

News for Family Forests

September 2018



Forest Management Co.
PROFESSIONAL FORESTERS

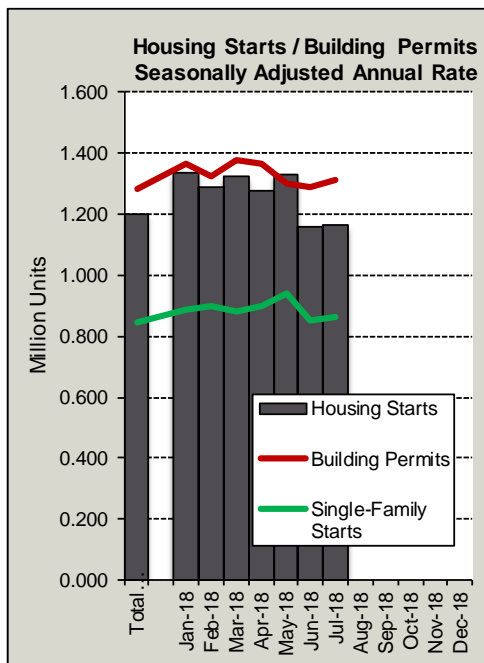
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A dry summer that seemed destined for a Fire Level-4 shutdown never quite materialized, which left many local mills, that had prepared for tightening log deliveries, with excess volume headed into fall. This, along with some anxiety about the tariffs, has resulted in reduced prices and caused some buyers to temporarily stop purchasing logs. That being said, prices remain strong, and there are still plenty of log buyers issuing Purchase Orders. Early Fall is a great time to spray, and resume thinning and road brushing operations now that fire season is winding down.



If you want to plan a timber harvest or other forest operation, please give me a call at (503) 654-2221 or send me an email at bkeller@woodlandmgmt.com. In addition to timber harvests, Woodland offers a variety of services—including reforestation, timber cruising, management plans, competition control in plantations, forestland valuations, and road maintenance. - Brent

MARKET WATCH: HOUSING, LUMBER AND LOGS



HOUSING STARTS

U.S. housing starts stabilized in July with an overall increase of just 0.9%. Single-family starts increased 0.9% and multi-family starts increased 3.1%. Total starts were 1.4% below July 2017. Building permits increased 1.5%¹ in July. Analysts are discouraged by a second disappointing month. (WSJ, 8/16/18)

