine climate, and holdings in the Bear and Mattole River drainages are dominated by Douglas-fir and Hardwood Mixed Evergreen Forest (estimated 46,000 acres). Approximately 95% of the property is forested, with the remaining area covered by prairie, shrubs, and waterways (about 10,000 acres).

1.2. Exclusion of areas from the scope of certificate

X	Applicability of FSC partial certification and excision policy
<input checked="" type="checkbox"/>	All forest land owned or managed by the FME is included in the scope of this evaluation.
<input type="checkbox"/>	FME owns and/or has management involvement in other forest land/properties (forest management units) not being evaluated. If yes, complete all sections below.
<input type="checkbox"/>	Is any portion of the forest management unit (s) under evaluation for

	certification being excised from the scope of the evaluation? If yes, complete all sections below.		
Comments / Explanation for exclusion/excision:	NA		
Control measures to prevent contamination	FME does not handle non certified wood		
	Other Forest area	Location	Size (ha)

2. ASSESSMENT PROCESS

2.1. Certification Standard Used

Forest Stewardship standard Used for assessment:	FSC Pacific Coast Regional Standard version 9.0
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2.2. Assessment team and qualifications

Auditor Name	Foster Dickard	Auditor role	SmartWood Lead Auditor
Qualifications:	<p>Foster is Senior Forester for the SmartWood US Region, and is responsible for providing overall management and leadership for forest management certification portfolio, client recruitment and quality control for all forest management services including FSC forest management certification, SmartLogging certification and carbon services. Foster holds a bachelors degree in forestry and a graduate degree in Wildlife and Forestry extension education from Mississippi State University. Foster has over 30 years experience as wildlife biologist and land management forester. Before coming to SmartWood, Foster was Region Wildlife Program Manager and Region Manager of Sustainability for International Paper Company. Foster has been on numerous FSC Forest Management audits as team leader and member.</p>		
Auditor Name	Stephen C. Grado	Auditor role	SmartWood Socio-economic Assessor
Qualifications:	<p>Dr. Grado is a Society of American Foresters (SAF) Certified Forester/Forest Certification Auditor #1155 and Fellow, a Professor of Forestry, and the George L. Switzer Professor in the Department of Forestry at Mississippi State University. He received a Ph.D. in Forest Resources in 1992, a M.S. in Forest Resources and Operations Research in 1984, and a B.S. in Forest Science in 1979 at The Pennsylvania State University, State College, Pennsylvania. He also has a B.A. in Political Science from Villanova University near Philadelphia, Pennsylvania. Dr. Grado has served as a socio-economic assessor/auditor on 21 SmartWood pre-assessments and assessments, 3 USDA Forest Service Test Evaluations (one with SGS), and numerous annual field audits (one with SFI). In addition, he has served as an assessor/auditor for innumerable SmartWood chain-of-custody assessments/audits, and also served as a peer reviewer of FSC certification assessment reports</p>		
Auditor Name	Robert Hrubes, Ph.D.	Auditor role	SCS Co-Team Leader

Qualifications:	<p>Robert is RPF, Forest Management and Economics - Robert is Senior Vice-President of Scientific Certification Systems (SCS). He is a California State Registered Professional Forester (RPF) and forest economist with 26 years of professional experience in both public and private forest management issues. He is the team leader for SCS' reassessment of MRC. He served as team leader for SCS for the initial MRC Forest certification evaluation in 2000. Before becoming Senior Vice-President of SCS, Robert worked in collaboration with SCS to develop the programmatic protocol that guide all their Forest Conservation Program evaluations. Robert 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, Solomon Islands, New Zealand, Australia and Japan. He also has professional work experiences in Brazil, Germany, Guam (U.S.), Hawaii (U.S.), and Malaysia. Robert is a founding member of the FSC and served on the first elected board of directors. He is a member of the FSC's Pacific Coast Working Group. He has a Ph.D. in Wildland Resource Science from the University of California, Berkeley.</p>		
Auditor Name	Mr. Kyle Meister	Auditor role	Team member
Qualifications:	<p>Mr. Meister is a new Certification Forester with Scientific Certification Systems. This was his first field audit with SCS. He has experience as an environmental educator and natural resource consultant in the U.S., Mexico, Ecuador, Costa Rica, and Colombia. He speaks Spanish and Portuguese.</p>		
Auditor Name	Mike Liqouri	Auditor role	Team member
Qualifications:	<p>Mike has lead or supported the development of sustainable forestry practices for several private forests, including large integrated forestry corporations, large multi-ownership Timber Investment Management Organizations, small family-owned forests, and several large state and federal forests. He was a key scientific adviser during the Forests & Fish planning process in Washington State, and was active in its adaptive management program. Mike developed and/or implemented Watershed Analysis projects in Washington, Idaho and Colorado and helped design Watershed Analysis methods. He developed several long-term management plans, including several Landscape Management and Habitat Conservation Plans. He is currently active on the 50,000-acre Jackson Demonstration State Forest Advisory Board in northwestern California. He is also a member of an independent scientific peer review board for the Quincy Library Group project, the largest community forestry project in the United States. He recently supported the California Board of Forestry in its review of rule revisions for Threatened and Impaired Watersheds, and is actively developing Explicit Riparian Design methods to improve ecological functions in actively managed riparian areas. Mike has</p>		

	participated in 4 sustainable forestry audits for both SFI and FSC certification bodies.
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2.3. Report peer reviewers

Peer Reviewer Name	Chris Maser
Qualifications:	Chris spent over 25 years as a research scientist in natural history and ecology in forest, shrub steppe, subarctic, desert, coastal, and agricultural settings. Trained primarily as a vertebrate zoologist, He was a research mammalogist in Nubia, Egypt, (1963-1964) with the Yale University Peabody Museum Prehistoric Expedition and a research mammalogist in Nepal (1966-1967), where I participated in a study of tick-borne diseases for the U.S. Naval Medical Research Unit #3 based in Cairo, Egypt. I conducted a three-year (1970-1973) ecological survey of the Oregon Coast for the University of Puget Sound, Tacoma, Washington. I was a research ecologist with the U.S. Department of the Interior, Bureau of Land Management for thirteen years (1974-1987)—the last eight studying old-growth forests in western Oregon—and a landscape ecologist with the Environmental Protection Agency for one year (1990-1991). Currently he is an independent author as well as an international lecturer, facilitator in resolving environmental conflicts, vision statements, and sustainable community development. He is also an international consultant in forest ecology and sustainable forestry practices.

Peer Reviewer Name	John Hodges
Qualifications:	John Hodges is a lead assessor and auditor for SmartWood. His undergraduate degree is in forest management and his graduate degrees are in ecology and plant physiology. He has worked for the U.S. Forest Service in both management and research, taught at Mississippi State University for 23 years, and served as VP and Land Manager for Anderson-Tully Company. He has authored or co-authored more than 150 scientific or technical publications and is a Fellow in the Society of American Foresters. He has served on dozens of FM and RM assessment teams as team leader and team member and has done dozens of COC assessments and audits.

2.4. Assessment schedule (including pre-assessment and stakeholder consultation)

Date	Location /main sites	Main activities
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Weeks of December 19 th and 29 th 2008 (preassess)	Offices of SCS/SW	Pre-assessment stakeholder notification letter sent to SCS/SW e-mail lists and stakeholders provided by HRC
Wednesday, January 21, 2009 (preassess)	HRC Offices	Opening meeting, explanation of standards employed, staff presentations, and finalization of assessment plan
Wednesday, January 21, 2009 (preassess)	HRC lands – Byron Bridge, Larabee Unit, Blue Label THP	Road and crossing improvements, review of revised harvest plans during PALCO/HRC transition and old growth retention
Thursday, January 22, 2009 (preassess)	HRC lands – Bear Creek, Unit LA 59, North Fork of Elk River, Freshwater and Elk River Divisions and Allen Creek HRC Offices	Observation of cooperation between Geology, Hydrology, Forestry, and Wildlife teams; road improvements; discussion of HCVPs; old growth identification and work with local environmental activists; stream monitoring and interaction with public; review of selection harvests; Marbled Murrelet Conservation Areas (MMCA); riparian restoration; road decommissioning; and old growth areas Interviews with stakeholders
Thursday, January 22, 2009 (preassess)	University of California Cooperative Extension Office, Eureka, CA	Pre-assessment public stakeholder consultation meeting
Friday, January 23, 2009 (preassess)	HRC Offices	Review of documents, interviews with stakeholders
Friday, January 23, 2009 (preassess)	HRC Offices	Closing meeting and initial results of pre-assessment Interviews with stakeholders
Sunday, August 2, 2009, 6:00 PM	Scotia Inn, Scotia, CA	Auditor planning meeting for the full assessment
Monday, August 3, 2009, 8:00AM – 2:00PM	Forest Operations Conference Room, Scotia, CA	Opening meeting: <ul style="list-style-type: none"> • introductions • overview of the FSC and of the certification process • role/purpose of pre-assessment • review of property maps

		<ul style="list-style-type: none"> review of audit itinerary and identification of field itinerary
Monday, August 3, 2009, 2:00PM – 5:00PM	Humboldt Redwood Company forest properties; Elk/Freshwater River Watersheds	Field assessment, THPs and various field sites, FME personnel and other interviews
Tuesday, August 4, 2009, 8:00AM – 5:00PM	Humboldt Redwood Company forest properties; Mattole/Bear River Watersheds	Field assessment, THPs and various field sites, FME personnel and other interviews
Wednesday, August 5, 2009, 8:00AM – 4:00PM	Humboldt Redwood Company forest properties; Elk/Freshwater River Watersheds; Nursery; HRC Mill, Scotia, CA; Forest Operations Conference Room, Scotia, CA	Field assessment, THPs and various field sites, mill inspection, FME personnel and other interviews
Wednesday, August 5, 2009, 6:30PM – 9:00 PM	Holiday Inn Express, Fortuna, CA	Public Stakeholder meeting
Thursday, August 6, 2009, 8:00 AM – 1:00 PM	Humboldt Redwood Company forest properties; Mad/Freshwater/Bear/Larabee River Watersheds; HRC Mill, Scotia, CA; Forest Operations Conference Room, Scotia, CA	Field assessment, THPs and various field sites, mill inspection, FME personnel and other interviews
Thursday, August 6, 2009, 2:00 PM – 5:00 PM	Forest Operations Conference Room, Scotia, CA	FME personnel and other interviews, Auditor deliberations and preparation for the exit meeting
Friday, August 7, 2009, 8:00AM – 12:00PM	Forest Operations Conference Room, Scotia, CA	Auditor deliberations and preparation for the exit meeting
Friday, August 7, 2009, 12:45 PM – 2:00 PM	Forest Operations Conference Room, Scotia, CA	Exit meeting: <ul style="list-style-type: none"> tentative findings next steps in the process

2.5. Evaluation strategy

The Humboldt Redwood Company (HRC or FME) is pursuing FSC certification for the lands that they manage in Humboldt County, California. HRC is a privately held company registered in Delaware.

A pre-assessment of the FME was jointly carried out by the SmartWood Program of the Rainforest Alliance and Scientific Certification Systems (SCS) to determine the readiness

of the HRC to successfully demonstrate that its management of their Humboldt County forested properties meets requirements of the SmartWood and SCS programs and the FSC certification standards. This pre-assessment was carried out on January 21-23, 2009 using the Forest Stewardship Council (FSC) *Pacific Coast Regional Forest Stewardship Standard for the United States of America, version 9.0*. Results of the pre-assessment indicated that, given some additional preparation by the FME, as noted in the pre-assessment report, they would be prepared for a full assessment. The full assessment was held from August 3, 2009 through August 7, 2009.

Prior to the full assessment site visit, audit team members contacted HRC staff to obtain further documents and stakeholder information relating to forest planning and management activities. Based on information received on planning management activities, the team selected a number of sites for possible visits and evaluation to cover the full range of management activities on the forest. Emphasis was placed on selecting sites from different forest types, management unit size, operations performed by different contractors, active operations, and time since an operation was completed. A final determination of sites to visit was made at the first meeting with the FME. Sites were chosen from those selected by the team based on time available and logistical considerations. Site visits were also used to interview contractors, volunteers, and NGOs in the field and others involved in harvesting or management operations on the forest (e.g., FME field personnel). Each site visit was used to evaluate on-the-ground conformance to FSC standards and also to evaluate conformance with goals and performance standards called forth in the FME’s draft forest management plan and related documents. The nursery which supplies seedlings to HRC was also visited by the team.

In addition to field visits, interviews were conducted with FME personnel in their office in Scotia, California, during the week of the visit. On August 5, 2009, a stakeholder meeting was held in Fortuna, California, and used to gather further opinions and other information. The socio-economic auditor and other team members held interviews with local, regional, and State stakeholders and contacted others by telephone and letters during the visit and up to three weeks after the team left Scotia, California.

List of management aspects reviewed by assessment team:

Type of site	Sites visited	Type of site	Sites visited
Road construction	4	Illegal settlement	0
Soil drainage	3	Bridges/stream crossing	10
Workshop	0	Chemical storage	0
Tree nursery	1	Wetland	0
Planned Harvest site	2	Steep slope/erosion	4
Ongoing Harvest site	5	Riparian zone	6
Completed logging	3	Planting	2
Soil scarification	0	Direct seeding	0
Planting site	2	Weed control	2
Felling by harvester	2	Natural regeneration	10

Felling by forest worker	3	Endangered species	1
Skidding/Forwarding	5	Wildlife management	4
Clearfelling/Clearcut	0	Nature Reserve	2
Shelterwood management	0	Key Biotope	0
Selective felling	5	Special management area	3
Sanitation cutting	0	Historical site	2
Pre-commercial thinning	0	Recreational site	2
Commercial thinning	5	Buffer zone	3
Logging camp	0	Local community	0
Cattle grazing	3	Mill site	2

Total number of person days used for the assessment: 8
= number of auditors participating 5 X number of days spent in preparation, on site
and post site visit follow-up including stakeholder consultation 40.

2.6. Stakeholder consultation process

The purpose of the stakeholder consultation strategy for the pre-assessment was twofold:

- 1) To ensure that the public was aware of, and informed about, the pre-assessment process and its objectives; and
- 2) To assist the field pre-assessment team in identifying potential issues of concern.

This process was not just stakeholder notification, but wherever possible, used to obtain detailed and meaningful stakeholder interaction. The process of stakeholder interaction did not stop after the pre-assessment visit. SCS and SW welcomed, at any time, comments on HRC operations and such comments often provide a basis for specific aspects related to a potential future assessment of HRC.

Prior to the field component of the pre-assessment, a public notification document was developed by SCS/SW and broadly distributed by e-mail during the weeks of December 19th and 29th. The e-mail notices alerted stakeholders to the pending pre-assessment and a planned public stakeholder consultation meeting in conjunction with the field audit. Specifically, on December 30, 2008, SCS distributed the notification to 90 individuals and organizations in its Northern California stakeholder list. On December 19 and 26, 2008, the public notification was sent to SW's U.S. Stakeholder Distribution List of 1,200 national and regional stakeholders, as well as to 250 of its clients. HRC also provided a stakeholder list to SW, and the notification was sent to 30 individuals and organizations on December 26, 2008. The HRC list, combined with an expanded list received by the pre-assessment team on January 20th, also provided a basis for the team to select people for interviews (in person, by telephone, or through e-mail). On January 6, 2009, HRC also distributed the public notice to 75 employees and staff. Additional stakeholders were also identified during the on-site pre-assessment.

A notification of the pre-assessment was sent by SCS to 90 individuals and organizations on December 30, 2008. An additional announcement containing the details about the public stakeholder meeting was sent on January 9, 2009. The stakeholder meeting was held on January 22, 2009 at the University of California Cooperative Extension Office,

Eureka, Humboldt County, California. A total of 8 individuals attended the stakeholder meeting and it lasted from 6:30 to 9:30PM.

The team interacted with approximately 15 HRC staff members during the pre-assessment, including office meetings and field visits. During the week of January 19th, the team also interviewed 25 individuals representing a variety of interests and organizations, including other HRC staff, environmental NGO's, community members, and contractors, as well as state and federal government agencies. Stakeholder consultation was used to supplement information relative to HRC's performance. It was also used as an effective means to identify difficult or controversial forest stewardship issues and gain an understanding of how stakeholders believe issues should be resolved. Again, stakeholder consultation occurred prior to, during, and after the on-site pre-assessment visit.

The purpose of the stakeholder consultation strategy for the assessment was threefold:

- 1) To ensure that the public is aware of and informed about the assessment process and its objectives;
- 2) To assist the field assessment team in identifying potential issues of concern; and
- 3) To provide diverse opportunities for the public to discuss and act upon the findings of the assessment.

This process involved stakeholder notification and, wherever possible, was also used to obtain detailed and meaningful stakeholder interaction. The process of stakeholder interaction continued during the report writing phase of the process. SW and SCS welcomed, at any time, comments on HRC operations invaluable for the assessment. In addition, such comments often provide a basis for specific aspects related to potential future audits of HRC.

On June 2, 2009, SmartWood and SCS sent out the initial notification alerting stakeholders to the impending assessment to take place in the first week of August and confirming a stakeholder meeting as well during the week. The former sent the notification to approximately 250 stakeholders on its "Stakeholder Lists for all USA Forest Management Operations" and the latter to 400 individuals and organizations in its Northern California stakeholder list. On July 27, 2009, immediately prior to the actual assessment process, a detailed public notification document was developed by SW and SCS and distributed by e-mail to the same stakeholders. These e-mail notices alerted stakeholders to the pending assessment visit and detailed the public stakeholder consultation meeting to take place during the week. The public stakeholder meeting was titled the "Public Meeting for FSC Assessment of Humboldt Redwood Company" and was held on August 5, 2009 at the Holiday Inn Express in Fortuna, Humboldt County, California. A total of 15 individuals attended the stakeholder meeting, which lasted from 6:30 to 9:30PM.

HRC sent the public notification to approximately 75 employees and staff during May 2009 and then again at the end of July 2009. On July 27, 2009, HRC also mailed the public notification on the assessment to approximately 100 stakeholders from its internal list.

HRC also provided its internal stakeholder list to SW and SCS. The HRC list, updated since the January 2009 pre-assessment, provided a basis for the assessment team to select individuals and groups for interviews (in person, by telephone, or through e-mail and mail). Additional stakeholders were also identified during the on-site assessment, with many of them also contacted by the assessment team afterward.

During the week of August 3-7, 2009 the assessment team came in contact with HRC management and staff members during the assessment meetings and field visits. The team also interviewed individuals representing a variety of interests and organizations, including environmental NGO's, community members, and contractors. Stakeholder consultation was used to supplement information relative to HRC's performance. It was also used as an effective means to identify difficult or controversial forest stewardship issues and gain an understanding of how stakeholders believed issues should be resolved. Again, stakeholder consultation occurred prior to, during, and after the on-site assessment visit. The table below details the contacts actually consulted during both the pre-assessment and assessment process.

Stakeholder Type^a	Stakeholders Notified (#)	Stakeholders consulted directly or provided input (#)
HRC Management and Staff	25	25
Adjoining Landowners	7	7
Consulting Foresters	4	4
County Official	1	1
Federal Agencies	3	3
FSC-US	2	2
Journalists	2	2
Lessees (one former)	2	2
Local/Regional NGOs	9	9
Logging Contractors	5	5
MRC Employees	3	3
Native Tribe or Representatives	3	3
Private Citizens	1	1
Ranchers	1	1
Retired from Forest Industry	5	5
State Agencies	9	9
Tree Sitters	3	3
University Academics	3	3

^aNote: Number of stakeholders contacted, as listed in the table above, are slightly greater than those listed in Appendix VII, since some stakeholders indentified themselves in more then one category.

3. ASSESSMENT FINDINGS AND OBSERVATIONS

3.1. Stakeholder comments received

The stakeholder consultation activities were organized to give participants the opportunity to provide comments according to general categories of interest based upon the assessment criteria. The table below summarizes the issues identified by the assessment team with a brief discussion of each based upon specific interview and/or public meeting comments.

FSC Principle	Stakeholder comments	SmartWood response
P1: FSC Commitment and Legal Compliance	All governmental employees contacted confirmed that HRC does good job following the California Forest Practices Act regulations and that their THPs and HCPs are well done according to specifications.	No response needed.
	Stakeholders (e.g., adjoining landowners, tribes, NGOs, tree sitters) confirmed that HRC has sought and received their input to their management activities (e.g., old-growth activities) through engagement processes whereby they must follow regulations set forth under the CA FPA (e.g., public comment on THPs). It was also stated that HRC also holds meetings open to associations, organizations, and individuals on a number of topics (e.g., forest management procedures and data related to a watershed). Of note, was their confirmation that the President and Chief	No response needed.

	the Forest Operations Manager.	
P3 – Indigenous Peoples’ Rights	All tribal members and tribal representatives confirmed that HRC is in communication with them. In addition, projects of mutual concern and benefit are underway or are being planned or discussed.	No response needed.
P4: Community Relations & Workers’ Rights	All employees interviewed were pleased with HRC. They felt that the organization is fair in terms of pay scale, benefits, and attempting to work with them when issues of a personal nature arise.	No response needed.
	All employees interviewed indicated that specialized training deemed necessary for their job performance is available, subject to their request and approval.	No response needed.
	Interviews with a number of logging contractors found them expressing general satisfaction with HRC, and felt that the Company was doing a good job in terms of providing job opportunities, despite the economic slowdown.	No response needed.
	Interviews with each logging contractor verified the process for contractors to address issues of concern or disputes. The chain of contact goes from	No response needed.

	<p>the Forester, to the Area Forester, to the Forest Operations Manager.</p> <p>Interviews with a diverse number of stakeholders confirmed that HRC engages a number of individuals and groups affected by management operations (e.g., tree sitters, adjoining landowners) who are apprised of proposed forest activities (e.g., logging) and associated environmental and aesthetic effects to solicit their comments or concerns.</p> <p>Comments by stakeholders recognized that in most watersheds, and in cases, where HRC has dealt with their concerns about old growth forests, HRC has achieved considerable success in conflict resolution through a re-examination of their policies and interactions with stakeholders.</p> <p>HRC and their staff, inherited a complicated and controversial challenge with some landowners in the Elk/Freshwater River watersheds associated with flooding of personal property, largely attributed to past and present forest management practices and policies. There is</p>	<p>No response needed.</p> <p>HRC is making efforts to evaluate and manage the social and physical aspects of these issues based on the best available science and input from affected residents and the appropriate hydrological resource agencies and regulators. Relative to old growth, they have made great strides.</p> <p>During the assessment, and through further stakeholder outreach after the team's visit, it was noted that the Elk/Freshwater River watersheds will require continued time and effort on the part of the HRC staff as they continue to implement their conflict resolution policies to effectively manage social and physical aspects of the</p>
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	<p>great deal of dissatisfaction being expressed among stakeholders in this area.</p> <p>A former lessee from an organization expressed dismay on how their lease was terminated. However, in a conversation with a current lessee revealed that HRC has treated them especially well, going so far as to provide equipment, access, and cooperation on joint projects to maintain a positive relationship.</p>	<p>Elk/Freshwater River watershed issue. See OBS 05/09.</p> <p>Given some admitted lapses on the part of the former lessee relative to the property and its dwellings and HRC's right to terminate a lease (all of which were inherited), did not cause the team to question HRC's actions. This was further reinforced by explanations for the lease termination given to the social assessor by HRC and the extraordinary efforts being taken with another lessee.</p>
P5: Benefits from the Forest	<p>Stakeholder comments received through the stakeholder meeting and telephone interviewed expressed an appreciation of HRC for its presence in the County and its contribution to the economy and employment.</p>	<p>No response needed.</p>
P6: Environmental Impact	<p>Stakeholders affiliated with state agencies stated that HRC does an excellent job assessing environmental impacts through their Habitat Conservation Plans and Timber Harvest Plans.</p> <p>HRC's old growth policy and their activities in the forest, particularly the decision to no longer harvest individual old-growth trees in "Type III old-growth," were favorably viewed by</p>	<p>No response needed.</p> <p>HRC needs to continue working with stakeholder groups to continually build upon their early successes relative to old-growth issues.</p>

	<p>stakeholders.</p> <p>All stakeholders (e.g., environmentalists, agency personnel) made positive note of the cessation of clearcutting under the new HRC management regime.</p> <p>While some stakeholders affiliated with watersheds (e.g., Mattole River watershed) complimented HRC for indentifying and assessing problem areas (e.g., flooding, bank erosion), several Elk/Freshwater watershed stakeholders were disappointed with HRC relative to their issues of sediment build-ups, cutting in the forest, and flooding in the communities affected.</p>	<p>HRC needs to continue working with stakeholder groups to continually build upon their early successes relative to old-growth issues.</p> <p>The audit team spent considerable time in the Elk/Freshwater River watershed examining past and current timber harvesting operations on the subject forest estate. The audit team also consulted with state agency personnel (e.g., North Coast RWQCB staff) about potential adverse, cumulative impacts of timber harvest in the watershed. On the basis of information gathered, the auditors concluded that the substantially modified harvesting practices under HRC will materially reduce the risk of adverse, cumulative impacts. As previously noted, the Elk/Freshwater River watershed will require continued time and effort on the part of the HRC staff to resolve real or perceived issues on the part of stakeholders in this watershed. The audit team expects that HRC personnel will continue to affirmatively pursue active dialogue with Elk River residents for the purpose of further allaying their concerns.</p>
P7: Management Plan	No comments.	No response needed.
P8:	Northern California	No response needed.

Monitoring & Assessment	Regional Water Quality Control Board (NCRWQCB) staff recognized HRC's exceptional road monitoring program.	
P9: Maintenance of High Conservation Value Forest	<p>Stakeholders contacted generally affirmed the positive nature of their dealing with HRC and its old-growth polices and on-the-ground implementation. HRC has had extensive interaction with stakeholders (e.g., regulatory agency personnel, environmental activists) on the classification and management of old-growth forests, which are one prominent type of "high conservation value forest."</p> <p>Consultation with regard to non-old-growth HCVFs (e.g., tanoak) has not been undertaken at a comparable level to old growth and, at present, does not constitute adequate conformity with the consultative requirements of the standard.</p>	<p>No response needed.</p> <p>HRC will need to develop a consultation process that provides opportunities for stakeholders outside of the regulatory framework to offer input on the identification HCVFs relevant to North Coast Redwood forest land and locations within the HRC ownership that may possess such values. Opportunities for stakeholder input on appropriate management prescriptions for areas possessing HCVFs and, where appropriate given the nature of the HCVFs, need to be coordinated with other eco-region managers of HCVFs. See CAR 16/09.</p>
P10 - Plantations	Not applicable. HRC does not use plantation	No response needed.

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3.2. Main strengths and weaknesses

Principle/Subject Area	Strengths Relative to the Standard	Weaknesses Relative to the Standard	CAR/OBS #s
P1: FSC Commitment and Legal Compliance	<ul style="list-style-type: none"> ▪ HRC possesses an intimate knowledge of state and federal laws and regulations. ▪ HRC provides public access to information required by law, and in some cases volunteers information it is not required to share with outside stakeholders. 	<ul style="list-style-type: none"> ▪ HRC does not have a written statement of commitment to the FSC P&C. ▪ HRC does not have policy on actions to take should irreconcilable situations between laws and FSC P&C arise. ▪ Staff assignment changes could weaken security efforts. 	<ul style="list-style-type: none"> ▪ CAR 2009.1, OBS 2009.1, and OBS 2009.2
P2: Tenure & Use Rights & Responsibilities	<ul style="list-style-type: none"> ▪ HRC actively consults with outside stakeholder groups when planning and implementing forest management activities. 	<ul style="list-style-type: none"> ▪ The audit team uncovered some cases where volunteers were working on HRC lands without any accounting for liability issues. ▪ HRC lacks a formal policy on bringing disputes to the attention of the certification bodies. 	<ul style="list-style-type: none"> ▪ CAR 2009.2 and OBS 2009.3
P3: Indigenous Peoples' Rights	<ul style="list-style-type: none"> ▪ HRC has formalized its relations with tribes and tribal representatives that are above the norm for this type of association. This includes continual communications, collaboration on joint projects, joint planning in the forest, and access to the HRC property for various activities. 	<ul style="list-style-type: none"> ▪ NONE 	<ul style="list-style-type: none"> ▪ NONE

P4: Community Relations & Workers' Rights	<ul style="list-style-type: none"> ▪ HRC employees participate in regional public education related to forestry, botany, wildlife, and watershed management. ▪ HRC has designed and implemented a comprehensive safety policy. ▪ HRC apprises many groups of its management activities. 	<ul style="list-style-type: none"> ▪ The audit team noted several interpretations of the hardhat policy. ▪ HRC has a challenging and controversial situation with landowners in the Elk and Freshwater watersheds associated with the flooding of personal property. ▪ HRC does not formally document and address all stakeholder interactions. 	<ul style="list-style-type: none"> ▪ CAR 2009.3, OBS 2009.4, and OBS 2009.5
P5: Benefits from the Forest	<ul style="list-style-type: none"> ▪ HRC's ownership has shown a willingness to infuse the business with enough capital to support long-term forest management. 	<ul style="list-style-type: none"> ▪ HRC does not formally treat all non-timber, income-generating activities in the forest management plan. ▪ Logging contractors could use more training in implementing selection harvest systems. ▪ HRC management should document that its assessments on utilization and marketing for common, lesser-used species are valid, and not necessarily solely based on its experience at MRC. 	<ul style="list-style-type: none"> ▪ CAR 2009.4, OBS 2009.6, and OBS 2009.7

<p>P6: Environmental Impact</p>	<ul style="list-style-type: none"> ▪ HRC conducts a number of environmental impact assessments prior to conducting management activities, such as the cumulative impacts assessment of the THP process. ▪ HRC integrates Watershed Analysis into its planning, operational, monitoring and adaptive management processes and continuously responds to the information obtained from these assessments. ▪ HRC transparency in making results of environmental analyses available on its web site clearly exceeds norms for the Pacific Coast region. ▪ HRC's science and forestry staff works cooperatively to identify and protect RTE species. ▪ HRC's old growth policy is well defined, auditable, and creates an incentive to avoid incidental harvest of old growth. ▪ HRC retains uncommon tree species and screen trees to protect snags. ▪ HRC has done extensive watershed analysis and geologists have identified landslide-prone areas. ▪ HRC is placing emphasis on cultural control of invasive species and continues to explore options. 	<ul style="list-style-type: none"> ▪ HRC's emphasis on commercial conifer species may or may not be ecologically suitable for all sites. ▪ HRC has no informal mechanisms for detecting and evaluating declines in soil fertility. ▪ HRC's RSA assessment methodology is not completely clear. ▪ HRC has not formally updated the conditions of its grazing leases. ▪ HRC has not fully elaborated a strategy to control invasive species and pests while monitoring the effects of chemical control. ▪ Auditors noted inconsistency with HRC's monitoring of contractors' implementation of fluid spill containment procedures. ▪ Loggers may require more training in the move from even-aged to selection systems. ▪ HRC could improve its use of slash as a tool to reduce adverse impacts on soil during harvest operations. ▪ HRC could improve its treatment and monitoring of Douglas-fir release during its transition to uneven-aged management. ▪ HRC could identify soils that are sensitive even while harvesting during dry periods. 	<ul style="list-style-type: none"> • CAR 2009.5, CAR 2009.6, CAR 2009.7, CAR 2009.8, CAR 2009.9, CAR 2009.10, OBS 2009.7, OBS 2009.8, OBS 2009.9, OBS 2009.10, OBS 2009.11, OBS 2009.12, OBS 2009.13, and OBS 2009.14
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P6: Environmental Impact (cont.)		<ul style="list-style-type: none"> ▪ HRC could explore non-chemical alternatives to frilling and chemical control of hardwood competitors. ▪ HRC could improve its strategy to prevent and control invasive exotic plants. ▪ HRC could improve stream protection/restoration methods at road decommissioning sites. 	
P7: Management Plan	<ul style="list-style-type: none"> ▪ HRC describes plans to protect both RTE plant and animal species. ▪ HRC describes archeological and geologically sensitive features. 	<ul style="list-style-type: none"> ▪ HRC’s overarching management plan is incomplete. ▪ HRC lacks a public summary of its management plan. ▪ As the management plan is updated, HRC staff will require more training as it related to implementation. 	<ul style="list-style-type: none"> ▪ Major CAR 2009.1, Major CAR 2009.2, and OBS 2009.15
P8: Monitoring & Assessment	<ul style="list-style-type: none"> ▪ HRC conducts extensive monitoring activities, including sediment movement and RTE species’ maintenance and recovery efforts. ▪ HRC has a highly robust forest-road monitoring system. ▪ HRC monitors roads for drainage effectiveness and the degree roads are hydrologically disconnected from local streams. 	<ul style="list-style-type: none"> ▪ HRC lacks a public summary of its monitoring program. ▪ HRC’s DCS lack procedures to include its certificate code and FSC claim on sales documentation. ▪ HRC has not updated its forest inventory program. ▪ HRC does not record the yield of many NTFPs and economic benefits associated with non-timber income. ▪ HRC does not formally monitor its social impact. ▪ HRC’s DCS does not address outsourcing in the scope of its CoC certificate. ▪ HRC’s DCS does not state its intentions for use of FSC and/or certification body’s trademarks. 	<ul style="list-style-type: none"> ▪ Major CAR 2009.2, Major CAR 2009.3, CAR 2009.11, CAR 2009.12, CAR 2009.13, CAR 2009.14, OBS 2009.15

P9: Maintenance of High Conservation Value Forest	<ul style="list-style-type: none"> ▪ HRC has conducted an extensive analysis of HCVPs and RSAs with the input and expertise of its staff, federal and state agencies, universities, and local environmental stakeholders. 	<ul style="list-style-type: none"> ▪ HRC does not have a public summary of its measures to maintain and/or enhance high conservation values. ▪ Consultation related to the assessment of non-old-growth HCVPs has not been very strong. 	<ul style="list-style-type: none"> ▪ Major CAR 2009.2 and CAR 2009.16
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3.3. Identified non-conformances and corrective actions

A non-conformance is a discrepancy or gap identified during the assessment between some aspect of the FME’s management system and one or more of the requirements of the forest stewardship standard. Depending on the severity of the non-conformance the assessment team differentiates between major and minor non-conformances.

