

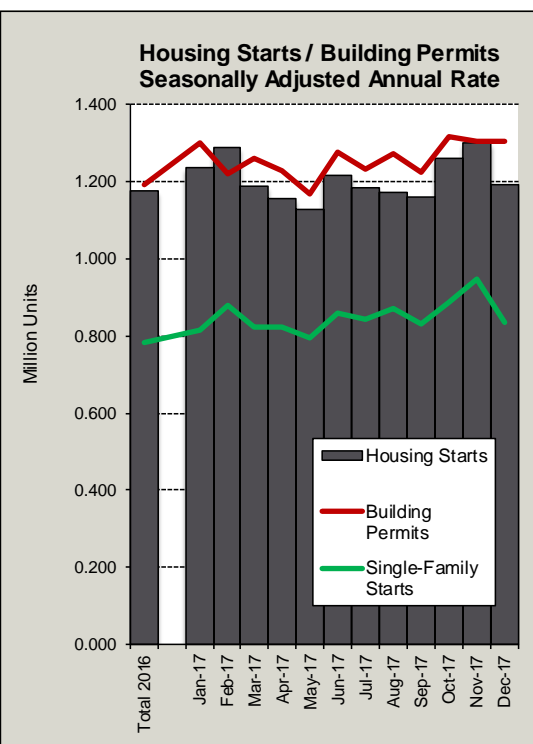


Based on Woodland's direct knowledge of log markets and recent timber sales, there is no indication the log market will decline anytime soon. Now is the ideal time to plan a harvest for 2018, before loggers get booked for the year, or lose the ability to fit your job into their busy schedule. Also, we are now in the heart of planting season, which will be extended now that snow has returned to all elevations of the Pacific Northwest.

If you need help with any aspect of your reforestation, or want to plan a timber harvest, give me a call at (503) 654-2221 or email me at bkeller@woodlandmgmt.com. In addition to reforestation and timber harvests, Woodland offers a variety of services – including timber cruising, management plans, pre-commercial thinning, competition control in plantations, forestland valuations, and road maintenance.

