Can Mandated Timber Harvests Save County Payments?

Analysis of the Draft Federal Forest County Revenue, Schools, and Jobs Act

Headwaters Economics

UPDATE February 16, 2012

Summary Findings

The U.S. House Subcommittee on National Parks, Forests, and Public Lands is considering a draft of House Resolution 4019, the "Federal Forest County Revenue, Schools, and Jobs Act of 2012" (County Revenue Act) that would mandate commercial timber harvests on National Forests as a way of replacing the expired Secure Rural Schools and Community Self-Determination Act (SRS) payments to local governments.[i]

This brief provides a summary of the data and methods we used to estimate timber harvests required to meet annual revenue targets, and how state payments will change relative to current SRS payments. We will provide additional information on the economic context and potential of the County Revenue Act in a following brief.

Our analysis finds:

- Based on 2010 timber prices, the timber cut required to meet the minimum revenue target as defined by the County Revenue Act is **33.2 billion board feet**, 15 times greater than the actual 2010 national timber cut of 2.1 billion board feet, and nearly three times higher than the record-single year timber cut of 12.7 billion board feet in 1987.

- The County Revenue Act would create winners and losers among states compared to current county payments under SRS. For example, the County Revenue Act would deliver **$154.3 million more to Oregon** counties and **$12.9 million less to New Mexico** counties. Nationally, the County Revenue Act would increase annual county payments over average annual SRS payments from 2008 to 2011 by $230.5 million, a 50 percent increase.

A solution needs to be found for the dozens of counties dependent on payments from the Forest Service that will face significant cuts to local schools, road departments and other services if funding declines (Forest Service payments made up 10 percent or more of all county government revenue for 81 counties in 2009[ii]).

But relying nearly entirely on timber sales to fund payments, as proposed by the County Revenue Act, raises important questions about how rural economies work today, and how we value and manage public lands. The original 25% Fund established a funding mechanism to compensate counties for non-taxable federal land linked directly to commodity production on the new National Forests. As the national economy has changed, and as attitudes about public land management and values have shifted, a commodity-only payment system may no longer work for counties fiscally, economically, or politically.

Table 1: Timber Cut Required at 2010 Prices to Meet Annual Revenue Requirement Defined by the County Revenue Act (Pages 2 and 3)[iii]

State	Average annual NF gross receipts 1980-2000 (2010 $s)	Minimum annual revenue requirement: 60% of average annual	2010 average cut price for NF timber ($/mbf)	Minimum sale level required by minimum annual revenue
Alabama	9,881,062	5,928,637	104.51	56,726
Alaska	26,074,110	15,644,466	53.67	291,474
Arizona	30,282,165	18,169,299	11.09	1,638,564
Arkansas	35,053,821	21,032,292	78.17	269,058
California	300,527,366	180,316,419	16.33	11,045,310
Colorado	23,406,336	14,043,802	15.61	899,440
Florida	11,988,747	7,193,248	77.53	92,777
Georgia	5,737,722	3,442,633	45.85	75,083
Idaho	80,511,626	48,306,976	32.45	1,488,734
Illinois	694,181	416,509	7.90	52,730
Indiana	542,417	325,450	24.31	13,388
Kentucky	2,512,705	1,507,623	61.80	24,394
Louisiana	19,155,942	11,493,565	100.02	114,914
Maine	194,059	116,435	66.19	1,759
Michigan	11,297,531	6,778,518	63.32	107,058
Minnesota	14,100,428	8,460,257	41.77	202,545
Mississippi	40,994,483	24,596,690	74.69	329,330
Missouri	12,392,506	7,435,504	87.38	85,096
Montana	56,428,532	33,857,119	27.57	1,228,168
Nebraska	282,596	169,558	12.50	13,565
Nevada	2,185,458	1,311,275	8.85	148,162
New Hampshire	2,858,367	1,715,020	74.92	22,892
New Mexico	10,954,159	6,572,496	11.99	548,114
New York	37,986	22,791	83.43	273
North Carolina	5,146,726	3,088,035	52.66	58,646
North Dakota	514	308	10.00	31
Ohio	615,342	369,205	55.78	6,619
Oklahoma	5,001,208	3,000,725	68.03	44,107
Oregon	721,863,739	433,118,243	40.37	10,727,394
Pennsylvania	20,914,324	12,548,595	264.15	47,506
South Carolina	14,959,502	8,975,701	109.24	82,162
South Dakota	11,858,195	7,114,917	27.61	257,654
Tennessee	2,748,914	1,649,348	47.45	34,763
Texas	19,814,509	11,888,705	122.36	97,162
Utah	8,556,784	5,134,071	30.05	170,863
Vermont	1,221,006	732,603	93.06	7,872
Virginia	3,722,955	2,233,773	47.88	46,650
Washington	205,478,893	123,287,336	51.61	2,388,875
West Virginia	5,596,068	3,357,641	44.30	75,787
Wisconsin	6,273,776	3,764,266	70.40	53,468
Wyoming	9,848,033	5,908,820	22.07	267,693
National Total	**1,741,714,793**	**1,045,028,876**	**54.00**	**33,116,804**

