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Interdicting Timber Theft in a Safe Place: A Statutory Solution to the Traffic Stop Problem

Randy J. Trick[†]

Timber theft is a unique and prevalent crime that occurs throughout the Pacific Northwest, a region built upon the natural resources industry that is now significantly depressed. Theft of trees, wood and other specialized forest products, ranging from Christmas trees and cedar blocks to pinecones and salal grass, distorts the economics of the forestry and wood products industries. Because the thefts occur in remote rural areas, law enforcement faces two primary problems—difficulty catching thieves at the time of the crime, and the danger to the law enforcement of confronting thieves in remote locations. Law enforcement officers in the backcountry are more vulnerable because they are far from backup, from civilians, and from routes of escape. Further, timber theft enjoys some level of community acceptance, which makes interdiction and enforcement more difficulty. This article proposes a key tool to help enforce timber theft laws—crafting a statute that would provide de facto reasonable suspicion for an officer to stop a vehicle visibly carrying loads of specialized forest products without a proper tag. This solution would also prevent a criminal case from being dismissed when evidence of the stop is suppressed, and it would allow officers to interdict timber thefts on public highways, rather than in the backwoods.

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[†] Seattle University, J.D. Candidate 2012. The author would like to thank Marcus Lee for his work as an editor and Courtney Barnes for her assistance during the development of this article. This article is dedicated to federal law enforcement officers Kristine Fairbanks and Margaret Anderson, both killed in cold blood while on duty in the Pacific Northwest.

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I. INTRODUCTION

The oldest living things in the Pacific Northwest are the red cedar trees that grow in groves in the southwest corner of the Olympic National Forest in Washington State. Some have been living for more than 600 years. And in 2006, several men cut down thirty-one of these ancient trees, disturbing one of the last serene cedar groves in the Pacific Northwest. The thieves cut blocks of cedar from the trees, a valuable commodity to artisans, woodworkers, and builders, and sold them on what is essentially a black market.¹ Federal agents investigated the crime, arrested the men, and by the spring of 2009 seven had pleaded guilty. The federal prosecutor noted the gravity of the crime, writing in a sentencing memorandum that "[t]he true value of these resources cannot be measured by board-feet or the number of cedar shingles to be harvested from each tree . . . [the loss is like] losing a national antiquity, or a cultural heritage resource."² Notably, U.S. Forest Service law enforcement officer Kristine Fairbanks, one of the lead investigators in the case, had been shot and killed on duty before she could see any of the men sentenced.³

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^{1.} Mike Carter, 2 Year Sentence for Washington Old-Growth Timber Theft, SEATTLE TIMES, Apr. 10, 2009, http://seattletimes.nwsource.com/html/localnews/2009020137_weboldgrowth10m.ht ml.

^{2.} Id.

^{3.} *Id*.

Stopping timber theft and enforcing the forestry laws presents several distinct challenges to law enforcement. Detection and intervention of the crime is difficult and rare, and when it is possible, approaching and arresting a timber thief in the backcountry may not be safe. Officer Fairbanks was not killed by a timber thief, but she was shot to death by a criminal miles into the Olympic National Forest, with the next closest law enforcement officer twenty minutes away.⁴ In February of 2012, a Mason County Deputy shot a suspected wood thief in the backwoods.⁵ The deputy had been conducting surveillance of a potential wood theft site when he encountered the suspected thief.⁶ The officer called for backup, and when an arrest was attempted the suspect drove his truck at the deputies.⁷ The deputy shot the suspect in self-defense, injuring him.⁸

Blocks of wood from old-growth trees are just one type of specialized forest products stolen off private or public lands and fed into the sawmills and wood manufacturing plants of the Pacific Northwest. Other specialized forest products, or SFPs, such as evergreen salal, wild berries, cones, native grasses, mushrooms, and other forest byproducts are abundant in the Pacific Northwest, and their theft is thought to be widespread.⁹ The SFP black market distorts the economics of the timber and wood products industry, and deprives federal and local governments of needed tax revenue. The thefts that supply this illegal trade are often

^{4.} Nick Perry, U.S. Forest Service Officer, Suspect Shot and Killed, SEATTLE TIMES, Sept. 21, 2008, http://seattletimes.nwsource.com/html/localnews/2008193200_forestservicedeath21m.html.

^{5.} Associated Press, *Mason County Deputy Shoots Wood Theft Suspect*, SEATTLEPI.COM, Feb. 10, 2012, http://www.seattlepi.com/default/article/Mason-County-deputy-shoots-wood-theft-suspect-3241081.php.

^{6.} Press Release, Mason County Sheriff's Office, Deputy Shoots Theft Suspect (Feb. 9, 2012), *available at* http://so.co.mason.wa.us/index.php?aid=823.

^{7.} *Id*.

^{8.} Id.

^{9.} One researcher estimated the illegal harvest of moss in Oregon, for example, to be twice that of the legitimate harvest in the mid to late 90s. JeriLynn E. Peck, Commercial Moss Harvest in Northwest Oregon: Describing the Epiphyte Communities, 71 NW. SCI. 186 (1997). A follow-up study by Peck reaffirmed that the moss industry still saw "rampant" illegal harvesting, and that illegal harvesting remained a factor in making resource-management decisions. JeriLynn E. Peck & John A. Christy, Putting the Stewardship Concept into Practice: Commercial Moss Harvest in Northwestern Oregon, USA, 225 FOREST ECOLOGY & MGMT. 225, 226 (Apr. 2006); see also, PATRICIA MUIR, AN ASSESSMENT OF COMMERCIAL "MOSS" HARVESTING FROM FORESTED LANDS IN THE PACIFIC NORTHWESTERN AND APPALACHIAN REGIONS OF THE UNITED STATES: HOW MUCH MOSS IS HARVESTED AND SOLD DOMESTICALLY AND INTERNATIONALLY AND WHICH SPECIES ARE INVOLVED?, FINAL REPORT TO U.S. FISH AND WILDLIFE SERVICE AND U.S GEOLOGICAL SURVEY, FOREST AND RANGELAND ECOSYSTEM SCIENCE CENTER 15 (2004). Most estimates of illegal timber theft suggest more than \$1 billion of timber is stolen for national forests alone each year. Lisa M. Paciello, Note, Timber Theft In National Forests: Solutions To Preventing the Widespread, Underprosecuted, and Underpunished Crime, 32 NEW ENG. J. ON CRIM. & CIV. CONFINEMENT 345, 347-48 (2006).

committed without regard to their serious ecological implications.¹⁰ Though the scale of the timber theft problem cannot be accurately quantified, it is real. Such theft victimizes the public's investment in the health and protection of its public lands. Indications suggest the scale of the problem is vast in the Pacific Northwest, especially in Washington, because of the region's abundance of natural resources and acres of forests, both managed by the state and timber companies, and the area's stands of untouched old-growth trees.

The forests of the Pacific Northwest offer an easy target for backcountry criminals who need just a basic understanding of chainsaw operation and some experience felling and bucking trees. To such people, the forests are just as prime a target as a parking lot of unlocked cars with a laptop computer on each passenger seat. And criminals know that enforcement is scarce in the woods.¹¹ Law enforcement is primarily frustrated by the sheer amount of acreage to cover, officer safety concerns, and general acceptance in some rural communities of timber theft.¹² Investigating theft sites after the fact, or tracking stolen wood from a mill back to the harvester, requires more time, energy, and cooperation by civilians than law enforcement agencies can spare or garner. Officer safety is put at greater risk when attempting to stop a theft in action where backup may be distant and culprits may be caught completely surprised. As a result, federal, state, and local law enforcement officers stand the best and safest chance to intercept stolen timber by patrolling the public highways and forest roads a thief must travel to deliver stolen wood to sawmills. Yet, interdictions on highways and roads implicate the legal issue of the vehicle seizure-such traffic stops require individualized and reasonable suspicion.¹³

^{10.} While this paper offers a prescriptive solution to issues involving timber theft, primarily theft of cedar, firewood, and Christmas trees, the analysis is applicable to the theft of all forests products. Other aspects of the issue, such as the precise extent of the economic and ecological effects of timber theft, fall beyond the scope of this paper.

^{11.} Chris Solomon, Ancient Trees Falling Victim to Illegal Drugs: Proceeds from Sale of Old Timber Being Used to Support Meth Habits, Forest Officials Suspect, SEATTLE TIMES, Nov. 25, 2001, at A1, available at http://community.seattletimes.nwsource.com/archive/?date=20011125&slu g=hottimber25m0. Jay Webster, a patrol captain for the Olympic and Mount Baker-Snoqualmie National Forests, told Soloman, "You know where bad guys go to do bad things?... They go to the woods. Cause there's no cops."

^{12.} See Michael R. Pendleton, *Taking the Forest: The Shared Meaning of Tree Theft*, 11 SOC'Y & NAT. RESOURCES 39 (1998) [hereinafter Pendleton, *Taking the Forest*].

^{13.} State v. Ladson, 979 P.2d 833, 838 (Wash. 1999). The court, addressing pretexual traffic stops, said "a traffic stop is a 'seizure' for the purpose of constitutional analysis, no matter how brief. . . . An ordinary traffic stop has been analogized by federal courts to investigative detention subject to the criteria of reasonableness set forth in Terry v. Ohio, 392 U.S. 1, 88 S.Ct. 1868, 20 L.Ed.2d 889 (1968) and United States v. Botero–Ospina, 71 F.3d 783, 786 (10th Cir.1995)." *Id.* (internal citations omitted).

Protecting the natural resources of the Pacific Northwest and protecting law enforcement officers trying to stop timber thefts can be accomplished with a change to Washington's specialized forest products statutes.¹⁴ Both goals can be accomplished by giving law enforcement in Washington a clear legal authority to stop suspected timber thieves on public highways, rather than deep in the woods. The change also addresses a legal barrier that has resulted in the reversal of some timber theft convictions, and clarifies for law enforcement officers their permissive authority as they patrol rural and forest roads looking for suspected thieves. Other statutory language could resolve evidentiary issues for other types of forest product theft prosecutions or civil actions, or evidentiary issues in other courts.

Understanding the legal and social issues of forest product theft begins with a survey of the timber industry in the Pacific Northwest, an understanding of the common types of timber theft, and an appreciation of the history of the problem and the social issues surrounding investigation and enforcement. There are three recognized types of timber theft. The first two, affiliated and unaffiliated timber theft, concern large-scale operations where harvesting occurs either without a timber sale contract or outside of its terms. The third type, timber poaching, is committed by individuals without regard to boundary lines or land ownership.¹⁵ The types of theft share elements of greed, a belief that a tree is inconsequential property, and reflect the strong heritage of logging in the Pacific Northwest. Each type of timber theft presents different legal issues and obstacles to their detection, monitoring, investigation, enforcement, and prosecution. This article focuses on timber poaching-the theft of trees and SFP by individuals or small groups acting simply to resell the wood for cash. Such crimes are committed with complete ecological disregard and commonly by people in need of either substance abuse treatment or government assistance.¹⁶

Part I provides a general context by describing the forestlands of the Pacific Northwest and defines a geographic scope for this issue. Economic information about the legitimate timber industry offers the best estimate of the scope of the formal and informal specialized forest product industry.¹⁷ Part II of this paper considers the types and styles of

^{14.} This article focuses on the statutes of Washington State, though the proposed change need not be unique to Washington. In all states where the harvest, hauling, and sale of specialized forest products are regulated, lawmakers can mimic the solution proposed for Washington.

^{15.} See Pendleton, Taking the Forest, supra note 12.

^{16.} Soloman, supra note 11.

^{17.} It is notable that figures regarding the number of timber theft prosecutions under these statutes are unavailable for the Northwest and most parts of the country. Further, few timber theft

timber theft, those who commit it, and provides insight into the social pressures that complicate investigation and enforcement.¹⁸ Part III outlines the applicable statutes governing legitimate forest product harvesting and possession in Washington, as well as recent efforts to streamline and amend those laws, while Part IV explores a common legal defense to timber theft prosecutions—the improper seizure of a load of stolen wood during a traffic stop. Finally, Part V of this paper proposes statutory language to give law enforcement officers and prosecutors effective and critical tools—de facto reasonable suspicion to stop a vehicle visibly carrying specialized forest products under certain conditions, and a presumption establishing the evidentiary requirement of a willful mens rea, and a stronger forfeiture law to further deter thieves.

II. PACIFIC NORTHWEST FORESTS: OWNERS AND OPERATORS

The economy of the West has historically been fueled by natural resource exploitation—minerals, water, game, and timber. The size of the forestry, timber, and lumber industry in the Pacific Northwest has decreased over recent decades, but remains the largest regional source of wood products in the country.¹⁹

The vast forests of Washington and Oregon are predominantly owned and managed by the public through federal and state agencies. Oregon and Washington comprise the Forest Service's Region 6,²⁰ with eleven national forests in Oregon and six in Washington.²¹ The Forest Service manages 10.1 million acres of land in Washington; the figure tops 17.3 million acres in Oregon.²² Figure 1 shows the changing amount

19. DARIUS M. ADAMS ET AL., U.S. FOREST SERV., ESTIMATED TIMBER HARVEST BY U.S. REGION AND OWNERSHIP, 1950–2002 40 (2006), *available at* http://www.fs.fed.us/pnw/pubs/pnw_gtr659.pdf. This quantification relies upon data that timber harvesters reported to state economic agencies, or timber sales activity reports from national forests. When possible, state or federal data is cited rather than the self-reported industry data. In some instances, data points for one state, such as Washington, do not have corresponding data points in another state, making direct comparisons difficult. Thus, the data presented has limitations, but provides a basic quantification of the scope of the natural resources industry in the Pacific Northwest.

