CONTROLLED WOOD RISK ASSESSMENT PUBLIC REPORT

According to FSC-STD-40-005 v3-1 based on the draft FSC-NRA-USA V2-0 2017.

COUNTRY OF ORIGIN: United States North-East (Maine, New-York, New-Hampshire, Vermont, Massachusetts)

Certificate holder:	Masonite International Corporation	Ecoregions covered by this risk assessment and status:	NA0406 - Eastern forest-boreal transition (Upper NY - Adirondak region) NA0407 - Eastern Great Lakes Lowland Forest (NY, VT) NA0410 - New England-Acadian forest (ME, MA, NH, VT) NA0411 - Northeastern coastal (ME, MA) forests
Date of risk assessment:	January 2018		
Certificate holder address:	6184 rue Notre-Dame, Lac- Mégantic, QC, Canada G6B 3B5		

Summary:

(from: FSC-NRA-USA V2-0 DRAFT, ANNEX C)

Risk Designations by FSC US Region

Low: indicates the area of origin of the wood purchased by Masonite Corporation, QC, Canada

				Catego	y 3: High C	onservation	Values			
FSC US Region	Category 1: Legality	Category 2: Traditional & Human Rights		HCV 2: Landscape- Level Forests	HCV 3: Rare Ecosystems	HCV 4: Critical Ecosystem Services	HCV 5: Community Needs	HCV 6: Cultural Values	Category 4: Conversion	Category 5: Genetically Modified Organisms
Pacific Coast	Low	Low	Specified	Low	Specified ⁶	Low	Low	Low	Specified ¹¹	Low
Rocky Mountains	Low	Low	Low	Low	Specified ¹	Low	Low	Low	Low	Low
Southwest	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
Non-Forested	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
Great Lakes	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
Northeast	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
Appalachian	Low	Low	Specified	Low	Specified ⁸	Low	Low	Low	Low	Low
Ozark-Ouachita	Low	Low	Specified ³	Low	Low	Low	Low	Low	Low	Low
Mississippi Alluvial	Low	Low	Specified ⁴	Low	Specified ⁹	Low	Low	Low	Specified ¹²	Low
Southeast	Low	Low	Specified ⁵	Low	Specified ¹⁰	Low	Low	Low	Specified ¹³	Low

¹ Critical Biodiversity Area: Central California, Klamath-Siskiyou

Species: Lesser Slender Salamander, Relictual Slender Salamander, Scott Bar Salamander

² Critical Biodiversity Area: Central Appalachians, Southern Appalachians Species: Cheoah Bald Salamander

³ Critical Biodiversity Area: Ouachita River Valley

⁴ Species: Ivory Billed Woodpecker

⁵ Critical Biodiversity Area: Southern Appalachian, Cape Fear Arch, Florida Panhandle, Central Florida Species: Dusky Gopher Frog, Houston Toad, Patch-nosed Salamander

⁶ Old Growth Forest

⁷ Old Growth Forest

⁸ Priority Forest Type: Mesophytic Cove Sites

⁹ Priority Forest Type: Late Successional Bottomland Hardwoods

¹⁰ Priority Forest Type: Late Successional Bottomland Hardwoods, Native Longleaf Pine Systems

¹¹ Entire region

¹² Limited to the portion of the region that occurs within the state of Louisiana

¹³ Entire region, with the exception of the portion of the region that occurs within the states of Mississippi, Alabama, and Arkansas

Overview

The Category 1 risk assessment was completed by a consultant on behalf of FSC International. It was approved following a public consultation and then formally published as part of a Centralized National Risk Assessment (CNRA) for the entire United States (including Categories 1 and 5). The following content for Category 1 remains exactly the same as it was in the CNRA.

Sources of legal timber in the conterminous United States

Forest classification type	Permit/license type	Main license requirements (forest management plan, harvest plan or similar?)	Clarification
Public lands	Timber sale contract	Harvest in accordance with contract, which conforms to the timber sale plans of the land management agency, which in turn conform to the agency's land management plans, and all in accord with governing statutes and regulations.*	The exact planning requirements vary by jurisdiction and managing agency. Also, some jurisdictions and agencies have different requirements for minor and subsistence harvests. These may require permits or notice.
Private lands, in states with forest practices laws	Permission of landowner plus state permit or notice given to state	Harvest with permission of land owner; in accordance with forest practices laws and any other laws that might apply (e.g., fire prevention); after any necessary planning submitted, permit obtained, or notice given to state.*	States with forest practice laws are mostly in the western US. Requirements vary. In California, there must be a plan prepared by a licensed forester submitted and approved by the state. In Oregon, there is no plan or permit required, only a requirement for giving notice to the state.
Private lands, in states without full forest practices acts but with some regulation	Permission of landowner, perhaps with state notice or a permit	Harvest with permission of landowner, in accordance with any laws that might apply (e.g., fire prevention laws, seed tree laws, wetlands protection laws); sometimes after notice given to state.*	Examples: New Hampshire requires notice for tax purposes and sometimes the posting of a tax bond, requires a permit for activities in wetlands, has penalties for timber trespass and deceptive forestry practices, limits

			clear-cutting around highways, streams, and water bodies, and regulates the disposal of slash.
			Virginia has four basic legal requirements: don't cause water pollution, give the state notice before logging, leave seed trees in pine stands (or replant or submit to the state a conservation plan for such stands), and suppress fires.
Private lands, states with no	Permission of landowner	No specific requirements; often voluntary best	Example:
special forest harvest legislation		management practices for water quality (BMPs).*	Alabama has voluntary BMPs. The state collects severance taxes from sawmills and log yards, which can pass on the expense to loggers or landowners.

^{*}Harvests on all categories of land are subject to some federal regulations. For example, the Endangered Species Act prevents disturbance or harm to threatened or endangered species. The Clean Water Act regulates movement of soil (dredging and filling) in wetland areas. Also, businesses are subject to tax, employment, workplace safety, and other laws. Safety laws in particular may be specific to logging.

Category 1. Illegally Harvested Wood

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	Legal righ	ts to harvest	
1.1 Land	Applicable laws and regulations	Alberto Goetzl, S. C., Paul Ellefson, P. U.,	Low risk
tenure and manage ment	Public lands are managed by associated agencies at either the federal or state level. Most federally owned land available for commercial timber is managed by the US Forest Service (Dept. of Agriculture).	Philip Guillery, T. F., & Gary Dodge, P. C. (2008). Assessment of Lawful Harvesting & Sustainability of US Hardwood Exports. Seneca Creek Associates, LLC	Land records in the United States are highly reliable. Banks routinely issue mortgages based on them.
rights	The property clause of the US Constitution is in Article 4, Section 3. The guarantees of due process and just compensation are in Amendments 5 and 14.	[http://www.americanhardwood.org/fileadmin/	Large property transactions routinely proceed when the records show clear title.
	Generally, the federal statutes concerning federal lands are codified in Title 16 (conservation) and Title 43 (public lands) of the US Code (USC). The provisions concerning military reservations are in Title 10.	The websites of the various agencies provide statistics on their land ownership.	In its report to the Montreal Process Working Group on the Conservation and Management of Temperate and
	Many federal agency regulations concerning federal lands are in Title 36 (parks, forests, and public property) and Title 43 (Public lands: Interior) of the Code of Federal Regulations (CFR), although other	Ross W. Gorte, Carol Hardy Vincent, Laura A. Hanson & Marc R. Rosenblum (2012). Federal Land Ownership: Overview and Data - Report R42346. Congressional Research	Boreal Forests, in scoring an indicator relating to land tenure, the US government concluded that, "All forest land owners, public and

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	titles have applicable rules. For example, presidential "executive orders" reserving lands would be codified in Title 3 of the CFR, and Title 50 contains rules of the Fish and Wildlife Service. The internal rules of procedure of agencies are not all codified in the CFR. Important sources of information on US Forest Service procedures and standards are the Forest Service Manual and the Forest Service Handbook. The organization of state and local land management agencies varies, e.g. in Alabama, the state Forestry Commission manages a few thousand hectares of state forests. One state forest includes a wildlife area managed in conjunction with the state's Department of Conservation and Natural Resources. For privately owned lands, state and local laws and institutions largely govern tenure. State laws govern the sale or transfer of rights to land, the rights of property owners and occupants, and the recording of interests and rights to land. Most states do not have a "Torrens" system where title results from registration. Rather, land rights transfer from person to person based on the issuance of deeds, mortgages, and other granting instruments, and recording of these instruments provides possible purchasers with notice of claims to the land. Private companies called title insurers will search the records and issue limited guarantees stating that a particular seller has rights to convey. State (and in some cases federal) courts will resolve disputes over tenure rights. It is possible (but unusual) to gain rights to land through "adverse possession." If a person exercises a right to land in an open manner, hostile to the rights of the owner, continuously, for a period of time set in statute (typically whatever the state's statute of limitations is for trespass), that person gains rights to the land. These rights could be outright ownership or something less, such as an easement (sometimes called a prescriptive easement). This is why an inspection of the land, along with inspection of the land records, is necess	Service [fas.org/sgp/crs/misc/R42346.pdf]. United States Department of Agriculture Forest Service (2011) National Report on Sustainable Forests - 2010 FS-979. [http://www.fs.fed.us/research/sustain/national -report.php.] Onsrud, Harlan J. (1989) "The Land Tenure System of the United States," Forum: Zeitschrift des Bundes der Offentlich Bestellten Vermessungsingenieure, Jan. 1989. [http://www.spatial.maine.edu/~onsrud/pubs/la ndtenure07.pdnsrud].	private, exercise their forest tenure rights to achieve their forest land management goals [A]although complex, clear title is usually sufficient [to allow forest management] in the United States. In cases where disagreements about land rights occur, courts provide a means to settle those conflicts." US Department of Agriculture. 2011. National Report on Sustainable Forests—2010, p 111. Compliance with business and tax registration is probably high, but no figures seem readily available. Governments have strong incentive to enforce registration, as it leads to tax revenue. Large businesses, occupying a good deal of commercial or industrial space, are easy for compliance officials to find. With smaller businesses and businesses that cross over from neighboring jurisdictions to do limited tasks, the risk of non-compliance is slightly higher. "There can be high confidence that rights of timber ownership are wellestablished and respected. Approximately 92% of hardwood lands. The vast majority of private landowners own small family forests that average less than 10 hectares in size. Numerous legal processes are available to landowners to resolve disputes involving proper title and/or

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	Licensing to conduct business may be under state or local control or both, depending on the state and the kind of business. Some states require additional specific professional licenses or registration for those in the business of logging or those in the business of giving		the unauthorized taking or sale of timber property." Seneca Creek Report 2008, p ii. "Comparisons of international
	forest management advice. The federal government requires individuals and businesses earning income or paying employees to register for tax purposes.		governance indicators, such as those compiled by the World Bank, strongly indicate that the US is perceived as a
	Governments at all levels hold the power of eminent domain (i.e., the power to acquire title to private lands without the owner's consent), but the U.S. Constitution requires that owners receive due process of law (governments must bring a lawsuit to acquire land if the owner is unwilling to sell it) and just compensation.		country with a high regard for the rule of law, an effective environmental, labor and public welfare regulatory environment, and a low level of corruption." Seneca
	State and local laws govern the classification and management of lands held by state and local governments (about 18 million hectares of potential timberlands). Typically, state or local land management agencies, such as forestry commissions or parks departments, manage these lands.		Creek Report 2008, p iii. Of the World Bank Governance Indicators that measure government effectiveness, regulatory quality and rule of law, the US ranks in the top
	The US Constitution gives the federal Congress power to "dispose of and make all needful Rules and Regulations respecting the Territory or other property of the United States." The Congress has delegated federal land management authority to several agencies (the next cell in this row lists the major ones). Each agency, and in some cases each individual park or reserve, is subject to statutes (written by Congress) and regulations (written by agencies) that govern management. In addition, Congress has established some "systems" with management restrictions (e.g., the Wilderness system, the Wild and Scenic Rivers system, the National Trails system). These systems include lands from multiple agencies, and in some cases non-federal lands. Congress has also given the President authority to designate lands as national monuments, to protect features of historic or scientific interest. Legal Authority		10% of all countries. Indicators measuring the Rule of Law are perhaps the most relevant in terms of a risk assessment for illegal behavior in the U.S. The U.S. ranks just below the 92nd percentile amongst 212 countries, meaning that the rule of law is believed by independent observers around the world to be respected by its citizens and business enterprises" Seneca Creek Report 2008, p 43. Note that these three quotes only relate to hardwood. Based on the available information, the risk is assessed as low.
	Local governments keep land tenure records. In some states, the courts keep the records. In some, the recorder is an administrative		
	office of a local government. Local or state governments handle business registration, and state governments handle creation of		

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	corporations and other legal persons. A business incorporated in one state but operating in several states may have to register as a "foreign" corporation and designate a local agent in each state.		
	In some states, businesses must also register with the state taxing authority.		
	The federal Internal Revenue Service issues employer identification numbers, required of most businesses, used for tracking tax-related payments and obligations. The Social Security Administration issues social security numbers to individuals, used for tracking individual income and tax payments.		
	The organization of state and local land management agencies varies. E.g. in Alabama, the state Forestry Commission manages a few thousand hectares of state forests. One state forest includes a wildlife area managed in conjunction with the state's Department of Conservation and Natural Resources. The Division of State Parks in that department manages the state parks.		
	For federal lands, the five largest land management agencies in terms of total area managed are: • The Bureau of Land Management, managing the "public lands" (100 million hectares, mostly not forested land, but including the commercially valuable forests of the O & C lands in western Oregon)		
	• The US Forest Service, managing the national forests and grasslands and some special reserved lands; by far the largest seller of legal timber from federal lands (78 million hectares, including nonforest lands and lands reserved from commercial harvest)		
	• The US Fish and Wildlife Service, managing the national wildlife refuges (35 million hectares, with the largest of its holdings in Alaska) • The National Park Service, managing national parks, monuments, historic sites, etc. (32 million hectares, also with the majority of its holdings in Alaska)		
	The Department of Defense, managing military reservations (7 million hectares)		
	In addition, other agencies have notable rural land holdings, including: • The Department of Energy, managing nuclear weapons production facilities and surrounding buffer zones		

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	• The Bureau of Reclamation, managing lands under and adjacent to water development facilities such as dams • The Tennessee Valley Authority, managing lands incidental to energy production, river development, and recreation in the mid-South. The Bureau of Indian Affairs oversees about 23 million hectares of federal land held in trust for Native American tribes.		
	Legally required documents or records		
	The most reliable way to determine land ownership is through search of the local property records, coupled with physical survey and inspection of the property for signs of actively used easements or incursions. The tenure rights to land are typically conveyed through deeds and similar documents. The local governments record copies of these documents. In some cases, as with conservation easements, the documents will convey management rights but not possession or full ownership.		
	Local governments will also have records of who has been paying the property taxes for private lands, although the payer is not always the owner.		
	Private owners can convey management rights by lease or contract. In the case of long-term rights that might not be apparent from inspection of the land, a rights holder would be wise to record the document in the property records to provide notice to any potential land purchasers, but generally this is not a legal requirement.		
	State and federal ownership should be apparent from the land records, though it may be from the lack of records of any ownership transfer away from the government.		
	Federal, state, and local laws classify publically owned lands and designate management authority. The laws often identify the land through a legal description (metes and bounds, or by reference to a standard land survey), so these laws can be sources of ownership documentation. However, governments sometimes create		
	reservations that include private "inholdings," and it is still possible on some federal lands to gain a private patent following discovery of a commercially valuable mineral deposit, so in the end the texts of the laws can't be relied upon completely as indicators of ownership. Managing agencies usually have accurate maps of their lands		

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	indicating boundaries and inholdings, and sometimes laws incorporate these maps by reference, but usually the maps do not carry legal weight. Businesses will often have a business license from the local government. Businesses with offices in urban areas will often have a certificate of occupancy or occupation permit attesting to compliance with zoning laws, although that certificate may be held by the landlord if the business is renting office or industrial space. Corporations and other legal persons may have a certificate of incorporation or other paperwork from the state attesting to their valid organization. Most businesses must have an employer identification number issued by the federal Internal Revenue Service. Sole proprietors may have a social security number, issued by the federal Social Security Administration, instead.		
1.2	Applicable laws and regulations	Laws	Low risk
Concessi on licenses	For US Forest Service: FSH 2409.18, Ch. 50 § 53 State lands have similar regulations based at the state level. One statutory authorization for Forest Service timber sales is 16 U.S. Code § 472a. The basic regulations are in 36 CFR part 223, subpart B. The internal procedures can be found in the Forest Service Manual. FSM 2400, covers timber resource management, including commercial timber sales (Chapter 2430) and timber sale contract administration (Chapter 2450). The basic rules for Bureau of Land Management timber sales are 43 CFR Chapter II, subchapter E, parts 5000 to 5510. The statutory provisions allowing forest management and timber sales on lands held by the Bureau of Indian Affairs are in 25 USC §§ 406, 407, and 466. The rules are in 25 CFR part 163. The US Fish and Wildlife Service can issue a permit for timber harvest on national wildlife refuges if that is compatible with the refuge's purpose. See 50 CFR § 29.1. On refuges in Alaska, subsistence (i.e., non-commercial) harvests are allowable, and some require a special	FSH 2409.18, Chapter 50, Section 53 - http://www.fs.fed.us/forestmanagement/products/contracts.shtml 16 U.S. Code § 472a - Timber sales on National Forest System lands - http://www.law.cornell.edu/uscode/text/16/472 a. 36 CFR Part 223, Subpart B - Timber Sale Contracts - http://www.law.cornell.edu/cfr/text/3 6/part-223/subpart-B. Forest Service Manual FSM 2400 - http://www.fs.fed.us/cgi-bin/Directives/get_dirs/fsm?2400 43 CFR Chapter II, subchapter E, parts 5000 to 5510 - http://www.law.cornell.edu/cfr/text/43/chapter-II/subchapter-E.	Most timber harvest in the United States occurs on private land (fee simple), where Concession Licenses are not required. Public forests in the US are managed either at the state / local level, or by the US Forest Service or the Federal Bureau of Land Management (which conducts its own timber management and timber sales programs). In many cases a harvesting permit, which acts like a concession license is required. In the United States, the term "concession" is usually understood to mean transfer of a long-term license to manage and enjoy the fruits of a resource. In that sense, the federal government rarely issues concessions for timber

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Indicator	use permit from the refuge manager. 50 CFR § 36.15. The general authorization for sales of land interests for timber production or sales of forest products from military lands is 10 USC §2665. The Department of Defense and the individual services have regulations concerning timber sales. The federal government has laws that debar or suspend persons with a history of bad actions from participating in federal contracts, and the government maintains lists of such persons. The Forest Service's rules for debarment because of actions relating to timber sales are in 36 CFR part 223, subpart C. Other agencies can debar persons for violations of their laws, and these listings may have government-wide effect, stopping new contracts and grants. The US General Services Administration keeps a government-wide list of debarred persons, the Excluded Parties List System. A new website, sam.gov, provides access. On private lands, the general laws for contracts and property transactions govern most transfers of rights to manage and harvest. These are largely state laws. A private landowner will typically enter into a contract with a logger allowing the logger to harvest timber. Private lands may be leased long-term for timber production, but it's actually more common for private landowners to lease their lands for hunting and recreation, reserving for themselves the right to sell or harvest timber.	25 USC §§ 406, 407, and 466 - http://www.law.cornell.edu/uscode/text/25/cha pter-12 and http://www.law.cornell.edu/uscode/text/25/466 . 25 CFR part 163 - http://www.law.cornell.edu/cfr/text/2 5/part- 163. 50 CFR § 29.1 - http://www.law.cornell.edu/cfr/text/5 0/29.1. 50 CFR § 36.15 - http://www.law.cornell.edu/cfr/text/5 0/36.15. 10 USC §2665 - http://www.law.cornell.edu/uscode/text/10/266 5. 36 CFR part 223, subpart C - http://www.law.cornell.edu/cfr/text/36/part- 223/subpart-C. References The US General Services Administration keeps a government- wide list of debarred	production. That goes also for state and private ownership. A study of worldwide concession practices for the World Bank found that, "Few, if any, concession- type forest tenures remain in the United States." John A. Gray, 2002, Forest Concession Policies and Revenue Systems: Country Experiences and Policy Changes for Sustainable Tropical Forestry, at p. 8. Instead, the typical practice is for the landowner to retain management authority over the forest and grant short-term permission to harvest timber. On public lands, this means that the managing agency holds timber sales. Each agency has its own laws and rules for conducting sales. On public lands (mainly those managed at the federal level by the US Forest Service) a Timber Sale Contract is required that specifies environmental compliance and a fee
	Private lands may be leased long-term for timber production, but it's actually more common for private landowners to lease their lands for hunting and recreation, reserving for themselves the right to sell or harvest timber. Another form of long-term management control over land is the conservation easement. These are becoming more common in the	223/subpart-C. References The US General Services Administration	sales. On public lands (mainly those managed at the federal level by the US Forest Service) a Timber Sale Contract is required that specifies environmental compliance and a fee based on an evaluation of the timber value. State natural resource
	United States. The private owner grants a third party (typically a government or a non-governmental conservation organization) the right to block uses of the land. The easement may require the land to be kept in a natural state, or it may allow some commercial use if it is consistent with the purpose of the easement. For example, an easement to protect the views of land around an historic village might allow farming or forestry to continue but would prohibit construction of modern roads or structures. Conservation easements are transfers of rights that bind subsequent owners of the land, and as such the easements are usually recorded in the land records. In return for the easement, the land owner may get a purchase payment, may enjoy	John A. Gray (2002). Forest Concession Policies and Revenue Systems: Country Experiences and Policy Changes for Sustainable Tropical Forestry. World Bank Technical Paper No. 522. [http://elibrary.worldbank.org/doi/pdf /10.1596/0-8213-5170-2] at p.8. Alberto Goetzl, S. C., Paul Ellefson, P. U., Philip Guillery, T. F., & Gary Dodge, P. C. (2008). Assessment of Lawful Harvesting &	agencies have similar requirements. On public lands, the process of contracting tends to be highly transparent. Opportunities to purchase timber are announced publicly, the bidding process is subject to public scrutiny, and the contracts themselves are public records. Even in anecdotal reports, there does not seem to be much evidence of corruption by public

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	lower property taxes due to the reduced market value of land subject to the easement, or may get a one-time deduction for income tax purposes reflecting the value of a donated easement. Legal Authority For federal lands, see the federal land management agencies in the box above. For state and local lands, the legal authority is the state or local land management agency. Below is a list of the main forestry agencies in the fifty states. In many states, universities have forestry extension programs, and in some states these have a role in management of state lands. US Forest Service Alabama Forestry Commission Alaska Division of Forestry Arizona State Land Department Arkansas Forestry Commission California Department of Forestry and Fire Protection Colorado State Forest Service Delaware Department of Agriculture Forest Service Florida Division of Forestry Georgia Forestry Commission Hawaii Division of Forestry and Wildlife Idaho Department of Lands Illinois Division of Forest Resources Indiana Division of Forestry Iowa Dept. of Natural Resources - Forestry Division Kansas Forest Service Kentucky Division of Forestry Louisiana Department of Agriculture and Forestry - Office of Forestry Maine Forest Service Massachusetts Division of Forests & Parks - Bureau of Forestry Michigan Dept. of Natural Resources - Forest Resources Division Minnesota Dept. of Natural Resources - Division of Forestry Mississippi Forestry Commission	Sustainability of US Hardwood Exports. Seneca Creek Associates, LLC. [http://www.americanhardwood.org/f ileadmin/docs/Seneca_Creek_Study/Seneca_Creek_StudyFull_Version.pdf]. Government Accountability Project. Undated. 'Field Guide to Timber Theft: Understanding Timber Sales, the Contract, and the Law'. [http://www.bark- out.org/sites/default/files/bark- docs/Field_Guide_toTimber_Theft.p df'] State Forestry Commission South Carolina 'Don't Be A Victim Of Timber Transaction Crime Information For Forest Landowners in South Carolina' - http://www.state.sc.us/forest/timber val.htm. South Carolina Forestry Association, SCFA - http://www.scforestry.org/.	officials in the award of timber sales. A separate issue is the possibility of collusion among bidders. There is no available evidence of this. A third issue is the possibility of people evading the debarment laws. There is no available evidence of this. On private lands, the transaction is rooted in contract. Fraud is a concern. A buyer could misrepresent its logging skills or its intent to follow forest practice laws. A buyer or seller could mislead the other about the value of the standing timber. A buyer could use threats or intimidation to induce a landowner to sell timber. Of these, the greatest risk seems to be the logger or buyer fraudulently misleading the landowner about the value of the timber. Some state forestry agency websites and publications warn about this problem. See, e.g., http://www.state.sc.us/forest/timberv al.htm. This site estimates the loss from timber theft and fraud (two different crimes) in South Carolina at \$10 million annually. The annual "delivered value" of timber in the state is over \$783 million (http://www.scforestry.org/), so the estimated loss is about 1.3% (assuming that the estimated loss is also in terms of "delivered value").

