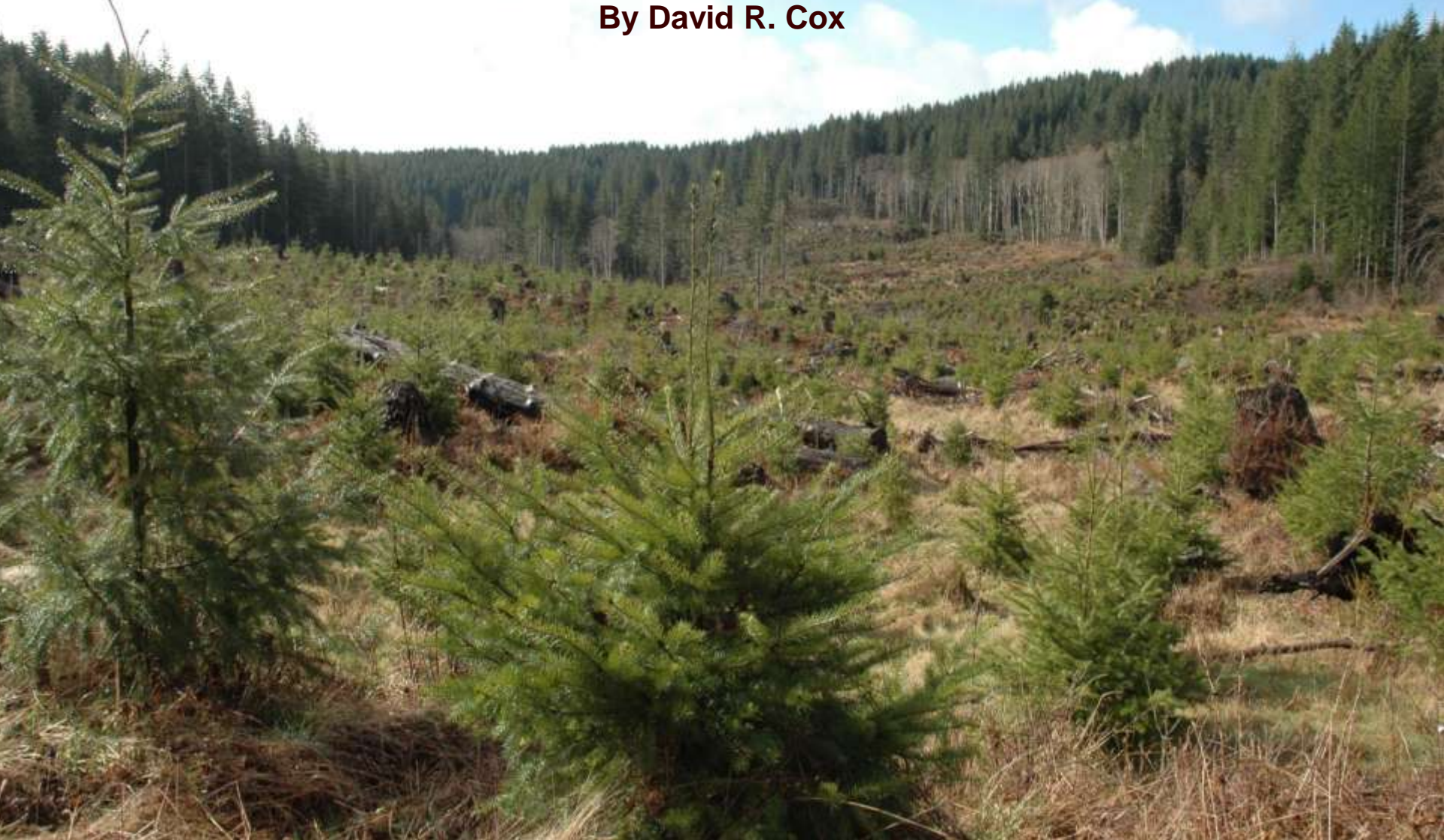
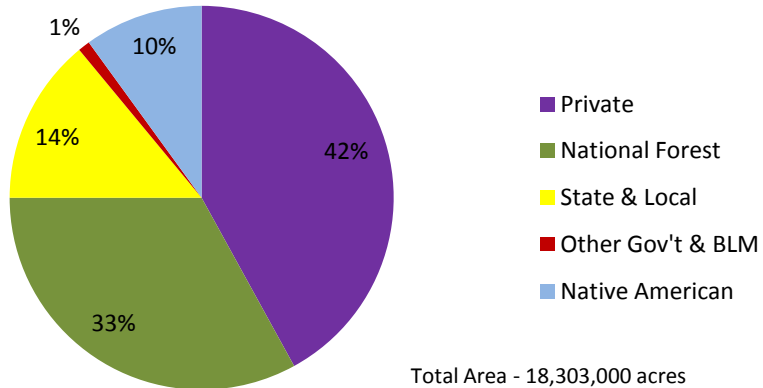