20. Parts of northern California and Idaho have occasionally been included in Region 6. Some data presented in this article includes regional totals from years where Region 6 included these forests.

21. Pacific Northwest Region, U.S. FOREST SERV., http://www.fs.fed.us/r6/pdx/forests.shtml (last visited Apr. 9, 2012).

22. U.S. FOREST SERV., FS-383, FY2010 LAND AREA REPORT, tbl.4 (Sept. 30, 2010), available at http://www.fs.fed.us/land/staff/lar/LAR2010/LAR_Book_FY2010.pdf.

cases constitute published case law; the number of prosecutions that fail at the trial court level due to challenges to the probable cause of a traffic stop is unknowable.

^{18.} The organized defrauding of the Forest Service by companies that bid for, receive, and exploit contracts has historically been a serious federal resources management crisis. However, exploring the topic as it occurs today is beyond the scope of this paper, though ripe for further study.

of forest-use land in the West Coast states. Table 1 displays who owns and manages forestland in the Pacific Northwest and the percentage of acreage under each entity's stewardship. Notably, the amount of land under tribal control in Washington is high because the Confederated Tribes and Bands of the Yakima Nation control a large reservation generally encompassing the east slope of Mt. Adams south of Mt. Rainier.²³

On privately-managed lands in western Washington and Oregon, most stands of valuable old-growth were harvested decades ago; that acreage is now typically second-growth, or in some places, third-growth farmed timber.²⁴ Public land is targeted more often than private land because cedar and maple thieves seek the preserved old-growth stands,²⁵ and because public forest agencies almost exclusively contract timber harvesting, creating the opportunity for affiliated timber theft.²⁶



Figure 1. Forest-Use Land by State by Selected Years, 1945-2007.²⁷

^{23.} See Treaty With The Yakima, June 9, 1855, 12 Stat. 951.

^{24.} Washington Forestland, WASH. CONTRACT LOGGERS ASS'N, http://www.loggers.com/tim ber facts.htm (last visited Apr. 9, 2012).

^{25.} See WASH. STATE DEP'T OF NATURAL RES., THE FUTURE OF WASHINGTON FORESTS 19 (2007).

^{26.} See Pendleton, Taking the Forest, supra note 12.

^{27.} Major Land Use Data Sets, U.S. Dep't of Agric. Econ. Research Serv., http://www.ers.usda.gov/Data/MajorLandUses/spreadsheets/Total%20land%201945-2007%20by%20state.xls.

Owner/Designation	Washington ²⁸	Oregon ²⁹
National Forest	36.6	48
National Parks	5.1	9
Other federal	1.5	-
State agency	12	4
Tribal	7	2
Timber Industry	21	21
Small land owner ³⁰	15	16
Other	2	-

Table 1. Stewardship of Pacific Northwest Forestland (By Percentage of Total).

A. Timber as an Industry in Decline

Environmental regulation, rather than economic pressures, takes the bulk of the blame for the timber industry's historic decline. During the late 1980s, the federal government was required to conform its practices to the Endangered Species Act,³¹ which led to acres of public land declared off limits to harvesting so as to preserve the habitat of the Northern Spotted Owl, the Marbled Murrelet, and various species of salmon.³²

^{28.} WASH. CONTRACT LOGGERS ASS'N, supra note 24.

^{29.} *Timber and Forest Facts of Oregon*, ASSOCIATED OREGON LOGGERS, http://www.oregonl oggers.org/harvestdata.html (last visited Apr. 9, 2012).

^{30.} Notably, in Oregon more than 150,000 private landowners own forestland, with nearly sixty percent of those owners holding properties smaller than ten acres. OREGON FOREST RES. INST., THE FUTURE OF OREGON'S WORKING FORESTS 1 (July 2008), *available at* http://oregonforests.org/ assets/uploads/Working_Web.pdf.

^{31.} Tennessee Valley Auth. v. Hill, 437 U.S. 153, 173 (1978). ("One would be hard pressed to find a statutory provision whose terms were any plainer than those in § 7 of the Endangered Species Act. Its very words affirmatively command all federal agencies 'to *insure* that actions *authorized, funded,* or *carried out* by them do not *jeopardize* the continued existence' of an endangered species or '*result* in the destruction or modification of habitat of such species' 16 U.S.C. § 1536 (1976 ed.). (Emphasis added).").

^{32.} See Northern Spotted Owl v. Hodel, 716 F. Supp. 479, 483 (W.D. Wash. 1988) ("[T]he [Fish and Wildlife] Service disregarded all the expert opinion on population viability, including that of its own expert, that the owl is facing extinction, and instead merely asserted its expertise in support of its conclusions. The Service has failed to provide its own or other expert analysis supporting its conclusions. . . . Accordingly, the [FWS's] decision not to list at this time the northern spotted owl as endangered or threatened under the Endangered Species Act was arbitrary and capricious and contrary to law."); see also Northern Spotted Owl v. Lujan, 758 F. Supp. 621, 625 (W.D. Wash. 1991) ("In 1982, Congress expressed frustration at the slow pace of implementing the Endangered Species Act. Particular concern focused on the Secretary's critical habitat responsibilities as a source of delay.").

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The historic decline in the timber industry is most apparent when one compares the volumes and the values of timber sales on Forest Service land in the Pacific Northwest since the late 70s. Figure 3 shows this historic trend (the full data is available in Table 5 in the appendix). Nationwide, timber sales peaked in 1987, when 12,712 million board feet³³ (MMBF) were sold.³⁴ A year later, the Forest Service posted its greatest timber sales in Oregon, selling 8,600 MMBF.³⁵ Similarly telling is the decline of the number of sawmills, plywood mills, and single mills in the Pacific Northwest, between the early 90s and the beginning of this decade. Table 2 compares the number of these mills using the most recent data available, and data at the time of the major downturn in federal timber harvest.

	Washington	Oregon
Sawmills, 1990–1991	93	96
Sawmills, 2010–2011	23	31
Plywood mills, 1990–1991	19	29
Plywood mills, 2010-2011	8	6
Shingle mills, 1990–1991	37	6
Shingle mills, 2010-2011	7	3

Table 2. Wood Product Manufacturers.³⁶

Despite the decline of the timber industry in the last thirty years, it remains a significant part of the Washington and Oregon economies, and the states lead the nation in producing timber and wood products.³⁷ The

^{33.} The "M" in "MBF" refers to one thousand, not one million. Rather, "MMBF" refers to a million board feet, or a thousand thousand board feet. One board foot is equivalent to a solid piece of wood one-foot square by one inch thick. An 8-foot 2x4 contains 3.5 board feet. An average 2,300 square-foot home uses about 16,000 board feet of lumber. One metric board foot equals a thousand board feet.

^{34.} USFS REGION 6, TIMBER VOLUME UNDER CONTRACT, FY 1905-2011 NATIONAL SUMMARY CUT AND SOLD DATA AND GRAPH, *available at* http://www.fs.fed.us/forestmanagement/documents/sold-harvest/documents/1905-2011_Natl_Summary_Graph.pdf (last visited Apr. 9, 2012). The U.S. Forest Service maintains additional information and updated cut and sale information at http://www.fs.fed.us/forestmanagement/reports/sold-harvest/index.shtml.

^{35.} Id.

^{36.} Figures represent the number of mills inspected by the U.S. Department of Labor Occupations Safety and Health Administration for the years listed. *Inspections Within Industry*, U.S. DEP'T OF LABOR, OCCUPATIONS SAFETY & HEALTH ADMIN., http://www.osha.gov/pls/imis/industr y.html (allowing users to compile inspection data). Data from 1990–1991 sorted by SIC code (plywood mills, 2436; sawmills, 2421; single mill, 2429); data from 2010–2011 sorted by NAICS code (plywood mills, 321212; sawmills, 321113).

^{37.} In 2009, the most recent year with available data, Washington was second to California in the economic output of the forestry and fishing industry with \$7.713 billion, or 26.4% of the industry's national output; Oregon was fifth (\$1.44 billion, or 4.95%). Oregon was third in the

historic health of the timber industry, as well as its decline, can be seen both in annual timber sales and in the amount of timber cut each year. For example, Oregon has historically been a major source of timber; the state's total annual wood harvest, from both public and private forests, reached a high of 8.6 billion board feet in 1988,³⁸ a figure more than half of the Forest Service's record-breaking harvest.³⁹ Twenty years after that historic harvest in Oregon, the state produced 4.3 billion board feet,⁴⁰ a figure twice the forest service's national harvest of 2,296 MMBF.⁴¹

Since 2005, the demand for forest softwoods plummeted as residential construction waned, and the industry contracted an average of 4.7% a year from 2005 to 2010.⁴² Most telling may be the recent decline in employment output in the timber industry, as outlined in Figure 4 (in the appendix). Historical data shows the industry peaked in 1979, when the wood product manufacturing sector alone employed as many as 32,000 in Washington.⁴³ That number dropped to 13,200 over thirty years, and may fall further, with the state estimating only 10,300 employees in the sector by 2030.⁴⁴

As timber harvests decline so too does the economic size of the industry and its contribution to the states, as shown in Figure 2. Activity in these sectors declined since 1985, and the forestry and wood products sectors now each contribute less than one percent of each state's economic activity. For the historic output of the economic sectors, see Table 4 and Figures 5–7 (in the appendix).

44. Id.

nation for economic output of the wood product manufacturing sector (\$1.176 billion, 5.64%); Washington was ninth (\$861 million, 4.13%). *Gross Domestic Product by State*, U.S. DEP'T OF COMMERCE, BUREAU OF ECON. ANALYSIS, http://www.bea.gov/regional/index.htm.

^{38.} Oregon Dep't of Forestry, 25 Year Harvest History, http://egov.oregon.gov/ODF/STATE_FORESTS/FRP/docs/2006rpt25YearTable.xls (last retrieved Mar. 22, 2012).

^{39.} USFS REGION 6, supra note 34.

^{40.} Oregon Dep't of Forestry, supra note 38.

^{41.} USFS REGION 6, supra note 34.

^{42.} CTR. FOR ECON. VITALITY, W. WASH. UNIV. COLL. OF BUS. & ECON., LOGGING INDUSTRY SNAPSHOT 1 (2011), available at http://www.pacificedc.org/Library%20Docs/Industry%20Snapshot %20-%20Timber.pdf.

^{43.} WASH. STATE OFFICE OF FIN. MGMT., 2010 LONG-TERM ECONOMIC AND LABOR FORCE FORECAST 3-6 (2010).



Figure 2. Percentage of State GPD for Select Economic Sectors.⁴⁵

^{45.} Interactive Access to Industry Economic Accounts Data, U.S. DEP'T OF COMMERCE BUREAU OF ECON. ANALYSIS, http://www.bea.gov/itable. Retrieve data using the BEA Interactive Data feature at http://www.bea.gov/iTable/index_industry.cfm. Notably, the forestry sector also includes fisheries. State GPD achieved by searching "all sectors."





B. The Economic Impact of Specialized Forest Products

While harvesting and processing timber is a closely watched economic indicator in the Northwest, economic analyses overlook the harvest of specialized forest products (SFPs), which represent a share of the Pacific Northwest's natural resources economy. The only existing data on SFPs are estimates rather than precise accounting. The U.S. Forest Service requires its offices to track the SFP permits distributed by district offices each year. This tracking provides some of the most reliable information about SFP harvesting on federal lands. The self-reported information from Region 6 forests is aggregated in Table 3, showing millions of pounds and thousands of dollars of products legitimately harvested each year. One recent estimate by the Forest Service places the value of SFPs harvested from its lands alone at \$27 million annually.⁴⁷

Harvesting some SFPs can be profitable only when collected en mass. Illegal harvesters of moss, a type of SFP, can sell the greenery to florists and earn between seventy-five cents and \$1 per pound. In one publicized incident, an eastern Oregon sheriff's deputy making a traffic stop discovered a pickup truck with about 3,000 pounds of moss in the bed.⁴⁸

As with many types of crime, the number of timber thieves is unknown and almost impossible to track, making it difficult to estimate the impact the theft has on the economics of the timber industry. Thievery has a direct, though unmeasured, effect on the timber industry because the wood from the illegally-cut trees is often purchased by mill owners for less than wood from a legitimately-harvested tree, but is sold after processing at market value.⁴⁹ In this way, thievery subsidizes the wood products industry.

Large-scale organized theft props up and supports the natural resources industry to a greater extent, though the precise amount is unknown. However, it is more important to understand that this timber theft occurs and that it affects the market than it is to quantify that effect. The statutory changes discussed below would not cost much money because the changes place the onus on the public to comply, rather than on an agency to change permitting procedures. Thus, a cost-benefit

^{47.} WASH. STATE DEP'T OF NATURAL RES., REPORT TO THE LEGISLATURE: SPECIALIZED FOREST PRODUCTS WORK GROUP 5 (2008).

^{48.} Erin Madison, *Moss Theft? Yes, There is Such a Crime,* CORVALLIS GAZETTE-TIMES (Corvallis, Ore.), June 25, 2005, *available at* http://forests.org/shared/reader/welcome.aspx?linkid=4 3457.

