

Expert warns: LA style urban wildfire could race thru Inner Southeast

By David F. Ashton
for The Bee

A Reed College alumnus who built his career inside the electric power industry warns that the catastrophic Eaton Fire in Los Angeles last year should be treated as a warning shot for Portland – and this region is not moving fast enough to prepare.

Speaking in Reed College's Vollum College Center to about 100 guests, Eastmoreland resident, economist, and former Portland General Electric executive Robert McCullough used the 2024 Eaton Fire – which swept through the Altadena area of the Los Angeles metro – as a “case study in institutional failure”.

The blaze killed at least 17 people, turned cars into pools molten metal, and destroyed more than 9,000 structures, mostly homes –



Robert McCullough (far left) visited with Portland Fire & Rescue personnel – including Fire Safety Chief Mike Pringle, District 4 Battalion Chief Erik Oatfield, Fire Chief Lauren Johnson, Public Information Officer Rick Graves, and Operations Chief Andy Ponce – all of whom were there for his talk in Vollum Center at Reed College.

despite Southern California Edison's (SCE) prepared 900-page “wildfire mitigation plan”, and what he called “the most sophisticated wildfire planning exercise in the world”.

“We’re not talking about people who are malicious, stupid, uneducated, or lazy,” McCullough cau-

tioned. “We’re talking about the best of the best. It was the institutions that led them there!”

EATON FIRE A ‘MODEL FAILURE’

McCullough argued that modern megafires are largely decided before the first spark, in this world of fragmented agencies and outdated assumptions about weather and risk. Federal forecasters at NOAA had issued a “red flag” warning on the very day of the Eaton Fire – the kind of notice that, he said, should make residents “go to visit your cousins”. Yet power to a major transmission line serving Altadena was never shut off.

SCE’s planning relied on advanced modeling software and outside consultants, but it all rested on a single bad assumption – known as the “eight-hour rule”. Planners assumed there would be no effective fire response for the first eight hours, and expected only relatively modest damage within that time.

“In modeling, you often run into the ‘Leaning Tower of Pisa’ effect,” McCullough said. “The more complicated the model, the more vulnerable it is to a single bad assumption at the very base.” In this case, he argued, “the ‘eight-hour rule’ caused the Eaton fire, because it underestimated the scale of the fire, right from the point of ignition.”

In reality, he said, high-resolution data from Whisker Labs (an AI firm that makes sensors to predict and prevent electrical fires, and to monitor the power grid) showed power-system problems before the fire

even started! Within minutes, CalFire was mapping a fast-moving blaze, with embers igniting homes nearly a mile away from the onrushing flames. By midnight, it had already exceeded 1,000 acres – far beyond what SCE’s model had ever expected.

PARALLELS FOR PORTLAND

McCullough warned, “that failure last year has direct implications for Portland, where steep escarpments and wooded slopes also tightly border neighborhoods on both sides of the Willamette River.”

From Reed College, “we could walk to Oaks Bottom,” he told the audience – where transmission structures and a wooded bluff rise high above the Springwater Corridor. A wooden pole line runs up the slope directly behind Sellwood’s small commercial core. “That wooden pole marks a risk area,” he said, adding that he had recently walked the trail himself, “to see how immediate that was – and it is very immediate.”

As for the west side of Portland, he pointed to Forest Park and the six-mile string of petrochemical storage tanks at its base as the highest hazard area. “Most people don’t remember Forest Park itself is not the issue,” he said. “The issue is these six miles of petrochemical storage at the foot of Forest Park.” There are relatively few residents there – but a fire could disrupt fuel supplies for months. Here on the east side of the Willamette, the opposite is true: Fewer tanks, but many more homes and businesses perched close to fire-prone slopes.

“We’re less than a mile”

from those hazards in some Inner Southeast Portland neighborhoods, said McCulloch – and, under Eaton-style conditions, “that’s less than 30 minutes” of fire spread.

UTILITIES, SILOS, MISSED OPPORTUNITIES

McCullough remarked that Portland General Electric, PacifiCorp, and the Bonneville Power Administration all face rising a wildfire risk, but still operate in their own “silos”, rather than cooperating amongst themselves. “Utility risk maps” at these utilities focus on their own powerlines, while city parks and escarpments fall between jurisdictions.

“The funny part is that the utilities tend to have the most resources, but they’re not applied constructively in getting to that solution,” he remarked. He added that the statewide planning documents he has reviewed devote only a few pages to wildfire risk – even as these billion-dollar disasters become more frequent, here in the west.

He urged city and county leaders to push for faster undergrounding of key utility lines, insulation of remaining overhead wires, and installing real-time ignition detection cameras – such as the “Pano AI” systems now being installed elsewhere in the region.

At roughly \$50,000 a year, he called these cameras “not really a major cost” compared with potential massive losses, and he added that Portland should have at least one of these watching the eastside hills, and another one aimed at the University of Portland.

PREVENTION IN A WARMER WORLD

McCullough warned that these investments will, of course, show up on electric bills. “This is going to be a hell of a battle, because we are sending the price tag off to the customers.” But, with average temperatures rising and extreme wind events already a fact of Portland life, “the century-old grid is now ‘obsolete and unsupportable’ in our increasingly hotter and windier climate.”

However, McCullough went on to say that there is some good news: Costs for solar and battery storage are rapidly falling, and even new “under-river” transmission projects back east show that technical solutions do exist. His own consulting work, he said, has shifted over the years to include “more events, and more consequences” – including firefighter response – as utilities and insurers ask for deeper analysis of such rare but devastating scenarios.

“This is the common sense of catching up to a different world,” McCullough told the Reed audience. “We desperately need to invest in our mitigation measures along our east side hillsides.”

If all this sounds familiar, he made similar points in a guest editorial in THE BEE earlier this year. Now it’s essential our local governments and regional utilities really start taking this seriously.

There were at least three small wildfires battled by local firefighters in Oaks Bottom just last year; they were reported in these pages as they occurred – so the danger of an urban wildfire such as Los Angeles experienced last year in Altadena near Pasadena, and up along the coast in Pacific Palisades at the same time, faces us today, right here in River City.

If you live here, THE BEE suggests that you might want to add your voice to his warning in your conversations with our City Counselors, Multnomah County Commissioners, Metro, and our various public utilities.