The Northwest's Forests – An Overview and Factors Impacting Sustainability

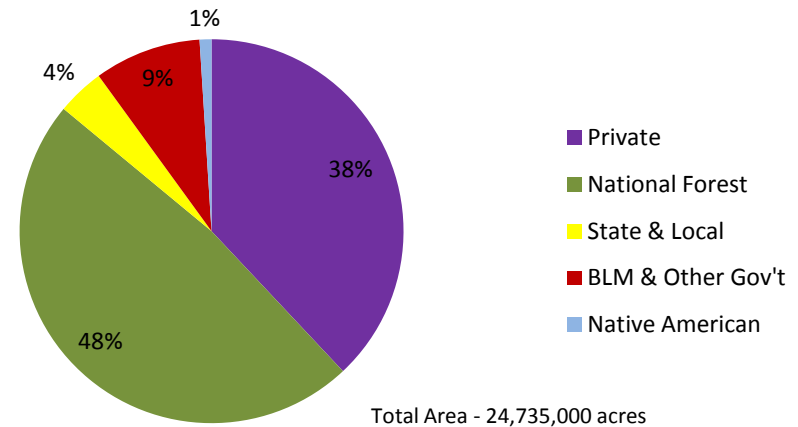
By David R. Cox



All Timberland¹ Ownership in Washington



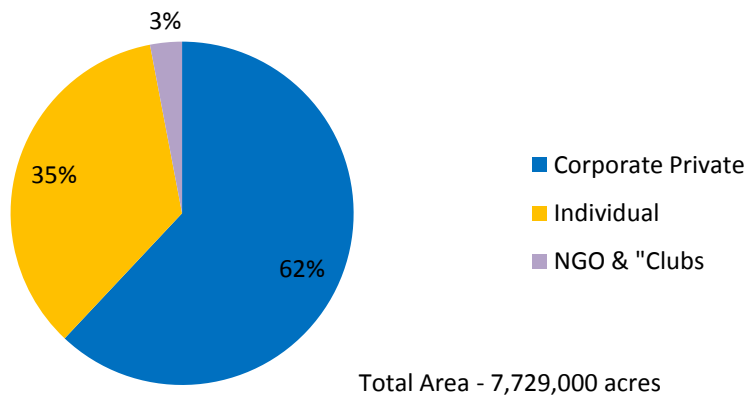
All Timberland¹ Ownership in Oregon



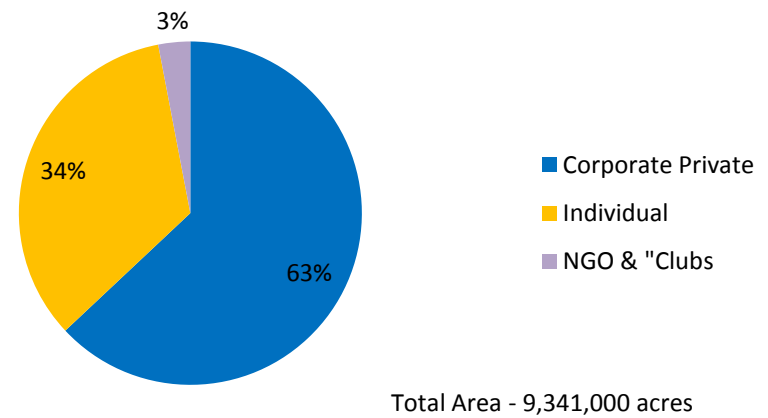
¹ Forestland capable of producing 20 cu. ft./ac./yr. at culmination

Source: Pacific Northwest Research Station, U.S. Forest Service.

Private Timberland¹ Ownership in Washington



Private Timberland¹ Ownership in Oregon



¹ Forestland capable of producing 20 cu. ft./ac./yr. at culmination

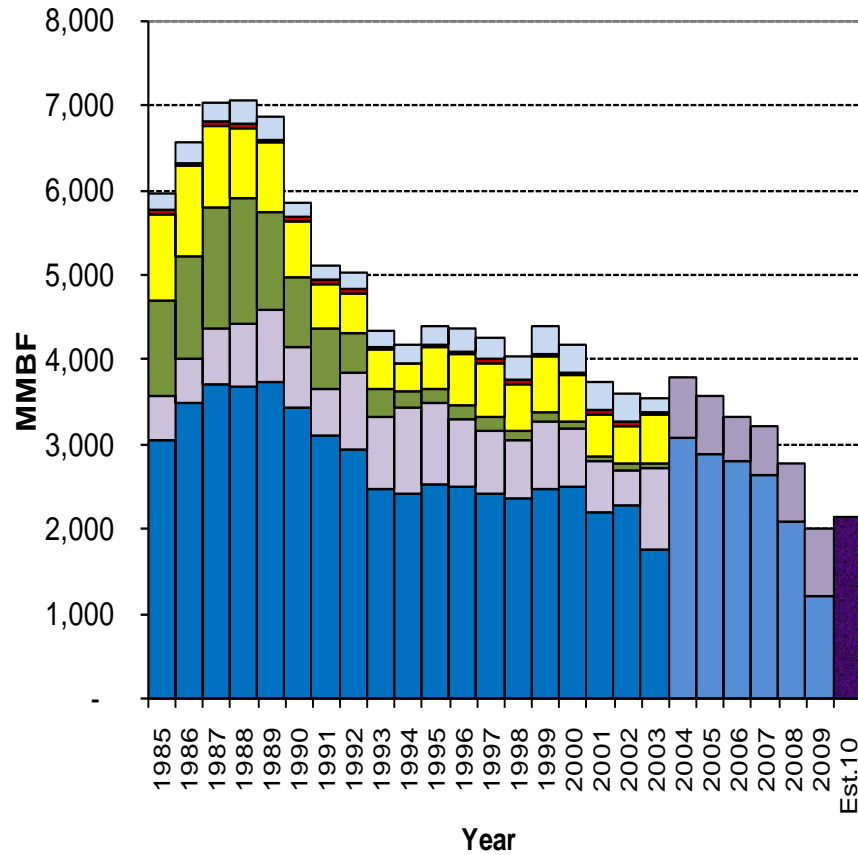
Source: Pacific Northwest Research Station, U.S. Forest Service.

	Acres
<u>Timberland Investment Management Organizations ¹</u>	
Hancock Timber Resources	600,000
The Campbell Group	1,000,000
FIA	100,000
Forest Capital Partners	1,100,000
Timbervest	100,000
ORM	200,000
Conservation Forestry	< 100,000
Greenwood Resources	< 100,000
GMO Renewable Resources	< 100,000
	+ 3,100,000
<u>Real Estate Investment Trusts ¹</u>	
Longview	600,000
Plum Creek Timber	1,500,000
Potlatch Corp.	NA
Rayonier	400,000
Weyerhaeuser	2,100,000
	+ 4,600,000

¹ These are estimates based on web site information; some acres outside of WA & OR may be included.

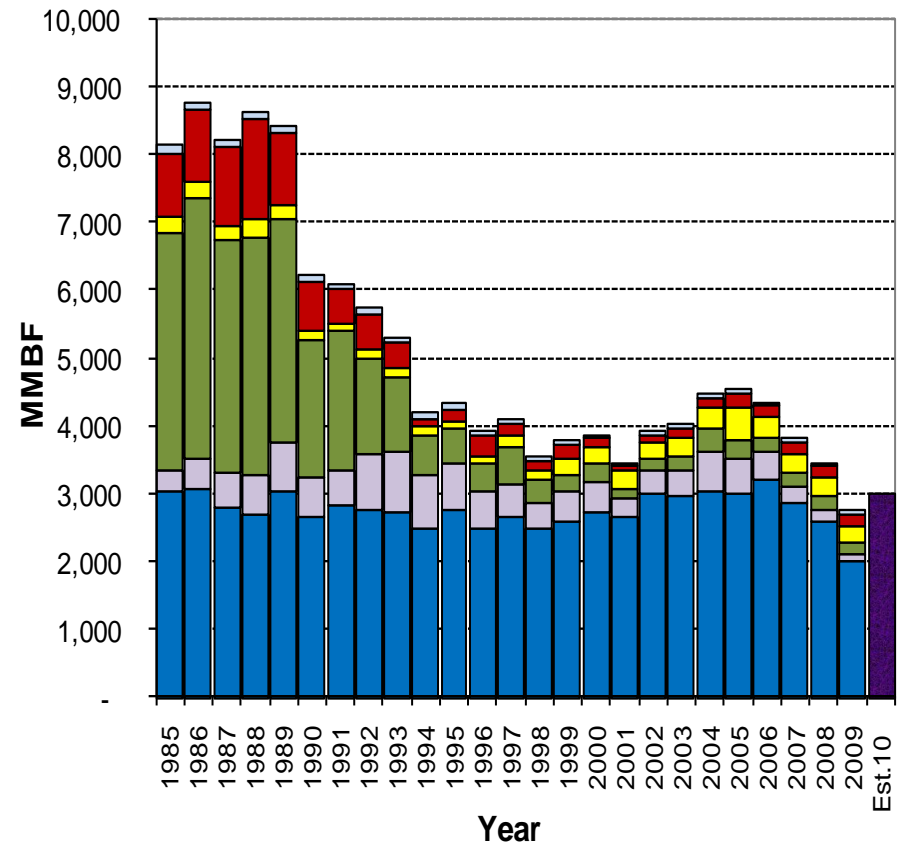
Privately Held Large Forest Land Owners	
Oregon	Acres
Hampton	
Seneca	
Starker	
Rosboro	
Roseburg	
Timber Products Company	
Giustina Land & Timber	
Giustina Resources	
Miami Corp.	
Cascade Timberlands	
Avery	
Stimson	
Green Diamond	
Sierra Pacific	
Lone Rock	
Perpetua	
Rough & Ready	
South Coast Lumber	
Oregon Total	1,645,000
Washington	
SDS Lumber Company	
Port Blakely	
Green Crow	
Green Diamond	
Hampton	
Sierra Pacific	
Stimson	
Murray Pacific	
Merrill & Ring	
Trillium	
Washington Total	1,120,000