^{49.} Soloman, supra note 11.

analysis is not necessary. Understanding the context of timber theft—an appreciation for the size of the timber and SFP industry in the Northwest, as well as the industry's decline—informs why it occurs, how to address it, and why new tools are needed for officers to safely enforce timber laws.

Christmas Trees	55,000
Limbs or boughs	2.3 million pounds
Foliage (inc. salal)	11.7 million pounds
Seasonal grasses	2.3 million pounds
Mushrooms	462,730 5-gal. buckets
Total SFP permits	\$622,217 in fees
Oregon State SFP receipts	\$60,255 (1990-1994)
Oregon cedar permits	\$165,835 (1990-1994)
SFP Economy	
SFP economy (1998)	1,381 employees, 221 businesses, \$45.9M payroll
SFP economy (2007)	2,216 employees, 231 businesses, \$75.5M payroll
Est. Unreported SFP economy	10,300 employees, 60 businesses (Washington, Oregon, and British Columbia, Canada)

Table 3. USDA	SPF Harvests	in 2010 (Reg	gion 6 Forests). ⁵⁰
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III. COPS, ROBBERS, AND LOGGERS

A. The Three Types of Timber Theft

There are three types of timber theft—affiliated timber theft, unaffiliated timber theft, and what is commonly known as timber poaching. As mentioned in the introduction, affiliated and unaffiliated timber thefts are organized operations occurring either in violation of a timber sale contract, or without a contract in place at all. These crimes

^{50.} These figures do not include firewood.

Federal figures are from *Automated Timber Sales Accounting System Sold and Removed Worksheet*, THE U.S. FOREST SERV., http://www.fs.fed.us/r6/nr/fp/FPWebPage/FP70104A/Special %20Forest%20Products.htm.

Oregon figures are from Oregon Dep't of Forestry, supra note 38 at S-78.

Economic data is from JERRY SMITH ET AL., U.S. FOREST SERV., A U.S. FOREST SERVICE SPECIAL FOREST PRODUCTS APPRAISAL SYSTEM: BACKGROUND, METHODS, AND ASSESSMENT, PNW-GTR-822 (July 2010), *available at* http://www.fs.fed.us/pnw/pubs/pnw_gtr822.pdf.

occur when the perpetrator either trespasses onto the victim's land and cuts trees, or has the landowners' consent and exceeds the scope of consent when cutting trees without permission.⁵¹ Timber poaching meanwhile, involves one-person or small-scale tree cutting.

The three types of timber theft are distinct and enjoy different levels of community acceptance, engagement, and in some cases, tolerance by law enforcement. It is tough for law enforcement to crack down on these crimes because some thefts go undetected, whereas others are blatant but the community and some regulatory agencies may turn a blind eye. If law enforcement was to change its enforcement tactic by enforcing theft and timber laws on a public highway where thieves transport these goods, rather than trying to determine the location of a theft site in the forest, the distinction between types of timber theft becomes only marginally important.

The most common and most profitable type of timber theft is "affiliated theft,"⁵² where trees are taken in conjunction with an authorized timber sale. Contract logging companies committing this theft exceed the conditions of their contract by either harvesting species of trees not included in the timber sale, or by harvesting trees outside the geographic boundaries of the sale.⁵³ Affiliated theft ran rampant on Forest Service land in the late 1980s and early 1990s, coinciding with the peak of the timber industry.⁵⁴ By conservative estimates, tens of millions of dollars' worth of timber each year left the West's federal forest lands by industrial loggers who regularly moved boundary markers or stole cans of the tracer paint used by the Forest Service to mark trees slated for cutting.⁵⁵ The thefts were also committed by thieves who tampered with the computers at weigh scales, or logging trucks that just bypassed scales all together.⁵⁶ In the mid 1990s, when timber sales were depressed, the estimated value of timber stolen through affiliated theft may have reached \$100 million a year.⁵⁷

Similar to affiliated theft is "unaffiliated theft," where thieves establish a commercial logging operation without operating under the

^{51.} Aric M. Larsson, *Cause of Action for Damages Resulting from Timber Trespass*, 45 CAUSES OF ACTION 2d 655, at § 9 (2010).

^{52.} The three types of timber theft were first named and categorized by Michael R. Pendleton of the University of Washington. Pendleton, *Taking the Forest, supra* note 12.

^{53.} Paciello, supra note 9.

^{54.} See Brad Knickerbocker, US Fight Against Timber Thieves, CHRISTIAN SCIENCE MONITOR 1, Mar. 23, 1998, available at http://www.csmonitor.com/1998/0323/032398.us.us.4.html.

^{55.} Id.

^{56.} Paciello, supra note 9 at 347.

^{57.} Knickerbocker, supra note 54.

color of any contract or authority.⁵⁸ Small-scale unaffiliated theft also occurs where a private landowner hires a contractor to harvest timber, but the contractor then crosses the property boundary to harvest from an adjoining parcel.⁵⁹ These are true instances of timber trespasses and typically result in civil actions, if there is to be any resolution at all.⁶⁰

These two types of theft are important to the discussion at hand only in that they are the most substantial source of illegitimate wood in the timber market and are commonly one's first impression of timber theft. These types of theft cannot be practically stopped with the prescriptive element in this article—the big rigs loaded with logs on public highways are supposed to be measured and verified by weigh stations or at the mill, not by individual patrol officers. To address such large-scale theft by organized or corporate thieves, major institutional changes are needed. Allowing officers to make legal traffic stops of suspected timber thieves, as suggested in this article, is meant to target the small-time and solo thief.

The third type of timber theft, the primary focus of this paper, is best described as "timber poaching."⁶¹ In this situation, a poacher trespasses onto private land, or traverses through public lands, to cut down standing timber and buck it into marketable pieces. Poachers typically take small batches or single trees at a time, focusing on those of high value. Such thieves are often driven by poverty or drug addictions,⁶² whereas the large-scale thefts are driven by corporate greed.⁶³ Interdicting timber theft gives the criminal justice system, with its courtordered rehabilitation and substance abuse treatment, access to a population in need.

In the Pacific Northwest, cedar trees and some spruce are valuable because the wood is used for ornamental woodworking, poles, shake roofing, and other products.⁶⁴ Other softwoods, such as Douglas fir, are cut, converted to firewood, packaged, and sold.⁶⁵ Timber poachers

^{58.} Michael R. Pendleton, *Looking the Other Way: The Institutional Accommodation of Tree Theft*, 20 QUALITATIVE SOC. 326 (1997) [hereinafter Pendleton, *Looking the Other Way*].

^{59.} See, e.g., Paciello, supra note 9 at 348.

^{60.} See, e.g., N.Y. STATE LEGISLATIVE COMM'N ON RURAL RES., TIMBER THEFT IN NEW YORK: A LEGISLATIVE BRIEFING D-6 (2008).

^{61.} Timber poaching has also been known as "timber piracy."

^{62.} Soloman, *supra* note 11.

^{63.} See Eco-Terrorism and Lawlessness on the National Forests: Oversight Hearing Before the House Resources Subcommittee on Forests and Forest Health, 107th Cong. 102-16 (2002) (statement of Michael Roy Pendleton) [hereinafter Pendleton (2002)]; see also, Pendleton, Looking the Other Way, supra note 58.

^{64.} Herbert McLean, Timber Theft on the National Forests, 100 AM. FORESTS 9/10, 17 (1994).

^{65.} Mary Swift, Upper County Timber Theft Is 'Stealing From Children': Thieves Take 60 To 80 Trees On State Land, DAILY RECORD (Ellensburg, Wash.), June 24, 2010.

typically act alone or in small groups using personal tools rather than commercial logging equipment.⁶⁶ While policymakers, environmental groups and the Forest Service, to an extent, have tried to address affiliated timber theft, timber poaching does not enjoy the same attention due to the lower-profile and less-glamorous culprits. Institutions can take action against affiliated theft by changing the way they conduct business, but stopping the timber poacher is left to the law enforcement officer in the backcountry.

B. The Timber Poacher's Techniques, Profile, and Impact

Timber poachers typically carry out their crimes in three alternate methods: convenience poaching, an adopted highline rigging approach, or simply carrying the wood by hand.⁶⁷ Convenience poaching is, as the name suggests, the easiest method for thieves to engage in. In such instances, the thief maintains access to his or her vehicle by taking trees along rugged roads.⁶⁸ There are thousands of miles of accessible forest roads in the Pacific Northwest, making it nearly impossible for law enforcement to have the presence to stop such thieves in the act. The Washington Department of Natural Resources (DNR) alone controls 14,000 miles of forest roads.⁶⁹ In Oregon, more than 1,150 miles of forest roads crisscross the million acres of the Umpgua National Forest alone, and it is only the fifth smallest of eleven national forests in Oregon.⁷⁰ A common practice by commercial timber companies compounds the problem, making private forests just as attractive to roadside thieves. Timber companies typically leave high-value timber standing near property lines and along roads as environmental or aesthetic buffers, while the harvesting occurs within the parcel.⁷¹

Thieves also adopt the highline rigging approach, cutting trees uphill from a loading site, rigging a steel wire around the tree, and using pulleys or a truck's winch to drag the tree to the vehicle.⁷² In some

^{66.} See, e.g., Pendleton, Looking the Other Way, supra note 58.

^{67.} Pendleton, Taking the Forest, supra note 12.

^{68.} Pendleton, Looking the Other Way, supra note 58.

^{69.} WASH. STATE DEP'T OF NATURAL RES., POLICY FOR SUSTAINABLE FORESTS 47 (2006).

^{70.} Umpqua National Forest, U.S. DEP'T OF AGRIC., http://www.fs.usda.gov/umpqua (last visited Apr. 21, 2012).

^{71.} DAVID MERCKER, UNIV. OF TENN. AGRIC. EXTENSION SERV., PUB. NO. SP595, TIMBER THEFT!: HOW TO AVOID IT AND WHAT TO DO IF IT HAPPENS, *available at* https://utextension.tenne ssee.edu/publications/Documents/SP595.pdf.

^{72.} Forest Officials Alarmed at Increased Firewood and Timber Theft, U.S. FED. NEWS SERV., Feb. 17, 2009; see, e.g., Pendleton, Taking the Forest, supra, note 12.

instances, individual thieves, especially those stealing cedar blocks,⁷³ will simply load a backpack and hike from the theft site.⁷⁴

With either of the first two forms of timber poaching theft—where the ill-gotten tree is bucked or limbed near the load site—the thieves leave substantial evidence of the theft in the form of fresh sawdust, stumps, or discarded pieces of the tree. Still, law enforcement must still find the theft site amid the maze of forest roads or trails. Regardless of the method a thief uses, the crime is always vulnerable to detection by law enforcement while it is underway. But for law enforcement to patrol all possible theft sites would be onerous. However, any method a thief uses requires him to transport the wood out of the forest using public roads, and law enforcement can best maximize its presence by patrolling the primary roads into and out of the forests.

C. The Trees that Are Targeted

Timber thieves in the Pacific Northwest target several types of trees. In addition to cutting down cedar trees for a few blocks of wood, thieves have cut down entire trees just to sell the fragrant tips of the branches for use in potpourri.⁷⁵ Fir and spruce trees are popular Christmas trees and thieves target them in late fall. Maple trees are also a popular target,⁷⁶ as trees that show a distinctive "birds eye" pattern in the heartwood are used to make violins and guitars. Thieves will notch a standing maple tree and remove a slice of the trunk to see if it will show the distinct pattern, harming those trees that are not ultimately cut down and stolen.⁷⁷

In other regions of the United States other types of trees and forest products are more susceptible to thieves. Thieves target cherry trees in New England, where the value of thefts there has been reported as high

^{73.} Cedar is valuable, even in small chunks, because it can be milled into roofing shingles. Therefore, it is the most likely to be carried by hand or by backpack from a theft site.

^{74.} Interestingly, this method requires strength and endurance, time-honored qualities of the respected logger. Pendleton, *Taking the Forest, supra* note 12; *see also* State v. Walker, 181 P.3d 31, 35 (Wash. Ct. App. 2008).

^{75.} Alex Fryer, *Chipping Away at Tree Poaching*, CHRISTIAN SCIENCE MONITOR, Aug. 13, 1996.

^{76.} A Michigan man was fined \$300 and sentenced to ten days in jail for stealing six maples. Knickerbocker, *supra* note 54.

^{77.} Warren Stashenko, *Maples Falling Victim to Backwoods Thieves*, SEATTLE TIMES, May 17, 2007. As the reporter explained, "Beneath the bark might be distinctive puckers, ripples and warts, signs that the honey-colored wood can be cut and polished to reveal a three-dimensional pattern of shimmering flames or undulations." Stashenko quoted Larry Raedel, the DNR's chief law enforcement officer, as saying "When they find one that does [have the bird's eye feature], they cut down the entire tree and pack out a five or six foot section. They might make \$500-\$400 for a slab of birds eye." *See also* Lori Compas, *Hide Your Trees: Timber Theft is Increasing Across the Country*, E: THE ENVTL. MAG., Sept.–Oct. 2010, at 14.

as \$100,000.⁷⁸ The Daniel Boone National Forest in Kentucky has repeatedly sought the public's help catching criminals stripping bark off the slippery elm tree, which sells as an herbal remedy to soothe the throat, stomach, and skin irritations.⁷⁹ In California, timber poaching occurs from the water, where intrepid loggers scout for and drag away giant redwood trees that have naturally fallen into rivers.⁸⁰ Although these thieves are not physically cutting down the redwoods, the removal of these naturally fallen trees is still illegal in the state.