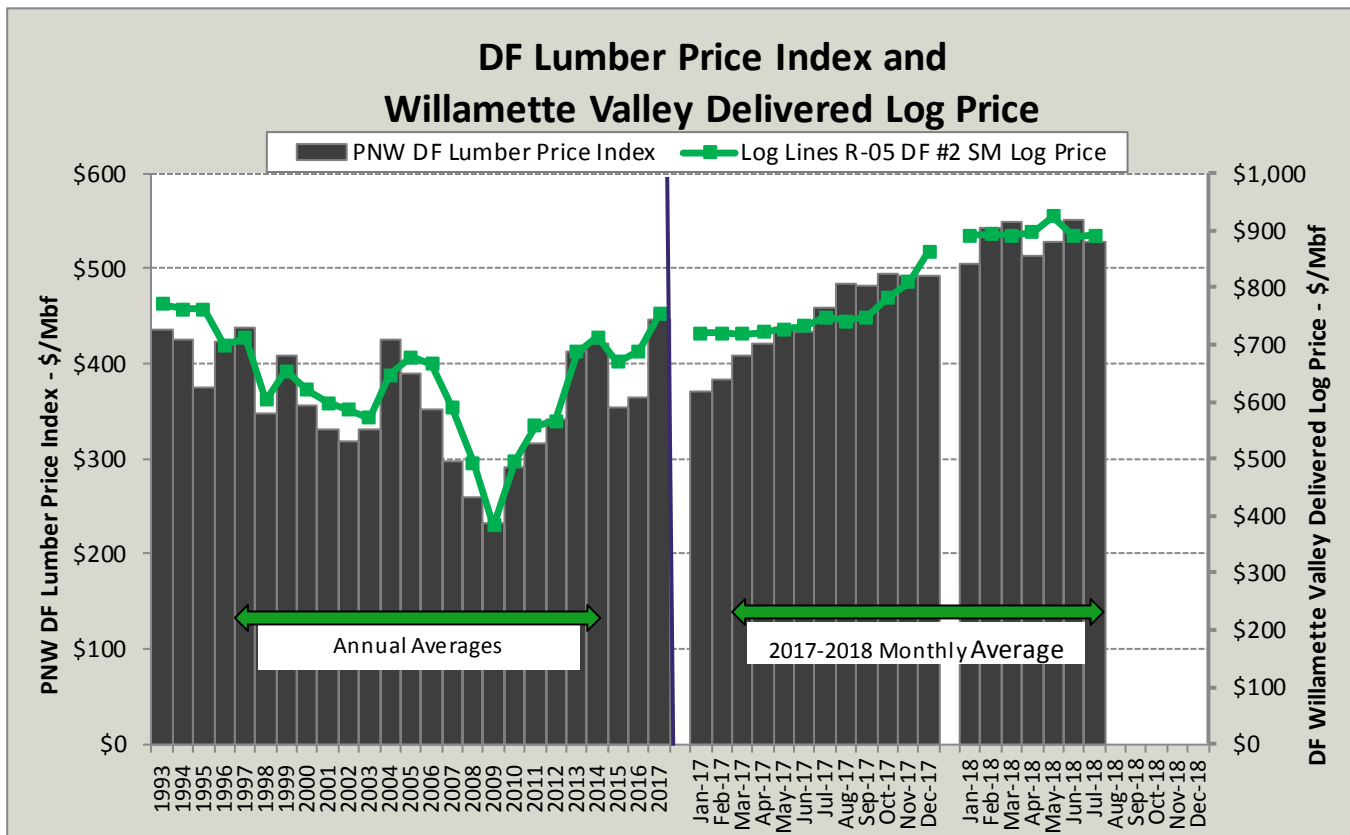
July 2018 Housing Starts (million units, seasonally adjusted):

	July 2018	June 2018	Monthly Difference	July 2017	Annual Difference
All Starts	1.168	1.158	0.9%	1.185	-1.4%
Single-Family Starts	0.862	0.854	0.9%	0.839	2.7%
Building Permits	1.311	1.292	1.5%	1.258	4.2%
Single-Family Building Permits	0.869	0.853	1.9%	0.817	6.4%

Source: U.S. Census Bureau

¹ All housing statistics reported in seasonally adjusted annual rates (SAAR).

LUMBER & LOGS



DF log prices held steady in July, while lumber prices fell, as shown in Attachment 3. Lumber prices continued to fall in August indicating the peak is now behind us. (Note that lumber and log prices are on different scales in the chart.)

- July DF #2S log prices, as reported by Log Lines, increased \$2 to \$892/Mbf, which is 0.2% above the prior month, 19.3% higher than July 2017, and 27% above the 5-year average.
- At \$528/Mbf, the DF lumber index price for July dropped 4.2% over June 2018. However, it was 15.1% higher than July 2017 and 33.3% above the 5-year average.

July 2018 Douglas-fir Prices:							
	July 2018	June 2018	Change from Previous Month	July 2017	Change from Previous Year	5 Yr Annual Average	Current month compared to 5 Yr Annual Average
Logs	\$ 892	\$ 890	0.2%	\$ 748	19.3%	\$ 702	27.0%
Lumber	\$ 528	\$ 552	-4.2%	\$ 459	15.1%	\$ 397	33.3%

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



MARKET NEWS

WWPA LUMBER TRACK REPORT

Data from the Western Wood Products Association shows that overall U.S. lumber production and consumption increased in May, compared to both April 2018 and May 2017.