- **Major non-conformance** results where there is a fundamental failure to achieve the objective of the relevant FSC criterion. A number of minor non-conformances against one requirement may be considered to have a cumulative effect, and therefore be considered a major non-conformance.
- **Minor non-conformance** is a temporary, unusual, or non-systematic non-conformance, for which the effects are limited.

Major non-conformances must be corrected **before** the certificate can be issued. While minor non-conformances do not prohibit issuing the certificate, they must be addressed within the given timeframe to maintain the certificate.

Each non-conformance is addressed by the audit team by issuing a corrective action request (CAR) CARs are requirements that candidate operations must agree to, and which must be addressed, within the given timeframe of a maximum of one year period.

Major Corrective Action Requests

Non-conformance: HRC’s “master” forest management plan is, at present, incomplete (e.g., it does not properly incorporate and/or reference other documents that are a part of the compendium of planning documents; not all key staff have had input to the forest management plan’s content; landscape-level considerations are not adequately addressed).	
Major CAR 2009.1	<ol style="list-style-type: none"> 1. HRC must establish management objectives that are achievable, measurable, and adaptive in the short- and long-term in accordance with sub-criterion 7.1.a. 2. HRC shall make reference to other documents that are integral components of the forest management plan. 3. HRC shall ensure that its personnel have the opportunity to review and offer input on sections of the forest management plan related to each staff member’s field of responsibility. 4. HRC shall explicitly address and state how they will account for

	<p>harvested non-timber forest products (NTFPs) and land uses (e.g., grazing, bough collection, communication sites) in the forest management plan.</p> <ol style="list-style-type: none"> 5. While protecting confidentiality of information, HRC shall identify its legal status and detail legal rights or claims that it holds over neighboring properties, as well as those that other parties hold on HRC property. 6. HRC shall describe and state how they will implement landscape-level management considerations within the ownership and near adjacent properties. 7. HRC shall design a forest inventory program that includes attributes to be measured and/or monitored and indicate the frequency of updates. See also CAR 2009.11.
Deadline	Prior to award of certification.
Reference	FSC Criterion 7.1, sub-criterion 7.1.e, and Regional Indicators 7.1.a.1, 7.1.b.1, 7.1.b.4, 7.1.b.6, 7.1.d.1
HRC Response (conveyed on September 8, 2009)	<p>Please review the September draft of the forest management plan; we specifically added and/or clarified content to respond to #s 1, 2, and 4-7 above. Regarding #3 above, these people provided significant input to the forest management plan and reviewed drafts throughout its development: Mike Jani (President and Chief Forester), Tom Schultz (Forest Operations Manager), Sal Chinnici (Forest Sciences Manager), Kate Sullivan (Physical Sciences Manager), Eric Johnson (Inventory Forester), Mike Miles (Area Manager, Central and South), Jon Woessner (Area Manager, North), Rich Bettis (Security Manager), and Maralyn Renner (Stewardship Manager); the following people also reviewed the forest management plan and/or provided input for specific sections: Brad Mauney (Wildlife Biologist), Tagg Nordstrom (Geologist), Josh Monson (Accountant), Debbie Barcelos (Human Resources), Roger Petersen (Roads Manager), Ric Kunes (Forester, knowledgeable about archaeology sites and primary contact with local Tribes), Gary Ogden (Logging Forester), Russ Owsley (Safety Manager), Shauna Rotbergs (Administrative Assistant), and Jason Butcher (Database Manager). All HRC staff has had access to the “current draft” of the forest management plan on the HRC Intranet since June 2009. Sarah Billig (Stewardship Director) at MRC also wrote the first draft of the Management Plan section that addresses Principle 9, assisted with analysis of Representative Samples (Criterion 6.4), and reviewed drafts of the forest management plan at various stages.</p>
Audit Team Comment on HRC’s Response	<ol style="list-style-type: none"> 1. As now augmented, HRC’s forest management plan includes sections both on its purpose as a company and on the timber-management objectives. Both sections describe short- and long-term objectives that are achievable, measurable, and adaptable over time. 2. HRC either includes or references the Habitat Conservation Plan,

	<p>Option A, GIS and remote sensing data, Forest-Vegetation-Typing Manual, previous timber inventories, current forest inventory program, Timber Harvest Plans, growth and harvest modelling software programs, California Forest Practice Rules, chemical applications records, guidance document on pest control, THP Checklist, streambed alteration agreement, asbestos airborne toxic control measures, California Environmental Quality Act requirements, OSHA records, the HRC Web site, log specifications, grazing Lease, maps, guidance on soil compaction and fertility, treaties and regulations, employee sign-in/out procedures, and several monitoring forms.</p> <ol style="list-style-type: none"> 3. Using a random number generator, the auditors selected five HRC employees at random from the list of management plan reviewers and were able to interview four of them. These interviewees confirmed that they had the opportunity to have input related to their field of expertise, knowledge of the landscape, and HRC. 4. HRC added a section entitled, "Non-timber Products" on page 64 of the plan. This section deals with hunting, grazing leases, communications sites, and plans for contracts for the removal of small volumes of non-timber forest products, such as branches and leaves for Christmas wreaths. 5. HRC is a limited liability corporation. In the "About Humboldt Redwood Company," subsection "Our Lands Today," HRC states that the surrounding landownerships and in-holdings are a mixture of public, township, and private lands. HRC describes deeded rights-of-way that it has with neighbors and in-holders, where it requires access to conduct forest operations. Some neighbors have deeded rights-of-way across its property. There are also public roads that traverse HRC lands on which neighbors have prescriptive rights-of-way. HRC occasionally needs to ask for permission to access lands, where it has no deeded rights-of-way. 6. HRC has added a section called "Landscape Planning Refinements" to its landscape-level planning process. It has identified the forest inventory and implemented the use of a new-forest-growth model, FORSEE, as essential to refining this process. HRC also will continue mapping of old-growth stands and further develop the constraint layers in the GIS in the future. The landscape level plan is scheduled for revision every 5 years. In regard to HRC lands adjacent to public and private properties and roads, HRC states that "These areas of community concern are evaluated in THP layout and operations planning by the foresters and are managed with special sensitivity to the impacts any silvicultural activities may have on the viewsheds and aesthetic quality for adjacent neighbors." Other landscape-level considerations are described in the HCVF and Representative
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	<p>Sample Area (RSA) analyses, including other known reserve areas in the region.</p> <p>7. HRC describes its forest resource inventory program in Appendix A of the plan. It includes descriptions of attributes to be measured/monitored, including some data sheets to be used. The frequency of updates to the forest inventory varies. For example, the GIS layer will be updated annually with the harvests that have occurred. All trees in the inventory database will be grown one year forward with FORSEE. Old-field plots will be retired from the database annually. More plots will be added to specific strata as the number of plots becomes depleted. Aerial photos and orthophotos will be purchased every 3-5 years for vegetation typing. Permanent plots will be re-measured every 5 years.</p> <p>On the basis of the content of the HRC forest management plan, , augmented in response to this Major CAR and conveyed to the audit team after the August field audit but prior to finalization of this report, the audit team concludes that closure of this Major CAR is now warranted.</p>
Status of Major CAR:	This CAR is closed.

Non-conformance: HRC lacks complete public summaries for its forest management plan, monitoring program, and measures that ensure the maintenance and/or enhancement of High Conservation Value Forests (HCVFs).	
Major CAR 2009.2	While respecting the confidentiality of information, HRC must prepare public summaries of its forest management plan and monitoring program, including elements listed under Criteria 7.1 and 8.2. HRC must also describe, in a publicly available document, measures taken to ensure the maintenance and/or enhancement of conservation attributes identified in its HCVF analyses.
Deadline	Prior to award of certification.
Reference	FSC Criterion 7.4 (no Regional Indicators exist in the PC Regional Standard); Criterion 8.5, Regional Indicator 8.5.a; Criterion 9.3.
HRC response (conveyed on September 8, 2009)	The entire draft forest management plan will be posted on the Web (hrcllc.com) no later than 14 September 2009.
Audit Team Comment on HRC's Response	The audit team verified on September 29, 2009 that the HRC forest management plan was publically available on its Web site, which goes beyond the public summary required by the FSC Criterion 7.4. HRC describes its monitoring activities (C8.5) in the "Monitoring and Adaptive Management" section of this publically available plan while protecting the confidentiality of its information. HRC describes various types of

	monitoring activities, including how it tracks trends in business, social, and environmental concerns, Habitat Conservation Plan implementation, and forest inventory (i.e., yield, growth, regeneration, condition of forest). Measures to maintain and/or enhance HCVFs are included in the publically available plan (C9.3). HRC describes its HCVFs and the stakeholders consulted in the process in its forest management plan, which is open for public comment.
Status of Major CAR:	This CAR is closed.

Non-conformance: FME's DCS does not have procedures to include the FME's FSC certificate registration code and FSC claim (FSC Pure) on all sales, shipping, and all other documentation for sales of FSC-certified products.	
Major CAR 2009.3	HRC shall have procedures to include the FME's FSC certificate registration code and FSC claim (FSC Pure) on all sales, shipping, and all other documentation for sales of FSC-certified products and, thereafter, implement such procedures.
Deadline	Prior to award of certification.
Reference	FSC Pacific Coast Regional Forest Stewardship Standard for the USA, v. 9.0; CoC 1.3.c., CoC 2.3, CoC 3.1
HRC response (conveyed on September 8, 2009)	HRC redesigned its trip ticket in response to the CAR. The trip ticket includes the FSC certificate code from both certification bodies and will be used to track all loads from the forest to the mill, thereafter FSC chain-of-custody procedures for the mill take precedent.
Audit Team Comment on HRC's Response	The updated trip ticket and response satisfies this Major CAR, thus warranting its closure.
Status of Major CAR:	This CAR is closed.

Corrective Action Requests (CARs)

Non-conformance: HRC has not provided a written statement of commitment to the FSC P&C in its management plan or another official document.	
CAR 2009.1	HRC shall provide a written statement of commitment to manage its forest estate in accordance with the FSC P&C, endorsed by senior management and placed in the publicly available summary of the forest management plan or in another suitable document.
Deadline	Ninety days after award of certification.
Reference	FSC Criterion 1.6, Regional Indicator 1.6.a.
HRC Response	This will be incorporated into the Management Plan and the "About Us" documents on the web site (hrcllc.com) no later than 90 days after award of certification.

Auditor Comment	Duly noted.
Status of CAR:	Open

Non-conformance: In general, HRC allows customary and lawful uses of the forest to the extent that they are consistent with conservation of the forest resources, the objectives of forest management, and whereby such uses do not present a legal liability. According to HRC policy, individuals, groups, or businesses may gain access to the forest through legal contracts, permits or leases. However, there were some cases where individuals were working voluntarily on HRC's forest holdings without a proper and available legal arrangement to reduce exposure of legal liability.

CAR 2009.2	HRC shall develop and implement a process whereby volunteers can engage in stewardship activities on HRC lands without presenting a legal liability.
Deadline	First annual audit
Reference	FSC Criterion 2, Regional Indicator 2.2.b.
HRC Response	This will be corrected within the first year after award of certification.
Auditor Comment	Duly noted.
Status of CAR:	Open

Non-conformance: HRC engages a number of individuals and groups affected by management operations and who are apprised of proposed forest activities (e.g., timber harvesting) and associated environmental and aesthetic effects to solicit their comments or concerns. However, such interactions are not formally documented and addressed in management plans and operations. As such, there is inadequate evidence of how HRC assesses social impacts and how such impacts are considered in the course of managing the forest estate.

CAR 2009.3	HRC shall develop and implement a process whereby there is clear evidence that socio-economic interactions, considerations, and impacts are duly assessed, recorded, and incorporated into management planning and operations.
Deadline	First annual audit
Reference	FSC Criterion 4.4; Regional Indicator 4.4.b.
HRC Response	This will be corrected within the first year after award of certification.
Auditor Comment	Duly noted.
Status of CAR:	Open

Non-conformance: HRC engages in or allows the utilization of non-timber products on its land holdings, including grazing, the installation of communication sites, and the harvesting of tree branches and other plant parts for ornamental products. These activities and their associated impacts are not fully considered in the management plan.

CAR 2009.4	HRC shall fortify the treatment of non-timber income-generating activities
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	in the management plan to ensure that they are carried out in a way that is consistent with the management plan and with conservation of the forest resource.
Deadline	First annual audit
Reference	FSC Criterion 5.2, Regional Indicator 5.2.d.
HRC Response	This has been partially addressed in the September draft of the Management Plan, and will be fully corrected within the first year after award of certification.
Auditor Comment	Duly noted.
Status of CAR:	Open

Non-conformance: HRC managers, citing past management experience under its sister company, MRC, have stated that a major focus of forest management is on the production of Coastal redwood (<i>Sequoia sempervirens</i>) lumber. Thus, HRC is encouraging the inter-planting of Coastal redwood on Douglas-fir (<i>Pseudotsuga menziesii</i>) dominated sites where Coastal redwood may or may not be ecologically suitable or may have not occurred in recent ecological history (~150 years). There are instances where efforts to establish redwood on Douglas-fir dominated sites could be considered a type conversion.	
CAR 2009.5	HRC shall develop a risk-assessment tool to ensure that the introduction of Coastal redwood onto sites where it does not currently occur is ecologically appropriate.
Deadline	First annual audit
Reference	FSC Criterion 6.3, Regional Indicator 6.3.b.1
HRC Response	This will be corrected within the first year after award of certification.
Auditor Comment	Duly noted.
Status of CAR:	Open

Non-conformance: Other than anecdotal observations in the field during and after management activities, HRC has no formal mechanisms for detecting and evaluating declines in soil fertility.	
CAR 2009.6	HRC shall: (a) develop a monitoring strategy to detect changes in soil fertility, (b) define acceptable thresholds of change in soil fertility based on a review of scientific literature, and (c) develop, as needed, potential courses of action to be taken to mitigate the loss of soil fertility and to rehabilitate affected sites.
Deadline	First annual audit
Reference	FSC Criterion 6.3, Regional Indicator 6.3.c.1
HRC Response	This will be corrected within the first year after award of certification.
Auditor Comment	Duly noted
Status of CAR:	Open

Non-conformance: HRC has employed many of the required consultative processes conducted under the California Forest Practice Rules, the federal Endangered Species Act, and other regulatory mandates to complete its assessment of representative sample ecosystems (representative sample areas- RSAs- in HRC terminology). HRC’s botanist has also relied on her extensive knowledge of nearby natural areas to designate RSAs and differentiate them from HCVPs. However, the methods and analyses employed in HRC’s RSA assessment remain unclear.

CAR 2009.7	HRC shall document the process and analyses that were employed in designating the current representative sample areas (RSAs) on the HRC forest estate. HRC must also develop and convey to the certification bodies a written summary of how the processes employed to date meet the requirements set forth in FSC Criterion 6.4. If gaps exist between FSC requirements and HRC procedures for establishing RSAs, HRC must develop and implement actions aimed at eliminating the gaps.
Deadline	First annual audit
Reference	FSC Criterion 6.4, Regional Indicator 6.4.a.
HRC Response	This will be corrected within the first year after award of certification.
Auditor Comment	Duly noted.
Status of CAR:	Open

Non-conformance: There have been instances of cattle trespass into aquatic habitats on HRC lands. HRC has changed its grazing policy and detailed some of these changes in the management prescriptions for prairies, but has not formally updated the conditions of its grazing leases, including how lease terms will minimize adverse environmental impacts.

CAR 2009.8	HRC must document the changes to its grazing lease and ensure that the description of its grazing policy is complete. The revised grazing lease must include provisions for avoiding/minimizing adverse environmental impacts, such as to riparian vegetation and aquatic resources.
Deadline	First annual audit
Reference	FSC Criterion 6.5, Regional Indicator 6.5.s
HRC Response	This has been fully addressed in the September draft of the Management Plan.
Auditor Comment	HRC addresses grazing in the management of Oregon white oak stands and generally in its “Non-Timber Products” section of the management plan. HRC’s grazing policy includes provisions for limitations on the number of animals, rotation of animals to different pastures, winter grazing and supplemental feed restrictions, fencing and gates, water trough and salt lick locations, and watercourse protection. In addition to the update of its grazing policy in the management plan, HRC has prepared a generic grazing lease that demonstrates the inclusion of these provisions, as well as the general terms of the lease.

Status of CAR:	This CAR is closed.
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Non-conformance: HRC does not maintain its own records of herbicide use in a manner that would enable the company to monitor effects and impacts of chemical control of plants over the long-term. HRC has not fully developed a strategy for the control of pests and non-native, invasive plants in its management plan. HRC does not prepare written prescriptions that fully describe the risks and benefits of the use of chemicals.	
CAR 2009.9	HRC shall develop a record keeping and monitoring protocol aimed at adaptively improving and modifying its chemical use with the objective of lowering dependency on chemical control measures. HRC shall develop a written strategy for the control of pests and non-native, invasive plants. HRC shall develop site-specific written prescriptions for herbicide applications.
Deadline	First annual audit
Reference	FSC Criterion 6.6, Regional Indicators 6.6.e, 6.6.f, and 6.6.g.
HRC Response	This will be corrected within the first year after award of certification.
Auditor Comment	Duly noted.
Status of CAR:	Open

Non-conformance: Auditors observed several, small hydraulic-fluid spills left from recent harvests. Contractors either did not follow, or did not complete, containment and cleanup measures as mandated by federal and state law and HRC’s own guidance booklet, “Environmental, Health and Safety Practices for Contractors.”	
CAR 2009.10	HRC shall ensure that its staff and contractors implement appropriate spill containment and cleanup procedures for all chemical spills in a timely manner consistent with federal and state regulations as well as company policy.
Deadline	First annual audit
Reference	FSC Criterion 6.7, Regional Indicator 6.7.b.
HRC Response	This will be corrected within the first year after award of certification.
Auditor Comment	Duly noted.
Status of CAR:	Open

Non-conformance: In its present state, HRC’s forest inventory data cannot provide accurate volume estimations at the stand level. HRC has not defined the frequency of updates to its forest inventory and what attributes (e.g., ecological indicators, canopy dominance) it will include in its forest inventory system.	
CAR 2009.11	HRC shall develop and make substantial progress in implementing a forest inventory program that details inventorying methods to be employed, defines attributes to be measured or monitored, and describes the frequency of inventory updates. See also Major CAR 2009.1.

Deadline	First annual audit
Reference	FSC Criterion 8.2, Regional Indicators 8.1.b and 8.2.b.1.
HRC Response	This has been fully addressed in the September draft of the Management Plan, which includes HRC's complete Forest Resource Inventory Program as Appendix A (the August draft Appendix A was just a portion of the full Inventory Program).
Auditor Comment	In our judgment, this CAR has not yet been fully addressed. While we take positive note of the inclusion, in the Management Plan, of a fuller description of the inventory program, objective evidence of progress made in implementing the program is still lacking (e.g., commitment of additional budgeted funds for inventory work, completed initial measurement or re-measurement of some of the inventory plots)
Status of CAR:	Open

Non-conformance: HRC derives a small portion of its income from nontimber forest products (NTFPs) and intends to increase its current offering of NTFPs. HRC does not record the yield of many NTFPs.

CAR 2009.12	HRC shall record and monitor the yield of all harvested NTFPs. All NTFPs /services must be incorporated into the management plan and in the public summary of monitoring results.
Deadline	First annual audit
Reference	FSC Criterion 8.2, Regional Indicator 8.2.a.2
HRC Response	This will be corrected within the first year after award of certification.
Auditor Comment	Duly noted.
Status of CAR:	Open

Non-conformance: HRC is a stable and significant contributor to local communities through employment and purchasing of goods and services within the regional economy. However, HRC has not monitored and performed an assessment on the extent of its social impact in this regard. HRC does not have a formal system to monitor public responses to its management activities.

CAR 2009.13	HRC shall implement a monitoring process and periodic social impact analyses regarding its forest operations relative to local communities and the North Coast regional economy, specifically referring to the: a) generation or maintenance of local jobs and public responses to management activities, and b) influence of forest management on the viability of forest-based livelihoods (e.g., mill jobs, other supporting businesses) in local communities.
Deadline	First annual audit
Reference	FSC Criterion 8.2, Regional Indicators 8.2.d.3 and 8.2.d.4
HRC Response	This will be corrected within the first year after award of certification.

Auditor Comment	Duly noted.
Status of CAR:	Open

Non-conformance: Through lowering the allowable annual cut significantly, eliminating even-aged management, and putting much of the land in permanently protected status, HRC provides many ecosystem services. HRC does not fully take into account the economic benefits of nontimber forest products and services.

CAR 2009.14	HRC shall conduct an assessment of the economic benefits of non-timber forest products and services and identify ways in which some such goods and services might generate income for the company and the regional economy.
Deadline	First annual audit
Reference	FSC Criterion 8.2, Regional Indicator 8.2.e.2
HRC Response	This will be corrected within the first year after award of certification.
Auditor Comment	Duly noted.
Status of CAR:	Open

Non-conformance: HRC possesses a Chain-of-Custody (CoC) stump-to-gate procedure, but its staff lacks training in CoC procedures. The procedure also does not mention that CoC documentation (e.g., records of FSC-certified log sales/transfers) must be maintained for at least 5 years.

CAR 2009.15	HRC shall ensure that all relevant field personnel have received proper stump-to-gate CoC training. HRC shall ensure that its CoC procedure contains all relevant documentation required for transferring FSC-certified product to an FSC CoC certificate holder.
Deadline	Prior to the first sale of certified timber originating from HRC's forest holdings.
Reference	FSC Criterion 8.3 (the Pacific Coast Standard contains no Regional Indicators for this Criterion)
HRC Response	Please refer to HRC's Operating Procedures for Maintaining Chain of Custody for Forest Stewardship Council (FSC) Certified Forest Products Delivered From Humboldt Redwood Company Forestlands (HRC-FO-OP 001 Rev1 with training). This controlled document states that CoC records will be maintained for at least 5 years. Furthermore, this document contains evidence that HRC staff completed training in CoC procedures by 15 September 2009.
Auditor Comment	The document "HRC-FO-OP 001 Rev1 with training" contains procedures to ensure the proper, documented transfer of FSC-certified product to an FSC CoC certificate. This same document supplies evidence that training has been completed for all pertinent HRC staff and contractors (e.g., logging and trucking contractors).

Status of CAR:	This CAR is closed.
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Non-conformance: HRC has had extensive interaction with stakeholders (e.g., regulatory agency personnel, environmental activists) on the classification and management of old growth forests, which are one prominent type of “high conservation value forest” as established in FSC Principle 9. However, consultation with regard to non-old growth HCVFs (e.g., tanoak) has not been at a comparable level and, at present, does not constitute adequate conformity with the consultative requirements found in Principle 9.	
CAR 2009.16	HRC shall develop a consultation process that provides opportunities for stakeholders outside of the regulatory framework to offer input on the identification of high conservation values relevant to North Coast redwood forest land and locations within the HRC ownership that may possess such values. HRC must also provide opportunities for stakeholder input on appropriate management prescriptions for areas possessing high conservation values and, where appropriate given the nature of the conservation values, coordinate management efforts with other managers of HCVFs within the eco-region.
Deadline	First annual audit
Reference	FSC Criterion 9.2, Regional Indicator 9.2.a; Criterion 9.3, Regional Indicator 9.3.c
HRC response	This will be corrected within the first year after award of certification.
Auditor comment	Duly noted.
Status of CAR:	Open

Non-conformance: HRC does plan to place the FSC-certified trademark on their Web site and may use it in other off-product pieces such as brochures. It is understood there is a review process required before such use and that there should be a process to implement and document this review. HRC will have to amend their DCS description to account for off-product labeling and trademark use procedures.	
CAR 2009.17	HRC shall have DCS procedures in place to include: <ul style="list-style-type: none"> • off product FSC/Rainforest Alliance trademark use that follows the applicable policies • submission of all FSC/Rainforest Alliance/SmartWood claims to SmartWood for review and approval prior to use • all trademark review and approval correspondence with SmartWood is kept on file for a minimum of 5 years
Deadline	First annual audit
Reference	FSC Regional Criteria CoC 1.3.e, CoC 5.1, CoC 5.2, CoC 5.3
HRC response	This will be corrected within the first year after award of certification.
Auditor comment	Duly noted.
Status of CAR:	Open

3.4. Observations

Observations are very minor problems or the early stages of a problem, which does not of itself constitute a non-conformance, but which the auditor considers may lead to a future non-conformance if not addressed by the client. An observation may be a warning signal on a particular issue that, if not addressed, could turn into a CAR in the future (or a pre-condition or condition during a 5 year re-assessment).

Background/Justification: HRC's management plans for its forest estate are designed to be in compliance with FSC P&C. The assessment team found no circumstances in which HRC is in a position of conflict between laws, regulations, and FSC P&C. However, there may be circumstances where an irreconcilable situation may arise.	
OBS 2009.1	It would be beneficial if HRC wrote and implemented a policy stating that, in the rare event there is an irreconcilable situation among laws, regulations, and FSC P&C, HRC will bring to this to the attention of the FSC or its certification bodies for consultation.
Reference	FSC Indicator 1.4.a

Background/Justification: HRC implements a number of measures to prevent illegal and unauthorized activities in the forest. These include posting boundary notices, using gates, making periodic inspections, using surveillance equipment, reporting suspected illegal or unauthorized activities to the proper authorities, working with local timber buyers, and utilizing state and federal agency resources.	
OBS 2009.2	Two staff members charged with security issues on HRC forest lands do an exceptional job. However, due to the senior status of the lead employee and the use of a forester who is relatively inexperienced in security issues to replace former security personnel, HRC should consider developing a strategy that will ensure the experience, capability, and institutional memory in these positions are maintained.
Reference	FSC Indicator 1.5.a.

Background/Justification: HRC indicated that there were no issues of significance regarding disputes over tenure and use rights to the certifying body.	
OBS 2009.3	HRC should write and implement a policy to bring significant disputes over tenure and use rights to the attention of their certification bodies for consultation.
Reference	FSC Indicator 2.3.b.

Background/Justification: The auditing team noted different interpretations of the hardhat policy among HRC personnel. At least one vehicle was not equipped with a radio, although personnel were within cell phone range.	
OBS 2009.4	HRC should be more consistent in the application of its safety policies.
Reference	FSC Indicator 4.2.a.

Background/Justification: HRC and their staff, inherited a complicated and controversial challenge with some of the landowners in Elk/Freshwater watersheds associated with flooding of personal property that is being largely attributed to past and present forest management practices and policies. HRC is making efforts to evaluate and manage the social and physical aspects to this issue based on the best available science and input from affected residents and the appropriate hydrological resource agencies and regulators. It was recognized that in other watersheds, and in cases where they have dealt with stakeholders concerned about old growth forests in relation to watersheds, they have achieved some success in conflict resolution through their interactions and a re-examination of their policies. However, during the assessment, and through further stakeholder outreach after the team's visit, it was noted that the Elk river watershed will require continued time and effort to bring to a resolution, as there is great deal of dissatisfaction among stakeholders in this area.

OBS 2009.5	HRC staff should continue to implement their conflict resolution policies to effectively manage the social and physical aspects of the Elk/Freshwater river watershed issue.
Reference	FSC Criterion 4.5

Background/Justification: HRC has stated that the major focus of its management will be on Coastal redwood and Douglas-fir products. Although it has worked to diversify the product offerings between these two species, HRC is disinclined to work with lesser-used species due to previous attempts to market them under MRC.

OBS 2009.6	HRC should ensure that their conclusions determined on common, but lesser-used species under MRC management are valid for HRC considering the geography and the capabilities of local mills of Humboldt County.
Reference	FSC Indicator 5.2.b.

Background/Justification: Auditors observed yarder corridors wider than usual for typical selection harvesting systems and damage to residual trees in both yarder and ground-based operations.

OBS 2009.7	Loggers contracted by HRC could benefit from more training and experience in harvesting practices typical to selection systems to better minimize damage to residual stands.
Reference	FSC Indicators 5.3.b and 6.5.b.