D. Gauging the Scope and Cost of Timber Theft

It is difficult, if not impossible, to accurately quantify the scope of the timber poaching problem, either in Washington or elsewhere. Because timber thieves are typically charged under the general theft statute in the Washington criminal code, and not under the specific timber theft statute,⁸¹ it is difficult to compile the caseload involving timber theft.⁸² But, drawing on what estimates do exist, timber theft appears to be a multi-million dollar problem nationwide.

The Forest Service has never officially calculated the cost of individual timber poachers operating on its land. But estimates in the mid 1990s ranged from \$10 million to \$100 million or more each year.⁸³

80. Kenneth R. Weiss, *Red Gold Brings Its Own Rush: Redwoods that Fall in State Preserves Remain Protected by Law*, LOS ANGELES TIMES Mar. 19, 2004, at A1.

^{78.} Joel Stashenko, *State May Update 93-Year-Old Timber Theft Provision*, ASSOCIATED PRESS, July 5, 2002, *available at* http://forests.org/shared/reader/welcome.aspx?linkid=12850.

^{79.} Theft of Slippery Elm Bark Recurring on National Forest, U.S. FED. NEWS, May 24, 2007, available at 2007 WLNR 25878897; Two Men Plead Guilty to Stripping Elm Bark on National Forest, U.S. FED. NEWS, Aug. 29, 2008, available at 2008 WLNR 16416629; 'To Take or Not to Take' Collecting Forest Products on National Forest Land, U.S. FED. NEWS, Apr. 6, 2009, available at 2009 WLNR 6406865.

^{81.} WASH. REV. CODE § 9A.56. Just as Wash. Rev. Code § 76.48 includes an affirmative defense to possession of SFPs without a permit when the SFPs were harvest off of one's own land, or with permission of the landowner, the state's theft statute includes an affirmative defense when the defendant took property "under a claim of title made in good faith." Other possible charges include the trafficking in stolen property, *id.* § 9A.82.050, 9A.82.055, and in rare cases, organized crime and racketeering, *id.* § 9A.82.060. *See* Fryer, *supra* note 75.

^{82.} The Administrative Office of the Courts, which prepares monthly and annual caseload reports by county in Washington, separates offenses into eight categories of felonies, including theft. At this time, the office does not count the number of prosecutions by individual statute.

^{83.} One egregious account came from the Tongass National Forest in Alaska in which unknown persons "approach deserted beaches in a small and fairly quiet tow boat (maybe at night), quickly felling choice red cedars and Sitka spruces some 250-plus years old. They pull the heisted logs off the beach with a boat and cable and tow them to secret destinations for big bucks." McLean, *supra* note 64.

Investigators for the U.S. House of Representatives Appropriations Committee confirmed that amount as reasonable estimation in 1993.⁸⁴

More recently, the Associated Press compiled an estimate that suggests the illegal timber industry may trade as much as \$1 billion in illegal domestic wood each year (including affiliated timber theft).⁸⁵ Large lumber companies, which provide about thirty-five percent of the nation's lumber production, estimate their losses from poachers to be \$350 million per year, a figure that is in line with the \$1 billion estimate.⁸⁶

Some anecdotal estimates of the size and cost of the problem exist, shedding some light on the scope of the timber theft problem. Estimates range from hundreds of millions of dollars' worth of timber illegally cut and converted, to possibly a billion dollars a year. For example, in Washington's Snohomish County, officials reported that the value of thefts there reaches about \$1 million a year.⁸⁷ One estimate from British Columbia, Canada, suggests tree theft costs about \$20 million in lost royalties to the province.⁸⁸

Governments and researchers have come up with estimates for timber and specialized forest product thefts in other parts of the country, and they provide some frame of reference to understand the size of the issue in the Pacific Northwest. In New York State, officials estimated in 2002 that the amount of revenue lost due to timber theft was more than \$100,000 a year.⁸⁹ In the southern United States alone, estimates suggest that between five and ten percent of the volume delivered to sawmills is stolen, with an estimated value of \$75 million per year.⁹⁰ In Mississippi,

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^{84.} See, e.g., Scott Sonner, Report: Timber Theft Costs U.S. Millions—Probe Says Lumber Industry Can Defraud and Steal, then Hamper Federal Investigations, ASSOCIATED PRESS, May 4, 1993; see also, Pendleton (2002), supra note 63.

^{85.} Martha Mendoza, Losing Ground to Timber Thieves: Illegal Logging Chips Away at Forests, but One Court Puts Foot Down, ASSOCIATED PRESS, May 26, 2003. The article describes the methodology of the study:

A dozen forestry economists consulted by The Associated Press said that, based on the limited data available, thieves may be stealing trees worth at least \$1 billion a year at the sawmill. That's enough to produce the framing, siding and shingles for about 25,000 single-family homes. By comparison, the estimated value of auto theft was about \$8 billion last year.

^{86.} Id.

^{87.} Jim Haley, *Tree Thieves Cut Down College Revenues*, CMTY. COLL. WEEK, Jan. 8, 2001, at 12. Because proceeds from timber on state trust lands are redirected into the state coffers, specifically to fund K-12 and higher education in Washington State, timber theft has a direct impact on the finances of education in the Washington State.

^{88.} Eleanor White et al., *Microsatellite Markers for Individual Tree Genotyping: Application in Forest Crime Prosecutions*, 75 J. TECH. BIOTECH. 923 (2000).

^{89.} Joel Stashenko, supra note at 78.

^{90.} Shawn A. Baker & James E. Johnson, Forestland Security for Small-Scale Forest Landowners, in PROCEEDINGS OF HUMAN DIMENSIONS OF FAMILY, FARM AND COMMUNITY

the problem costs the state and landowners \$3 million a year, the state's natural resources agencies estimated in $2010.^{91}$ In West Virginia an estimated \$12 million per year is stolen.⁹²

The government, or the public, does not feel the economic impact of timber theft each year the same way a business would see an effect on its bottom line. Timber poaching from public lands cannot be measured as an economic loss the same way stealing from a timber company's log deck may be. But to properly grasp the scope and impact of the timber theft problem, one must attempt quantify the amount stolen in terms of merchantable timber, and the amounts, as outlined above, are shocking.

E. Pressures on Safe Enforcement

Using a chainsaw to bring down and buck a tree, legally or otherwise, is a prominent part of the Pacific Northwest's logging heritage. Pioneers settling the region found the land covered with dense forest, and timber seemed as disposable a resource as the region's plentiful freshwater. Logging was a way of life, and pioneers literally carved communities out of the forests. As a result, generations have tolerated a certain amount of abuse of the natural resources, such as timber poaching and timber theft, and these local attitudes have affected law enforcement response.⁹³

Affiliated timber theft, for example, is part of the identity of the commercial logger. Timber companies regularly took advantage of a tenpercent "overharvest" clause in most Forest Service contracts in the 1990s.⁹⁴ And when environmental regulation, especially concerning the spotted owl habitat, hamstrung industrial harvests, those in the industry needed to find ways to keep the wood industry alive. The practice of

FORESTRY INTERNATIONAL SYMPOSIUM 283 (D.M. Baumgartner, ed., Mar. 29–Apr. 1, 2004), *available at* http://www.familyforestrysymposium.wsu.edu/Proceedings1/httpdocs/table-of-contents/index.html.

^{91.} Press Release, State of Miss., Sec'y of State, The State Cracks Down on Growing Timber Theft Problem (June 29, 2010) *available at* http://www.sos.ms.gov/news_press_release.aspx ?id=189.

^{92.} Andy Horcher & Rien J.M. Visser, *Unmanned Aerial Vehicles: Applications for Natural Resource Management and Monitoring, in* 2004 COUNCIL ON FOREST ENGINEERING CONFERENCE PROCEEDINGS: "MACHINES AND PEOPLE, THE INTERFACE" (Apr. 27–30, 2004).

^{93.} Pendleton, a professor of forestry at the University of Washington, conducted more than 600 hours of observation by riding with Forest Service law enforcement officers of the Pacific Northwest in the 1990s. Tree theft was among the most prolific criminal violations observed in the study; on virtually every field observation evidence of tree theft was encountered. To date, his ethnographic studies have not been challenged or repeated. *See* Pendleton, *Looking the Other Way, supra* note 58; *see also* Pendleton, *Taking the Forest, supra* note 12.

^{94.} Pendleton, Taking the Forest, supra note 12.

affiliated timber theft has been accepted by the industry and, to a large extent, accepted by the Forest Service.⁹⁵

Similarly, the logging community, and to some extent law enforcement, accepts tree poaching as a cultural practice. Tree poaching reinforces and maintains the shared heritage of logging. It also provides access to social status in the logging communities of the Northwest experienced fallers are respected for their ability regardless of how it developed. Tree poaching also requires community—trust-based relationships between cutters and buyers reap economic rewards. Finally, it also serves the opposite purpose, giving the community a way to divide itself and exclude some loggers by labeling them as criminals.⁹⁶ Generally, law enforcement does not have incentive to vigorously pursue the criminals who may be illegitimately exercising the skills of their heritage when other criminals, those who do not enjoy community support, use public forestlands for purposes like clandestine drug production.⁹⁷

From the enforcement side, Forest Service officers exercise a kind of passive acceptance of timber theft and sometimes an outright avoidance of the thieves, especially deeper in the forests.⁹⁸ The social acceptance of timber poaching may play a role, but so does the Forest Service's perception of not being a law enforcement agency.⁹⁹ Officers also have a compelling motivation to avoid thieves—their personal safety. Law enforcement officers in national forests drive marked patrol

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^{95. &}quot;Affiliated timber theft as a form of deviance serves not as a means to exclude people from the community, but as a vehicle for affirming shared values of family and loyalty. In effect, one role of timber theft is to create community cohesion." *See* Pendleton, *Taking the Forest, supra* note 12.

^{96.} Pendleton posited that tree theft persists because it actually serves as a stabilizing influence in the rural social order; to criminalize it would disrupt the shared identity of this community. *See id.*

^{97.} See id.

^{98.} Pendleton was struck by the prevalence of non-enforcement in the field level or at the investigative level. Such enforcement simply did not occur as a formal U.S. Forest Service action, he noted. *See id.*

^{99.} See Hearing Concerning the Administration's Views on Law Enforcement Personnel in the Forest Service Before the Subcommittee on Civil Service Committee on Post Office and Civil Service United States House of Representatives, 103rd Cong. (1993) (testimony of Dale Robertson, Chief of the U.S. Forest Serv.). Robertson said, "I would like to begin by putting our law enforcement program into context. The Forest Service is not a law enforcement agency. Rather, we are a natural resource management agency with some law enforcement problems because we are responsible for the safety of people using the National Forests and the protection of resources."

Land management agencies, such as the Forest Service, exercise the "good host doctrine," meaning that the forest visitor is due a pleasant experience while on public lands. As a result, Forest Service employees, especially law enforcement officers, innately tried to minimize contact with visitors. When contact was necessary, the preferred approach was educational, rather than penal. One Forest Service supervisor told Pendleton, "We don't want them (LEO's) out there playing cowboy. We prefer the social relations approach which emphasizes public relations." Pendleton, *Looking the Other Way, supra* note 58, at 330.

vehicles and seem to provide a pattern of cues to would-be criminals in order to avoid confrontations: briefly sounding the vehicle's siren before approaching a known theft site; telling the district office receptionist the officer's whereabouts and patrol plan for the day; and purposefully patrolling in routine routes and schedules.¹⁰⁰ The concern for officer safety by the officers themselves cannot be underestimated.¹⁰¹

For one officer in 2008, coming unexpectedly across a criminal in the Olympic National Forest did prove fatal.¹⁰² Kristine Fairbanks, a K-9 officer with the Olympic National Forest, was patrolling alone when she came upon a van without license plates occupied by Shawn Roe, a mentally disturbed man. She was more than three miles into the national forest and more than seven miles from the closest highway. Roe shot her while her only backup, a German Shepherd named Radar, remained locked in the patrol SUV.¹⁰³

A Clallam County Sheriff's deputy arrived about forty minutes after Fairbanks failed to respond to a radio call from dispatch.¹⁰⁴ The deputy found that Roe had dragged Fairbanks's body off the road and behind a tree. Roe was shot and killed by Clallam County Sheriff's deputies later that evening.¹⁰⁵

Six months after Fairbanks's death, the last four co-conspirators of a major timber theft operation investigated by Fairbanks pleaded guilty in federal court. Three others had already pleaded guilty. The pleas posthumously closed her last major investigation, which, as discussed in the introduction, involved the arrest of a crew that cut down thirty-one cedar trees from a pristine stand of old growth red cedar in the Olympic National Forest.¹⁰⁶

Understanding why timber attracts thieves however, requires picturing the woods, where one tree looks very much like another. If a

^{100.} See Pendleton, Looking the Other Way, supra note 58. "These patterned behaviors increase the likelihood that tree thieves can learn these routines to avoid apprehension. By avoiding these contacts the L.E.O.'s can operate within the 'good host doctrine' and reduce the likelihood of an uncontrolled confrontation. In effect assimilatory accommodation is a mutually beneficial practice," Pendleton wrote.