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	Missouri Department of Conservation		On the whole, the risk of illegality in
	Montana Dept. of Natural Resources and Conservation - Forestry		entering into contracts, public or
	Division		private, is real, but is considered low.
	Nebraska Forest Service		
	Nevada Division of Forestry		
	New Hampshire Division of Forests & Lands		
	New Jersey Division of Parks & Forestry		
	New Mexico Forestry Division		
	New York Division of Lands & Forests		
	North Carolina Division of Forest Resources		
	North Dakota Forest Service		
	Ohio Department of Natural Resources - Forestry		
	Oklahoma Forestry Services		
	Oregon Department of Forestry		
	Pennsylvania Bureau of Forestry		
	Rhode Island Division of Forest Environment		
	South Carolina Forestry Commission		
	South Dakota Division of Resource Conservation & Forestry		
	Tennessee Division of Forestry		
	Texas Forest Service		
	Utah Division of Forestry, Fire, and State Lands		
	Vermont Department of Forestry, Parks & Recreation		
	Virginia Department of Forestry		
	Washington Department of Natural Resources		
	West Virginia Division of Forestry		
	Wisconsin Department of Natural Resources Forestry Program		
	Wyoming State Forestry Division		
	Legally required documents or records		
	A written Timber Sale Contract (US Forest Service) - A Forest		
	Service contract usually requires advance payment and the posting of		
	a performance bond. There should be documentation of deposit of		
	funds or establishment of a surety by a third party.		
	Other agencies and states will have their own requirements, but government sales contracts are probably universally captured in		

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	writing, and the payment and bonding requirements will probably be similar to those of the US Forest Service.		
	On private lands, timber sale contracts are usually written documents, but some landowners and loggers have been known to work based on oral understandings.		
	Conservation easements and long-term leases must be in writing to be enforceable.		
1.3	Applicable laws and regulations	Laws	Low risk
Manage	National Forest Management Policy Act of 1976 (US Forest Service	US Forest Service	Federal lands
ment and harvestin	lands)	Planning requirements in statute	US Forest Service: The Forest
g planning	Bureau of Land Management: BLM planning is governed by the Federal Land Policy and Management Act.	- National renewable resource assessment: 16 USC § 1601,	Service does inventory and plans on many scales, from national to the
pianing	Federal business practices law.	http://www.law.cornell.edu/uscode/text/16/160	individual timber sale. On the
	Business & forest practices laws (for all states)	1.	national level, the Forest and Rangelands Renewable Resources
	US Forest Service	- Renewable resource program: 16 USC § 1602.	Planning Act requires the Forest
	Planning requirements in statute	http://www.law.cornell.edu/uscode/text/16/160	Service to prepare a national
	- National renewable resource assessment: 16 USC § 1601	2.	assessment of the demand and
	- Renewable resource program: 16 USC § 1602	- Inventory: 16 USC § 1603,	supply of renewable resources in the country and a renewable resource
	- Inventory: 16 USC § 1603	http://www.law.cornell.edu/uscode/text/16/160	program, which includes goals for
	- Land and resource management plans: 16 USC § 1604.	3.	Forest Service outputs of timber. The
	Planning requirements in the Code of Federal Regulations	- Land and resource management plans: 16	nine regions of the Forest Service
	- Planning generally: 36 CFR pt. 219	USC § 1604, http://www.law.cornell.edu/uscode/text/16/160	prepare regional guides addressing
	- Environmental impact assessment: 36 CFR pt. 220.	4.	regional planning issues. Then, under the National Forest
	- Timber management planning: 36 CFR pt. 221.	Planning requirements in the Code of Federal	Management Act, each of the over
	Planning requirements in the Forest Service Manual	Regulations	100 units of the Forest Service
	 National resource planning: FSM 1910. Land and resource management planning: FSM 1920. Timber management planning: FSM 2410. 	- Planning generally: 36 CFR pt. 219, http://www.law.cornell.edu/cfr/text/3 6/part- 219.	prepares a land and resource management plan, which, among other things, identifies areas open to
	Bureau of Land Management	- Environmental impact assessment: 36 CFR	harvest. The law requires the Forest
	Planning requirements in statute	pt. 220 http://www.law.cornell.edu/cfr/text/3	Service to involve the public in
	- Inventory: 43 USC § 1711	6/part-220.	planning, and for each plan the Forest Service must prepare an
	- Land use planning: 43 USC § 1712.	- Timber management planning: 36 CFR pt. 221, http://www.law.cornell.edu/cfr/text/3	environmental impact statement

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
Indicator		6/part-221. Planning requirements in the Forest Service Manual - National resource planning: FSM 1910, http://www.fs.fed.us/im/directives/fsm/1900/19 10.txt. - Land and resource management planning: FSM 1920, http://www.fs.fed.us/im/directives/fsm/1900/19 20.doc. - Timber management planning: FSM 2410, http://www.fs.fed.us/im/directives/fsm/2400/24 10.doc. Bureau of Land Management Planning requirements in statute - Inventory: 43 USC § 1711, http://www.law.cornell.edu/uscode/text/43/171 1. - Land use planning: 43 USC § 1712, http://www.law.cornell.edu/uscode/text/43/171 2.	satisfying the requirements of the National Environmental Policy Act. The Forest Service then draws up separate timber management plans. These cover smaller areas and shorter timeframes than the land and resource management plans. These plans are also subject to environmental assessment. Bureau of Land Management: BLM planning is governed by the Federal Land Policy and Management Act. It too requires comprehensive management plans, but it has far less detailed planning requirements than the Forest Service laws. On BLM's most productive forest lands, the O & C lands, the O & C Lands Act sets the goals of management, but it does not have detailed planning requirements. Bureau of Indian Affairs: If the Native American tribe is interested and
	state forests will have planning requirements in the law. A few examples are listed in the box in this row dealing with sources of information.	- Land use planning: 43 USC § 1712, http://www.law.cornell.edu/uscode/text/43/171	but it does not have detailed planning requirements. Bureau of Indian Affairs: If the Native
	registered professional forester must prepare these plans. - The state of Oregon requires a harvest plan for harvests needing a waiver from forest practices rules, harvests near certain streams or wetlands, and harvests affecting endangered species. - Some states require landowners to submit a timber management plan before the state will classify land as timber land or forest land, reducing the property tax rate. Most states, though, do not require management plans from private owners. - Some voluntary programs require private planning in order to	Planning requirements in the Code of Federal Regulations - Resource management planning: 43 CFR part 1600, subpart 1610, http://www.law.cornell.edu/cfr/text/4 3/part-1600/subpart-1610 Annual timber plans: 43 CFR § 5410.0-6, http://www.law.cornell.edu/cfr/text/43/5410.0-6.	example, BIA rules require the tribe to prepare appropriate management and operating plans. State permits generally have a minimum threshold for acreage / board feet of harvest before they are required. They are also often required in ecologically sensitive areas.
	become eligible for government benefits or assistance. Under the		For federal lands, the planning

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	national Forest Stewardship Program, the US Forest Service in cooperation with state forest agencies will help non-industrial private forest owners write forest stewardship management plans, but participation in the program is voluntary. Under conservation programs in the federal Farm Bill, administered by the federal Natural Resources Conservation Service, landowners who adopt management plans and put certain sensitive lands under conservation management are eligible for financial incentives. Sample state forest planning law - Michigan: Part 525, Sustainable Forestry on State Forestlands, of the Natural Resources and Environmental Protection Act, section 52503 (codified at Michigan Compiled Laws §324.52503. Sample state laws regarding private land planning - California's Z'berg-Nejedly Forest Practices Act of 1973 requires	Bureau of Indian Affairs - Statutory provisions on forest management: 25 USC Chapter 33, http://www.law.cornell.edu/uscode/text/25/cha pter-33. - Rules regarding forest management, including management planning: 25 CFR part 163, http://www.law.cornell.edu/cfr/text/2 5/part-163. Federal environmental impact assessment (all federal agencies) National Environmental Policy Act EIA requirement: 42 USC § 4332, http://www.law.cornell.edu/uscode/text/42/433	process is transparent and participatory, so flaws in planning regularly come to light but seldom go uncorrected. The agencies allow stakeholders to pursue informal administrative challenges to planning decisions and timber sale approvals. In addition, the courts have ruled that people who enjoy the federal lands for recreation or scenic value have the right to sue the managing agencies for failure to comply with planning or EIA laws. A 2014 study in the Journal of Forestry reported that the US Forest Service was taken
	private timber harvest or management planning. California Public Resources Code §§ 4581 to 4592 (timber harvesting) and §§ 4593 to 4594.7 (non-industrial timber management plans). - Oregon: Oregon Administrative Rules 629-605-0100 and 629-605-0170 - The state of Washington: Revised Code of Washington Chapter 84.34; see particularly § 84.34.041(4).	2. EIA regulations: 40 CFR parts 1500 to 1508, http://www.law.cornell.edu/cfr/text/4 0/chapter-V. State forestry law generally (not just planning laws) - Defenders of Wildlife. 2000. State Forestry Laws.	to court 1125 times between 1989 and 2008 over land management issues. The Service won a bit more than half the cases, lost about a quarter and settled the remainder out of court. Miner, Amanda M.A., Robert W. Malmsheimer, and Denise M. Keele. 2014. Twenty Years of
	Legal Authority For public (federal) forests: US Forest Service	www.defenders.org/publications/state_forestry	Forest Service Land Management Litigation. J. Forestry. Vol 112, Issue
	For the federal and state lands and state regulation of private lands, see the agencies listed in the box above in this column. However, most of the state agencies listed do not require management plans from private lands. State revenue departments and local government revenue and assessor offices administer property tax requirements. Legally required documents or records Timber Sale Contract (US Forest Service) All federal land management plans are public documents. (It is possible that plans for military bases might have portions redacted for national security purposes.) Under the environmental assessment	_laws.pdf. Sample state forest planning law Michigan: Part 525, Sustainable Forestry on State Forestlands, of the Natural Resources and Environmental Protection Act, section 52503 (codified at Michigan Compiled Laws §324.52503, http://www.legislature.mi.gov/(S(bjn2yd45nya 4kxjuhc5t4vrn))/mileg.aspx?page=shortlinkdis play&docname =mcl-324-52503). Sample state laws regarding private land planning	1. pp. 32-40. State planning is similarly transparent. In some cases, citizens have challenged the adequacy of state plans, however the author has not found reports of widespread or systematic violation of planning rules. Planning requirements for private lands are limited. The author has not been able to find indications of regular violations of these

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	laws, the federal agencies must publish a notice of their intent to begin planning, publish a draft plan, take public comment, revise the plan, and publish a final plan. Every US state has some form of freedom of information or open records law. Most management plans for state and local forests are probably public documents. Whether private management plans, if submitted to the government, are public documents, depends on state laws. Many freedom of information act laws have provision for protecting confidential business information in documents held by the government. In Maine, for example, management plans are apparently not public documents.	- California: California Public Resources Code §§ 4581 to 4592, http://www.leginfo.ca.gov/cgi-bin/displaycode?section=prc&group =04001-05000&file=4581-4592, (timber harvesting) and §§ 4593 to 4594.7, http://www.leginfo.ca.gov/cgi-bin/displaycode?section=prc&group =04001-05000&file=4593-4594.7, (non-industrial timber management plans) Oregon: Oregon Administrative Rules 629-605-0100 and 629-605-0170, http://arcweb.sos.state.or.us/pages/rules/oars _600/oar_629/629_605.ht ml Washington State: Revised Code of Washington Chapter 84.34; see particularly § 84.34.041(4), http://app.leg.wa.gov/rcw/default.aspx?cite=8 4.34.	requirements. Based on the available information, the risk for this category has been assessed as low.
		References Paul V. Ellefson, Michael A. Kilgore, Calder M. Hibbard and James E. Granskog (2004). 'Regulation of forestry practices on private land in the United States: Assessment of state agency responsibilities and program effectiveness'. STAFF PAPER SERIES NUMBER 176, Department of Forest Resources, College of Natural Resources and Agricultural Experiment Station, University of Minnesota. [http://www.forestry.umn.edu/prod/groups/cfan s/@pub/@cfans/@forestry/documents/asset/c fans_asset_18 4634.pdf.] Darren Fishell (posted 16 February 2012). 'Georgetown selectmen to investigate potential Tree Growth Tax Fraud'. Bangor Daily News.	

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
		[http://bangordailynews.com/2012/02/16/news/midcoast/georgetown-selectmen-to-investigate-potential-tree-growth-tax-fraud/.]	
		Miner, Amanda M.A., Robert W. Malmsheimer, and Denise M. Keele. 2014. Twenty Years of Forest Service Land Management Litigation. J. Forestry. Vol 112, Issue 1.	
1.4	Applicable laws and regulations	Federal laws - Forest Service and BLM	Low risk
Harvestin g permits	For US Forest Service: FSH 2409.18, Ch. 50 § 53 On Forest Service and BLM lands, the timber sale contract serves the purpose of a permit. The timber sale contract procedural rules for the Forest Service are in the Forest Service Handbook 2409.18, chapter 50, The Forest Service and the Bureau of Land Management also grant permits for small removals of forest products, but these must have minor impact on the resources and total value of under \$1000. West of the 100th meridian, they may not include sawlogs. Forest Service Handbook 2409.18, part 54. The Forest Service may grant permits for harvests for "administrative uses." These include for research purposes, disaster relief, or property improvement (removal of a diseased or infested tree, for example). These ordinarily should involve small volumes of wood; the preferred method for allowing harvest of merchantable timber is through a timber sale. See Forest Service Handbook 2409.18, chapter 80. Based on a small sample of state laws, the states appear to follow the federal practice. That is, they do not require a permit separate from the timber sale contract. On private lands, the required permit will vary from state to state, and in some states, from locality to locality. Western states tend to have more detailed and prescriptive forestry laws. For example, California requires: • The logger to have a license, Cal. Pub. Res Code §§ 4570–4578. • The landowner or logger to file (1) a timber harvest plan (which the state has 30 days to reject); (2) a notice of the beginning of harvest;	lands - The timber sale contract procedural rules for the Forest Service: Forest Service Handbook 2409.18, chapter 50, http://www.fs.fed.us/im/directives/fsh/2409.18/wo_2409.18_50.doc The BLM's rules: 43 CFR pt 5400, http://www.law.cornell.edu/cfr/text/4 3/part-5400, BLM Manual § 5400, http://www.blm.gov/style/medialib/blm/wo/Infor mation_Resources_Management/policy/blm_manual.Par.94852.File.dat/5400_Sales_of_Fo rest _Products.pdf, and BLM Handbook 5400-2 to 5480-1, http://www.blm.gov/style/medialib/blm/wo/Infor mation_Resources_Management/policy/blm_manual.Par.94852.File.dat/5400_Sales_of_Fo rest _Products.pdf - Permits for small removals of forest products: Forest Service Handbook 2409.18, part 54, http://www.fs.fed.us/im/directives/fsh/2409.18/wo_2409.18_50.doc Permits for harvests for "administrative uses": Forest Service Handbook 2409.18, chapter 80, http://www.fs.fed.us/im/directives/fsh/2409.18/2409.18_80.doc.	State permits generally have a minimum threshold for acreage / board feet of harvest before they are required. They are also often required in ecologically sensitive areas. Corruption associated with timber sales and harvest permits in the US is generally not an issue. The US also has a relatively good Corruption Perception Index (73), as measured by Transparency International. Timber is real property and, in many states, is treated similarly as theft of other kinds of property. Additionally, some states have statutes that are specific to timber theft and trespass. There a few potential risks in this category, some of these might equally well fall under "tenure," "taxes," or another category. (1) Harvest off public lands without contract or permit, for commercial purposes. It is easy to find anecdotal reports of small-scale tree theft from public lands. Especially when a slow economy puts rural people out of

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
Indicator		State laws - California: Cal. Pub. Res Code §§ 4570—4578, http://codes.lp.findlaw.com/cacode/PRC/1/d4/2/8/6; Cal. Pub Res. Code §§ 4581—4592, http://codes.lp.findlaw.com/cacode/PRC/1/d4/2/8/7. - Alaska: Alaska statutes § 41.17.090, http://codes.lp.findlaw.com/akstatutes/41/41.1 7./01./41.17.090. - Virginia: Code of Virginia §10.1- 1181.2(H), http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+10.1- 1181.2 - New Hampshire: See University of New Hampshire Cooperative Extension (2014) "Guide to New Hampshire Timber Harvesting Laws", at p.7. http://www.nhdfl.org/library/pdf/Forest%20Prot ection/Guide%20to%20NH%20Timber%20Ha rvesting%20La ws%20rvs2012.pdf References Transparency International Corruption Perception Index - http://www.transparency.org/cpi2013/results University of New Hampshire Cooperative Extension (2014). 'Guide to New Hampshire Timber Harvesting Laws'. [http://www.nhdfl.org/library/pdf/Forest%20Prot ection/Guide%20to%20NH%20Timber%20H arvesting%20L aws%20rvs2012.pdf.] USA Today (18 May 2003), "Thieves steal hundreds of millions of dollars worth of trees," http://usatoday30.usatoday.com/news/nation/2003-05-18-timber-theft_x.htm.	
	proof of mailing. In some states, like New Hampshire, the landowner or logger must post an acknowledgement that the notice was received.	Fox News (13 June 2014), "Redwood burl poaching spreads from national parks to	commercial collection. Of concern generally is that "pressure on

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	In states where some form of plan or post-activity report is required, the landowner or logger should have copies of these.	national forests". [http://www.foxnews.com/us/2014/06/13/redw ood-burl-poaching-spreads-from-national-park-to- national-forests/.]	Federal budgets may have reduced U.S. law enforcement capacity, but no empirical studies are available." US Department of
		Jeffrey Kent (1 January 2012), "Guest Viewpoint: The timber racket: A culture of corruption and political payoffs harms the land and ourselves". Eugene, Oregon, Register-Guard Newspaper, reprinted at [http://olympicforest.org/wp-content/uploads/2014/03/227.pdf.	Agriculture. 2011. National Report on Sustainable Forests— 2010. (3) Harvest off public lands in violation of environmental, labor, or similar conditions in the permit: covered below under environmental and labor issues.
		Shawn Baker (2003). 'An Analysis of Timber Trespass and Theft Issues in the Southern Appalachian Region' Thesis submitted to the Faculty of the Virginia Polytechnic Institute and State University. [http://scholar.lib.vt.edu/theses/available/etd-05212003-	(4) Harvests off public lands while defrauding about volumes, species, or quality: covered below under taxes and fees and under classification of species, quantities, and quality.
		153313/unrestricted/timb_theft_thesis.pdf]. United States Department of Agriculture Forest Service (2011) National Report on Sustainable Forests - 2010 FS-979. [http://www.fs.fed.us/research/sustain/national -report.php.]	(5) Harvests off private land without permission of the owner: timber theft and trespass. This is a chronic, but low-level problem. An article reporting on a new law in the state of Georgia to boost imber theft
		Linda S. Morris (20 September 2014)." New law to crack down on timber theft" The Telegraph. [http://www.macon.com/2014/09/20/3318417_new-law-to-crack-down-on-timber.html].	enforcement reports that the neighboring states of Alabama and South Carolina each investigate 100 to 150 reports of timber theft each year. The New York State Legislative Commission on Rural Resources
		NYS Legislative Commission on Rural Resources (2008). "Timber Theft in New York: A Legislative Briefing". [http://www.nysenate.gov/files/pdfs/timber08a ppdixCfix.pdf].	produced a report on timber theft in 2008 recommending stronger laws and enforcement. A 2003 masters thesis from Virginia Polytechnic Institute and State University surveyed land owners, attorneys,
		Virginia Department of Forestry 2007 Locality Value and Volume -	and law enforcement officers in

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
		http://www.dof.virginia.gov/harvest/data/2007_Value-Volume_County.htm.	twenty counties in a four-state region of the southern Appalachian Mountains and estimated the losses from theft and trespass at \$300,000 per year. This is not a standard statistical region, so any comparisons with total harvest would be inexact. However harvest figures from the seven Virginia counties in the study were valued at over \$24,000,000 in 2007, according to the Virginia Department of Forestry. If the other thirteen counties have anything near that harvest rate, the loss to illegal activity is well below one percent of the total harvest value. Note, though, that the illegal activity probably focuses on high-value hardwood species, such as black cherry (Prunus sylvatica) and black walnut (Juglans nigra) and may account for a somewhat higher proportion of that harvest than these numbers suggest. The Seneca Creek report states that the most commonly reported incidents of timber theft and trespass involve poorly marked or disputed boundary lines. The experience of states with the most detailed information allows an estimate that on the order of 800 to 1,000 significant timber theft cases occur annually in the hardwood region, involving an estimated 20,000 to 25,000 cubic meters (including both softwood and hardwood). Even if half

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
			or more were hardwood trees, stolen timber would represent a very small portion of total US hardwood production – very likely less than 1%.
	Taxes	and fees	
1.5 Payment of royalties and harvestin g fees	Applicable laws and regulations Federal and state tax policies On public lands, the timber sale contract will set the fees for commercial timber. The two most common types are scaled sales (the timber is measured or scaled after it has been cut) and tree measurement or lump-sum sales (the timber in the standing trees is estimated, and the payment specified in the contract is based on that estimate.) See Government Accountability Project (undated) cited above, at p. 11. US Forest Service contracts require an up-front payment, plus a performance bond to assure completion of any tasks required in the contract, such as road maintenance or disposal of logging wastes. On private lands, state and local laws will cover harvesting taxes and fees. As with other kinds of laws, the laws of the fifty states show variation, but there are some basic patterns. Most states charge an annual tax based on the value of real property. These "ad valorem" taxes tend to drive landowners to develop the land if the market value (and hence annual tax) rises. To combat this trend, some states will tax land based on its current value as forest land or based on a flat rate per unit of area, as long as the land remains in forest. To get these lower rates of taxation, the landowner may have to accept conditions that are linked to harvest, such as preparation of a management plan, payment of a yield tax when the timber is harvested, or even granting of a conservation easement limiting development of the land. Also, the landowner might be liable for back taxes based on market value if the land is ever converted to non-forest use. States may also levy taxes on the harvested timber itself. Eleven states have a yield tax based on the value of the timber, and twelve states have a severance tax, which is based on the volume of timber	Taxes as they apply to timber in the US: http://www.fs.fed.us/spf/coop/library/timbertax.pdf The website http://www.timbertax.org/, sponsored by the US Forest Service and private associations representing landowners, has general information on taxation of forestry in the US, with links to state and federal laws. (For a table of state timber tax approaches, see http://www.timbertax.org/statetaxes/quickrefer ence/.) Title V Taxation - Chapter 79 - Forest Conservation and Taxation, Section 79:1 - http://www.gencourt.state.nh.us/rsa/html/v/79/79-mrg.htm. See the sources of information on timber sale contracts for more detailed information on contract types, payments, and bonds. Darren Fishell (posted 16 February 2012). 'Georgetown selectmen to investigate potential Tree Growth Tax Fraud'. Bangor Daily News. [http://bangordailynews.com/2012/02/16/news/midcoast/georgetown-selectmen-to-investigate-potential-tree-growth-tax-fraud/.]	Royalties and harvesting fees are generally only applicable to public lands, which are administered at either the county, state, or federal level. All states and federal agencies that hold land have well developed programs for regulating timber and timber harvest. Stumpage fees are very applicable to private timber harvest. There is no doubt that some timber contract holders have cheated the government out of timber payments, in some cases for millions of dollars. See the Jeffrey Kent opinion piece cited above and the Government Accountability Program guide to timber contracts cited above. One avenue of fraud has been collusion between loggers and scalers to under- report the volume or quality of timber harvested. Because of this, the US Forest Service has been moving away from scaled sales to lump-sum scales. The BLM tends to offer only lump-sum sales. Kent declares that the problem is not corruption, but capture of the government agencies by the

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	regardless of its market value. That means that the majority of states have no special harvest tax.		industries they regulate. There are no payments under the table. Lawful,
	New Hampshire presents an example of a yield tax. It levies a tax of ten percent of the stumpage value of timber harvested. New Hampshire Statutes, Chapter 79. This tax is payable to the town in which the harvested land sits. If the person harvesting the timber does not own the property, the town may require a payment bond before the timber is harvested.		transparent, but troublingly large contributions to political action committees and candidates keep legislators from instituting more burdensome controls and practices on industry. A culture in the agencies
	Legal Authority		that views the industry as a partner in managing the land keeps the
	For public lands, US Forest Service.		agency officials from acting as true
	For the public lands, the land management agency generally collects the amounts due under timber contracts.		watchdogs. Kent's experience was in the 1980s
	For private lands, the property, yield, and severance taxes are usually collected by local governments or by the state agency concerned with revenue.		and '90s. A drop-off of press reports about this kind of contract cheating suggests that after a flurry of bad
	Legally required documents or records		publicity and Congressional
	Timber Sale Contract (US Forest Service)		oversight in the 1990s, the Forest Service may have brought the
	For public lands, the timber contracts will show the amounts or rates		problem under control.
	due. For sales based on estimates of the timber volume, the documents inviting bids should indicate the volume. For sales based on scaled volumes after harvest, there should be paperwork from whoever has done the scaling, which might be a government official or a third party such as a independent scaler or the mill purchasing the raw logs. The government land management agency should have copies. The logger and the government should have records of payments made and bonds or sureties posted.		Studies or documentation of evasion of severance or yield taxes on private harvests has not been found. One news report questions the inclusion of land subject to a conservation easement in a property tax classification intended for lands with forests capable of commercial
	On private lands, the local or state revenue agency will have records of the assessed values of land, the reported volumes of timber harvested, and the tax rates applied. They should also have records of the amounts of taxes paid.		production. True chain of custody marking of trees and tracking of volumes from harvest through milling to bulk sales should make it relatively easy to document tax or contract fraud based on misreporting of harvests.