Overall U.S. mill utilization for the first five months of 2018 increased slightly over the first five months of 2017. However, Coastal mills reported a steady utilization of 90%, matching the report from last month, but 3 percentage points lower than the first five months of 2017. (WWPA, 8/9/18)

Lumber Production	May-18	April 2018	Change from Previous Month	May 2017	Change from Previous Year
U.S. Lumber Production	3.17	3.01	5.3%	2.96	7.3%
U.S. Lumber Consumption	4.44	4.17	6.5%	4.10	8.4%
Western U.S. Lumber Production	1.28	1.24	3.6%	1.22	4.8%
Southern U.S. Production	1.74	1.64	6.5%	1.60	9.2%
Canadian Production	2.48	2.46	0.9%	2.53	-2.0%

Mill Capacity	Jan - May 2018	Jan - April 2018	Change from Previous Month	Jan-May 2017	Change from Previous Year
U.S. Production as a % of Capacity	86%	85%	1.0%	84%	2.0%
Coast Production as a % of Capacity	90%	90%	0.0%	93%	-3.0%

All volumes in Bbf; Source: WWPA Lumber Track and Western Lumber Facts

NEW U.S. WILDFIRE STRATEGY

In mid-August, the U.S. Department of Agriculture (USDA) Forest Service (USFS) announced a new strategy for managing catastrophic wildfires and the impacts of invasive species, drought, and insect and disease epidemics.

“The challenges before us require a new approach,” said Interim USFS Chief Vicki Christiansen. “This year Congress has given us new opportunities to stand shoulder-to-shoulder with state leaders to identify land management priorities that include mitigating wildfire risks. We will use all the tools available to us to reduce hazardous fuels, including mechanical treatments, prescribed fire, and unplanned fire in the right place at the right time, to mitigate them.”

A key component of the new strategy is to prioritize investment decisions on forest treatments in direct coordination with states, using the most advanced science tools. This allows the USFS to increase the scope and scale of critical forest treatments that protect communities and create resilient forests.

Christiansen claims this should allow the USFS to increase the scope and scale of critical forest treatments to protect communities and create resilient forests. (Press Release, 8/16/18)

BC SOFTWOOD EXPORTS SLOW

British Columbia (BC) saw exports of softwood lumber fall 4.3% in the first half of 2018, compared to the same period in 2017. In the same period, log exports fell 8.5%, selected value-added wood products fell 6.7%, and cedar shakes and shingles fell 21.4%.

However, a few wood products had an increase in exported volume. Softwood plywood and veneer rose 17.8%, other panel products rose 10.1% and other solid wood products rose 24.1%. (BC Stats, 8/7/18)

CHINESE TRADE CONTENTION EXPANDS TO SOFTWOOD LUMBER

In early August, China announced plans to impose tariffs of up to 25% on more than 5,000 U.S. products if the U.S. follows through on threats to tax \$200 billion worth of Chinese exports to the U.S. Several Pine, Fir, and Spruce lumber products were among the U.S. goods included in the new Chinese tariff list.

Uncertainty about when the tariffs would take effect, or if they would be rescinded as part of ongoing negotiations between the two countries prompted caution among traders. Some buyers asked suppliers to ship previous orders as quickly as possible. (Random Lengths, 8/17/18)

BUILDERS CALL FOUL PLAY

The CEO of the National Association of Home Builders in the U.S., Jerry Howard, stated that the softwood lumber tariffs charged to Canadian lumber have led to unsavory behavior by lumber producers on both sides of the border. Howard likens their responses to unwarranted price gouging, when a better response would have been increased domestic production to keep prices lower.

“We believe the lumber producers were acting not much differently than the oil cartels did back in the 1970s,” Howard said from Washington, D.C. “There is just too much evidence that leads us to conclude that there was profiteering going on.”

Zoltan van Heyningen, Executive Director of the U.S. Lumber Coalition responded to the NAHB allegations, even calling them “hogwash.” Van Heyningen also stated, “The price surge was not profiteering, but the result of several factors outside the firms’ control.”

What is certain is that the price of softwood lumber has increased since the tariffs were issued. The price of framing lumber had been \$358/Mbf shortly before the levies were announced, and rose steadily for the ensuing year, reaching a peak of \$582 in June 2018—a 62% increase. The NAHB claims this added about \$9,000 to the average newly constructed home price. Prices have since decreased to about \$440/Mbf, still adding \$4,000 to the average home, the builders claim. (National Post, 8/28/18)

MPP CERTIFIED BY APA

In June, we reported about the new mass plywood panel (MPP) being manufactured by Freres Lumber in Lyons, OR. MPP is similar to cross laminated timber, but MPP is produced from varying thicknesses of wood veneer. In August, Freres’ MPP received certification under the APA - The Engineered Wood Association's ANSI/APA PRG 320 standard. This standard covers the manufacturing, qualification, and quality assurance requirements for cross-laminated timber (CLT). (Press Release, 8/21/18)

OREGON TAKES THE LEAD IN TALL TIMBER BUILDING

A recent addendum to Oregon's building code made the state the first in the country to allow timber buildings to rise higher than six stories without special consideration.