^{101.} See *id.* One officer told Pendleton during his study "It's deep and dark in this district. If someone decided to shoot me they could do it and probably never get caught."

^{102.} Perry, supra note 4.

^{103.} Fairbanks carried a trigger device, which would have unlocked and opened the doors to her patrol car, letting the K-9 officer out in a case of officer emergency. But Fairbanks knew her device did not function and was waiting for a new patrol car anyway. Tom Callis, *Solemn Anniversary: FBI Report Provides Details of Officer's Fatal Shooting Year Ago Today*, PENINSULA DAILY NEWS (Port Angeles, Wash.), Sept. 20. 2009.

^{104.} *Timeline of Events* PENINSULA DAILY NEWS (Port Angeles, Wash.), Sept. 21. 2008, http://www.peninsuladailynews.com/apps/pbcs.dll/article?AID=2008809220304.

^{105.} Id.

^{106.} Carter, supra note 1.

thief walks far enough off the road, no one may have walked there for years, and may not for years to come. Wood is valuable, and it surrounds the thief. With a little methamphetamine, one has all the energy needed to run a chainsaw, pry with a peavey hook, and haul blocks of wood back to a vehicle. Some thieves are smart enough to obscure the sounds of their crime by running a hose from a power saw's muffler into a bucket of water, or using mallets wrapped in rubber hose.¹⁰⁷

Under the Routine Activity Theory developed by social scientists, the three major components required for crime to occur are present during timber theft: an opportunity, a motivated offender, and a suitable target.¹⁰⁸ Another crime model, the "CRAVED" model, posits that property most susceptible to theft has six characteristics, all of which apply to trees: concealable, removable, available, valuable, enjoyable, and disposable.¹⁰⁹ The trees of the Pacific Northwest are removable, available, valuable, and disposable in the sense that sawmills provide an easy fence for thieves to exchange their hauls for cash. The trees are enjoyable because the proceeds of the theft are pleasant, and also, considering the social acceptance aspect of timber theft, there is an enjoyable respect in the physical feat of harvesting trees.¹¹⁰ The evidence of the crime is concealable; moss and slash can be piled over the stump.¹¹¹ Additionally, once on the roadway, the thief blends in with legitimate traffic. The appearance of vehicles transporting cut timber along roadways is a common sight in the Pacific Northwest.¹¹²

It is with regard to this last aspect—the thief believing he can leave the theft site safely because a load of wood in a vehicle blends with other rural traffic—that law enforcement has the greatest opportunity to interrupt the "conceal" element of the CRAVED crime model. If officers focus attention on interdicting timber theft on the public highways, thieves become more likely to be stopped and apprehended. Increased attention on the highways may also convince thieves that their trip from a theft site to a mill may be dangerous and risky, creating a deterrent

^{107.} See, e.g., Pendleton, Taking the Forest, supra note 12.

^{108.} Shaun Baker, An Analysis of Timber Trespass and Theft Statutes in the Southern Appalachian Region 109 (May 1, 2003) (M.S. Thesis, Virginia Polytechnic Institute and State University), *available at* http://scholar.lib.vt.edu/theses/available/etd-05212003-

^{153313/}unrestricted/timb_theft_thesis.pdf.

^{109.} Id.

^{110.} For example, Pendleton observed law enforcement officers come across a thief who had carried cedar blocks downhill on his back. They admired his strength and decided not to arrest the man until a more "controlled time" so as to avoid a fight with such a strong man. Pendleton, *Taking the Forest, supra* note 12.

^{111.} McLean, supra note 64.

^{112.} Baker, supra note 108.

effect, comparable to media publicity in advance of increased drunk driving patrols.

As discussed above, law enforcement feels substantial pressure to avoid detecting and stopping timber theft at its source. The paramount concern is officer safety, as working in the forestland means working alone in an inherently unpredictable environment. By comparison, the side of a public highway or a primary forest service road is a much safer site to meet a suspected timber thief. Officers are better equipped to perform traffic stops, control the interaction with a suspect, and safely make an arrest with their vehicle and equipment available. Getting officers out of the deep woods and giving them more tools to perform their duty in a safer place will result in more-aggressive interdiction and investigation of timber theft. However, giving Washington law enforcement better and safer tools starts with changes to the SFP statute, and striking the balance between enforcement and permissive public harvesting.

IV. LAW AND DISORDER-CURRENT STATUTORY INADEQUACY

Perhaps one of the factors that most complicates investigating timber theft, or determining whether a theft has occurred at all, is that Washington allows cutting and taking SFPs in certain circumstances. A tree may be cut with valid permission, pursuant to a permit, or cut under the mistaken belief that a permit is valid when it is not. In such instances a theft has not occurred. But whether legitimately, by mistake, or in complete disregard of the law, the tree does not know the difference, and a law enforcement officer finding the scene weeks or months later may not know the difference. By way of analogy, enforcing timber theft laws when the state issues SFP harvesting permits is similar to police trying to determine if a suspicious person is a shoplifter or has a valid 100percent-off coupon given to him by the store.

Analyzing the relevant Washington statutes and recent legislative changes to the code exposes where weaknesses in the law persist despite the efforts of lawmakers. Reviewing past changes to the law also evidences where changes can be made to better achieve the goals of the stakeholders who advised the Legislature, while giving law enforcement agencies critical tools to prevent and investigate timber theft.

A. Washington's Specialized Forest Products Statute

In 1967, the Washington State Legislature created a regulatory system with regard to specialized forest products.¹¹³ The statute, codified

^{113.} WASH. STATE DEP'T OF NATURAL RES. (2007), *supra* note 25.

at R.C.W. 76.48, regulates the harvesting of specialized forest products from public and private land, and their possession, sale, processing, and resale.¹¹⁴ The statute requires SFP processors and buyers to keep certain records of SFP sales, which provides law enforcement with a paper trail when they investigate the transfer of stolen SFPs. The chapter intends to serve three primary purposes: assist law enforcement, protect landowners (private and public) from theft, and minimize the burden of the requirements on those legitimately in the SFP industry.¹¹⁵

The Legislature modified the SFP statute several times over the last forty years in the hopes of better reflecting demand for SFPs, their manufacture, and the concerns of those in the SFP industry. This piecemeal approach left the law in a ragged patchwork of amended sections and cross-references.¹¹⁶ The last substantial changes to the law occurred in 2009, when the Legislature passed House Bill 1038,¹¹⁷ recompiling the statute for clarity and adjusting statutorily-allowed quantities of SFPs to reflect, again, changes in the SFP industry. The bill did not include any new authority for law enforcement to interdict thefts.

The SFP statutes have long required harvesters to acquire permits from a county sheriff's office.¹¹⁸ The statute currently provides that any dealing in SFPs without a valid permit, or without complying with an alternative permitting process, is a violation of the statute and is a gross misdemeanor.¹¹⁹ By way of comparison, Oregon requires permits for SFP harvesting, possession, and processing. Oregon's permitting process is less formal than Washington's, requiring only that the rightful landowner supply certain verifiable information on a form to the harvester, rather than requiring a permit from local law enforcement.¹²⁰ The Oregon code specifically criminalizes both the purchasing of cedar from anyone not bearing a permit and the transport of more than five conifer trees.¹²¹ Oregon also places an affirmative duty on peace officers to note and investigate violations of these sections.¹²²

^{114.} WASH. REV. CODE § 76.48.031 (2011).

^{115.} Id. § 76.48.011(2).

^{116.} Letter from Peter Goldmark, Comm'r of Pub. Lands, to Wash. State Legislature (Feb. 2, 2009), *in* WASH. STATE DEP'T OF NATURAL RES. (2008), *supra* note 47.

^{117. 2009} Wash. Sess. Laws 1317.

^{118.} See Clallam County Forest Products Harvesting Permits, CLALLAM CNTY., http://www.clallam.net/PermitsLicenses/html/permits_forest.htm (last visited Apr. 9, 2012). Some counties are better than others in terms of administering the permits. See WASH. STATE DEP'T OF NATURAL RES. (2007), supra note 25, at 35.

^{119.} WASH. REV. CODE § 76.48.151 (2011).

^{120.} Or. Rev. Stat. § 164.813 (2011).

^{121.} Id. §§ 165.109, 164.825.

^{122.} Id. § 164.835.

In 2007 and 2009, the Washington State Legislature passed bills significantly affecting the regulation of SFPs. In 2007, the House of Representatives sought to change the law after hearing from local wood carvers about being caught up in court for not having permits for cedar blocks they owned legitimately. It was the beginning of a two-year legislative process that ultimately led to an additional form of SFP permitting, a more refined definition of SFPs subject to regulation, and new record keeping by SFP purchasers to aid law enforcement in tracking stolen wood. However, other than providing a stronger paper trail for investigators, the legislative changes failed to give law enforcement any new tools to apprehend thieves.

1. Public Lobbying Leads to House Bill 1909 (2007 Session)

Donna Quezada and her husband, Joaquin Quezada, own Creative Wood Sculptures, and sell chainsaw carvings in Enumclaw, Washington. In the spring of 2006, police stopped them as they transported three small cedar blocks from their home cutting yard to the Washington State Fairgrounds in Puyallup, Washington. They did not have a permit to haul their own wood and it was seized. The couple had to spend more than \$20,000 in legal fees to adjudicate the matter. Their experience prompted them to lobby the Washington State Legislature to prevent other wood artisans from being ensnared by the law.¹²³ Three other representatives of woodworking and artisan groups testified at the same hearing in support of the legislative proposal,¹²⁴ and eleven people testified at the companion Senate committee hearing.¹²⁵ There was no testimony in opposition.

House Bill 1909 initially sought to revamp the reach of the state's SFP regulations, balancing law enforcement tools with a person's rightful ownership of regulated products.¹²⁶ For example, the bill included an intent clause, stating that the Legislature wanted "law enforcement to prosecute those legitimately stealing SFPs, while not enforcing against small actors who are responsibly collecting SFPs from

^{123.} Protecting from the Theft of Specialized Forest Products: Hearing on HB 1909 Before Agriculture & Natural Resources, 60th Leg., Reg. Sess. (Wash. Feb. 13, 2007) (Testifying before the house committee, the couple brought hand-held pieces of cedar to illustrate that even small pieces of wood could land an artist or craftsman in jail because the statute did not specify a minimum size of wood chunk requiring a permit). Audio of the hearing is available at http://tvw.org/index.php?option=com tvwplayer&eventID=2007021157.

^{124.} H.B. Rep. 1909, 60th Leg., Reg. Sess. (Wash. 2007).

^{125.} S.B. Rep. 1909, 60th Leg., Reg. Sess. (Wash. 2007).

^{126.} STATE AGRIC. & NATURAL RES. COMM., WASH. STATE H.R. OFFICE OF PROGRAM RESEARCH, BILL ANALYSIS: HB 1909 (2000), *available at* http://apps.leg.wa.gov/documents/billdoc s/2007-08/Pdf/Bill%20Reports/House/1909.HBA%2007.pdf.

willing landowners. Prosecutorial discretion is urged."¹²⁷ After the bill passed the House, the Senate replaced the text and passed Substitute House Bill 1909, which created the Specialized Forest Products Workgroup, spearheaded by the DNR.¹²⁸

2. Legislature Creates SFP Workgroup to Review Statute

The workgroup created by House Bill 1909 identified problems with the existing SFP statute, proposed solutions by consensus, and approved the first draft of proposed House Bill 1038.¹²⁹ Through a series of public stakeholder meetings, the group found that the SFP statute improperly impacted those who legitimately owned fine timber, but did not have any supporting paperwork.¹³⁰ Law enforcement members of the group highlighted issues, such as confusion of the law and not knowing which agency has jurisdiction on which public lands.¹³¹ Generally, law enforcement officers told the group that logistical difficulties led to a breakdown of enforcement at the point of harvest.¹³² In response, the workgroup suggested greater emphasis on enforcement where the SFPs enter the stream of commerce. Law enforcement stakeholders asked that SFP buyers collect more information upon purchase, thus creating a better paper trail for officers tracking stolen wood pieces.¹³³

The workgroup found that the existing permitting system was inadequate and allowed thieves to cloak their illegal activities.¹³⁴ At the time, the law required an SFP permit, or a copy of the permit, to accompany wood products from harvest to the point of sale to the consumer. Each permit has a specific permit number, and as loads of wood were split up and sold piecemeal, the permit number needed to follow. The permit number system functioned similarly, as if each batch of harvested wood had a serial number instead of as if each piece of wood had a serial number. Under the old system, sellers complained they needed to use rigorous accounting procedures to account for the origin of every product they possessed.¹³⁵ The workgroup proposed better record keeping by the first purchaser, including recording and filing the permit number of each load of wood. To offset the impact of the stricter record

^{127.} Id.

^{128. 2007} Wash. Sess. Laws 1790; *see, e.g.*, WASH. STATE CRIMINAL JUSTICE TRAINING COMM'N, LAW ENFORCEMENT DIGEST (July 2007).

^{129.} WASH. STATE DEP'T OF NATURAL RES. (2007), supra note 25.

^{130.} Id. at 5-10.

^{131.} Id. at 9.

^{132.} Id. at 11.

^{133.} *Id*.

^{134.} *Id.* at 19.

^{135.} Id. at 18.

keeping on the wood product industry, simpler bills of lading with names, addresses, and company names could accompany the products further into the stream of commerce.

