## **Purpose and Need**

## **Purpose and Goals of Project**

The purpose of the KRRBI Project is to provide high-speed broadband Internet service to people living in the ancestral territories of the Karuk and Yurok Tribes (Tribes), including tribal and non-tribal community members, who are presently unserved or underserved by current service providers.

The Project will provide broadband access to 7 first responder agencies, 19 other anchor institutions, as well as 616 households in Orick, Orleans, Johnsons, Wautec, Weitchpec, and other neighbors and businesses along Segments 1-4 where 295 households are unserved and 321 households are underserved. To achieve this shared goal, the Tribes have agreed to partner under the Karuk Tribe's CLEC.

## **Current Internet Access**

The KRRBI service area is very large, and identifying current internet access is best discussed at the community level. KRRBI will serve 5 unserved and underserved communities: Orleans, Weitchpec, Ka'Pel, Wautec, and Orick. The communities are listed below with a description of the broadband service that is available as of June 2018.

**Orleans:** In October 2015, the Karuk Tribe launched Áan Chúuphan, a wireless Internet provider in Orleans. Áan Chúuphan has over 100 subscribers, and provides Internet access to most of the Orleans area. Áan Chúuphan offers plans up to 3.2 Mbps download and 1.4 Mbps upload. Most of Orleans is now considered underserved, but some of the surrounding area is still unserved.

**Weitchpec, Ka'Pel, and Wautec:** These three communities are served by Yurok Connect, the Yurok Tribe wireless Internet provider. The maximum speed available to Yurok Connect subscribers was 3.2 Mbps download and 1.4 Mbps upload. A few households in these communities may have limited access to US Cellular or Verizon Wireless 3G service, but this is not available to the communities as a whole, but only to a lucky few who can reach cell towers over 20 miles away through dense forest.

**Orick:** In May of 2015, Tsunami Wireless expanded services into Orick. They offer speeds of 6.5 Mbps download and 1.6 Mbps upload. According to Tsunami Wireless's website, Orick is in their service area, but they do not show Orick on their service area map. With this data it is not possible to be sure how much of the community of Orick receives Tsunami's service. A few households in this community may have Verizon Wireless 3G or 4G services, but these services are not available to the community as a whole. The partial cellular service is due to the location of cell towers, which are placed to provide service to Highway 101, and not the community of Orick.

The Karuk Tribe estimates that around 75% of the populations of Orleans, Weitchpec, Ka'Pel, and Wautec have underserved access. Orick is listed on the California broadband map as partially served, where an unknown percentage of households have access to full broadband service according to the California standard. According to CPUC Decision D.12-02-015 a served area is defined as an area with at least one broadband provider offering combined downstream speeds of at least 6 megabits per second and upstream speeds of at least 1.5 megabits per second. An underserved area is where broadband is available, but no wireline or wireless facilities-based provider offers service at advertised speeds of at least 6 mbps downstream and 1.5 mbps upstream. An unserved area has no service, or service slower than 768 kbps downstream and 200 kbps upstream.

The current carriers in the region are:

Yurok Connect Áan Chúuphan Tsunami Wireless Frontier Communications Verizon Wireless US Cellular

Áan Chúuphan, Yurok Connect and Tsunami wireless all use unlicensed radio frequencies for last mile service, with a mix of unlicensed and licensed radio frequencies for middle mile service. Áan Chúuphan also has a short fiber optic run as part of its middle mile infrastructure. Verizon Wireless and US Cellular use their own cellular networks for middle mile service. Frontier Communications acquired the telephone facilities of Verizon California in April of 2016. So far, Frontier has not offered any broadband access in KRRBI's service area.