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination	
1.6 Value added taxes and other sales taxes	Applicable laws and regulations The United States does not have a federal value added tax. None of the states currently have a value added tax, although Hawaii has a general excise tax on businesses, which each business can elect to pass on to customers by charging a "quasi sales tax". The majority of US states and some local governments have sales taxes, levied on sales of goods and sometimes services, but there is usually an exemption for goods sold as raw materials for future processing and goods sold to buyers from out of state. States with	New York sales tax requirements (example): http://www.tax.ny.gov/pubs_and_bulls/tg_bull etins/st/record-keeping_requirements_for_sales_tax_vendors .htm The web site http://www.salestaxinstitute.com/resources/rat es is provided by a private company that keeps track of sales tax rates by state. Note,	http://www.tax.ny.gov/pubs_and_bulls/tg_bull etins/st/record-keeping_requirements_for_sales_tax_vendors .htm The web site http://www.salestaxinstitute.com/resources/rat es is provided by a private company that keeps track of sales tax rates by state. Note, though, that these taxes may not apply to	Low risk Sales taxes are levied at the state level, with the tax rate varying by state from 0% to 7.5%. Ordinarily, harvest and sale of timber is not going to trigger sales or use tax
	sales taxes typically have use taxes, which apply to goods brought in from out of state for which no comparable sales tax has been paid. In most cases, because logs are being sold for further processing, their sale is not taxable. Note that many states and local governments levy an annual ad valorem tax on personal property (i.e., property other than real estate) used in business. The business typically must file an annual property inventory stating the original purchase dates, prices and current depreciated values of its personal property and then make a payment representing some percentage of the total property value. Legal Authority State departments of revenue Sellers collect sales taxes from buyers, and state and local revenue agencies in turn collect sales taxes from sellers. State agencies generally collect use taxes from buyers. Business personal property taxes are usually paid to the revenue departments of local or state governments. Legally required documents or records Differs by state Sellers will have records of sales taxes collected from buyers and paid to the government. Governments will have records of payments collected and forwarded by sellers, although tax filings are usually not public documents. A conscientious buyer will have records of purchases made where a	services, and there may be special rates for some items. For example, a state might have a lower tax or even no tax for food, non-luxury clothing, or prescription drugs, or it might have a separate tax rate that applies to motor vehicles. States and local governments very often have information pages explaining the tax obligations of businesses. For example, the page outlining personal property taxes for businesses in Fairfax County Virginia is http://www.fairfaxcounty.gov/dta/business_per sonalproperty.htm. Penelope Lemov (18 May 2011). "States Look to Collect Internet Sales Taxes". Governing the States and Localities. [http://www.governing.com/columns /public-finance/states-collect- internet-sales-taxes.html].		
	Sellers will have records of sales taxes collected from buyers and paid to the government. Governments will have records of payments collected and forwarded by sellers, although tax filings are usually not public documents.			

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	payment of use taxes. Governments will have records of use tax filings, which are often simply a few lines on the annual income tax forms, but these filings will not be public records.		
	Businesses will have property inventories and records of filing and paying personal property taxes. Governments will have records of filings and payments, which may not be public records.		
1.7	Applicable laws and regulations	For access to the statutes, regulations, and	Low risk
Income	Tax policies Internal Revenue Code	agency guidance, the IRS maintains a gateway webpage: http://www.irs.gov/Tax-	Income and profit taxes are levied at
and profit taxes	U.S. federal tax law is complex. The statutes take up all of title 26 of the U.S. Code. The regulations take up all of title 26 of the Code of Federal Regulations. On top of these, there are formal rules and guidance from the Internal Revenue Service (IRS) and rulings of the courts on tax law.	Professionals/Tax-Code,- Regulations-and-Official-Guidance and http://www.irs.gov/Forms-&-Pubs For an overview of federal tax obligations associated with timber, see http://www.timbertax.org/getstarted/ and the links on that page. Alberto Goetzl, S. C., Paul Ellefson, P. U.,	the federal level, and administered by the Internal Revenue Service (IRS). Most states also leverage addition income and profit taxes, generally at a much lower rate than the federal level. Every individual and every business organized to make profit is subject to
	State laws tend to follow federal law in the definition of income, treatment of deductions from income, and so forth.		
	Corporations with publicly traded stock are subject to regulation from the federal Securities and Exchange Commission, which requires annual public disclosures of basic financial information, including income, assets, and liabilities.		annual federal taxation on net income. All but four states have annual corporate income taxes, and all but seven have annual individual
	Legal Authority	Seneca Creek Associates, LLC	income taxes. In timber sales, this
	Internal Revenue Service (federal agency)	[http://www.americanhardwood.org/fileadmin/	means the landowner selling the
	At the state and local levels, the revenue agencies have various names. The Internal Revenue Service offers the following page linking to business taxation web pages of the states: http://www.irs.gov/Businesses/Small-Businesses-&-Self-Employed/State-Links-1.	docs/Seneca_Creek_Study/Seneca_Creek_St udyFull_Version.pdf]. Summary of the disclosure regulations and areas of possible reform: U.S. Securities and Exchange Commission (2013). "Report on	timber and the logger cutting and selling the logs will have recordkeeping, reporting, and taxpaying obligations. Tax filing tends to be annual,
	Legally required documents or records	Review of Disclosure Requirements in Regulation S-K as Required by Section 108 of	however businesses and individuals may have to make quarterly
	IRS Form 1040: Income taxes IRS Form 1099: Capital Gains taxes	the Jumpstart Our Business Startups Act".	payments of their own estimated
	Income taxation is tied closely to recordkeeping. An individual or business should have full records of income, expenses, and	[http://www.sec.gov/news/studies/2013/reg-sk-disclosure-requirements-review.pdf].	taxes. Employers may have to forward withheld amounts from
	associated tax filings for the past three years. For investments and depreciable assets, the records must go back longer, often to the acquisition of the investment or asset.	IRS Oversight Board (2012). "2012 Taxpayer Attitude Survey".	employee salaries as often as every two weeks.
	acquisition of the investment of asset.	[http://www.treasury.gov/IRSOB/reports/Docu	There is also a tax due upon

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	Taxing authorities will have copies of income tax returns that individuals and businesses have filed, but these are generally not public documents.	ments/IRSOB_TAS%202012_FINAL.pdf].	inheritance, called the estate tax. At the risk of oversimplification, before property passes through inheritance, the estate of the deceased may have to pay estate taxes. If a large part of the value of the estate is in land, the estate may have to sell land or timber to raise money to pay the taxes. The timing of inheritance tax obligations seldom coincides with the ideal rotation age, so this can disrupt management plans. A financial advisor can help a sophisticated landowner anticipate and avoid inheritance taxes by structuring ownership through corporations or trusts. It is often the smaller landholdings, associated with family farms and woodlots, that are caught up in inheritance tax problems.
			The US has an income tax that includes special provisions for certain kinds of timber income and expenses. For example, expenses for reforestation and conservation practices are treated favorably (with limits). The federal government also imposes an estate tax that can affect forest properties upon transfer to estate beneficiaries. In turn, the states have various forms of taxation that include income tax, estate and gift tax, property tax and severance or yield taxes. In many states, property taxes are adjusted so that forest properties are valued for current use while some states apply

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
			a tax at harvest in lieu of (and sometimes in addition to) annual assessments.
			Compliance rates to both federal and state tax requirements in general are very high at least 84% for compliance to federal income taxes according to government studies. There are no data to suggest that failure to pay assessed taxes on hardwood timber income or property occurs to any significant extent in the US. IRS surveys show a very high proportion of taxpayers believe that cheating on taxes is unacceptable and that people who do cheat should be held accountable. Nonetheless, that result suggests that a small percentage of people do try to evade taxes to some degree.
			Businesses will often hire an outside service to handle payroll-associated taxes and will often hire professional assistance to fill out income tax forms. The use of outside professionals, such as certified public accountants, lowers the risk of noncompliance.
			Some businesses, particularly large ones or ones whose stock is traded on public stock markets, will hire independent auditors to review records and payments. This also lowers the risk of noncompliance.
			The risk is probably highest among small businesses and individuals.

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
			The IRS randomly audits a small percentage of tax returns, and this promotes compliance. If a business or individual knew that its tax filings would be audited or even might be audited as part of a forest certification program, that would almost certainly either raise compliance or discourage bad actors from seeking certification.
			Overall, based on the available information, the risk for this category has been assessed as low.
1.8		esting activities Laws	Low risk
Timber harvestin g regulatio ns	Applicable laws and regulations Requirements for timber harvesting on US Forest Service lands: - 16 USC § 1604 - sets up the land and resource management planning system and requires permits, contracts, and resource use generally to be consistent with these plans CFR Title 36 - more specific regulations. o Timber management plans must call for sustained yield, a non- declining flow of timber (i.e., the harvest level must be relatively constant from year to year), and multiple use (protecting the value of the land for fish, wildlife, water, recreation, and grazing if the land is so used). 36 CFR § 221.3, o All management activities must be consistent with the larger land and resource management plans, 36 CFR § 219.15(b), o Land and resource management plans must provide for ecological, social, and economic sustainability as detailed in 36 CFR § 219.8, o Must maintain a diversity of plant and animal communities, 36 CFR § 219.9. o Must allow for multiple use, 36 CFR § 219.10, o Timber contracts must reflect the requirements of "applicable land and resource management plans and environmental quality standards," 36 CFR § 223.30, - The parallel planning system for the Bureau of Land Management is rooted in 43 U.S.C. § 1712, - The BLM planning and programming	Federal - US Forest Service lands - 16 USC § 1604, http://www.law.cornell.edu/uscode/text/16/160 4 - CFR Title 36 § 221.3, http://www.law.cornell.edu/cfr/text/3 6/221.3 36 CFR § 219.15(b), http://www.law.cornell.edu/cfr/text/3 6/219.15 36 CFR § 219.8, http://www.law.cornell.edu/cfr/text/3 6/219.8; - 36 CFR § 219.9, http://www.law.cornell.edu/cfr/text/3 6/219.9; - 36 CFR § 219.10, http://www.law.cornell.edu/cfr/text/3 6/219.10 36 CFR § 223.30, http://www.law.cornell.edu/cfr/text/3 6/223.30. Federal -Bureau of Land Management - 43 U.S.C. § 1712, http://www.law.cornell.edu/uscode/text/43/171	Statics show that it is not a common case to see harvesting volume above the allowed and only few cases are known on road construction not following the legislation. Thus a low risk. A recent study in Oregon looked at compliance with forest practice requirements regarding leaving behind snags, live trees, and downed logs for the benefit of wildlife. It found compliance rates of 97% ± 6%, and it noted that sites frequently exceeded the legal minimums. A 2012 Washington state study of compliance with requirements for activities affecting riparian areas found rates of compliance ranging from 43% (commercial thinning rules in stream buffer zones, sample of seven sites) to 100% (management of debris in non-fish-bearing streams, 19 sites). It concluded that while

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
Indicator	regulations are in 43 CFR part 1600. Note that 43 CFR § 1610.3-2, requires plans to be consistent with federal, state, and local programs and policies On the BLM's most productive timber lands, the O & C lands, 43 U.S.C. § 1181a, provides a general policy of sustainable harvests and protection of water and recreation. On state and local lands, forest practice requirements are also rooted in management planning. E.g. the Oregon rules on state forest planning, which require identification of lands that require special practices because of riparian habitat, scenic value, and so forth. Oregon Administrative Rules 629 Division 35, Timber sale contracts may incorporate requirements in forest practice and other environmental rules, OAR 629-029-0135(3). The state has over ninety pages of forest practice laws (Oregon Revised Statutes §§ 527.610 to 527.770, 527.990 (1) and 527.992) and rules (OAR 629 Divisions 600 to 670) that apply to harvests on state, local, and private lands. The Oregon Department of Forestry offers a collection of the laws in a single document. On private lands, state and local laws may control forest practices. The states show three broad approaches to timber harvest regulation. Some states have detailed forest practice laws that prescribe things like stream buffers and rules for skidding and yarding logs. The Oregon laws mentioned above are an example. This regulatory approach is most common in western states. Some states have a few simple forest practice rules, perhaps combined with voluntary or mandatory "best management practices" to protect water and soils. Virginia, for example, has a law requiring landowners to retain seed trees to promote regeneration of pines, Code of Virginia §10.1-1164. In addition, Virginia limits the power of local governments to restrict forest activities beyond the requirements of following best management practices (BMPs), Code of Virginia § 10.1-1126.1. Like most southern states, Virginia has BMP guidelines to prevent water quality problems from silviculture,	2 43 CFR part 1600, http://www.law.cornell.edu/cfr/text/4 3/part- 1600 43 CFR § 1610.3-2, http://www.law.cornell.edu/cfr/text/4 3/1610.3- 2, - 43 U.S.C. § 1181a, http://www.law.cornell.edu/uscode/text/43/118 1a, provides a general policy of sustainable harvests and protection of water and recreation. State and local lands Oregon: - Oregon Administrative Rules 629 Division 35, http://arcweb.sos.state.or.us/pages/rules/oars _600/oar_629/629_035.ht ml OAR 629-029-0135(3), http://arcweb.sos.state.or.us/pages/rules/oars _600/oar_629/629_029.ht ml Oregon Revised Statutes §§ 527.610 to 527.770, 527.990 (1) and 527.992) and rules (OAR 629 Divisions 600 to 670) that apply to harvests on state, local, and private lands The Oregon Department of Forestry offers a collection of the laws in a single document: http://www.oregon.gov/odf/privateforests/docs /fparulebk.pdf OAR 629 division 43, http://arcweb.sos.state.or.us/pages/rules/oars	

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	Some states have no forest practice laws. A few states defer to local regulation of forest practices. Many states require loggers to take steps to suppress sparks from equipment and to have basic fire-fighting equipment such as shovels and axes on site. For example, the Virginia law regarding spark suppression is Code of Virginia § 10.1-1145. Oregon's much more extensive fire prevention rules are at OAR 629 division 43. Forest Principles (UNCED) (Rio de Janeiro, Brazil, June 1992). International Tropical Timber Agreement (Geneva, Switzerland, 1994). Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)/Federal Environmental Pesticide Control Act (FEPCA) (1947, 1972). Federal Plant Pest Act (1957). Forest practices acts - Not all states have Forest Practices Acts and many have voluntary BMPS. Pollution Prevention Act (1990). Federal Insecticide Act (1910). Plant Quarantine Act (1912). Fire practices laws (for all states) On the federal lands, the federal government sets the timber harvesting rules, and federal land managers tend to meet or exceed the substance of state forest practices rules, although the federal government is not bound to follow state procedures. Legal Authority Regulated at the state level Mandatory BMPs (Best Management Practices) Not all states are mandatory with many southern states being voluntary. More information needed. In general, the federal authorities will be the land management agencies, and the state authorities will be the state forestry agencies, boards, and commissions. State cooperative extension services, chartered to help private landowners improve management practices, will have a role in educating landowners about requirements and giving them advice about compliance. Legally required documents or records Timber sale contracts may include forest practice requirements or	bin/legp504.exe?000+cod+10.1-1164. - Code of Virginia § 10.1-1126.1, http://leg1.state.va.us/cgi- bin/legp504.exe?000+cod+10.1-1126.1. - Code of Virginia § 10.1-1181.2, https://leg1.state.va.us/cgi- bin/legp504.exe?000+cod+10.1-1181.2. - Code of Virginia § 10.1-1145, https://leg1.state.va.us/cgi- bin/legp504.exe?000+cod+10.1-1145. References The websites of state forestry agencies often contain descriptions or links to applicable forest practice requirements and laws. States often publish manuals or educational material for landowners explaining forest practice obligations. For example: Virginia, http://www.dof.virginia.gov/print/mgt /Timber-Sales.pdf, and Vermont, http://www.vtfpr.org/regulate/documents/timbe r_harvest09_web.pdf. Defenders of Wildlife. 2000. State Forestry Laws. www.defenders.org/publications/state_forestry _laws.pdf. Guy Sabin (2012). "Compliance and Implementation Monitoring of Forestry Best Management Practices in South Carolina 2011- 2012". South Carolina Forestry Commission, Columbia, SC. [http://www.state.sc.us/forest/bmp12.pdf]. Jennifer Weikel, Rod Krahmer, and Jim Cathcart (2014). "Compliance with Leave Tree and Downed Wood Forest Practices Act Regulations - Oregon Department of Forestry Forest Practices Monitoring Section Technical	from a forgiving attitude of inspectors, which in the US is more common in enforcement of environmental standards against agricultural operations than it is in enforcement against manufacturing operations. There may also be regional variations. In the state of Washington study, compliance rates appear to be higher in the eastern part of the state than in the west. Some of the reports track compliance trends, and it appears that compliance with standards tends to improve, perhaps as landowners and loggers become more familiar with what is necessary to comply. In the end, the risk needs to be evaluated locally. If there are no enforceable standards, there is obviously no risk. Risk may be moderate for complex standards, for poorly enforced standards, or for new standards.

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	contain references to the applicable laws. If state or federal foresters have inspected a logging site, there may be paperwork records of the inspection.	Report #20". Oregon Department of Forestry. [http://www.oregon.gov/odf/PRIVATE_FORES TS/docs/Leave%20Tree%20Downed%20Woo d%20Report%20Final%20April%202014.pdf]. Walter Obermeyer and Alice Shelly (2012). "Forest Practices Compliance Monitoring Report 2010/2011". Washington State Department of Natural Resources. [http://www.dnr.wa.gov/Publications/fp_cm_bi ennial_report_10-11.pdf]. Alabama Forestry Commission compliance figures: http://www.forestry.alabama.gov/bmpmon.asp x?bv=2&s=1http://www.forestry.alabama.gov/bmpmon.aspx?bv=2&s=1	
1.9 Protected sites and species	Applicable laws and regulations National Trails System. 16 USC §§ 1241–1251, The National Historic Preservation Act, 16 USC §§ 470–470x6 The Migratory Bird Treaty Act prohibits the hunting, killing, capturing, or sale of most native birds without a permit. 16 USC §§ 703–712. This Act does not appear to affect forest practices in a significant way. The Bald and Golden Eagle Protection Act protects bald and golden eagles and their nests. 16 U.S.C. 668-668d. The US Fish and Wildlife Service has published non-binding guidelines for avoiding harm to bald eagles and has stated that penalties against persons who unintentionally harm eagles will be mitigated if the persons were following the guidelines. The guidelines for forestry call for buffers of approximately 100 meters in radius around nests, extended to 200 meters during the breeding season. US Fish and Wildlife Service. 2007. National Bald Eagle Management Guidelines. The Endangered Species Act, 16 USC §§ 1531–1544, , is potentially the most important species protection law for forest management Section 9 of the Act, 16 USC § 1538, makes it unlawful to "take" a species listed as threatened or endangered, and the definition of "take" includes harassing or harming a protected species, 16 USC §	Laws Federal - Wilderness Act. 16 USC § 1132, http://www.law.cornell.edu/uscode/text/16/113 2 - National Wild and Scenic Rivers Act and System. 16 USC § 1274, http://www.law.cornell.edu/uscode/text/16/127 4 National Trails System. 16 USC §§ 1241– 1251, http://www.law.cornell.edu/uscode/t ext/16/chapter-27 The National Historic Preservation Act, 16 USC §§ 470–470x6, http://www.law.cornell.edu/uscode/t ext/16/chapter-1A/subchapter-II Columbia Gorge National Scenic Area Act, 16 USC §§ 544–544p, http://www.law.cornell.edu/uscode/t ext/16/chapter-2/subchapter-II Administrative set-asides - e.g. designated areas that are not suitable for timber production, 36 CFR 219.11,	The US has a broad and comprehensive legal structure surrounding species protection and the protection of socially and ecologically important sites, administered at both the federal and state level. The quick way to find protected areas on a piece of public land is to look at the official management plan prepared by the responsible agency. Due to the transparency of planning and the active participation of interested members of the public, it is highly likely that the plan accurately identifies protected sites. The long way is to start first with the statute or executive order that assigned the land to a particular management agency. That may

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	Special overlays that Congress might have designated on an ad hoc basis. For example, some lands in the Mount Hood National Forest are also in the Columbia Gorge National Scenic Area and are subject to the management directives in the Columbia Gorge National Scenic Area Act, 16 USC §§ 544–544p, Administrative set-asides. These should be clearly apparent in the management plans. To take the US Forest Service as an example, their land and resource management plans must designate areas that are not suitable for timber production, 36 CFR 219.11. These include lands where slope or soil conditions make sustainable timber management impossible, and lands designated administratively for other uses (e.g., for scientific and educational use as research natural areas. Note that federal and state rules protecting wetlands may limit silvicultural activities in those areas. These laws are rooted in water pollution laws, and are discussed below with the other pollution laws. State: Each individual state will be different, but many states have analogues of the federal programs, such as state parks and state wild and scenic rivers, that set state lands in categories with no or limited opportunity for timber management. Again, the quick way to discover these is to consult the current plan that the state land management agency has prepared. Private: Private lands may be subject to local zoning requirements, and requirements to protect scenic values. Also, private lands may lie within federal wild and scenic river corridors. In that case, the federal government typically seeks an agreement with state and local governments over restrictions in land use in the area, but leaves the authority to control land use in state and local hands. If private lands are used in ways that are consistent with state and local laws but inconsistent with the river's designation, the federal government as a last resort can condemn the private property, but this is a costly and rarely used tool.	http://www.law.cornell.edu/cfr/text/3 6/219.11 or for scientific and educational use as research natural areas, http://www.fs.fed.us/rmrs/research- natural- areas/ Migratory Bird Treaty Act. 16 USC §§ 703–712, http://www.law.cornell.edu/uscode/t ext/16/chapter-7/subchapter-II The Bald and Golden Eagle Protection Act. 16 U.S.C. 668-668d, http://www.law.cornell.edu/uscode/t ext/16/chapter-5A/subchapter-II National Bald Eagle Management Guidelines. http://www.fws.gov/southdakotafield office/NationalBaldEagleManageme ntGuidelines.pdf The Endangered Species Act, 16 USC §§ 1531–1544, http://www.law.cornell.edu/uscode/t ext/16/chapter-35, References The state or regional offices of The Nature Conservancy, an NGO, often can provide GIS information on areas critical to conservation. The Endangered Species Act listing agencies have range maps and maps of areas that are "critical habitat" for listed species. (For some endangered, collectable species, these are not public information!) Activity in these areas has the potential to take listed species or even jeopardize the continued existence of the species.	assign the land to a class of protected areas (e.g., national park, national monument, national historic landmark, etc.), may specify how it is to be managed or protected, and may specify areas within the land subject to special protections. The risks of non-compliance on public lands are generally low. The planning processes are open and transparent, with strong public participation. Conservation groups have shown a willingness to take agencies to court over protected area and Endangered Species Act issues. The Endangered Species Act has a citizen suit provision, 16 USC §1540(g), allowing any citizen to sue anyone, including the federal government, seeking an injunction to enforce the Act. As a result, the agencies are generally careful to follow the law on these matters. Where there are high instances of these privately initiated actions, there may be a higher level of risk. Private lands may have more risk. Zoning violations are going to occur, but they are going to be hard to disguise, and people will risk local enforcement actions. Damage to historic or archeological sites, especially if previously undiscovered, will be hard to detect, even for certification auditors. Damage to protected species may also be hard to detect, unless the auditor sees