The workgroup also suggested stiffer penalties for SFP thieves who hide behind false permits. The group recommended that anyone knowingly using false documents when selling SFPs be charged with a Class C Felony, the lowest level of ranked felony in Washington. This change was primarily aimed at sawmill owners who knowingly trafficked in stolen wood by falsifying records.¹³⁶ The group also wanted to encourage trial judges to exercise their statutory discretion to bar repeat offenders from receiving future SFP permits. Though admittedly not much of a deterrent to the violator, the workgroup pointed out that the addition of this penalty to an offender's sentence gives forest landowners the ability to effectively bar thieves from their land, having the same practical effect as a trespass order.¹³⁷

3. Recommendations Appear in House Bill 1038 (2009 Session)

Nearly all of the workgroup's recommendations became law in 2009 with the passage of House Bill 1038.¹³⁸ With regard to the permitting process, the bill retained the validated permit system, under which SFP permits must be received from the sheriff's office before harvesting or transporting. The bill also created a verifiable permit system, whereby a permit could be obtained from the Internet before harvest or transport, but must be delivered to the sheriff's office within five days of the harvest or transport. The suggested felony punishment for forged permits was codified and a statute allowing law enforcement officers to seize property upon arrest, including vehicles, stayed on the books.

The statutory changes proposed in 2007, and those approved in 2009, attempted to make the law friendlier to those whose livelihood depends on SFPs. The new permitting process sought to clear confusion and give members of the public more options. But better record keeping was required on the back end of any SFP transaction so as to counter the possible abuse of the verifiable permit system and to assist law enforcement. The paper trails may help law enforcement track down suspects, but the statutory changes offered no new tools to prevent, deter, or, more importantly, to interdict SFP theft.

^{136.} The workgroup reported to the Legislature that actors in the industry repeatedly break this law. Increasing the penalty was meant to discourage repeat offenders who knowingly produced false documents. *Id.* at 19.

^{137.} Id.

^{138. 2009} Wash. Sess. Laws 1317.

B. Timber Theft Case Law

Investigating a timber theft after the fact by gathering forensic evidence and trying to determine the identity of a culprit involves similar legal protections and procedures as the investigations of other sorts of theft. Officers attempting to catch thieves in the act of stealing timber or SFPs from public lands must abide by the same search, seizure, confession, and other constitutional protections.

The most common source of case law involving timber theft comes from convictions overturned because officers stopped vehicles carrying loads of wood without having reasonable suspicion to effectuate the stop.¹³⁹ Other legal issues, such as the conflict between the specific SFP statute and the general theft statute,¹⁴⁰ or the question of double jeopardy in prosecution for both theft and trespass,¹⁴¹ have been well adjudicated.

1. Circumstantial Evidence—State v. Hansen

At trial, timber theft prosecutions rely largely on circumstantial evidence for many reasons. Trees do not have serial numbers like personal electronics or currency, and branding stamps to identify ownership of already-cut trees can be removed or obscured. Absent genetic or microsatellite tracking, connecting stolen timber at a mill or in the back of a truck with a downed and harvested tree at the theft site is difficult and sometimes unpersuasive.¹⁴² Usually the circumstantial evidence used to convict is discovered at the time a police officer first stops the suspect, usually within a short time after any timber poaching was committed.

In *State v. Hansen*, a Washington appellate court addressed a timber theft case where law enforcement officers connected the defendant with a known theft site based on evidence that individually was weak, but was persuasive in its totality.¹⁴³ Officers with the Washington State Department of Fish and Wildlife (DFW) saw an empty pickup truck and a small car drive into the woods, then leave two hours later with the truck full of cedar. The officers stopped both the truck and the car, and subsequently built a case relying on available circumstantial evidence.

The appellate court upheld the conviction, summarizing the evidence thusly:

^{139.} The most common legal challenge to a timber theft conviction seems to be sufficiency of the evidence. The most common legal challenge unique to timber theft prosecutions, however, was an attack on the traffic stop.

^{140.} See United States v. Manes, 420 F. Supp. 1013 (D. Or. 1976); State v. Darrin, 647 P.2d 549 (Wash. Ct. App. 1982).

^{141.} See United States v. Gemmill, 535 F.2d 1145 (9th Cir. 1976); Manes, 420 F.Supp 1013. 142. See White, supra note 88.

^{143.} State v. Hansen, No. 93-1-00215-7, 1997 WL 117021 (Wash. Ct. App. Mar. 14, 1997).

Under cover of darkness, he drove a truck into the woods empty, then came out two hours later with cedar blocks. He did not have a valid permit to harvest the cedar. A beer bottle and shirt from [the] car, which was following Hansen, suggested that the two men had been working together to cut cedar. Hansen gave a palpably false explanation of having harvested the cedar on Harstene Island [where the permit provided]. The tire treads on the truck matched photos of tire tracks near the theft scene. Wood grain on some of the cedar in Hansen's truck exactly matched grain from splats recovered from the theft site. A tarp used to conceal a stump at the theft site matched a tarp in the truck. The value of cedar taken from the downed trees easily exceeded \$1,500, and "hundreds" of trips had been made along the zig-zag path, indicating that the wood in the truck was only the most recent of many loads hauled from the site.¹⁴⁴

From this evidence, the jury found Hansen guilty. The appellate court affirmed, holding that the jury's finding was reasonable.¹⁴⁵

The *Hansen* court did not address the validity of the traffic stop or whether the DFW officers had probable cause because the issue was never raised. But *Hansen* demonstrates how an officer simply patrolling roads, highways, and forest roads may make a typical arrest and file with prosecutors a case heavy on circumstantial evidence. In other instances where officers stopped a truck laden with cedar blocks, convictions have been overturned on the basis of a bad seizure alone, including two in Washington. In both cases, discussed below, a law enforcement officer witnessed a vehicle carrying blocks of cedar down a forest road, leaving a known cedar theft site, and effectuated a stop.

2. Reasonable Suspicion—State v. McCord and State v. Thorp

In the earlier of two cases discussed, *State v. McCord*, a sheriff's deputy told dispatch he saw a truck carrying cedar, suspected the cedar was illegal, and asked another deputy to stop the truck down the road.¹⁴⁶ The original officer did not articulate the basis for the suspicion over the radio, nor did the prosecution offer a basis for the suspicion in court.¹⁴⁷

^{144.} Id. at *2.

^{145.} Id.

^{146.} State v. McCord, 576 P.2d 892 (Wash. Ct. App. 1978).

^{147.} The court said that the other officer:

is presumed to be a reliable informant, but the information coming from the "reliable informant" was conclusory only, a mere suspicion that the truck was hauling cedar. A police officer's unfounded suspicion or hunch is not a legal basis for an intrusion into a person's privacy even for momentary interrogation. There must be some further factual basis.

During the stop, the driver told the second officer he was hauling a few cedar blocks and produced an SFP permit the officer suspected to be fraudulent. The driver was also sweaty and covered in cedar sawdust, implying the cedar had been freshly cut.¹⁴⁸ The court held that one deputy's suspicion being communicated to another did not provide a basis to support the traffic stop or arrest by the second officer.¹⁴⁹

Almost twenty years later, in *State v. Thorp*, an appellate court overturned a drug conviction because police discovered the evidence during a traffic stop based on a suspicion that cedar being hauled came from a known theft site.¹⁵⁰ A Grays Harbor County Sheriff's deputy passed a flatbed truck hauling cedar blocks. The deputy testified that he stopped the truck solely to determine if the driver, Thorp, had a valid SFP permit. The State did not argue that the deputy had probable cause or an articulable suspicion to effectuate the stop.¹⁵¹ Rather, the State argued that a county ordinance permitted law enforcement officers to stop vehicles transporting cedar products to check for compliance with the SFP laws. Had Thorp produced the necessary permit he would have been free to go.¹⁵² The court found that, given the full protections of the U.S. Constitution's on searches and seizures, the ordinance was unconstitutional because it did not require *individualized suspicion*.¹⁵³

3. Mens Rea—Proving Theft Was Not an Unintentional Act

McCord and *Thorp* present the only substantive case law regarding the enforcement of SFP laws.¹⁵⁴ Other legal issues, such as double jeopardy, whether the misdemeanor statute supersedes the felony statute, and attacks on the mens rea requirement have largely been challenges to the statutes and problems for prosecutors, not law enforcement officers. Such attacks on the mens rea requirement of the statute were found only

Id. at 895. The first officer that radioed his suspicions was not called to testify at trial, a fact the court suggested may have doomed the admissibility of the stop.

^{148.} While U-Haul trucks, such as the one driven in *McCord* had been used in cedar thefts previously, neither deputy knew of this connection at the time of the stop.

^{149.} The court declined to draw a parallel to a similar stop involving a stolen television being carried in a specific type of cab from a high-crime area. State v. Sinclair, 523 P.2d 1209 (Wash. Ct. App. 1974) (holding that traffic stop in a high-crime area was reasonable where specific types of property are known to be carried in a specific company's cab).

^{150.} State v. Thorp, 856 P.2d 1123 (Wash. Ct. App. 1993).

^{151.} Id. at 1124-25.

^{152.} Id.

^{153.} Id.

^{154.} In a 2003 unpublished opinion, the court found that even though a law enforcement officer investigating timber theft followed a trail of freshly broken branches and drag marks from the victim's land, Weyerhaeuser Corp., onto the suspect's land, enough probable cause had been developed for the search warrant before the officer trespassed. State v. Davis, No. 32140-8-II, 2005 WL 2746671 (Wash. Ct. App. Oct. 25, 2005).

at the federal level.¹⁵⁵ Until 1976, the U.S. Code included a strict liability misdemeanor offense for cutting government timber. Currently, the entirety of 18 U.S.C. § 641 does not have an explicit mens rea requirement, but courts hold that a willful element is inherent in the words "steal, purloin." Further, the section includes "knowingly converts." The property damage statute, 18 U.S.C. § 1361, does include the mens rea requirement of "willfully." While no challenges to the mens rea requirement of Washington's SPF statute could be found, that is likely because prosecutions occur under the theft statute, which has an established mens rea, or because the pertinent sections of Washington law are strict liability statutes.

Further, instances of dismissals or acquittals because mens rea could not be proven may not be reported or taken up on appeal. That does not mean, however, that such legal challenges do not frustrate prosecutors. In some larcenies, such as shoplifting, the concealment of goods is prima facie evidence of intent to steal.¹⁵⁶ But in the forests it may be weeks or more before a theft site is discovered. Because the scene of the crime is open and exposed to the elements, it is not possible to know how it has been degraded or how other people have tainted it. Addressing this legal requirement requires only a simple statutory change, discussed below. However, the requirement of reasonable suspicion during a traffic stop hinders investigators; these issues arise in the field at the time of detection and cannot be mitigated later by a prosecutor or by charging an alternate crime. A mistake in the field during a Fourth Amendment event may doom the subsequent case, not to mention costing time and resources as the case is fully adjudicated.

V. GIVING LAW ENFORCEMENT TOOLS FOR SAFETY AND EFFICIENCY

Law enforcement officers investigating timber theft need all the tools they can get. They are often working alone, trying to cover vast geographic areas, and investigate a type of theft that enjoys a level of community support in rural Washington. As Officer Fairbanks's death demonstrates, officers working public forestlands deal with a safety concern unique from their urban counterparts. To encourage officers to zealously enforce the timber theft law requires giving them a safe venue from which to investigate thieves. The backwoods is inherently not that venue. Public highways and forest roads, which thieves must travel to complete their crime, provide a sort of choke point for thieves, and give

^{155.} See, e.g., United States v. Derington, 229 F.3d 1243 (9th Cir. 2000); United States v. Henderson, 721 F.2d 276 (9th Cir. 1983); United States v. Wilson, 438 F.2d 525 (9th Cir. 1971).
156. Baker, *supra* note 108.

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officers more access to backup, other civilians, and the ability to control the encounter.

Timber theft, as a larceny, is unique. At a typical urban theft site, police can inspect the site for evidence of an intruder by looking for what is there that ought not be. But investigating a theft of forest products, such as evidence of a missing tree or branches, can be obscured. Evidence like sawdust, tracks, or spilled chainsaw fuel would degrade over time. Timber theft investigation and prosecution, therefore, is made much easier by catching a thief with the stolen goods. But to catch a thief safely means letting the officer dictate the time and place of the confrontation.

In timber theft trials, prosecutors face a disproportionate challenge overcoming a defendant's claim of ignorance as to the state's SFP law; proving the mens rea of willfulness is difficult. Sometimes criminal prosecution is not enough deterrence in a community with a rich logging heritage. To avoid these issues, the Washington State Legislature should develop three tools to support law enforcement officers and prosecutors in their effort to stop timber theft: (1) a de facto reasonable suspicion for officers patrolling public roads to effectuate a traffic stop of a suspected thief; (2) declaring noncompliance with the SFP statutes to be rebuttable evidence of willful intent in criminal prosecutions; and (3) strengthening seizure statutes to strip suspected thieves of the tools of theft upon arrest, and forfeit them upon conviction.