- Brent

MARKET WATCH: HOUSING, LUMBER AND LOGS



HOUSING STARTS

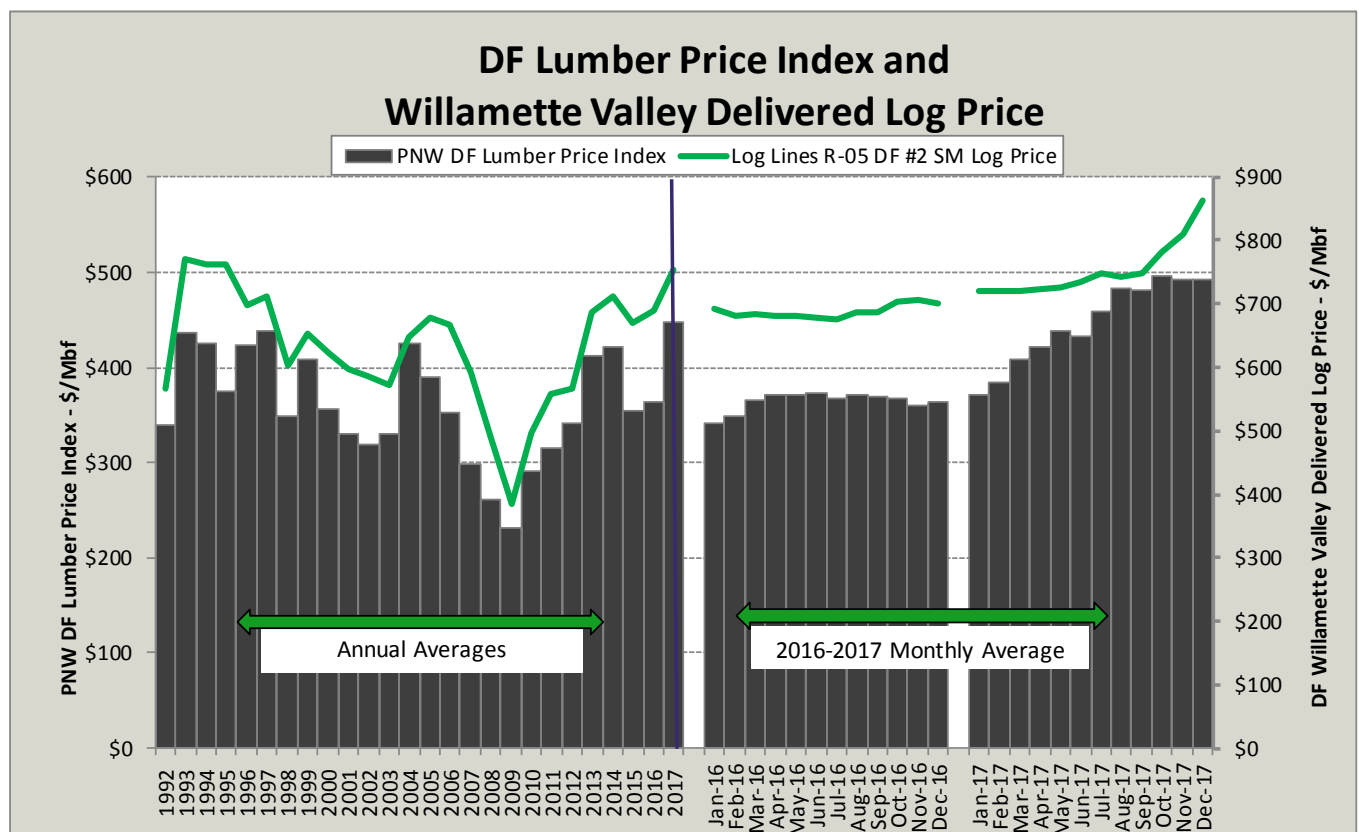
U.S. housing starts decreased 8.2% overall in December. Single-family starts also decreased, while building permits held steady. Market analysts view this as an (over) correction after the hurricane related bumps in October and November (Wall Street Journal, 1/18/18).

December 2017 Housing Starts (million units, seasonally adjusted):

	December 2017	November 2017	Monthly Difference	December 2016	Annual Difference
All Starts	1.192	1.299	-8.2%	1.268	-6.0%
Single-Family Starts	0.836	0.948	-11.8%	0.808	3.5%
Building Permits	1.302	1.303	-0.1%	1.266	2.8%
Single-Family Building Permits	0.881	0.865	1.8%	0.830	6.1%

Source: U.S. Census Bureau

LUMBER & LOGS



Lumber prices held steady in December while log prices continued to increase. Lumber prices decreased 0.09% and log prices increased 6.54%. These are record setting times! (Note that lumber and log prices are on different scales in the figure above.)

- December DF #2S log prices, as reported by Log Lines, increased \$53 to \$863/Mbf, which is 6.5% better than last month, 23.1% higher than December 2016, and 27% above the 5-year average.
- At \$492/Mbf, the DF lumber index price for December 2017 was down 0.1% below last month. However, that price is 35.5% higher than December 2016 and 25.6% above the 5-year average.

December 2017 Douglas-fir Prices:

	December 2017	November 2017	Change from Previous Month	December 2016	Change from Previous Year	5 Yr Annual Average	Current month compared to 5 Yr Annual Average
Logs	\$ 863.00	\$ 810.00	6.5%	\$ 701.00	23.1%	\$ 664.95	29.8%
Lumber	\$ 492.47	\$ 492.89	-0.1%	\$ 363.43	35.5%	\$ 375.47	31.2%

Sources: Log Lines Willamette Valley DF #2S monthly average price & WWPA Pacific NW Coast Douglas-Fir monthly lumber

MARKET NEWS

LUMBER PRODUCTION TAKES OFF IN 2017

WWPA reports that in the first 10 months of 2017, about 28.6 Bbf of softwood lumber was produced in the U.S. Of that total, sawmills in the western U.S. produced about 11.5 Bbf, compared to 15.4 Bbf in the U.S. South. In October alone, there was a 10% increase in U.S. sawmill production over October 2016. In the U.S. West, YTD production was up 2.9%.