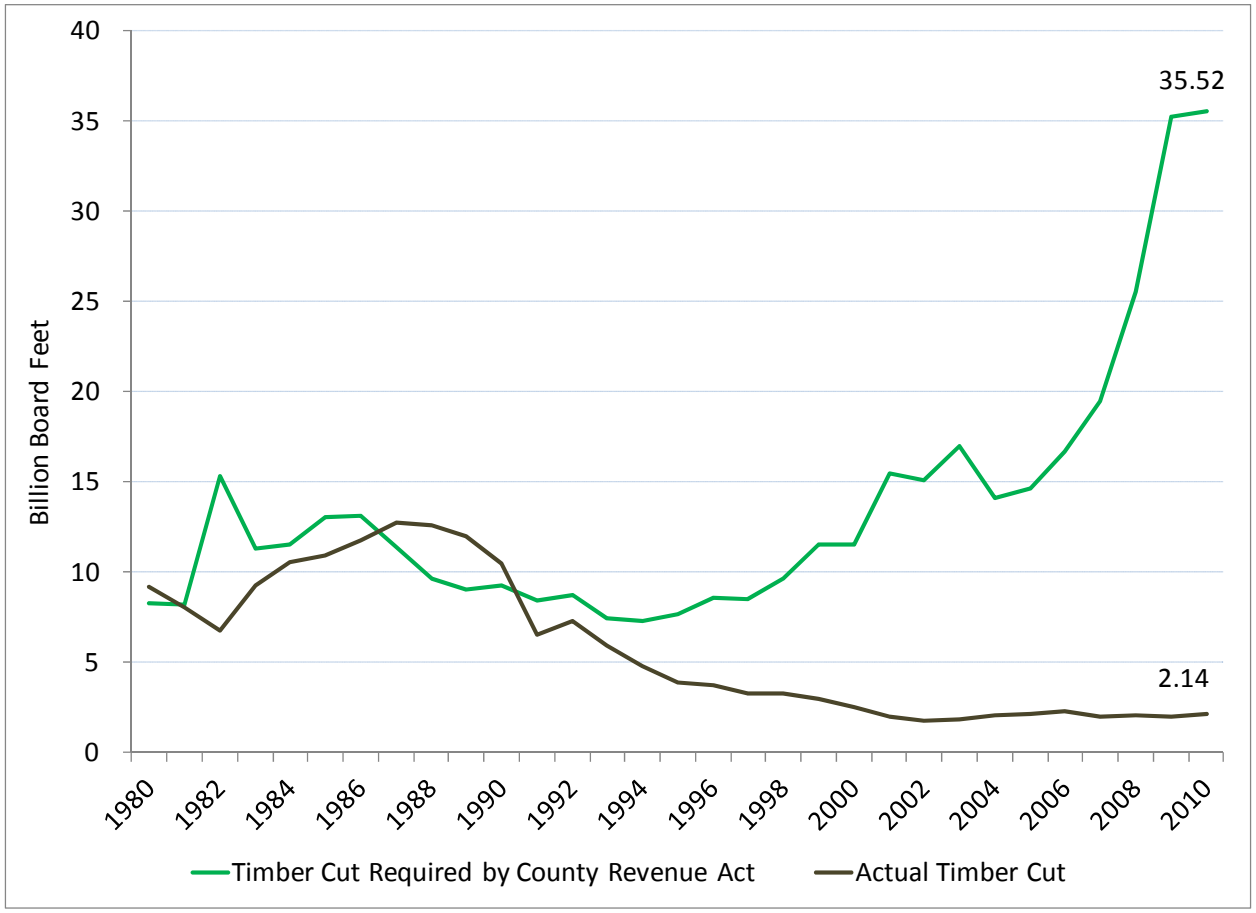
Table 1 (Cont.): Timber Cut Required at 2010 Prices Compared to Actual 2010 Timber Cut, the Highest Single Year Cut Since 1980, and the Average Annual Timber Cut from 1980-2000[iv]

