Health impact from smoke rises with more intense wildfires

Other sources of air pollution are in decline in the U.S.

By MATTHEW BROWN Associated Press

BILLINGS, Montana - Climate change in the Western U.S. means more intense and frequent wildfires churning out waves of smoke that scientists say will sweep across the continent to affect tens of millions of people and cause a spike in premature deaths.

That emerging reality is prompting people in cities and rural areas alike to prepare for another summer of sooty skies along the West Coast and in the Rocky Mountains — the regions widely expected to suffer most from blazes tied to dryer, warmer conditions.

'There's so little we can do. We have air purifiers and masks — otherwise we're just like 'Please don't burn," said Sarah Rochelle Montoya of San Francisco, who fled her home with her husband and children last fall to escape thick smoke enveloping the city from a disastrous fire roughly 150 miles away.

Other sources of air pollution are in decline in the U.S. as coal-fired power

plants close and fewer older cars roll down highways. But those air quality gains are being erased in some areas by the ill effects of massive clouds of smoke that can spread hundreds and even thousands of miles on cross-country winds, according to researchers.

With the 2019 fire season already heating up with fires from Southern California to Canada, authorities are scrambling to better protect the public before smoke again blankets cities and towns. Officials in Seattle recently announced plans to retrofit five public buildings as smoke-free shelters.

Scientists from NASA and universities are refining satellite imagery to predict where smoke will travel and how intense it will be. Local authorities are using those forecasts to send out real-time alerts encouraging people to stay indoors when conditions turn unhealthy.

The scope of the problem is immense: Over the next three decades, more than 300 counties in the West will see more severe smoke waves from wildfires, sometimes lasting weeks longer than in years past, according to atmospheric researchers led by a team from Yale and Harvard.

For almost two weeks last year during the Camp



AP File Photo

Smoke from the Camp Fire near Paradise, Calif., darkens the sky on Nov. 8, 2018. Tens of millions of people in the western U.S. face a growing health risk due to wildfires as more intense and frequent blazes churn out greater volumes of lung-damaging smoke, according to research scientists at NASA and several major universities.

Fire, which killed 85 people and destroyed 14,000 homes in Paradise, California, smoke from the blaze inundated the San Francisco neighborhood where Montoya lives with her husband, Trevor McNeil, and their three children.

Lines formed outside hardware stores as people rushed to buy face masks and indoor air purifiers. The city's famous open air cable cars shut down. Schools kept children inside or canceled classes, and a church soup kitchen sheltered homeless people from the smoke.

Montoya's three children have respiratory problems that their doctor says is likely a precursor to asthma, she said. That would put them among those most at-risk from being harmed by wildfire smoke, but the family was unable to find

child-sized face masks or an adequate air filter. Both were sold out everywhere they looked.

In desperation, her family ended up fleeing to a relative's vacation home in Lake Tahoe. The children were delighted that they could go outside again.

"We really needed our kids to be able to breathe," Montoya said.

Smoke from wildfires

was once considered a fleeting nuisance except for the most vulnerable populations. But it's now seen in some regions as a recurring and increasing public health threat, said James Crooks, a health investigator at National Jewish Health, a Denver medical center that specializes in respiratory ailments.

"There are so many fires, so many places upwind of you that you're getting increased particle levels and increased ozone from the fires for weeks and weeks," Crooks said.

One such place is Ashland, Oregon, a city of about 21,000 known for its summer-long Oregon Shakespeare Festival.

During each of the past two summers, Ashland had about 40 days of smokefilled air, said Chris Chambers, wildfire division chief for the fire department. Last year, that forced cancellation of more than two dozen outdoor performances. Family physician Justin Adams said the smoke was hardest on his patients with asthma and other breathing problems and he expects some to see long-term health effects.

essentially was like they'd started smoking again for two months," he said.

Forecast for Pendleton Area TODAY THURSDAY FRIDAY



Periods of sun, a







SATURDAY

TEMP.

Yesterday

Normals

TEMP.

Yesterday

Normals

PRECIPITATION

Month to date

Year to date Last year to date

Normal year to date

PRECIPITATION

Month to date

Year to date

Last year to date

Normal year to date WINDS (in mph)

Boardman WNW 6-12

Pendleton NW 6-12

SUN AND MOON

First

July 9

Sunrise today

Sunset toniaht

Moonrise today

Moonset today

24 hours ending 3 p.m.

Normal month to date

24 hours ending 3 p.m

Normal month to date

AccuWeather DOWNLOAD THE FREE APP



LOW

6.49"

0.00"

4.42" 5.10"

Thu.

WSW 7-14

W 7-14

5:07 a.m.

8:49 p.m.

1:38 a.m.

2:18 p.m.

Last

July 24

105° (1925) 35° (1904)

SUNDAY

ALMANAC

HIGH

PENDLETON through 3 p.m. yest.

HERMISTON through 3 p.m. yest.