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	- Private lands may also be subject to conservation easements that limit uses.		nests or individuals of the species near the site. However, violators of
	- As noted above under taxation, states may offer lower tax rates to lands that owners pledge to keep land as open space. In some states, those programs conceivably could limit the type of forest operations that the owner could perform on the land. Some state forest practice laws create de facto protected areas by requiring buffer strips around streams or roadways.		the Endangered Species Act face civil and criminal prosecution if caught, which is a strong deterrent. Overall, the risk on private lands is still low, but attention should be paid to areas known to be important to
	State and private landowners also face the prohibition against taking listed species, except that the "take" prohibition does not apply to listed plants on private land, as these are considered the owner's property. State and private owners do not have the requirement to consult with the listing agency before acting, however they may voluntarily agree to a conservation plan and get permission to take a small number of the protected individuals if they follow the plan.		listed species, such as forests in the Pacific Northwest with salmon spawning streams, or forests in the Southeast with red-cockaded woodpeckers.
	Some states have state versions of the federal Endangered Species Act. The state and federal lists of protected species often overlap, but one list may have species that the other government has not yet reviewed for listing, and states may list species that are rare in the listing state but common elsewhere in the country. (Actually, the federal list also can limit listings to specific regions of the country, if the populations listed are biologically distinct.)		
	Convention on Nature Protection and Wild Life Preservation in the Western Hemisphere (Washington, DC, 1940).		
	Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar, Iran, 2 Feb 1971).		
	Convention Concerning the Protection of the World Cultural and Natural Heritage; (Paris, France, 16 Nov 1972).		
	International Plant Protection Convention (IPPC) (1979 Revised Text) (Rome, Italy, 1979).		
	Endangered Species Act (1973, 1978, 1979, 1982). Forest landowners and managers cannot cause injury or death by direct harm or through habitat modification to a species listed as threatened or endangered.		
	Clean Water Act (CWA): control activities in forested wetlands and		

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	requires states to have programs to control non-point source pollution, usually accomplished through Best Management Practices (BMPs).		
	<u>Clean Air Act (CAA):</u> states must have programs to protect air quality and visibility, including controls on prescribed burning and the use of ozone-depleting chemicals. Federal Insecticide, Fungicide and Rodenticide Act (FIFRA): regulates chemical use in forest stands, whether for insect control or for vegetation management.		
	Resource Conservation & Recovery Act (RCRA) (1976, 1984). Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, commonly known as "Superfund") (1980, 1986).		
	Withdrawn, Kyoto Protocol to the United Nations Framework Convention on Climate Change (Kyoto, Japan, 1997). Convention on Biological Diversity (UNCED) (Rio de Janeiro, Brazil, 5 Jun 1992).		
	Framework Convention on Climate Change, (UNCED) (Rio de Janeiro, Brazil, 1992).		
	Rio Declaration on Environment and Development (UNCED) (Rio de Janeiro, Brazil, 1992).		
	Convention on the Conservation of Migratory Species of Wild Animals (Bonn, Germany, 23 Jun 1979).		
	Legal Authority		
	US Fish and Wildlife Service (ESA)		
	National Marine Fisheries (ESA for anadramous fish, principally in the northwest US).		
	State level laws are administered by state natural resource departments.		
	The US Congress plays a major role in making protected area designations, for example, of national parks and additions to the national wilderness system. The President, under the Antiquities Act, can set aside federal land as national monuments by executive order.		
	The federal and state land management agencies play a major role in administrative declarations of areas off-limits to commercial forestry. (Note that the laws often vest these powers in the hands of the Secretary of the cabinet department that contains the agency. Thus, the Secretary of Agriculture has powers to administer the national		

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	forests, which are assigned to the US Forest Service, and the Secretary of the Interior has powers to administer the national parks, national wildlife refuges, and the otherwise unreserved public lands, assigned to the National Park Service, the US Fish and Wildlife Service, and the Bureau of Land Management.)		
	The National Park Service administers the National Register of Historic Places under the National Historic Preservation Act. Each state has designated a State Historic Preservation Office to inventory historic and archeological sites in the state, conduct planning, and propose sites for addition to the national listing.		
	The U.S. Fish and Wildlife Service and the National Marine Fisheries Service (NOAA Fisheries) administer the federal Endangered Species Act. State wildlife agencies generally administer the state acts.		
	Legally required documents or records		
	Land management agencies tend to have good maps of designated protected areas. These should be included in their land management plans.		
	Federal agencies should have records of their consultation with the listing agencies over possible effects on listed species. If there is a possible effect, there should be a written biological opinion from the listing agency. If the management agency has permission to take some of the listed species, it should have an incidental take statement. A state or private owner that claims permission to take a listed species should have an approved conservation plan and an incidental take permit.		
1.10	Applicable laws and regulations	Laws	Low risk
Environm ental	EIA:	<u>Federal</u>	Environmental permits (NEPA) are
requirem ents	- Federal agencies: National Environmental Policy Act (NEPA. Citations to the statute and its regulations are above under planning). Before taking on any action, unless the action falls under a predetermined "categorical exclusion" (a set of activities that never have significant effects), the agency has to determine if the action	- National Environmental Policy Act EIA requirement: 42 USC § 4332, http://www.law.cornell.edu/uscode/t ext/42/4332. EIA regulations: 40 CFR parts 1500 to 1508,	required for projects on federal lands or those that apply federal funding. Water quality is regulated on both public and private lands via the Clean Water Act. There are also a
	could have a significant environmental effect. This takes the form of an	http://www.law.cornell.edu/cfr/text/4 0/chapter-	host of environmental laws that regulate aspects of timber harvest at

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	environmental assessment (EA). If there is no effect foreseen, the agency makes a formal finding of no significant impact (FONSI). If there is a possible significant effect that the agency can't prevent by modifying the project, the agency must prepare a full environmental impact statement (EIS) with an extensive process of public involvement. NEPA applies not only to projects that a federal agencies itself undertakes, but also to projects that it funds or approves. So, if a state or private person undertakes a project that requires a federal permit, that may trigger NEPA review.	V Federal Water Pollution Control Act, also called the Clean Water Act, 33 USC §§ 1251–1387, http://www.law.cornell.edu/uscode/text/33/chapter-26. T - Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). 7 USC §§ 121–136y, http://www.law.cornell.edu/uscode/text/7/chapter-6.	the state level. Certain federal statutes govern federal land management directly (about 20% of US timberland but less than 1% of US hardwood supply). The most significant of these are: the National Forest Management Act (NFMA), Federal Land Policy and Management Act
	- Some states have state environmental impact assessment laws (collectively called little NEPAs or SEPAs). These apply to state and sometimes private actions.	- Clean Air Act, 42 USC §§ 7410– 7671q, http://www.law.cornell.edu/uscode/t ext/42/chapter-85.	(FLMPA), the Wilderness Act, and the National Environmental Policy Act (NEPA). The latter mandates that federal agencies assess the
	Environmental quality: - Forest management can trigger requirements under several types of environmental laws. In rough order of importance, they are water quality, pesticide, air quality, solid waste, and hazardous waste remediation laws. In all these cases, it really does not matter who owns the land. The environmental laws apply to federal and state land management agencies in the same way that they apply to businesses and individuals. - Federal Water Pollution Control Act, also called the Clean Water Act, 33 USC §§ 1251–1387. The application of the Act to forest operations has been controversial, but basically two aspects of the Act are likely to apply. Forest management leads to non-point pollution, which is pollution that is not coming from a discrete outfall, vehicle or other source. The Act addresses non- point pollution through voluntary best management practices (BMPs), with a fallback to stricter controls if there is actual deterioration of water quality below water quality standards. Forest management in wetlands can lead to movement of	- Resource Conservation and Recovery Act, 42 USC §§ 6921–6939g, http://www.law.cornell.edu/uscode/t ext/42/chapter-82/subchapter-III Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 USC §§ 9601–9675, http://www.law.cornell.edu/uscode/t ext/42/chapter-103 States - California: 17 Calif. Code of Regulations §§ 95801–96022, http://www.arb.ca.gov/regact/2010/c apandtrade10/copusforest.pdf and https://govt.westlaw.com/calregs/Br owse/Home/California/CaliforniaCo	environmental impacts of their activities on government-owned forest land. As result, all federal timber management activities require some form of environmental assessment or impact analysis. Hardwood management is mainly impacted in the national forests of the eastern US that contain significant inventory of hardwood species. Planning and harvest activities on federal forest lands are frequently delayed, altered or cancelled pending completion of administrative or judicial reviews as a result of stakeholder group challenges.
	soil, which is considered dredging and filling of the wetlands, requiring a Clean Water Act § 404, 33 USC § 1344, permit. "Normal" silvicultural operations are exempt from § 404, but "normal" is narrowly defined. To qualify for the exemption, the operator must follow BMPs, and several other conditions must be met (e.g., no endangered species present, no wild or scenic rivers affected, no permanent change of wetlands to uplands).	deofRegulations?guid=I34B7E5A0E 67711E2960E9FD1BEAA332C&ori ginationContext=documenttoc&tran sitionType=Default&contextData=% 28sc.Default%29. - Oregon: Oregon Revised Statutes (ORS) §§ 526.695–.775, ORS §§ 526.780–.783 -	The risk of violation of federal EIA requirements is fairly low. The process is transparent. Citizens have a well-established right to sue to enforce the federal EIA laws, and that keeps agencies accountable. Where there are high instances of

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
Indicator	legally required documents or records - Most states have parallel water quality laws. In fact, the federal government encourages states to develop laws that are at least as strict as the federal standards. If states do, the federal government can delegate to them the power to write permits and take the lead in enforcement. Some states stick with voluntary BMPs; some make part or all of the BMPs mandatory parts of the forest practice rules. Virginia is an example of a hybrid: it makes BMPs voluntary in most of the state, but mandatory in areas close to the Chesapeake Bay. See the Virginia handbook on BMPs. - Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). 7 USC	https://www.oregonlegislature.gov/b ills_laws/lawsstatutes/2013ors526.h tml. References This page has a link to a 2007 citizen's guide to federal EIA: https://ceq.doe.gov/publications/citiz ens_guide_to_nepa.html General landowner guides from states - New Hampshire: University of New Hampshire Cooperative Extension (2014) "Guide to New Hampshire Timber Harvesting Laws". [http://www.nhdfl.org/library/pdf/For est%20Protection/Guide%20to%20 NH%20Timber%20Harvesting%20L aws%20rvs2012.pdf] - Kentucky: Mountain Association for Community Economic Development. Undated. "The Kentucky Forest Landowner's Handbook". [http://www.maced.org/foi/landowne rs- handbook.htm] Virginia: Virginia Department of Forestry, (2011). "Virginia's Forestry Best Management Practices for Water Quality Technical Manual (5th ed.)". [http://www.dof.virginia.gov/print/wat	
	§§ 121–136y. The three basic requirements that apply to forest management are that (1) people can only sell and apply pesticides that have been approved by the federal government, (2) people can only use a pesticide in a manner consistent with the instructions on its label, and (3) people cannot obtain or apply especially dangerous pesticides unless they are licensed applicators. Plants that have been genetically modified to resist pests are considered plant-pesticides, subject to FIFRA regulation. - States can enact their own pesticide laws if they do not interfere with the regulatory scheme of FIFRA. For example, states may set rules limiting aerial spraying near streams or property lines, or requiring prespray notice to neighbors. See, e.g., the standards discussed in this news story: Rob Davis, In Oregon, helicopters spray weed killers near people under West Coast's weakest protections.		
	- Clean Air Act, 42 USC §§ 7410–7671q - A clean air concern with forest management is often the smoke from prescribed burns. There are also concerns about pollution from vehicles. Also, states are beginning to write laws concerning carbon offsets from forests. As with water pollution control, the federal government encourages states to develop their own laws and agencies, and delegates authority to them if the state system is at least as strict as the federal system. - Forests as carbon sinks: California has developed an accounting protocol for forest projects, for use in its cap-and- trade system, 17 Calif. Code of Regulations §§ 95801–96022. Oregon's Forest Resource Trust, created through Oregon Revised Statutes (ORS) §§ 526.695–.775, can subsidize forestation of non-forest and under-		

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	stocked private lands in return for the carbon rights. ORS §§ 526.780–.783 allow the state forester to buy and resell carbon offsets from private landowners, acting as a broker Hazardous wastes: subtitle C of the Resource Conservation and Recovery Act, 42 USC §§ 6921–6939g. States may have their own versions and delegated authority Contamination of soil and groundwater from past use of hazardous substances: Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 USC §§ 9601–9675 - makes the land owner, site operator, and people who generated waste, arranged for its disposal at the site, or transported the waste all potentially liable for cleaning up the site. Some states have similar state liability and clean-up laws, which may give the state power to come in and abate hazards and collect the cost from responsible parties.	[http://www.oregonlive.com/environ ment/index.ssf/2014/10/in_oregon_ helicopters_spray_we.html].	
	Legal Authority		
	Environmental Protection Agency (NEPA) For EIA requirements, the land management agency will have responsibility for conducting the assessment. The federal Council on Environmental Quality (CEQ) writes the rules for federal assessments and oversees implementation. The federal Environmental Protection Agency (EPA) incidentally reviews every agency's environmental impact statements.		
	For environmental requirements, the lead federal agency is the EPA. Every state has its own state environmental agency. In many states, the forestry agency is responsible for overseeing voluntary BMPs on private forest lands.		
	The responsibility for dredge and fill regulation (§ 404) is shared between the US Army Corps of Engineers and the EPA. Very few states have been delegated responsibility for the § 404 program, and then only for certain classes of wetlands, but some states run parallel wetland programs without delegation (meaning a project may require separate federal and state approvals).		
	Note that like the Endangered Species Act, the Clean Water, Clean Air, and Resource Conservation and Recovery Acts have citizen suit provisions allowing citizens to go to court to enforce the acts against individual polluters or the government.		

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	Legally required documents or records		
	Environmental Impact Statement (for NEPA)		
	A federal environmental impact assessment, if there is no categorical exclusion, usually produces an EA and then either a FONSI or a notice of intent to prepare an EIS. (For an obviously significant proposed action, such as a long-term land and resource management plan, the agency may skip the EA and go right to the EIS.) The agency should invite public comments on the scope of the environmental review, prepare a draft EIS, collect public comments on the draft, publish a final EIS, and then a issue a record of decision (ROD) on what action to take.		
	Agencies can "tier" assessments. For example, a timber management plan, which might by itself involve significant impacts, can get by with just an EA if all the impacts were already discussed in the earlier land and resource management plan EIS. The timber plan EA tiers on the management plan EIS.		
	States should have guidelines for BMPs. They may have different BMPs for different regions, forest types, or stream types. In the case of public lands, the timber contracts may incorporate the BMPs by reference. This sometimes is done in private timber sale contracts, too.		
	For operations in wetlands, the situation can get complex. Here, for example, is a link to guidance on compliance from North Carolina, a state that runs a wetlands regulation program in parallel with the federal program: http://ncforestservice.gov/publications/WQ0107/BMP_chapter06. pdf.		
1.11	Applicable laws and regulations	Laws	Low risk
Health and safety	National Environmental Policy Act (1969, 1975, 1982). Occupational Health and Safety Act (OSH Act), 29 USC §§ 651–678 Federal Water Pollution Control Act/Clean Water Act (1972, 1977). OHSA 1910.266, Logging-specific regulations - 29 CFR 29 CFR part 1910 - general safety regulations, applying to all workplaces, covering things like protective equipment, storage of hazardous materials, welding, hand-held power tools, and so forth.	Federal -Occupational Health and Safety Act (OSH Act), 29 USC §§ 651–678. - 29 CFR § 1910.266, http://www.law.cornell.edu/cfr/text/2 9/1910.266. - 29 CFR part 1910, http://www.law.cornell.edu/cfr/text/2 9/part-	Logging is one of the more hazardous occupations in the United States. Health and safety is closely regulated by OHSA, which has specific provisions for logging. OHSA standards: Based on a search of OHSA's online database for inspections in standard industrial

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	29 CFR 1910.1200 - The regulations for reporting to workers what toxic chemicals are onsite, applicable to all workplaces. These do not apply to pesticides bearing federally approved labels under the federal pesticide law (FIFRA), but safe handling of these pesticides is covered under FIFRA, as discussed below. The FIFRA Agricultural Worker Protection Standard 40 CFR part 170 -applies to all pesticide use in forests as well as farms. It requires worker safety training, access to information, use of protective equipment, emergency preparedness, and so forth. 7 USC § 136i - FIFRA requires people who apply especially toxic ("restricted use") pesticides to be certified or to work under supervision of a certified applicator. The federal government can certify applicators or it can delegate certification authority to a state that submits a satisfactory certification plan. State: - The OSH Act allows the federal government to delegate authority to administer workplace safety regulation to a state if a state has a program at least as strict as the federal program. About half the states have delegated authority. - All states have workers compensation programs that pay benefits to employees injured on the job. Most employers are required to pay premiums to cover their employees. The federal government has a program that covers federal government employees. Legal Authority The federal agency concerned with worker safety is the Occupational Safety and Health Administration (OHSA), in the Department of Labor. This OHSA web page provides contact information and links to state occupational safety and health agencies: https://www.OHSA.gov/dcsp/osp/. The federal Environmental Protection Agency administers FIFRA. Where EPA has delegated certification authority to a state, it is usually a state agriculture agency that is in charge of certification. State cooperative extension services may also play a role in training and testing applicators.	1910. - 29 CFR 1910.1200, http://www.law.cornell.edu/cfr/text/2 9/1910.1200 OHSA 1910.266, Logging- specific regulations - https://www.OHSA.gov/pls/OHSAw eb/owadisp.show_document?p_tabl e=STANDARDS&p_id=9862 FIFRA Agricultural Worker Protection Standard. 40 CFR part 170, http://www.law.cornell.edu/cfr/text/4 0/part- 170 FIFRA requires people who apply especially toxic ("restricted use") pesticides to be certified or to work under supervision of a certified applicator. 7 USC § 136i, http://www.law.cornell.edu/uscode/t ext/7/136i. References OHSA logging website: https://www.OHSA.gov/SLTC/loggin g/ A US Department of Labor page with links to state workers compensation programs: http://www.dol.gov/owcp/dfec/regs/c ompliance/wc.htm. Index page for information on the FIFRA Agricultural Worker Protection Standard: http://www.epa.gov/pesticides/healt h/worker.htm US Environmental Protection Agency Worker Protection Standard Compliance Monitoring Program, Accomplishments and Violations Reports: http://www.epa.gov/compliance/mo nitoring/programs/fifra/wps.html. OHSA's information page on logging: https://www.OHSA.gov/SLTC/loggin	class (SIC) 2411 (logging), OHSA conducted 378 logging site inspections in 2013. Some were in response to reported accidents or complaints of violations, but most were planned inspections. A cursory search of the resulting list of inspections makes it appear that inspectors found violations at more than half the sites. Although enough raw data is available to understand the severity and frequency of violations, the scope of this project did not allow for analysis of the data, and no summary of compliance in the logging industry was found. FIFRA agricultural worker protection: In 2013, EPA and the states inspected 3663 sites. These covered all agricultural users, and it's not clear if they included any forest operations. In those inspections, the inspectors issued warnings to 332 sites, administrative fines to 58 sites, took 40 to court (includes sites that contested the administrative enforcement), and took other action, such as issuing administrative orders to comply, at 267 sites. It is not clear how many of these infractions were minor and how many major, but the warnings almost certainly cover minor infractions, the court cases are probably more serious infractions, and the administrative fines and orders could cover either kind of situation. It's possible that some sites

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	Legally required documents or records	g/index.html.	had multiple inspections, and that
	OHSA requires employers to keep records of serious job-related injuries. See https://www.OHSA.gov/recordkeeping/.	OHSA's "eTool" for learning about logging site requirements:	inspections were designed to focus on sites of types most likely to have
	If there are hazardous chemicals other than pesticides at a worksite, there should be Material Safety Data Sheets for each chemical.	https://www.OHSA.gov/SLTC/etools /logging/index.html.	infractions. Still, only about one site in ten had a violation serious enough to merit something more than a
	If there are pesticides, the pesticide label should be available. Official pesticide labels can be several pages long and contain information about the lawful purposes of use (what pests, what crops or trees to protect) and the lawful manner of use.	OHSA's user's guide and tutorial on logging workplace safety and health requirements: https://www.OHSA.gov/SLTC/etools/logging/userguide.html.	warning. See EPA's web page on monitoring compliance with the standard. It is not currently clear from these statistics how many forest sites
	Certified pesticide applicators should have documentation of their certification, and should keep records of their use of restricted- use pesticides.	OHSA maintains an online database of past inspections, https://www.OHSA.gov/oshstats/ind ex.html, and users can pull up inspection data for a particular establishment, https://www.OHSA.gov/pls/imis/establishment.html, or a particular industry class, https://www.OHSA.gov/pls/imis/indu stry.html.	were inspected, or were found to be in breach of the requirements. This information does show that the compliance monitoring and enforcement of the legal requirements is carried out seriously by the authorities.
1.12	Applicable laws and regulations	Laws	Low risk
Legal employm ent	Fair Labor Standards Act: regulates minimum wage, medium age, overtime pay.	Federal -Minimum Age Laws: Federal Department of	Most employment in the US is considered "at will," and can be
ent	Other laws administered by Department of Labor	Labor's pages on youth employment,	terminated by either party or changed without prior notice. A
	Civil Rights Act of 1964: outlawed hiring discrimination based on race, gender, religion, or national origin.	http://www.youthrules.dol.gov/know- the- limits/agriculture/index.htm and http://www.dol.gov/dol/topic/youthla	written contract is not necessary; all employers are still subject to labor
	More details, actual citations and examples from large timber producing states.	bor/agerequirements.htm#lawregs Minimum wage laws: The federal Department of Labor	laws. Detailed records of accidents,
	In general, you will find both federal and state rule regarding legal employment.	maintains a reference page on federal and state minimum wage laws:	injuries, and corrective measures must be maintained. The Fair Labor
	Employee tax payments and workers compensation: These laws have been covered above in other categories. The discussion of taxes	http://www.dol.gov/whd/minwage/a merica.htm.	Standards Act (FLSA) establishes minimum wage, overtime pay,
	covered the need to get an employer identification number, to withhold and forward employee tax payments, and to make employer payments to fund social benefit programs. The discussion of health and safety	- Citizenship or lawful residency: Section 274A of the federal Immigration and Nationality Act, 8 U.S.C. 1324a,	recordkeeping, and child labor standards affecting full-time and part- time workers in the private sector and in federal, state, and local