State	Minimum sale level required by minimum annual revenue requirement (mbf)	2010 actual NF timber cut (mbf)	Minimum sale level percent change from 2010 actual timber cut	Historical single-year high timber cut (1980-2010)	Year Attained	Minimum sale level percent change from from historic high	Average annual timber cut (1980-2000)	Minimum sale level percent change from average cut
Alabama	56,726	21,555	163%	108,436	1991	-48%	63,775	-11%
Alaska	291,474	35,632	718%	199,561	1980	46%	99,429	193%
Arizona	1,638,564	50,106	3170%	283,256	1987	478%	171,393	856%
Arkansas	269,058	116,268	131%	240,300	1987	12%	173,557	55%
California	11,045,310	251,354	4294%	1,973,439	1988	460%	1,114,085	891%
Colorado	899,440	79,919	1025%	287,641	1985	213%	143,244	528%
Florida	92,777	19,473	376%	121,913	1985	-24%	76,973	21%
Georgia	75,083	4,570	1543%	89,508	1980	-16%	45,443	65%
Idaho	1,488,734	96,350	1445%	829,245	1980	80%	517,304	188%
Illinois	52,730	243	21593%	21,900	1983	141%	7,027	650%
Indiana	13,388	2,393	459%	13,142	1984	2%	3,679	264%
Kentucky	24,394	6,029	305%	45,935	1989	-47%	25,193	-3%
Louisiana	114,914	38,653	197%	207,044	1985	-44%	109,185	5%
Maine	1,759	12	14191%	12,225	1982	-86%	3,019	-42%
Michigan	107,058	129,629	-17%	234,711	1989	-54%	188,039	-43%
Minnesota	202,545	85,589	137%	183,707	1989	10%	140,302	44%
Mississippi	329,330	43,164	663%	308,264	2006	7%	185,766	77%
Missouri	85,096	43,740	95%	74,769	1985	14%	57,320	48%
Montana	1,228,168	145,612	743%	631,603	1983	94%	355,231	246%
Nebraska	13,565	72	18636%	2,618	1987	418%	498	2623%
Nevada	148,162	5,655	2520%	11,435	1994	1196%	3,045	4765%
New Hampshire	22,892	11,071	107%	41,996	1983	-45%	24,280	-6%
New Mexico	548,114	41,569	1219%	171,989	1983	219%	82,884	561%
New York	273	560	-51%	897	1985	-70%	271	1%
North Carolina	58,646	25,966	126%	76,426	1983	-23%	49,612	18%
North Dakota	31	53	-42%	119	1990	-74%	61	-49%
Ohio	6,619	4,215	57%	12,089	1985	-45%	5,055	31%
Oklahoma	44,107	15,218	190%	39,614	1986	11%	22,137	99%
Oregon	10,727,394	360,272	2878%	4,069,208	1987	164%	2,079,640	416%
Pennsylvania	47,506	22,228	114%	84,105	1989	-44%	55,424	-14%
South Carolina	82,162	44,687	84%	378,179	1990	-78%	91,598	-10%
South Dakota	257,654	96,655	167%	144,643	1990	78%	85,423	202%
Tennessee	34,763	8,262	321%	38,700	1984	-10%	24,406	42%
Texas	97,162	19,458	399%	139,343	1985	-30%	88,614	10%
Utah	170,863	21,103	710%	101,286	1986	69%	62,433	174%
Vermont	7,872	4,452	77%	17,509	1981	-55%	8,418	-6%
Virginia	46,650	18,649	150%	76,757	1988	-39%	48,849	-5%
Washington	2,388,875	148,656	1507%	1,720,214	1981	39%	777,085	207%
West Virginia	75,787	6,510	1064%	44,849	1991	69%	28,769	163%
Wisconsin	53,468	66,447	-20%	170,530	1991	-69%	127,027	-58%
Wyoming	267,693	45,807	484%	141,360	1983	89%	79,085	238%
National Total	**33,116,804**	**2,137,859**	**1449%**	**12,712,103**	**1987**	**161%**	**7,546,536**	**339%**

For example, in Oregon, the County Revenue Act would require a cut of 10.7 billion board feet to meet the annual revenue target at 2010 prices. This level of cut is:

- 30 times above the actual 2010 timber cut of 360 million board feet (a 2878% increase),
- more than double the single-year highest timber cut recorded since 1980 of 4 billion board feet (164% increase),
- five times the average cut level achieved from 1980 to 2000 of two billion board feet (a 416% increase).