Today

Full

July 16

HIGH

75°	52°	72°	50°	74°	49°	79°	53°	83°	56°
			HERMISTON	TEMPER	RATURE FORE	CAST			
81°	56°	79°	55°	79°	52°	84°	57°	88°	56°

PENDLETON TEMPERATURE FORECAST

OREGON FORECAST Shown is today's weather. Temperatures are today's highs and tonight's lows. Seattle Wenatchee Tacoma Moses Lake • Pullman Aberdeen Yakima 81/57 Longview Kennewick Walla Walla Astoria **Portland** Enterprise Hermiston Pendleton 73/44 The Dalles 81/56 Salem La Grande 72/46 70/52 Corvallis Albany 68/51 Bend Ontario • Eugene 70/48 Caldwell Medford 71/49

Forecasts and graphics provided by AccuWeather, Inc. ©2019

NATIONAL EXTREMES

Yesterday's National Extremes: (for the 48 contiguous states)

High 104° in Needles, Calif. Low 24° in Aspen Springs, Colo.

NATIONAL WEATHER TO	DAY	
Seattle 71/54 Billings 80/56	Winnipeg 81/56 Minneapolis 86/68	Montreal 84/63 Toronto 83/64
Los Angeles		Detroit New York 88/72 Washington 92/75
74/61 El Pa 99/7		Atlanta 90/71
97/68 Shown are noon positions of	Monterrey • 88/72 weather systems and precipitation. Tempera	Miami 94/8†
-10s	30s 40s 50s 60s ************************************	70s 80s 90s 100s 110s warm front stationary front high low

USDA grants to help farms, businesses cut energy costs

Oregon applicants received eight grants totaling \$266,490

By GEORGE PLAVEN Capital Press

SALEM — Northwest farms and businesses are getting \$324,060 in grants from USDA Rural Development to help reduce their energy costs by becoming more efficient and installing renewable energy

Funding was announced on June 11 and comes from Renewable Energy for America Program, or REAP. Oregon applicants received eight grants totaling \$266,490; Idaho applicants received five grants \$40,589; totaling Washington applicants received two grants totaling \$16,981.

Nationwide, the USDA awarded \$1 million through REAP across 17 states and Puerto Rico. The single largest grant of \$100,000 went to the University of Oregon, which is working with the Seattle-based nonprofit Spark Northwest to assist 40 small businesses primarily agricultural producers — in installing solar, wind, hydro, thermal and biogas energy projects.

"Business owners know that energy costs can consume a large portion of their budget," said John Huffman, Oregon state director for USDA Rural $\hbox{``These}$ Development. grants will not only help rural entrepreneurs and farmers improve their bottom line by saving on their utility bills, but also help improve the rural economy by retaining and

creating jobs."

REAP grants divided into two categories. The Renewable Energy Systems and Energy Efficiency Improvement Program awards money for renewable energy developments and efficiency improvements, while the Energy Audit and Renewable Energy Development Assistance Program allows recipients to conduct energy audits and provide assistance for farms and rural businesses.

In Oregon, blueberry farm Sandau Enterprises in Salem will use a \$20,000 grant to install a 71-kilo watt solar array, offsetting 94% of the farm's energy use and reducing energy bills by \$6,930 per year.

Another \$80,000 went to the Oregon Trail Electric Cooperative, which serves 23,000 members in Eastern Oregon including Baker, Grant, Harney and Union counties. The co-op plans to conduct energy audits and solar energy site analysis at 25 local farms and businesses.

In all, REAP grants are expected to help nearly 70 Oregon producers and business owners. Idaho grants will go toward installing solar arrays, LED lights and energy efficient windows at individual businesses. The two grants in Washington are dedicated to building solar arrays with a combined capacity of 23.7 kilowatts, saving a combined \$1,581 a year in energy costs.

Congress has appropriated \$50 million for REAP grants and loan guarantees in fiscal year 2019. USDA will announce additional awards for applicants in the coming months.

GRANT RECIPIENTS

Farms and businesses in Oregon, Washington and Idaho received 15 grants totaling \$324,060 from USDA Rural Development to install renewable energy systems and increase energy efficiency.

RECIPIENTS INCLUDE:

ID — Mark E. Bolduc (Hagerman), \$6,247

ID — Stephanie Elizabeth Deyo (Orofino), \$5,047

ID — Azevedo Drywall LLC (Twin Falls County), \$6,606

ID — City Storage Inc. (Idaho Falls), \$6,489

ID — James C. Allen, DDS (Rexburg), \$16,200

OR — Integrated Biomass Resources (Wallowa), \$2,655

OR — Mountain View Hotel and RV Park LLC (Joseph), \$8,077

OR — Sprinter Trucking Inc. (Winston), \$19,950

OR — Oregon Trail **Electric Cooperative** (Baker, Union, Grant, Harney counties), \$80,000

OR — Kiger Island Blues LLC (Corvallis), \$20,000

OR — Pasta Piatti Inc. (Ashland), \$15,808

OR — Sandau Enterprises Inc. (Salem), \$20,000

OR — University of Oregon

(Eugene), \$100,000 WA — Rabble and Roost LLC

(Whatcom County), \$7,759

WA — Fungi Perfect LLC (Shelton), \$9,222

CORRECTIONS: The *East Oregonian* works hard to be accurate and sincerely regrets any errors. If you notice a mistake in the paper, please call 541-966-0818.

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