Background/Justification: HRC conducts harvest operations during the dry season and covers skid trails with slash upon completion to minimize soil erosion but not before potential soil compaction from skidder use.

OBS 2009.8	HRC could potentially reduce compaction impacts on skid trails by placing slash on the skid trail to create a slash bed before equipment moves onto such surfaces. This type of BMP is common throughout the region.
Reference	FSC Indicator 6.3.c.3

Background/Justification: HRC retains live trees and understory vegetation consistent with purposes for regeneration or restoration. HRC foresters have noted that beyond certain ages and crown vigor, Douglas-fir has a difficult time responding to release treatments. This may result in a preference for the removal of Douglas-fir in selection treatments.	
OBS 2009.9	HRC should be mindful of retention and type conversion issues addressed in CAR 2009.5 regarding Douglas-fir.
Reference	FSC Indicator 6.3.e.4

Background/Justification: Although logging occurs in the dry season when most soils are least sensitive to compaction, erosion, and sediment transport, there are areas where soils are sensitive enough during the dry season to warrant concerns over soil integrity.	
OBS 2009.10	HRC should identify soils sensitive to compaction and erosion, even during the dry season, and develop and implement management practices to reduce and mitigate damage to these areas during harvesting operations.
Reference	FSC Indicators 6.5.a and 6.5.e.

Background/Justification: Although HRC's decommissioning practices are at least as good as (and often better than) others in the industry, there remain opportunities to improve practices for creek restoration in areas where roads that cross streams are decommissioned.	
OBS 2009.11	HRC scientists and managers should refine the road decommissioning and stream restoration processes used to close watercourse crossings by considering the results and observations of recent decommissioning projects and the latest scientific literature.
Reference	FSC Indicators 6.5.l.

Background/Justification: The auditors' inspection concluded that the average width of all watercourse and lake protection zones (WLPZs) exceeds the requirements of the FSC US Pacific Coast Standard, Version 9.0. However, HRC's policies, as written, could conflict with the Standard in the instance of a placement of a variable retention (VR) or group selection opening adjacent to a WLPZ whose size has been reduced as a result of watershed analysis. Under the current Standard, HRC would be in non-conformance were it to place a VR or group selection opening immediately adjacent to such a WLPZ.	
OBS 2009.12	HRC should evaluate its written policy on stream buffers to consider the requirements of the FSC Pacific Coast Standard, v. 9.0.
Reference	FSC Indicators 6.5.p, 6.5.q, and 6.5.r.

Background/Justification: Chemical use on the HRC forest estate remains a regularly employed management tool. While the Pacific Coast Standard does not mandate the elimination of chemical use as a forest management tool, the Standard does expect that managers of certified forests affirmatively pursue non-chemical alternatives and to also seek to minimize chemical use as much as possible.	
OBS 2009.13	To reduce its dependency on herbicides, HRC should continue to explore alternatives to frilling in its control of tanoak.

Reference	FSC Indicator 6.6.b.
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Background/Justification: HRC's invasive exotic plant policy mostly covers two species, jubata grass and yellow star thistle. HRC has determined that chemical control of either is cost prohibitive and thus relies on the shading effects of selection silviculture to reduce their impacts on growing forests. There may be other exotic invasive plants that could become problematic under selection silviculture.

OBS 2009.14	HRC should develop a more comprehensive and cohesive plan for the prevention and control of invasive exotic plants.
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Reference	FSC Indicator 6.9.b.
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Background/Justification: HRC staff regularly engages in safety and internal training meetings to review new and existing policies and new information relevant to the implementation of management policies. However, as the management plan is not yet complete, the staff only receives training on completed portions related to their daily occupation.

OBS 2009.15	Upon completion of the management plan, HRC staff should receive the necessary training to ensure its implementation.
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Reference	FSC Criterion 7.3
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3.5. Certification Recommendation

Based on a thorough review of FME performance in the field, consultation with stakeholders, analysis of management documentation, or other audit evidence the SmartWood assessment team recommends the following:

Certification requirements met; certificate should be issued	<input checked="" type="checkbox"/>
Major CAR(s) closed	
Certification requirements not met	<input type="checkbox"/>
FME has demonstrated that their described system of management is being implemented consistently over the forested areas covered by the scope of the evaluation	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Comments: FME recently acquired the property and has effectively implemented a new management regime and functional management plan.	
Subject to conformance with minor CARs (if applicable), FME's management system, if implemented as described, is capable of ensuring that all the requirements of the certification standards are met across the scope of the certificate	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Comments:	
Issues identified as controversial or hard to evaluate.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Comments: The FME inherited property with historic flooding problems on private property that are associated with forest operations in some watersheds. The FME must work closely with regulatory agencies and local stakeholders and property owners to ensure forest operations meet regulatory compliance and consider operational options to minimize impacts on flooding on private property down stream.

Certificate type recommended:

- Forest management and Chain of custody**
- Forest management only (no CoC)**

Once certified, the FME will be audited annually on-site and required to remain in conformance with the FSC principles and criteria as further defined by regional guidelines developed by SmartWood or the FSC in order to maintain certification. The FME will also be required to fulfill the corrective actions as described below. Experts from SmartWood will review continued forest management performance and conformance with the corrective action requests described in this report, during annually scheduled and/or random audits.

4. CLIENT SPECIFIC BACKGROUND INFORMATION

These sections adapted from HRC's management plan and auditor observations.

4.1 Ownership and land tenure description

The Humboldt Redwood Company, LLC (HRC) owns 209,300 forested acres on 12 management units, which include eight planning watersheds in Humboldt County, California and ownerships of infrastructure in the town of Scotia, California. The property, located across the northern California coastal range, is situated in a north-to-south band five to 50 miles inland from the Pacific Ocean and is generally centered along U.S. Route 101.

Some early owners of what now comprise HRC forest lands were the Holmes-Eureka Lumber Co., Hammond Lumber Co., Dolbeer & Carson Lumber Co., Arcata Redwood Co., Freshwater Lumber Co., Hicks Vaughan Redwood Co., Van Duzen River Redwood Company and the Pacific Lumber Co. (PALCO). Over the years, the most productive timberlands owned by many of these original logging businesses were acquired and consolidated by PALCO. HRC acquired this property on July 31, 2008 as a result of PALCO's financial restructuring.

HRC makes known its legal (i.e., HRC's landownership) and customary use rights (e.g., cattle grazing, hunting and fishing, gathering, horseback riding) associated with the forest. A Land Security Officer maintains a secure area for the property conveyance book, deeds, lease agreements and information on rights-of-way. Native tribes do not have any claims on the HRC estate. Customary use rights are granted to employees and others with permission.

4.2 Legislative and government regulatory context (adapted from

HRC must operate in conformance with an extensive array of federal, state, and county laws and regulations. Key legislative and regulatory mandates include those relating to forest activities (e.g., Zberg-Nejedly Forest Practices Act [FPA], California Board of Forestry and the California Department of Forestry and Fire Protection [Cal FIRE] fire practices and protection policies, the Timberland Productivity Act), wildlife concerns (e.g., Migratory Bird Treaty Act, Lacey Act, U.S. Endangered Species Act, California Endangered Species Act and Fish and Game Code), air and water issues, (e.g., U.S. Clean Air Act, Federal Water Pollution Control Act, U.S. Clean Water Act, California Wild and Scenic Rivers Act, Porter-Cologne Water Quality Control Act and other California water quality policies, California Water Resources Policies – including the Water Code), pesticide use (e.g., FIFRA, FEPCA), archaeological and historical considerations (e.g., National Historic Preservation Act) and the well-being of employees (e.g., Occupational Health and Safety Act, federal Equal Employment Opportunity Acts).

California has some of the most rigorous forest practice regulations in the U.S. These regulations are the result of the passage of the Z'Berg-Nejedly Forest Practices Act of 1973, developed by a governor appointed Board of Forestry and administered by Cal FIRE. Compliance by land managers with these, and other, rules can be challenging.

Another key piece of legislation having a strong bearing on HRC forest activities is the California Environmental Quality Act (CEQA). CEQA is California's assessment of environmental impacts of state permitted projects (e.g., timber harvesting). By following the Forest Practice Rules (developed as a result of the FPA) and developing appropriate Timber Harvest Plans (THPs), HRC is able to meet the CEQA requirements for addressing project requirements. Harvesting prescriptions are enforceable components of THPs that are legal compliance documents of the State. HRC's THPs are prepared by Registered Professional Foresters licensed by the State of California.

Beyond HRC's forest activities, protection of fish and wildlife is also regulated. To protect fish and wildlife species, wildlife and conservation laws have been implemented in an attempt to restore native forest ecosystems (e.g., Migratory Bird Treaty Act of 1918, Wildlife Conservation Law of 1947-which sets policy for conservation of California wildlife, Z'Berg-Nejedly Act of 1973). In particular, the federal listing of the Northern spotted owl, marbled murrelet, coho salmon and steelhead trout as endangered species has had significant effect on forest management not only in Humboldt County but also throughout the Pacific Northwest. When acquired by law, a multi-species Habitat Conservation Plan (HCP) covers HRC lands. HRC's HCP also meets the requirements of CEQA. HRC complies through its HCP, as well as its timber harvest planning process, to address California's endangered and threatened species commonly occurring on HRC forest lands. HRC follows CESA for plant protections not covered under the HCP. The HCP has extensive provisions for monitoring forest dynamics and providing environmental safeguards based on assessments and monitoring. For example, habitat surveys relating to endangered and threatened species will be submitted to the California Department of Fish and Game (CDFG), and be included in its THPs. In addition, the HCP requires a watershed analysis to be performed to satisfy federal and state agency requirements for water resources.

Archaeological, cultural, and historical resources also have added protections that HRC must address. HRC complies with Cal FIRE requirements for Archaeological and Cultural resources. Three main procedures required in a Confidential Archaeological Addendum to a THP include a check of the state's archaeological records, notification of the Indian tribe that occupied the land as part of its traditional territory, and an archaeological survey of the property conducted by an archaeologist or an archaeologically trained resource professional. Due to legal confidentiality requirements, locations of archaeological sites are maintained on a map with strict security controls. HRC conducts a periodic property-wide records search in conjunction with the North Coastal Information Center for archaeological resources to ensure that the significant archaeological and historical sites within the ownership are adequately identified and protected (FPR Article 14 Archaeological and Historical Resource Protection, Section 929.1). HRC foresters and technicians undergo CLFA/Cal FIRE archaeological training program (FPR Article 14 Archaeological and Historical Resource Protection, Section 929.4).

4.3 Environmental Context

The HRC estate exists within a landscape of a diverse series of ridges uplifted as the oceanic plates collide with the North American continent, producing a mountainous

terrain with elevations rising from 40 to 3,600 feet above sea level. The geology underlying the ownership is composed of sedimentary rocks accreted to the active margin of the North American continent as the Gorda and San Juan de Fuca plates slip under the continent. Bedrock is highly deformed and fractured forming a structurally weak mélangé in the east made up of folded, faulted, and fractured hard sandstone, argillites in the south and west, and poorly consolidated young fine grained silts, clays, and sands in the north and central portions of the property. Soils are typically well drained, shallow to moderately deep, and provide nutrients to sustain long-term forest growth. HRC's lands are among the most biologically diverse and productive lands on the west coast of North America. With a Mediterranean climate and rich organic soils, Coastal Redwood and Douglas-fir forests can achieve high volumes of standing biomass. On HRC lands, 86% of the timberland is classified as Site Quality II indicating that the co-dominant trees in the stand can achieve heights of 102-121 feet by 50 years of age. There are lesser amounts of Site I (greatest growth) and III (average growth for the species).

Vegetation on HRC lands is primarily Coastal Redwood and Douglas-fir Mixed Conifer Forests (approximately 153,000 acres). Areas that lie inland farther from the influence of the marine climate, and holdings in the Bear and Mattole River drainages are dominated by Douglas-fir and Hardwood Mixed Evergreen Forest (estimated 46,000 acres). Approximately 95% of the property is forested, with the remaining area covered by prairie, shrubs, and waterways (about 10,000 acres).

HRC's lands are situated in a landscape that is a mixture of working forest intermingled with old growth reserves. Consolidation of HRC lands over the years included large tracts old growth, natural forests that had never been logged. Unlike other timberland owners, PALCO did not harvest all of its old growth during the first eight decades of the 20th century, which left comparatively large areas of old growth trees in contiguous tracts or mixed with younger age stands on the ownership. Through parts of the 20th century, PALCO primarily used partial harvest or thinning techniques when harvesting timber. Clearcutting as a silvicultural strategy was brought back into favor in the mid 1980s. As a result of the variety of silvicultural methods employed over the past 160 years, the working forest today is a mixture of age classes resulting from one to three previous harvests, with significant portions now containing younger even-aged forest stands. Recently, several of these larger old growth tracts have been transferred into public ownership from HRC. However, several large areas, as well as residual old growth trees dispersed throughout the property, remain in HRC ownership. These stands and individual trees are protected for their inherent and habitat value to the species that depend on them. HRC is unique in the amount of old growth forests retained and protected by a private timber company.

Within HRC's forest holdings are areas devoid of timber value but important ecologically and socially within the area. These special sites are identified for a wide variety of values. These include water bodies of all sorts; unique places that may be geologically formed, such as cliffs or caves; and vegetative complexes such as prairies and oak woodlands. There are also Native American and early regional-settler archaeological

sites. HRC protects these sites and manages around them to maintain their inherent values to regional ecology and social history.

HRC lands support many species of birds, mammals, fish, and amphibians. The diversity of forest age classes and spatial patchiness of the forest landscape on HRC lands provides habitat to many species with a wide array of habitat needs. Of particular importance are five species that inhabit its forests and streams that are federally or state listed as threatened or endangered in northern California, including northern spotted owls, marbled murrelets, and three species of salmon including Chinook and Coho salmon and steelhead trout. These species can occur throughout HRC lands, in some cases in robust populations. Federal agencies responsible for their protection consider HRC lands keystone to their recovery in this region. In addition to these protected animal species, HRC lands contain one of the largest, if not the largest, populations of the State endangered plant, Humboldt milk-vetch.

Within the working forest, there are local conditions requiring protection and restricted access when the forests around them are actively managed. These include riparian or streamside forests that provide critical ecological functions for stream habitats, residual old growth trees, nesting sites for owls, golden eagles, and falcons, and steep slopes prone to landsliding and sediment input to streams. HRC routinely makes special provisions when managing around these and other sensitive sites.

4.4 Socioeconomic Context

Prior to the 1850s, HRC forest lands were largely late successional Coastal Redwood and Douglas-fir mixed forests supporting communities of Native Americans such as the Wiyot, Sinkyone, Whilkut, and the southern Athabascans that include the Mattole and Nongatle. These peoples used fire to clear areas and improve hunting, especially along the borders of the redwood forest where woodlands and prairies existed. The first known discovery of Humboldt Bay by Europeans occurred in 1806. Somehow this initial discovery of the bay and its environs was forgotten. Instead, Humboldt Bay's discovery is attributed to Dr. Josiah Gregg and his companions, who traveled west on foot from the Trinity Gold Fields in 1849. The re-discovery of the Humboldt Bay entrance is credited to H.H. Buhne, who piloted a small boat through the Bay entrance and landed on the shores in 1850. The first sawmill was established on Humboldt Bay shortly thereafter, marking the beginning of the lumber industry on what became known as the Redwood Coast of California.

Initial harvesting in the 1850s and 1860s began at the mouths of watersheds and progressed up-stream and up-slope to ridgelines. Early logging generally consisted of a regimen of burn, clearcut, and burn again, followed by dragging logs downhill to the nearest stream and using streambeds as transportation corridors. Once landed in larger river valleys, logs were floated to mills via river systems. Later entries into these earlier logged forests, and first entry into forests located further inland, were commonly accomplished with steam donkeys (steam driven cable machines), and railroads. The end of World War II brought an entirely new logging system based on crawler tractors and trucks. This transition stimulated construction of a gravel and dirt road network to access the property that is still used today.

According to 2008 U.S Census Bureau estimates, Humboldt County, California is 3,572.49 mi² with 35.4 persons per mi² with a population of 129,000. It is 86.2% white, 8.4% in part or whole Hispanic or Latino, 6.3% Native American, and 1.1% black. The State distribution is 76.6%, 36.6%, 1.2%, 6.7%, respectively, with 6.7% being Asian. As of 2000, of those older than 25 in the County, 84.9% had a high school diploma while 23.0% had a bachelor degree or higher. These numbers were 76.8% and 26.6% for the State, respectively. In 2007, median household income was \$37,281 for the County versus \$59,928 for the State.

Since 1990, employment in most sectors of the economy has fallen significantly in northwest California. Today, in Humboldt County timber production, ranching, agriculture, recreation, and tourism are still the common uses of the land. However, the business environment has changed, especially for forest industry. This was due to a wide range of related occurrences, such as, changes in mill technologies, corporate consolidation of the industry and associated downsizing, historic over capitalization/excess mill capacity, shifting policy priorities on public lands, and diminishing log supplies.

Government, manufacturing, services, and hospitality jobs are now the largest employers in the county with government, services, and retail trade expected to produce the largest future growth in employment (up to 90%). So, while forest industry had been the County's top industrial sector for years, it is, despite its recent fall off, still an important contributor to the County economy for both employment and value-added production. In addition, the natural resource base has continued to make Humboldt County a primary tourist destination, focused primarily on the fame of its giant redwood trees. Popular tourist destinations include Humboldt Redwoods State Park, Richardson Grove State Park, and Redwoods National Park. The largest employers in Humboldt County include Humboldt County, Humboldt State University, St. Joseph Health System, Eureka City Schools, College of the Redwoods, The Sun Valley Group, Green Diamond Resource Co., Mad River Hospital, HRC, and the U.S. Postal Service.

While the County social and economic environment is important to HRC's viability, its surrounding landscape and those residing in it are just as important to HRC. Much of HRC's forest lands are adjacent to public and private roads, neighbors, and public reserves and parks. These are areas of community concern and are considered in forest planning and operations by foresters and managed with special sensitivity to impacts silvicultural activities may have on the viewsheds and aesthetic quality for adjacent neighbors, among other issues. HRC's public access policy is to encourage cooperative education and research on its ownership. It is also open to a variety of other activities including hiking, camping, picnicking, bicycling, horseback riding, running, hunting, and fishing. Written permits or lease arrangements are required for all of these activities to shelter wildlife, prevent road damage, protect watercourses, educate individuals about safety issues, and allow HRC protection from personal liability claims. To aid HRC in the implementation of the public access policy, HRC has a gate policy for employees and contractors to ensure that access to the property is controlled

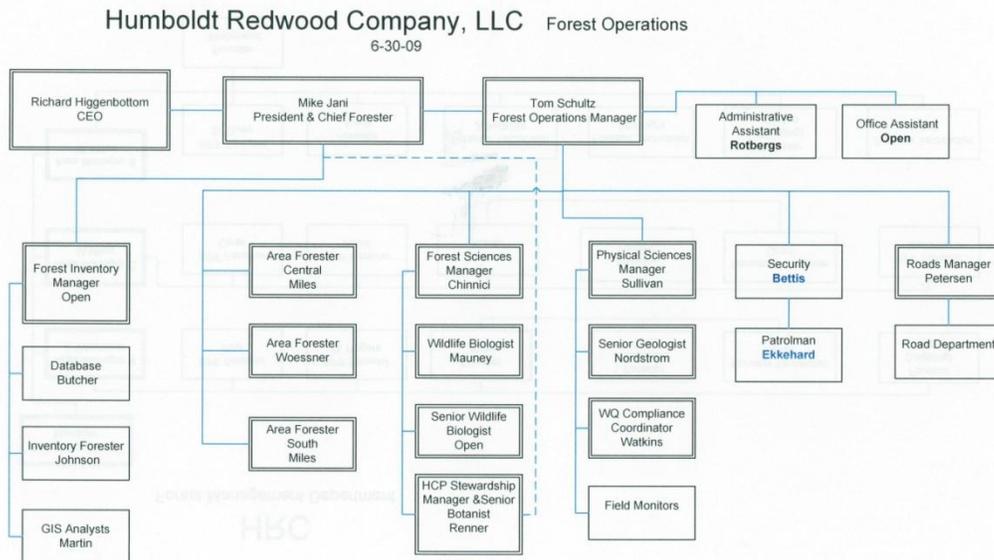
for public and employee safety, and for the protection of the environment. Grazing is a traditional land use in Humboldt County. HRC's grazing lease policy seeks to minimize resource damage, while providing HRC with the benefit of reducing fire hazard by lowering the amount of dry standing grass in the summer

APPENDIX I: Public summary of the management plan

(NOTE: To be prepared by the client prior to assessment, Information verified by assessment team)

Main objectives of the forest management are:	
Primary priority:	income from harvesting and sales of roundwood
Secondary priority:	biodiversity and increasing of nature values
Other priorities:	Maintained as investment to increase the value; ;
Forest composition:	
153,000 acres (61,918 ha) conifer (redwood, Douglas-fir); 45,000 acres (18,211 ha) hardwood and hardwood/conifer; 10,000 acres (4,047 had) non-forest (prairies, river bars)	
Description of Silvicultural system(s) used:	
selective logging with cont. forest cover	
Silvicultural system	% of forest under this management
Even aged management	2090 ha
Clearcut (clearcut size range)	0 ha
Shelterwood	2090 ha
Uneven aged management	67568 ha
Individual tree selection	16718 ha
Group selection (group harvested of less than 1 ha in size)	38312 ha
Other types of management (explain) Variable Retention used in rehabilitation - please refer to Management Plan for details	12538 ha
Harvest methods and equipment used:	Cable yarding, tractor yarding, helicopter yarding
Estimate of maximum sustainable yield for main commercial species:	57 million board feet annually over the next 10 years; also see Management Plan for extended forecast
Explanation of the assumptions (e.g. silvicultural) upon which estimates are based and reference to the source of data (e.g. inventory data, permanent sample plots, yield tables) upon which estimates are based upon.	
Please refer to Management Plan "HRC Landscape Planning Tools and Components." See also the HRC/MRC Web site: http://www.mrc.com/Reports-ManagementPlan.aspx .	
FME organizational structure and management responsibilities from senior management to operational level (how is management organized, who controls and takes decisions etc.)	
HRC has a hierarchical structure to its management team. The executive branch	

consists of three main individuals who oversee the entire organization, from financial to forest operations and monitoring. There are six departments under executive branch, including Forest Inventory, Forestry, Forest Sciences, Physical Sciences, Security, and Road Management. HRC has divided the 13 SUs geographically into three groups: north, central, and south. In the Forestry Department, two Area Foresters have been assigned to the groups. These Area Foresters oversee the integration of information and activities from the forest inventory, forest and physical sciences, security, and road management in the planning and implementation of Timber Harvest Plans (THPs). Each department is responsible for various activities, including data collection and monitoring related to forest inventory, wildlife, fisheries, botany, geology, riparian zones, sediment movement, controlled access, and road construction and repair. Each department also has temporary or seasonal positions throughout the year related to road maintenance, wildlife, reforestation, and monitoring activities. HRC contracts tree planting, herbicide application, and harvesting to independent companies. HRC Area Foresters and other staff review the work of seasonal employees and contractors.



See also the HRC/MRC Web site: <http://www.mrc.com/Reports-ManagementPlan.aspx>.
Structure of forest management units (division of forest area into manageable units etc.)

Forestlands are divided into 13 "Sustainability Units" - for a complete description please refer to Management Plan "HRC Landscape Planning Framework" and the map provided during audit. See also the HRC/MRC Web site: <http://www.mrc.com/Reports-ManagementPlan.aspx>.

Monitoring procedures (including yield of all forest products harvested, growth rates, regeneration, and forest condition, composition/changes in flora and fauna, environmental and social impacts of forest management, costs, productivity and efficiency of forest management).

Please refer to "Employees," "Community," "Quality Products," "Business Return," and "Monitoring" in the Management Plan; and the Habitat Conservation Plan (HCP; a summary is provided in the Management Plan; the entire Habitat Conservation Plan was provided to the auditors). See also the HRC/MRC Web site: <http://www.mrc.com/Reports-ManagementPlan.aspx>.

Environmental protection measures, e.g. buffer zones for streams, riparian areas, etc., protection measures for Rare Threatened and Endangered Species and habitat

Please refer to Management Plan "Habitat Conservation Plan" and "Forest complexity and diversity." See also the HRC/MRC Web site: <http://www.mrc.com/Reports-ManagementPlan.aspx>.

Other Sections may be added by the FME

APPENDIX II: FSC Reporting Form: Detailed FME information (Confidential)

(NOTE: To be prepared by the client prior to assessment, Information verified by assessment team)

Forest management enterprise (FME) information:			
FME legal name:	Humboldt Redwood Company, LLC		
FME legal jurisdiction:	Delaware, USA		
Contact person (public)	Maralyn Renner		
Address	125 Main St., P.O. Box 712, Scotia CA, USA 95565		
Tel/FAX/email	707-764-4199 (ofc) 707-764-4400 (fax) mrenner@hrcllc.com		
Reporting period	Previous 12 month period	Dates	1 August 2008 - 1 August 2009

1. Scope of Certificate			
Type of certificate: single FMU		SLIMF Certificate not applicable	
Group or Multiple FMU	Number of group members (if applicable):		
	Total number of Forest Management Units FMUs: (if applicable, list each below):		
	FMU size classification within the scope:		
		# of FMUs	total forest area FMU group
	< 100 ha		ha
	100 – 1000 ha		ha
	1000 – 10 000 ha		ha
	> 10 000 ha		ha
	SLIMF FMUs		ha
Group Certificate: List of FMUs included in the certificate scope provided in Appendix V:			
Multi-FMU Certificate: List of each FMU included in the certificate scope:			
	FMU	Area	Forest Type
		ha	
		ha	
		ha	

2. FSC Product categories included in the FM/CoC scope			
<input checked="" type="checkbox"/>	Main Class	Sub Class 1	Subclass 2 or details
<input checked="" type="checkbox"/>	Logs/Wood in the rough	0312 - Logs of non-coniferous wood	
<input checked="" type="checkbox"/>	Logs/Wood in the rough	0311-Logs of coniferous wood	
<input type="checkbox"/>	3451 - Wood charcoal	34510 - Wood charcoal	
<input type="checkbox"/>	311 - Wood, sawn or chipped lengthwise, sliced or peeled, of a thickness exceeding 6 mm;	3110 - Wood, sawn or chipped lengthwise, sliced or peeled, of a thickness exceeding 6 mm; railway or	

	railway or tramway sleepers (cross-ties) of wood, not impregnated	tramway sleepers (cross-ties) of wood, not impregnated	
<input checked="" type="checkbox"/>	312 - Wood continuously shaped along any of its edges or faces; wood wool; wood flour; wood in chips or particles	3123 - Wood in chips or particles	
<input type="checkbox"/>	Non Wood Forest Products	0392 - Plant parts/not flower-ornaments	Parts of pla
<input type="checkbox"/>	other		
Species Included in the Scope of the Certificate			
Common/Trade Name		Latin Name	
coast redwood		Sequoia sempervirens	
Douglas-fir		Pseudotsuga menziesii	
tan-oak		Lithocarpus densiflorus	
grand fir		Abies grandis	
Sitka spruce		Picea sitchensis	
Pine		Pinus sp.	
Total Sales/ Turnover		\$15,000,000.00 US\$	

3. FME Info					
Location of certified forests (<i>Insert additional rows for multi-FMUs, Group members are reported in Group Appendix</i>)	Latitude:	N 40	degrees	15 to 50	minute s
	Longitude:	E 123/124	degrees	45/15	minute s
Forest zone	Temperate				
Certified Area under Forest Type					
- Natural	84,703 ha				
- Plantation	0 ha				
Stream sides and water bodies	22,363 Linear Kilometers				
4. Workers					
Number of workers including employees, part-time and seasonal workers:					
Total workers	75 workers (of which – provide detail below)				
- Local Full time employees (a:b)	63 Male		7 Female		
- Non - Local Full time employees (c:d)	1 Male		0 Female		
- Local Part time workers (e:f)	3 Male		1 Female		
- Non- local part time workers (g:h)	0 Male		0 Female		
Worker access to potable water on the work site	<input checked="" type="checkbox"/> YES		<input type="checkbox"/> NO		
Full time employees making more than \$2 a day	<input checked="" type="checkbox"/> YES		<input type="checkbox"/> NO		
Number of serious accidents (past 12	11; see Management Plan for specific details				

month period)	
Number of fatalities (past 12 month period)	0

5. Species and annual allowable cut				
Botanical name	Common trade name	Annual allowable cut	Actual harvest (2008)	Projected harvest for next year
Sequoia sempervirens	coast redwood	182,560 m3	105,628 m3	62,628 m3
Pseudotsuga menziesii	Douglas-fir	95,640 m3	26,039 m3	51,816 m3
Lithocarpus densiflorus	tan-oak	NA m3	NA m3	NA m3
Abies grandis / Picea sitchensis / Pinus sp.	grand fir / Sitka spruce / pine (white woods)	12,500 m3	6,034 m3	7,,013 m3
Total AAC		290,700 m3	13,7701 m3	121,457 m3
Total annual estimated log production:			280,550 m3	
Total annual estimates production of certified NTFP:			0 m3	
(list all certified NTFP by product type):			m3 m3 m3	

6. Forest Area Classification	
Total certified area	84,703 ha
Total forest area in scope of certificate	80,656 ha
Ownership Tenure	Private ownership
Management tenure:	private management
Forest area that is:	
Privately managed	84,703 ha
State/Public managed	0 ha
Community managed	0 ha
Area of production forests (areas where timber may be harvested)	69,658 ha
Area without <u>any</u> harvesting or management activities: strict forest reserves	11,589 ha
Area without timber harvesting and managed only for production of non-timber forest products or services	3,456 ha
7. Forest Regeneration	
Area or share of the total production forest area regenerated naturally	24380 ha
Area or share of the total production forest area regenerated by planting or seeding	12538 ha

Area or share of the total production forest are regenerated by other or mixed methods (describe) Intermixed natural and planted	32740 ha
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8. High Conservation Values identified via formal HCV assessment by the FME and respective areas

Cod e	HCV TYPES ¹	Description: Location on FMU	Area
HCV 1	Forest areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g. endemism, endangered species, refugia).	Refugia forest stands containing Type 1 and Type 2 old growth redwood not included in HCV2 below - map provided at audit (note: company is in the process of identifying refugia stands of Douglas-fir so this value is expected to increase)	742 ha
HCV 2	Forest areas containing globally, regionally or nationally significant 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.	Larger scale refugia redwood forests containing Type 1 and Type 2 old growth along with second growth preserved in marbled murrelet conservation areas (MMCAs), along with buffers to the old growth redwood stands in the MMCAs, adjacent State Parks, and BLM lands - map provided at audit	2,687 ha
HCV 3	Forest areas that are in or contain rare, threatened or endangered ecosystems.		ha
HCV 4	Forest areas that provide basic services of nature in critical situations (e.g. watershed protection, erosion control).	Riparian Management Zones (RMZs)	14,202 ha
HCV 5	Forest areas fundamental to meeting basic needs of local communities (e.g. subsistence, health).		ha

¹ The HCV classification and numbering follows the ProForest HCVF toolkit. The toolkit also provides additional explanation regarding the categories. Toolkit is available at <http://hcvnetwork.org/library/global-hcv-toolkits>.