Figure 1: Timber Cut That Would be Required At Real Annual Prices from 1980-2010[v]



Timber prices were low in 2010, and some may expect that prices will rise in the future. How will the County Revenue Act perform when prices are high? One way to answer that is to apply the minimum revenue requirement of the proposed law to historic years when prices were higher.

Figure 1 shows that in each of the last ten years since 2001, the County Revenue Act would have required timber cuts higher than the historic single-year record cut of 12.7 billion board feet in 1987.

The annual revenue requirement is problematic in that it requires harvests sufficient to meet average targets even during periods of recession when demand and prices fall. The figure shows that the County Revenue Act, if it had been in place, would have required the Forest Service to cut 15.3 billion board feet of timber in 1982 during the national recession when prices fell from $213.34 /mbf to $113.59/mbf in a single year. The actual cut in 1982 was 6.7 billion board feet.[vi]

Even during the housing boom of the 2000s, when timber prices reached levels two and a half times higher than the 2010 price (inflation adjusted $123.61 in 2004 compared to $49.03 in 2010), the County Revenue Act would have required record timber harvests year-in and year-out. For example, the required cut in 2004 when prices were highest over the last decade would have been 14 billion board feet, 11 percent higher than the single-year record.

The County Revenue Act Would Require Annual Timber Cuts Far Above Historic Highs

As drafted, the County Revenue Act requires that each National Forest meet annual revenue requirements based on 60 percent of historic gross receipts produced over the period 1980 to 2000. To achieve these mandated targets the County Revenue Act creates a new type of commercial project on public lands, "Revenue Trust Projects," that will be exempt from certain environmental laws, restricts environmental review costs of preparing Trust Projects to one-third of expected receipts, prevents appeals by the public, and shares 65 percent of gross receipts with counties (current law shares 25 percent).[vii]

The County Revenue Act also extends fully-funded PILT appropriations to FY 2017 (a five year extension), and provides $875 million to extend Forest Service payments to counties for a period of two years to provide a transition the Forest Service time to get revenue trust projects going on a sufficient scale to meet revenue targets.

The County Revenue Act highlights the problem of mandating that revenue targets be met every year without taking into account the volatility of timber demand and timber price. To generate timber values equivalent to long-term averages at today's price, timber cuts would need to be more than 15 times higher than historic levels, or nearly three times the single year record cut in 1987.

If timber prices rise significantly from current levels, future timber cuts could be lower to meet annual revenue requirements. However, 2010 prices are the highest in three years, and the proposal needs to be evaluated in the context of recessions as well as periods of high timber demand and price. It is also possible that mandated harvest levels in the Act, combined with the annual revenue requirement could keep prices artificially low as supply is forced into the market.

Today's low prices and the inherent volatility of timber markets calls into question the ability of the Forest Service to produce timber receipts sufficient to provide dependable payments to counties year in and year out across each National Forest.

The Affect of the County Revenue Act on Federal Spending is Uncertain

The County Revenue Act would strictly limit the costs the National Forest Service could incur in conducting environmental reviews, and would bar judicial review of trust projects. Costs are limited at 33 percent of the receipts expected to be generated by each trust project, and 34 percent of receipts appear to be available to the Forest Service to prepare trust projects, suggesting that trust projects will be revenue neutral to the taxpayer.

Any costs for planning and administering sales other than environmental review costs will still likely come from the Agency's budget. However, it remains unclear if this will hold down total costs of planning and administering sales. For example, the Salvage Timber Sale program in the 1990's

waved some environmental review requirements, but there was no evidence of either lower costs or increased sales.[viii]

The Forest Service conducts below cost timber sales (where the agency's costs of planning and administering sales exceed receipts generated) for a variety of purposes, including economic development, forest and watershed restoration, and fire risk reduction. The stated goals of the County Revenue Act are to create jobs and educational opportunity, and to provide dependable revenue to counties. These goals may justify continued federal spending to plan and administer trust projects. However, more information will be required to estimate the costs of increasing timber sales dramatically on public lands.