According to the nationwide poll conducted by Hart Research, 74% of the participants indicated they'd be personally uncomfortable doing business in buildings built using wood products, such as cross-laminated timber. The poll was sponsored by the Portland Cement Association. Respondents cited these reasons for their concern: wood is less strong than other building materials like steel and concrete; it's not as sturdy or durable and could break; wood is more flammable and presents a greater fire hazard; wood is more susceptible to weather damage and weather events (including earthquakes & hurricanes); it is less safe and will decompose or rot faster than other materials.

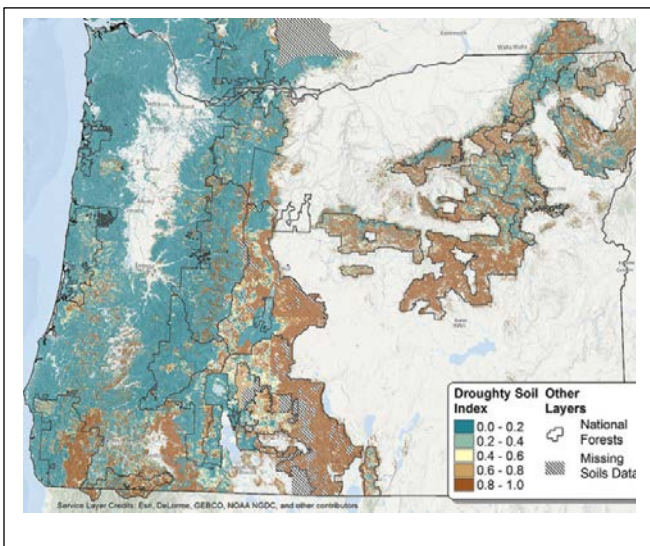
Three new Oregon building classifications were introduced: Type IV A, timber buildings permitted up to 18 stories and 270 feet tall, Type IV B, timber buildings with a maximum height of 12 stories and 180 feet, and Type IV C, which is permitted to rise nine stories and 85 feet tall at maximum. The shortest of the timber typologies is allowed to use exposed structural timber as an interior finish, whereas the tallest, type A, must enclose all exposed surfaces and include a three-hour fire-resistance rating for the structural elements. (The Architect's Newspaper, 8/14/18)

ODFW MURRELET CHALLENGE

Five conservation groups filed a lawsuit in early August against the Oregon Department of Fish and Wildlife (ODFW) Commission for failing to uplist the marbled murrelet from threatened to endangered under the Oregon Endangered Species Act. This, after the ODFW voted to uplist the bird in February 2018, and then reversed their decision in June.

The ODFW Commission met again in August to consider voluntary guidelines for timber companies to help conserve the marbled murrelet. Had the marbled murrelet been uplisted to endangered, the guidelines would become mandatory. (Press Release, 8/2/18)

IDENTIFYING DROUGHT-PRONE SOILS



Oregon State University (OSU) and the U.S. Department of Agriculture Forest Service have collaborated on a study of "droughty soils." They define droughty soils as those that have a propensity to dry out during the summer months and are likely be particularly vulnerable during a prolonged drought. The study team developed a droughty soil index model—a tool that can assist forest managers plan for a changing climate. The model can also help fire managers identify sites to install soil moisture sensors to assist in fire danger modeling, and it can assist the Forest Service target areas in the PNW that are degraded for landscape restoration. (KTVZ, 8/16/18)

MAPPING THE U.S. GDP

The U.S. economy is the largest in the world and grew at a rate of 4.1% last quarter, its fastest pace since 2014. Bloomberg recently published a study that illustrates how we use our land to create wealth. The study author called the 48 contiguous states a “1.9 billion-acre jigsaw puzzle of cities, farms, forests and pastures that Americans use to feed themselves, power their economy and extract value for business and pleasure.”