Additionally, sawmills in the west have reported operating an average of 83-84% of capacity in October and November 2017. (WWPA/FORDAQ, 1/19/18 & Western Lumber Facts, 1/8/18)

HIGH LUMBER PRICES = HIGHER HOME PRICES

The increased lumber prices have been good for mill profitability in 2017, but some home builders are frustrated because they have to pass increased material costs to consumers in the midst of already lofty housing prices.

“Pricing fluctuates, but essentially the prices for materials are 25 % more than a year ago,” said Wade Hoyt of Hoyt Homes in Missoula. “Materials are one item in a list of 60 we price in to the list price of a house. But due to price increases, the cost of a home right now is 17-18% higher than it was a year ago.” Hoyt also said that the price for OSB (oriented strand board), a widely used building product similar to particle board, has quadrupled since the beginning of 2016. (Missoulia, 1/24/18)

LUMBER & TIMBER MARKET UPDATE

Wood Business and Wood Resources International recently released lumber and log market reports. Here are some of the highlights:

- Lumber markets appeared to be at least good to strong in 2017; this included the U.S., Canada, most of Europe, Japan, China and much of Asia. Only one market region remained unsettled: The Middle East/North Africa.
- One of the largest lumber market variables in 2017 was the initiation of import duties on Canadian lumber shipments to the U.S. These duties were expected to cause huge disruptions and volatility, and certainly did so as Canadian exporters successfully pushed up U.S. market prices to cover all of the import duties.
- New residential housing (the key driver of North American lumber consumption) remains on a slow but steady upward trajectory and should reach between 1.20-1.22 million units in 2017.
- North American lumber production continued to expand in 2017. U.S. West lumber production is forecasted to rise by about 3% in 2017 and over 6% in 2018, and perhaps increase another 6% in 2019. This is an aggressive forecast, and it is subject to both log availability and suitable pricing.
- Sawlog prices were up in most regions of the world in the 3Q/17 and the Global Sawlog Price Index (GSPI) has gone up for three consecutive quarters.
- With the outlook for continued strong demand for lumber in key markets and higher consumption of sawlogs, it is likely that the GSPI will continue upward in the coming quarters. (Wood Business, 1/3/18 & WRI, 12/28/17)

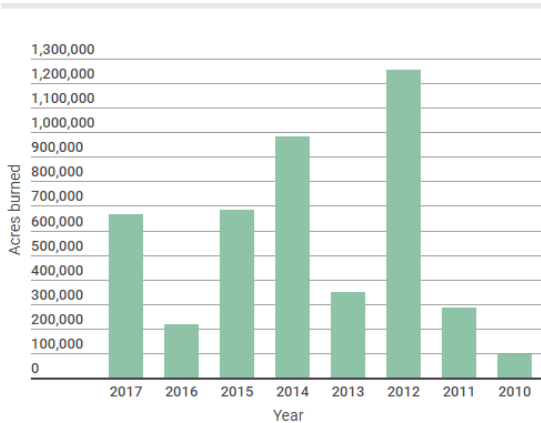
HOW EFFECTIVE ARE RIPARIAN BUFFERS ON STREAM TEMPERATURE?