County Revenue Would Create Winners and Losers, Harming Rural and Poor Counties that Currently Benefit from SRS

A return to payments that are distributed solely based on historic timber production will shift money from away from counties that benefit from the SRS formula to counties where production was high in the 1980's, mainly counties in Oregon and the Pacific Northwest.

For example, Oregon counties would receive combined payments of $282 million based on historic gross receipts, more than double their average annual Secure Rural Schools payments from 2008 to 2011 ($127 million).[ix] New Mexico counties would receive $12.9 million less, falling 75 percent from an average SRS payment of $17 million to just $4 million.

Nationally, the County Revenue Act would increase annual county payments by $230 million relative to average annual SRS payments from 2008 to 2011 a 50 percent increase.

Table 2: County Revenue Act Payments Compared to SRS

State	County Revenue Act State Payment	Average SRS State Payment, 2008-2011	Difference	Percent Differenc
New Mexico	$4,272,122	$17,178,239	($12,906,117)	-75%
Utah	$3,337,146	$14,412,759	($11,075,613)	-77%
Alaska	$10,168,903	$20,617,959	($10,449,056)	-51%
Colorado	$9,128,471	$17,330,383	($8,201,912)	-47%
Idaho	$31,399,534	$37,390,430	($5,990,896)	-16%
Montana	$22,007,128	$27,305,826	($5,298,699)	-19%
Nevada	$852,329	$5,447,589	($4,595,260)	-84%
Wyoming	$3,840,733	$5,561,136	($1,720,403)	-31%
Kentucky	$979,955	$2,577,655	($1,597,700)	-62%
Arizona	$11,810,044	$13,113,062	($1,303,017)	-10%
Virginia	$1,451,952	$2,154,982	($703,029)	-33%
Wisconsin	$2,446,773	$2,950,332	($503,559)	-17%
Tennessee	$1,072,076	$1,482,365	($410,288)	-28%
West Virginia	$2,182,467	$2,497,494	($315,027)	-13%
Nebraska	$110,212	$421,217	($311,004)	-74%
North Carolina	$2,007,223	$2,228,771	($221,548)	-10%
Michigan	$4,406,037	$4,571,506	($165,469)	-4%
Indiana	$211,543	$320,430	($108,887)	-34%
Ohio	$239,983	$331,539	($91,556)	-28%
Maine	$75,683	$92,917	($17,235)	-19%
New York	$14,814	$27,008	($12,194)	-45%
North Dakota	$200	$780	($579)	-74%
Vermont	$476,192	$404,516	$71,677	18%
Illinois	$270,731	$107,170	$163,560	153%
Missouri	$4,833,077	$4,386,537	$446,541	10%
Georgia	$2,237,712	$1,780,439	$457,272	26%
New Hampshire	$1,114,763	$606,429	$508,334	84%
Oklahoma	$1,950,471	$1,371,313	$579,158	42%
South Dakota	$4,624,696	$3,032,143	$1,592,553	53%
Alabama	$3,853,614	$2,168,136	$1,685,478	78%
Florida	$4,675,611	$2,951,493	$1,724,119	58%
Minnesota	$5,499,167	$3,475,159	$2,024,008	58%
South Carolina	$5,834,206	$2,545,894	$3,288,312	129%
Pennsylvania	$8,156,587	$4,646,402	$3,510,185	76%
Texas	$7,727,658	$3,811,136	$3,916,522	103%
Arkansas	$13,670,990	$9,315,993	$4,354,997	47%
Louisiana	$7,470,817	$2,884,961	$4,585,856	159%
Mississippi	$15,987,848	$7,898,999	$8,088,850	102%
Washington	$80,136,768	$36,680,151	$43,456,618	118%
California	$117,205,673	$55,337,938	$61,867,735	112%
Oregon	$281,526,858	$127,262,712	$154,264,146	121%
National Total	**$679,268,769**	**$448,681,898**	**$230,586,871**	**51%**

Conclusion

A solution needs to be found for the dozens of counties dependent on payments from the Forest Service. Relying nearly entirely on timber sales to fund payments, as proposed by the County Revenue Act raises important questions about how rural economies work today, and how we value and manage public lands. The original 25% Fund established a funding mechanism to compensate counties for non-taxable federal land linked directly to commodity production on the new National Forests. As the national economy has changed, and as attitudes about public land management and values have shifted, a commodity based payment system may no longer work for counties fiscally, economically, or politically.