A. De Facto Reasonable Suspicion for Traffic Stops

Law enforcement learns about timber theft in one of two primary ways: an officer comes upon a theft operation in person, as occurred in Mason County in early 2012,¹⁵⁷ or the stolen wood is seen in transit on forest or rural roads. As previously noted, the *McCord* and *Thorp* cases suggest that catching criminals in transit is only effective if the criminals provide some pretext for a stop, such as hauling an unsecured load, a broken taillight, or talking on a cell phone. Allowing officers to check the legitimacy of SFP loads they pass on the road would be an easy and effective method of both investigating and deterring SFP theft. It is an efficient tool because officers are patrolling roads for other criminal infractions. Further, officers working in rural forested areas know the location of frequented theft sites and the roads that lead to and from them. But, having to follow a truckload of suspicious cedar blocks

^{157.} As has been mentioned previously, there are safety concerns that can make officers reluctant to catch thieves in the act.

without ever seeing a pretext for a stop is a reality for officers post *McCord* and *Thorp*.

A way to give law enforcement an effective and unobtrusive tool to catch timber thieves rests in a statutory fix. To determine the right approach, an examination of the county ordinance giving the deputy in *Thorp* the authority to effectuate the traffic stop there, and why it was determined to be unconstitutional, is informative.

In *Thorp*, the deputy had authority to stop Thorp based on Grays Harbor County Ordinance 23(8), which provided:

Any peace officer . . . shall have the power to stop, inspect and search without a warrant any person or vehicle observed transporting . . . five or more pounds of . . . cedar products for the purpose of ascertaining whether or not the same are being transported in violation of the provisions of this ordinance.¹⁵⁸

The *Thorp* court held that the ordinance violated the Washington State Constitution and the Fourth Amendment by permitting essentially roving traffic stops without any individualized suspicion.¹⁵⁹ The Grays Harbor rule was meant to check compliance with the county and state laws regarding SFPs, not to investigate a suspected violation of the law. The ordinance ineloquently tried to give peace officers de facto reason to stop a vehicle hauling cedar. If the transportation of the cedar itself had been a violation, probable cause would have existed as a violation would have been in plain view. Instead, there was no apparent violation to justify the seizure of Thorp and subsequent investigation, making the ordinance flawed and unconstitutional. Thus, in order to return to law enforcement the tool the Grays Harbor lawmakers attempted to provide, there must be some possible violation of a law an officer could observe and could thus use as a basis for a traffic stop and investigation.

The Washington State Legislature should amend Washington Revised Code § 76.48 to declare an officer has a reasonable suspicion to effectuate a traffic stop when an unpermitted load of SFPs is being hauled down a public road. Not every load of wood on a public road is illegal, and the same concerns that prompted legislative action in the past five years are present—innocent wood owners being ensnared in a fabric of regulatory paperwork. But, the streamlining of the SFP permitting process by the passage of House Bill 1038 in 2009 should make it easier for legitimate woodworkers to comply with the regulations regarding hauling SFPs. The changes that year made it easier for all legitimate SFP

^{158.} Thorp, 856 P.2d at 1126, n.3.

^{159.} Such stops were found unconstitutional by the U.S. Supreme Court in Delaware v. Prouse, 440 U.S. 648, 663 (1979).

harvesters to acquire permits, with both the validated and verifiable permitting process available to the public. A legitimate SFP harvester or hauler can therefore be expected to have a permit of some sort.

The statute should require a hauler display a duplicate permit or a special SFP hauling tag on the load whenever SFPs are being hauled on public roads. The absence of such a permit or tag provides the reasonable suspicion that an officer would need to stop the vehicle and investigate whether the owner has a valid permit. Ideally the permits, or a tag accompanying the permit, would have a unique design, color, or ink to make forgery difficult, but designing and printing these tags is unrealistic for counties or the state at a time of shrinking government budgets.

The SFP permits could have large type on them, or a second page with large print could accompany the original permit, so that an officer tailing a vehicle carrying SFPs could recognize the permit. If an officer sees this permit, there is no reason to stop the vehicle solely on the basis of checking for illegal SFPs. If the tag is missing the officer would have reasonable suspicion for a temporary seizure. Currently, a driver is required to carry the original permit or a valid copy on his person as he or she hauls the SFP. Thus, if the permit on display is illegible or blows off the load, the driver could simply produce the actual permit at the time of the stop and assuage the officer's suspicion. The law already has a presumption of validity—if the SFPs described in the permit are of the same general type as the SFPs being hauled, it is presumed that the permit covers the SFPs in question.¹⁶⁰ Thus, the only imposition on a valid SFP permit holder is the inconvenience of the traffic stop.

The Legislature should consider the following statutory language:

Any person hauling specialized forest products upon a public road in a manner where they are visible to others on the road shall affix to the load of specialized forest products a true copy of the SFP permit, or an SFP hauling tag, in a manner so that the permit or the tag may be reasonably viewed by motorists traveling behind. A peace officer on a public road or highway unable to see a permit copy or hauling tag on a load of suspected specialized forest products, may stop the vehicle and seek from the driver or others in the vehicle, proof that a valid specialized forest products permit accompanies the products. Hauling such forestry products without a permit on display shall constitute a civil infraction. If a valid permit is provided, the driver shall not be cited for a violation of this section.¹⁶¹

^{160.} WASH. REV. CODE § 76.48.061 (2011).

^{161.} If a hauling tag, something like 4" x 6" piece of paper or card stock which says "SFP HAULING PERMIT—DATE RANGE," is created, a separate section may be needed or amended to

This proposed law is similar to a Vermont statute that allows peace officers to stop vehicles carrying one or more evergreen trees "under such condition or circumstances as to reasonably justify" a belief the trees were stolen.¹⁶² The statute does not define what circumstances would justify such a belief. If the driver cannot produce a bill of sale or a writing showing the rightful possession of the trees, refuses to answer questions, or lies to the officer, it constitutes prima facie evidence that the person has stolen the trees.¹⁶³

This proposal does not suggest that the absence of the permit or hauling tag affixed to the load of SFPs be considered evidence that the products are stolen, nor does it suggest that a civil or criminal penalty accompany the failure to display the permit. The purpose of the proposed statute is not to provide prosecutors with more evidence of theft, but to avoid suppression hearings when timber thieves are arrested after being pulled over. Further, it would empower peace officers to diligently patrol rural and forest roads for thieves and allow them to effectively perform their duty from the relative safety of public roads rather than backcountry theft sites where, even though a law enforcement officer may have jurisdiction, the encounter would be on the criminal's turf.

authorize the creation of the hauling tag and provide that one accompany any validated permit from a sheriff's office or any verifiable permit received from the internet or other source. Extremely large letters on the actual SFP permit, and the permit coming in duplicate, would also allow the driver to carry a copy and to affix a copy to the load. Most Region 6 forests require and provide brightly colored tags attached to SFP permits on which a hauler is required to punch out the operable date, affix, staple or nail to the load being carried. *See, e.g.*, U.S. FOREST SERV., FIREWOOD REMOVAL GUIDE MAP (2003–2004), *available at* http://www.fs.fed.us/r6/oka/global-websites/pdf-

files/firewood_rules.pdf; see also Willamette National Forest: Forest Products Permit, U.S. FOREST SERV., http://www.fs.usda.gov/detail/willamette/passes-permits/forestproducts/?cid=FSE_005558 (last visited Mar. 25, 2012).

^{162.} VT. STAT. ANN. 13 § 3609 (2011). The statute reads, in full:

A person found transporting upon a public highway one or more pine, spruce, hemlock, cedar, or other evergreen trees, under such condition or circumstances as to reasonably justify any police officer or a person from whom trees of such type have been stolen, or his or her employees, to believe that such trees have been stolen or taken without the consent of the owner, such police officer, person or his or her employees, or any of them, may stop the person transporting such trees and interrogate such person as to where and from whom he or she obtained such trees and ask such person to produce a bill of sale or a writing showing his or her rightful possession of such trees. If the person interrogated fails to produce a bill of sale or writing showing his or her rightful possession of such trees or refuses to answer such interrogations, or if his or her answers to such interrogations are false, it shall be prima facie evidence that such person has stolen such trees and upon conviction for such an offense he or she shall be imprisoned for not more than six months or fined not more than \$300.00, or both.

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The Washington State Constitution provides greater privacy protections than the U.S. Constitution.¹⁶⁴ Some may question whether the proposed statutory language provides an unconstitutional authority to police in Washington State to seize persons without just cause. The *Thorp* case makes clear that stopping vehicles simply to check compliance with the law is unconstitutional. Such stops are akin to other stops that do not require individualized suspicion, such as sobriety check points.

Washington State's leading case on suspicionless seizures involves highway stops to check a driver's sobriety. In City of Seattle v. Mesiani, the Washington State Supreme Court made clear that the Washington Constitution "provides greater protection to individual privacy interests than the Fourth Amendment."¹⁶⁵ Stops, such as those at sobriety checkpoints or on a country highway when a truck is full of wood, must be done under the authority of law.¹⁶⁶ The proposed legislation, therefore, must create some "authority of law" by which to authorize law enforcement officers to seize an individual. Whereas the Vermont statute explicitly allows law enforcement to perform a stop, the Washington statute must create the reason. Thus, the statute must create a civil infraction, akin to driving without vehicle tabs,¹⁶⁷ which would provide the "authority of law" for an officer to make a traffic stop. This avoids the problem the Grays Harbor ordinance faced because an officer who cannot see a permit or hauling tag on a load of SFPs would not be stopping a vehicle to check compliance, but rather to investigate an apparent infraction.

B. No Permit Proves Intent

Although the "willful" mens rea does not seem to be a legal issue brought during the appeal of timber theft convictions in Washington,¹⁶⁸ it

^{164. &}quot;No person shall be disturbed in his private affairs, or his home invaded, without authority of law." WASH. CONST. art. I, \S 7.

^{165.} City of Seattle v. Mesiani, 755 P.2d 775, 776 (Wash. 1988). The court said, "From the earliest days of the automobile in this state, this court has acknowledged the privacy interest of individuals and objects in automobiles."

^{166.} *Id.* at 777. The court concluded, "No argument has been presented to this court that would bring the checkpoint program within any possible interpretation of the constitutionally required 'authority of law.' The Seattle sobriety checkpoint program therefore violated petitioners' rights under article 1, section 7."

^{167.} WASH. REV. CODE § 46.16A.030 (2011).

^{168.} Likely because most timber theft cases, when prosecuted as felonies, are prosecuted under the state's theft statute, WASH. REV. CODE § 9A.56.020, which includes the mens rea requirement of "wrongfully" or "intent to deprive." The mens rea problems I specifically address in the following paragraphs refer to "willfully" or "knowingly"—language that shows up in the federal statute and the SFP statutes of several states other than Washington.

has been an issue at the federal level. The federal laws create separate offenses for damaging the government's property and taking the government's property. An act of cutting a valuable tree in a national forest, then taking it off the public land, could implicate both 18 U.S.C. § 641, which criminalizes the stealing, knowing conversion of, and receipt of known-stolen government property,¹⁶⁹ and 18 U.S.C. § 1361, which criminalizes the *willful* degradation or damage of government property.¹⁷⁰ Both sections require willfulness as an element. Often, both violations are charged at the same time.¹⁷¹

Lawmakers should give prosecutors a tool to help convict timber thieves charged under a statute similar to the federal regulations. Specific statutory language could prevent post-conviction legal challenges in cases where a questionable element of the crime was intent, willfulness, or acting knowingly. While the Vermont statute provides that a failure to produce a valid tree-hauling permit constitutes prima facie evidence of a theft, the absence of an SFP permit would serve a different evidentiary role under this proposal. In order to avoid ensnaring those who misplace their SFP permit or drivers who do not know the permit must be carried with the SFPs, the absence of a permit could simply prove intent rather than guilt, and it could be a rebuttable presumption.¹⁷²

Thus, any SFP statutes that require willfulness as an element of proving timber or forest resources theft should include the following provision:

Absence of a valid specialized forest product permit during the hauling or harvesting of any SFP may be considered by a court as evidence of willful conduct. Such a presumption is rebuttable only by testimony or evidence under oath directly from the legal owner of the land where the SFPs were harvested, if the harvest occurred on private property, that the defendant had been granted permission to harvest the SFP in accordance with the provisions elsewhere in this chapter.

This proposed statutory language does not lead to automatic convictions, like the Vermont statute does—a de facto mens rea still requires evidence of an actus reus. Producing a valid permit in a pretrial motion for dismissal would likely lead to a dismissal of the charges. The statute suggested above would give prosecutors a powerful tool to

^{169. 18} U.S.C. § 641 (2011).

^{170.} Id. § 1361.

^{171.} United States v. Manes, 420 F.Supp. 1013 (D. Or. 1976).

^{172.} I note that this proposed legislation is meant to address the mens rea hurdle for theft prosecutions only.

overcome claims of ignorance from timber thieves, while still preventing conviction of those merely ignorant of the law.

C. Take the Thief's Tools of Crime

If stronger investigative techniques or easier prosecution in court does not deter thieves, law enforcement can attack the problem where it counts—in a thief's wallet, or more likely, pickup toolbox.¹⁷³

In 1987, the Alabama State Legislature passed the Timber Theft Equipment Condemnation Act, placing an affirmative duty on law enforcement officers to seize, upon arrest, any vehicle or equipment in possession of the arrestee suspected to have been used in the commission of a timber theft.¹⁷⁴ Specifically, the statute applies only at the time of an arrest for a violation of the state's timber theft law, or any felony law involving timber.¹⁷⁵ The law has provisions for storing the seized property, a duty to report the seizure to the suspect and prosecuting attorney, as well as procedures to return the property if the defendant is not convicted of a timber theft crime, or condemn it if he or she is.