Harvest by Owner Washington



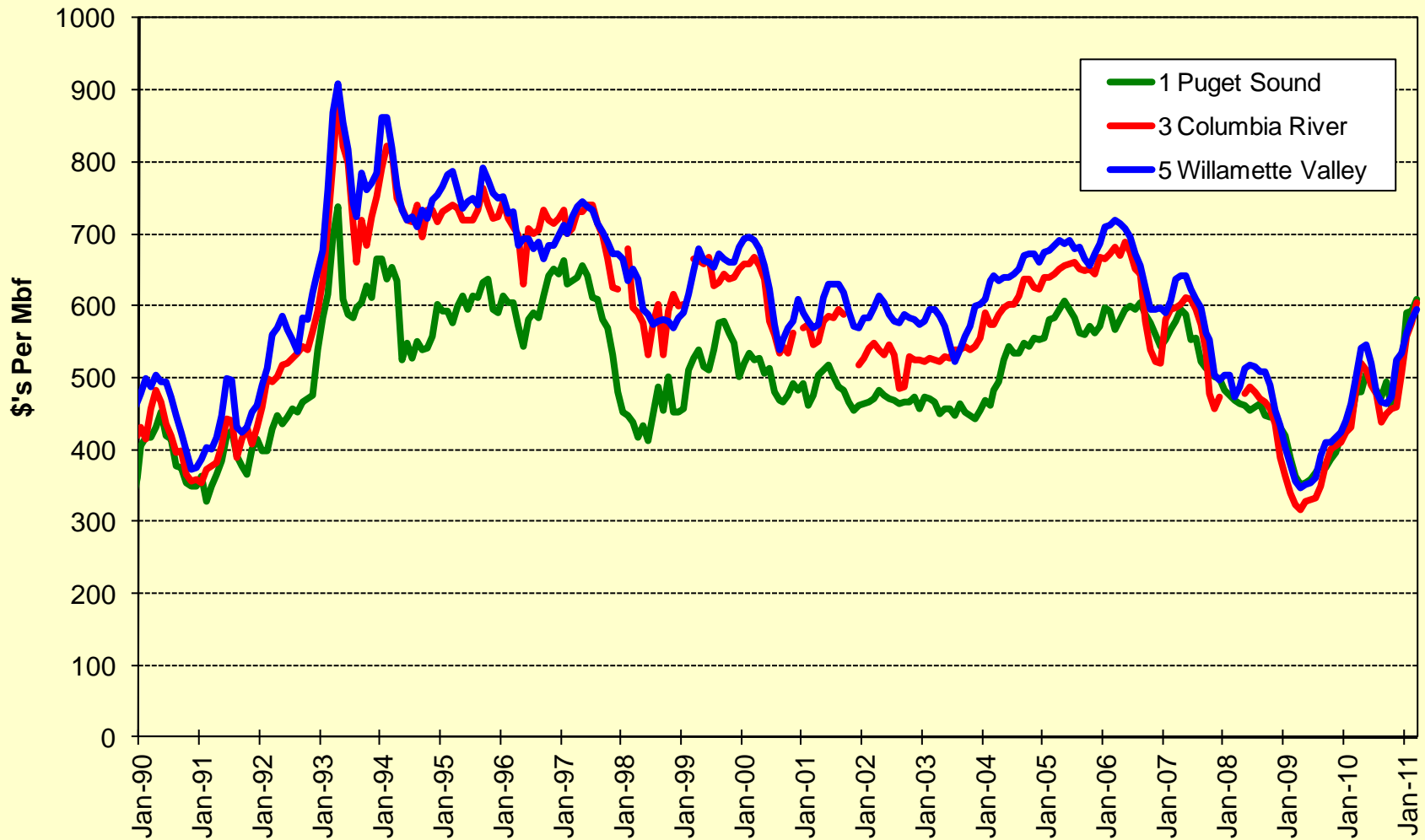
Source: Washington DNR & DOR

Harvest by Owner Oregon



Source: Oregon Dept. of Forestry

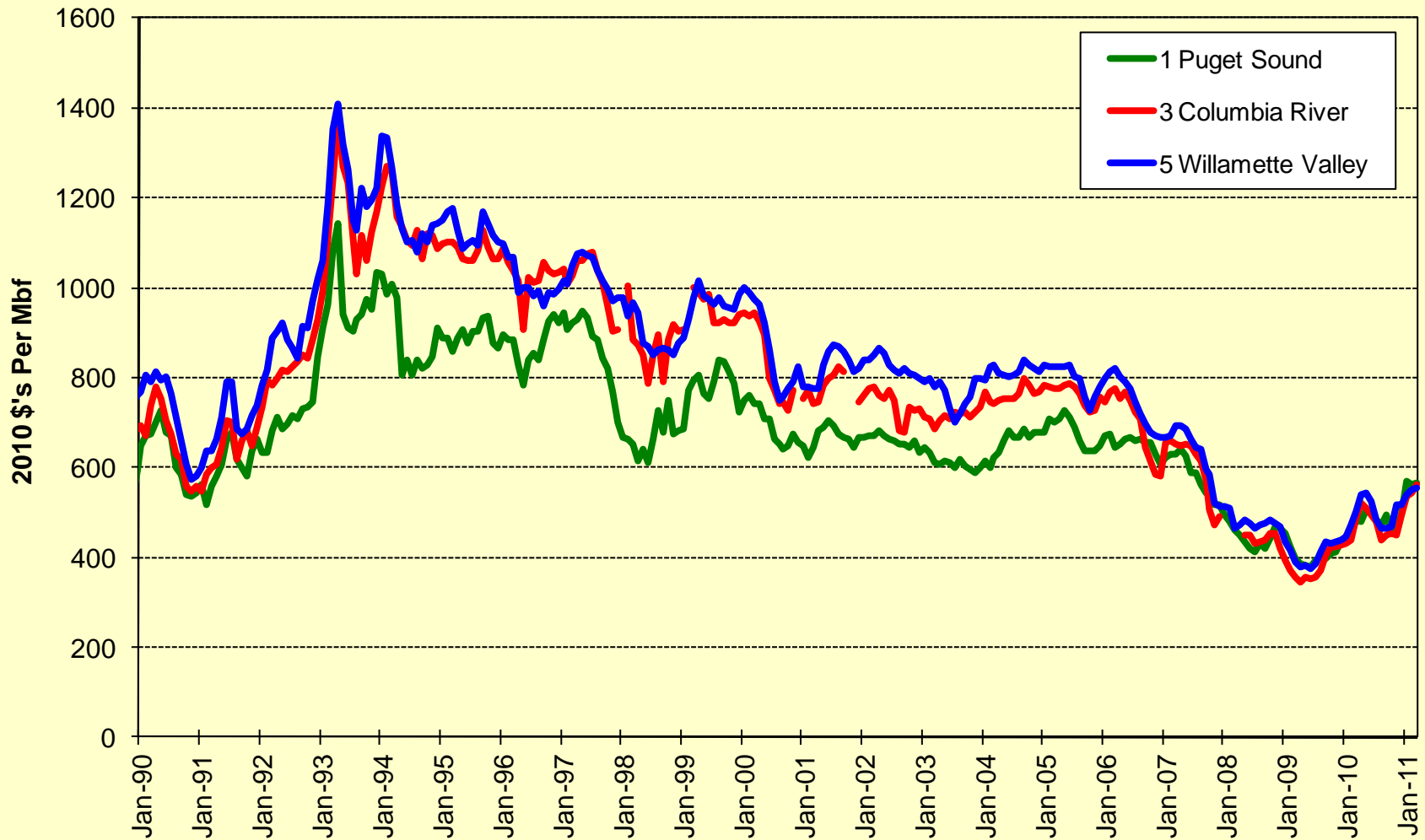
Nominal Price Trends for Douglas-fir Domestic #2 Sawlogs