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	mentioned participation in workers compensation insurance programs. Unemployment Insurance: In the same vein as workers compensation insurance, states require employers to pay into a state unemployment insurance fund. The state programs are set up in compliance with federal law, but are run under state laws by state officials.	http://www.law.cornell.edu/uscode/t ext/8/1324a The applicable regulations are in 8 CFR Part 274a, http://www.law.cornell.edu/cfr/text/8/ part-274a/subpart-A.	governments. The US Department of Labor rigorously enforces labor and worker safety laws usually in cooperation with corresponding state agencies.
	Minimum age laws: Laws set minimum ages for employment generally, maximum hours for younger employees, and minimum ages for particularly dangerous jobs, including logging. Minimum wage laws: Federal laws set minimum wages, and state and local laws may set minimum wages. If they differ, the higher minimum applies. The general minimum wage may not apply to all jobs — for example, they might not apply to jobs where the employee normally receives a significant income from tips. The laws tend to set weekly hour thresholds of around 40 hours, and the pay for work beyond those hours must be at an increased rate. Citizenship or lawful residency: Section 274A of the federal Immigration and Nationality Act, 8 U.S.C. 1324a, , makes it illegal to employ someone who is not a citizen, lawful permanent resident, or specially permitted immigrant. The applicable regulations are in 8 CFR	- Discrimination: This federal website lists the key federal statutes: http://www.eeoc.gov/laws/statutes/i ndex.cfm. This companion site lists the implementing regulations and ongoing rulemakings: http://www.eeoc.gov/laws/regulation s/index.cfm. State - Unemployment Insurance: The state programs are set up in compliance with federal law, but are run under state laws by state officials. For information on laws, see this federal Department of Labor website: http://workforcesecurity.doleta.gov/unemploy/l	Worker's compensation liability insurance requirements are regulated at the state level. Most states require worker's comp insurance. Timber harvesters (i.e. loggers) are registered or certified in nearly all states within the hardwood-producing region either through public or private programs (such as the Master Logger Program). Only New York and New Jersey have not yet established any kind of registration or certification program
	Part 274a. Discrimination: Federal laws prohibit discrimination based on race, color, religion, sex (including pregnancy), national origin, disability, genetic information, or age (over 40). Most laws apply only to businesses with a minimum number of employees, such as 15 or 20. Legal Authority Department of Labor (DOL) The federal Internal Revenue Service and the state revenue departments enforce the tax laws. Unemployment insurance and workers compensation insurance are generally managed by state agencies. The Wage and Hour Division of the Department of Labor oversees minimum wage and age laws at the federal level.	aws.asp An index of state adverse possession laws: http://statelaws.findlaw.com/propert y-and- real-estate-laws/adverse-possession.html - The Bureau of Land Management's web page on subsistence use in Alaska: http://www.blm.gov/ak/st/en/prog/su bsistence.html. References Annette Bernhardt et al. (2009). "Broken Laws, Unprotected Workers: Violations of Employment and Labor Laws in America's Cities". National Emplaoyment Law Project. [http://www.nelp.org/BrokenLaws].	for timber harvesters. The licensing or registration of professional foresters occurs in 14 states within the hardwood-producing region. A compendium of federal laws also governs fair labor, worker safety and health. For example, the Occupational Safety and Health Act (OHSA) protects forest workers by prescribing that specific safety measures be taken and safety equipment used while engaged in commercial forestry activity. The risk of non-compliance for tax laws was discussed above.
	The US Citizenship and Immigration Services oversee compliance with the requirement that employers verify citizenship or lawful	Hector Chichoni (2011). "I-9 Compliance Crackdowns". Society for Human Resource	Compliance is probably the rule, but there will be a small number of

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	residency. The federal Equal Employment Opportunity Commission oversees compliance with federal anti-discrimination laws. Legally required documents or records I-9 form required to demonstrate eligibility to work in the US W-4 form required to file for mandatory income taxes. As noted above, for taxes and other payments to the government, the employer should have business records and receipts. The employer should obtain a filled-out IRS W-4 form from each employee, so the employer can determine how much salary needs to be withheld to cover expected taxes. The employer should be giving employees and tax authorities annual W-2 forms reporting wages paid and withheld for the year. People retaining certain independent consultants must give the consultant and government a 1099 form reporting compensation for services. Some states may require work permits or recordkeeping for youths under a given age. For example, Oregon requires employers hiring minors to obtain an annual employment certificate from the state and to keep records of how they verified the youth's age. See this state FAQ page on youth employment: http://www.oregon.gov/boli/TA/pages/t_faq_taminors.aspx. Employers must fill out and retain an I-9 form from the federal government verifying the legal status of each new employee. http://www.uscis.gov/i-9-central.	Management. [http://www.shrm.org/publications/hr magazine/editorialcontent/2011/021 1/pages/0211chichoni.aspx] See the enforcement options listed at https://www.ice.gov/factsheets/i9- inspection. Jeffrey S Passel, D'Vera Cohn, Jens Manuel Krogstad and Ana Gonzalez-Barrera (2014). "As Growth Stalls, Unauthorized Immigrant Population Becomes More Settled". Pew Research Hispanic Trends Project. [http://www.pewhispanic.org/2014/0 9/03/as- growth-stalls-unauthorized-immigrant- population-becomes- more-settled/#]. Timothy Sutto (2012). "Out In Left Field: CA Needs H2-A Ag-Worker Overhaul". Immigration Compliance Group. [http://www.immigrationcomplianceg roup.com/immigration-compliance- blog/tag/california-agriculture/]. US Citizenship and Immigration Service - E- Verify is an Internet- based system that allows businesses to determine the eligibility of their employees to work in the United States. E- Verify is fast, free and easy to use – and it's the best way employers can ensure a legal workforce: http://www.uscis.gov/e-verify.	People trying to evade the law. Evidence of things like use of outside bookkeeping or accounting services and external auditors will indicate a lower risk of non- compliance. For wage and hour laws, a 2009 study of urban workers in traditionally low-paying occupations found about a quarter of workers reported experiencing violations of wage and hour laws. Results varied by industry, and in residential construction, the sector in the study most like logging, compliance was better than average with closer to an eighth of the workers reporting violations. Compliance was worse in smaller businesses. This suggests that there may be some risk of noncompliance in logging operations, particularly in smaller operations. For citizenship or lawful residency laws, a 2011 article published on the website of the Society for Human Resource Management flatly stated that "most U.S. employers are not fully compliant." The article then described many of the detailed things that can go wrong leading to technical non- compliance, such as failure to make sure the employee has filled out the I-9 form legibly, failure to make sure the form is signed, failure to get the form filled out on the first day of hire, failure to properly review proof of status documents and make sure the

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
			information matches that on the I-9 form, and so forth. The enforcement policy of the US Immigration and Customs Enforcement agency seems to reflect that most violations are technical in nature and do not merit more than a formal notice of non-compliance, advising the employer to make corrections.
			However, the situation might be more severe in the logging sector. The Pew Research Center estimates that about 10.4 million adults in the US are unauthorized immigrants. Many of these people have come to the US looking for work, and agricultural and low-skill trades offer opportunities. A 2012 post in an immigration blog estimated that half the agricultural workers in the state of California were undocumented. The 'Broken Laws' study above noted that employers willing to hire undocumented workers can offer lower wages with less fear that their employees will make complaints to authorities about labor law compliance.
			The federal government allows employers to participate in an electronic system to verify that a potential employee is allowed to work. The system is called eVerify. If an employer has taken the effort to qualify to use the system, and uses it regularly, it may be a "best management practice" indicating a

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
			lower risk of non-compliance.
	Third pa	l Irties' rights	
1.13	Applicable laws and regulations	Laws	Low risk
Customa ry rights	Customary rights are usually not important in US land tenure systems. By and large, the US states either have recognized long-standing customary rights and incorporated them into the system of formal rights, or they have extinguished them.	- Alaska National Interest Lands Conservation Act. See 16 USC §§ 3111–3126, http://www.law.cornell.edu/uscode/t ext/16/chapter-51/subchapter-II	The risk of violating a right held through adverse possession is low. If the right is being held openly and exclusively, the potential violator
	There are a few limited exceptions. One is the law of adverse	References	should be able to discover it through
	possession, described above under land tenure. It is important only for private lands.	An index of state adverse possession laws: http://statelaws.findlaw.com/propert y-and-	inspection of the land. Overall, customary rights being are
	Another possible source of claims of customary rights is through	real-estate-laws/adverse- possession.html	not important in forest management,
	treaties with Native American tribes, discussed below under indigenous peoples rights.	The Bureau of Land Management's web page on subsistence use in Alaska:	with the possible exception of Native American treaty rights.
	In the state of Alaska, the federal Alaska Native Claims Settlement Act of 1971 settled most native claims to land. However, on some federal lands, Native Americans and rural residents have rights to use the land for subsistence purposes. These rights are recognized in the Alaska National Interest Lands Conservation Act. See 16 USC §§ 3111–3126.	http://www.blm.gov/ak/st/en/prog/subsistence.html.	On balance the risk for this category is assessed as low.
	Rivers that have historically supported navigation are subject to a public right of way and use, but forests seldom grow in rivers. Historically, though, this aspect of law has been important in allowing rivers to be used to transport logs. In fact, one test of navigability has been whether the river can float a log. Paths that have been used continuously by humans "since time immemorial" may be subject to public rights of way. Again, this is not a		
	widespread issue in forest land ownership.		
	Legal Authority		
	It is usually up to the courts to make findings of customary rights. On federal lands in Alaska, the federal land management agencies		
	oversee exercises of subsistence rights.		
	Legally required documents or records		
	By the time most adverse possession rights are reduced to paper,		

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	they have become formal rights. The only way to discover possible instances of adverse possession is to inspect the property and locate its boundaries in a survey.		
	Documents relating to tribal claims include the treaties and court interpretations, discussed below under indigenous people's rights.		
1.14 Free	Applicable laws and regulations	N/A	N/A
prior and informed consent	N/A. There is no general law requiring the free and prior informed consent of indigenous peoples to actions affecting their lands. If indigenous people own the land or hold some rights to it, or if it is held in trust for them, they will have legal rights to control or affect the use of the land. Otherwise, their consent will not be required by law. There are also general requirements within US contract law that parties enter into contracts willingly, but these are not FPIC requirements in the traditional sense. Legal Authority The Bureau of Indian Affairs oversees lands held in trust by the federal government for Native Americans. Legally required documents or records The federal statutes concerning Native Americans are in Title 25 of the USC and the regulations are in Title 25 of the CFR.		
1.15	Applicable laws and regulations	This state of Washington website explains	Low risk
Indigeno	The Indian Self Determination and Education Assistance Act of 1975	Stevens treaty tribal hunting and fishing rights:	The legal relationship between the
us peoples	Varied treaties with American Indian Nations, Tribes, and Bands in the United States.	http://wdfw.wa.gov/hunting/tribal/tre aty_history.html	federal government and the Native American tribes is multifaceted.
rights	National Historic Preservation Act, including in relation to American Indian sites (1966)	The US Forest Service has a tribal relations office: http://www.fs.fed.us/spf/tribalrelatio ns/.	Officially, the two deal with each other as sovereigns, and treaties
	Cultural protection acts (for all states) Natural communities conservation acts (for all states)	The US Institute for Environmental Conflict Resolution, a federal agency promoting consensual settlement of disputes, has a	signed between the federal government and the tribes outline tribal rights. Tribal members, though, are US citizens. Sometimes the federal government treats the tribes as coequal to the states. For
	Tribes are considered Sovereign Nations (a rough legal equivalent to a US State) and have their own judicial systems.	branch devoted to Native American issues, https://www.udall.gov/OurPrograms/ Institute/ServiceAreaNativeAmerica n.aspx,	

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
Stat Gen The triba http:	gal Authority ate and federal judicial systems. enerally, each federally recognized tribe has its own government. the BIA Division of Forestry and Wild land Fire Management oversees to all forestry endeavors. the p://www.bia.gov/WhoWeAre/BIA/OTS/DFWFM/index.htm. the gally required documents or records	and may have information on the frequency or number of such conflicts. United Nations General Assembly (2012). "Report of the Special Rapporteur on the rights of indigenous peoples, James Anaya - Addendum - The situation of indigenous peoples in the United States of America". [http://www.ohchr.org/Documents/H RBodies/HRCouncil/RegularSessio n/Session21/A-HRC-21-47- Add1_en.pdf]	example, the federal government delegates to some tribes the power to take the lead in enforcing environmental or workplace safety and health laws on tribal lands. Tribes have their own police forces and courts, and in some cases their own forestry or wildlife agencies. And sometimes the federal government treats the tribes as beneficiaries of federal trusts, as is often the case with tribal lands nominally owned by the federal government. The situation becomes a bit different in the state of Alaska, where special laws apply. The Alaska Native Claims Settlement Act extinguished informal claims to land, chartered special corporations to hold native interests in land, and granted 40 million acres of land to those corporations. Alaskan tribal members own shares in these corporations, elect their boards, and enjoy dividends from them. In this way, the native peoples exercise ownership rights. As noted above under customary rights, native people also have rights to subsistence use of certain federal lands. Outside of Alaska, the Bureau of Indian Affairs oversees reservations set aside for particular tribes. Some of the land on these reservations is allotted to individuals and some to the tribe as a whole. The BIA and tribal government may conduct forest

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
			management on these lands. There are about 18 million acres of forested lands on these reservations.
			The treaties that the federal government negotiated with the tribes in the 19th century sometimes guaranteed tribes rights outside of the lands reserved for them. In particular the so-called "Stevens treaties," negotiated by Territorial Governor Isaac Stevens with tribes in the Pacific Northwest, typically included language like this: The right of taking fish, at all usual and accustomed grounds and stations, is further secured to said Indians in common with all other citizens of the Territory, and of erecting temporary houses for the purpose of curing them, together with the privileges of hunting, gathering roots and berries, and pasturing their horses on open and unclaimed lands.
			The tribes, states, and federal government have often been in court arguing over the meaning of this language. It is now well-settled that members of certain Northwest tribes have rights to fish and hunt outside their reservations, subject to tribal regulation but only subject to state and federal regulation if necessary to preserve a species. The national forests are considered "open and unclaimed lands." The national parks are not. The Indian Self Determination and

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
			Education Assistance Act of 1975 greatly increased indigenous people's control of their own rights.
			The UN Report of the Special Rapporteur on the rights of indigenous peoples, Addendum on the United States, lists 168 concerns that native peoples expressed to the special rapporteur about their human rights, treaty rights, and other legal rights during a 12-day fact finding mission. Some of these were intratribal. Many had nothing to do with natural resources. But some, like the Sioux claims to federal land in the Black Hills, involve forested lands.
			The Black Hills claim offers one illustration of the nature of these issues. In 1980 the US Supreme Court affirmed a \$106 million judgment against the federal government for taking Native American land in the Black Hills of South Dakota. The Sioux Nation rejected the judgment, however. They did not want compensation. They wanted the land.
			If there were a timber sale on that federal land today, the legal position would be clear: the land belongs to the federal government and the federal government can sell the trees. There is no violation of law. Nevertheless, talks between the federal government and the tribes on the future of the land are ongoing.

			There are disagreements and controversies over Native American
			rights, and there are concerns that the country could do more to meet the letter and spirit of the non-legally binding Declaration of the Rights of Indigenous Peoples. But there does not seem to be a great deal of clearly illegal activity regarding Native Americans and forests.
	Trade ar	nd transport	
1.16 Applicable laws and regulations		Laws	Low risk
Classification of species, quantities qualities (Code Chapter 47, The BLM regulation prohibiting timber theft the government to collect treble damages if false claims on the government, and allows prosecute such cases if the government false Every state has laws against fraud. Legal Authority Regulated through state laws Criminal cases for fraud will be prosecuted Attorneys or other US Department of Justic state level by District Attorneys or their equivate prosecuting officials vary, but District common title). Civil cases can be brought be the party cla case of federal False Claims Act cases, by Legally required documents or records State and counties require documents, such providing this information.	and fraud: 43 CFR § USC § 3729–3733 - allows n a civil suit for making s private citizens to ils to. on the federal level by U.S. ce attorneys, and on the sivalents (the titles of the Attorney is the most iming the loss, or in the any citizen.	Federal - The general laws against defrauding the United States: 18 U.S. Code Chapter 47, http://www.law.cornell.edu/uscode/t ext/18/part-l/chapter-47 The BLM regulation prohibiting timber theft and fraud: 43 CFR § 5462.2, http://www.law.cornell.edu/cfr/text/4 3/5462.2 The federal False Claims Act: 31 USC § 3729–3733, http://www.law.cornell.edu/uscode/t ext/31/subtitle-III/chapter- 37/subchapter-III, allows the government to collect treble damages in a civil suit for making false claims on the government, and allows private citizens to prosecute such cases if the government fails to. References Government Accountability Project. Undated." Field Guide to Timber Theft: Understanding Timber Sales, the Contract, and the Law". [http://www.bark-out.org/sites/default/files/bark-	US state laws provide regulations for the cutting of timber and required payment of taxes. These requirements include a report showing the kinds, quantities and value of the harvested timber, and this information is required to be reported to the state/county. The sources of information above paint a disturbing picture, but for the federal lands, the sources discuss fraud in the 1980s and '90s. The lack of more recent reports and the apparent closure of the Government Accountability Project's Forest Program give hope that the problems identified have been addressed. On private lands, the problem is probably ongoing, especially for smaller and less sophisticated landowners. It would seem prudent for buyers and

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	Generally, in fraud cases the key documents will be any contracts covering the sale of the timber, and any records about the volume, species, and quality of the timber sold.	timber racket: A culture of corruption and political payoffs harms the land and ourselves". Eugene, Oregon, Register-Guard Newspaper. Reprinted at [http://olympicforest.org/wp-content/uploads/2014/03/227.pdf].	party verify timber cruises and scaling, and investigating the reputation of the firms involved in timber transactions.
		Public Employees for Environmental Responsibility (1996). "Unindicted Coconspirator: Timber Theft and the US Forest Service". PEER White Paper. [http://www.peer.org/assets/docs/whitepapers/1996_unindicted_coconspirator.pdf].	
		Public Employees for Environmental Responsibility (1997). "Bureau of Mismanagement: Timber Sale Maladministration". [http://www.peer.org/assets/docs/w hitepapers/1996_unindicted_coconspirator.pdf].	
		Sourht Carolina Forestry Commission(2010). "Don't Be A Victim Of Timber Transaction Crime Information For Forest Landowners in South Carolina". [http://www.state.sc.us/forest/timber val.htm].	
		Massachusetts Woodland Steward (2000). "Under-Your-Nose Timber Scams". [http://daviesand.com/Services/Timber_Scams/index.ht ml].	
1.17	Applicable laws and regulations Laws		Low risk
Trade and transport	The US does not impose any form of export tax on exported goods, including US hardwood exports. The only significant export prohibition for wood products affects unprocessed logs harvested from state and federal lands west of the 100th meridian.	Federal - The Lacey Act, 16 USC § 3372, http://www.law.cornell.edu/uscode/t ext/16/3372	International and interstate commerce is regulated through requirements within the Lacey Act. US state laws provide regulations for transport such as wood load tickets.
	Trade and transport laws only applying to international trade are discussed below under "Customs regulations."	<u>State</u>	"The Lacey Act now makes it

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination	
Indicator	In Lacey Act, 16 USC § 3372, makes it a federal offence to (1) import, export, transport, sell, receive, acquire, or purchase any plant taken in violation of tribal or federal law; (2) to import, export, transport, sell, receive, acquire, or purchase in interstate or foreign commerce any plant— (i) taken, possessed, transported, or sold in violation of any law or regulation of any State, or any foreign law, that protects plants or that regulates— (I) the theft of plants; (II) the taking of plants from a park, forest reserve, or other officially protected area; (III) the taking of plants from an officially designated area; or (IV) the taking of plants without, or contrary to, required authorization; (ii) taken, possessed, transported, or sold without the payment of appropriate royalties, taxes, or stumpage fees required for the plant by any law or regulation of any State or any foreign law; or (iii) taken, possessed, transported, or sold in violation of any limitation under any law or regulation of any State, or under any foreign law, governing the export or transhipment of plants.	Sources of Information - Oregon: Oregon Revised Statutes (ORS) § 164.813, ORS § 164.825 - https://www.oregonlegislature.gov/b ills_laws/lawsstatutes/2013ors164.h tml. ORS Chapter 532 - https://www.oregonlegislature.gov/b ills_laws/lawsstatutes/2013ors532.h tml Vermont: 13 Vermont Statutes Annotated, Chapter 77 § 3609, http://www.leg.state.vt.us/statutes/fu llchapter.cfm?Title=13&Chapter=07 7 Virginia: Code of Virginia §§ Title 59.1, Chapter 8. https://leg1.state.va.us/cgi- bin/legp504.exe?000+cod+TOC590 10000008000000000000000	_	
	The states have varying requirements concerning timber transport, including rules aimed at discouraging timber theft or mislabelling in transport. Every state also has laws governing vehicle registration and safe operation, which may include special laws for logging and log transport vehicles. For example, there may be limits on vehicle length or requirements about securing loads that apply specifically to log trucks. Oregon Revised Statutes (ORS) § 164.813 requires written permission from the landowner to transport larger volumes of certain special forest products including firewood. ORS § 164.825 makes it unlawful to cut or transport more than five coniferous trees without written permission from the landowner. The laws specify what information the written permission must contain. ORS Chapter 532 deals with branding of forest products, in other words, the placing of marks identifying the source or owner of the products. Branding of forest products being shipped by road, rail, or water is mandatory in the western part of the state and voluntary in the eastern part. (The most commercially valuable forests are in the			

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	western part of the state.) The state maintains a registry of brands.		
	Vermont Statutes Annotated, Chapter 77 § 3609, - Vermont requires a transporter to have a bill of sale or other written evidence of ownership. Vermont does not register brands, but does have penalties for defacing or stealing marked logs. 13		
	Code of Virginia §§ Title 59.1, Chapter 8 - Virginia does not appear to require permits or permission to transport timber, but Virginia has a voluntary branding system intended for logs moved by water. Timber owners register their brands with the clerk of the state circuit court in their county.		
	Legal Authority		
	Regulated through Lacey Act and via state laws.		
	State transport laws are probably going to be enforced largely by state and local police, in cooperation with forestry authorities.		
	In states that have timber branding programs, the responsible offices will vary. In Virginia, for example, the clerks of the circuit courts keep the branding records. In Oregon, the Department of Forestry approves brands and keeps the records.		
	Violations of the federal Lacey Act can be policed by state and local officials, and also by the enforcement arms of the federal land management agencies, wildlife agencies, or the Federal Bureau of Investigation. Civil and criminal prosecutions of the Act will most often be brought by the prosecutors in the federal Department of Justice.		
	Legally required documents or records		
	State and counties require documents, such as load tickets or reports providing this information.		
	Documentation will vary by state. In Oregon and Vermont, for example, there will be written permission statements or bills of sale from landowners.		
1.18	Applicable laws and regulations	Laws	Low risk
Offshore	Transfer pricing is of concern to tax officials, as it lets companies shift	- 26 U.S. Code § 482,	The international tax standard,

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
trading and transfer pricing	profits to other jurisdictions. Because federal income tax rates are higher than state rates, the greatest concern is international transactions, but a company could also seek to reduce its state tax burden by shifting apparent profits within the US, from a high-tax state to a low- or no-tax state, or its local tax burden by shifting apparent profits to a low-tax local jurisdiction. The basic federal statutory provision dealing with transfer pricing is 26 U.S. Code § 482. However, several other tax law provisions may be relevant. The regulations implementing § 482 are extensive. The outline of the regulations is presented in 26 CFR § 1.482-0. Legal Authority The federal Internal Revenue Service implements and enforces US tax laws. State and local revenue agencies implement state and local laws. Legally required documents or records Tax returns and financial records will be the primary evidence of profits made and taxes paid. Independent audits of financial records or tax returns may shed light on possible transfer payment issues. Through the "APA" Program, a company in doubt about the transfer pricing laws can seek formal guidance from the IRS before the company files its taxes. In that case, there should be a written agreement signed with the IRS explaining how the laws apply to the company's transactions.	http://www.law.cornell.edu/uscode/t ext/26/482 Several other tax law provisions may be relevant. See the list at http://www.ustransferpricing.com/la ws.html The regulations implementing § 482 are extensive. The outline of the regulations is presented in 26 CFR § 1.482-0, http://www.law.cornell.edu/cfr/text/2 6/1.482-0. References Internal Revenue Service IRS (2014). "IRS Transfer Pricing Audit Roadmap". [http://www.irs.gov/pub/irs- utl/FinalTrfPrcRoadMap.pdf]. KPMG (2013). "Global Transfer Pricing Review - TAX - United States". [http://www.kpmg.com/Global/en/Iss uesAndInsights/ArticlesPublications /global- transfer-pricing- review/Documents/united- states- v2.pdf]. KPMG (2011). "United States: State tax implications of transfer pricing issues". [http://www.us.kpmg.com/microsite/t axnewsflash/tp/2011/TNFTP11_49 US.html]. Web site of state transfer pricing links: http://www.transferpricing.com/usst ate.htm Internal Revenue Service IRS (1999). "Report on the Application and Administration of Section 482". [http://www.irs.gov/pub/irs- pdf/p3218.pdf]. Kelly Phillis Erb. (2012). "IRS brings "A-Team" to crush Transfer Pricing Abuse". Forbes. [http://www.forbes.com/sites/kellyph illipserb/2012/03/27/irs-brings-a- team-to- crush-transfer-pricing- abuse/]. OECD United States - OECD Anti- Bribery	developed by OECD and supported by the UN and the G20, provides for full exchange of information on request in all tax matters without regard to a domestic tax interest requirement or bank secrecy for tax purposes. Currently all 30 OECD member countries, including USA have endorsed and agreed to implement the international tax standard. Furthermore, all offshore financial centers accept the standard. USA has exchange of information relationships with 84 jurisdictions through 61 DTCs and 31 TIEAs. There is extensive regulation through the Internal Revenue Service (IRS) via the Internal Revenue code. The risk of transfer pricing is limited to multi- jurisdiction firms. This will eliminate from concern government land owners, small non-industrial land owners, and most small to medium enterprises involved in logging and processing. Only the larger firms are likely to have international or multi-state arms that would support the kinds of transactions needed for transfer pricing. In a 1999 report to Congress, the IRS estimated the potential federal tax revenue gap from transfer pricing to be \$2.8 billion per year, of which it was detecting 61% through audits.

