

## ***Internet Connectivity Bolsters Access to Genetics Research from Remote Laboratory***

### **Outcomes:**

A 100-fold increase in internet capacity allows data from state of the art population genetics studies to be shared readily between remote University research lab and the Columbia River Inter-Tribal Fish Commission. The required wireless towers also resulted in internet access that was previously unavailable to numerous rural Magic Valley businesses and families in Southern Idaho.



University of Idaho Hagerman Fish Culture Experiment Station, in Hagerman, Idaho

### **Benefit:**

The Hagerman Research Station is now essentially on the University of Idaho campus internet network. Internet capacity jumped from 3 Mbps to 300 Mbps, a 100 fold increase in capacity and data transfer speed. The system now supports stable and real-time video conferencing as well as large data transfers associated with population genetics studies conducted with other universities and agencies. Data from new high-speed genetic sequencers can now be accessed and shared easily for research.

### **Explanation:**

When the University of Idaho's Hagerman Fish Culture Experiment Station's was built in 2006 the only internet option was through phone connections with a maximum 3 Mbps of bandwidth. Slow internet connections essentially isolated the lab, and impeded communications and data sharing. Track 2 EPSCoR funding provided a wireless system that connects the remote research station to Boise where it links into the Idaho Regional Optical Network (IRON) for seamless connection within the University of Idaho secured network housed 460 miles away.

Highlight provided by Ron Hardy, University of Idaho for EPS-0919514

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