Each colored square on the map represents 250K acres of land. The squares are used to divide the U.S. into six major types of land use.

These are some of the facts reported:

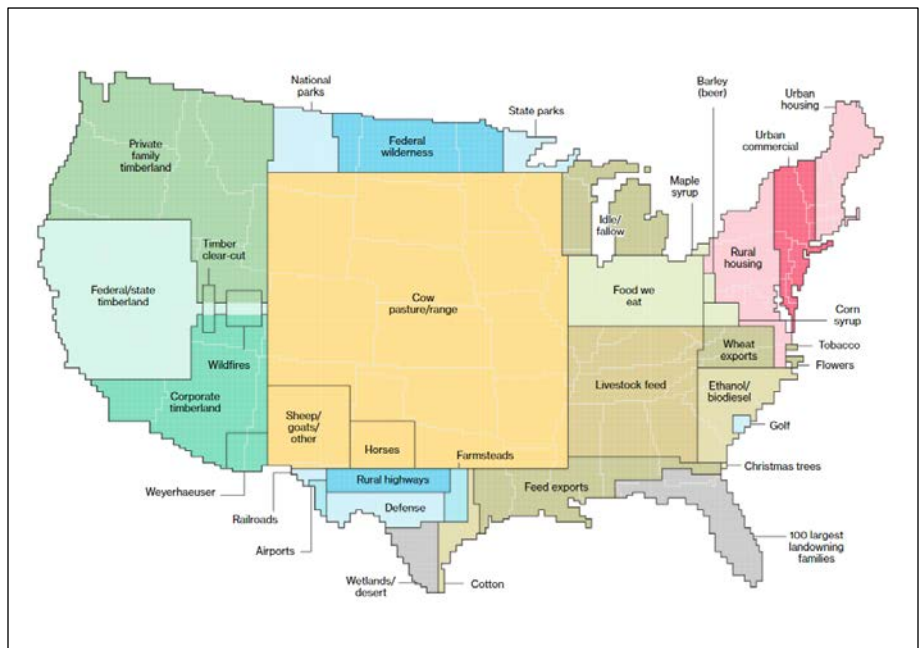
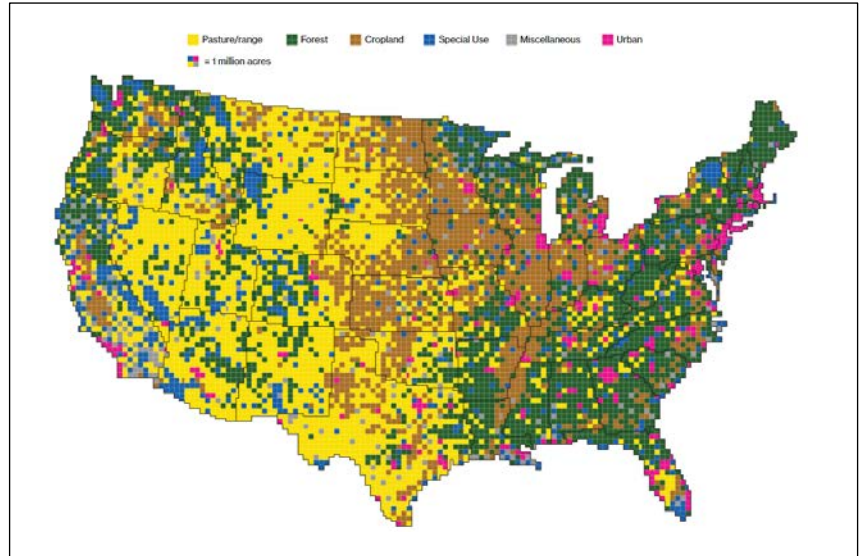
Even though urban areas (pink) make up just 3.6% of the total size, four in five Americans live and work in urban areas. The 10 most productive metropolitan areas contributed about 40% of the U.S. GDP in 2016. And the U.S. is becoming more urban—adding about 1 million acres a year.