Source: Log Lines Log Price Reporting Service

Breaks in lines indicate no reported data.

Real Price Trends for Douglas-fir Domestic #2 Sawlogs



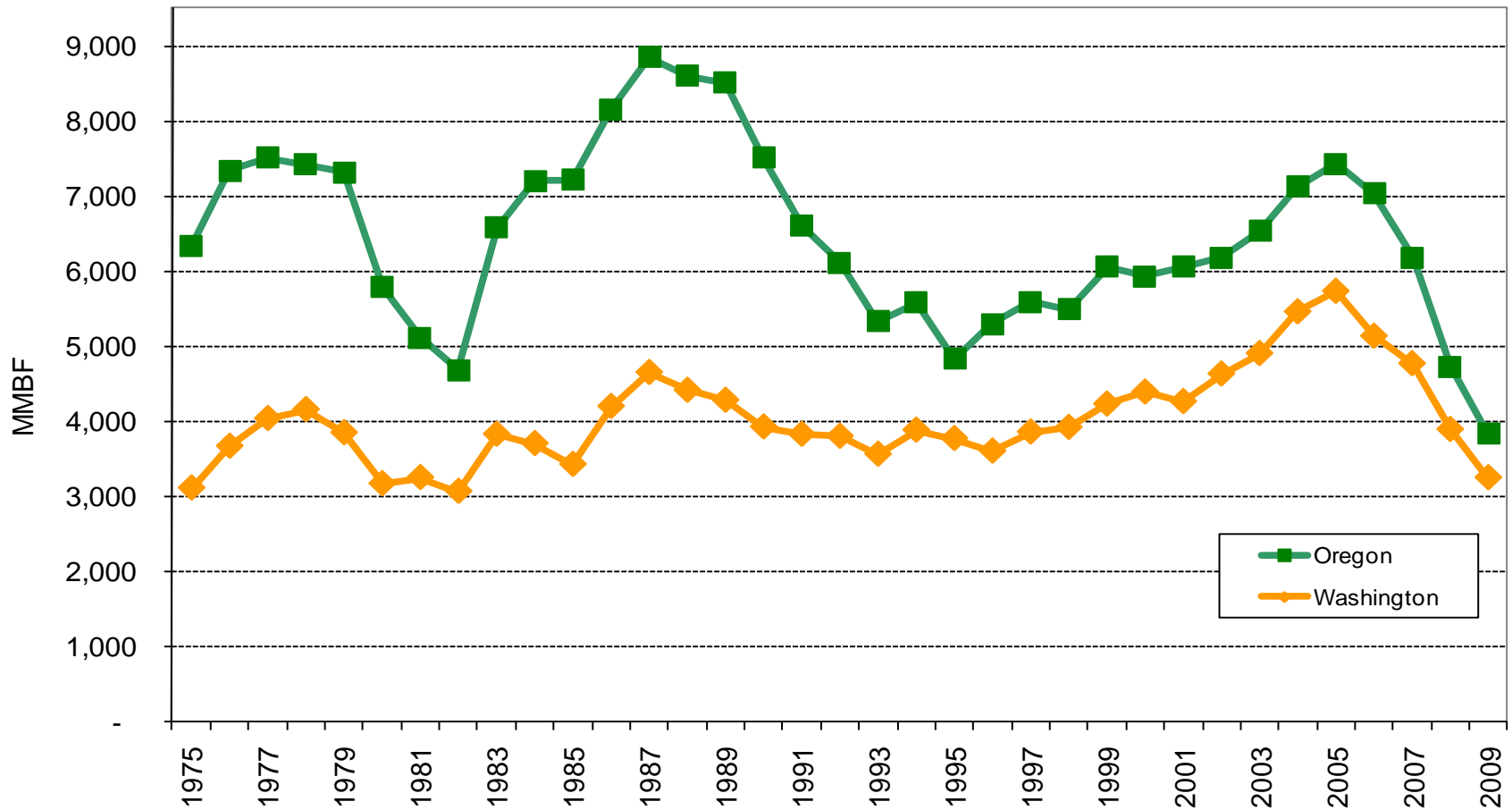
Source: Log Lines Log Price Reporting Service

Breaks in lines indicate no reported data.