HCV 6	Forest areas critical to local communities' traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities).		ha
TOTAL HCVF AREA			17,631 ha
Number of sites significant to indigenous people and communities			68

9. Highly Hazardous Pesticide Use

FME has a valid FSC derogation for use of a highly hazardous pesticide	<input type="checkbox"/> YES (if yes, fill in below) <input checked="" type="checkbox"/> NO
Number of FSC highly hazardous pesticides used in last calendar year	0
Liters of FSC highly hazardous pesticides	0 liters
Number of hectares treated with FSC highly hazardous pesticides	0 ha

APPENDIX III: Certification standard compliance checklist (confidential)

The following checklist must be completed separately for each FMU evaluated. For group certification assessments, checklists completed for each group member sampled shall demonstrate full compliance with all the requirements of the FSC P&C, except those already complied with at the group level. Based on the evaluation of compliance with each indicator, a score has been assigned for the associated criterion using Table X as a guide. The entire assessment team does scoring of all criteria through a consensus process. Where noncompliance with the standard is documented by the team, corrective action requests (CAR) are outlined. The following definitions apply, and are the basis for all certification assessments:

- Precondition** Requirements that FMO must meet before certification by SmartWood can take place.
- Minor CAR** Requirements that FMO must meet, within a defined time period (usually within one year), during the period of the certification,
- Observation** Non-mandatory actions or recommendations suggested by the assessment team to address FMO performance.

For each criterion discussed below, the assessment team’s findings are presented and where applicable CARs or observations are presented. Note: where comments have been received from stakeholders about the client’s compliance related to a defined criterion, please include reference to related finding under the explanatory notes.

Pacific Coast Standard version 9.0

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	
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. <i>For example: Records are on file documenting any</i>	C	A central repository for applicable laws and regulations as well as contacts for state and federal agencies responsible for local enforcement have been developed and is included in the draft forest management plan. Field trips by the team and HRC personnel throughout the forested property indicated that employees and contractors were aware of relevant federal, state, and county laws and

<p><i>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.</i></p>		<p>regulations. In addition, discussions with regulators indicated that HRC was also in compliance.</p> <p>HRC has inherited a Habitat Conservation Plan (HCP) and it files and receives State agency approval on Timber Harvest Plans (THPs) prior to conducting timber harvesting activities.</p>
<p>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.</p>	<p>C</p>	<p>Forestry operations meet or exceed current state forest practice regulations for roads, wildlife, and water quality that exist within California. This was verified through extensive field visits to the forest and numerous watersheds and with interviews with employees (where information was shared) and in discussions with stakeholders. In addition, the California Department of Forestry and Fire Protection (Cal Fire), which oversees the harvesting of timber on private lands, confirmed HRC's satisfactory level regulation compliance. Regulatory compliance is primarily accomplished through the submission of Timber Harvesting Plans to Cal Fire and other State "review agencies" such as the Department of Fish and Game (DFG) for review and approval. Additional regulatory mechanisms include HRC's Habitat Conservation Plans (HCP), its Sustained Yield Plan (SYP), 1,600 permits, etc. All regulatory agencies expressed a high overall level of satisfaction with HRC's compliance with regulatory requirements.</p>
<p>1.1.c. Where required by law, forest (<i>see Glossary</i>) owners and managers share public information, provide open records, and conduct procedures for public participation.</p>	<p>C</p>	<p>HRC follows, at a minimum, the letter of the law relative to state and federal statutes and the release or withholding of information (e.g., confidential information related to archaeological sites). HRC shares a good deal of information and provides open records to the public when appropriate considering that they are a private organization. HRC has undertaken an exceptional commitment to transparency. The company web site, linked to the MRC web site, already contains an exemplary amount of information not required by any regulation or statute and HRC is still in the process of adding more documents and information on their web site.</p> <p>HRC has sought and received public input on their management</p>

		<p>activities (e.g., old growth management activities) through engagement of stakeholder groups (e.g., adjoining landowners, tribes, NGOs) and through processes whereby they must follow regulations set forth under the CA FPA (e.g., public comment on THPs). HRC also holds meetings open to associations, organizations, and individuals on a number of topics (e.g., forest management procedures and data related to a watershed). In addition, the HRC President is available to and in fact engages the public on a continual basis and is demonstrably willing to discuss and share information on any issue (e.g., tribal interests on HRC forest lands, adjoining landowner concerns). Interviews with a variety of stakeholders confirmed such activities and a clear appreciation of HRC's efforts.</p> <p>The THP process and local water quality board, in addition to the high level of access to information that HRC provides voluntarily, provide ample opportunity for public involvement. HRC also submits confidential information on archaeological sites to relevant state organizations. HRC has an exceptional commitment to transparency.</p>
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	HRC pays all taxes and fees in full, and in a timely manner. Evidence was provided to the team by HRC accounting department on payments of Humboldt County property and yield 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	
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.	C	HRC has compiled a list of agreements in their draft forest management plan (See Appendix F of the Plan) and intends to put the Plan on their Web site. The list includes treaty, regulation, or agreement details and how they apply to HRC operations. HRC has conducted internal training and/or made employees aware of these

(Note: see Analysis of US Government Procedures for Abiding with Treaties, FSC-US, 3/10/03)		items (e.g., through a handout and verbal conversations). Evidence of training in this area was supplied to the team. The team observed no instances of non-compliance.
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	
1.4.a. Any perceived, possible conflict between US law and FSC P&C shall be referred to FSC ABU.	C	<p>Management plans for the forest are oriented to be in compliance with FSC Principles and Criteria; senior managers at HRC have over 10-years of experience in designing and executing forest management systems in conformance with the FSC certification standards (at MRC). The assessment team found no circumstances in which HRC is in a position of conflict between laws, regulations, and FSC P&C. Evidence of training in this area was supplied to the team. To ensure continual compliance HRC could write, and implement if necessary, a policy in the rare event that there is an irreconcilable situation whereby HRC will bring to this to the attention of the third party certifier for consultation.</p> <p>OBS 2009.1: It would be beneficial if HRC wrote and implemented a policy stating that, in the rare event there is an irreconcilable situation among laws, regulations, and FSC P&C, HRC will bring to this to the attention of the FSC or its certification bodies for consultation.</p>
C1.5. Forest management areas should be protected from illegal harvesting, settlement and other unauthorized activities.	C	
<p>1.5.a. Forest owners or managers implement measures to prevent illegal and unauthorized activities in the forest.</p> <p><i>For example, efforts may include posting boundary notices, using gates, making periodic inspections, and reporting suspected illegal or unauthorized</i></p>	C	HRC implements a number of measures to prevent illegal and unauthorized activities in the forest. These include posting boundary notices, using gates (refer to HRC Lands Gate Policy); making periodic inspections; using surveillance equipment; reporting suspected illegal or unauthorized activities to the proper authorities; working with local timber buyers, lease holders, and mineral extraction entities; and utilizing state and federal agency resources

<p><i>activities to the proper authorities.</i></p>		<p>[e.g., California Fish & Game (CA FG), Law Enforcement Division personnel]. Documented security training of HRC personnel on security issues was also provided to the team (e.g., Marijuana Growing: Recognition and Response). In an interview with an adjoining landowner, appreciation was expressed that HRC's use of gates prevented extensive trespassing on their property.</p> <p>OBS 2009.2: Two staff members charged with security issues on HRC forest lands do an exceptional job. However, due to the senior status of the lead employee and the use of a forester relatively inexperienced in security issues to replace former security personnel, HRC should consider developing a strategy that will ensure the experience, capability, and institutional memory in these positions are maintained.</p>
<p>C1.6. Forest managers shall demonstrate a long-term commitment to adhere to the FSC Principles and Criteria.</p> <p><i>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).</i></p>	<p>C</p>	
<p>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.</p>	<p>NC</p>	<p>HRC has not provided a written statement of commitment to the FSC P&C in its management plan or another official document.</p> <p>CAR 2009.1: HRC shall provide a written statement of commitment to manage its forest estate in accordance with the FSC P&C, endorsed by senior management and placed in the publicly available summary of the forest management plan or in another suitable document.</p>
<p>1.6.b Forest owners or managers document the</p>	<p>NA</p>	<p>HRC is not seeking partial certification.</p>

reasons for seeking partial 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	<p>HRC has documented and discussed at length its strategies and silvicultural treatments for future harvest entries, for many decades into the future. Additionally, the SYP projects harvests and yields over 100 years into the future. The team concludes that these actions conform to the FSC P & C. Evidence was gathered through a team conference call with its Inventory Forester and the sharing of information. In addition, the draft forest management plan outlines HRC plans (e.g., See Tables 3 and 5, Figures 5 and 6, description on pp. 17-20).</p> <p>HRC has prepared a 100-year growth and harvest plan documented in the management plan.</p>
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	
<p>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.</p> <p><i>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.</i></p>	C	<p>HRC made known the legal (i.e., HRC's landownership) and customary use rights (e.g., cattle grazing, hunting and fishing, gathering, horseback riding) associated with the forest to the team. The latter are granted to employees and to others with permission. The Land Security Officer was interviewed and showed the auditor the secure area where property conveyance book, deeds, lease agreements and information on rights-of-way are kept.</p> <p>There are no parties contesting HRC's ownership rights to the land nor are any parties claiming customary rights that HRC does not recognize. HRC possesses deeds, titles to the land, and other related documentation.</p> <p>HRC has been updating the arrangements of the grazing leases as they expire to further minimize environmental risks, such as to</p>

		watercourses.
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	HRC surveys its property lines and identifies boundaries prior to commencement of forest operations near property lines. The team witnessed examples of the latter, for harvest units, riparian zones, and for archaeological sites. HRC will implement special-treatment zones, which serve as buffers for California State Parks adjoining the forest. In most cases, this is also done for other landowners.
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. <i>Examples of legally recognized rights include:</i> <ul style="list-style-type: none"> ▪ <i>public rights of way</i> ▪ <i>public use of water</i> ▪ <i>established easements</i> ▪ <i>treaty rights</i> 	C	Controlled access is permitted when deemed compatible with HRC management policies and objectives. Employees can hunt the property in compliance with a schedule set up by the HRC Forest Operations Manager. Special user groups are allowed to engage in some activities (e.g., annual ATV event, Boy Scout Camp). In several cases, stakeholders have had personal tours on the property specific to their interest (e.g., old growth issues).
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. <i>For example:</i> <ul style="list-style-type: none"> ▪ <i>collecting firewood for personal use or sale</i> ▪ <i>collecting non-timber forest products for personal use or sale</i> 	C	In general, HRC allows customary and lawful uses of the forest to the extent they are consistent with conservation of the forest resource, their forest management objectives, provided they do not present a legal liability. According to HRC policy, individuals, groups, or businesses gain access to the forest through legal contracts, permits, or leases. However, there were some cases where individuals were working voluntarily on the forest without a legal arrangement, thus exposing the HRC to legal liability. CAR 2009.2: HRC shall develop and implement a process whereby

<ul style="list-style-type: none"> ▪ <i>recreation</i> ▪ <i>gathering plant materials for traditional cultural purposes by American Indians</i> ▪ <i>use of water</i> ▪ <i>hiking, hunting, and fishing on non-posted property</i> ▪ <i>visiting ancestral gravesites</i> 		<p>volunteers can engage in stewardship activities on HRC lands without presenting a legal liability.</p>
<p>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.</p>	C	<p>HRC has consulted with a number of stakeholder groups when planning and implementing forest management activities. Examples include the Archeologist for the Berar River Band of the Rohnerville Rancheria (BRBRR), other tribal entities (e.g., InterTribal Sinkyone Wilderness Council), the Mattole Restoration Council, agency stakeholders through the THP process, a number of tree sitters, adjoining landowners (to discuss access and impacts), and area ranchers. These consultations were confirmed through interviews with stakeholders held by the team.</p>
<p>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.</p>	C	
<p>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 (<i>see Glossary</i>) claims.</p>	C	<p>HRC is able to resolve many issues through dialogue with neighboring landowners (e.g., border trees, boundaries, access issues). The field foresters typically handle such issues as they arise. If an issue remains unresolved it goes to the Area Forester and then to the Forest Operations Manager. Evidence of this process was confirmed through employee and stakeholder interviews.</p> <p>HRC places a strong emphasis on stakeholder outreach to keep lines of communication open with various groups and individuals. The President of HRC takes a leadership role in this effort. To further this</p>

		<p>effort, HRC took the opportunity to institute a formal dispute resolution process and contact mechanism. This official policy will be linked to its forest management plan. There will also provide a mechanism opportunity to document disputes. The onus for implementation of this policy falls on the Forest Operations Manager.</p> <p>Currently, HRC expressed to the team that there are no disputes of substantial magnitude involving a significant number of interests.</p>
2.3.b. The forest owner or manager provides information regarding disputes over tenure and use rights to the certifying body.	C	<p>HRC indicated that there were no instances of significance regarding disputes over tenure and use rights to the certifying body. The team could find no instances where this was not the case.</p> <p>OBS 2009.3: HRC should write and implement a policy to bring significant disputes over tenure and use rights to the attention of their certification bodies for consultation.</p>
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	HRC does not manage tribal forests.
3.1.a. Managers of tribal forests secure informed consent regarding forest management activities from tribes or individuals (such as allottees (<i>see Glossary</i>)) whose forest is being considered for management.	NA	
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.	NA	
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	NA	

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	
<p>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.</p> <p>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 formal governments. 4) Lineal descendants of American Indians with ties to the land.</p> <p>Unsuccessful attempts to contact tribal representatives are documented.</p>	C	<p>HRC has indentified to the audit team all tribes, or tribal representatives, that are within the sphere of influence of HRC’s forest lands. The THP process requires contacting tribes when forest operations have the potential to interfere with archaeological or other sensitive sites. Documentation of contacts with tribes was also presented to the team and confirmed through interviews with the tribes or their representatives.</p> <p>HRC is doing a commendable job of working with local tribes [i.e., sending them Timber Harvest Plans (THPs) for review, addressing issues related to sensitive sites, participating in granting efforts]. Documentation in the form of a grant application that was recently approved represented a joint effort between the BRBRR, HRC, and the Archaeological Research Center, California State University at Sacramento to do archaeological work on HRC properties. Verbally, outreach is occurring with several tribes and the InterTribal Sinkyone Wilderness Council. Interviews with tribal members, or tribal representatives, verified that these activities are taking place and that talks are in place for future cooperation.</p>
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.	C	<p>If HRC discovers a site having archaeological significance, they are required by law to notify a regional Information Center in California. HRC will also notify tribal members or tribal representatives if archaeological sites related to these resources are discovered on HRC forest lands. Tribal interests are involved in the planning of forest operations through the development of THPs and through additional cooperation between HRC and the tribes in the field. One site was visited in the field where adequate protections measures were taken by HRC, in cooperation with a tribal archaeologist, to afford it protection during forest operations and to provide for further study of the site.</p>

		HRC also makes public presentations on a number of issues at various venues to seek inputs from stakeholders, including tribal interests. For example, documentation was provided on a HRC presentation titled the “Bear River Watershed Analysis Public Review Draft Presentation” in April 2009. Most participants at this presentation represented tribal interests (e.g., BRBRR).
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.	C	<p>The document titled “California’s Forest Practice Rules for the Protection of Archaeological, Historical, and Cultural Sites, Title 14 of the California Code of Regulations” describes regulations and protections afforded tribal resources. HRC is required to follow appropriate mandates relative to these resources. If HRC personnel discover a site having archaeological significance they are required by law to notify a regional Information Center in California.</p> <p>Under the direction of CAL FIRE, THPs must include current archaeological records, archaeological surveys, and tribal consultation. THPs with appropriate documentation were shared with the team. According to the CAL FIRE Archaeology Program, “archaeological surveys of THP areas must be conducted by either a professional archaeologist or one of CAL FIRE’s Certified Archaeological Surveyors with oversight and review by a professional archaeologist.”</p> <p>One site was visited in the field, where adequate protections measures were taken by HRC, in cooperation with a tribal archaeologist, to afford it protection during forest operations and to provide for further study of the site.</p>
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	C	As mentioned above in 3.2, under the direction of CAL FIRE, THPs must include current archaeological records, archaeological surveys,

<p>sites of current or traditional significance within the property proposed for certification.</p> <p><i>For example, areas of special significance may include:</i></p> <ul style="list-style-type: none"> ▪ <i>ceremonial, burial, or village sites</i> ▪ <i>areas used for hunting, fishing, or trapping</i> ▪ <i>current areas used for gathering culturally important or ceremonial materials, such as basket materials, medicinal plants, or plant materials used in dances</i> ▪ <i>current areas used for subsistence gathering, such as mushrooms, berries, or acorns</i> 		<p>and tribal consultation. THPs with appropriate documentation were shared with the team and this included communications to tribal interests.</p>
<p>3.3.b. Forest owners or managers and tribal representatives jointly develop measures to protect or enhance areas of special significance.</p>	<p>C</p>	<p>HRC’s draft forest management plan states that historical and archaeological sites on the forest are considered important to surrounding communities. In addition, it is stated that a major priority for HRC is to manage the forest with full consideration of these sites, with this action being one more way to maintain positive community relationships.</p> <p>Under the direction of CAL FIRE, the THP process calls for HRC to provide tribal representatives the opportunity to jointly develop measures to protect or enhance areas of special significance.</p>
<p>3.3.c. Confidentiality of disclosures is maintained in keeping with applicable laws and requirements of tribal representatives.</p>	<p>C</p>	<p>HRC maintains confidentiality of disclosures in keeping with applicable laws. For example, documentation affiliated with THPs having confidential information on archaeological sites is pulled from the THP and sent to the appropriate agencies (e.g., a California Department of Forestry field unit) or individuals (e.g., a Reviewing Archaeologist) to preserve confidentiality. Two sample cover pages describing this process for two THPs were presented to the team. The cover page states up front that: “Information concerning archaeological sites has been removed from THP (THP designation removed by auditor) in accordance with the policy of the Office of</p>

		Historical Preservation as adopted by the State Historical Resources Commission under authority of public Resources Code 5020.4.”
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	Although HRC respects the confidentiality of tribal knowledge, it does not directly assist in the protection of tribal intellectual property rights. There is no commercialization of indigenous intellectual property, traditional ecological knowledge, and/or tribal forest resources.
3.4.a. Forest owners or managers respect the confidentiality of tribal knowledge and assist in the protection of tribal intellectual property rights.	NA	
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.	NA	
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. <i>For example, a high quality work environment may include the following attributes:</i> <ul style="list-style-type: none"> ▪ <i>employee and contractor relationships that are long term and stable</i> ▪ <i>a mixture of diverse tasks that require</i> 	C	HRC employees perform a multitude of administrative and forest management activities that provide for quality work opportunities. Employees all have specialized expertise, above their normal duties as foresters, and are fully supported by HRC as they use these talents to complete their work. Employee interviews, for the most part, revealed that they felt a high level of job satisfaction. There was no general dissatisfaction. All employees are afforded a comprehensive package of benefits that

<p><i>varying levels of skill</i></p> <ul style="list-style-type: none"> ▪ <i>opportunities for advancement</i> ▪ <i>a comprehensive package of benefits</i> ▪ <i>opportunities for employee and contractor participation in decision-making</i> ▪ <i>forest owners or managers provide and/or support training opportunities for workers to improve their skills</i> 	<p>are outlined in the “Humboldt Redwood Company, LLC Employee Handbook.” Benefits are described in detail on pages 43 to 63 in the handbook.</p> <p>In general, employees are given opportunities to participate in decision-making relative to their tasks in the field and in other matters. Some concern was expressed by a few employees that they were not given an opportunity to have input in recent employee layoff and furlough decisions. HRC management stated that these issues were decided within a small circle to protect the sensitive nature of these decisions and eliminate rumors that could impact the workforce. Both the administration and several employees stated that after these decisions were made, several adjustments took place as management employee discussions unfolded on the impacts of these decisions and the ability of the workforce to complete their tasks in the field. Management also stated that several adjustments, of a positive nature, were not out of the question and this will, at some point, involve employee input. Contractors are also continuing to have inputs into timber harvest planning and layouts. Interviews with contractors revealed that HRC is in constant contact with them before, during, and after a job. This provides ample opportunities to discuss issues in the field related to operations and instruct contractors on procedures.</p> <p>Contractors are primarily logging and trucking contractors, although there are other types of contractors that are also used (e.g., reforestation, road). HRC employs a number of local contractors that are used on a steady basis. Contractors range from small crews to much larger operations, but these businesses are used for jobs uniquely suited for their capabilities in terms of their work experience and capabilities of their equipment. Several of the contractors have been operating in the region for many years for other ownerships and continued on with HRC. Interviews with a number of logging contractors found them expressing general satisfaction with HRC, and felt that the Company was doing a good job in terms of providing job</p>
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		<p>opportunities despite the economic slowdown.</p> <p>Both employees and contractors have ample opportunities for training. HRC provides numerous training opportunities for employees with the Company, especially in the area of safety. The team was provided with ample documentation detailing a series of training sessions that have taken place with in the past year. For example, one training session held provided guidance on mountain lions, the FSC P & C, and issues relating to work around power lines. In another case a training session was held on the “Watershed Analysis Hillslope Management Prescription Training for Upper Eel and Bear River Watersheds.” Employees were also given opportunities to seek out training in venues beyond what HRC provides, as long as it is justified and approved by their supervisor. Contractors do have the responsibility for training and educating their employees as stated in the “Humboldt Redwood Company, LLC Environmental, Health and Safety Practices for Contractors” booklet. All logging contractor owners and supervisors interviewed had had ProLogger training and detailed the training they provide for their employees. In several cases, there is joint training provided by HRC to both its employees and contractors (e.g., HCP training, specifics of forest management practices).</p>
<p>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).</p>	<p>C</p>	<p>All employees doing the same job, whether local or otherwise, are provided with the same remuneration, benefits, safety equipment, training, and workman’s compensation. This was verified by the examining Company policies and through interviews with HRC management and its employees.</p>
<p>4.1.c. Employee compensation and hiring practices meet or exceed standards for comparable forest workers within the region.</p>	<p>C</p>	<p>In regards to compensation, some HRC employees stated that their salary was somewhat lower than they felt it should be, but the benefits were better than under previous ownerships. However, in interviews with management and the Human Resources Manager, it was communicated to the auditor how salaries are arrived at and the process seemed to be an equitable one. HRC takes advantage of surveys that are used to determine market-driven salary levels by job</p>

		type. Two surveys used are Forest Products Industry Compensation Association (FPICA) and one implemented by the Timber Operators Council.
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	Hiring practices by HRC ensures that qualified employees and contractors are used. Many employees and contractors reside in the local area or within the northern California region. However, employees from outside these areas, if qualified do have opportunities for employment under HRC. Employee qualifications are determined through the application and interview process as detailed to the auditor by the Human Resources Manager. Beyond the application form, potential employees must provide a resume and list of references. Contractors are hired based on past job performance and training undertaken by owners or supervisors (e.g., ProLogger training).
4.1.e. Forest owners or managers demonstrate a preference for the local procurement of goods and services.	C	According to HRC managers, goods and services are purchased locally in part due to HRC's isolated location. In addition, with the Company's progressive community emphasis, there is preference to support the local economy. However, if items are not available they will go beyond the local area.
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 (<i>see also 1.1.a</i>).	C	During the assessment, it was determined that employees and contractors were following all applicable state and federal labor laws and regulations. The intent to see that this is continually adhered to can be found through HRC's policies available to employees and contractors through documentation and training sessions. Most important in this regard are the draft forest management plan, the "Humboldt Redwood Company, LLC Employee Handbook" and the "Humboldt Redwood Company, LLC Environmental, Health and Safety Practices for Contractors" booklet. A central repository for applicable laws and regulations, as well as contacts for state and federal agencies responsible for labor law issues, have been developed and are included in the draft forest management plan. The Handbook details a number of related labor policies, primarily under its "Employment Policies" and "Benefits" sections. While the focus of the booklet is health and safety, the issues described relate strongly to labor-related regulations. Also, the Logging Contract contains clear

		language that contractors will follow all federal laws and regulations.
<p>4.1.g. Forest owners and managers contribute to public education about forest ecosystems and their management.</p> <p><i>For example, forest managers use forests as a training and educational resource.</i></p>	C	<p>In regards to public education and outreach, several lists created by employees were provided to the auditor in regard to HRC’s activities. For example, the HRC President serves as an advisor to the University of California Berkeley and Cal Poly Forestry/CNR programs. He is also a board member of the California Forestry Association. The Forest Operations Manager is a soon to be appointed board member of The Buckeye Conservancy. HRC’s Stewardship Manager/Botanist is involved in many organizations (e.g., College of the Redwoods Ag Advisory Committee) and has developed and presented several papers, posters, and talks in and about the region. The Manager of HRC’s Physical Science Program engages in numerous external science-related activities (e.g., California Board of Forestry Technical Advisory Committee, participant in a Riparian Management Workshop) and various external community activities (e.g., Humboldt Bay Initiative (HBI) Project Team; Board of Directors, Humboldt Fish-Action Council). The Forest Sciences Manager communicates and gives presentations to teachers and students (K through 12) through the Redwood Region Logging Conference and California Forestry Association Education Programs. He has also worked closely with natural resource-related projects at Fortuna High School. One forester participates as an HRC representative to the Mattole Restoration Council and the Bear River Watershed Restoration Council. The team also noted that HRC has a public fishing museum on site.</p>
<p>C4.2. Forest management should meet or exceed all applicable laws and/or regulations covering health and safety of employees and their families.</p>	C	
<p>4.2.a. The forest owner or manager and their contractors develop and implement safety programs and procedures.</p> <p><i>For example:</i></p>	C	<p>HRC’s safety program is exemplary and well documented. The “Humboldt Redwood Company, LLC Employee Handbook” states the Company’s safety policy on pp.36-37. A number of other documents were provided to the team that further illustrated HRC’s commitment to health and safety of its workforce and contractors. Key among</p>

<ul style="list-style-type: none"> ▪ <i>well-maintained machinery and equipment</i> ▪ <i>use of safety equipment appropriate to each task</i> ▪ <i>documentation and posting of safety procedures in the workplace</i> ▪ <i>educational efforts (such as Forest Industry Safety Training Alliance and Game of Logging)</i> ▪ <i>contracts with safety requirements</i> ▪ <i>safety records, training reports, and certificates</i> 	<p>these HRC’s “Humboldt Redwood Company, LLC Safety Policy Binder,” the “Humboldt Redwood Company, LLC Environmental, Health and Safety Practices for Contractors” booklet, and the “Humboldt Redwood Company, LLC FIRE & Emergency Medical Helicopter Evacuation Plan 2009.” The draft forest management plan has a statement on the employee safety policy, which states that the Company will have “monthly all-hands meetings, safety observation reporting, and hazard/near miss reporting.” The Plan includes a table on HRC Safety Statistics since HRC assumed ownership. Also, an interview with the Safety Supervisor and employees confirmed that training (with its own documentation provided to the team) and reporting is occurring as stated. In addition, the Safety Supervisor provided the auditor with HRC’s “Cal/OSHA Form 300 (Rev. April 2004); Log of Work Related Injuries and Illnesses” documentation as is required by law.</p> <p>Further evidence of safety procedures was the well-maintained machinery and other equipment (e.g., earth moving equipment) used by employees and viewed by the team. While there was one incident of less than favorable communication equipment in one truck, all vehicles had proper communications, first aid kits, tools, safety glasses, and hard hats.</p> <p>As previously mentioned HRC has an extensive safety-training program covering such diverse topics as safety equipment, the importance of a clear work area, eye injuries, energized lines, and a review of the past year’s incidents. There is also safety training provided to all new employees. In addition, there is a Job Hazard Analysis (JHA) review undertaken for each employee and there assigned job within the Company. HRC requires that owners or supervisors who operate in the field undergo LTO-related training and transfer that knowledge to employees. A major component of this involves safety. Visits to active logging sites found all contractors and their employees outfitted with appropriate safety equipment.</p>
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		<p>Interview with owners or supervisors revealed that HRC foresters always check for training credentials and insurance coverage. Logging contracts also have clear language referring to safety requirements on page 3.</p> <p>The auditing team noted different interpretations of the hardhat policy among HRC personnel. At least one vehicle was not equipped with a radio, although personnel were within cell phone range.</p> <p>OBS 2009.4: HRC should be more consistent in the application of its safety policies.</p>
<p>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).</p> <p><i>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.</i></p>	C	
<p>4.3.a. Forest owners or managers and their contractors develop effective mechanisms to resolve disputes between workers and management.</p> <p><i>For example:</i></p> <ul style="list-style-type: none"> ▪ <i>Language translators and cultural interpreters are employed as needed.</i> ▪ <i>Cross-cultural training is employed as needed to integrate the workforce.</i> 	C	<p>The “Humboldt Redwood Company, LLC Employee Handbook” provides ample evidence that appropriate policy mechanisms are in place for employees to voice opinions on their own behalf. Pages 7-8 describe the Company’s “Open Door Policy” for mitigating disputes. Procedures to be taken by employees are adequately described in the Handbook. HRC also took the opportunity to institute a formal dispute resolution process and contact mechanism. This official policy will be linked to its forest management plan. This policy will also provide a mechanism and opportunity to document disputes. The onus for implementation of this policy falls on the Forest Operations Manager.</p> <p>Interviews with each logging contractor verified the process for</p>

		<p>contractors to address issues of concern or disputes. The chain of contact goes from the Forester, to the Area Forester, to the Forest Operations Manager.</p> <p>In general, HRC management seeks to solve problems at the lowest levels for both employees and contractors, rather than have issues resolved in the legal system.</p> <p>Under U.S. law, HRC employees have the right to organize and voluntarily negotiate with their employees.</p>
<p>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.</p> <p><i>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.</i></p>	C	
<p>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.</p>	C	<p>HRC has available a number of opportunities for individuals and/or groups to provide input into management planning, particularly if they are affected by such actions. Applicable statues and regulations require certain opportunities for public input. For example: the THP submittal and approval process, HCP process, and the watershed analyses being undertaken. A more specific example: documentation was provided on an HRC presentation titled the “Bear River Watershed Analysis Public Review Draft Presentation” in April 2009.</p> <p>HRC stated to the auditors that landowners have and will be contacted when forest or transport activities might impact them. Interviews with</p>