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination	
		Convention. This page contains all information relating to implementation of the OECD Anti-Bribery Convention in the United States: http://www.oecd.org/daf/anti-bribery/unitedstates-oecdanti-briberyconvention.htm. International Transfer Pricing Journal: http://www.ibfd.org/IBFD-Products/International-Transfer-Pricing-Journal-All-Articles (find 'United States')	IRS. 1999. Report on the Application and Administration of Section 482. Since then, the IRS has had some high- profile settlements with large multi-national corporations and has stepped up its enforcement efforts. Kelly Phillis Erb. 2012. According to that article, most of the abuse is thought to be in the high-tech and pharmaceutical sectors.	
		Exchange of Tax Information Portal - United States: http://www.eoi-tax.org/jurisdictions/US#agreements	The risk of illegal transfer pricing is low in most US forest operations, but when dealing with large companies with extensive international operations, some evidence of compliance, such as the report of a government or third-party auditor, would be reassuring.	
1.19	Applicable laws and regulations	Laws	Low risk	
Custom regulatio ns	Lacey Act Customs regulations The Lacey Act, discussed above, prohibits the export of plants (including material from plants) that have been illegally harvested, transported, or sold. 16 USC §§ 620-620h - Federal government has a prohibition against export of unprocessed logs harvested from federal and non-federal public lands in the western US. It also prohibits "substitution," meaning companies can't buy public lands timber and ship unprocessed logs from their own lands overseas. The regulations implementing these bans are in 36 CFR part 223,	- The Lacey Act, 16 USC § 3372, http://www.law.cornell.edu/uscode/t ext/16/3372 - 16 USC §§ 620-620h, http://www.law.cornell.edu/uscode/t ext/16/chapter-4 The regulations implementing these bans are in 36 CFR part 223, subparts D, http://www.law.cornell.edu/cfr/text/3 6/part- 223/subpart-D, and F, http://www.law.cornell.edu/cfr/text/3 6/part-	No reports of rates of compliance with the export bans or controls were found. The emphasis with the Lacey Act has been on timber imports. No discussion of its effects on exports was found. As long timber theft and trespass occur, there will be a risk of violating the Lacey Act with exports. Some of	
	subparts D and F. These regulations include requirements for marking of all logs reserved for domestic processing. They also include requirements for reporting the acquisition and processing of logs. The federal Bureau of Industry and Security, in the Department of Commerce, requires a license for the export of unprocessed western	223/subpart-F 15 CFR § 754.4, http://www.law.cornell.edu/cfr/text/1 5/754.4.	the exports are illegal. But there is no reliable estimate of the risk. On balance, the risk for this category	
		Customs & Border Patrol Import Guidelines (http://www.cbp.gov/linkhandler/cgov/newsroom/publications/trade/iius.ctt/iius.pdf)	has been assessed as low.	

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	short supply. 15 CFR § 754.4.		
	Legal Authority		
	US Customs and Border Protection, in the Department of Homeland Security, has primary responsibility for implementing and enforcing export laws. It coordinates with its sister investigative agency, Immigration and Customs Enforcement. Offices in the federal land management agencies and the Commerce Department also play a supporting role.		
	The US Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) issues phytosanitation certificates for unprocessed plant products. The US does not require these for exports, but some countries require them to allow import. In the process, APHIS may become aware of unlawful exports of unprocessed logs.		
	Legally required documents or records		
	Customs declaration forms.		
	There should be paperwork on the acquisition and processing of logs from federal land. The logs themselves, upon inspection, should bear "highway yellow" colored marks.		
	There should be written licenses if western red cedar is exported.		
1.20	Applicable laws and regulations	Laws	Low risk
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (Washington DC, 1973).	- The federal statute implementing CITES trade controls is Endangered Species Act §	No North American tree with commercial timber value is listed in
	Amendment to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (Art.XI) (Bonn, Germany, 23 Jun 1979).	8A, 16 U.S.C. 1537a, http://www.law.cornell.edu/uscode/t ext/16/1537a The implementing regulations	the CITES Appendices. The risk of US timber exports violating CITES is therefore low.
	The federal statute implementing CITES trade controls is Endangered Species Act § 8A, 16 U.S.C. 1537a.	are in 50 CFR part 23, http://www.law.cornell.edu/cfr/text/5 0/part-23.	
	The implementing regulations are in 50 CFR part 23.		
	Legal Authority		
	US Fish & Wildlife Service, Customs & Border Patrol, other federal enforcement agencies.		
	The official implementing agencies for CITES in the US are the		

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designation and determination
	Division of Management Authority and the Division of Scientific Authority within the International Affairs Program of the US Fish and Wildlife Service.		
	US Customs and Border Protection is generally charged with enforcing import and export laws.		
	Legally required documents or records		
	CITES permit		
4.04		care procedures	La constala
1.21 Legislatio n requiring due diligence/ due care procedur es	Applicable laws and regulations The Lacey Act amendment 2008, (the Food, Conservation, and Energy Act of 2008 expanded its protection to a broader range of plants and plant products (Section 8204. Prevention of Illegal Logging Practices). The Lacey Act now makes it unlawful to import, export, transport, sell, receive, acquire, or purchase in interstate or foreign commerce any plant, with some limited exceptions, taken in violation of the laws of a U.S. State or any foreign law that protects plants. Legal Authority United States Department of Agriculture Animal and Plant Health Inspection Service (APHIS) Legally required documents or records PPQ FORM 505: Plant and Plant Product Declaration Form (PDF; 319 Kb) PPQ FORM 505B: Plant and Plant Product Declaration Supplemental Form (PDF; 274 Kb) Schedule of Enforcement of the Plant and Plant Product Declaration (PDF; 83 Kb)	Federal - Amendments to the Lacey Act from H.R.2419, Sec. 8204 - http://www.aphis.usda.gov/plant_he alth/lacey_act/downloads/backgrou nd redlinedLaceyamndmnt forestsmay08.pdf - Federal Register: Interim Final Rule Common Food Crop and Common Cultivar Definitions. https://www.google.com.au/url?sa=t &rct=j&q=&esrc=s&source=web&cd =2&cad=rja&uact=8&ved=0CCUQFj AB&url=http%3A%2F%2Fwww.aphi s.usda.gov%2Fplant_health%2Flac ey_act%2Fdownloads%2FAPHIS- 2009- 0018.pdf&ei=Wfq0VJHCHoSW8Q Wn_IHYBw&usg=AFQjCNE2QbyiW nYN1QGi6dg8YuWID77Ebg&sig2=l kAvWwxXUZaGaHUCXvGmAQ&bv m=bv.83339334,d.dGc	Low risk DECLARATION - Compliance with the declaration requirement is necessary to successfully import a timber product. It is currently unknown how well are people actually completing the declarations DUE CARE - No comprehensive data on compliance levels available. High profile Gibson Guitar Case - Even before the case was settled, the 2009 investigations of Gibson had a significant impact on sourcing practices within the music industry. Instrument makers essentially stopped buying Malagasy rosewood and ebony, which had been illegal to harvest in Madagascar since 2006, as a result of these visible enforcement actions. In addition, the spotlight the case placed on the
	Lacey Act Sample Form (PDF; 348 Kb)	- Federal Register: Advance Notice of Proposed Rulemaking, June 30, 2011 - http://www.aphis.usda.gov/plant_he alth/lacey_act/downloads/APHIS- 2010-0129- 0001.pdf - Federal Register: Implementation of Revised	illegal Malagasy rosewood and ebony trade also led to crackdowns in China on Chinese importers of this material. The Amendments increasingly are leading companies to focus on monitoring their own supply chains

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records		
		Lacey Act Provisions, February 28, 2011 (PDF: 146KB) - http://www.aphis.usda.gov/plant_he	and to adopt compliance programs to help ensure that their plant products come from legal sources.
		alth/lacey_act/downloads/APHIS- 2008-0119-0259.pdf - Federal Register: Common Food Crops and Common Cultivars Definitions, August 4, 2010 (PDF; 55 Kb) - http://www.aphis.usda.gov/plant_he alth/lacey_act/downloads/Proposed CC-Definition.pdf	Given the high profile nature of the Gibson Guitar Case, as well as the trade declaration requirement being mandatory, it is likely that there is a good level of knowledge of the Lacey Act requirements. Given the requirements are not proactive in the same way as those in Europe, it is
		 - Federal Register: Implementation of Revised Lacey Act Provisions, September 2, 2009 (PDF; 60 Kb) - http://www.aphis.usda.gov/plant_he alth/lacey_act/downloads/2008-0119.pdf 	also likely that levels of compliance are reasonably high for timber produced in the USA. On balance, the risk for this category has been assessed as low.
		 - Federal Register: Implementation of Revised Lacey Act Provisions, February 3, 2009 (PDF; 61 Kb) - http://www.aphis.usda.gov/plant_he alth/lacey_act/downloads/FederalR egister02-03-2009.pdf 	
		 Federal Register: Implementation of Revised Lacey Act Provisions, October 8, 2008 (PDF; 59 Kb) - http://www.aphis.usda.gov/plant_he alth/lacey_act/downloads/FederalR egisterNoticeLaceyActImplementati onPlan.pdf 	
		References - Environmental Investigation Agency EIA (2012). "Lacey Act has teeth: US gets serious about illegal logging - EIA". [http://eia- global.org/blog/lacey-act-has-teeth-us-gets-serious-about-illegal- logging] Marcus Asner and Katherine Ghilain (2014).	
		"The 2008 Lacey Act Amendments and the Fight Against Illegal Logging" Arnold & Porter LLP, Bloomberg Law -	

Indicator	Applicable laws and regulations, legal Authority, & legally required documents or records	Sources of Information	Risk designati on and determin ation
		http://www.bna.com/the-2008-lacey- act- amendments-and-the-fight- against-illegal- logging/ - Pervaze A. Sheikh (2012). "The Lacey Act: Compliance Issues Related to Importing Plants and Plant Products".	
		Congressional Research Service. http://www.law.umaryland.edu/mars hall/crsreports/crsdocuments/R4211 9_07242012.pdf	

Category 2. Wood harvested in violation of traditional or civil rights

Risk assessment summary

Indicator	Sources of Information	Functional scale	Risk designation and determination
2.1. The forest sector is not associated with violent armed conflict, including that which threatens national or regional security and/or linked to military control.	See detailed analysis below.	Entire Assessment Area	All low risk thresholds (1, 2, 3, 4 and 5) are met and there is no other evidence of specified risk. None of the specified risk thresholds are met.
2.2. Labour rights are respected including rights as specified in ILO Fundamental Principles and Rights at work.	See detailed analysis below.	Entire Assessment Area	Low risk Low risk thresholds 10 and 12 apply. None of the specified risk thresholds are met.
2.3. The rights of Indigenous and Traditional Peoples are upheld.	See detailed analysis below.	Entire Assessment Area	Low risk Low risk thresholds 17, 19 and 21 apply. None of the specified risk thresholds are met.

Indicator	Sources of Information	HCV occurrence and threat assessment	Functional scale	Risk designation and determination
2.1	17-24	There is no UN Security Council ban on timber exports from the United States [17,18,19]. The United States is not covered by any other international ban on timber export [17,18,19]. There are no individuals or entities involved in the forest sector in The United States that are facing UN sanctions [17,18,19]. There is no evidence of conflict timber concerns within the United States [18,20,21,22,23,24].	Entire assessment area	Low risk (Thresholds 1, 2, 3, 4 & 5): The forest sector is not associated with violent armed conflict, including that which threatens national or regional security

				and/or linked to military control.
2.2	25-70	General Social Rights The Declaration on Fundamental Principles and Rights at Work reads as follows [25]: "All ILO Members, even if they have not ratified the Conventions in question, have an obligation arising from the very fact of membership in the Organization to respect, to promote and to realize, in good faith and in accordance with the Constitution, the principles concerning the fundamental rights which are the subject of those Conventions, namely: a) freedom of association and the effective recognition of the right to collective bargaining; b) the elimination of all forms of forced or compulsory labour; c) the effective abolition of child labour; and d) the elimination of discrimination in respect of employment and occupation." This indicator specifically addresses whether the country being assessed upholds the ILO Fundamental Principles and Rights at Work – which may be demonstrated by ratification of the 8 relevant ILO Core	Entire assessment area	Low risk (Thresholds 10 & 12): Labor rights are upheld including rights as specified in ILO Fundamental Principles and Rights at Work, particularly in the forest sector.

Indicator	Sources of Information	HCV occurrence and threat assessment	Functional scale	Risk designation and determination
		conventions, or using other evidence. Therefore, the fact that the United States has not ratified all 8 of the Conventions does not automatically infer that the country is not in compliance with the indicator.		
		The United States has extensive legislation protecting the social rights of individuals and workers. The following pieces of the US legal framework uphold the ILO Fundamental Principles and Rights of Work in the United States:		
		 The First Amendment to the United States Constitution, adopted in 1791, provides that "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press, or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances". In practice, this means that the Constitution protects employees' rights of association, thereby prohibiting their discharge for union activity. 		
		• Freedom of association in the US is protected by the 1935 National Labor Relations Act (NLRA; 29 USC §151-169), with primary responsibility for enforcement by the National Labor Relations Board (NLRB). Additionally, the US Code (29 USC §171(a)) states that, "it is the policy of the United States that, "sound and stable industrial peace and the advancement of the general welfare, health, and safety of the Nation and of the best interests of employers and employees can most satisfactorily be secured by the settlement of issues between employers and employees through the processes of conference and collective bargaining between employers and the representatives of their employees"		
		 Forced and compulsory labor is prohibited by the 13th Amendment to the United States Constitution, and is codified in 18 USC § 1589. The amendment specifically outlaws slavery and involuntary servitude, except as punishment for a person duly convicted of a crime 		
		 The Trafficking Victims Protection Act (most recently reauthorized in 2013) authorizes measures to combat human trafficking. Additionally, federal legislation requires every employer to pay each employee a minimum wage (29 U.S.C.§ 206) and overtime pay (29 U.S.C.§ 207). 		
		 The Fair Labor Standards Act of 1938 (29 USC § 201-262) restricts the employment of children under the age of 16 with the exception of children working on farms owned by their parents, and forbids the employment of people younger than 18 in jobs deemed too dangerous (including logging). 		
		 Discrimination with respect to employment is prohibited in the United States by Section VII of the Civil Rights Act of 1964 (Public Law 88-352), and is overseen by the U.S. Equal Employment Opportunity Commission. There are several additional and complementary pieces of legislation, 		

Indicator	Sources of Information	HCV occurrence and threat assessment	Functional scale	Risk designation and determination
		such as: the Equal Pay Act of 1963 (EPA), which protects men and women who perform substantially equal work in the same establishment from sex-based wage discrimination; the Age Discrimination in Employment Act of 1967 (ADEA), which protects individuals who are 40 years of age or older; Title I and Title V of the Americans with Disabilities Act of 1990, as amended (ADA), which prohibit employment discrimination against qualified individuals with disabilities in the private sector, and in state and local governments; Sections 501 and 505 of the Rehabilitation Act of 1973, which prohibit discrimination against qualified individuals with disabilities who work in the federal government;		
		All indicators In the Category 1 (legality) assessment were designated as 'low risk' at a national scale, indicating that the relevant legislation is enforced.		
		Freedom of Association & Collective Bargaining		
		Even though the US has not ratified either of the associated Core Conventions, it has been a member of the ILO since 1980 (and previous to that was a member from 1934 to 1977). As a member, the US has obligations under the ILO Constitution, including a commitment under the Declaration on Fundamental Principles and Rights at Work. [26] Additionally, the US is subject to annual ILO review and reporting processes and also complaint processes (through the Committee on Freedom of Association, CFA). A report by the International Organisation of Employers (IOE) notes that "Most CFA case examinations of U.S. law have resulted in conclusions and recommendations that the law or practice subject of the complaint is consistent with the principles of freedom of association" and that "there has never been a wholesale criticism of the NLRA or NLRB by the CFA or the ILO" [27]. There are 42 closed complaints cases listed in the US member profile [26]. All of this provides strong evidence that the United States respects, promotes and realizes, in good faith, workers' rights to "freedom of association and the effective recognition of the right to collective bargaining."		
		Some sources question whether the United States is truly respecting workers' rights to freedom of association and the effective recognition of the right to collective bargaining. Concerns include the exemption of a small number of worker categories (such as agricultural workers) from the NLRA [28,29,30,31], the ability of employers to hire replacement workers for those on strike [31], the perceived ability of employers to pressure employees against organizing in the workplace [31], the predominance of enterprise-level bargaining [33], the perceived lack of fair election processes [30], and the perceived lack of adequate enforcement [31].		
		 While the NLRA is an important piece of legislation that protects workers' rights, it is not the only source of protection for workers in the US. The Member profile for the United States lists 80 separate pieces of national legislation associated with 'Freedom of association, collective 		

Indicator	Sources of Information	HCV occurrence and threat assessment	Functional scale	Risk designation and determination
		bargaining and industrial relations' [26]. As noted above, the constitution itself protects the rights of all workers to associate and the US Code establishes in federal policy the respect of the country for collective bargaining – both of these cover all workers, regardless of whether they are covered by the NLRA. Additionally, in the 2003-2005 US Annual Reports to the ILO, the Government writes, "No Government's authorization is required to establish a workers' organization, or to conclude collective agreements. The exercise of freedom of association and the right to collective bargaining is recognized at enterprise, sector/industry, national (and international) levels for the following categories of workers: (i) medical professionals; (ii) teachers; (iii) agricultural workers; (iv) workers engaged in domestic work; (v) workers in export processing zones (EPZs) or enterprises/industries with EPZs status; (vi) migrant workers; (vii) workers of all ages; and (viii) workers in the informal economy." [28]		
		 US labor relations are different than those in other parts of the world. A predominance of enterprise-level bargaining reflects these differences, but does not indicate that collective bargaining is not respected, just that it is done differently. Employers have rights in the US that are different from other countries, including being allowed to actively communicate with employees during collective bargaining, but again this does not indicate that collective bargaining is not respected. While employers are allowed to hire replacement workers so that they may remain in business during strikes, they are required by law to bargain in good faith to resolve those strikes. [34] 		
		 Concerns about election processes do not take into account (and were published prior to) recent changes in union election procedures that are universally considered to favor unions [35,36]. It also fails to consider that, according to election statistics, unions are successful in approximately 70% of the elections that are held [37]. 		
		• There is a very robust system for enforcement of these rights. On the federal level, they are guaranteed by the NLRA, which protects the rights of employees and employers, "to encourage collective bargaining, and to curtail certain private sector labor and management practices, which can harm the general welfare of workers, businesses and the U.S. economy." [38] The Act also established the National Labor Relations Board (NLRB), which has primary responsibility for enforcement of the NLRA. Each year, approximately 20,000 charges are filed with the NLRB alleging unfair labor practices, and each one is investigated by regional field examiners and attorneys. More than half of these are withdrawn or dismissed, and of those that receive full investigation, a little over 1,000 each year result in formal complaints detailing the alleged violations. After a decision by a judge, the remaining cases are litigated and reviewed by the NLRB itself each year [39]. The US Annual Reports to the ILO summarize the millions of dollars		

Indicator	Sources of Information	HCV occurrence and threat assessment	Functional scale	Risk designation and determination
		that have been repaid to workers as a result of these enforcement actions [28]. This represents a heavily utilized and strong enforcement system.		
		In its 2017 report, the International Trade Union confederation (ITUC) categorizes the US as a Status 4 (Systemic violations of rights) in its annual index [32]. The categorization is based upon surveys of national unions and review of legislation and then comparison of these results with 97 indicators derived from the ILO Conventions and jurisprudence that represent violations of workers' rights. The primary concerns highlighted in the 2017 report were lack of consultation with unions regarding labor law and policy, and limits on certain types of strike actions.		
		 This index is based on the opinion of the unions, not metrics, and the views of employees and employers are not included. 		
		 Other global indices and indicators that address labor rights recognize the US as being above the median [69,70] 		
		 The status categorization within this index is built upon indicators that are drawn from the ILO Conventions, but as noted by ILO itself, ratification of and conformance with the Conventions is not required for respect of the Fundamental Principles and Rights [25], and it is the Fundamental Principles and Rights that are the focus of Indicator 2.2 for this risk assessment. Therefore, lack of complete alignment with the Conventions and a lower status in this index does not per se indicate that the US does not respect the basic rights of association and collective bargaining. 		
		 The issues highlighted in the report (e.g., consultation with unions regarding labor law and policy, and limits on certain types of strike actions) provide no information regarding whether the US respects the basic rights of association and collective bargaining. 		
		 Therefore, it is still possible for the US to respect the Fundamental Principles and Rights, while being categorized with a lower status in this index. 		
		It is possible to conclude from the information presented that while the US has not ratified and may not conform with all specifics in the associated Core Conventions, it respects the fundamental rights of freedom of association and the effective recognition of the right to collective bargaining.		
		Compulsory or Forced Labor		
		The US ratified Core Convention 105 (Abolition of Forced Labour Convention) in 1991 and the ILO web site indicates the status as 'In Force' [26]. The US has not yet ratified Convention 29 (Forced Labour Convention), but as noted above has legislation that addresses fundamental rights associated with		

Indicator	Sources of Information	HCV occurrence and threat assessment	Functional scale	Risk designation and determination
		compulsory or forced labor. There are also numerous additional policies, reports, action plans and executive orders that provide evidence of the country's efforts to ensure these rights, particularly as they relate to human trafficking [28].		
		The United States is consistently categorized as Tier 1 (the highest tier reflecting a country's efforts to address human trafficking problems) in the U.S. Department of State's Trafficking in Persons annual report [40]. The Global Slavery Index's 2016 assessment identifies the United States as a country with one of the lowest estimated prevalences of modern slavery and as a country with one of the strongest responses to modern slavery [41].		
		Some sources identify the situation of migrant workers in the agricultural sector as an area of concern [42,43,44]. The agricultural sector is important for this assessment, as it includes both farmworkers and forest workers.		
		 One of the sources is an ILO report on forced labor [42]. The report is 57 pages in length and the United States is mentioned in a single paragraph within a section on the Agricultural, forestry and fishing sector. The US is identified as an example of a country with a high population of migrant and seasonal farmworkers. The report acknowledges that a high share of migrant workers is reflected in the number of cases of forced labour in the sector as a whole (globally), but does not indicate that the US is of specific concern. 		
		 One of the sources identified is Anti-Slavery International, the world's oldest international human rights organization [Source 43]. While this organization has awarded organizations that are fighting forced labor in the United States agricultural sector, it does not identify the United States as a country in which they focus their anti-slavery efforts and a search of 'United States' at the web site does not bring up any reports or other articles about specific concerns in the US or the US in general. Additionally, Anti-Slavery International recognizes the US Department of State's Trafficking in Persons Report (see above) as a valid global index of human trafficking and efforts to eliminate it. 		
		 One of the sources is an article written for an online topical research digest hosted by the University of Denver [44]. The article notes a high occurrence of forced labor in the US, but does not provide any data or specific references as evidence. It states that the high occurrence is due to the absence of labor standards and regulations in the industry, and to the increasing number of undocumented immigrant farm workers that have no legal protection. The article recognizes the importance of the Trafficking Victims Protection Act and some limitations, but was written prior to reauthorizations of the act that increased the protections that it provides. However, the article 		

Indicator	Sources of Information	HCV occurrence and threat assessment	Functional scale	Risk designation and determination
		does not recognize the Migrant and Seasonal Agricultural Worker Protection Act which is the principle federal employment law for farmworkers in the US [45].		
		 Perhaps most pertinently, these sources focus almost entirely on farmworkers, which are one component of the agricultural sector. However, forest workers are a separate component of the agricultural sector, but are not specifically addressed in these sources. While the 2017 Trafficking of Persons report [40] does identify forced labor in the forestry sectors of Burma, Czechia, Guyana, Mongolia, Sweden, and Uganda, and the 2016 List of Goods Produced by Child Labor or Forced Labor [46] identifies forced labor for timber in Brazil, North Korea, and Peru, the US is not mentioned in association with forestry or timber in either report. 		
		While the US has not ratified both relevant Core Conventions, it is still possible to conclude that the US respects the fundamental right to the elimination of all forms of forced or compulsory labor, and in particular that there are no concerns identified in the forest sector.		
		Child Labor The United States ratified Core Convention 182 (Worst Forms of Child Labor Convention) in 1999 and the ILO web site indicates the status as 'In Force' [26]. The US has not yet ratified Convention 138 (Minimum Age Convention), but as noted above has legislation that addresses fundamental rights associated with child labor. Additionally, every state has legislation that further limits the hours and days per week that minors may work in non-farm employment and 34 states have similar limits for farm work [47]. And all states have compulsory education until at least 16 years of age [28]. The US Annual Reports to the ILO also detail statistics on the effective enforcement of the federal legislation, including hundreds of cases, thousands of children affected and millions of dollars paid in fines each year [28].		
		The United States does not feature in the ILO Child Labour Country Dashboard, which indicates a low risk for child labour in the United States [Source 53]. The 2016 List of Goods Produced by Child Labor or Forced Labor [46] does not associate any goods produced in the US with child labor.		
		Some sources identify the situation of children in the agricultural sector as an area of concern [43,48,49,50,51,52]. The agricultural sector is important for this assessment, as it includes both farmworkers and forest workers. However, the focus of all of these sources are exemptions in the US legislation that allow children under the age of 16 to work on family farms, and does not in any way include children working in forests. The US Labor legislation clearly prohibits the employment of minors between 16 and 18 years of age in forestry service occupations and associated occupations as they are "occupations particularly hazardous or detrimental to [the minors'] health or well-being" [54]. No sources of information were identified that suggest that child labor in the forest sector is a concern.		