**2008 - 2010 Delivered Log Price Dollar Losses
Compared to a 2007 Base**

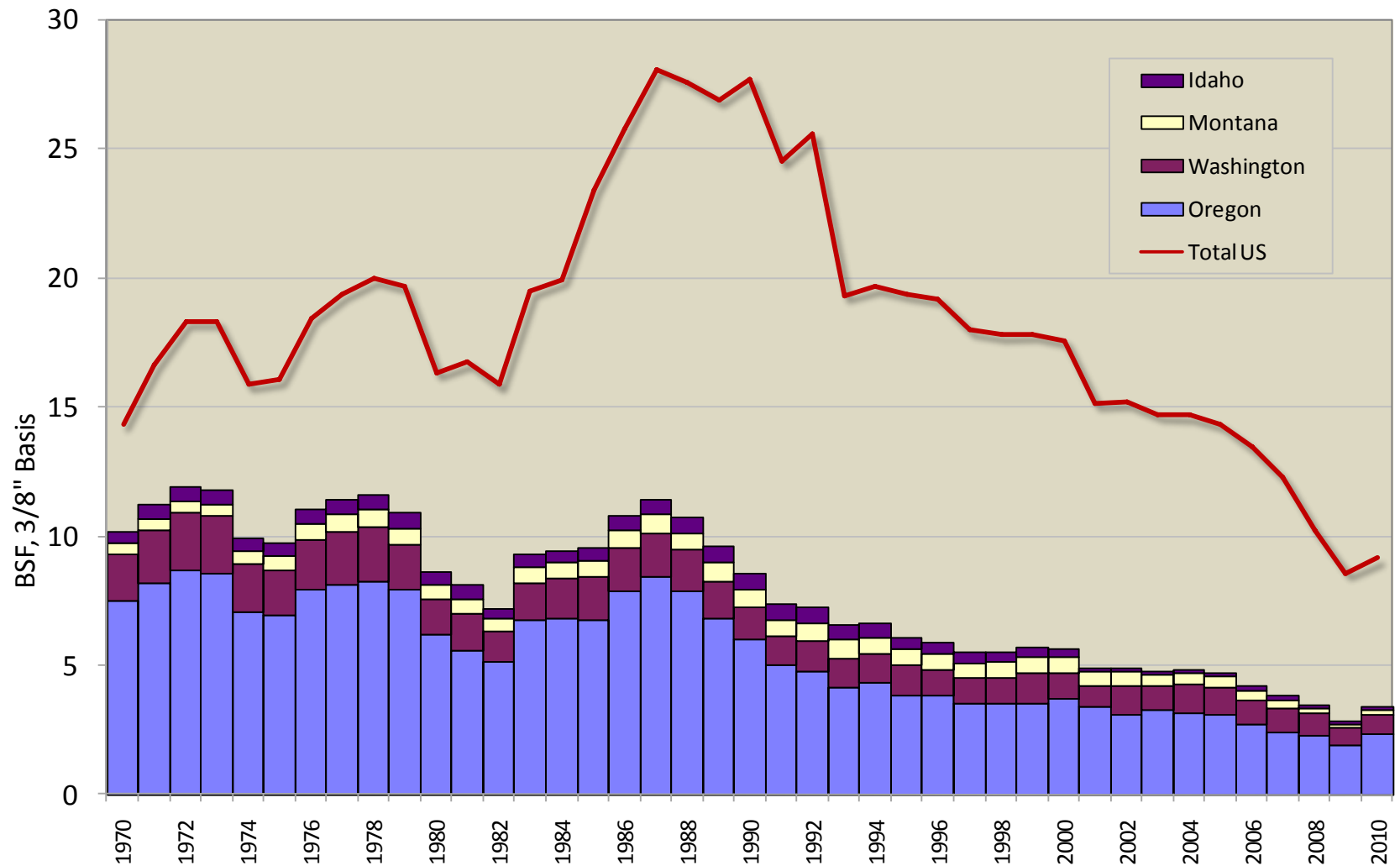
Loss from Lower Harvests	\$2,145,000,000
Loss from Lower Prices	\$2,532,000,000
Total	\$4,677,000,000

Lumber Production Oregon & Washington



Source: Western Wood Products Association

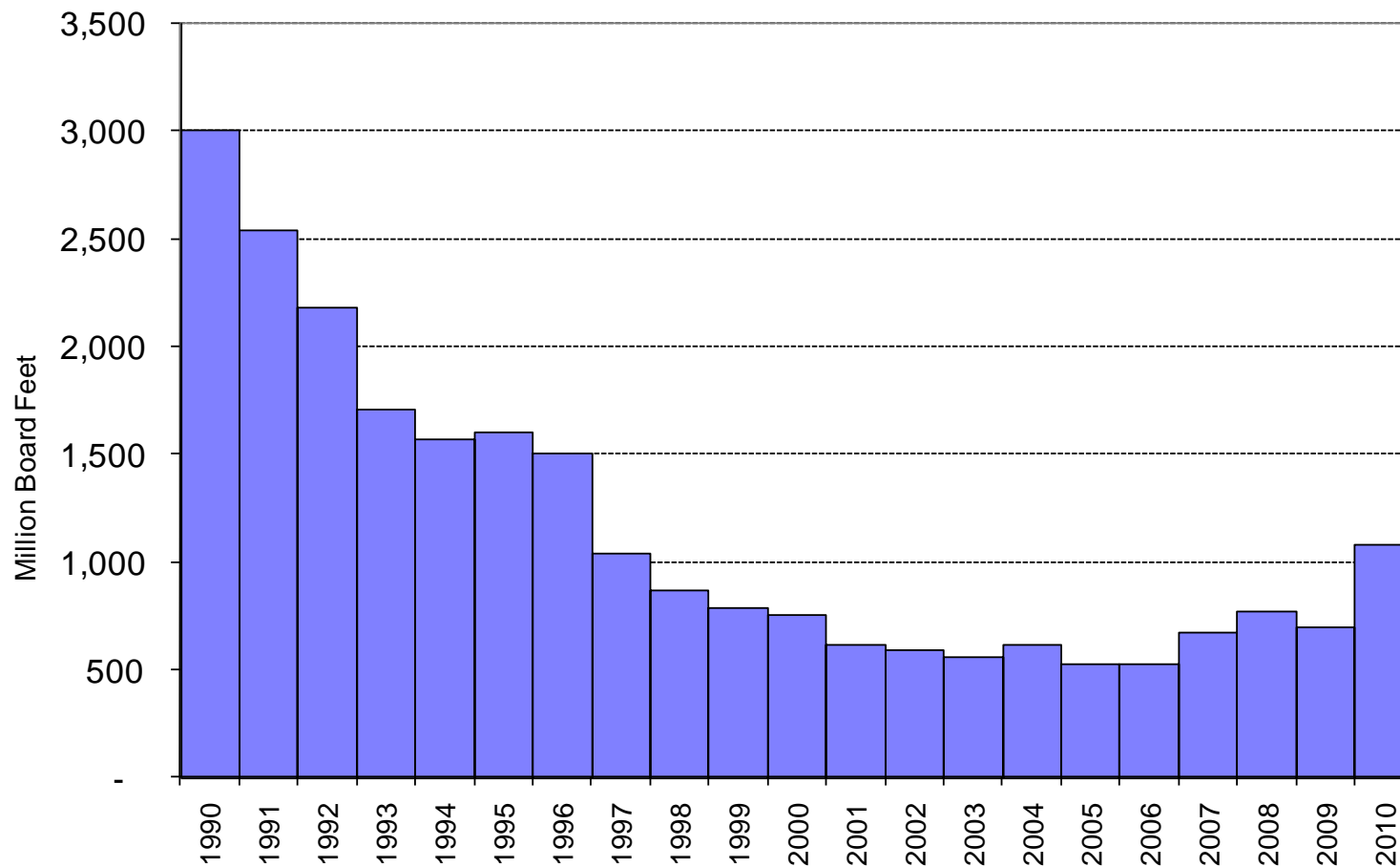
U.S. Plywood Production Comparison, 1970 - 2010



Source: APA - The Engineered Wood Assoc.