		<p>several landowners stated that HRC personnel keep them informed and exercise extreme care when operations commence.</p> <p>Once the forest management plan is installed on the Web, individuals will see a statements and contact information asking for any inputs or comments they might have on forest panning and operations.</p> <p>Furthermore, HRC’s President and many of its employees are in continual contact with stakeholders to address their concerns (e.g., tree sitters and old growth trees) and discuss issues of importance to them (e.g., tribes and the potential for utilizing non-timber forest resources such as tan oak acorns)</p> <p>Under the California THP process, there is ample opportunity for public notification and comment on forest management operations.</p>
<p>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.</p>	<p>NC</p>	<p>HRC engages a number of individuals and groups affected by management operations and who are apprised of proposed forest activities (e.g., logging) and associated environmental and aesthetic effects, to solicit their comments or concerns. Some actions are required by law (e.g., THP procedures), and some are done through the Company’s progressive community engagement (See also Criterion 4.4.a.). However, such interactions are not formally documented and addressed in management plans and operations to reflect social impacts and how they are dealt with. What is missing is an effort to develop and implement a process whereby there is clear evidence that these social interactions and impacts are incorporated into management planning and operations, or in specific cases, a justification for not doing so.</p> <p>CAR 2009.3: HRC shall develop and implement a process whereby there is clear evidence that socio-economic interactions, considerations, and impacts are duly assessed, recorded, and incorporated into management planning and operations.</p>
<p>4.4.c. Significant archeological sites and sites of</p>	<p>C</p>	<p>Protections afforded archeological sites and sites of cultural,</p>

<p>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.</p>		<p>historical, or community significance, as identified through consultations are largely covered under the THP process, other mandated procedures and regulations (e.g., CAL FIRE’s program for archeological discoveries), and a process developed by HRC to designate notable areas as Special Sites. Special Sites are mapped and available to employees and provided to contractors and others using the forest when appropriate to ensure protection.</p>
<p>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.</p>	<p>C</p>	<p>HRC staff inherited a complicated and controversial challenge with some of the landowners in Elk/Freshwater watersheds associated with flooding of personal property that is being largely attributed to past and present forest management practices and policies. HRC is making efforts to evaluate and manage the social and physical aspects of this issue based on the best available science and input from affected residents and the appropriate hydrological resource agencies and regulators. It was recognized that in other watersheds, and in cases where they have dealt with stakeholders concerned about old growth forests in relation to watersheds, they have achieved some success in conflict resolution through their interactions and a re-examination of their policies. However, during the assessment, and through further stakeholder outreach after the team’s visit, it was noted that the Elk River watershed will require continued time and effort to bring to a resolution, as there is great deal of dissatisfaction among stakeholders in this area.</p> <p>OBS 2009.5: HRC staff should continue to implement their conflict resolution policies to effectively manage the social and physical aspects of the Elk/Freshwater river watershed issue.</p>
<p>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.</p>	<p>C</p>	<p>HRC engages a number of individuals and groups affected by management operations and who are apprised of proposed forest activities (e.g., logging) and associated environmental and aesthetic effects to solicit their comments or concerns. Some actions are required by law (e.g., THP procedures) and some are done through the Company’s progressive community engagement (See also Criterion 4.4.a.). HRC stated to the auditors that they will contact landowners</p>

		<p>when forest or transport activities might impact them. Interviews with several landowners stated that HRC personnel keep them informed and exercise extreme care when operations commence.</p> <p>Once the forest management plan is posted on the Web, individuals will see both a statement and contact information asking for any input or comments they might have on forest planning and operations.</p> <p>While HRC has made great progress in this area, they face a tough challenge with a small number of landowners in Elk/Freshwater watersheds. However, the audit team concludes that the Company has made some progress in resolving these issues, and is confident this effort will continue. Further progress in resolving this longstanding issue (long pre-dating HRC) will require ongoing and follow-up affirmative action on the part of HRC senior managers, particularly Mike Jani.</p> <p>Interviews with stakeholders from other watersheds indicated that HRC is sensitive to their concerns and is making an effort to avoid and/or mitigate adverse impacts to their watersheds (e.g., the Mattole watershed). For example, HRC makes its lands and other in-kind services available for watershed restoration projects.</p>
4.5.b. Forest owners or managers and their contractors have adequate liability insurance.	C	<p>HRC and their contractors carry adequate liability insurance and Statutory Workers' Compensation levels which are a consequence of HRC logging contract requirements for insurance (see page 6) which require \$1 million for injury and property damages per occurrence and for incidents related to contractor employees. Interviews with logging contractors indicated that they generally carry at least this amount and in several cases stated that they had insurance coverage above this value. Contractors also indicated the HRC personnel check on their insurance coverage for every job they are offered.</p>
<p>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.</p>		
C5.1. Forest management should strive toward	C	

<p>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.</p>		
<p>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.</p> <p><i>For example, investment and reinvestment in forest management are sufficient to fulfill management objectives and maintain and/or restore forest health and productivity.</i></p>	C	<p>The owners of HRC have shown a willingness to infuse the business with sufficient amounts of capital and are capable of supporting long-term forest management. There is a clear willingness to invest even with forgone or delayed timber revenues.</p> <p>HRC has deferred investments in inventory and has reduced its investments in scientific research in order to maintain essential operations, such as monitoring the implementation of THPs. There remains, however, a need to adequately fund the inventory effort to provide sufficient informational support critical to the effective management of the forest estate, in conformance with the Pacific Coast standard.</p>
<p>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.</p>	C	<p>HRC is able to fulfill the management plan and in fact is harvesting below the allowable annual harvest. HRC has cash reserves to handle short-term financial fluctuations.</p>
<p>C5.2. Forest management and marketing operations should encourage the optimal use and local processing of the forest's diversity of products.</p> <p><i>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.</i></p>	C	
<p>5.2.a. Preference is given to local, financially</p>	C	<p>HRC harvests redwood and Douglas-fir timber from its own lands to</p>

<p>competitive, value-added processing and manufacturing facilities.</p>		<p>supply its own mill in Scotia, CA. It sells lesser-utilized species that may need to be removed to other local mills capable of processing these lower volumes.</p> <p>HRC is also able to send white woods (e.g., Grand fir) to its pressure treatment facility.</p> <p>HRC has stated that the major focus of its management will be on Coastal redwood and Douglas-fir products. Although it has worked to diversify the product offerings between these two species, HRC is disinclined to work with lesser-used species due to previous attempts to market them under MRC.</p> <p>OBS 2009.6: HRC should ensure that their conclusions determined on common, but lesser-used species under MRC management are valid for HRC considering the geography and the capabilities of local mills of Humboldt County.</p>
<p>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).</p>	<p>C</p>	<p>HRC has lower volumes and/or lower grades of these lesser-used species compared to MRC. However, if a small facility is able to utilize these species and HRC is able to gain from it, the auditors were informed that HRC would be willing to work with them.</p> <p>HRC's core business is lumber production from redwood and Douglas-fir and it has worked to diversify product sales to its principal buyer, Home Depot.</p>
<p>5.2.c. The technical and financial specifications of some sales of forest products are scaled to promote successful competition by small businesses.</p>	<p>C</p>	<p>HRC puts most harvest contracts up to a competitive bidding process and has determined what areas are suitable for cable and cat logging, which allows smaller operators a chance to compete.</p>
<p>5.2.d. When non-timber products are harvested or utilized, the management and use of those products are incorporated into the management strategy.</p>	<p>NC</p>	<p>HRC engages in or allows the utilization of non-timber products on its land holdings, including grazing, the installation of communication sites, and the harvesting of tree branches and other plant parts for ornamental products. These activities and their associated impacts are not fully considered in the management plan.</p>

		CAR 2009.4: HRC shall fortify the treatment of non-timber-income-generating activities in the management plan to ensure that they are carried out in a way that is consistent with the management plan and with conservation of the forest resource.
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	Auditors observed yarding and sorting consistent with maximizing volume and value.
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. <i>For example, bumper trees are used and equipment is selected and used in a way that minimizes unintentional damage to crop trees.</i>	C	HRC includes a provision in the contract for damage or cutting of undesignated trees, incomplete utilization, and penalized practices. Auditors observed yarder corridors wider than usual for typical selection harvesting systems and damage to residual trees in both yarder and ground-based operations. OBS 2009.7: Loggers contracted by HRC could benefit from more training and experience in harvesting practices typical to selection systems to better minimize damage to residual stands.
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. <i>For example:</i> <ul style="list-style-type: none"> ▪ <i>Chips and sawdust are used for mulch, filler, or fuel.</i> ▪ <i>Small diameter boles are used for fence</i> 	C	In the professional judgment of audit team members, HRC retains adequate amounts of biomass in the form tree limbs, tops, snags, down logs and woody debris throughout harvest sites for soil health and erosion control. HRC spot burns excess slash piles. When stand conditions permit, HRC retains adequate amounts of woody debris in representative proportions of stand throughout harvest sites for soil health and erosion control. This includes live, cavity, and large trees for snag recruitment. Part of HRC's Watershed Analysis includes an assessment of stream channel conditions. Channel conditions monitored include large wood in streams, and distribution of deep pools and spawning gravels.

<i>posts, flooring, and furniture stock.</i>		
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. <i>For example, compatible uses may include recreation, ecotourism, hunting, fishing, and specialty products.</i>	C	HRC has a permitting process for recreation and use of structures for events on its lands, which diversify its revenue stream but with marginal returns.
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. <i>For example:</i> <ul style="list-style-type: none"> ▪ <i>Facilities and equipment are regularly maintained and updated.</i> ▪ <i>Absentee owners maintain a local office.</i> ▪ <i>The owner or manager supports local business development by working with organizations, such as the chamber of commerce.</i> 	C	HRC has a high level of civic engagement, including the CAT program. This program allows locals to apply for funds for civic projects.
C5.5. Forest management operations shall recognize, maintain, and, where appropriate, enhance the value of forest services and resources such as watersheds and fisheries. <i>Note: The Working Group considers this criterion sufficiently explicit and measurable. Indicators are not required.</i>	C	HRC protects riparian buffers and engages in extensive efforts at watershed planning and management. The implementation of uneven-aged management will further enhance the protection of the full suite of forest services.
C5.6. The rate of harvest of forest products shall not exceed levels that can be permanently sustained.	C	

<p>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. <i>(see also 7.1.d)</i></p>	<p>C</p>	<p>HRC has an inventory system that includes growth, regeneration, and projected harvests.</p> <p>HRC is using some inventory data collected under PALCO, but has identified improving and completing the forest inventory as a priority to make decisions based on better data. PALCO data was sufficient and statistically sound for estimates of property-wide timber volumes, but less useful for making refined stand-level estimates.</p>
<p>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.</p>	<p>C</p>	<p>The HRC harvest projections are well under growth for each sustainability unit for the first several decades. As standing timber volume increases over the 100-year period, harvest is projected to equal growth.</p>
<p>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.</p>	<p>C</p>	<p>HRC's uneven-aged management practices lead to a range of residual age and diameter classes throughout the FMU. Where necessary, inter-planting is done to bring stands up to appropriate stocking levels. Re-entry periods are spaced enough to allow sufficient growth and stocking recovery.</p> <p>Audit team members visited an overstocked stand that HRC plans to thin, a harvest designed to favor the residual Redwood component as the remaining Douglas-fir crowns are in poor health. Several snags currently present in the stand are intended to be retained for wildlife and biodiversity purposes.</p>
<p>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.</p>		
<p>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</p>	<p>C</p>	<p>HRC is a large-scale timber management operation.</p>

<p>considerations as well as the impacts of on-site processing facilities. Environmental impacts shall be assessed prior to commencement of site-disturbing operations.</p> <p><i>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.</i></p>		
<p>6.1.a. Using available science and local expertise, forest owners and managers identify and describe:</p> <ul style="list-style-type: none"> (1) ecological processes, such as disturbance regimes; (2) common plants, animals, and their habitats; (3) rare plant community types (<i>see Glossary and Appendix D</i>); (4) rare species and their habitats (<i>see Glossary</i>); (5) water resources; and (6) soil resources <p>(<i>see also 7.1.a and b</i>).</p>	C	<p>HRC demonstrates exemplary conformance with this indicator, in both large-scale planning watersheds and at the THP scale. Scientific data and analysis are an integral part of HRC’s forest management practices.</p> <p>For example:</p> <ul style="list-style-type: none"> 1. THPs cumulative effects studies 2. Special studies – including sediment supply studies for Freshwater, Elk and Bear watersheds, demonstrate a commitment to use intensively collected scientific data to inform management practices associated with roads and rate of harvest. These studies are often integrated within other scientific data collected under either their HCP or Watershed Analysis programs, and used to test working hypotheses and continuously validate working assumptions regarding the ecology and natural functions of the forest. 3. Landslide studies 4. CAO has to report road cleanup work, harvest level 5. 1600 permit application to put crossings in (streambed alteration permit) 6. Watershed analysis looks at watershed 7. HCP – Botany survey protocols 8. EIR/EIS associated with HCP, which includes a biological opinion

		9. Section 3 of THP – describes vegetation, stand description.
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	The THP development, review and approval process as well as the watershed analysis process are both evidence of conformity to this Indicator. Section 4 of THPs lists cumulative impacts and covers historical timber harvest practices and past land use activities.
6.1.c. Prior to the commencement of management activities, potential environmental impacts and their cumulative effects are evaluated.	C	The THPs, especially section IV of the THPs, constitute a thorough evaluation of site level potential environmental impacts. Evaluation of cumulative impacts within the construct of the THP process is far less robust. The extensive use of Watershed Analysis (a robust cumulative effects assessment tool) on all their lands, and the commitment to base their stewardship goals at the watershed scale indicate a commitment to this indicator.
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 (<i>see also 7.1.c</i>). Actions needed to avoid and mitigate negative environmental impacts are identified, and a mitigation plan is formulated (<i>see also criterion 7.1</i>).	C	The HCP, all THPs, and watershed analysis documents are public. The THPs are structured around identifying management alternatives. HRC has demonstrated a commitment to using science as a fundamental element of forest management. At the planning scale, watershed analysis and HCP requirements support the maintenance and often restoration of critical habitat for both terrestrial wildlife and aquatic species. HRC complies with requirements developed under all regulatory requirements including THPs, CAOs and WWDRs. Also, the self-imposed requirement for uneven-aged management and evidence of light-harvest silviculture indicate a strong commitment to ecosystem processes and functions. These actions in combination ensure that the long-term ecological values of the forest are maintained and/or restored.
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	C	

<p>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.</p>		
<p>6.2.a. If consultation of databases for rare species and/or plant community types (<i>see Glossary and 6.1</i>) 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.</p>	C	<p>HRC is a large-scale, timber-management operation with a botany and wildlife staff that conduct surveys in addition to consulting California databases, such as California Natural Diversity Data Base (CNDDDB). The aquatic management collaborates with state and federal agencies on the protection of salmonids. The HCP guides management for rare, threatened, or endangered (RTE) species on or near their ownership.</p> <p>Property-wide policies and commitments with regard to specific animal and plant species are incorporated into THPs which is responsive to this indicator, in that the forest-management operation must identify plant or animal species present, including their habitat, which are listed as rare, threatened or endangered under federal or state law, or sensitive by the California Board of Forestry. If HRC finds RTE species or potential RTE species habitat, then HRC personnel manage the potential habitat as if the RTE species is present.</p>
<p>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.</p>	C	<p>HRC demonstrates its commitment to managing for rare species through their use of MMCAs, owl circles, OG reserves, WLPZs widened to meet aquatic conservation mandates, and adjusted THPs boundaries to exclude areas with rare plants.</p>
<p>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</p>	C	<p>HRC establishes and maintains many conservation zones, for example, HRAs, nest buffers, Oregon oak woodland zone, and consult plans and specialist in their scientific review required in their HCP.</p> <p>HRC's old-growth reserve areas can be expected to enhance the attainment of RTE objectives (e.g., for marbled murrelet and other old growth associated species).</p>

ecologists, to determine species' habitat needs.		HRC is engaging in many ongoing efforts to recover salmonid habitat and conducts botanical surveys to locate and protect rare plant species (e.g., Humboldt Milk Vetch),
<p>6.3. Ecological functions and values shall be maintained intact, enhanced, or restored, including:</p> <p>a) Forest regeneration and succession.</p> <p>b) Genetic, species, and ecosystem diversity.</p> <p>c) Natural cycles that affect the productivity of the forest ecosystem.</p> <p>d) Old-growth stands and forests</p> <p>e) Retention</p> <p>f) Even-aged silvicultural systems</p> <p><i>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.</i></p>	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	<p>THPs have restocking requirements under Forest Practice Rules.</p> <p>Silvicultural systems used to regenerate Douglas-fir and redwood are ecologically compatible with landscape patterns. HRC uses information from site indexes and mapped soil types as well as the other information listed in the indicator.</p>
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	C	Selection silvicultural systems, as well as variable retention which is an even-aged system variant, implemented on HRC property are used for restoration purposes in addition to timber production and restore

from natural processes inherent to the site.		age classes (e.g., WLPZs, MMCAs).
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	HRC's implementation of uneven-aged management is compatible with disturbance regimes typical for coastal temperate forests of the Pacific Coast. The riparian zones are on recovery trajectory and monitoring evidence suggests that key ecosystem functions (e.g. sediment regimes, thermal protections, etc) are approaching background levels.
C6.3.b. Genetic, species, and ecosystem diversity	C	
6.3.b.1. The forest owner or manager selects trees for harvest, retention, and planting in a manner that maintains or enhances the productive capacity, genetic diversity and quality, and species diversity of the residual stand.	NC	HRC managers, citing past management experience under its sister company, MRC, have stated that a major focus of forest management is on the production of Coastal redwood (<i>Sequoia sempervirens</i>) lumber. Thus, HRC is encouraging the inter-planting of Coastal redwood on Douglas-fir (<i>Pseudotsuga menziesii</i>) dominated sites where Coastal redwood may or may not be ecologically suitable or may have not occurred in recent ecological history (~150 years). There are instances where efforts to establish redwood on Douglas-fir dominated sites could be considered a type conversion. CAR 2009.5: HRC shall develop a risk assessment tool to ensure that the introduction of Coastal redwood onto sites where it does not currently occur is ecologically appropriate.
6.3.b.2. Native seeds of known provenance are used for artificial regeneration.	C	Inter-plantings are heavy to redwood and with Douglas-fir (DF) in areas that are prone to DF. DF tends to have better natural regeneration. The company uses cuttings from redwood (RW) that are sent to the nursery. All cuttings are from known, native provenance. They are mixing clones in planting areas.
6.3.b.3. Habitat components necessary to support native species are protected, maintained, and/or enhanced within the harvest unit and across the	C	HRC is conducting landscape scale planning that identifies, maps, and establishes management practices that support a number of key habitat elements. For example, screen tree guidelines are being developed

<p>FMU (<i>see also 6.3.e.1</i>).</p> <p><i>For example:</i></p> <ul style="list-style-type: none"> ▪ 		<p>that help promote the function of large, old trees and snags. Vertical and horizontal structural diversity is established through silvicultural strategies promoting uneven-aged redwood forest structures.</p> <p>Critical habitat elements for endangered species, like northern spotted owls and marbled murrelets, are identified at regional scales, and HRC is cooperating with adjacent landowners to protect these important species beyond property boundaries.</p>
<p>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.</p>	C	<p>Selection silviculture and reserve areas, WLPZs, HCVFs, RSAs all contribute to a dynamic and varied forest ecosystem with a full range of habitats and species typical of coastal redwood ecosystems.</p>
<p>C6.3.c. Natural cycles that affect the productivity of the forest ecosystem</p>	C	
<p>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.</p> <p><i>For example:</i></p> <ul style="list-style-type: none"> ▪ <i>Primary management objectives shift from commercial production to restoration.</i> ▪ <i>Site preparation is minimized.</i> ▪ <i>The lightest practical equipment with the lowest ground pressure is used.</i> ▪ <i>Whole-tree harvesting is discontinued, and tops are left in the forest.</i> ▪ <i>Longer rotations and a diversity of species are used in lieu of artificial fertilization.</i> ▪ <i>Natural, early successional processes are allowed or encouraged.</i> 	NC	<p>There is active, ongoing monitoring of forest health, such as with the HCP disturbance index and through watershed analyses.</p> <p>Other than anecdotal observations in the field during and after management activities, HRC has no formal mechanisms for detecting and evaluating declines in soil fertility.</p> <p>CAR 2009.6: HRC shall: (a) develop a monitoring strategy to detect changes in soil fertility, (b) define acceptable thresholds of change in soil fertility based on a review of scientific literature, and (c) develop, as needed, potential courses of action to be taken to mitigate soil fertility losses and rehabilitate affected sites.</p>
<p>6.3.c.2. Forest managers identify and apply site-</p>	C	<p>Slash is placed to control erosion and enhance soil health. Excess</p>

<p>specific fuels management practices, based on:</p> <ul style="list-style-type: none"> (1) natural fire regimes, (2) risk of wildfire, (3) potential economic losses, and (4) public safety. 		<p>slash is piled and spot burned in order to reduce wildfire risks. Broadcast burning is used on occasion and where appropriate. Firebreaks are maintained along critical areas for public safety.</p>
<p>6.3.c.3. Post-harvest management activities maintain soil fertility, structures, and functions.</p> <p><i>For example:</i></p> <ul style="list-style-type: none"> ▪ <i>Slash is randomly distributed across the harvest area.</i> ▪ <i>Burning is used where it is appropriate to the natural disturbance regime.</i> 	C	<p>HRC conducts harvest operations during the dry season and covers skid trails with slash upon completion to prevent erosion.</p> <p>OBS 2009.8: HRC could potentially reduce compaction impacts on skid trails by placing slash on the skid trail to create a slash bed before equipment moves onto such surfaces. This type of BMP is common throughout the region.</p>
<p>6.3.c.4. Prescriptions for salvage harvests balance ecological and economic considerations.</p> <p><i>For example:</i></p> <ul style="list-style-type: none"> ▪ <i>Coarse woody debris is maintained.</i> ▪ <i>Den trees and snags are maintained.</i> ▪ <i>Natural, background levels of 'pest' populations are allowed exist before measures to control such populations are implemented.</i> 	C	<p>Salvage harvestings on HRC lands are very limited in extent and frequency and, as such, does not constitute a threat to the maintenance of key ecological components such as LWD and snags.</p>
<p>C6.3.d. Old-growth stands and forests</p> <p>Note: Failure to meet the provisions of Criterion 6.3.d. will be considered a major failure (fatal flaw).</p>	C	
<p><i>This section uses the following definitions:</i></p> <ul style="list-style-type: none"> ▪ <i>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.</i> 		

- *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.

<p>6.3.d.1. Non-tribal <i>Type 1</i> stands are not harvested. Timber harvests may be certifiable on <i>Type 1</i> American Indian lands, in recognition of their sovereignty and unique ownership. Requirements for certification of tribal operations that include harvest in <i>Type 1</i> stands are:</p> <ul style="list-style-type: none"> ▪ <i>Type 1</i> 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 <i>Type 1</i> stands have been established ▪ Landscape level considerations have been addressed ▪ Rare species (<i>see Glossary</i>) are protected 	C	By policy, HRC does not harvest <i>Type 1</i> stands.
<p>6.3.d.2. Management activities adjacent to <i>Type 1</i> stands are conducted to minimize abrupt forest/opening edge effects and other negative impacts on the ecological integrity of these areas.</p>	C	HRC does not employ clearcutting anywhere on its forest estate. Even-aged management is employed only in the form of “variable retention” and then only in a restoration context where the objective is to return hardwood stocking to more ecologically appropriate levels. <i>Type 1</i> stands are buffered.
<p>6.3.d.3. Timber harvests in <i>Type 2</i> and <i>Type 3</i> stands maintain late-successional/old-growth</p>	C	HRC has adopted a policy of retaining all trees established prior to 1800 throughout its ownership.

<p>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.</p>		
<p>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.</p>	C	<p>HRC organizes sustainability units (SUs) comprised of aggregations of planning watersheds. The SUs on HRC forest lands contain a mixture of seasonal and perennial watercourses, which are either protected from harvesting and equipment entry or have strict harvest restrictions. Due to these harvesting restrictions in riparian zones, or WLPZs, late successional and old-growth conditions will develop over time in these areas.</p>
<p>6.3.e. Retention <i>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.</i> <i>Retention and set-aside provisions include:</i></p> <ul style="list-style-type: none"> ▪ <i>habitats of sensitive, threatened, and endangered species (criterion 6.2)</i> ▪ <i>old-growth and late successional trees (6.3.d)</i> ▪ <i>post-harvest, within-stand tree retention (6.3.e.5)</i> ▪ <i>green trees around snags (6.3.e.2)</i> ▪ <i>native hardwoods (6.3.e.3)</i> ▪ <i>representative stand types (criterion 6.4)</i> ▪ <i>riparian management zones (criterion 6.5)</i> ▪ <i>late-seral management areas (10.5.a)</i> 	C	
<p>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</p>	C	<p>HRC works with local environmental advocates to help identify and retain legacy, wildlife, snags, madrone and minor species such as chinkapin, as well as screen trees. Leave tree practices seek to</p>

<p>native plants, fungi, and animals, both within the harvest unit and across the FMU.</p> <p><i>For example:</i></p> <ul style="list-style-type: none"> ▪ <i>Old trees with irreplaceable characteristics are retained.</i> ▪ <i>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.</i> ▪ <i>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.</i> ▪ <i>Three to 10 snags per acre (averaged over 10 acres) are maintained or recruited.</i> ▪ <i>Snags are well represented by size, species, and decay class.</i> 		<p>identify trees with unique characteristics, and provide such trees with sufficient growing space to encourage vigorous growth and tree health.</p>
<p>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.</p>	C	<p>HRC has screen tree policies to protect snags and retained trees, and cuts lighter on windthrow prone areas.</p>
<p>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.</p>	C	<p>HRC retains madrone, large tanoaks, and other species that are part of the forest matrix.</p>
<p>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 (<i>see Glossary</i>), unless retention at a lower level is necessary for purposes of</p>	C	<p>HRC is using variable retention (VR) to get tanoak back to more ecologically appropriate levels consistent with restoration of conifer sites.</p> <p>HRC retains live trees and understory vegetation consistent with purposes for regeneration or restoration. HRC foresters have noted</p>

restoration.		that beyond certain ages and crown vigor, Douglas-fir has a difficult time responding to release treatments. This may result in a preference for the removal of Douglas-fir in selection treatments. OBS 2009.9: HRC should be mindful of retention and type conversion issues addressed in CAR 2009.5 regarding Douglas-fir.
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.	NA	There are no harvest openings larger than 6 acres being created on the HRC forest estate.
6.3.f. Even-aged silvicultural systems	C	
6.3.f.1. Even-aged silviculture (<i>see Glossary</i>) 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.		HRC management goals are to employ uneven-aged management. Stands that are in current even-aged condition are being managed to be an uneven-aged stand. Even-aged management is employed only in the form of “variable retention” and then only in a restoration context where the objective is to return hardwood stocking to more ecologically appropriate levels.
6.3.f.2. When trees are planted, the plantings maintain or enhance the composition and/or diversity of the forest ecosystem.	NA	
6.3.f.3. If regeneration harvest ages do not approach culmination of mean annual increment (CMAI, <i>see Glossary</i>), retention approaches the upper end of the range required in 6.3.e.5.	NA	

<p>6.3.f.4. Regeneration harvest blocks in even-aged stands average 40 acres or less. No individual block is larger than 60 acres (<i>see 6.3.e.4. and 6.3.e.5. for provisions of within-stand retention in openings larger than 6 acres</i>).</p>	<p>NA</p>	
<p>6.3.f.5. Regeneration in previously harvested areas reaches a mean height of at least seven feet or achieves canopy closure (<i>see Glossary</i>) before adjacent areas are regeneration harvested.</p>	<p>NA</p>	
<p>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.</p> <p><i>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 considered as a representative sample for the purposes of meeting this criterion.</i></p> <p><i>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</i></p>	<p>C</p>	

<p><i>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.</i></p> <p><i>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.</i></p> <p><i>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.</i></p> <p><i>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.</i></p>		
<p>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,</p>	<p>NC</p>	<p>Partially responsive to this Indicator are: EIS for headwaters, collaboration with NOAA fisheries, gap analysis for wildlife species (assessment of habitat across landscape); watershed analysis of resources.</p>

<p>landscape, and watershed planning efforts; universities; and/or local conservationists. It may also include gap analysis.</p>		<p>HRC has employed many of the required consultative processes conducted under the California Forest Practice Rules, the federal Endangered Species Act, and other regulatory mandates to complete its assessment of representative sample ecosystems (representative sample areas- RSAs- in HRC terminology). HRC's botanist has also relied on her extensive knowledge of nearby natural areas to designate RSAs and differentiate them from HCVFs. However, the methods and analyses employed in HRC's RSA assessment remain unclear.</p> <p>CAR 2009.7: HRC shall document the process and analyses that were employed in designating the current representative sample areas (RSAs) on the HRC forest estate. HRC must also develop and convey to the certification bodies a written summary of how the processes employed to date meet the requirements set forth in FSC Criterion 6.4. If gaps exist between FSC requirements and HRC procedures for establishing RSAs, HRC must develop and implement actions aimed at eliminating the gaps.</p>
<p>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.</p>	<p>C</p>	<p>HRC's botanist has also relied on her extensive knowledge of nearby natural areas to designate RSAs and differentiate them from HCVFs. RSA's are documented and mapped.</p>
<p>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.</p> <p>Note: Failure to meet the provisions of 6.4.c. or</p>	<p>NA</p>	

<p>6.4.d. is a major failure (fatal flaw) for mid- and large-sized public forests.</p>		
<p>6.4.d. Managers of large, conterminous public forests (<i>see Glossary</i>) establish and maintain representative protected areas sufficient in size to maintain species dependent on interior core habitats.</p> <p>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.</p>	NA	
<p>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 protect water resources.</p> <p><i>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.</i></p>	C	
<p><u>Logging and Site Preparation</u></p> <p>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</p>	C	<p>Harvesting generally is limited to dry periods, though some winter-season logging does take place in areas accessed by winterized (rocked) roads.</p> <p>HRC has a pre- and post-harvest checklist that it reviews for all harvests.</p>

<p>habitats.</p> <p><i>For example, soils are either dry enough or frozen enough to minimize disturbance and compaction.</i></p>		<p>Although most logging occurs in the dry season when most soils are least sensitive to compaction, erosion, and sediment transport, there are areas where soils are sensitive enough during the dry season to warrant concerns over soil integrity.</p> <p>OBS 2009.10: HRC should identify soils sensitive to compaction and erosion and develop and implement management practices to reduce and mitigate damage to these areas during harvesting operations.</p>
<p>6.5.b. Logging damage to regeneration and residual trees is minimized during harvest operations.</p>	C	<p>Auditors observed yarding corridors wider than has become the norm at MRC (and other redwood region companies such as Big Creek Lumber Company) for typical selection harvesting systems and damage to residual trees in both yarder and ground-based operations.</p> <p>OBS 2009.7: Loggers contracted by HRC could benefit from more training and experience in harvesting practices typical to selection systems to better minimize damage to residual stands.</p>
<p>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.</p>	C	<p>HRC has done extensive watershed analyses throughout its ownership and maintains a landslide inventory that it uses to quantitatively evaluate hazards during harvest planning activities. A licensed staff geologist reviews such areas in detail and establishes management practices suitable to those lands.</p>
<p>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.</p>	C	<p>See above.</p>
<p>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.</p> <p><i>For example:</i></p> <ul style="list-style-type: none"> ▪ <i>On slopes greater than 30 percent, ground-based yarding is used only when it is</i> 	C	<p>Watershed analysis determines types and restrictions of equipment. Roughly 50% of operations are tractor based. HRC is attempting to move more to cable skidding.</p> <p>Section II of THP describes soils stabilization and waterbar specs, and road construction and grade.</p> <p>HRC does not use a one-size-fits-all policy for operational equipment</p>