More than 30% of U.S. land is used for pasture (yellow)—by far the largest land-use type in the contiguous 48 states. The Government administers about 25% of our pastureland—mostly in the West—and makes it available to grazing for a fee.

Cropland (brown) would take up more than 20% of the 48 contiguous states. Yet the land used to grow food is much smaller. Most cropland is used for livestock feed, exports, or is left idle to let the land recover.

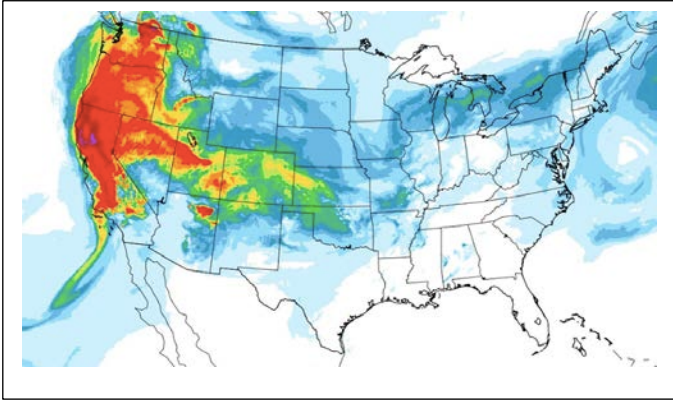
Between pastures for grazing and cropland used to produce feed, 41% of U.S. land in the contiguous states revolves around livestock.

Unprotected forests and timberland (green) constitute 1/4 of the contiguous U.S. According to the U.S. Forest Service, timber harvests typically occur on about 11 million acres each year. But because of regrowth, the volume of U.S. timber stock grew by about 1% annually from 2007 to 2012. Weyerhaeuser Co. is the largest private owner of timberlands in the U.S. With 12.4 million acres. (Bloomberg, 7/31/18)



CALIFORNIA WILDFIRE SMOKE SPREADS ACROSS THE NATION

In early August, news reports indicated that smoke from Northern California wildfires had reached New York and Boston.



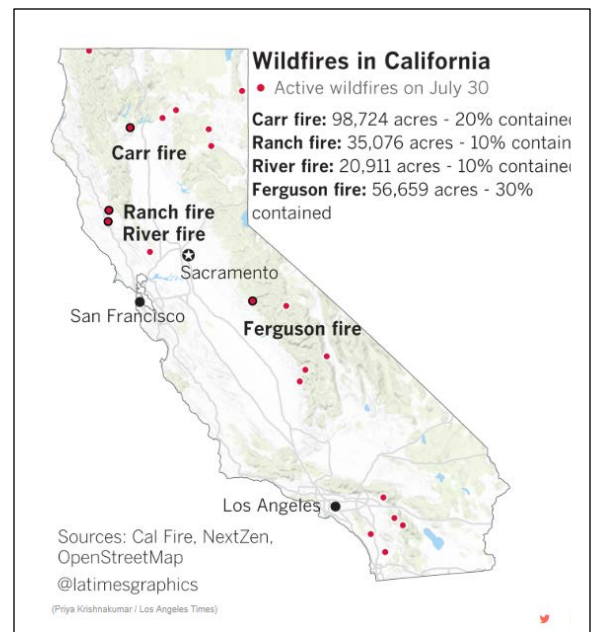
While the jet stream normally carries pollution from the West to the East across the U.S., it is not usually noticeable. Anthony Wexler, Director of the Air Quality Research Center at the University of California, reports that because the smoke becomes diluted with clean air as it travels, the smoke was not harmful on the East Coast. Even still, Wexler stated that in his experience, “It’s never been this bad.” The air quality in the region around the fires is some of the worst in the world.

Areas of California, Oregon and Washington State have been rated unhealthy and sometimes even hazardous as the blanket of smoke encroaches and retreats intermittently. Conditions have limited outdoor recreational activities for some and visibility is low, with particulates causing the sun to appear with a reddish glow. (Mashable, 8/9/18)

CALIFORNIA’S HISTORIC FIRE SEASON (AGAIN!)