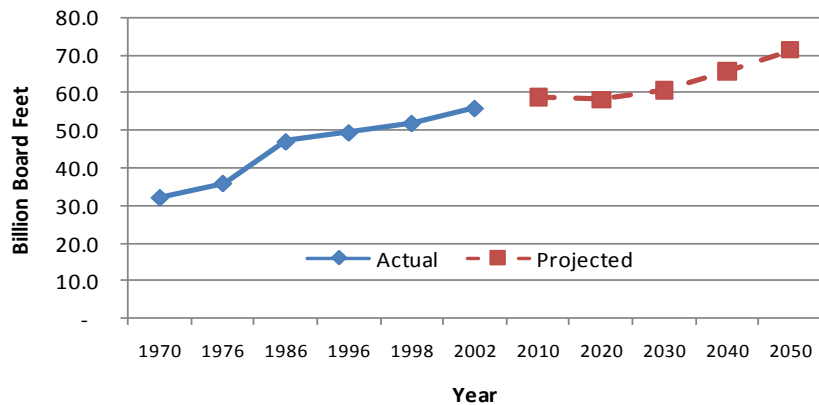
Softwood Log Volume Exports Seattle and Columbia-Snake Customs Districts

1990-2010



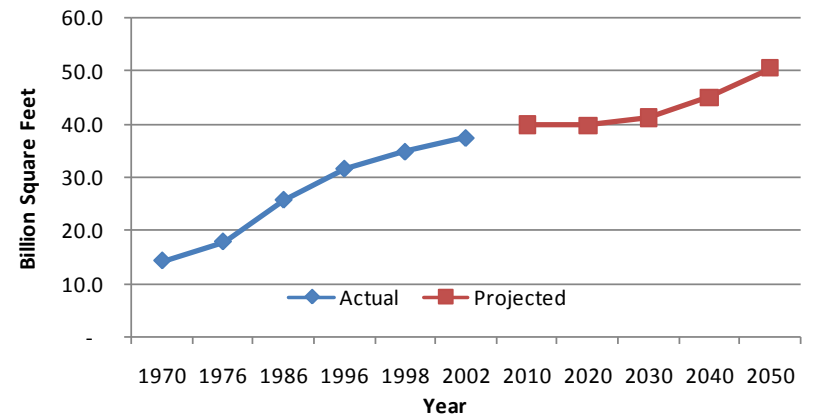
Source: WWPA Statistical Yearbook

Historic and Projected U.S. Softwood Lumber Consumption



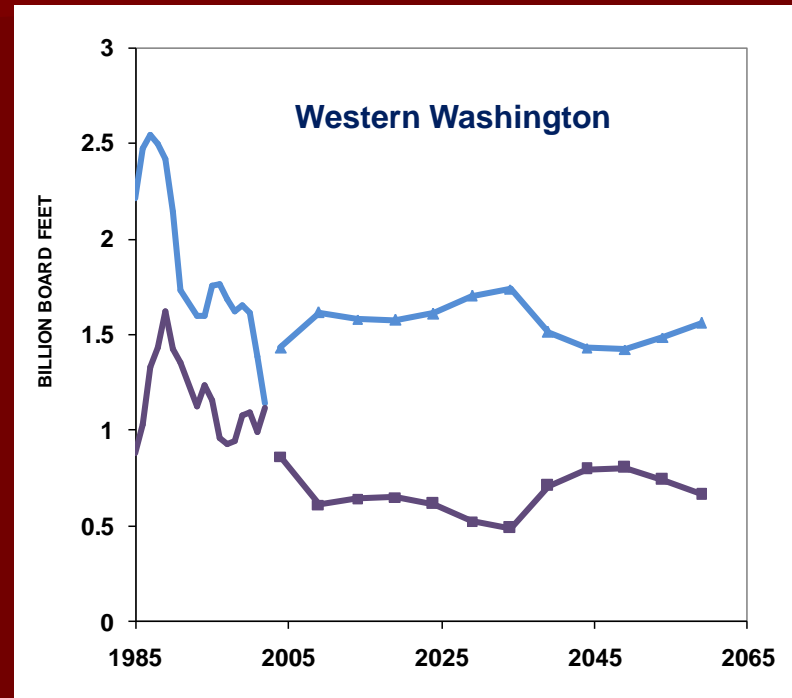
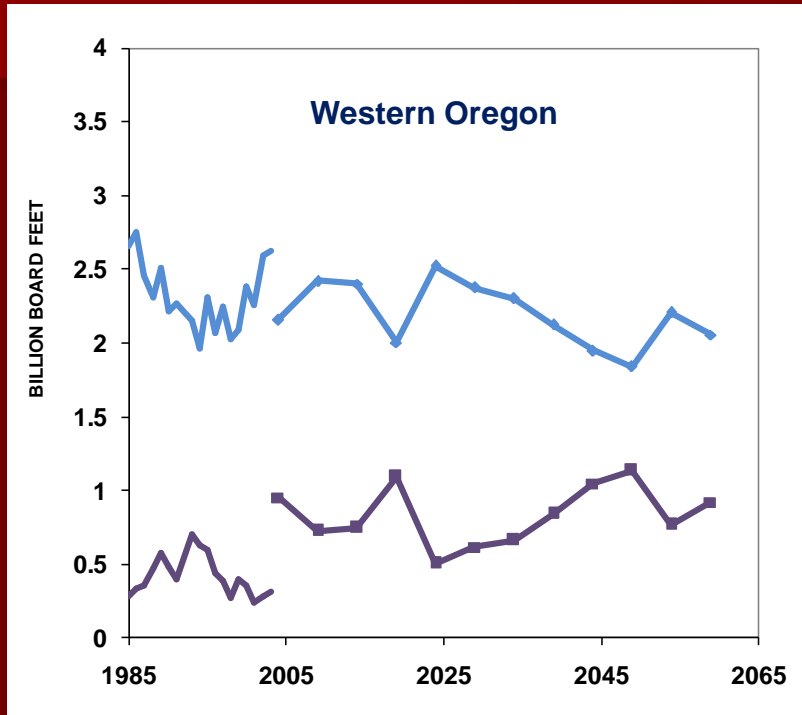
Source: 2005 RPA Timber Assessment Update. U.S. Forest Service, General Technical Report PNW-GTR-699

Historic and Projected U.S. Structural Panel Consumption



Source: 2005 RPA Timber Assessment Update. U.S. Forest Service, General Technical Report PNW-GTR-699

Historical and Projected Annual Private Timber Harvests in Western Oregon and Western Washington



Source: Adams, Darius M. and Latta, Gregory S., 2007. Timber Trends on Private Lands in Western Oregon and Washington: A New Look. Western Journal of Applied Forestry, 22(1):8-13.