The dynamics of stream temperatures are more complicated than most people realize. They aren't just influenced by the exposure of shade or sun. They are also heavily influenced by things like whether the water flows through the stream bed or through a stream bank, the geometry of the stream channel, how much water there is in the stream channel, and how much groundwater input there is. A recently released Oregon State University (OSU) study indicates that geology has a greater effect on stream temperature than exposure to shade or sun. Their data is based on studies done on two streams in the Oregon Cascade Range and one near Roseburg, in the Cascade foothills. (OSU, 1/28/18)

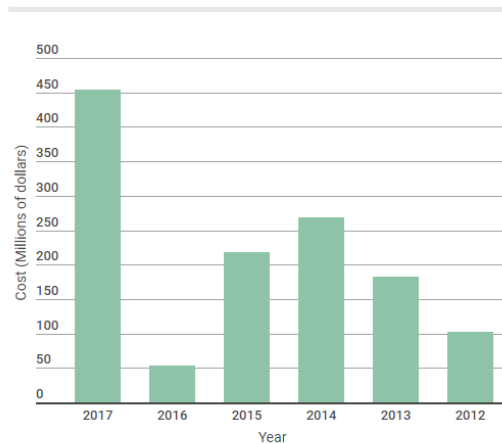
OREGON FIRE COST STATISTICS

The cost of fighting wildfires in Oregon skyrocketed to \$454 million in 2017, the most so far in this century. The high cost was fueled by multiple large wildfires—and more than 2,000 total fires—that burned 665,000 acres statewide. Between 2010 and 2015, federal and state agencies spent an average of \$146 million on Oregon wildfires. That number more than tripled in 2017. (KGW, 1/10/18)

Acres burned by wildfires in Oregon



Cost of fire suppression in Oregon



Source: Northwest Interagency Coordination Center

LENDERS BULLISH

Northwest Farm Credit Services released a year-end report predicting that lumber prices will stabilize in 2018, maintaining the gains made in 2017. NWFC cautions that due to low inventories and cautious buying strategies, the market is susceptible to supply shocks. NWFC anticipates that log prices will increase “modestly” in 2018. (NWFC Market Snapshot, 12/31/17)

INTERIOR DEPARTMENT RELOCATION PLAN

Interior Secretary Ryan Zinke is planning the largest reorganization in the history of the U.S. Department of the Interior by dividing the U.S. into 13 regions that are not subject to state lines. Zinke hopes to change the way the federal government manages more than 500 million acres of land and water across the country by getting land managers out of Washington D.C. and closer to the land areas managed. (Washington Post, 1/10/18)

LINN COUNTY LAWSUIT: BENTON COUNTY STILL IN

Linn County Circuit Court Judge Daniel Murphy has again denied a motion to dismiss Linn County's \$1.4 billion breach of contract lawsuit against the Oregon Department of Forestry.

In their latest attempt, Attorneys representing the state of Oregon and the Dept. of Forestry argued in court that Benton County should be excluded from the \$1.4 billion breach of contract suit brought by Linn County and 140 other taxing districts.

Attorneys said that in 1997, the Benton County Board of Commissioners wrote a letter supporting the DOF "balanced" long-term planning process. Those plans included expanding management of more than 700K acres with decreasing emphasis on timber production as the "greatest permanent value." (Albany Democrat Herald, 1/25/18)

CANNABIS FARMS: A NEW THREAT TO SPOTTED OWLS

California's Proposition 64, which legalizes recreational marijuana in the state, took effect in January. The state expects an increasing conversion rate of private timberland into private, illegal and unpermitted marijuana cultivation sites. Unfortunately for local owl populations that feed on rodents, marijuana farmers seem to rely on rat poison in the form of anticoagulants. As the owls feed on the rodents, the owls are being exposed to these poisons. A recent study led by the University of California, Davis, showed that seven of the 10 northern spotted owls collected tested positive for rat poison, while 40 percent of 84 barred owls collected also tested positive for the poison. Researchers hope to use their results to build a case for increased forest monitoring and species protection. (Press Release 1/11/18)