In early August, just one month into the new budget year, California had already spent 25% of its annual fire budget. 2017 was historically the worst year for California wildfires, but 2018 is looking to exceed that short-lived record. So far, at least 17 wildfires have plagued the state this year. Three fires have been exceptionally challenging:

- The Mendocino Complex fire became the largest wildfire in California history in August. It is actually the combination of two fires (Ranch Fire & River Fire) in the same area of Northern California. Together, these fires have burned over 400K acres. On August 23 these fires were reported to be mostly contained.
- The Carr fire was the 7th largest fire and the 6th deadliest (with 8 deaths) in the state’s history. It burned over 200K acres and was reported to be fully contained on August 23.
- At close to 97K acres, the Ferguson Fire was small in comparison to the fires mentioned above, but it was of great concern because it threatened Yosemite National Park. This fire became fully contained on August 19. Firefighters are still working in the area, but some areas of the park have re-opened. (The Daily Beast, 8//9/18), LA Times, 7/31/18), (AP, 8/13/18), (Inciweb, 8/23/18)



MORE FIRE NEWS IN THE WEST

- There's been an enormous increase in the number of people at risk from wildfire in the western U.S. in recent decades, with an estimated 6.7m homes now at significant risk from wildfires. The population in wildfire-prone areas in California, Washington State, Oregon, Idaho and Nevada has exploded since 1940, when just 607,000 houses were in locations threatened by wildfires. The at-risk number of properties in the western U.S. has grown since that time by more than 1,000%. (Guardian Web, 8/8/18)
- British Columbia (BC) has declared a provincial state of emergency due to the ongoing wildfire situation. On Aug. 14, there were 566 wildfires burning in BC, with 29 evacuation orders affecting approximately 3,050 people (1,521 properties). The extended weather forecast calls for continued hot and dry conditions, with risk of thunderstorms in some parts of the province. (Press Release, 8/15/18)
- Colorado is lamenting the cost of firefighting this summer. At the end of July, Colorado reported 1,585 wildfires, covering 438,307 acres. The interagency Rocky Mountain Area Coordination Center estimated spending over \$144 million to fight 60 large fires this year. Those fires covered 431,606 acres. Since July, the price tag has certainly increased as active fires keep burning. (Daily Sentinel, 8/18/18)
- Wildfires have burned over 1,000,000 acres in Oregon and Washington this year, according to the Forest Service, running a price tag of over \$435 million. The Forest Service also said 71% of the 2,857 fires this year in the two states have been human-caused. (KOIN, 8/26/18)

THE ELLIOTT CANNOT BE SOLD

The Oregon Court of Appeals has ruled that the sale of the East Hakki Ridge tract of the Elliott State Forest to the Seneca Jones Timber Company was illegal. The 788 acres involved in the sale will not transfer ownership.

The ruling overturns the sale of 788 acres to the Seneca Jones Timber Company and is a victory for environmental groups who had sued to stop it.

The East Hakki Ridge tract was considered a test case for selling the forest to private timber interests. (AP, 8/1/18)

PATROLLING DOUGLAS COUNTY

Douglas County sheriff's deputies Rick Held and Sid Greer work under a contract with the Douglas Timber Operators, to patrol the members' timberlands. They report responding to trespassing issues, illegal trash dumps, vandalism and theft. However, they claim their biggest issue is transient camps and trash dumps. They also find many abandoned vehicles—mostly stolen and stripped vehicles and old, worthless RVs. Each season of the year, brings a different group of people to the forests, with different issues to deal with. (News Review, 8/26/18)

FOREST MANAGEMENT FROM A TO Z

In 2013, the USFS put out a bid for to reduce wildfire risk and rehabilitate a stand of overgrown trees in the Coleville National Forest in northeastern Washington. The contract was awarded to Vaagen Brothers Lumber and it became known as the A to Z Project, because Vaagen contracted to manage everything – from start to finish. That includes the environmental analysis, public comment and the actual field work.

The benefits include the federal forest receiving rehabilitation on a scale too large for the government to manage and the cost will come from revenues created from log sales. It is the first time this type of management has been attempted by the USFS and it has garnered attention from a documentary filmmaker. It has also become a legal issue that is currently in the court system.

