FOR IMMEDIATE RELEASE

CONTACT:
Ann Marcus
Link Oregon | Communications Lead
marcus@linkoregon.org | 503-539-8578



Fiber Network Boost Transforms Ag Research Capabilities in Eastern Oregon

Research Study Leads to Successes in Impeding Spread of Rangeland Wildfires

PORTLAND, ORE. November 15, 2022 — A recent study published by researchers from the U.S. Department of Agriculture-Agricultural Research Service Center (USDA-ARS) and Oregon State University's College of Agricultural Sciences at the cooperatively managed <u>Eastern Oregon Agricultural Research Center</u> (EOARC) in Burns, Oregon revealed an innovative application of technology to <u>slow wildfire spread across rangelands</u>: cattle fitted with GPS- and wireless-enabled collars could be directed to graze within a targeted area and consume flammable vegetation, thus creating a wildfire fuel break.

This is one of many research studies underway at the **22,000-acre EOARC facility** to support beef cattle production—an agricultural commodity estimated to contribute more than \$900 million to the Oregon economy—as well as identify methods for improving rangeland, watershed, wildlife, and forest management. Much of the center's research relies on the ability to efficiently **collect and share vast amounts of data**. But limitations on the center's network capacity presented challenges in processing and transmitting data effectively.



In response, the EOARC network connection was recently upgraded from a 10-Megabit-per-second (Mbps) link to an **optical-fiber-based 10-Gigabit-per-second (Gbps) service**, a thousand times faster. This new capability, leveraging the fiber plant recently installed by **Hunter Communications**, is thought to be the fastest network connection provisioned in the Burns area.

This **exponential leap in broadband speed** was made possible through Link Oregon, the middle-mile fiber broadband service provider for Oregon's non-profit and public sectors, and the partnership between Oregon State and USDA-ARS. Link Oregon's point of presence (POP) in Burns enabled a cost-effective, jointly funded last mile build out to EOARC. This POP is one of many in Link Oregon's growing statewide 100-Gbps backbone network. Link Oregon's strategic presence around the state, much of which is in rural communities, is beginning to enable community anchor tenant institutions to gain higher speed and better quality Internet access, as exemplified by the Burns project.

"Link Oregon is very pleased to support EOARC researchers and students with this significantly improved level of connectivity to enhance their collaborative research programs and their continuing commitment to innovation on behalf of farmers and ranchers in eastern Oregon," said **Steve Corbató**, executive director of Link Oregon.

"This upgrade provides scientists and support staff with a research-quality network connection enabling greatly improved operations and new research opportunities," said **Lucas Turpin**, director of information technology for the Extension and Engagement division of the College of Agricultural Sciences. "Without Link Oregon's local presence, this and other projects like it wouldn't have been possible" he added. "We hope this is the first of many such projects to support local communities via their K-12 and higher education institutions, university research facilities, libraries, public healthcare organizations, Tribal facilities, and other public and non-profit organizations statewide."

Dr. David Bohnert, director of EOARC, who was involved in the study on the use of *virtual fencing* to reduce rangeland wildfire spread, noted that "the faster access to Google Earth Pro enables documentation of research locations, Geographic Information Systems (GIS) mapping layers, and other project information without the substantial lag that we experienced before the fiber upgrade."

USDA-ARS Research Leader **Dr. Chad Boyd**, also involved in the virtual fencing study, added, "The change to fiber, and not having to deal with slow Internet access and processes, has increased my effective daily work time by upwards of 20 percent."

Another EOARC researcher, ecologist **Dr. Stella Copeland**, also noted enthusiastically, "the one-hour dataset is now taking *one minute* to download! No exaggeration!"

About Link Oregon

Link Oregon, a federally tax-exempt 501(c)(3) Oregon non-profit organization, is a consortium of the State of Oregon through its Enterprise Information Services and the state's four largest research universities—Oregon State University, OHSU, Portland State University, and the University of Oregon. Link Oregon provides high-speed, resilient, middle-mile fiber broadband connectivity to Oregon's public and non-profit sectors. It also facilitates other collaborative information technology projects among its membership. For more information about Link Oregon, visit https://www.linkoregon.org/

About the Oregon State University College of Agricultural Sciences

Through its world-class research on agriculture and food systems, natural resource management, rural economic development and human health, the College provides solutions to Oregon's most pressing challenges and contributes to a sustainable environment and a prosperous future for Oregonians.

About Hunter Communications

Hunter Communications provides ultra-high-speed fiber optic broadband internet, data, and voice services to business and residential customers in communities throughout Oregon and northern California. With multi-Gig speeds, no data caps, and competitive pricing, Hunter's 3,000+mile fiber network is nationally recognized for performance and reliability.

BroadbandNow.com recognized Hunter with four 2020 Internet Service Provider Awards, including for fastest business internet speeds in Oregon and among the top 10 nationwide. In 2022, *PC Magazine* recognized Hunter as the top internet service provider for gamers in the Northwest. Founded in 1994, Hunter is headquartered in Medford, Oregon where the company established a legacy of service excellence and commitment to local communities. Additional information is available at Hunterfiber.com.

###