There are other options available to Congress and the Administration for using county payments to achieve policy goals. For example, Congress could choose to re-invest in current SRS appropriations and boost existing and proven stewardship and restoration funding and authorities creating jobs and supporting rural communities today. Alternatively, Congress could do away with the Forest Service payment program altogether in favor of a simple tax equivalency payment divorced from broader policy agendas.

Headwaters Economics has a long-standing interest in understanding county payments and what they mean for rural communities. For more information, see County Payments, Jobs and Forest Health at http://headwaterseconomics.org/tools/county-payments-research/ .

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About Headwaters Economics
Headwaters Economics is an independent, nonprofit research group that assists the public and elected officials in making informed choices about land management and community development decisions in the West, http://headwaterseconomics.org/.

Methods

Determining Minimum Revenue Requirements

As defined by the County Revenue Act, Annual Revenue Requirements for each National Forest will equal 60 percent of average annual gross receipts during the period 1980 to 2000. We used actual 25% Fund payments to states and counties for the period 1980 to 2000 to calculate average annual gross receipts for the same period[x] on a state by state basis. These data are expressed in real 2010 dollars.

Figure 1 on page 4 uses annual harvest levels and prices reported by the U.S. Forest Service, Forest Management Cut and Sold Reports, FY 1905-2011 National Summary Cut and Sold Data and Graph.

Minimum Sale Levels Needed to Achieve Annual Revenue Requirements

We estimated the timber cut that would be required at 2010 prices as a way of illustrating the impact of the County Revenue Act, had it been in place in that year. The minimum revenue requirement was divided by the average annual price received by the Forest Service for timber cut in 2010.

The result is the total volume (mbf) of convertible products necessary to achieve Annual Revenue Requirements based on 2010 prices.

Current Timber Prices

We used total cut volumes of convertible products (mbf) and total cut value for each National Forest to calculate a per mbf price using data from Forest Service Cut and Sold reports for FY 2010.[xi]

Endnotes

[i] H.R. 4019, The Federal Forests County Revenue, Schools, and Jobs Act of 2012. Discussion draft released February 15, 2012. US House of Representatives.

[ii] Headwaters Economics. 2010. County Payments, Jobs, and Forest Health: Ideas for Reforming the Secure Rural Schools and Community Self-Determination Act (SRS) and Payments in Lieu of Taxes (PILT). Bozeman, MT.

[iii] USDA Forest Service, Secure Rural Schools and Community Self-Determination Act. Annual Payment Information.ASR 10-3 Projected FY 2011 Payments, May 5, 2011; Estimated 25 percent payments, FY2008-2011. USDA Forest Service Forest Management. Cut and Sold Reports. Fiscal Year 2011 Quarters 1-3 (October 2010 to June 2011) for all Regions and National Forests. .

[iv] Ibid.

[v] Ibid.

[vi] U.S. Forest Service, Forest Management Cut and Sold Reports, FY 1905-2011 National Summary Cut and Sold Data and Graph. http://www.fs.fed.us/forestmanagement/products/sold-harvest/index.shtml/cut-sold.shtml.

[vii] H.R. 4019.

[viii] For an excellent discussion of below-cost timber sales, see CRS Report dated July 21, 2004. *Below-Cost Timber Sales: An Overview*. Ross Gorte.

[ix] USDA Forest Service, Secure Rural Schools Annual Payment Information (see note iii)

[x] 1986 to 2000 data are payments at the county scale, and these were allocated to NF based on proportional acreage. 1980 to 1985 payment data were from total state payments that were first attributed to counties based on each county's portion of the state payment in 1986, then these county estimates were allocated to each national forest based on proportional acreage. Once county payments were calculated for each NF, they were multiplied by 4 to arrive at total gross receipts (county payments were equal to 25% of gross receipts, so multiplying county payments by 4 results in total gross receipts the payment is based on.

[xi] USDA Forest Service Forest Management. Cut and Sold Reports. Fiscal Year 2011 Quarters 1-3 (October 2010 to June 2011) for all Regions and National Forests. http://www.fs.fed.us/forestmanagement/reports/sold-harvest/cut-sold.shtml.