<p><i>possible to do so without exacerbating soil erosion.</i></p> <ul style="list-style-type: none"> ▪ <i>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.</i> 		<p>selection and silvicultural techniques. HRC trains new RPFs in equipment and road-skid trail layout.</p> <p>Although logging occurs in the dry season when most soils are least sensitive to compaction, erosion, and sediment transport, there may be areas where soils are sensitive enough during the dry season to warrant concerns over soil integrity.</p> <p>OBS 2009.10: HRC should identify soils sensitive to compaction and erosion and develop and implement management practices to reduce and mitigate damage to these areas during harvesting operations.</p>
<p>6.5.f. Plans for site preparation either minimize impacts to forest resources or specify the following mitigations:</p> <p>(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.</p> <p>(2) Scarification of soils is limited to the minimum necessary to achieve successful regeneration of desired species.</p> <p>(3) Topsoil is minimally disturbed.</p>	C	<p>Slash is spread for soil protection and compacted near some landings for erosion control after operations are complete. Excess slash is piled and spot burned.</p>
<p><u>Transportation System (including permanent and temporary haul roads, skid trails, and landings)</u></p> <p>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:</p> <p><i>For example:</i></p> <ul style="list-style-type: none"> ▪ <i>As a part of watershed assessments on public lands, habitats for salmonids and</i> 	C	<p>HRC has expended substantial financial resources in the contexts of special initiatives such as CAOs, NCP, and WWDRs to reduce adverse impacts of roads. A significant effort toward road management is apparent. It includes a systematic program for identifying, evaluating, and if necessary, formally abandoning old, legacy roads. It also includes a systematic program for storm-proofing all roads, including adding rock to running surfaces, improving culvert sizing and spacing, cleaning ditches and culvert entrances, pulling back sidecast in landslide-prone areas, seasonal road-use restrictions. HRC also applies a rigorous statistically valid adaptive management system that routinely monitors sediment production and delivery and has well-defined triggers for refining</p>

<p><i>other threatened and endangered aquatic species are identified. If shown to be necessary, road density is reduced in such habitats and/or mitigated within the watershed.</i></p> <ul style="list-style-type: none"> ▪ <i>Roads, landings, and skid trails are minimized.</i> ▪ <i>Displacement of soil, sedimentation of streams, and impacts to water quality are minimized.</i> ▪ <i>Patches of habitat and migration corridors are conserved.</i> ▪ <i>Roads constructed across slopes in excess of 60 percent are full bench cuts or with minimal side-cast.</i> ▪ <i>Roads are built on flat areas or stable slopes.</i> ▪ <i>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).</i> ▪ <i>Permanent roads have structures to control soil erosion year-round and are managed under a winter maintenance plan.</i> ▪ <i>Cooperative transportation planning with agencies, such as watershed councils, is used to minimize negative cumulative environmental impacts across the landscape.</i> 		<p>management practices and re-evaluating roads that do not conform to standards.</p>
<p>6.5.h. Landings are designed and constructed to minimize soil erosion.</p> <p><i>For example:</i></p>	<p>C</p>	<p>HRC places landings in stable areas and makes use of established decking sites.</p>

<ul style="list-style-type: none"> ▪ <i>Landings are located on ecologically suitable sites.</i> ▪ <i>Landings are limited to the smallest practical safe area.</i> ▪ <i>Landings are sloped to divert runoff to non-erosive areas.</i> ▪ <i>Landings are seeded and mulched or covered with slash after use.</i> 		
<p>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.</p> <p><i>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.</i></p> <p>Access is restricted to roads that are not immediately needed for purposes of management.</p>	C	All roads are gated and HRC issues permits to regulate access to certain times of the year.
<p>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.</p>	C	HRC has an extensive road monitoring program that functions to systematically upgrade and remedy drainage problems and reduce impacts to streams. See comments under 6.5g.
<p>6.5.k. Access is restricted and erosion is controlled on infrequently used roads.</p>	C	All roads have restricted use, including seasonal restrictions and gated access.
<p>6.5.l. Unnecessary roads are permanently decommissioned or put to bed.</p> <p><i>For example:</i></p> <ul style="list-style-type: none"> ▪ <i>Bridges and culverts are removed; water bars are installed.</i> 	C	<p>HRC is actively engaged in a program to identify and decommission roads.</p> <p>OBS 2009.11: HRC scientists and managers should refine the road decommissioning and stream restoration processes used to close watercourse crossings by considering the results and observations of</p>

<ul style="list-style-type: none"> ▪ <i>Slopes are re-contoured and/or re-vegetated.</i> ▪ <i>Ecologically functional drainage patterns are established.</i> 		<p>recent decommissioning projects and the latest scientific literature.</p>
<p><u>Stream and Water Quality Protection</u></p>		
<p><i>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:</i></p> <ul style="list-style-type: none"> ▪ <i>Category A stream: A stream that supports or can support populations of native fish and/or provides a domestic water supply.</i> ▪ <i>Category B stream: Perennial streams that do not support native fish and are not used as a domestic water supply.</i> ▪ <i>Category C stream: An intermittent stream that never the less has sufficient water to host populations of non-fish aquatic species</i> ▪ <i>Category D stream: A stream that flows only after rainstorms or melting snow and does not support populations of aquatic species</i> 		
<p>6.5.m. Streams, vernal pools, lakes, wetlands, seeps, springs, and associated riparian areas are managed to maintain and/or restore hydrologic processes, water quality, and habitat characteristics (<i>see NMFS (1996)</i>; state water quality standards; <i>Karr (1981)</i>), which may include:</p> <ul style="list-style-type: none"> ▪ 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 	<p>C</p>	<p>WLPZs are established throughout the property, and extensive scientific and operational focus is placed on HRC’s aquatic protection strategies. Extensive planning has included scientifically rigorous evaluation of riparian functions, including thermal loading, wood recruitment, sediment functions, fish passage, aquatic habitat, and other functions. Each stream segment has been evaluated and mapped for each of these functions, and extensive scientific evidence is used to establish riparian structure and width guidelines. These are documented with incredible rigor within watershed analysis documents.</p>
<p>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.</p>	<p>C</p>	<p>Riparian buffers are, in part, designed to ensure recovery of a natural wood recruitment regime to watercourses. Rigorous scientific evaluations are conducted on each stream segment in association with watershed analysis procedures.</p>

		<p>HRC is engaging in efforts to restore woody debris but has run into obstacles with State agencies.</p> <p>The equipment entry and harvest restrictions in WLPZs should allow for riparian vegetation to grow in both in stature and crown area, thus enhancing shade cover to maintain lower water temperatures.</p>
<p>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:</p> <ul style="list-style-type: none"> ▪ 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 	<p>C</p>	<p>Riparian standards are set by watershed analysis procedures that rigorously evaluate all riparian functions on every stream segment. Generally, standards follow:</p> <p style="padding-left: 40px;">No cuts in inner zone (0 – 50 feet), high retention where can cut in outer zone. (single tree selection) Exclude heavy equipment.</p> <p style="padding-left: 40px;">Outer zone – (50 to 150 ft.) – single or group selection based on basal area (high basal area retention).</p> <p style="padding-left: 40px;">Slash and straw and mulch in soil disturbance.</p> <p>Where Watershed Analysis recommends buffers smaller than stated above, it is done with rigorous attention to managing for multiple riparian functions, and such recommendations are rigorously justified by data and the professional expert judgment of the team of scientists involved in the Watershed Analysis.</p>

<p>weeds</p> <ul style="list-style-type: none"> ▪ avoid road construction and reconstruction 		
<p>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:</p> <ul style="list-style-type: none"> ▪ 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	<p>Stream width buffer issue – 150 ft. buffer. Use total Class A RMZ width of 75 – 150 ft.</p> <p>Average width of entire WLPZ exceeds requirements of this indicator. Auditor field checks showed that most riparian zones exceed these minimum buffer widths.</p> <p>The auditors’ inspection concluded that the average width of all watercourse and lake protection zones (WLPZs) substantially exceeds the requirements of the FSC US Pacific Coast Standard, Version 9.0. However, HRC’s policies, as written, could conflict with the Standard in the instance of a placement of a variable retention (VR) or group selection opening adjacent to a WLPZ whose size has been reduced as a result of watershed analysis. Under the current Standard, HRC would be in technical non-conformance should it to place a VR or group-selection opening immediately adjacent to such a WLPZ. However, such a non-conformance would result only from the prescriptive application of the Standard, rather than HRC’s overall intent to protect riparian functions. We note that the Pacific Coast Standard applies a uniform, one-size-fits-all approach that <i>assumes</i> to be sufficient to meet riparian functions, whereas HRC has applied extensive analytical tools and cutting-edge scientific tools in its riparian assessment during Watershed Analysis to carefully design riparian standards unique to each stream segment that <i>ensures</i> sufficient riparian function.</p> <p>OBS 2009.12: HRC should evaluate its written policy on stream buffers to consider the requirements of the FSC Pacific Coast Standard, v. 9.0.</p>
<p>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</p>	C	<p>The auditors’ inspection concluded that the average width of all watercourse and lake protection zones (WLPZs) substantially exceeds the requirements of the FSC US Pacific Coast Standard, Version 9.0.</p>

<p>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 (<i>see 6.5.n</i>).</p>		<p>However, HRC’s policies, as written, could conflict with the Standard in the instance of a placement of a variable retention (VR) or group selection opening adjacent to a WLPZ whose size has been reduced as a result of watershed analysis. Under the current Standard, HRC would be in technical non-conformance were it to place a VR or group selection opening immediately adjacent to such a WLPZ. However, the non-conformance would result only from the prescriptive standard, not the overall intent to protect riparian functions. We note that the Pacific Coast Standard applies a uniform, one-size-fits-all approach that <i>assumes</i> to be sufficient to meet riparian functions, whereas HRC has applied extensive analytical tools and cutting-edge scientific tools in its riparian assessment during Watershed Analysis to carefully design riparian standards unique to each stream segment that <i>ensures</i> sufficient riparian function.</p> <p>OBS 2009.12: HRC should evaluate its written policy on stream buffers to consider the requirements of the FSC Pacific Coast Standard, v. 9.0.</p>
<p>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.</p>	<p>C</p>	<p>The auditors’ inspection concluded that the average width of all watercourse and lake protection zones (WLPZs) exceeds the requirements of the FSC US Pacific Coast Standard, Version 9.0. However, HRC’s policies, as written, could conflict with the Standard in the instance of a placement of a variable retention (VR) or group selection opening adjacent to a WLPZ whose size has been reduced as a result of watershed analysis. Under the current Standard, HRC would be in non-conformance were it to place a VR or group selection opening immediately adjacent to such a WLPZ. However, the non-conformance would result only from the prescriptive standard, not the overall intent to protect riparian functions. We note that the Pacific Coast Standard applies a uniform, one-size-fits-all approach that <i>assumes</i> to be sufficient to meet riparian functions, whereas HRC has applied extensive analytical tools and scientific tools in its riparian assessment during Watershed Analysis to carefully design riparian standards unique to each stream segment that <i>ensures</i> sufficient</p>

		<p>riparian function.</p> <p>OBS 2009.12: HRC should evaluate its written policy on stream buffers to consider the requirements of the FSC Pacific Coast Standard, v. 9.0.</p>
<p>6.5.s. For Category D streams, management:</p> <ul style="list-style-type: none"> ▪ maintains root strength and stream bank and channel stability ▪ recruits coarse wood to the stream system ▪ minimizes management-related sediment transport to the stream system 	C	<p>HRC’s policies and practices substantially conform to this standard. The Riparian Module of Watershed Analysis rigorously evaluates each stream segment according to these functions (among several others).</p>
<p>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.</p> <p><i>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.</i></p>	C	<p>HRC has reviewed cattle leases and assessed salt lick locations to move cattle activity away from watercourses. HRC has also engaged landowners on cattle trespass issues and restricted winter grazing on some of their cattle leases.</p> <p>There have been instances of cattle trespass into aquatic habitats on HRC lands. HRC has changed its grazing policy and detailed some of these changes in the management prescriptions for prairies, but has not formally updated the conditions of its grazing leases including how lease terms will minimize adverse environmental impacts.</p> <p>CAR 2009.8: HRC must document the changes to its grazing lease and ensure that the description of its grazing policy is complete. The revised grazing lease must include provisions for avoiding/minimizing adverse environmental impacts, such as to riparian vegetation and aquatic resources.</p> <p>HRC addresses grazing in the management of Oregon white oak stands and generally in its “Non-Timber Products” section of the management plan. HRC’s grazing policy includes provisions for limitations on the number of animals, rotation of animals to different pastures, winter grazing and supplemental feed restrictions, fencing and gates, water trough and salt lick locations, and watercourse</p>

		<p>protection.</p> <p>In addition to the update of its grazing policy in the management plan, HRC has prepared a generic grazing lease that demonstrates the inclusion of these provisions, as well as the general terms of the lease. HRC has submitted sufficient evidence to close minor CAR 2009.8.</p>
<p>6.5.u. Stream crossings are located and constructed to minimize fragmentation of aquatic habitat (<i>see Glossary</i>), 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.</p> <p><i>For example:</i></p> <ul style="list-style-type: none"> ▪ <i>Crossings of riparian management zones are minimized.</i> ▪ <i>Stream crossings are installed at an angle that causes the least ecological disturbance to the waterway.</i> ▪ <i>Culverts allow free passage of aquatic organisms.</i> 	C	<p>HRC’s policies and practices substantially conform to this standard. The Fish-Habitat, Surface Erosion, and Stream Assessment Modules of Watershed Analysis rigorously evaluates each stream segment according to these functions (among several others). Additionally a systematic program evaluating all roads is being applied that ensures fish passage.</p> <p>On operational units, Foresters are required to evaluate fish passage requirements in accordance with THP requirements. They typically evaluate 100-yr peak flows using either the Rational Method, or US Geological Survey empirical formulas where data is not otherwise available.</p>
<p>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</p>	C	

<p>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.</p>		
<p>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.</p>	C	<p>HRC uses Triclopyr to control woody and broadleaf plants, Imazapyr and Glyphosate to control annual and perennial plants. All three chemicals are permitted under FSC rules. Chemicals are used as a last resort to control invasive species and are used for restoration activities.</p>
<p>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.</p> <p><i>For example, components of silvicultural systems, integrated pest management, and strategies for controlling vegetation may include:</i></p> <ul style="list-style-type: none"> ▪ <i>creation and maintenance of habitat that discourages pest outbreaks</i> ▪ <i>creation and maintenance of habitat</i> 	C	<p>HRC’s uneven-aged silvicultural methods tend to shade out non-native, invasive plants, especially those that are shade intolerant. These invasive species are therefore more likely to be a problem on perennially disturbed sites, mainly roadsides.</p> <p>HRC is not relying primarily on chemical use to control invasive plants.</p> <p>Chemical use on the HRC forest estate remains a regularly employed management tool. While the Pacific Coast Standard does not mandate the elimination of chemical use as a forest management tool, the Standard does expect that managers of certified forests affirmatively pursue non-chemical alternatives and to also seek to minimize chemical use as much as possible.</p> <p>OBS 2009.13: To reduce its dependency on herbicides, HRC should continue to explore alternatives to frilling in its control of tanoak.</p>

<ul style="list-style-type: none"> ▪ <i>that encourages natural predators</i> ▪ <i>evaluation of pest populations and establishment of action thresholds</i> ▪ <i>diversification of species composition (see Glossary) and structure</i> ▪ <i>use of mechanical methods</i> ▪ <i>use of prescribed fire</i> 		
<p>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.</p>	C	<p>All chemical application is by hand directly to the target species. No foliar treatments are allowed when wind speeds are greater than 10 miles per hour.</p>
<p>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.</p>	C	<p>There is no application allowed within a watercourse lake protection zone, which can range from 50-150 ft. for a class 1 stream under California Forest Practice Rules and 25 ft for a class 3 stream.</p>
<p>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.</p>	NC	<p>Chemical use records are kept at the Humboldt County Department of Agriculture for a three-year period.</p> <p>HRC only uses herbicides according to label directions and has a water quality and detection monitoring program.</p> <p>HRC keeps records of when and where herbicides used. HRC uses information to assess effectiveness of herbicides application and whether to use again.</p> <p>Foresters return to assess regeneration one year after herbicide application. Frilling is assessed as well.</p> <p>HRC hires licensed contractors for herbicide application, and treatment areas are posted. HRC follows state laws on exposure of workers to chemicals. However, HRC does not maintain its own records of herbicide use in a manner that would enable the company to monitor effects and impacts of chemical control of plants over the</p>

		<p>long-term. HRC has not fully developed a strategy for the control of pests and non-native invasive plants in its management plan. HRC does not prepare written prescriptions that fully describe risks and benefits of chemical use.</p> <p>CAR 2009.9: HRC shall develop a record keeping and monitoring protocol aimed at adaptively improving and modifying its chemical use with the objective of lowering dependency on chemical control measures. HRC shall develop a written strategy for the control of pests and non-native invasive plants. HRC shall develop site-specific written prescriptions for herbicide applications.</p>
<p>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.</p>	<p>NC</p>	<p>HRC does not maintain its own records of herbicide use in a manner that would enable the company to monitor effects and impacts of chemical control of plants over the long-term. HRC has not fully developed a strategy for the control of pests and non-native, invasive plants in its management plan. HRC does not prepare written prescriptions that fully describe the risks and benefits of the use of chemicals.</p> <p>CAR 2009.9: HRC shall develop a record keeping and monitoring protocol aimed at adaptively improving and modifying its chemical use with the objective of lowering dependency on chemical control measures. HRC shall develop a written strategy for the control of pests and non-native invasive plants. HRC shall develop site-specific written prescriptions for herbicide applications.</p>
<p>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.</p>	<p>NC</p>	<p>HRC does not maintain its own records of herbicide use in a manner that would enable the company to monitor effects and impacts of chemical control of plants over the long-term. HRC has not fully developed a strategy for the control of pests and non-native invasive plants in its management plan. HRC does not prepare written prescriptions that fully describe the risks and benefits of the use of chemicals.</p> <p>CAR 2009.9: HRC shall develop a record keeping and monitoring</p>

		<p>protocol aimed at adaptively improving and modifying its chemical use with the objective of lowering dependency on chemical control measures. HRC shall develop a written strategy for the control of pests and non-native invasive plants. HRC shall develop site-specific written prescriptions for herbicide applications.</p>
<p>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.</p>	<p>C</p>	
<p>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.</p> <p><i>For example forest owners and managers minimize health and environmental risks by:</i></p> <ul style="list-style-type: none"> ▪ <i>Immediately containing spills of hazardous material, as required by applicable regulations, and then engaging qualified personnel to perform the appropriate removal and remediation.</i> ▪ <i>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.</i> ▪ <i>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</i> ▪ <i>Disposing of contaminated water and containers in a location and manner that is environmentally sound.</i> 	<p>C</p>	<p>HRC has a policy intended to guide the minimization and containment of chemical and fuel spills.</p> <p>HRC provides a booklet, “Environmental, Health and Safety Practices for Contractors” to contractors. The booklet contains information on legal requirements of contractors, procedures on contractor responsibilities, instructions on reporting and containing spills, and state agencies’ environmental compliance inspections.</p> <p>Logging equipment is, in some instances, stored at landings on HRC harvest sites. Auditors noted toolkits and fire-safety kits located in safe areas near landings for routine vehicle maintenance.</p>

<p>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.</p>	<p>NC</p>	<p>Auditors observed several small hydraulic fluid spills left from recent harvests. Contractors either did not follow, or did not complete, containment and cleanup measures as mandated by federal and state law and HRC’s own guidance booklet, “Environmental, Health and Safety Practices for Contractors.”</p> <p>CAR 2009.10: HRC shall ensure that its staff and contractors implement appropriate spill containment and cleanup procedures for all chemical spills in a timely manner consistent with federal and state regulations as well as company policy.</p>
<p>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.</p>	<p>C</p>	<p>Contractors have maintenance protocols and regularly check equipment for leaking fluids.</p>
<p>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.</p>	<p>C</p>	<p>Equipment stored in the field was observed to be parked safely away from watercourses.</p>
<p>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.</p>	<p>C</p>	<p>HRC has adopted MRC’s chemical container policy.</p>
<p>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.</p> <p><i>Applicability Note: Genetically improved organisms (e.g., Mendelian 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</i></p>	<p>NA</p>	<p>HRC does not use biological control agents nor does it employ GMOs.</p>

<i>cent/2. The prohibition of genetically modified organisms applies to all organisms including trees.</i>		
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 (<i>see Glossary</i>), 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 (<i>see Glossary</i>) 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	<p>HRC uses a 50:50 seed mix for erosion control that contains “Gulf annual ryegrass” and “Common barley,” both of which are shade intolerant and therefore rarely become invasive on forest lands.</p> <p>HRC formally and informally monitors erosion control projects for effectiveness and compliance where they use annual grass seed mixes for temporary ground cover. Auditors did not observe any instances where any erosion control plantings were permanently established or moving off site.</p> <p>HRC only works with native tree species.</p>
6.9.b. Forest owners or managers develop and implement control measures for invasive exotic plants.	C	<p>Two invasive plants found on HRC, among others, are jubata grass and yellow star thistle. HRC has determined that chemical control of jubata grass is cost prohibitive in most cases and relies on shading it out to get rid of it. However, HRC lacks a comprehensive plan for control of invasive exotic plant species.</p> <p>HRC’s invasive, exotic plant policy mostly covers two species, jubata grass and yellow star thistle. HRC has determined that chemical</p>

		<p>control of either is cost prohibitive and thus relies on the shading effects of selection silviculture to reduce their impacts on growing forests. There may be other exotic invasive plants that could become problematic under selection silviculture.</p> <p>OBS 2009.14: HRC should develop a more comprehensive and cohesive plan for the prevention and control of invasive exotic plants.</p>
<p>6.10. Forest conversion to plantations or non-forest land uses shall not occur, except in circumstances where conversion:</p> <ul style="list-style-type: none"> 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. <p><i>Note: The Working Group considers this criterion sufficiently explicit and measurable. Indicators are not required.</i></p>	C	<p>HRC does not practice plantation management and does not convert HCVFs. HRC does not subdivide forest land.</p>
<p>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.</p>		
<p>C7.1. The management plan and supporting documents shall provide:</p> <ul style="list-style-type: none"> 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. 	C	<p>HRC's "master" forest management plan is, at present, incomplete (e.g., it does not properly incorporate and/or reference other documents that are a part of the compendium of planning documents; not all key staff have had input to the forest management plan's content; landscape-level considerations are not adequately addressed).</p> <p>Major CAR 2009.1:</p> <ol style="list-style-type: none"> 1. HRC must establish management objectives that are achievable, measurable, and adaptive in the short- and long-term in accordance with sub-criterion 7.1.a. 2. HRC shall make reference to other documents that are

<p>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.</p> <p><i>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 managing the forest.</i></p>		<p>integral components of the forest management plan.</p> <ol style="list-style-type: none"> 3. HRC shall ensure that its personnel have the opportunity to review and offer input on sections of the forest management plan related to each staff member's field of responsibility. 4. HRC shall explicitly address and state how they will account for harvested non-timber forest products (NTFPs) and land uses (e.g., grazing, bough collection, communication sites) in the forest management plan. 5. While protecting confidentiality of information, HRC shall identify its legal status and detail legal rights or claims that it holds over neighbouring properties as well as those that other parties hold on HRC property. 6. HRC shall describe and state how they will implement landscape-level management considerations within the ownership and near adjacent properties. 7. HRC shall design a forest inventory program that includes attributes to be measured and/or monitored and indicate the frequency of updates. See also CAR 2009.11. <p>On the basis of the content of the HRC forest management plan, conveyed to the audit team after the August field audit but prior to finalization of this report, the audit team concludes that closure of Major CAR 2009.1 is now warranted.</p>
<p>7.1.a. Management objectives</p>	<p>C</p>	
<p>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.</p>	<p>C</p>	<p>HRC's forest management plan contains a section on its purpose and vision for long-term ecological, social, and economic vitality. HRC describes its timber management objectives in the management plan, which notably includes restoring uneven-aged stand structure and pre-1850s native tree species composition. The uneven-aged management strategy is consistent with restoration of the forest resource.</p> <p>HRC's "master" forest management plan is, at present, incomplete</p>

<p>The actions and objectives are specific, achievable, measurable, and adaptive. (The elements of a comprehensive forest management plan are found in Appendix H.)</p>		<p>(e.g., it does not properly incorporate and/or reference other documents that are a part of the compendium of planning documents; not all key staff have had input to the forest management plan’s content; landscape-level considerations are not adequately addressed).</p> <p>See Major CAR 2009.1. On the basis of the content of the HRC forest management plan, conveyed to the audit team after the August field audit but prior to finalization of this report, the audit team concludes that closure of Major CAR 2009.1 is now warranted.</p>
<p>7.1.b. Description of forest resources to be managed, environmental limitations, land use and ownership status, socioeconomic conditions, and profile of adjacent lands</p>	<p>C</p>	
<p>7.1.b.1. Using data collected proportionally to the scale and intensity of management, the forest owner or manager describes the following resources:</p> <ul style="list-style-type: none"> ▪ timber ▪ fish and wildlife ▪ harvested non-timber forest products (e.g., botanical and mycological) ▪ non-economic natural resources 	<p>C</p>	<p>HRC includes information on forest composition and timber inventory data to assess harvest potential. It has identified improving the timber inventory as necessary to make better growth and yield models and identify any other potential constraints. HRC describes the fish and wildlife resource and how they guide timber harvesting and other management activities. For example, it has established marbled murrelet conservation areas. There is no formal harvesting of non-timber forest products, although HRC has inherited some grazing leases from PALCO and has elaborated new grazing guidelines and a lease consistent with the maintenance and enhancement of the forest resource. It describes non-economic natural resources and the management thereof, such as riparian areas, wildlife protection, and old growth, throughout the management plan.</p> <p>HRC’s “master” forest management plan is, at present, incomplete (e.g., it does not properly incorporate and/or reference other documents that are a part of the compendium of planning documents; not all key staff have had input to the forest management plan’s content; landscape-level considerations are not adequately addressed).</p> <p>See Major CAR 2009.1 and also CAR 2009.11.</p>

		On the basis of the content of the HRC forest management plan, conveyed to the audit team after the August field audit but prior to finalization of this report, the audit team concludes that closure of Major CAR 2009.1 is now warranted.
7.1.b.2. Descriptions of special management areas, Rare species and their habitats, Rare plant communities, and other ecologically sensitive features in the forest are included in the management plan.	C	HRC describes northern spotted owl, marbled murrelet, and other threatened and endangered wildlife species. Rare plant communities and sensitive features, such as serpentine outcrops, are also included.
7.1.b.3. A description of past land uses is included in the management plan and incorporated into the goals and objectives.	C	HRC describes the land-use history in the introduction to the management plan. Past land use, such as intensely even-aged harvest practices during the previous ownership, guides its objectives for uneven-aged management.
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	<p>HRC is a limited liability company comprising 209,300 acres. There are grazing leases and rights-of-way mentioned in the management plan.</p> <p>No other specifics on use rights. “HRC maintains records on these in its offices.”</p> <p>HRC’s “master” forest management plan is, at present, incomplete (e.g., it does not properly incorporate and/or reference other documents that are a part of the compendium of planning documents; not all key staff have had input to the forest management plan’s content; landscape-level considerations are not adequately addressed).</p> <p>See Major CAR 2009.1. and see also CAR 2009.11.</p> <p>On the basis of the content of the HRC forest management plan, conveyed to the audit team after the August field audit but prior to finalization of this report, the audit team concludes that closure of Major CAR 2009.1 is now warranted.</p>
7.1.b.5. Relevant cultural and socioeconomic issues	C	The HRC management plan includes a description of its community

<p>(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.</p>		<p>relations and how user groups can gain official access to recreational opportunities. An overview of the workforce, its qualifications, and annual safety statistics is included. Many archaeological and historical sites are identified on maps and as HCVPs.</p>
<p>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.</p>	<p>C</p>	<p>HRC's landscape level planning is a major component of its analysis of its sustainability units, which are managed at the watershed level. It describes the tools and components of the landscape planning model and the preliminary results of the analysis.</p> <p>HRC's "master" forest management plan is, at present, incomplete (e.g., it does not properly incorporate and/or reference other documents that are a part of the compendium of planning documents; not all key staff have had input to the forest management plan's content; landscape-level considerations are not adequately addressed).</p> <p>See Major CAR 2009.1. and see also CAR 2009.11.</p> <p>On the basis of the content of the HRC forest management plan, conveyed to the audit team after the August field audit but prior to finalization of this report, the audit team concludes that closure of Major CAR 2009.1 is now warranted.</p>
<p>7.1.c. Description of silvicultural and/or other management system</p>	<p>C</p>	<p>HRC employs uneven-aged silvicultural methods in timber harvesting and restoration activities.</p>
<p>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) (<i>see also 6.3.a</i>).</p>	<p>C</p>	<p>HRC employs almost exclusively uneven-aged management techniques, mostly selection systems and variable retention, the latter of which is employed for restoration of conifers. Silvicultural prescriptions are based on geology, soils, inventory and growth data, and a number of constraints (e.g., the presence of rare and endangered species, riparian buffer zones).</p>
<p>7.1.c.2. Prescriptions are prepared prior to</p>	<p>C</p>	<p>HRC meets with contractors prior to management activities to go over</p>

<p>harvesting, site preparation, pest control, burning, and planting and are made available to people who carry out the prescriptions.</p>		<p>the prescription, maps, and constraints.</p>
<p>7.1.d. Rationale for the rate of annual harvest and species selection</p>	<p>C</p>	
<p>7.1.d.1. The management plan is based on the best available data on growth, yield, stocking, and regeneration. (<i>see also 5.6.b</i>).</p>	<p>C</p>	<p>HRC is using some inventory data collected under PALCO, but has identified improving and completing the forest inventory as a priority to make decisions based on better data. PALCO data was sufficient and statistically sound for estimates of property-wide timber volumes, but less useful for making refined stand-level estimates.</p> <p>HRC’s “master” forest management plan is, at present, incomplete (e.g., it does not properly incorporate and/or reference other documents that are a part of the compendium of planning documents; not all key staff have had input to the forest management plan’s content; landscape-level considerations are not adequately addressed).</p> <p>Major CAR 2009.1:</p> <ol style="list-style-type: none"> 1. HRC must establish management objectives that are achievable, measurable, and adaptive in the short- and long-term in accordance with sub-criterion 7.1.a. 2. HRC shall make reference to other documents that are integral components of the forest management plan. 3. HRC shall ensure that its personnel have the opportunity to review and offer input on sections of the forest management plan related to each staff member’s field of responsibility. 4. HRC shall explicitly address and state how they will account for harvested non-timber forest products (NTFPs) and land uses (e.g., grazing, bough collection, communication sites) in the forest management plan. 5. While protecting confidentiality of information, HRC shall identify its legal status and detail legal rights or claims that it holds over neighbouring properties as well as those that other parties hold on HRC property.