BARRED OWL ADVOCATES LOSE IN COURT

As previously reported, wildlife officials have been experimenting with killing barred owls to see if reducing their population will have a benefit to the survival rate of the Northern Spotted Owl. Advocacy groups have challenged the agency's plan to kill barred owls, however the 9th U.S. Circuit Court of Appeals decided that the experiment by the U.S. Fish and Wildlife Service didn't violate a federal law aimed at protecting migratory birds. The court says that law doesn't prevent killing one species to advance the scientific understanding of another. (News Times, 1/11/18)

MOUNTAIN PINE BEETLES ON THE DECLINE? SPRUCE BEETLES MULTIPLYING

After a 20-plus year battle, the mountain pine beetles are no longer an epidemic to the forest in South Dakota and have since been lowered to the status of endemic. Kurt Allen entomologist says, "Basically the mountain pine beetle epidemic has ended and we are back to what we call endemic levels or very low levels of beetles throughout the forest." He estimates that less than one tree per acre is currently being affected by the beetles. When the levels are this low, mitigation efforts are minimal. No explanation was mentioned for the decline. (Press Release, 1/10/18)

However, In B.C., the spruce beetle outbreak continues to worsen. The outbreak of spruce beetle infestation in north-central B.C. rose to record-breaking levels in 2017, and the latest government data shows no sign of it slowing down. Aerial surveys revealed 340,000 hectares of forest are now impacted by the beetle—more than 45 times the pre-outbreak levels recorded in 2013. Even still, Jeanne Robert, the regional forest entomologist for the Omineca and Northeast regions with B.C.'s Ministry of Forests, said because spruce tend to grow in more ecologically diverse areas, the impact of the infestation likely wouldn't be as severe as the mountain pine beetle outbreak that destroyed over 18 million hectares of B.C. forests and continues to spread into Alberta. (CBC News, 1/9/18)

POST-FIRE SALVAGE LOGGING PLANNED

In both California and Oregon, plans are being laid out for streamlined post-fire salvage logging, but will wildlife ecologists have a say?

The California Board of Forestry and Fire Protection stated an emergency regulation which will allow for the cutting or removing of dead and dying trees around damaged or destroyed legally permitted structures. It allows for an "expedited" notification rather than go through the process of preparing a timber harvest plan in Mendocino, Napa and Sonoma counties. (North Bay Business Journal, 1/8/18)

The U.S. Forest Service is planning on salvage logging later this year in about 8% of its acres burned in last year's 191K-acre Chetco Bar fire in Curry County. This is a move timber advocates welcomed and one conservation group called "something we can live with." However, the actual salvage-logging area could be reduced during ongoing environmental analysis. Forest Supervisor Robert MacWorter has sought an emergency declaration to ensure sales could be sold and logged before bug infestations and other factors render the sales uneconomical, documents state. While it would not affect actions through federal court, the emergency declaration would exempt the project from the government's administrative appeals. (Mail Tribune, 1/15/18)

Wildlife ecologists have just released a California study that may yet have an effect on post-fire logging plans. The researchers claim that post-fire logging operations were causing the declines in the territory occupancy of spotted owls. In fact, they claim the fires themselves did not affect owl survival. In areas where no logging took place following large forest fires, the scientists failed to detect any significant effect in the spotted owls' territory occupancy or extinction rate. (Eurasia Review, 1/21/18)

BUILDER CONFIDENCE CONTINUES INTO 2018

Builder confidence in the market for newly-built single-family homes hit an 18-year high in December 2017 at a rate of 74. While the January 2018 survey shows a slight drop of 2 points, confidence remains very high. "Builders are confident that changes to the tax code will promote the small business sector and boost broader economic growth," said NAHB Chairman Randy Noel. "Our members are excited about the year ahead, even as they continue to face building material price increases and shortages of labor and lots." (NAHB, 1/17/18)

JAPAN EMBRACES BIOMASS FUELS

FutureMetrics has been analyzing the Japanese market for biomass fuels, including wood pellets, palm kernel shells, domestic biomass, and imported woodchips. They predict the demand for these products will increase 351% between 2017 and 2025, as Japan embraces biomass as a significant part of its energy future. Wood pellet demand alone is projected to reach nearly 10 million tons by 2025. (FutureMetrics, 1/2/18)