Indicator	Sources of Information	HCV occurrence and threat assessment	Functional scale	Risk designation and determination
		While the US has not ratified both relevant Core Conventions, it is still possible to conclude that the US respects the fundamental right to the effective abolition of child labor, particularly in the forest sector.		
		<u>Discrimination</u>		
		Even though the US has not ratified either of the associated Core Conventions, it has been a member of the ILO since 1980 (and previous to that was a member from 1934 to 1977). As a member, the US has obligations under the ILO Constitution, including a commitment under the Declaration on Fundamental Principles and Rights at Work. Additionally, the US is subject to annual ILO review and reporting processes. [26]		
		As noted above, the US has a suite of federal laws that prohibit discrimination in the workplace, including discrimination based on race, color, religion, sex, national origin, gender, age, pregnancy, disability, gender identity, sexual orientation, and genetic information. The Equal Employment Opportunity Commission (EEOC) is responsible for enforcement of these laws. In 2015, the EEOC received 89,385 private sector charges of discrimination and achieved 92,641 resolutions, including more than \$356.6 million in monetary benefits [59].		
		Some sources question whether the United States is truly respecting workers' rights to elimination of discrimination. Concerns include differences in unemployment rates between African Americans and whites [55,56], wage gaps between races and genders [56,57], discrimination against workers with family responsibilities [49,56,58], slow progress on affirmative action, an increase in religious discrimination and age discrimination claims, and wage gaps and unemployment rate gaps for persons with and without disabilities [56].		
		 The US generally scores well or very well on global indices and reviews of gender equality in the workplace [60,61], on social progress [62], fundamental rights (including discrimination) [63], and discrimination in employment & vocational training [64] 		
		 Conclusions about racial, gender, religious, age and other discrimination cannot be drawn from simple statistics such as wage and unemployment gaps without delving deeper into the issues. FSC-GUI-60-008 (V1-0) states, "Concerning non-discriminatory employment and occupation practices, the working group clarified that differences in remuneration between workers are not considered discriminatory where they exist due to inherent requirements or specifics of the job, e.g. due to length of employment, experience, technical expertise and performance" [68]. There must be recognition or consideration of the many different factors that may contribute to employment differences where they do exist. For example, research results indicate that a majority of racial and gender wage gaps in the US can be explained by differences in education, labor force experience, occupation or industry and other factors that can be measured [67]. 		

Indicator	Sources of Information	HCV occurrence and threat assessment	Functional scale	Risk designation and determination
		Therefore, while lack of a wage or unemployment gap could be used as evidence that discrimination does not exist, existence of a gap does not automatically infer that the US does not respect the fundamental right to the elimination of discrimination.		
		 In recent years, the US has significantly improved protections for workers with family responsibilities, including the 2010 Patient Protection and Affordable Care Act that amended the Fair Labor Standards Act to require that employers provide break time for nursing mothers [65], and the Family and Medical Leave Act of 1993 that requires the provision of leave time for family reasons (i.e., maternity/paternity leave) and for medical reasons [66]. A number of the sources with concerns were published prior to implementation of these new laws. 		
		 No sources of information were identified that suggest that any form of discrimination related to race, religion, disability or age in the forest sector is a concern. 		
		It is possible to conclude from the information presented that while the US has not ratified and may not conform with all specifics in the associated Core Conventions, it respects the fundamental rights of the elimination of discrimination in respect of employment and occupation, particularly in the forest sector.		
2.3	71-143	Historical Context The federal government entered into more than 400 treaties with various Native American Nations from 1778 to 1871. After 1871, the United States instead used formal agreements between Native American Nations and the federal government as a replacement for treaties. Even though Congress ended treaty-making with tribes in 1871, the pre-existing treaties are still in effect and contain promises which bind the United States today. In total, almost 600 documents were signed between 1778 and 1911. In these treaties and other constructive arrangements between Native American Nations and the United States some lands were reserved for them and for their use. These are called reservations. Some provisions were included in the treaties for the Native American Nations to continue to use the land they ceded to the government by concluding the treaty. These usufructuary rights outside the reservations were the rights of the Native Americans to hunt, fish, and gather forest products off the land or to get access to sacred sites. Because they retained these rights in their treaties, these are referred to as reserved rights. Many of these treaties and other arrangements have been violated by the United States and the current reservations do not always reflect the areas agreed upon as reservations in the treaties and other arrangements. [122,123,124,125,126] There is significant evidence of historical violations of legal and customary rights of Indigenous Peoples in the US, however, Indicator 2.3 requires an assessment of the current situation.	Entire assessment area	Low risk (Thresholds 17, 19 & 21): The rights of indigenous and traditional peoples are upheld, particularly in the forest sector.

Indicator Information HCV occurrence and threat assessment	Functional scale	Risk designation and determination
According to the United States Census Bureau, approximately 5.2 million people in the U.S., or 1.7% of the total population, identified as Native American or Alaska Native alone or in combination with another ethnic identity in 2010. In addition, there are roughly half a million persons that identify entrely or partly as Native Hawaiians. [120] There are 567 federally recognized tribal entities in the United States, and many of these have federally recognized national homelands or 'reserves' [121]. Between 200-300 additional groups identify as historical Indigenous nations but have not been federally recognized, although some are in the recognition process and some have achieved recognition at the state level [122]. Indigenous peoples are present in all regions of the US. There are a number of pieces of legislation at the core of federal policy protecting Native American rights, including: the Indian Self-Determination and Education Assistance Act of 1975, by which tribes are able to assume the planning and administration of federal programs that are devised for their benefit; the American Indian Religious Freedom Act of 1978, which directs federal officials to consult with tribes about actions that may affect religious practices; and the Native American Graves Protection and Repatriation Act of 1990, which directs federal agencies and museums to return indigenous remains and sacred objects to appropriate indigenous groups. A combination of other laws, policies, executive orders and programs fill out the suite of protections by providing additional protections for indigenous religion and culture, and addressing Indian economic and natural resource development, education and civil rights. [127,138] The low risk designations for relevant indicators in the Category 1 assessment indicate that these laws are enforced. The Federal Government has several agencies dedicated specifically to indigenous affairs, the principal one being the Bureau of Indian Affairs (BIA) within the Department of the Interior. Under feder		determination

Indicator	Sources of Information	HCV occurrence and threat assessment	Functional scale	Risk designation and determination
		However, sources still express concerns regarding the rights of Native Americans in the US, including: violence against Native American women [127,128,129]; access to, control over, and protections of places of cultural and religious significance [122,127,130,131,132,133,134,135,138]; ability to achieve federal recognition [127,135]; management of and control over trust lands and other lands and waters for which rights are held or that affect tribal well-being [122,127,129,133,134,136,137,140]; use of consultation and Free, Prior and Informed Consent (FPIC) [122,130,131,138,139]; doctrine used by the US Federal court system [127,136,137]; and lack of ratification of and conformance with the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), and the ILO Convention 169 [122,127,132].		
		Recent Federal Government Efforts To address concerns such as those identified above, the US Federal government has made a number of recent changes to improve the effectiveness of the legislation and policy that address Native American rights. These efforts build on others in the last few decades that have been overall recognized as advancing indigenous self-determination and development with respect for cultural identity, and as being generally in line with the aspirations expressed by indigenous peoples [127].		
		Perhaps most importantly, while the U.S. did not vote for UNDRIP when it was originally adopted in 2007, at the request of Tribes, individual Native Americans and others in the country, it reviewed its position, including extensive government-to-government consultation with tribal leaders, and in 2010 decided to support the Declaration [73]. At the same time that the US government announced its endorsement of the Declaration, it also provided a statement of how it would support UNDRIP, and recognized, as did many tribal leaders, that this would require the US government to continue to work with tribal governments [71,72,73]. The Declaration ensures that indigenous peoples' rights to cultural integrity, education, health, and political participation are protected. It provides for the recognition of indigenous peoples' rights to their lands and natural resources, and the observation of their treaty rights. It also requires countries to consult with indigenous peoples with the goal of obtaining their consent on matters with concern them (i.e., free, prior and informed consent or FPIC). Basically, it recognizes indigenous peoples' right to self-determination. [74]		
		[NOTE: ILO Convention 169, which the United States has not ratified, similarly recognizes indigenous peoples' right to self-determination, while setting standards for national governments regarding indigenous peoples' economic, cultural and political rights, including maintenance of their own identifies, languages and religions, control over their own institutions and ways of life and economic development, and participation in decision-making on activities that may impact them. [75]		
		Recent changes in legislation and policy that are shaping the US Government's relations with tribes and helping to ensure tribes' self-determination, as required by UNDRIP and ILO Convention 169 include the following (and tribes are actively exercising that self-determination as a result [83]):		

Indicator	Sources of Information	HCV occurrence and threat assessment	Functional scale	Risk designation and determination
		 Establishment of the White House Council on Native American Affairs to work on economic development, healthcare, tribal justice systems, education and the management of land and natural resources – chaired by the Secretary of the Interior, this group is tasked with making policy recommendations to the President, coordinating with Native organizations, coordinating tribal consultations and assisting in organizing the yearly White House Tribal Nations Conference. 		
		 Federal Recognition: The US government continues to recognize additional tribes (there are now 567 recognized tribes and many others in the review process). A new final rule was published in 2015 to amend the regulatory process in order to speed it up and make it more transparent. [76,77] 		
		 Restoration of Trust Lands: Self-governance and tribal sovereignty are linked with the right to manage tribal lands. The Obama administration placed over 500,000 acres of land into trust for tribal nations, reversing a historic trend of loss of tribal homelands. [80] 		
		 Economic Development: In 2016, the Indian Trust Asset Management Reform Act was signed into law (with great support from tribes), providing tribes with greater provisions to manage their own trust asset (including the above trust lands) and therefore their own economic opportunities, such as surface leasing, forest management and appraisals without approval of the Secretary of the Interior. [78.79,83] And the 2010 Claims Resolution Act settled four tribal water rights issues, settled litigation that addressed mismanagement of trust assets, settled a lawsuit addressing alleged discrimination against Indian farmers in federal agricultural programs, and created a fund to address historic accounting and trust management issues. [73,81,82] 		
		 Tribal Court: The 2013 reauthorization of the Violence Against Women Act included new provisions that gave tribes the authority to prosecute in tribal courts individuals who commit acts of domestic violence on tribal lands, regardless of whether they are Indian or not [82,83]. And even before these additional authorities were added, The Tribal Law and Order Act of 2010 gave tribes greater authority to prosecute crimes [73,83]. 		
		 U.S. Courts: After many years of unsuccessful filing and outcomes for cases heard at the US Supreme Court, during the 2015 term, 26 Indian law case petitions were filed, 5 were heard by the Court and there were four wins and one loss [86]. And it appears that this increase in activity at the Supreme Court level continued for 2016 and into 2017 [117]. 		
		 Government-to-Government Consultation/FPIC: The President issued an Executive Memorandum in late 2009 that directed all federal agencies to develop a plan within 90 days to consult and coordinate with tribal governments, thereby enforcing President Clinton's Executive Order 13175 "Consultation and Coordination with Indian Tribal Governments [90]. This Memorandum resulted in new policies regarding consultation and coordination with Indian Tribes [90,91,92,115,116]. 		

Indicator	Sources of Information	HCV occurrence and threat assessment	Functional scale	Risk designation and determination
		 Health: The Indian Health Care Improvement Act (reauthorized in 2010) modernizes tribal health care networks and helps to ensure every Native American receives the health care promised to them. [83,84] 		
		 Education: The 2015 reauthorization of the Elementary and Secondary Education Act (called the Every Student Succeeds Act) includes several new indigenous peoples-specific provisions. [73,85] 		
		 Religion: In 2012, the Departments of Defense, the Interior, Agriculture, and Energy and the Advisory Council on Historic Preservation entered into a Memorandum of Understanding (MOU) regarding 'Interagency Coordination and Collaboration for the Protection of Indian Sacred Sites.' The action plan for the MOU requires that the provisions of the MOU be implemented in consultation with Indian tribes. [101] 		
		Not only did the US endorse UNDRIP, but in 2016, as a member of the Organization of American States, the US adopted the American Declaration on the Rights of Indigenous Peoples (ADRIP). The ADRIP was finalized after almost 30 years of work with the indigenous peoples and 35 independent states of the western hemisphere. It was developed with the guiding principle that no standard would be adopted that was lower than the standards contained in the UNDRIP. Some go beyond UNDRIP, including treaties, the rights of children, and the rights of peoples in voluntary isolation. [102,103,104]		
		In his 2017 State of Indian Nations speech, National Congress of American Indians President, and Swinomish Indian Tribal Community member, Brian Cladoosby recognized that government-to-government relations with the US government were the best they had been since the formation of the US government. He also recognized many of the programs and policies detailed above that were being developed together by the US and tribal government and were being successfully implemented by the tribes. [83]		
		Resolution of Tribal Disputes		
		While there are examples of tribal disputes that are either ongoing or have not had successful resolution [127,129,133,134,135,136,137,138], these examples do not provide conclusive evidence that the system is broken and that that laws and regulations and/or other legally established processes do not exist that serve to resolve conflicts, because there are also an increasing number of more recent successes in resolving disputes through the court system, or through other means [81,93,94,95,96,97,98,99,100,109,127,129,133,141,142,143].		
		Further, the US government is allowing its agencies to use and seeing an increase in use of alternative dispute resolution programs [87], and is even providing expertise specifically for tribal concerns through the Native Dispute Resolution Network (a network of American Indian, Alaska Native, Native Hawaiian		

Indicator	Sources of Information	HCV occurrence and threat assessment	Functional scale	Risk designation and determination
		and non-Native Environmental Conflict Resolution professionals) [88]. Conflict resolution through negotiation is closer to traditional Native approaches than mediation and much closer than use of the court system [89].		
		The point is that there are established processes that serve to resolve treaty and other rights disputes.		
		Forest Management By and For Tribes		
		Ultimately, Indicator 2.3 is concerned with the current and near future situation related to indigenous peoples' rights specifically within the forest sector.		
		A large part of self-determination is the right to manage your own assets and resources, including forest management and tribes in the assessment area are using forest management to further self-determination and tribal rights. [107,118,119]		
		Indigenous peoples do not see a forest just as a source of economic resource, but as an integral element of their cultural being, and part of a Tribe's self-determination is making or being an integral part of making the decisions on how the forest is managed so that these values are respected [105]. Many tribes in the assessment area are engaging in sustainable forestry management practices, which are seen as models for forest management elsewhere, as is evidenced by the high-level of active participation in the Inter-Tribal Timber Council which was established in 1976 [106,107,108,119]. In fact, 302 Tribes have forest lands and are engaged in forest management, and there has been an increase in Tribal Natural Resources Departments, those departments' active participation in forest management, and foresters on tribal staff, including a 84% increase in tribes taking over forest management from the Bureau of Indian Affairs (who managed the forests in trust for the tribes), and a 60% increase in tribal staffing from 1991 to 2011 [110; Expert: Mike Dockry].		
		Overall management of tribal lands has transformed from being completely dominated by Bureau of Indian Affairs (BIA) policies, which for forests emphasized timber production, to approaches that incorporate tribal visions and values for the land [110,119, Expert: Mike Dockry]. The legislation that regulates the management of trust lands was revised in 2012, providing tribes with much greater decision-making power over what happens with those lands [78,79,83,119].		
		Tribes are becoming much more active, not just in management of their own lands, but also the lands around their reservation and trust lands. The Tribal Forest Protection Act (2004) gives Tribes the ability to propose and implement management projects on US Forest Service and US Bureau of Land Management lands around their trust lands in order to protect their rights, lands and resources by reducing threats on these other lands [111]. Tribes are active partners in the Anchor Forest program which is an effort to provide forest land stewardship across ownership boundaries and among disparate interests [Source 112]. Tribes are active partners in most of the 22 Landscape Conservation Cooperatives, particularly on		

Indicator	Sources of Information	HCV occurrence and threat assessment		Risk designation and determination
		initiatives related to climate change resilience [113,114]. Additionally, recent changes to the US Forest Service consultation procedures and requirements have improved tribal participation in decision-making on National Forest lands – there are extensive requirements for government-to-government consultation prior to management of forests where tribes have rights and/or customary use [115,116,119].		

Category 2 Information sources

No	Source of information	Relevant indicator(s) or CW category
1.	World Bank: Worldwide Governance Indicators - the WGIs report aggregate and individual governance indicators for 215 countries (most recently for 1996–2012), for six dimensions of governance: Voice and Accountability; Political Stability and Absence of Violence; Government Effectiveness; Regulatory Quality; Rule of Law; Control of Corruption http://info.worldbank.org/governance/wgi/index.aspx#home	Context
2.	World Bank Harmonized List of Fragile Situations: http://siteresources.worldbank.org/EXTLICUS/Resources/511777-1269623894864/Fragile_Situations_List_FY11_%28Oct_19_2010%29.pdf	Context
3.	Committee to Protect Journalists: Impunity Index - CPJ's Impunity Index calculates the number of unsolved journalist murders as a percentage of each country's population. For this index, CPJ examined journalist murders that occurred between January 1, 2004, and December 31, 2013, and that remain unsolved. Only those nations with five or more unsolved cases are included on this index. http://cpj.org/reports/2014/04/impunity-index-getting-away-with-murder.php	Context
4.	Carleton University: Country Indicators for Foreign Policy: the Failed and Fragile States project of Carleton University examines state fragility using a combination of structural data and current event monitoring http://www4.carleton.ca/cifp/ffs.htm	Context
5.	Human Rights Watch: http://www.hrw.org	Context
6.	US AID: www.usaid.gov - Search on website for [country] + 'human rights' 'conflicts' 'conflict timber'	Context
7.	Global Witness: www.globalwitness.org - Search on website for [country] +'human rights' 'conflicts' 'conflict timber'	Context
8.	http://wwf.panda.org/about_our_earth/about_forests/deforestation/forest_illegal_logging/	Context
9.	Transparency International Corruption Perceptions Index. http://cpi.transparency.org/cpi2013/results/	Context

No	Source of information	Relevant indicator(s) or CW category
10.	Chattam House Illegal Logging Indicators Country Report Card. http://www.illegal-logging.info	Context
11.	Amnesty International Annual Report: The state of the world's human rights -information on key human rights issues, including: freedom of expression; international justice; corporate accountability; the death penalty; and reproductive rights	Context
12.	Freedom House http://www.freedomhouse.org/	Context
13.	Reporters without Borders: Press Freedom Index. 2013: http://en.rsf.org/spip.php?page=classement&id_rubrique=1054	Context
14.	Fund for Peace - Failed States Index of Highest Alert - the Fund for Peace is a US-based non-profit research and educational organization that works to prevent violent conflict and promote security. The Failed States Index is an annual ranking, first published in 2005, of 177 nations based on their levels of stability and capacity. In 2014 the FFP changed the name of the Failed State Index to the Fragile State Index: http://ffp.statesindex.org/rankings-2013-sortable	Context
15.	The Global Peace Index. Published by the Institute for Economics & Peace, This index is the world's leading measure of national peacefulness. It ranks 162 nations according to their absence of violence. It's made up of 23 indicators, ranging from a nation's level of military expenditure to its relations with neighboring countries and the level of respect for human rights. Source: The Guardian: http://www.visionofhumanity.org/#/page/indexes/global-peace-index	Context
16.	Rule of Law Index 2016, World Justice Project (http://data.worldjusticeproject.org/#groups/USA)	Context
17.	Compendium of United Nations Security Council Sanctions Lists http://www.un.org/sc/committees/list_compend.shtml	2.1
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January 2018

Page 90 of 101

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142.	Nearly 700 acres of Sonoma county coast protected under deal with landowners, Kashia Pomo, The Press Democrat, 2015 (http://www.pressdemocrat.com/news/4615137-181/nearly-700-acres-of-sonoma?artslide=0)	2.3
143.	US should return stolen land to Indian tribes, says United Nations. The Guardian, 2012 (https://www.theguardian.com/world/2012/may/04/us-stolen-land-indian-tribes-un)	2.3
Expert	Mike Dockry, Research Forester for the US Forest Service's Northern Research Station, Adjunct Assistant Professor for the University of Minnesota's Dept. Forest Resources, Affiliate Faculty for the University of Minnesota's American Indian Studies, and member of the Citizen Potawatomi Nation	2.3

January 2018

Page 91 of 101

Category 3. Wood harvested from forest in which high conservation values are threatened by management activities

Summary of Category 3 Risk Designations by FSC US Region

This table provides a summary of risk designation decisions by FSC US Region (see Annex B for a map of FSC US Regions).

A 'Specified' notation below indicates that there is specified risk designated within the region, but it is usually not the entire region.

		Category 3: High Conservation Values				
FSC US Region	HCV 1: Species Diversity	HCV 2: Landscape- Level Forests	HCV 3: Rare Ecosystems	HCV 4: Critical Ecosystem Services	HCV 5: Community Needs	HCV 6: Cultural Values
Northeast	Low	Low	Low	Low	Low	Low

Indicator	Sources of Information	HCV occurrence and threat assessment	Functional scale	Risk designation and determination
3. Wood harvested from forest in which high conservation values are threatened by management activities The supply area may be considered low risk in relation to threat to HCVs if: a) Indicator 3.1 is met; or b) Indicator 3.2 eliminates (or greatly mitigates) the threat posed to the supply area by	Those regions identified by Conservation International as a Biodiversity Hotspot http://www.biodiversityhotspots.org/xp/hotspots/Pages/default.aspx Those forest, woodland, or mangrove	In the country there are many areas of endangered high conservation value forests. More specifically there are some Global200, IFL and Biodiversity Hotspots areas in different parts of the country. Also there are several HVF areas which are significant on ecoregional level. US is a large country and evaluation of HCVF areas should be done in a smaller scale (e.g. at minimum state level) in order to produce more accurate results. Industrial plantations in the country as a rule do not have significant high conservation values and thus districts which	Low RISK for the USA	Low risk for the USA

January 2018

Page 92 of 101

non-conformity with 3.1.

3.1 Forest management activities at the relevant level (ecoregion, sub-ecoregion, local) do not threaten ecoregionally significant HCVs.

The organization shall first assess whether any HCVs are threatened at the ecoregional level. If any HCVs are threatened at the ecoregional level, the organization shall assess how forest management activities relate to these HCVs at the supply area level.

For the risk assessment of this category the identification of ecoregionally significant HCVs is required, which in practical terms implies that locally relevant values are not in the focus of this step of the risk assessment.

Threatened ecoregions can be identified through the supporting information that references, but is not limited to e.g. Biodiversity Hotspots, Global 200 Ecoregion, Frontier Forest, Intact Forest Landscapes.