		<p>6. HRC shall describe and state how they will implement landscape-level management considerations within the ownership and near adjacent properties.</p> <p>7. HRC shall design a forest inventory program that includes attributes to be measured and/or monitored and indicate the frequency of updates. See also CAR 2009.11.</p> <p>On the basis of the content of the HRC forest management plan, conveyed to the audit team after the August field audit but prior to finalization of this report, the audit team concludes that closure of Major CAR 2009.1 is now warranted.</p>
<p>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.</p>	<p>C</p>	<p>Redwood and Douglas-fir are the primary products and historically occurred in higher proportions than hardwoods and other conifers in this region. Where possible, restoration of these two commercial species is promoted and is consistent with maintaining and enhancing ecological composition, structure, and function of the forest.</p>
<p>7.1.e. Provisions for monitoring forest growth and dynamics (see also Principle 8) <i>Note: The Working Group considers this criterion sufficiently explicit and measurable. Indicators are not required.</i></p>	<p>C</p>	<p>HRC has detailed the current timber inventory data it has and what future inventories will consist of to conduct timber stand typing. A system of temporary and permanent plots will be used.</p> <p>HRC’s “master” forest management plan is, at present, incomplete (e.g., it does not properly incorporate and/or reference other documents that are a part of the compendium of planning documents; not all key staff have had input to the forest management plan’s content; landscape-level considerations are not adequately addressed).</p> <p>Major CAR 2009.1:</p> <ol style="list-style-type: none"> 1. HRC must establish management objectives that are achievable, measurable, and adaptive in the short- and long-term in accordance with sub-criterion 7.1.a. 2. HRC shall make reference to other documents that are integral components of the forest management plan. 3. HRC shall ensure that its personnel have the opportunity to review and offer input on sections of the forest management

		<p>plan related to each staff member's field of responsibility.</p> <ol style="list-style-type: none"> 4. HRC shall explicitly address and state how they will account for harvested non-timber forest products (NTFPs) and land uses (e.g., grazing, bough collection, communication sites) in the forest management plan. 5. While protecting confidentiality of information, HRC shall identify its legal status and detail legal rights or claims that it holds over neighbouring properties as well as those that other parties hold on HRC property. 6. HRC shall describe and state how they will implement landscape-level management considerations within the ownership and near adjacent properties. 7. HRC shall design a forest inventory program that includes attributes to be measured and/or monitored and indicate the frequency of updates. See also CAR 2009.11. <p>On the basis of the content of the HRC forest management plan, conveyed to the audit team after the August field audit but prior to finalization of this report, the audit team concludes that closure of Major CAR 2009.1 is now warranted.</p>
<p>7.1.f. Environmental safeguards based on environmental assessments (see also Criterion 6.1.) <i>Note: The Working Group considers this criterion sufficiently explicit and measurable. Indicators are not required.</i></p>	C	<p>HRC cites the stipulations of the Habitat Conservation Plan (HCP), which requires that the company assess its implementation and perform effectiveness monitoring for endangered species, hydrological indicators, and hillslope stability. The THP process requires endangered species surveys, riparian buffer marking, and the identification of other constraints.</p>
<p>7.1.g. Plans for the identification and protection of rare, threatened, and endangered species. (see also Criterion 6.3.) <i>Note: The Working Group considers this criterion sufficiently explicit and measurable. Indicators are not required.</i></p>	C	<p>The THP process requires surveys for rare, threatened, and endangered (RTE) species prior to the commencement of operations. In addition, HRC details its HCP and HCVFs in the management plan, both of which cover the maintenance and enhancement of RTE species and plant communities.</p>
<p>7.1.h. Maps describing the forest resource base including protected areas, planned management</p>	C	

activities, and land ownership.		
<p>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:</p> <ul style="list-style-type: none"> ▪ 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 <p>Maps of some features may be kept confidential to protect their integrity.</p>	C	<p>HRC’s maps detail property boundaries, roads, timber production areas, harvest blocks for the first two decades (which indicate knowledge of age class), general forest vegetation types, HCVPs and representative samples, locations and habitats for rare species, historical and archaeological sites, and watercourses and buffers. Soil conditions and conservation are considered in management planning and information is included in GIS and generated harvest maps. HRC will create more maps as necessary.</p> <p>The team noted that an extensive array of maps is available in each Watershed Analysis report that catalogs these features and functions.</p>
<p>7.1.i. Description and justification of harvesting techniques and equipment to be used. (see also Criterion 6.5) <i>Note: The Working Group considers this criterion sufficiently explicit and measurable. Indicators are not required.</i></p>	C	<p>The management plan outlines the objectives of uneven-aged management. The timber harvest prescription and THPs detail what equipment and harvesting techniques can be used. Justification of equipment is based on sensitive soils, slope, tree size, species composition, and the capabilities and limitations of equipment.</p>
<p>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.</p>	C	
<p>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,</p>	C	<p>According to its management plan, every HRC policy, procedure, operation, and even company objective is subject to revision/update through adaptive management.</p>

<p>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.</p>		<p>Both HRC's forest inventory and its management plan will be fully re-evaluated every five (5) years; watershed analyses will be re-visited every ten years or so. Annual surveys and monitoring of wildlife, plants, streams, hillslopes, and roads feed into the annual decision-making process for timber harvesting plan layout and for prioritizing forest, road, and stream restoration work.</p>
<p>C7.3. Forest workers shall receive adequate training and supervision to ensure proper implementation of the management plans. <i>Note: The Working Group considers this criterion sufficiently explicit and measurable. Indicators are not required.</i></p>	C	<p>The HRC staff regularly engages in safety and internal training meetings to review new and existing policies and new information relevant to the implementation of management policies. However, as the management plan is not yet complete, the staff has received training only on completed portions related to their daily occupation.</p> <p>OBS 2009.15: Upon completion of the management plan, HRC staff should receive the necessary training to ensure its implementation.</p>
<p>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. <i>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 information). (see also Criterion 8.5)</i></p> <p><i>Note: The Working Group considers this criterion sufficiently explicit and measurable. Indicators are not required.</i></p>	C	<p>HRC makes the current draft available upon request. Much data is available publically already.</p> <p>HRC makes its management plan available on its website while protecting the confidentiality of information.</p> <p>HRC lacks complete public summaries for its forest management plan, monitoring program, and measures that ensure the maintenance and/or enhancement of High Conservation Value Forests (HCVFs).</p> <p>Major CAR 2009.2: While respecting the confidentiality of information, HRC must prepare public summaries of its forest management plan and monitoring program, including elements listed under Criteria 7.1 and 8.2. HRC must also describe, in a publicly available document, measures taken to ensure the maintenance and/or enhancement of conservation attributes identified in its HCVF analyses.</p> <p>The audit team verified on September 29, 2009 that the HRC forest</p>

		<p>management plan was publically available on its Web site, which goes beyond the public summary required by the FSC Criterion 7.4. HRC describes its monitoring activities (C8.5) in the “Monitoring and Adaptive Management” section of this publically available plan while protecting the confidentiality of its information. HRC describes various types of monitoring activities, including how it tracks trends in business, social, and environmental concerns, Habitat Conservation Plan implementation, and forest inventory (i.e., yield, growth, regeneration, condition of forest). Measures to maintain and/or enhance HCVPs are included in the publically available plan (C9.3). HRC describes its HCVPs and the stakeholders consulted in the process in its forest management plan, which is open for public comment.</p>
<p>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. <i>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.</i></p>		
<p>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.</p>	<p>C</p>	
<p>8.1.a. Implementation of the management plan is periodically monitored to assess:</p> <ul style="list-style-type: none"> ▪ 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 	<p>C</p>	<p>Watershed Analyses are reviewed every 5 years to update the databases and maps associated with each assessment involved in the analysis. Annual HCP reports and Road Upgrade Reports are reviewed with agencies.</p> <p>Since its inception HRC has held meetings with community members over issues ranging from watershed management to old-growth protection policies.</p> <p>HRC’s management plan is currently in the process of refinement and</p>

		will incorporate input from staff and community members throughout the coming year.
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 (<i>see Appendix G</i>).	NC	<p>The HCP and Watershed Analysis both apply ecological indicators in the form of management objectives to ensure that the forest provides habitat and ecosystem-service functions.</p> <p>In its present state, HRC's forest inventory data cannot provide accurate volume estimations at the stand level. HRC has not defined the frequency of updates to its forest inventory and what attributes (e.g., ecological indicators, canopy dominance) it will include in its forest inventory system.</p> <p>CAR 2009.11: HRC shall develop and make substantial progress in implementing a forest inventory program that details inventorying methods to be employed, defines attributes to be measured or monitored, and describes the frequency of inventory updates. See also Major CAR 2009.1.</p>
C8.2. 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	Yield tax records prove that HRC maintains records of harvest volumes.
8.2.a.2. The forest owner or manager maintains records of the yield of harvested non-timber forest	NC	HRC derives a small portion of its income from non-timber forest products (NTFPs) and intends to increase its current offering of

products.		NTFPs. HRC does not record the yield of many NTFPs. CAR 2009.12: HRC shall record and monitor the yield of all harvested NTFPs. All NTFPs /services must be incorporated into the management plan and in the public summary of monitoring results.
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	There have been no unanticipated removals of forest products. HRC has a security program.
8.2.b. Growth rates, regeneration, and condition of the forest	C	
8.2.b.1. An inventory system is maintained to monitor: <ul style="list-style-type: none"> ▪ 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 (<i>see Appendix G; Karr 1981</i>) ▪ characteristics of terrestrial and aquatic habitats ▪ Soil characteristics 	NC	In its present state, HRC's forest inventory data cannot provide accurate volume estimations at the stand level. HRC has not defined the frequency of updates to its forest inventory and what attributes (e.g., ecological indicators, canopy dominance) it will include in its forest inventory system. CAR 2009.11: HRC shall develop and make substantial progress in implementing a forest inventory program that details inventorying methods to be employed, defines attributes to be measured or monitored, and describes the frequency of inventory updates. See also Major CAR 2009.1.
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 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	C	HRC monitors MMCAs, owl nest sites, water quality and riparian areas for species recovery efforts and actual use of protected areas by RTE species.

occurrence of Rare species.		
8.2.d. Environmental and social impacts of harvesting and other operations	C	
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	HRC conducts pre- and post-harvest monitoring. Its road monitoring system is extensive and incorporates studies on sediment movement.
8.2.d.2. A monitoring program is in place to assess the condition and environmental impacts of the forest-road system.	C	HRC has one of the most robust monitoring programs of its forest road system in the redwood region, if not North America. Effectiveness of drainage measures is monitored to the degree that they disconnect roads from streams and meet several other effectiveness criteria.
8.2.d.3. Generation or maintenance of local jobs and public responses to management activities are monitored.	NC	<p>HRC is a stable and significant contributor to local communities through employment and purchasing of goods and services within the regional economy. However, HRC has not monitored and performed an assessment on the extent of its social impact in this regard. HRC does not have a formal system to monitor public responses to its management activities.</p> <p>CAR 2009.13: HRC shall implement a monitoring process and periodic social impact analyses regarding its forest operations relative to local communities and the North Coast regional economy, specifically referring to the:</p> <ul style="list-style-type: none"> a) generation or maintenance of local jobs and public responses to management activities, and b) influence of forest management on the viability of forest-based livelihoods (e.g., mill jobs, other supporting businesses) in local communities.
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. <i>For example, the destination of forest resources is documented.</i>	NC	HRC is a stable and significant contributor to local communities through employment and purchasing of goods and services within the regional economy. However, HRC has not monitored and performed an assessment on the extent of its social impact in this regard. HRC does not have a formal system to monitor public responses to its management activities.

		<p>CAR 2009.13: HRC shall implement a monitoring process and periodic social impact analyses regarding its forest operations relative to local communities and the North Coast regional economy, specifically referring to the:</p> <p>a) generation or maintenance of local jobs and public responses to management activities, and</p> <p>b) influence of forest management on the viability of forest-based livelihoods (e.g., mill jobs, other supporting businesses) in local communities.</p>
8.2.d.5. The opportunity to jointly monitor sites of special significance (<i>see also criteria 3.2 and 3.3</i>) is offered to tribal representatives in order to determine adequacy of the management prescriptions.	C	HRC is coordinating monitoring and management of special sites with local tribal communities.
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	Executive staff monitors cash flows and timber markets for new opportunities and for information on making decisions in the short- and long-term.
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.	NC	<p>Through lowering the allowable annual cut significantly, basically eliminating even-aged management, and putting much of the land in permanently protected status, HRC provides many ecosystem services. HRC does not fully take into account the economic benefits of non-timber forest products and services.</p> <p>CAR 2009.14: HRC shall conduct an assessment of the economic benefits of non-timber forest products and services and identify ways in which some such goods and services might generate income for the company and the regional economy.</p>
C8.3. Documentation shall be provided by the forest manager to enable monitoring and certifying organizations to trace each forest	C	FME's DCS does not have procedures to include the FME's FSC certificate registration code and FSC claim (FSC Pure) on all sales, shipping, and all other documentation for sales of FSC-certified

<p>product from its origin, a process known as the "chain of custody."</p> <p><i>Note: The Working Group considers this criterion sufficiently explicit and measurable. Indicators are not required.</i></p>	<p>products.</p> <p>Major CAR 2009.3: HRC shall have procedures to include the FME's FSC certificate registration code and FSC claim (FSC Pure) on all sales, shipping, and all other documentation for sales of FSC-certified products and, thereafter, implement such procedures.</p> <p>HRC redesigned its trip ticket in response to the CAR. The trip ticket includes the FSC certificate code from both certification bodies and will be used to track all loads from the forest to the mill, thereafter FSC chain-of-custody procedures for the mill take precedent. The updated trip ticket and response satisfies Major CAR 2009.3, thus warranting its closure.</p> <p>HRC possesses a Chain-of-Custody (CoC) stump-to-gate procedure, but its staff lack training in CoC procedures. The procedure also does not mention that CoC documentation (e.g., records of FSC-certified log sales/transfers) must be maintained for at least 5 years.</p> <p>The document "HRC-FO-OP 001 Rev1 with training" contains proper procedures to ensure the proper, documented transfer of FSC-certified product to an FSC CoC certificate. This same document supplies evidence that training has been completed for all pertinent HRC staff and contractors (e.g., logging and trucking contractors). The updated activity satisfies minor CAR 2009.15, thus warranting its closure.</p> <p>FME will not outsource handling or processing of FSC-certified material to subcontractors prior to delivery at the forest gate.</p> <p>FME does not intend to use certification body trademarks for promotion or product labeling prior to delivery at the forest gate.</p> <p>All of the FME's staff involved in the CoC implementation are familiar with procedures since current procedures will be very similar</p>
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		<p>to the procedures to be used once FSC-certified wood is being delivered. However, annual, documented training in CoC procedures will promote awareness and ensure that COC procedures among the staff and contractors are in compliance.</p> <p>FME has implemented and documented annual training in CoC procedures to promote awareness and ensure that COC procedures among the staff and contractors are in compliance.</p>
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	HRC implements much adaptive management as required by the reporting protocols tied to HCP, Watershed Analysis, Cleanup and Abatement Orders, and other agency agreements.
<p>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.</p> <p><i>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).</i></p>	C	
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.	C	<p>HRC lacks complete public summaries for its forest management plan, monitoring program, and measures that ensure the maintenance and/or enhancement of High Conservation Value Forests (HCVFs).</p> <p>Major CAR 2009.2: While respecting the confidentiality of information, HRC must prepare public summaries of its forest</p>

	<p>management plan and monitoring program, including elements listed under Criteria 7.1 and 8.2. HRC must also describe, in a publicly available document, measures taken to ensure the maintenance and/or enhancement of conservation attributes identified in its HCVF analyses.</p> <p>The audit team verified on September 29, 2009 that the HRC forest management plan was publically available on its Web site, which goes beyond the public summary required by the FSC Criterion 7.4. HRC describes its monitoring activities (C8.5) in the “Monitoring and Adaptive Management” section of this publically available plan while protecting the confidentiality of its information. HRC describes various types of monitoring activities, including how it tracks trends in business, social, and environmental concerns, Habitat Conservation Plan implementation, and forest inventory (i.e., yield, growth, regeneration, condition of forest). Measures to maintain and/or enhance HCVFs are included in the publically available plan (C9.3). HRC describes its HCVFs and the stakeholders consulted in the process in its forest management plan, which is open for public comment.</p>
<p>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.</p> <p>High Conservation Value Forests are those that possess one or more of the following attributes:</p> <ul style="list-style-type: none"> 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	
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 (<i>see Appendix D</i>) that may be present in or adjacent to the forest, and their delineation by habitat descriptions and maps.	C	HRC has conducted an analysis of High Conservation Value Forest and Representative Sample Areas with the input and expertise of its own staff, federal and state agencies, universities, and local environmental activists and stakeholders. HRC has identified globally, nationally, regionally, and locally unique HCV attributes, such as Type 1 Old Growth attributes, Class I RMZs, prairies, and wildlife protection zones. HRC will place their HCVF analysis on the publically available management plan on its website.
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	NC	HRC has had extensive interaction with stakeholders (e.g., regulatory agency personnel, environmental activists) on the classification and

<p>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.</p>		<p>management of old growth forests, which are one prominent type of “high conservation value forest” as established in FSC Principle 9. However, consultation with regard to non-old growth HCVFs (e.g., tanoak) has not been at a comparable level and, at present, does not constitute adequate conformity with the consultative requirements found in Principle 9.</p> <p>CAR 2009.16: HRC shall develop a consultation process that provides opportunities for stakeholders outside of the regulatory framework to offer input on the identification of high conservation values relevant to North Coast redwood forest land and locations within the HRC ownership that may possess such values. HRC must also provide opportunities for stakeholder input on appropriate management prescriptions for areas possessing high conservation values and, where appropriate given the nature of the conservation values, coordinate management efforts with other managers of HCVFs within the eco-region.</p>
<p>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.</p>	<p>C</p>	<p>HRC lacks complete public summaries for its forest management plan, monitoring program, and measures that ensure the maintenance and/or enhancement of High Conservation Value Forests (HCVFs).</p> <p>Major CAR 2009.2: While respecting the confidentiality of information, HRC must prepare public summaries of its forest management plan and monitoring program, including elements listed under Criteria 7.1 and 8.2. HRC must also describe, in a publicly available document, measures taken to ensure the maintenance and/or enhancement of conservation attributes identified in its HCVF analyses.</p> <p>The audit team verified on September 29, 2009 that the HRC forest management plan was publically available on its Web site, which goes beyond the public summary required by the FSC Criterion 7.4. HRC describes its monitoring activities (C8.5) in the “Monitoring and Adaptive Management” section of this publically available plan while</p>

		protecting the confidentiality of its information. HRC describes various types of monitoring activities, including how it tracks trends in business, social, and environmental concerns, Habitat Conservation Plan implementation, and forest inventory (i.e., yield, growth, regeneration, condition of forest). Measures to maintain and/or enhance HCVFs are included in the publically available plan (C9.3). HRC describes its HCVFs and the stakeholders consulted in the process in its forest management plan, which is open for public comment.
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	HRC has identified HCVF attributes and areas and has detailed management options to maintain and/or enhance them. For example, Spotted owl habitat retention areas must maintain a core no-harvest zone of 18 acres surrounding a nest site. A minimum of 72 acres of suitable roosting and nesting habitat must be maintained within the habitat retention areas.
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 maintained.	C	According to HRC’s management plan, any permissible harvests in habitat conservation areas must meet the intent to accelerate the growth of habitat. Type 2 Old growth stands only allow single-tree selection to preserve or enhance old growth characteristics. HRC, whenever possible, avoids road construction through old growth areas, fossil beds, serpentine outcrops, and prairies. Oregon white oak stands are only entered to remove conifers and other competing vegetation.
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.	NC	HRC has had extensive interaction with stakeholders (e.g., regulatory agency personnel, environmental activists) on the classification and management of old growth forests, which are one prominent type of “high conservation value forest” as established in FSC Principle 9. However, consultation with regard to non-old growth HCVFs (e.g., tanoak) has not been at a comparable level and, at present, does not constitute adequate conformity with the consultative requirements found in Principle 9. CAR 2009.16: HRC shall develop a consultation process that provides opportunities for stakeholders outside of the regulatory framework to offer input on the identification of high conservation

		values relevant to North Coast redwood forest land and locations within the HRC ownership that may possess such values. HRC must also provide opportunities for stakeholder input on appropriate management prescriptions for areas possessing high conservation values and, where appropriate given the nature of the conservation values, coordinate management efforts with other managers of HCVFs within the eco-region.
<p>C9.4. Annual monitoring shall be conducted to assess the effectiveness of the measures employed to maintain or enhance the applicable conservation attributes.</p> <p><i>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.</i></p>	C	HRC conducts several monitoring activities of HCVFs, including northern spotted owl and marbled murrelet sites. Wildlife habitat monitoring includes assessments of existing protected sites to examine continued use of such sites by protected species and habitat attributes. HRC also has a well-established monitoring program for its streams, which includes provisions for sediment control and salmonid habitat.
<p>P10 Plantations shall be planned and managed in accordance with Principles and Criteria 1 9, and Principle 10 and its Criteria. While plantations can provide an array of social and economic benefits, and can contribute to satisfying the world's needs for forest products, they should complement the management of, reduce pressures on, and promote the restoration and conservation of natural forests.</p> <p><i>Applicability note: Plantations, as defined for the Pacific Coast Region, are tree-dominated areas substantially lacking in natural forest attributes (e.g. structure and species composition native to the area) that usually require human intervention in order to be maintained. A "planted forest" is not necessarily a "plantation" since it may be part of a management regime that maintains most natural forest attributes indigenous to the area. The following characteristics contribute to a management regime being considered plantation forestry and the land managed being classified a plantation:</i></p> <ul style="list-style-type: none"> ▪ <i>cultivation of exotic species</i> ▪ <i>use of even-aged silviculture for forest types that do not regenerate naturally through stand-replacing events</i> ▪ <i>use of even-aged silviculture with rotations less than 50 years</i> ▪ <i>use of even-aged regeneration units that lack retention, and that are larger than those specified under criterion 6.3.</i> 		

- *systematic use of, and reliance on, chemical herbicides, pesticides, and fertilizers*
- *single-species plantings on sites normally occupied by multiple-species forests*
- *regular, periodic stand treatments intended to eliminate natural-in-growth of native trees and associated ground cover*

The determination of whether the FMU is a plantation operation or an individual stand within it is a plantation is made on the basis of the overall forest management regime and the resulting conditions at the stand- and FMU-level.

Note: Regarding the Applicability of P1-9 to Plantation Forest Operations: For the proportion of the FMU being maintained in plantation management per 10.5.b, it is not expected that the management of the stands maintains or restores all levels of structure and composition associated with natural forests. Accordingly, some components of the first nine Principles and Criteria either do not apply or require modified interpretation when being applied to plantation forest operations. For the Pacific Coast region, indicators that do not apply to plantation forest stands are 6.3.e.4, 6.3.e.5, 6.3.f.3, and 6.3.f.4. Those that may require modification in interpretation, particularly for plantations located on agricultural soils, are 6.3.e.1, 6.3.e.2, 6.3.e.3, 6.3.f.2, 6.3.f.3, and 7.1.d.2. All other provisions of Principles 1-9 are equally relevant to natural forest and plantation forest operations.

NOT APPLICABLE. Per FSC definition, HRC does not practice plantation-based management. HRC practices almost exclusively unevenaged management and only with native species of known provenance.

APPENDIX IV: Chain-of-Custody Conformance (confidential)

Note: This CoC Appendix is used for FMEs only selling standing timber, stumpage, logs and/or chips produced within a FMU covered by the scope of the certificate. FME certificate scopes that include primary or secondary processing facilities shall include an evaluation against the full FSC CoC standard: FSC-STD-40-004 V2. Refer to that separate report Appendix.

Definition of Forest Gate: (check all that apply)

<input type="checkbox"/>	Standing Tree/Stump: FME sells standing timber via stumpage sales.
<input type="checkbox"/>	The Log Landing: FME sells wood from the landing/yarding area.
<input type="checkbox"/>	On-site Concentration Yard: Transfer of ownership occurs at a concentration yard under the control of the FME.
<input checked="" type="checkbox"/>	Off-site Mill/Log Yard: Transfer of ownership occurs when offloaded at purchaser's facility.
<input type="checkbox"/>	Other: <i>explanation</i>
Comments: Transfer of ownership occurs at the mill's FSC-certified log deck.	

Scope Definition of CoC Certificate:

Does the FME further process material before transfer at forest gate? <i>(If yes then processing must be evaluated to full CoC checklist for CoC standard FSC-STD-40-004 v2.)</i> Note: This does not apply to on-site production of chips/biomass from wood harvested from the evaluated forest area.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Comments: FME does not process wood prior to delivery at the forest gate.	
Is the FME a large scale operation (>10,000 hectares) or a Group Certificate? <i>(If yes then CoC procedures for all relevant CoC criteria shall be documented.)</i>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Comments: FME is considered a large scale operation totaling almost 85,000 ha.	
Does non-FSC certified material enter the scope of this certificate prior to the forest gate, resulting in a risk of contamination with wood from the evaluated forest area (e.g. FME owns/manages both FSC certified and non-FSC certified FMUs)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Comments: All wood is FSC-certified wood. Should non-certified wood be purchased, it would not be combined with FSC-certified wood prior to delivery at the forest gate.	
Does FME outsource handling or processing of FSC certified material to subcontractors (i.e. milling or concentration yards) prior to transfer of ownership at the forest gate? <i>(If yes a finding is required for criterion CoC 7 below.)</i>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Comments: FME will not outsource handling or processing of FSC-certified material to subcontractors prior to delivery at the forest gate.	
Does FME purchase certified wood from other FSC certificate holders and	Yes <input type="checkbox"/> No

plan to sell that material as FSC certified? (If yes then a separate CoC certificate is required that includes a full evaluation of the operation against FSC-STD-40-004 v2.).	<input checked="" type="checkbox"/>
Comments: FME does not intend to purchase FSC-certified wood from other FSC certificate holders and sell that material as FSC-certified prior to delivery at the forest gate.	
Does FME use FSC and/or Rainforest Alliance trademarks for promotion or product labeling? (If FME does not nor has no plans to use FSC/RA trademarks delete trademark criteria checklist below.)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Comments: FME does intend to use FSC and/or Rainforest Alliance trademarks for promotion or product labeling.	

Chain-of-Custody Criteria [FM-35 SmartWood Chain-of-Custody Standard for Forest Management Enterprises (FMEs)]

1. Quality Management	
COC 1.1: FME shall define the personnel/position(s) responsible for implementing the CoC control system.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Findings: FME's DCS states that its Forest Operations Manager is responsible for implementing the CoC control system.	
COC 1.2: All relevant staff shall demonstrate awareness of the FME's procedures and competence in implementing the FME's CoC control system.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Findings: All of the FME's staff and contractors involved in the CoC implementation are familiar with procedures since current procedures will be very similar to the procedures to be used once FSC-certified wood is being delivered. Documented training in CoC procedures promote awareness and ensure that COC procedures among the staff and contractors are in compliance.	
CoC 1.3: FME procedures/work instructions shall provide effective control of FSC certified forest products from standing timber until ownership is transferred at the forest gate. <i>Note: For large scale operations (>10,000ha) and Group Managers, CoC procedures covering all relevant CoC criteria shall be documented.</i> Including:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
a) Procedures for physical segregation and identification of FSC certified from non-FSC certified material. (If applicable)	
b) Procedures to ensure that non-FSC certified material is not represented as FSC certified on sales and shipping documentation. (If applicable)	
c) Procedures to include FME FSC certificate registration code and FSC claim (FSC Pure) on all sales and shipping documentation for sales of FSC certified products.	
d) Recordkeeping procedures to ensure that all applicable records related to the production and sales of FSC certified products (e.g. harvest summaries, sales summaries, invoices, bills of lading) are maintained for a minimum of 5 years.	
e) Procedures to ensure compliance with all applicable FSC/Rainforest Alliance/SmartWood trademark use requirements.	
Findings: FME's DCS provides effective control of FSC-certified forest products from standing timber to delivery at its forest gate.	

- a) Not applicable.
- b) Not applicable.
- c) FME's DCS does have procedures to include the FME's FSC certificate registration code and FSC claim (FSC Pure) on all sales, shipping, and all other documentation for sales of FSC-certified products.
- d) FME's DCS states that it will implement recordkeeping procedures to ensure that all applicable records related to the production and delivery of FSC-certified products (e.g., harvest summaries, delivery summaries, shipping documentation) are maintained for a minimum of five (5) years.
- e) FME does intend to use FSC and/or Rainforest Alliance trademarks for promotion or product labeling prior to delivery at the forest gate. However, FME's DCS does not include procedures for use of FSC and/or Rainforest Alliance trademarks for promotion. **See CAR 2009.17**

2. Certified Material Handling and Segregation

COC 2.1: FME shall have a CoC control system in place to prevent the mixing of non-FSC certified materials with FSC certified forest products from the evaluated forest area, including:

- a) Physical segregation and identification of FSC certified from non-FSC certified material.
- b) A system to ensure that non-FSC certified material is not represented as FSC certified on sales and shipping documentation.

Yes No
N/A

Note: If no outside wood is handled by FME within scope of certificate, mark as N/A.

Findings: No outside wood is handled by the FME within the scope of the certificate.

CoC 2.2: FME shall identify the sales system(s) or "Forest Gate", for each FSC certified product covered by the Chain of Custody system: i.e. standing stock; sale from log yard in the forest; sale at the buyer's gate; sale from a log concentration yard, etc.

Yes No

Findings: FME identifies the forest gate for all FSC-certified products (i.e., mill's FSC-certified log deck).

CoC 2.3: FME shall have a system that ensures that FME products are reliably identified as FSC certified (e.g. through documentation or marking system) at the forest gate.

Yes No

Findings: FME provided the team with its 4-part Log Receipt forms (i.e., trip tickets) that will be used to identify as FSC-certified wood delivered to the forest gate.

CoC 2.4: FME shall ensure that certified material is not mixed with non-FSC certified material at any stage, up to and including the sale of the material.

Yes No
N/A

Note: If no outside wood is handled by FME within scope of certificate, mark as N/A.

Findings: No outside wood is handled by the FME within the scope of its certificate.

3. Certified Sales and Recordkeeping

COC 3.1: For material sold with FSC claim the FME shall include the following information on sales and shipping documentation:

- a) FME FSC certificate registration code, and

Yes No

b) FSC certified claim: FSC Pure	
Findings: FME's FSC certificate registration code and FSC claim (FSC Pure) is included on Log Receipt forms and or other documentation used for FSC-certified products.	
CoC 3.2: FME shall maintain certification production and sales related documents (e.g. harvest summaries, invoices, bills of lading) for a minimum of 5 years. Documents shall be kept in a central location and/or are easily available for inspection during audits.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Findings: FME's DCS states that it will maintain certification production and sales related documents (e.g., harvest summaries, delivery summaries, shipping documentation) for a minimum of five (5) years. It also states that all recordkeeping will be kept in a central location, and made available for auditing purposes.	
CoC 3.3: FME shall compile an annual report on FSC certified sales for SmartWood containing monthly sales in terms of volume of each FSC certified product sold to each customer.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Findings: FME will compile an annual report on FSC-certified sales for SmartWood containing monthly sales in terms of volume of each FSC-certified product sold to each customer.	

