

# On the Lookout

Klickitat PUD is using technology to help watch for and pinpoint wildfires, benefitting response times

By Mark Garner, KPUD engineering supervisor

Klickitat PUD is working to improve situational awareness for the utility and our local emergency management agencies using money awarded through the Grid Resilience and Innovation Partnership Program grant—a cost share grant awarded as part of the Bipartisan Infrastructure Law.

Situational awareness means identifying and processing critical information as situations progress. For KPUD, this includes the ability to detect and respond to wildfire.

KPUD is working with the Oregon Hazards Lab at the University of Oregon, AlertWest and Klickitat County Department of Emergency Management to install three wildfire detection cameras at county-owned radio sites in 2024.

These cameras use artificial intelligence to detect wildfire smoke. If a camera detects a possible smoke plume, it sends an alert to the internal operations center where a human operator reviews the imagery to confirm the smoke. If confirmed, an alert is sent to the Klickitat County Department of Emergency Management and the fire district in which the smoke is detected, with exact coordinates of the smoke location. Once a fire begins, KCDEM can take control of the camera's movement and tilting capabilities to assist them in sizing up and managing the incident.

KPUD plans to continue installations over the next few years to

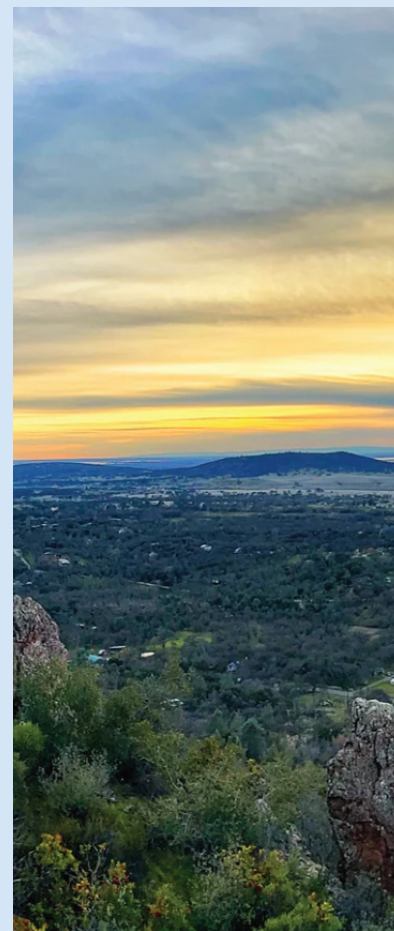
complete a network of cameras that cover much of the county and some areas of surrounding counties.