Regarding Intact Forest Landscapes, firefighting or fire prevention for the protection of public safety is not considered to be an economic activity of minimal disturbance. Fire control in the context of forest management activities is not considered to be an economic

ecoregions identified by World Wildlife Fund as a Global 200 Ecoregion and assessed by WWF as having a conservation status of endangered or critical. If the Global 200 Ecoregion comprises more than a single terrestrial ecoregion, an ecoregion within the Global 200 Ecoregion can be considered low risk if the sub-ecoregion is assessed with a Conservation Status other than "critical/endangered

http://www.national geographic.com/wil dworld/profiles/g20 0_index.html Those regions identified by the World Resources Institute as a Frontier Forest Intact Forests Landscapes, as entirely overlap with only industrial plantation areas can be classified as low risk in relation to this category.

NA0406 - Eastern forest-boreal transition (vulnerable)

- Ecoregion is identified as Biodiversity Hotspot? No
- Ecoregion is part of WWF's "Global 200 ecoregions" ? No
- Ecoregion is identified by the World Resources Institute Frontier Forest Intact Forests Landscapes: Yes. In the Adirondack area (New-York state) 3 forests are identified within the Adirondack State Park. No wood is sourced from this area).

Overall risk for this ecoregion: Low

NA0407 – Eastern Great Lakes Lowland Forest (NY, VT) (Critical/endangered)

- Ecoregion is identified as Biodiversity Hotspot? No
- Ecoregion is part of WWF's "Global 200 ecoregions"? No
- Ecoregion is identified by the World Resources Institute Frontier

Forest Intact Forests Landscapes : no. Overall risk for this ecoregion: Low

NA0410 - New England-Acadian forest (MN, MA, CT, NH, VT) (Critical/endangered)

- Ecoregion is identified as Biodiversity Hotspot? No
- Ecoregion is part of WWF's "Global 200 ecoregions" ? No
- Ecoregion is identified by the World Resources Institute Frontier Forest Intact Forests Landscapes: no.

Overall risk for this ecoregion: Low

NA0411 - Northeastern coastal (MN, MA, CN, RI) forests (Critical/endangered)

- Ecoregion is identified as Biodiversity Hotspot? No
- Ecoregion is part of WWF's "Global 200 ecoregions" ? No
- Ecoregion is identified by the World Resources Institute Frontier Forest Intact Forests Landscapes : no.

January 2018

Page 93 of 101

activity of minimal disturbance.	identified by	Overall rick for this assertation, Law	-
	identified by	Overall risk for this ecoregion: Low	
Low risk for this indicator may	Greenpeace		
be demonstrated as follows:	(www.intactforests.		
a) Material does not	org)	None of the states in this assessment are recognized as a	
originate from any of		hotspot. Endangered species are protected under the Federal	
the mapped areas of		Endangered Species Act.	
HCVs (as listed in			
3.1), <i>or</i> There are no ecoregionally			
significant HCVs in the supply			
area according to independent			
verifiable information at the			
supply area/supply unit level			
(NGO reports, environmental impact assessments, etc.).			
impact assessments, etc.).			
	http://www.biodiver		
	sityhotspots.org/xp/		
	hotspots/Pages/def		
	ault.aspx		
	http://www.national		
	geographic.com/wil		
	dworld/profiles/g20		
	0 index.html		
	www.intactforests.o		
	rg		
	WWF Ecoregions		
	database:		
	http://www.worldwil		
	dlife.org/biome-		
	categories/terrestria		
	<u>I-ecoregions</u>		
	https://www.worldwil		
	dlife.org/ecoregions/n		
	<u>a0401</u>		
	http://www.worldwil		

	dlife.org/ecoregions/n a0406 http://www.worldwil dlife.org/ecoregions/n a0407 http://www.worldwil dlife.org/ecoregions/n a0410 http://www.worldwil dlife.org/ecoregions/n a0411			
east region :	•	ortant information from the FSC-NRA-USA- V2-0 2017 to justify able at https://us.fsc.org/en-us/certification/controlled-wood/fsc-us-controll		
3.1 HCV 1	https://us.fsc.org/en- us/certification/control led-wood/fsc-us- controlled-wood- national-risk- assessment-us-nra	Critical Biodiversity Areas (CBA) This portion of the assessment was informed by the Critical Biodiversity Areas Dataset, a species richness index published by NatureServe and The Nature Conservancy (TNC) that identifies areas with high concentrations of rare species. [2] The study identifies concentrations of biodiversity, based on occurrence data from NatureServe, of almost 2,800 rare species in the US, including plants, mollusks, arthropods, fish, reptiles, amphibians, birds, and mammals. The index preferences species with limited ranges by applying an additional weighting to species that is inversely proportionate to the size of the species' range (rarity-weighted richness index). The spatial unit of analysis was a grid of hexagons, each about 160,000 acres in size. Rarer species (endemic species with very limited ranges) were given more weight, based on the number of hexagons in which a species occurs.	Low risk for the North east	Low risk for the North east

Risk assessment based on the final draft FSC-NRA-USA- V2-0 2017 Forexp Inc. January 2018

January 2018
Page 94 of 101

January 2018

Page 95 of 101

Specifically, if a species occurs only in one hexagon then it gets full weight (i.e., it counts as 1.0 species), if it occurs in two hexagons it counts as half (i.e., 0.5 species) in each of those hexagons, if it occurs in three hexagons it counts as 1/3, etc.

These weighted values are then summed for each hexagon to get the rarity-weighted richness index for that hexagon. Isoclines were drawn to surround biodiversity 'hot spots' with high rarity-weighted richness. For the purposes of the NRA, areas that had an index of 10 x 10-3 species per km2 or greater were considered Critical Biodiversity Areas, based upon an analysis completed for the original FSC US NRA Working Group (NRA WG) by TNC. [3] This threshold was selected to ensure known areas of high biodiversity were included. The resulting 14 areas may be viewed on a map available from the FSC US National Risk Assessment web page (https://us.fsc.org/en-us/certification/controlled-wood/fsc-us-controlled-wood-national-risk-assessment-us-nra).

This study aligns well with the HCV 1 definition of concentrations of biological diversity, as it identifies places with an increased conservation significance. It also aligns in with the focus on endemic species, and rare, threatened or endangered (RTE) species.

When these CBA, HCV 3 Old Growth and HCV 3 Priority Forest Types are considered together, they align well with the forested WWF Global 200 Ecoregions in the U.S.

Other datasets were investigated for this assessment, including U.S. Fish & Wildlife Service's designated Critical Habitat for listed species [5], Aquatic Biodiversity Hot Spots as defined in NatureServe's Rivers of Life report [6], and priority areas and opportunity areas from State Wildlife Action Plans, but it was determined that the Rarity-Weighted Richness dataset from NatureServe provided the most

Controlled Wood Risk	Assessment Report
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January 2018

Page 96 of 101

		consistent data across the entire assessment area at a scale that was deemed most appropriate for the NRA's purpose by the NRA WG. The following 14 HCV 1 CBA were identified through the process described above and then each CBA was assessed for threats from forest management activities to determine risk designations within the CBA: Southern California CBA Central California CBA Klamath-Siskiyou CBA Northern Utah CBA Southern Utah CBA Southwest Non-Forested CBAs Central Texas CBA Ouachita River Valley CBA Central Appalachians CBA Southern Appalachians CBA Cape Fear Arch CBA Florida Panhandle CBA Central Florida CBA Southern Florida CBA Conclusion: no CBAs were identified in the Northeastern region covered by this risk assessment, which justifies a low risk classification for 3.1	Low risk for the	Low Risk
HCV 2	https://us.fsc.org/en- us/certification/control led-wood/fsc-us- controlled-wood- national-risk- assessment-us-nra	During the period of time following European colonization of the US and prior to 1910, about a third of the forest was converted (primarily to agriculture) and most of the remaining had been harvested at least once. Active management that doesn't allow a forest to reach full maturity greatly reduces its biodiversity as does forest fragmentation. These factors have resulted in HCV 2 forests being fairly limited in the assessment area, generally only occurring in areas that are less accessible for harvest or development and/or have greater protections	entirety of the assessment area.	

January 2018

Page 97 of 101

		that limit development and commercial harvesting. In its HCV 2 assessment for the original National Risk Assessment Working Group (NRA WG), The Nature Conservancy (TNC) considered a number of datasets, including TNC Matrix Forest Blocks and the North in the analysis of HCV 2 because they do not fit the full definition of HCV and due to their limited spatial extents. However, TNC concluded that the Greenpeace/ WRI Intact Forest Landscapes dataset is reasonably robust, given that it is relatively straightforward to identify intact forest using remote sensing. Additionally, the description of Intact Forest Landscapes (IFL) for the dataset aligns very closely with definitions for HCV 2. Therefore, this dataset is used as a proxy for all HCV 2 in the assessment area. The dataset's IFL only occur in three areas in the eastern conterminous US areas – within the Adirondack management area in upstate New York, within the Okefenokee National Wildlife Refuge in southeastern Georgia, and within the Everglades on the southern tip of Florida. The areas in New York and Georgia occur on land that is permanently protected (GAP Status 1 or 2; see the Category 3 'Overview' for an assessment of the effectiveness of protection designations in the US). Most of the Everglades area is permanently protected within a National Park.		
HCV 3	https://us.fsc.org/en- us/certification/control led-wood/fsc-us- controlled-wood-	The areas in New York and Georgia occur on land that is permanently protected (GAP Status 1 or 2; see the Category 3 'Overview' for an assessment of the effectiveness of protection designations in the US). Most	Low risk for all parts of the assessment	Low risk
	national-risk- assessment-us-nra	assessment area, due to their rarity and typical small size. Old Growth, Roadless Areas, Priority Forest Types	area that are not within the HCV 3 areas identified	

January 2018

Page 98 of 101

		None of these 3 HCV exist in the North East	below, due to the absence of HCV 3	
HCV 4	https://us.fsc.org/en-us/certification/control led-wood/fsc-us-controlled-wood-national-risk-assessment-us-nra	The only dataset that the NRA WG found for the HCV4 assessment was the USFS Forests to Faucets Dataset1 (Surface Drink Water Importance Index, Index of Forest Importance to Surface Drinking Water). This dataset highlights areas important to drinking water based on the number of people that depend for drinking water on a given watershed (i.e. HUC 12), weighted for distance upstream from the water intake. The NRA WG concluded that this datalayer shows the importance of watersheds in the US to drinking water provision, and therefore the existence of HCV 4 associated with drinking water throughout much of the assessment area, particularly in the Eastern US and along the Pacific Coast. While HCV 4 includes much more than just drinking water (as indicated in the definitions and guidance above), there are not datasets available for consistent identification of all HCV 4 throughout the assessment area. Therefore, the following risk assessment will consider the entire assessment area. The importance of well managed forests for HCV 4 (i.e., drinking water, watershed protection, erosion control, landslides, etc.) has been well documented. For example, studies have indicated that the cost of water purification for populated areas is lower when the forests within the source watershed are well managed. Conversely, when forest management is not implemented well in HCV 4 areas, the effects can typically be seen through increased sediment and/or other pollutants in the water, affecting overall water quality. Therefore, the following assessment of whether HCV 4 are threatened by forest management activities and/or whether they are effectively protected, focuses on forestry best management practices (BMPs) developed for compliance with federal regulations governing Non-Point Source pollution of US waters. The Clean Water Act (CWA), which is enforced by the US Environmental Protection Agency (EPA) establishes the basic structure for regulating discharges of pollutants (including sediment) into the waters of the United States an	Low risk for the entirety of the assessment area. Evidence of the effectiveness of forestry BMPs, combined with the reported levels of compliance, indicates that there is a high likelihood that HCV 4 are being effectively protected throughout the assessment area through the implementatio n of forestry BMPs associated with State nonpoint	Low risk :Effective protection of HCV 4 is achieved through forestry BMPs developed by States for compliance with the federal Clean Water Act

January 2018

Page 99 of 101

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		However, it can still be a contributor.	source	
		Every state in the US has developed a set of forestry BMPs – some as early as the 1970s. BMPs are recognized by the CWA as being the best way to address nonpoint source pollution from land management activities, even though they do vary somewhat from state- to-state. However, in terms of HCV 4, states typically include BMPs that address wetlands (which would most likely include HCV 4 for flooding), steep slopes (which would most likely include HCV 4 for landslides and erosion control), and buffer zones adjacent to streams (which would most likely include HCV for erosion control). [154,158] Therefore, if BMPs effectively protect these kinds of areas from degradation (and resulting water quality effects), it would be possible to conclude that they would also effectively protect HCV 4.	pollution programs.	
		All states with substantial levels of timber harvest have invested in nonpoint source pollution programs that are based on BMPs. Peer reviewed research has found that when forestry BMPs are implemented, they protect water quality [154,158]. Indicator 4.19 of the National Report on Sustainable Forests indicates that the area and percent of forest land with significant soil degradation is low, suggesting that implemented BMPs are effective [157].		
		Those states that have invested in BMP monitoring programs generally report high levels of compliance and/or few significant risks to water quality [154]. Following a survey that requested results of state monitoring of BMPs, the National Association of State Foresters estimated that implementation rates average 91% nationwide.		
HVV 5	https://us.fsc.org/en- us/certification/control led-wood/fsc-us- controlled-wood- national-risk-	The United States is an industrialized nation that likely does not contain communities within the conterminous states that directly rely on sites or resources fundamental to satisfying basic needs, including indigenous peoples.	Low risk for the entirety of the assessment area. Though	Low risk There is no evidence of HCV 5 in the
	assessment-us-nra	No evidence of HCV 5 in the conterminous United States was found through a literature search on this topic. There is little doubt that they occur in Alaska and Hawaii, but these states are not included in the assessment area for the NRA. FSC US also surveyed US certification bodies with forest management clients to inquire if they have received any comments from communities or stakeholders that depend on forests for their livelihood during forest management public	subsistence activities likely exist in the conterminous United States, evidence suggests that they do not meet the	conterminous United States and its occurrence is unlikely

January 2018

Page 100 of 101

		consultations – the response was negative from all surveyed certification bodies. There is no reason to believe that HCV 5 would be more or less likely to occur on certified vs noncertified lands (the focus of the NRA), therefore, our survey of certification bodies provides a sampling of lands throughout the assessment area.	definition of HCV 5 and therefore it can be concluded that HCV 5 are unlikely to	
		Limited subsistence activities are believed to occur in the conterminous United States, but the question is really whether these activities meet the above definitions for HCV 5. The US Forest Service has broadened its consideration of subsistence to include and emphasize both social and cultural subsistence and other assessments of	occur in the assessment area.	
		'subsistence' use of Non-Timber Forest Products focus on how these products are sold and/or traded and become part of a market system on which people depend. Neither of these is consistent with the HCV 5 definition above. It is important to note that HCV 5 does not include forest uses such as recreational hunting or commercial timber harvesting.		
		Federal treaties exist for lands within the assessment area that protect the rights of American Indians to hunt, fish, trap and gather on reservations and on treaty-specified lands off reservations. [160] These rights may include subsistence use in a broader cultural sense, but there is no evidence to suggest that the food is being acquired because there is no alternative source. In areas where peoples' rights are not legally guaranteed, such as rural areas in heavily forested environments, there is evidence of subsistence need at the scale of the individual, but not whole communities, or significant portions of communities.		
HCV 6	https://us.fsc.org/en- us/certification/control led-wood/fsc-us-	HCV 6 associated with cultural values of global or national significance in the US are generally identified through formal	Low risk for the entirety of the	Low risk :HCV 6 exist

January 2018

Page 101 of 101

controlled-woodnational-riskassessment-us-nra protection in National Monuments, National Natural Landscapes, National Parks, or in state or local designations and occur throughout the United States. There are national level and state level registries of sites and they occur throughout the assessment area. Locations of sites sacred to Native American tribes are not generally publicly available due to tribal requests for confidentiality. However, as there were Native American communities throughout the United States prior to European colonization, these sites most likely occur throughout the assessment area. A large number of these sites occur on federally-administered lands, however, some do occur on other public lands, such as state-administered lands, and private lands.

Therefore, the following risk assessment considers the entire assessment area.

In the United States, globally and nationally significant cultural sites that occur in forested areas are permanently protected as UNESCO World Heritage Sites, National Monuments, National Natural Landmarks, or National Parks [see the Category 3 'Overview' for an assessment of the effectiveness of protection designations in the US]. Those that are not within protective designations generally still fall under the protection of federal legislation; see Categories 1 and 2 for assessments of legality, governance and law enforcement in the US]. Many of the Native American tribes' sacred sites occur on federally-managed lands, and while there has been a history of conflict with the Federal Government over protection of these sites, in recent years, there have been positive changes in this relationship, with a 1996 Executive Order and a 2012 MOU between a number of federal agencies for coordination and collaboration for protection of Indian sacred sites at the core.

All states have state preservation offices and associated laws, many of which are modeled on the National Historic

assessment area. Almost all globally and nationally significant cultural landscapes are under permanent protection as National Monuments, National Natural Landscapes or Natural Parks. Native American sacred sites and places receive protection from federal and state legislation. There is no evidence of recent threats from forest management activities to Native American sacred sites or cultural sites

in the area under assessment. but they largely occur permanently protected areas. HCV 6 that are outside of permanently protect areas are not believed to be threatened by forest management activities.

Controlled Wood Risk Assessment F	Report
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January 2018

Page 102 of 101

		Preservation Act and the National Environmental Policy Act which Americans regarding the effects of governmental undertakings and the impact they may have on cultural resources, and these provide an additional layer of protections, particularly for sites not on federal lands FSC US	critical to local communities.	
		staff conducted an extensive search of articles and information (including hundreds of news articles, press releases, law reviews, and congressional hearings) related to tribal disputes within the last 15 years over sacred sites and sacred places. Only three disputes related to forest management activities were identified, and in all cases, the courts ruled in favor of the tribes and protection of the sacred sites. The remainder dealt with issues primarily related to oil, gas and mineral extraction, development, and recreation.		
		In addition to a literature search, an FSC US survey of US certification bodies with forest management clients, which represents a sample of managed forests throughout the assessment area, found no evidence of forest management activity threats to cultural values critical to local communities.		
3.2 A strong system of protection (effective protected areas and legislation) is in place that ensures survival of the HCVs in the ecoregion. Low risk for this indicator shall be demonstrated as follows: a) A strong system of	FSC does not have a specific threshold that would clearly indicate whether a system of protection is "strong" or not. there is no single entity that controls	As 3.1 is low risk for the North-East this section is not applicable.		
protection of HCVs is in place. The definition of strong shall be based on the effectiveness of law enforcement in the country. This can be demonstrated through a high rating (≥ 75%) in the World Bank 'rule of	what "strong" means in this case, so there is no authority that can give a definitive ruling on this matter. It will be			

Controlled Wood Risk Assessment Report	January 2018
	Page 103 of 101

law' index (www.govindicators.org), and b) There is significant support by relevant national/regional stakeholders from the assessed supply area, or	necessary to consult and document existing readily available information, such as (but not necessarily limited to):			
c) The forest manager has agreed to an approach of HCV protection at the supply unit level with national/regional environmental stakeholders relevant for the assessed supply area. c) Indicator 3.2 cannot be met if there is substantial objection from relevant national or regional stakeholders against a low risk designation for the HCV category.	a) Percentage of the ecoregion in protected areas b) Degree of protection			
		Global risk status of category	LOW RISK	Low risk

Controlled Wood Risk Assessment Report	January 2018
	Page 104 of 101

Category 4. Wood harvested from areas being converted from forests and other wooded ecosystems to plantations or non-forest uses

The district of origin may be considered low risk in relation to conversion of forest to plantations or non-forest uses when the following indicator is present: (Note: the change from plantations to other land uses is not considered as conversion).

FSC Indicator	Information Sources Used	Justification and risk at the indicator level	Risk Designation
4.1 There is no net loss of forest cover.	FAO Global Resources Forest Assessment 2010 Assessment of Lawful Harvesting & Sustainability of US Hardwood Exports, AHEC, available at: http://www.ahec-europe.org/	According to last FAO report (Global Forest Ressources Assessment 2010) forest area annual net increase is 0,13 % in average within United States during the period 2000-2010, thus on whole country level the conversion is not a problem. However there are significant differences between different areas of US. Study by AHEC and comments from FSC US suggest that there are two ecoregions where conversion is endangering forests and where loss of forest cover is greater than 0.5% annually (the threshold defined by FSC). This areas of United States can be classified as low risk in relation to conversion as net loss of natural forests is not occurring in a significant rate and is in all cases below 0.5% annually.	LOW RISK

Controlled Wood Risk Assessment Report	January 2018
	Page 105 of 101

4.2 There is no net loss AND no significant rate of loss (>0.5% per year) of natural forests and other naturally wooded ecosystems such as savannahs taking place in the eco-region in question	Not evaluated since information exists for criteria 4.1	LOW RISK
	Total risk status of category	LOW RISK

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January 2018

Page 106 of 101

Category 5. Wood from forests in which genetically modified trees are planted

Requirements related to wood from forests in which genetically modified trees are planted

FSC Indicator	Information Sources Used	Justification and risk at the indicator level	Risk Designation
5.1 The district of origin may be considered low risk in relation to wood from genetically modified trees when one of the following indicators is complied with: a) There is no commercial use of genetically modified trees of the species concerned taking place in the country or district concerned OR b) Licenses are required for commercial use of genetically modified trees and there are no licenses for commercial use OR c) It is forbidden to use genetically modifies trees commercially in the country concerned.	Forestry Department of FAO (Food and Agriculture Organization of the United Nations) working paper "Preliminary review of biotechnology in forestry, including genetic modification", 2004. Assessment of Lawful Harvesting & Sustainability of US Hardwood Exports, AHEC, available at: http://www.ahec-europe.org/ Prof. Steven Strauss, Oregon State University. (Personal conversation). Restrictions on Genetically Modified Organisms: United States: http://www.loc.gov/law/help/restrictions-on-gmos/usa.php Regulatory Information: http://www.isb.vt.edu/regulatory.aspx USDA Field Tests of GM Crops: http://www.isb.vt.edu/search-release-data.aspx Petition for Determination of Non-regulated Status for Freeze Tolerant Hybrid Eucalyptus Lines: http://www.aphis.usda.gov/brs/aphisdocs/11_01901p.pdf	According to the latest available FAO study ("Preliminary review of biotechnology in forestry, including genetic modification", 2004. There is no commercial usage of any GM trees in the country. Commercial usage of GM trees is only taking place in China (species Populus nigra) according to the FAO data. It is relevant to notice that species derived from traditional breeding methods are not considered GMO species. Also only commercial usage of GMO species needs to be taken into consideration within this risk assessment. At the same time it should be noted that US is most advanced country in laboratory experiments and field trials of GMO species and thus the possibility that GMO species will be commercially used in US is realistic. If updated data becomes available about commercial usage of GMO species in US, the US risk assessment for this category needs to be updated and reviewed.	LOW RISK

Controlled Wood Risk Assessment Report	
	Page 107 of 101

applicable legislation of the area under assessment AND the risk assessment for relevant indicators of Category 1 confirms that applicable legislation is enforced. There is no ban against GM trees. GMO is regulated under general legislation covering general health, safety and environmental legislation Environmental impact assessment is needed before approving GMO use. The definition of GMO by the USDA (US Department of Agriculture) takes a function based approach, rather than focusing on the process of developing GMO. In the future this might mean that some products that the European Union/FSC would consider GMO, will not be registered as such under the US legislation and will not be regulated as such. The definition of GMO is tied to the traits and risks, and only to a little extend the GMO method. From personal communication with Prof. Steven Strauss, there has to his knowledge been no such cases, but future cases can occur.

(2) There is no commercial use of GMO (tree) species in the area under assessment,
Currently there are no GMO trees for commercial timber use. Fruit (papaya/plum) trees can be found as GMO, as well as research plots.

Controlled Wood Risk Assessment Report	January 2018
	Page 108 of 101

	Currently an application for commercial timber use of GM eucalyptus is being evaluated. A decision is expected to be given within 2015. If this petition will be approved there will be no requirements to register/regulate the MU using GMO trees, every GMO that has been deregulated has been analysed by FDA, USDA, and/or EPA and has thus been regulated prior to this. AND (3) Other available evidence does not challenge 'low risk' designation. Currently there is no use of GMO trees for commercial use, but the US might be close to approve the use of such. If this happens it will not be possible to identify the use of that GMO to a certain MU, which is why there might be specified risk in the future. But as the situation is now in the US there are no commercial GMO timber trees.	
5.2 Licenses are required for commercial use of genetically modified trees and there are no licenses for commercial use.	Not evaluated since information exists for criteria a.	
5.3 It is forbidden to use genetically modified trees	Not evaluated since information exists for criteria a.	

Controlled Wood Risk Assessment Report	
	Page 109 of 101

	Total risk status of category	LOW RISK
concerned.		
commercially in the country		