In light of the concern of woodworkers in Washington that innocent artists and wood turners have been ensnared in the state's SFP laws, and that seizure of vehicles and property could befall innocent actors, important distinctions should be pointed out.¹⁷⁶ The Alabama law created the affirmative duty to seize and impound equipment only upon arrest, not citation. It is also important to note that artisans hauling small to moderate amounts of cedar or wood products, such as the Quezadas were in 2006, were not arrested but were issued citations instead.¹⁷⁷ The Quezadas would not be subject to this impoundment power. If concerns that innocent actors could have power saws and vehicles impounded for

^{173.} As one law enforcement officer said in the mid 1990s,

If I see an area where they've been working, I'll watch it. If I hear a power saw or see a truck, I'm going to photograph them before we go in . . . We may confiscate their load, their trucks, and their power saws. It really hurts these guys when you take their power saws. That's the tool of the trade.

Fryer, *supra* note 75. Quote attributed to Lar Douglas, law enforcement officer with the Washington State Department of Natural Resources.

^{174.} Ala. Code § 9-13-220-227 (2011).

^{175.} Ala. Code § 9-13-221 reads, in part,

The seizure of vehicles and equipment provided in this section is authorized only when the arrest is for a crime involving the theft of timber harvesting equipment or the parts thereof, the harvesting, removal, transportation, or disposal of any forest products, or any other transactions related to forest products or timber harvesting equipment or any part or parts from timber harvesting equipment.

^{176.} This concern was specifically mentioned in the Washington State Department of Natural Resources Specialized Forest Products Workgroup report. WASH. STATE DEP'T OF NATURAL RES. (2008), *supra* note 47.

^{177.} Hearing on HB 1909 Before Agriculture & Natural Resources, supra note 123.

simply forgetting to carry a permit when hauling SFPs, the new proposed statute could require an officer to articulate in the seizure report the location of the suspected theft site, and what evidence connects the site to the SFPs that were seized. This could screen out those instances where law enforcement seizes SFPs pending investigation, or because they were being hauled without a permit. Instead, it would require some connection to a known theft before vehicles or equipment would be seized.

VI. CONCLUSION

The theft of forest products, as compared to other larceny, constitutes a unique crime in terms of the property taken, the methods of taking, and its role in the economy and heritage of the Pacific Northwest. Forest products illegally harvested and carried out of public forests range from pinecones to Christmas trees, bark and berries, fungi and foliage. But most egregious is when trees, having stood for decades if not hundreds of years, are indiscriminately lopped over, sliced into chunks, and carted off piecemeal.

This exploration of the unique issues facing timber theft investigations, prosecutions, and SFP statutes has not sought to reveal holes or deficiencies in the government's response to timber theft. Rather, it has identified opportunities to strengthen the response. Stolen timber can be large and easily detected, and law enforcement officers commonly spot loads of stolen timber on the roadway. However, the current laws inadequately address the needs of law enforcement officers or allow them to carry out their duties under the SFP statute as effectively and safely as possible.

Allowing officers to stop suspicious loads of wood, when no SFP permit accompanies the wood, will frustrate and hopefully deter thieves. It could also allow more thieves to be caught, giving law enforcement a chance to learn more from arrestees about how the crime is committed and which sawmills traffic in stolen wood. But more importantly, it would allow officers to interdict thieves on the officers' terms. Law enforcement officers conduct hundreds of traffic stops each year and are familiar with the risks to their safety in effectuating such stops. Preventing timber theft by finding the theft sites, and trying to interrupt the culprits, may occur occasionally, and when it does, it is so fraught with unknown elements that the risk factors cannot even be addressed or qualified.

While Officer Fairbanks was not shot by a timber thief, her killing emphasizes the inherent risk faced by law enforcement officers operating deep in the forestlands, away from backup and other civilians. The shooting of a suspected thief in Mason County highlights the danger of the field investigations. Because backup is more readily available on a public highway than deep in the forests, an officer may be more likely to enforce a timber theft law. Further, even if the investigation is conducted at the theft site, by visiting or by establishing surveillance, the arrest of the thieves could still occur on a public highway where an officer can pick the place and the surroundings.

Lawmakers have an opportunity to give law enforcement and prosecutors new and stronger tools to deter, investigate, apprehend and incarcerate SFP thieves, all while working within the existing regulatory framework of specialized forest products. These changes would save the public millions of dollars in lost resources and protect one of the most ancient and precious natural resources in the Pacific Northwest.

VII. APPENDIX

Table 4. Economic value and contribution to state GPD of select economic sectors. $^{178}\,$

Sector	1985	1990	1995	2000	2005	2009
Wood products sector,						
Economic value (in						
millions), Washington	\$1,716	\$2,290	\$2,334	\$1,269	\$1,394	\$861
Wood products sector,						
percent of state GPD,						
Washington	2.22%	1.93%	1.51%	0.56%	0.50%	0.26%
Wood products sector						
wood products sector,	\$2 127	\$2.220	\$2 110	¢1 0/1	\$2.206	¢1 176
economic value, Oregon	\$3,137	\$3,229	\$3,418	\$1,841	\$2,300	\$1,170
wood products sector,						
percent of state GPD,						
Oregon	7.95%	5.71%	4.19%	1.63%	1.61%	0.70%
Forestry sector economic						
value Washington	\$876	\$1 637	\$1.652	\$1 670	\$1 891	\$2.212
	<i>Q</i> 0 70	ψ1,0 <i>0</i> /	\$1,00 <u>2</u>	\$1,070	<i><i><i></i></i></i>	<i>\\\</i> 2,212
Forestry sector, percent of						
state GPD, Washington	1.13%	1.38%	1.07%	0.73%	0.68%	0.67%
Forestry sector seconomia						
Forestry sector, economic	# 2.C2		4050	¢1 440	Φ1 441	ф1 4 4 4
value, Oregon	\$362	\$662	\$852	\$1,442	\$1,441	\$1,444
Forestry sector percent of						
state GPD, Oregon	0.92%	1.17%	1.04%	1.28%	1.01%	0.86%

^{178.} U.S. DEP'T OF COMMERCE, BUREAU OF ECON. ANALYSIS, *supra* note 37.



Figure 4. Employment in Lumber and Wood Product Sectors 1994–2002 (Thousands of Workers).¹⁷⁹

^{179.} Series Report, U.S. DEP'T OF LABOR, BUREAU OF LABOR STATISTICS, http://data.bls.gov/cgi-bin/srgate (last visited Mar. 25, 2012). Generate date by searching for series IDs SAS4100003240021 and SAS5300003240021. Data generated Feb. 10, 2012.



Figure 5. Oregon Employment and Employers, by Sector and Year (2001–2010).¹⁸⁰

180. Id. Data series ID: ENU41000101113, ENU41000102113, ENU41000105113, ENU41000105321, ENU41000201113, ENU41000202113, ENU41000203321, ENU41000205113, ENU41000205321. Data generated Feb. 10, 2012. With a change in industry reporting codes between 2001–2002, the federal agencies collected and reported economic and employment data in better detail.



Figure 6. Washington Employment and Employers, by Sector and Year (2001-2010).¹⁸¹

181. Id. Data series ID: ENU53000105113, ENU53000105321, ENU53000205113, ENU53000205321. Data generated Feb. 10, 2012.



Figure 7. Economic Output of Select Economic Sectors for Selected Years.¹⁸²

^{182.} U.S. DEP'T OF COMMERCE, BUREAU OF ECONOMIC ANALYSIS, supra note 37.

		0							
	Oregon	Oregon	Oregon	Washington	Washington	Washington	R6	R6 Sawtimber	R6 Sawtimber
	Sawtimber	Sawtimber	Sawtimber	Sawtimber	Sawtimber	Sawtimber	Sawtimber	Sales	Cut Value
	Volume	Sales	Cut Value	Volume	Sales	Cut Value	Volume		
	(MBF)			(MBF)			(MBF)		
1977	3,020,883	\$509,634,340	\$2,746,455	1,272,118	\$132,867,532	\$1,148,529	4,300,178	\$643,229,011	\$3,903,915
1978	3,169,373	\$657,970,182	\$2,824,483	1,410,990	\$171,750,875	\$1,078,366	4,591,047	\$831,576,866	\$3,916,092
1979	3,266,200	\$959,406,477	\$2,866,976	1,503,894	\$308,431,370	\$1,180,773	4,786,084	\$1,272,744,821	\$4,057,986
1980	3,263,666	\$1,024,859,986	\$2,195,797	1,273,628	\$247,105,086	\$989,833	4,537,566	\$1,272,003,809	\$3,189,904
1981	3, 344, 113	\$934,749,398	\$2,050,224	1,557,014	\$278,611,140	\$938,605	4,912,547	\$1,218,173,559	\$2,990,080
1982	2,885,252	\$295,118,960	\$1,343,537	1,138,889	\$64,524,648	\$635,358	4,024,712	\$359,682,809	\$1,979,668
1983	2,901,125	\$359,310,316	\$2,385,541	1,308,303	\$96,488,169	\$965,070	4,210,627	\$455,854,761	\$3,351,762
1984	2,909,611	\$360,228,582	\$2,688,185	1,162,136	\$89,396,649	\$1,046,961	4,078,237	\$450,098,801	\$3,735,146
1985	2,854,044	\$304,869,161	\$2,973,078	987,544	\$69,199,125	\$1,011,745	3,848,728	\$374,432,741	\$3,990,625
1986	3,100,340	\$431,604,463	\$3,016,297	1,212,868	\$107,709,595	\$1,058,953	4,324,033	\$539,988,669	\$4,080,786
1987	3,270,026	\$541,425,524	\$3,442,045	1,209,371	\$136,448,142	\$1,237,321	4,481,179	\$678,074,150	\$4,685,730
1988	3, 133, 253	\$669,707,966	\$3,335,043	1,153,714	\$195,073,671	\$1,312,429	4,295,722	\$866,200,084	\$4,655,657
1989	1,822,191	\$499,471,169	\$3,328,064	524,704	\$91,932,461	\$1,131,310	2,346,915	\$591,403,710	\$4,464,059
1990	2,377,752	\$914,668,502	\$2,483,625	1,054,582	\$265,197,029	\$798,736	3,443,345	\$1,182,338,986	\$3,290,002
1991	1,309,985	\$358,349,359	\$2,009,911	432,797	\$87,070,874	\$709,772	1,742,782	\$445,420,233	\$2,723,545
1992	423,829	\$147,963,167	\$1,310,564	99,203	\$20,201,039	\$471,264	523,035	\$168,164,327	\$1,781,831

Table 5. Forest Service Region 6 Timber Sales by Volume (MBF) and Value (not Adjusted for Inflation), 1977–2008.¹⁸³

183. USFS REGION 6, supra note 34.

\$298,895	\$36,735,151	477,110	\$104,444	\$7,759,593	102,018	\$194,451	\$28,975,558	375,092	2008
\$319,837	\$43,325,223	436,160	\$95,993	\$11,372,554	127,481	\$223,844	\$31,952,668	308,679	2007
\$304,691	\$62,537,451	$466, \overline{684}$	\$87,681	\$12,564,283	110, 787	\$217,010	\$49,973,169	355,897	2006
\$416,348	\$50,367,787	411,310	\$77,832	\$13,152,095	100,024	\$338,516	\$37,215,693	311,286	2005
\$410,050	\$42,659,437	429,125	\$100,723	\$8,873,793	101,135	\$309,327	\$33,785,644	327,990	2004
\$234,759	\$40,296,896	322,488	\$62,505	\$8,210,941	95,665	\$172,254	\$32,085,955	226,823	2003
\$192,197	\$34,701,705	217,267	\$61,654	\$5,417,325	40,767	\$130,543	\$29,284,380	176,500	2002
\$190,110	\$21,275,592	179,208	\$72,821	\$7,440,596	58,787	\$117,289	\$13,834,996	120,421	2001
\$287,486	\$20,574,200	158,476	\$81,170	\$9,926,238	66,158	\$206,316	\$10,647,962	92,318	2000
\$403,892	\$57,136,536	326,981	\$106,359	\$9,773,161	64,393	\$297,533	\$47,363,375	262,588	1999
\$456,741	\$92,374,913	506,716	\$115,195	\$17,710,777	116,137	\$341,538	\$74,662,849	390,571	1998
\$511,883	\$162,408,985	618,812	\$120,408	\$34,843,411	138,806	\$391,449	\$127,559,562	479,979	1997
\$527,524	\$176,951,948	717,205	\$152,268	\$32,668,560	165,762	\$375,253	\$144,282,189	551,440	1996
\$629,710	\$51,605,425	202,522	\$156,200	\$13,824,101	74,875	\$473,509	\$37,781,324	127,647	1995
\$837,566	\$104,266,280	261,800	\$199,012	\$24,803,259	88,749	\$633,170	\$79,463,022	173,052	1994
\$1,311,927	\$191,941,979	548,788	\$324,535	\$20,465,525	92,300	\$984,230	\$171,476,453	456,488	1993
		(MBF)			(MBF)			(MBF)	
		Volume	Cut Value	Sales	Volume	Cut Value	Sales	Volume	
Cut Value	Sales	Sawtimber	Sawtimber	Sawtimber	Sawtimber	Sawtimber	Sawtimber	Sawtimber	
R6 Sawtimber	R6 Sawtimber	R6	Washington	Washington	Washington	Oregon	Oregon	Oregon	