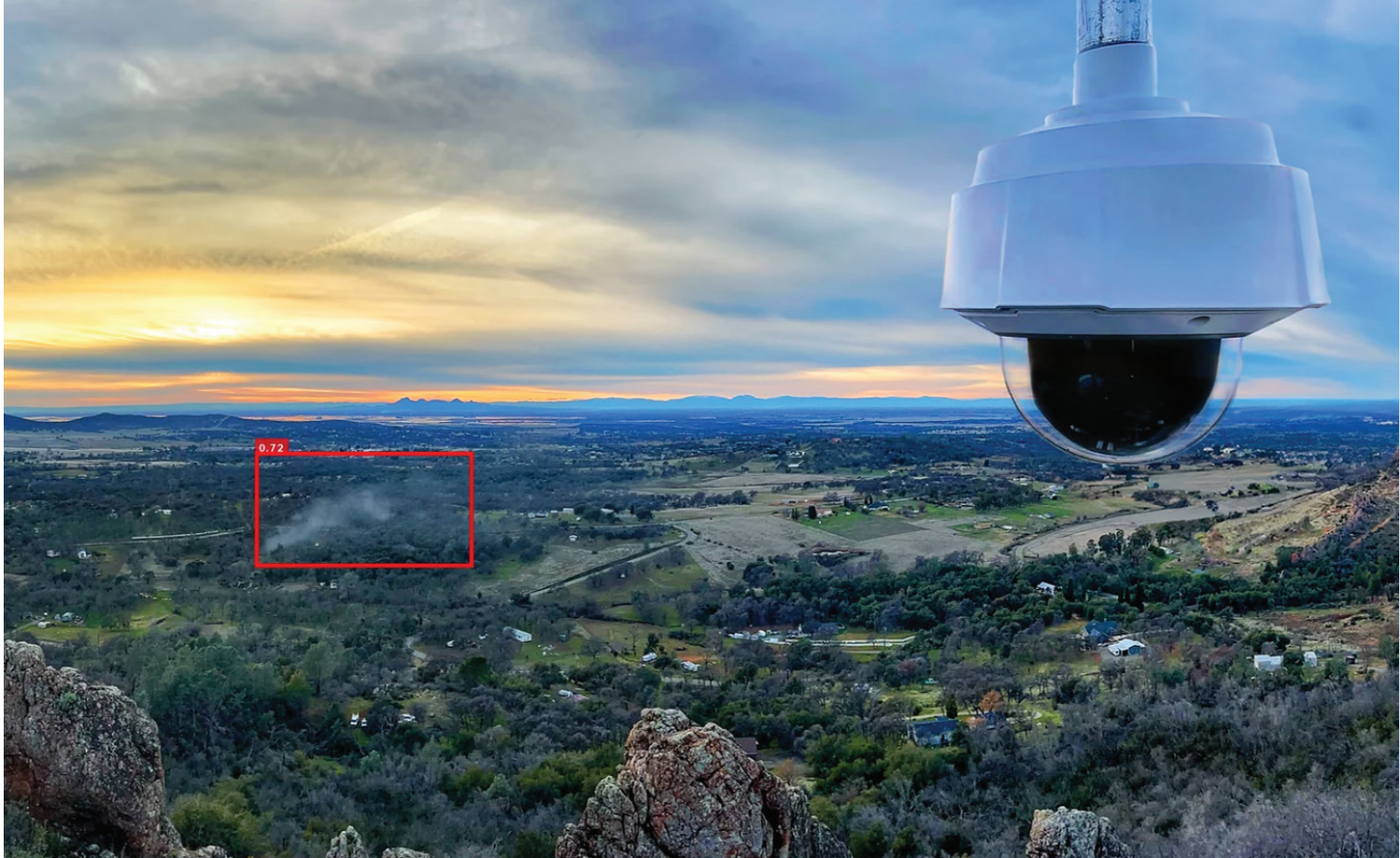
KPUD is enhancing its fire mitigation efforts by strategically placing high-quality weather stations across the county to improve localized weather forecasting. This initiative is crucial in determining optimal timings and locations for adjusting recloser settings or switching to one-shot operation. These adjustments are

part of our proactive approach to reducing the risk of power lines causing fires in vulnerable areas. Reclosers—typically functioning as circuit breakers on line sections—are now configured to cease automatic reclosing attempts after detecting a fault. This modification ensures immediate deenergization of the power line upon fault detection, reducing the potential for downed lines to be live while contacting the ground.

The improvements will also assist KCDEM and other agencies with fire weather situational awareness if a fire starts. Weather stations greatly assist KPUD in predicting and mitigating winter weather events as well.

We will also evaluate a climate risk intelligence system software





that integrates our existing satellite-based vegetation management system, weather and other data to help mitigate risks before, during and after a wildfire or storm. This system helps predict where damage is likely to occur, assess any damage and estimate the resources required to restore our system to operation.

Over the next few years, KPUD will continue efforts to increase our situational awareness with these technologies as well as additional hardware and software solutions that collect and integrate data to better inform our utility. This information will allow us to make better, more targeted decisions in our efforts to reduce outages and maximize the resources we have at our disposal. ■

**The new cameras KPUD uses can detect plumes of smoke, pinpoint fire location and alert local responders.**

*Visit [alertwest.org](http://alertwest.org) for more information about this technology and to view the live cameras that are already in place throughout the west.*