PULP MARKET PRICE HIKES

Softwood pulp price hikes have been announced for February shipments to Europe. The softwood pulp market is strong amid very tight supplies. Producers in northern Europe have been struggling to secure local raw material supplies because the unusually warm winter that has made it difficult to harvest pulpwood. (Industry Intelligence, 1/24/18)

MAMU TRENDS IN OREGON

NCASI recently released a study of Marbled Murrelet (MAMU) habitat trends in Oregon. NCASI is an industry-funded group of scientists, and knowledge about MAMU habitat is important as the seabird is listed as threatened, and little is known about its habitat or the factors affecting its decline. More importantly, habitat protection guidelines are in play at both the State and Federal levels.

To review, MAMU spend most of their lives at sea, but nest in large, old trees with horizontal branches – typically found in older stands. The NACSI scientists found that since 1995, an average of 64,700 acres has been added annually to the 50+ age class within the MAMU range in Oregon. The rate of increase has increased during the most recent inventory cycle. Industry folks point out that declining trends in population, therefore, must have more to do with conditions at sea. (AFRC News, Jan 2018)

OREGON ASSISTS RED ROCK BIOFUELS

Oregon Gov. Kate Brown authorized up to \$245 million in state bonds to assist the development of Red Rock Biofuels in January. Red Rock has already secured supply contracts with FedEx and the U.S. military for jet fuel generated from forest bi-products and agricultural waste.

The Lake County project has been in the works for several years, thought initially to be operational by 2016, but has hit several snags in its development. With much of the permitting and land acquisition completed, the project has yet to break ground at its planned site on the south end of Lakeview. The company, Red Rock Biofuels, LLC., is based in Fort Collins, CO. (Herald & News, 1/9/18)

TIMBERLAND TRANSACTIONS IN THE NEWS

U.S. timberland transactions totaled about 1.1 million acres in 2017, half the number of acres sold in 2016. This past year had few transactions over 100,000 acres and 49 sales announced by press time, compared to 62 in the same period of 2016. Timberland prices remained relatively high in the South. The average price per acre for the year was \$1,775 compared with \$1,770 in 2016 and the all-time high of \$1,875 in 2014. (Timber Mart-South, 1/23/18)

- Pope Resources announced recent sales totaling \$9.8 million, primarily from two conservation-oriented transactions. The first of the two conservation transactions involved the sale of 1,504 acres to Kitsap County for \$4.0 million. The second conservation transaction consisted of 216 acres of timberland in Jefferson County sold for \$1.5 million to the Washington State Department of Natural Resources (DNR). Additionally, the City of Gig Harbor purchased an 11-acre business park lot for \$3.5 million with plans to use the property for a park. (Pope Resources Press Release, 1/2/18)
- Roseburg Resources Co. has completed the previously announced sale of its California timberlands to Shasta Cascade Timberlands, a new company formed by New Forests. The transaction includes approximately 170,000 acres of investment-grade timberland in northern California, largely in Siskiyou and Shasta counties. (Roseburg Press Release, 1/24/18)
- Pacific Forest Trust purchased a conservation easement from one of Oregon's largest family owned forests the Parsons family forest. The 1,771-acre Mountcrest Forest transaction includes an easement to protect habitat for threatened and endangered species and ensure sustainable timber harvest. (Pacific Forest Trust, 1/17/18)
- Conservation Forestry acquired 15,000 acres of timberland in western Washington State from North Cascades Timberland for about \$39 million (\$2,600 per acre). (Timber Mart-South, 1/29/18)
- Forest Investment Associates sold 11,900 acres of Washington timberland to BTG Pactual Timberland for \$43.1 million (\$3,620 per acre). (Timber Mart-South, 1/26/18)