4. Outsourcing	
CoC 4.1: FME control system shall ensure that CoC procedures are followed at subcontracted facilities for outsourcing and FME shall collect signed outsourcing agreements covering all applicable FSC outsourcing requirements per FSC--40-004 v-2.0 <i>FSC Standard for Chain of Custody</i> November 2007.	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
Note 1: If FME outsources processing or handling of FSC certified material the outsourcing report appendix is required.	
Note 2: Check N/A if FME does not outsource processing or handling of FSC material.	
Findings: FME will not outsource handling or processing of FSC-certified material to subcontractors prior to delivery at the forest gate.	

5. FSC/Rainforest Alliance Trademark (TMK) Use Criteria

Standard Requirement:	
The following section summarizes the FME's compliance with FSC and Rainforest Alliance trademark requirements. Trademarks include the Forest Stewardship Council and Rainforest Alliance/SmartWood names, acronyms (FSC), logos, labels, and seals. This checklist is directly based on the FSC labeling standard (FSC-STD-40-201 <i>FSC on-product labeling requirements</i> (version 2.0) and FSC-TMK-50-201 V1-0 <i>FSC Requirements for the Promotional Use of the FSC Trademarks by FSC Certificate Holders</i> . References to the specific FSC document and requirement numbers are included in parenthesis at the end of each requirement. (Rainforest Alliance Certified Seal = RAC seal).	
General	
COG 5.1: FME shall have procedures in place that ensure all on-product and off product FSC/Rainforest Alliance trademark use follows the	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

applicable policies:	
Findings: Prior to the forest gate there will be no on-product trademark use. HRC will have to amend their DCS to account for off-product labeling and trademark use procedures. See CAR 2009.17.	
COC 5.2: FME shall have procedures in place and demonstrate submission of all FSC/Rainforest Alliance/SmartWood claims to SmartWood for review and approval prior to use, including” a) On-product use of the FSC label/RAC seal; b) Promotional (off-product) claims that include the FSC trademarks (“Forest Stewardship Council”, “FSC”, checkmark tree logo) and/or the Rainforest Alliance/SmartWood trademarks (names and seal)(50-201,2.3).	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Findings: Prior to the forest gate there will be no on-product trademark use. HRC will have to amend their DCS to account for off-product labeling and trademark use procedures to include submission of all FSC/Rainforest Alliance/SmartWood claims to SmartWood for review and approval prior to use. See CAR 2009.17.	
COC 5.3: FME shall have procedures in place and demonstrate that all trademark review and approval correspondence with SmartWood is kept on file for a minimum of 5 years (40-201, 1.10; 50-201, 2.4):	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Findings: Prior to the forest gate there will be no on-product trademark use. HRC will have to amend their DCS to account for off-product labeling and trademark use procedures to include all trademark review and approval correspondence with SmartWood is kept on file for a minimum of 5 years. See CAR 2009.17.	

Off-product / Promotional

Check if section not applicable (FME does not, and does not plan to use the FSC trademarks off-product or in promotional pieces)

Note: promotional use items include advertisements, brochures, web pages, catalogues, press releases, tradeshow booths, stationary templates, corporate promotional items (e.g., t-shirts, cups, hats, gifts).

When applicable to the FME’s promotional/off-product use of the trademarks, the criteria below shall be met:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Findings: HRC does plan to place the FSC-certified trademark on their Web site and may use it in other off-product pieces such as brochures. It is understood there is a review process required before such use and that there should be a process to implement and document this review. HRC will have to amend their DCS description to account for off-product labeling and trademark use procedures. See CAR 2009.17.	
COC 5.4: If the FSC trademarks are used for promotion of FMUs, FME shall limit promotion to FMUs covered by the scope of the certificate.	
COC 5.5: In cases that the Rainforest Alliance trademarks are used (50-201, 13.1, 13.2): a) The FSC trademarks shall not be at a disadvantage (e.g., smaller size); b) The FSC checkmark tree logo shall be included when the RAC seal is in place.	
COC 5.6: In cases that the FSC trademarks are used with the trademarks (logos, names, identifying marks) of other forestry verification schemes (SFI, PEFC, etc.), SmartWood	

approval shall be in place (50-201, 3.0).

COC 5.7: Use of the FSC trademarks in promotion of the FME's FSC certification shall not imply certain aspects are included which are outside the scope of the certificate (50-201, 1.6).

COC 5.8: Use of the FSC trademarks on stationery templates (including letterhead, business cards, envelopes, invoices, paper pads) shall be approved by SmartWood to ensure correct usage (50-201, 12.0).

COC 5.9: In cases that the FSC trademarks are used as part of a product name, domain name, and/or FME name, SmartWood approval shall be in place (50-201, 9.0, 10.0).

On-product

Check if section not applicable (FME does not, and does not plan to apply FSC labels on product)

	SmartWood Document	
Title: Peer Review Guidelines	Doc. No: FM-02	Version: 2.0
	Date: Sept 2004	Page 146 of 165

APPENDIX VI: List of all visited sites (confidential)

District	Area	Auditors	Type of site / short description of site
NA	Main Office Building, Scotia, CA	Hrubes, Dickard, Grado, Meister, Liquori	Opening session, review of pre-assessment, work accomplished since pre-assessment, devise assessment strategy.
Freshwater Sustainability Unit	Little Freshwater II THP	Hrubes, Dickard, Grado, Meister, Liquori	THP, volunteer workers boring Coastal redwood, HRC road crew activity.
Freshwater Sustainability Unit	Little Main Unit 7	Hrubes, Dickard, Grado, Meister, Liquori	Cable corridors, water bars, logging crew activity.
Elk River Sustainability Unit	Elk River, Brown Bridge THP	Hrubes, Dickard, Grado, Meister, Liquori	THP, screen trees for old growth, reuse of old skidder trails, Bible Camp, Boy Scout Camp.
Mattole River Sustainability Unit	Mattole watershed	Hrubes, Dickard, Grado, Meister, Liquori	Watercourse restoration project in collaboration with NGOs and agencies, earth flow discussion, grazing issues.
Bear River Sustainability Unit	THP	Hrubes, Dickard, Grado, Meister, Liquori	THP, understocked unit, frill treatments on hardwoods, logging activity.
Elk River Sustainability Unit	Elk River (all day), Metal Bridge	Dickard, Meister, Liquori	Watershed inspection, bridge work.
Elk River Sustainability Unit	Tom's Gulch culvert and crossing	Dickard, Meister, Liquori	Stream clean-up and abatement work. Road storm proofing measures; implementation and effectiveness.
Elk River Sustainability Unit	Cloud 9 THP	Dickard, Meister, Liquori	THP, school forest, forest road stream crossings, road closing and stabilization work, harvesting practices and impacts.
Elk River Sustainability Unit	North Fork Bridge	Dickard, Meister, Liquori	Bridge work, water quality protection measures.
Elk River Sustainability Unit	Top Lake THP	Dickard, Meister, Liquori	Overstocked Douglas-fir and Coastal Redwood.
Elk River Sustainability	North Fork	Dickard, Meister,	Special site for marbled murrelet conservation area (MMCA).

Unit	MMCA	Liquori	
Elk River Sustainability Unit	Class 3 stream, road decommission	Dickard, Meister, Liquori	Stream and road inspections.
Elk River Sustainability Unit	Elk River watershed	Dickard, Meister, Liquori	Monitoring sites.
Scotia, CA	HRC mill scale	Dickard, Meister, Liquori	Inspection of mill site.
Mad River Sustainability Unit	Mad River Sustainability Unit near Airport THP	Hrubes, Dickard, Meister	Overlook, discussion of management objectives for the Unit.
Mad River Sustainability Unit	Oregon white oak/ prairie HCVF near Moores THP	Hrubes, Dickard, Meister	HCVF area, cattle grazing.
Mad River Sustainability Unit	THP near the crew house/frill treatments	Hrubes, Dickard, Meister	THP, cattle grazing.
Freshwater Sustainability Unit	Upper McCreedy THP	Hrubes, Dickard	Road crossing, storm proofing, and new culvert as part of a road segment upgrade.
Freshwater Sustainability Unit	Freshwater Sustainability Unit	Dickard, Meister	Class 2 stream crossing.
Freshwater Sustainability Unit	Freshwater Sustainability Unit	Dickard, Meister	Mid-incline THP, yarding selection operation.
Bear River Sustainability Unit	THP	Grado, Liquori	Cable logging, inspection of residual trees.
Bear River Sustainability Unit	Bear Creek	Grado, Liquori	Logjam on stream, erosion of road, adjoining Humboldt Redwoods State Park.
Unnamed Unit	Archaeological site	Grado, Liquori	Archaeological site discussion and inspection of protective measures to be taken by HRC and tribal representatives.
Larabee Sustainability Unit	Northern spotted owl protection area	Grado, Liquori	Northern spotted owl protection area.
NA	Scotia Mill	Grado, Liquori	Inspection of seasonal bridge over

	Area		the Elk River leading to mill site, discussion of mill residues from the forest.
NA	Main Office Building, Scotia, CA	Hrubes, Foster, Grado, Meister, Liquori	Closing session, review of assessment including tentative CARs and OBSs.

APPENDIX VII: Detailed list of stakeholders consulted (confidential)

List of FME Staff Consulted

Name	Title	Contact	Type of Participation
Bettis, Richard	Land Security Officer	rbettis@hrcllc.com	Interview ^c
Chinnici, Sal	Forest Sciences Manager	schinnici@hrcllc.com	Opening meeting ^c , field ^c , interview ^c , closing meeting ^c
Craven, Gilbert	Geologist	gcraven@hrcllc.com	Field ^a , interview ^a
Curtemann, Jackie	Manager, Workers Compensation	jcurtemann@hrcllc.com	Interview ^c
Dendy, Sandy	Human Resources Manager	sdendy@hrcllc.com	Interview ^a , telephone interview ^b
Eilers, Brian	Heavy Equipment Operator	beilers@hrcllc.com	Field ^b , interview ^b
Farland, Adam	Forester	afarland@hrcllc.com	Field ^a , interview ^a , stakeholder meeting ^b
Halley, Kurt	Heavy Equipment Operator	khalley@hrcllc.com	Field ^b , interview ^b
Hawk, Benjamin	Forester	bhawk@hrcllc.com	Field ^b , interview ^b
Higgenbottom, Richard	Chief Executive Officer	rhiggenbottom@hrcllc.com	Interview ^b
Jani, Mike	President, Chief Forester	mjani@mendoco.com	Opening meeting ^c , e-mail ^c , telephone call ^c , field ^c , interview ^c , closing meeting ^c
Johnson, Eric	Inventory Forester	ejohnson@hrcllc.com	Opening meeting ^a , field ^a , interview ^a , telephone conference call ^b
Kunes, Richard	Forester	rkunes@hrcllc.com	Interview ^c
Mann, Eric	Land Security Officer	emann@hrcllc.com	Interview ^a

Miles, Mike	Area Manager, South	mmiles@hrcllc.com	Opening meeting ^c , field ^c , interview ^c , closing meeting ^c
Owsley, Russ	Safety Supervisor	rowsley@hrcllc.com	Interview ^c
Peterson, Roger	Roads Manager	rpeterson@hrcllc.com	Opening meeting ^c , field ^b , interview ^b
Renner, Maralyn	Stewardship Manager/Botanist	mrenner@hrcllc.com	Opening meeting ^c , e-mail ^c , telephone call ^c , field ^c , interview ^c , closing meeting ^c
Rice, Wayne	Forester	wrice@hrcllc.com	Closing meeting ^b
Schultz, Tom	Forest Operation Manager	tschultz@hrcllc.com	Opening meeting ^c , field ^c , interview ^c , closing meeting ^c
Sneed, John	Area Manager, Central	jsneed@hrcllc.com	Opening meeting ^a , field ^a , interview ^a
Sullivan, Kate	Manager, Physical Sciences	ksullivan@hrcllc.com	Opening meeting ^c , field ^c , interview ^c , closing meeting ^c
Watkins, Tracy	Water Quality Stewardship Coordinator	twatkins@hrcllc.com	Opening meeting ^a , field ^a , interview ^a
Woessner, Jon	Area Manager, North	jwoessner@hrcllc.com	Opening meeting ^c , field ^c , interview ^c , closing meeting ^c

^aContact made during the pre-assessment only.

^bContact made during the assessment only.

^cContact made during the both the pre-assessment and assessment.

List of other Stakeholders Consulted^{a, b, c}

Name	Organization	Contact	Type of Participation
Acuri, Ami	Tree Sitter	spooner@spoonerdirect.org	Field ^b , interview ^c , stakeholder meeting ^b , e-mail ^c
Anderson, John	MRC Forester	janderson@mendoco.com	Field ^b , interview ^b
Angeloff, Nick	Bear River Archaeologist	707-733-1900 707-407-6205	Telephone call ^c
Baker, Fred	Steve Will Logging	707-725-5134	Field ^b , interview ^b

Barnwell, Les	Adjoining landowner	Bridgeville, CA 707-777-3416	Telephone ^b
Billig, Sarah	Stewardship Director, MRC	sbillig@mendoco.com	Opening meeting ^a , field ^a , interview ^a
Blencowe, Craig	Registered Forester	cblen@comcast.net	e-mail ^b
Blomstrom, Greg	Consulting Forester	707-825-0730	Telephone ^b
Brinkema, Corey	FSC-US, Observer	cbrinkema@fscus.org	Opening meeting ^a , field ^a
Chambers, Bob	Bob Chambers Logging	None provided.	Field ^b , interview ^b
Cochrane, Laura	Mattole Restoration Council	laura@mattole.org	Field ^b
Cohoon, Ben C.	Tree Farm/Consultant	b.cphoon@yahoo.com	Stakeholder meeting ^b
deWaard, Beatrijs	Biologist, California Department of Fish and Game	None provided.	Field ^b
Dyer, Kerul	EPIC	kerul@wildcalifornia.org	Stakeholder meeting ^a
Elsbrac, Andy	Private citizen	None provided.	Stakeholder meeting ^b
Fay, Mike	National Geographic Society	mfay@ngs.org	Stakeholder meeting ^a
Flosi, Gary	Senior Biologist California Department of Fish and Game	1455 Sandy Prairie Court, Suite 1 Fortuna, CA 95540 707-725-1072 gflosi@dfg.ca.gov	Field ^b , interview ^b
Freedlund, Ali	Mattole Restoration Council	ali@mattole.org	Telephone call ^a , stakeholder meeting ^a , observer ^b , e-mail ^c
Han, Han-Sup	Assistant Professor, Humboldt State University	hh30@humboldt.edu	Stakeholder meeting ^b
Heppe, Chris	BLM-Headwaters	Chris_heppe@blm.gov	Stakeholder meeting ^b

Holm, Lindsay	National Geographic Society	lindsay@uuplus.com	Stakeholder meeting ^a
Karen Steer	FSC-US, Observer	ksteer@fscus.org	Opening meeting ^a , field ^a , closing meeting ^a
Lewis, Bill	Lewis Logging	707-772-4331	Field ^b , interview ^b
Mahan, Leah	NOAA	None provided.	Field ^b
Martien, Jerry	Humboldt Watershed Council	martien@humboldt.com	Stakeholder meeting ^a
Mayer, Judee	Humboldt State University	707-826-7056 jmayer@humboldt1.com	Interview ^b
Miller, Ray	Consultant	rmiller2183@gmail.com	Stakeholder meeting ^a
Monsch, Joel	Mattole Restoration Council	joel@mattole.org	Field ^b , interview ^b
Moxon, Kathy	Vice-President, Redwood Forest Foundation Board Member, Humboldt Area Foundation, Adjoining landowner	707-442-2993	Telephone ^b
Newkirk, Brian	Bible Camp	707-499-8732	Telephone call ^b
Noannan, Jack	California Alternatives to Toxics	None provided.	Stakeholder meeting ^b
Noell, Jesse	Landowner – Elk River Watershed	jnoell@copper.net	Stakeholder meeting ^a , e-mail ^a
Payliuco, Bob	NOAA	None provided.	Field ^b
Quinn, Brian	Tree Sitter	None provided	Field ^b , interview ^b , stakeholder meeting ^b
Rodoni, Johanna	Cattle Rancher	jmrodoni@humboldt1.com	Stakeholder meeting ^b
Rosales, Hawk	Executive Director. InterTribal Sinkyone Wilderness Council	P.O. Box 1523 Ukiah, CA 95482 707-468-9500 intertribalsinkyone@sbcglobal.net	Telephone call ^b , e-mails ^b

Routier, Helene	Table Bluff Reservation, Wiyot Tribe	707-733-5055	Telephone call ^a
Skaggs, Joanne	Skaggs Tree Farm	707-839-0679	Stakeholder meeting ^b
Skaggs, Otis	Skaggs Tree Farm	707-839-0679	Stakeholder meeting ^b
Smith, Jimmy	Humboldt County Board of Supervisors	707-476-2391	Stakeholder meeting ^b
Smith, Walter	SmartWood	wsmith@ra.org	Telephone call, e-mail ^a
Snyder, Wendy	Division Chief, CAL FIRE, Forester	135 Ridgeway Avenue Santa Rosa, CA 95401 707-576-2941	Telephone ^b
Stephens, Bob	Retied PALCO Chief Forester	1034 Riverside Drive Rio Dell, CA 95562 707764-3739	Stakeholder meeting ^b
Stoetzer, Billy	Tree sitter	None provided.	Stakeholder meeting ^b
Tollefson, Trevor	Biologist, California Department of Fish and Game	None provided.	Field ^b
Valachovic, Yana	Forest Advisor, UC Cooperative Extension	yvala@ucdavis.edu	Stakeholder meeting ^a , interview ^a
Vyerberg, Kris	Engineering Geologist, California Department of Fish and Game	1812 Ninth Street Sacramento, CA 95814 916-445-2182 kavberg@dfg.ca.gov	Field ^b
Wheeler, Jeremy	Mattole Restoration Council	jeremy@mattole.org	Telephone call ^a
Wildgrube, Neil	Lewis Logging	None provided.	Field ^b , interview ^b
Wrigley, Kristi	Landowner – Elk River Watershed	kwrigley@hughes.net	Stakeholder meeting ^c , telephone call ^a , e-mail ^c

^aContact made during the pre-assessment only.

^bContact made during the assessment only.

^cContact made during the both the pre-assessment and assessment.

APPENDIX VIII: Peer review addenda (confidential)

**SmartWood and SCS
Confidential Peer Review Report**

Candidate Operation: Humboldt Redwood Co.

Peer Reviewer: Chris Maser

Date of Review: 16 Nov. 2009

Reviewer Specialization: ecology (e.g., forest management, ecology, social science)

Anonymity: Note: The comments you provide in this review will be shared with the candidate operation. Do you wish your identity to remain confidential? Yes No

Reviewer Comments:

Assessment Report Quality:

How would you rate the overall quality of the assessment report?

High Acceptable Poor (provide comments below)

Do team observations and findings clearly support the certification decision reached?

Yes No Comments: more actual data on the biophysical conditions of the sites would have been good.

Areas for improvement: *(please provide general comments here, do not edit the report)*

Editing/Formatting: Comments: the report would benefit from grammatical editing

Lack of Clarity: Comments: general clarity is good

Technical Analysis: basically good Comments: see below (reference weak sections)

Information lacking: Please indicate areas: It would have been good to have more actual observational data on the biophysical aspects of the sites. However, while I cannot assess the biophysical condition from this report (e.g., streams, riparian zones, CWD), having worked with Hrubes in the field, I trust his judgement. (if detail is needed include in the comments table)

Other comments:

Assessment Process:

Based upon the information in the assessment report, do you have any comments on the assessment process (i.e. team composition, field time, stakeholder consultation) and the adequacy of fieldwork as the basis for making the certification decision?

Comments: A biologist/ecologist would have been a good addition, one I think is critical to the overall excellence of such a report. After all, the biophysical integrity of the forested ecosystem is basic to its over-all function as a service provider for humanity.

Report Conclusions:

Is the certification recommendation of the team justified by the reports observations and findings? Yes No If no, explain?

Do you agree with certification recommendation of the team? Yes No If no, state reasons why?

Please use the following table to detail:

- your disagreement with specific findings, including certification pre-conditions, conditions and recommendations;
- suggested actions that you feel should be taken, or issues that should be considered, but haven't been considered in the certification assessment report

Report section	Issue: Disagreement or suggested action	SW/SCS Response
General	<p>It would have been good to have more actual observational data on the biophysical aspects of the sites visited, such as the recruitment and disposition of large wood in streams with respect to instream habitat, bank stability, etc.</p> <p>In addition, I want to know the condition of riparian zones because they are the nexus between the aquatic habitat and the upland habitat. They also arbitrate the care taken of the upslope forested areas and the effects of timber harvesting on the streams.</p> <p>Moreover, I found nothing on the suitability of in stream culverts and fish passage.</p> <p>With respect to the forested areas and their management, I want to know how much CWD is left on site, what kind it is, how it is distributed with respect to its role as habitat, and what plans are in place for its short-term and long-term recruitment. These concerns are applicable to dying and dead trees as well.</p> <p>With this in mind, I think the report—excellent as it is—would be even better and more credible overall if issue, such as those listed above, had been discussed, even in a general sense. To simply say that CWD was “adequate” tells me little.</p>	<p>Observational data that demonstrates conformance is typically required for indicator findings; however, additional detail should also be included where appropriate to provide a clearer context of conformance at that site, and the FME and landscape scale.</p> <p>HRC has much biophysical data on streams, draws, and roads. To include the actual data for demonstrating conformance to the indicator would be cost prohibitive. The addition of a hydrologist to the assessment team was intended to</p>

		<p>provide a detailed examination of HRC's stream- and road-management programs.</p> <p>The following has been added to 5.3.c: "When stand conditions permit, HRC retains live, cavity and large trees for snag recruitment. Part of HRC's Watershed Analysis includes an assessment of stream channel conditions. Channel conditions monitored include large wood in streams, and distribution of deep pools and spawning gravels."</p>
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SmartWood and SCS Confidential Peer Review Report

Candidate Operation: Humboldt Redwood Company

Peer Reviewer: John Hodges

Date of Review: November 16, 2009

Reviewer Specialization: Forest Management/ Ecology

Note: The comments you provide in this review will be shared with the candidate operation. Do you wish your identity to remain confidential? Yes No

Reviewer Comments: My review comments are based on the reports received from SmartWood. Most are contained in the comments Table at the end of the report.

Assessment Report Quality:

How would you rate the overall quality of the assessment report?

High Acceptable Poor (provide comments below)

Do team observations and findings clearly support the certification decision reached?

Yes No Comments: Some minor exceptions are given in the Comment Table

Areas for improvement: *(please provide general comments here, do not edit the report)*

Editing/Formatting: Comments: Some minor editing needs to be done

Lack of Clarity: Comments:

Technical Analysis: Comments: Some sections on silviculture are not clear. For example the use of the shelterwood method is used according to the Company but no mentioned in the assessment report. (reference weak sections)

Information lacking: Please indicate areas: Please see details in the comments table (if detail is needed include in the comments table)

Other comments: See comments Table below

Assessment Process:

Based upon the information in the assessment report, do you have any comments on the assessment process (i.e. team composition, field time, stakeholder consultation) and the adequacy of fieldwork as the basis for making the certification decision?

Comments: all above are very favorable

Report Conclusions: Recommend certification of Company with cited CARs

Is the certification recommendation of the team justified by the reports observations and findings? Yes No If no, explain?

Do you agree with certification recommendation of the team? Yes No If no, state reasons why?

Please use the following table to detail:

- your disagreement with specific findings, including certification pre-conditions, conditions and recommendations;
- suggested actions that you feel should be taken, or issues that should be considered, but haven't been considered in the certification assessment report

Peer Reviewer Comments Table:

Table Instructions: Please use this format as table will be used to document SmartWood’s response to your comments. The first column should indicate the section of the report (report section, page or specific criterion) of concern. The second column should include a brief discussion of the issue you raise. The third column is left blank for SW to address your issues. If your comments require additional space, please summarize issue in second column and continue discussion in section following the table. Insert additional rows if necessary.

Report section	Issue: Disagreement or suggested action	SW/SCS Response
General	Team composition involving SmartWood and SCS was excellent, sites visited, stakeholder interviews, and time spent on the assessment was adequate, findings are generally justified, and the results are well presented. Overall a very good report.	Duly Noted
4.3 Env. context	Good coverage. However, I would suggest that a citation to the original literature be given or at least a reference of some kind to the literature.	Both reports now cite that these sections are adapted from HRC’s management plan and other documents.
Appendix I and Appendix II	In several places in the documents the Company simply refers to their management plan, which the reviewer did not see. Company needs to address the particular items in a meaningful way so the items can be evaluated. Also, the implication is that Company uses strictly uneven aged silviculture yet they say that the shelterwood method will be used (just for initial regeneration the one time?) and also that they will plant some 12538 ha. It is not clear how this planting will be done. I assume it is for restoration purposes and not for use of plantations but this needs to be made clear somewhere in the report since it is stated that p10 is NA for the Company.	<p>The shelterwood classification in the SW appendix II applies to current evenaged stands that were in place when HRC purchased the property and are managed going forward for uneven -aged management. HRC’s replanting is typically supplemental to natural regeneration (including the 12538 ha)</p> <p>HRC’s management plan is available to the public at http://hrcllc.com/pdf/HRC-ManagementPlan.pdf.</p> <p>HRC does not mention the shelterwood method anywhere in the management plan. HRC mentions that current, young even-aged stands will be converted to uneven-aged management.</p> <p>HRC employs a combination of natural and</p>

		<p>artificial regeneration with native species of known provenance to meet both stocking requirements and restoration objectives. HRC conducts supplemental planting, or artificial regeneration, in a way that is consistent with natural forest management in that the seedlings are planted in clusters and enter an uneven-aged-silvicultural regimen.</p> <p>HRC inter-plants mostly with Redwood and occasionally Douglas-fir. Redwood, however, is the most difficult to regenerate naturally.</p>
5.6.a	More information is needed here to justify the level of harvesting or at least refer to 7.1.d if enough information is given there.	Added text from 7.1.d to 5.6.a.
5.6.c.	Is overstocking a problem in any of the young stands? It is not addressed here and should be if it is a problem.	<p>Overstocking is an issue on some of the younger stands that were not pre-commercially thinned under PALCO. However, this is not a widespread problem by any means.</p> <p>SW/SCS auditors visited an overstocked stand that HRC plans to thin to favor the residual Redwood component as the remaining Douglas-fir crowns are in poor health. Several snags currently present in the stand could be retained for wildlife purposes.</p>
6.3.d.4	Need to explain how these old-growth and late-succession stands will be created and maintained.	The following text has been inserted into 6.3.d.4: “HRC organizes sustainability units (SUs) at the watershed level. The SUs on HRC forestlands contain a mixture of seasonal and perennial watercourses, which are either protected

		from harvesting and equipment entry or have strict harvest restrictions. Due to these harvesting restrictions in riparian zones, or WLPZs, late successional and old-growth conditions will develop over time in these areas.”
6.3.f.2.	Lots of planting is to be done (restoration purpose?) but I do not find any information on the process or the species to be planted. 6.3.f relates to even-aged silviculture but some emphasis needs to be given to choice of species to plant even if done for restoration.	Comment noted. However, this indicator relates to even-aged silviculture, which HRC does not employ except in restoration circumstances (hardwood reduction) and then only with use of variable retention. SW/SCS feels that it has addressed the reviewer’s comments on supplemental planting in the comment on “Appendix I and Appendix II.”
6.5.n.	This indicator should address effects of vegetation on shade for the streams. Is this a consideration for the Company?	The following text has been added to this indicator: “The equipment entry and harvest restrictions in WLPZs should allow for riparian vegetation to grow in both in stature and crown area, thus enhancing shade cover to maintain lower water temperatures.”
6.7.a	It seems to me that more information is needed here as to how unintended release of chemicals is prevented.	The following text has been added to this indicator: “HRC provides a booklet, “Environmental, Health, and Safety Practices for Contractors” to contractors. The booklet contains information on legal requirements of contractors, procedures on contractor responsibilities, instructions on reporting and containing spills, and state agencies’ environmental compliance

		<p>inspections.</p> <p>“Logging equipment was stored at landings on HRC harvest sites. Auditors noted toolkits and fire-safety kits “located in safe areas near landings for routine vehicle maintenance.”</p>
7.1.c	It seems (from Appendix II) that HRC may also use some even-aged methods (shelterwood) of silviculture. Does this need to be explained???	<p>HRC is converting their current even-aged stands to uneven-aged stands to uneven aged stands. Variable retention, a type of even-aged entry, is employed only in “hardwood challenged” circumstances.</p>
7.1.d.1. and 7.1.e.	I believe that some (more) explanation of current and proposed methods for determination of growth is warranted, for example use of permanent plots, etc.	<p>Plot information is in the Plan. Growth is covered under the Inventory section of the plan starting on page 15.</p> <p>SW/SCS believes that CAR 2009.11 addresses the reviewer’s concerns with forest inventory.</p> <p>Data collected under PALCO is sufficient to make estimates of the property-wide allowable annual cut (55 mmbf), which HRC is well under this year.</p>
7.1.h.1.	Was all information required in indicator shown on maps? I see no reference to soils maps in the report.	<p>Soils conditions and conservation are considered in management planning and information is included in GIS and generated harvest maps. This has been added to the findings.</p>
7.2.a	Seems to me that more is needed here. How often will the management plan be revised/modified and will modifications be continuous as needed for unforeseen circumstances?	<p>The following has been added to the indicator, modified from HRC’s management plan:</p> <p>“According to its management plan, every</p>

		<p>HRC policy, procedure, operation, and even company objective is subject to change through adaptive management.</p> <p>“Both HRC’s forest inventory and its management plan will be fully re-evaluated every five (5) years; watershed analysis will be re-visited every ten years or so. Annual surveys and monitoring of wildlife, plants, streams, hill slopes, and roads feed into the annual decision-making process for timber harvesting plan layout and for prioritizing forest, road, and stream restoration work.”</p>
8.2.b	The major fault I see with certification for the Company and with the assessment is the lack of information on growth rates and regeneration. Is regeneration being monitored? I cannot find anywhere it is addressed as to how or if it is done.	SW/SCS believes that CAR 2009.11 addresses the reviewer’s concerns with forest inventory, including growth rates and regeneration.
C8.4	Were the results of monitoring (inventory) incorporated into the latest management plan?	HRC and SW/SCS recognize that HRC’s forest-inventory program needs refinement and must be updated. HRC discusses its most recent inventory in its management plan. The SW/SCS team assigned CAR 2009.11 in response to the need to refine the forest inventory to meet growth and regeneration projections for each of HRC’s sustainability units (individual management units organized at the watershed level).

APPENDIX X: FME map