A legal challenge was brought by environmental groups who oppose the project, citing a conflict of interest on the part of Vaagen. There is concern that the logging company will design timber sales with an eye towards maximizing profits, rather than doing what is best for the public and the wildlife.

Everyone now waits on a decision from the Federal Court. (Northwest Public Broadcasting, 8/21/18)

GLOBAL FOREST RECOVERY

New research has found that new global tree growth over the past 35 years has more than offset global tree loss. A team of researchers from the University of Maryland, the State University of New York and NASA's Goddard Space Flight Center used high resolution radiometers aboard a series of 16 weather satellites to track forest growth and loss from 1982 to 2016. The data showed small changes occurring regularly over the long period of time which added up to a very large change. Over the past 35 years, new tree cover had offset tree cover loss by approximately 2.24 million square kilometers. Most of this occurred in places that had previously been barren, such as in deserts, tundra areas, and on mountains, in cities and in other non-vegetated land. This is due to restoration efforts and global warming raising timberlines in the mountainous regions and expanding forests into tundra areas. Other areas of tree growth resulted from large farm abandonments in places like Russia and the U.S. The team suggests this technique for tree growth monitoring could be used to predict future tree coverage. (Phys.org, 8/9/18)

CATCHMARK PURCHASES OREGON TIMBERLAND

CatchMark Timber Trust announced the intended purchase of 18,063 acres of timberland in Oregon from Forest Investment Associates (FIA) for \$88.8 million. Headquartered in Atlanta, CatchMark is a self-administered and self-managed, publicly-traded timberland REIT. This is CatchMark's first timberland purchase in the Pacific Northwest.

The to-be-acquired timberlands, known as the Bandon Property, are situated within the Douglas fir/western hemlock zone between the Coos Bay markets and Roseburg mills, approximately 150 miles southwest of Portland.

Separately, CatchMark announced an agreement to sell 56,000 acres of timberlands in Texas and Louisiana to FIA for \$78.5 million. CatchMark will retain approximately 370,000 tons of merchantable inventory to be harvested over the next 18-24 months. The per-acre sales price is \$1,533 when including the timber reservations. (Press Release, 8/22/18)

FABRIC MADE FROM WOOD

Making wood into fabric isn't new, but older wood-based fabrics like rayon use harsh chemicals that can pollute water and harm workers. A new fabric, made by a startup in Finland (Spinnova), uses a mechanical process instead of chemicals; the only byproduct is evaporated water, which is reused in production.

Spinnova's process uses wood pulp that's ground into a gel-like material called microfibrillated cellulose. The material flows through patented machinery to create a network of fibers that are spun and dried into a fluffy, firm wool that can be knit or woven into fabric and then made into clothing, shoes, or other textiles.

In addition to making cloth from wood, the technology may also be able to recycle clothing, creating a closed loop. While the company is still testing recyclability, it's likely that clothing could be fully recycled into more high-quality fiber, unlike most recycling, which tends to result in lower-quality materials. Right now, jeans and other cotton clothing that get recycled often end up as insulation, not new clothes. As recycling chops fibers, the materials usually degrade. But because Spinnova's process relies on nano-sized fibers, it doesn't hurt to grind up existing fabric, and it could be used to spin fiber out of any kind of cellulose, even cotton, so torn T-shirts and other clothing that often get trashed could find a better use. (The company has already successfully experimented with potato peels and straw.) (Fast Company, 8/1/18)

DIVERSITY AIDS CARBON STORAGE

Scientists are looking into using afforestation to increase CO2 capture and reduce global warming. Afforestation is the practice of planting new forests in areas that currently do not have trees. A new study indicates that if diversity of species is used in the planting of new forests, it could lead to the storage of twice as much carbon as the average monoculture plantation.

Researchers studied the carbon storage of several forests plots in southeast China. Each plot contained between three and 20 tree species. The results show that the most diverse forests are "faster" at storing carbon. Overall, for each additional tree species, the total carbon storage increased by 6.4%.

However, some warn that the relatively small scale of the experiment may have led researchers to overestimate the relationship between tree species diversity and carbon storage. More study is indicated to explore scaling this experiment to larger areas and comparing different species mixes. (Carbon Brief, 8/22/18)