Population Changes in Washington and Oregon

Year	Washington	Oregon
1980	4,132,000	2,633,000
1990	4,867,000	2,860,000
2000	5,894,000	3,431,000
2010	6,733,000	3,844,000
2030	8,386,000	4,891,000
2040	NA	5,425,000

2010-2030:

% Change	25%	27%
Difference	1,585,000	1,047,000

Source: Office of Financial Management, State of Washington and Office of Economic Analysis, State of Oregon.

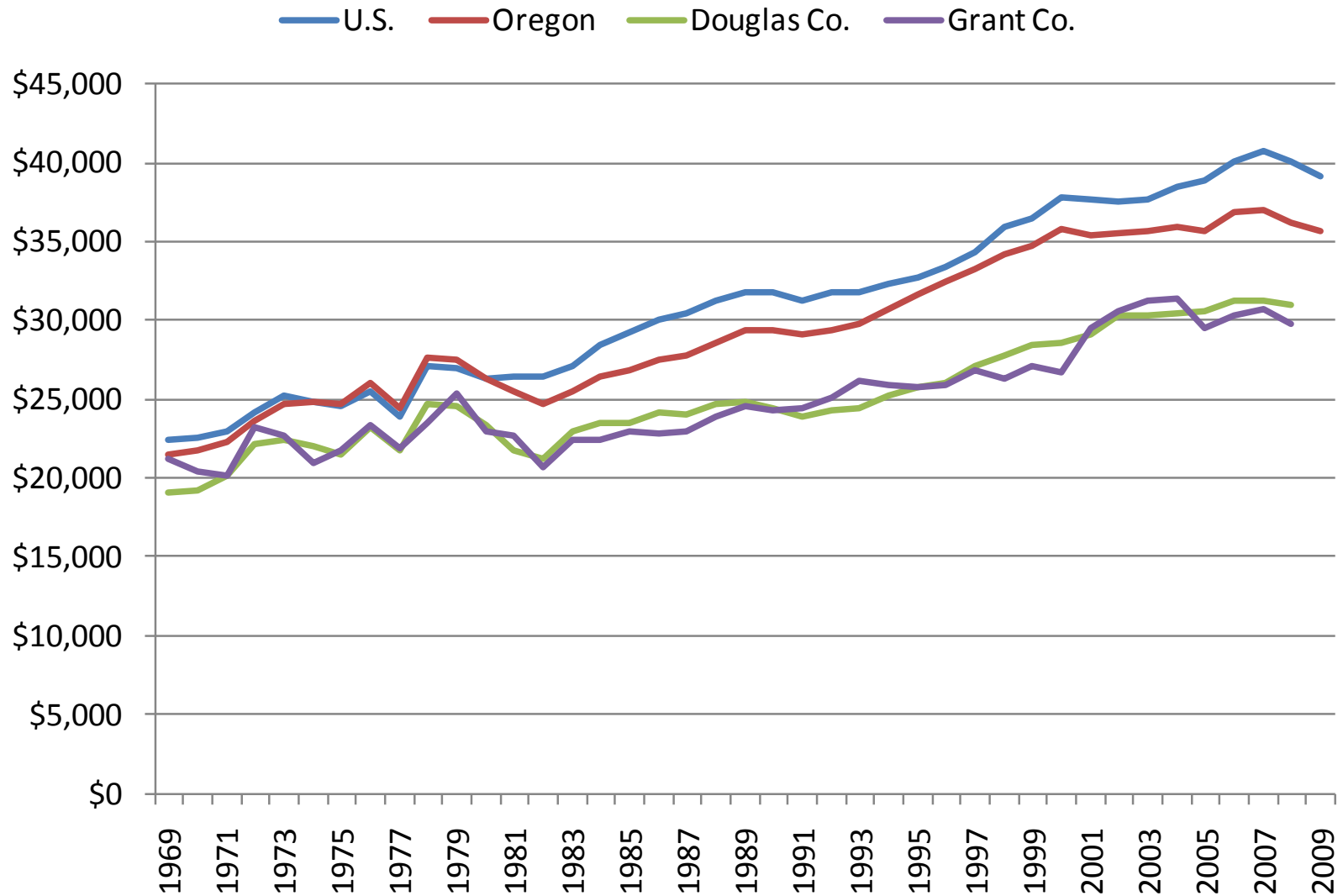
Net Population Migration in Washington and Oregon

Year	Washington	Oregon
Number of People		
2008	+ 57,979	+ 28,350
2009	+ 38, 878	+ 16,848
2010	+ 28,200	+ 6,841
2011 ¹	+36,000	+ 12,241
2012 ¹	+ 50,300	+ 22,421
2013 ¹	+ 48,100	+ 26,133

¹ Projected

Source: Office of Financial Management, State of Washington and Office of Economic Analysis, State of Oregon.

Per Capital Income, Oregon vs. United States (2009 \$'s)



Private Forest Certification in the Northwest

	Washington		Oregon	
	#	Acres	#	Acres
American Tree Farm System	679	303,000	757	791,000
Forest Stewardship Council	6	379,000	8	559,000
Sustainable Forest Initiative	17	5,531,000 ¹	12	2,894,000

¹ Includes Washington DNR



Dollars spent on Oregon Private Forestlands

Based on projects completed and reported to the Oregon Watershed Restoration Inventory (OWRI)

Prepared by Bobbi Riggers (OWRI Coordinator) 2/22/11

Year	Contribution from Private Industrial Forest Landowners	Contribution from Private Non-industrial Forest Landowners	All Other Contributions	Total Dollars Spent on Private Forest Land or Combined Private /Other Forest Land
1997	\$6,121,486	\$117,716	\$2,233,706	\$8,472,908
1998	\$9,198,634	\$101,677	\$1,212,979	\$10,513,290
1999	\$9,802,813	\$106,499	\$908,601	\$10,817,913
2000	\$11,268,522	\$231,507	\$1,904,854	\$13,404,883
2001	\$9,916,509	\$179,170	\$1,268,687	\$11,364,366
2002	\$7,682,264	\$267,084	\$3,061,683	\$11,011,031
2003	\$5,130,279	\$281,195	\$2,670,890	\$8,082,364
2004	\$5,426,791	\$228,144	\$5,944,219	\$11,599,154
2005	\$3,925,914	\$236,965	\$3,691,254	\$7,854,133
2006	\$3,868,245	\$330,855	\$5,125,715	\$9,324,815
2007	\$4,025,354	\$344,730	\$4,841,777	\$9,211,861
2008	\$3,036,720	\$123,976	\$6,983,450	\$10,144,146
2009	\$1,121,399	\$220,662	\$4,010,047	\$5,352,108
Total	\$80,524,930	\$2,770,180	\$43,857,862	\$127,152,972

Notes:

Projects include criteria such as "Land Use Type = Forest". Some projects with forest land use may have more than one land use type (e.g. range/pasture). Some commonly reported activities include road & fish passage improvements, instream habitat work, and riparian voluntary tree retention. This summary also includes some projects with a goal of livestock exclusion and treatments such as riparian fencing and off-channel livestock watering. The reporting from small woodland owners may be low, and therefore, their contribution may be underrepresented.

Forestry Accomplishments on Oregon Private Forestlands

Based on projects completed and reported to the Oregon Watershed Restoration Inventory (OWRI)

Prepared by Bobbi Riggers (OWRI Coordinator) 3/15/11

Oregon Plan Actions Reported from 1997 to 2009 by Private Forest Landowners	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
Road Miles Surveyed	2684	6828	3679	1096	847	397	654	163	0	57	0	51	2	16458
Road Miles Improved	305	381	466	405	379	398	206	273	120	139	76	61	29	3238
Road Miles Vacated, Closed or Relocated	28	50	95	91	86	42	34	86	1	9	13	10	2	547
Number of Peak Flow Improvements (increase culvert or bridge size to pass high flows)	508	922	1075	1114	1061	1180	473	435	254	334	252	198	95	7901
Number of Surface Drainage Improvements	999	2055	2302	2762	2565	2434	1117	1180	769	1002	469	407	238	18299
Number of Stream Crossings Improved for Fish Passage	139	214	203	180	195	143	102	130	77	89	61	84	26	1643
Number of Large Wood Placement Projects	76	89	51	56	26	41	29	33	24	16	26	23	24	514
Number of Other Instream Projects (boulder placement, side channels & alcoves)	63	18	12	6	11	4	8	5	2	9	2	6	10	156
Number of Conifer Restoration Projects	20	11	15	4	4	2	1	0	2	0	4	0	1	64
Number of Riparian Management Projects (voluntary tree retention)	139	174	242	233	254	196	206	152	218	173	192	173	114	2466

Private Forest landowners have contributed over \$89 million toward these restoration activities.

Washington RMAP ACCOMPLISHMENT REPORT FROM 2001-2009 - Information as of 12/31/2009

DNR Region	Number of approved RMAPs ¹	Number of Miles of Forest Roads Assessed	Number of Miles of Road that have been Improved to Rule Standards	Miles of DNR Approved Road Abandonment Completed	Miles of Orphaned Roads Identified	Number of Fish Passage Barriers Removed	Miles of fish Passage Opened	Number of Checklist RMAPs Submitted by Small Forest Landowner ²
Northeast	8	7,625	4,599	299	96	579	289	2,407
Northwest	29	5,841	1,955	908	650	209	69	1,499
Olympic	22	7,648	1,092	109	353	429	246	719
Pacific Cascade	34	21,942	6,528	544	715	1,324	645	3,028
South Puget Sound	15	7,886	763	268	220	265	143	694
Southeast	18	6,500	1,258	493	271	335	177	457
Statewide Totals	126	57,442	16,195	2,621	2,305	3,141	1,569	8,804

¹ Large landowners may have more than 1 RMAP; this number may include small landowners who have chosen to submit a full RMAP

² Small forest landowners may submit more than 1 checklist

State Wide Yearly Cumulative Reports

Year	Total # of Approved RMAP's & Submitted Checklists	***Total # of Submitted Checklist RMAPs by Small Landowners	Total Miles of Forest Roads Assessed in RMAPs	Miles of Road Improved to Rule Standards	Miles of DNR Approved Road Abandonment Completed	Miles of Orphaned Roads	Miles of Fish Passage Opened	# of Structures on Fish Streams Removed or Replaced
2001-2002	4,066	---	15,484		645	502	52	46
2001-2003	5,530	---	27,072		1,007 / *362	1,246	175 / *123	355 / *309
2001-2004	7,401	---	48,051		1,587 / *580	1,944	647 / *472	1,217 / *908
2001-2005	8,419	---	58,843		1,856 / *269	2,107	775 / *128	1,363 / *146
2001-2006	9,950	---	59,220		2,068 / *212	2,313	982 / *207	1,819 / *456
**2001-2007	107	8,121	56,936	13,140	2,153 / *85	2,293	1,221 / *239	2,248 / *429
2001- 2008	130	8,628 / *506	57,442	15,019 / *1,879	2,431 / *278	2,305	1,448 / *227	2,871 / *623
2001-2009	126	8,804 / *176	57,442	16,195 / *1,176	2,621 / *190	2,305	1,569 / *121	3,141 / *270

* Number represents the increase from the previous year's report.

**2007 is the first year the number of submitted large landowner RMAPs and submitted small landowner RMAP Checklists is separated.

Loss of Forestland Over 100 years

State	1907 M Acres	2007 M Acres	Loss in M Acres	Loss in %
Idaho	21,967	21,430	537	2.4
Oregon	31,729	30,169	1,560	4.9
California	37,404	32,817	4,587	12.3
Washington	26,834	22,279	4,555	17.0
Louisiana	18,020	14,222	3,798	21.1
Arkansas	25,405	18,830	6,575	25.9
Florida	22,918	16,147	6,771	29.5
Texas	31,819	17,273	14,546	45.7

Forest Resources of the United States, 2007. USDA Forest Service. 2009; GTR WO-78 – Table 3

Area of Private Land, by Selected Land Use Class and Year
Oregon

Land Use Class	1974	1994	2009	% Change
	----- thousand acres -----			
Wildland forest	9,210	9,052	9,018	-2%
Mixed forest/agriculture	889	819	803	-10%
Low density residential	710	1,079	1,144	61%

Source: Forests, Farms and People, US Forest Service, FIA Program and ODF, January 2011

**Average Number of Structures, per Square Mile, on all Non-Federal Land
in Oregon by Selected Land Use Class**

Oregon

Land Use Class	<u>1974</u>	<u>1994</u>	<u>2009</u>
Wildland forest	0.7	1.3	1.6
Mixed forest/agriculture	7.4	14.0	15.6
Low density residential	61.2	95.8	106.6

*Source: Forests, Farms and People, US Forest Service, FIA Program and ODF,
January 2011*

*“There are known knowns.
These are things we know that
we know. There are known
unknowns. That is to say, there
are things that we know we don’t
know. But there are also
unknown unknowns. There are
things we don’t know we don’t
know.”*

– Donald Rumsfeld

KNOWN KNOWNS as of 1970

- NEPA - Jan. 1970
- Certified Tree Farms
- State Forest Planning Laws
- Wood is Good
- Smokey Bear
- Wilderness
- Work for one organization until retirement

KNOWN UNKNOWNNS as of 1970

- Forest Service Planning Regulations
- Endangered Species Act
- NEPA
- State (Oregon) Land Use Laws
- Mergers and Acquisitions
- Technology
 - Wood Products Manufacturing
 - Computers
 - Plantation Management
 - Logging Equipment

UNKNOWN UNKNOWNNS (1970) That Become KNOWN UNKNOWNNS

- REITs
- TIMOs
- Spotted Owls
- Ninth Circuit Court
- Carbon Credits
- NGOs
- Climate Change
- Conservation Easements



My Most Sincere Thanks go to:

- ❖ Jacki McMahon
- ❖ Roger Lord, and
- ❖ Mark Rasmussen

for their assistance in preparing information for me.