

Looking for Broadband Life on the Wrong Side of the Digital Divide

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Greg Jirak, Broadband Alliance of Mendocino County

On August 20, 2013, staff members from the California Public Utilities Commission (CPUC) visited coastal Sonoma and Mendocino Counties to see for themselves the deplorable state of broadband in this beautiful area. Three meetings were held, one on Joy Road, in Sonoma County, one at Coast Community Library, in Point Arena, and one at the grammar school in the Village of Mendocino.

The following are the stories submitted by the Point Arena participants describing their problems with substandard broadband.

Maria Elena Biaggi - La Luna Farm, Owner

The lack of broadband availability in our area has negatively impacted our farming business, my translation business, and our children's studies. We have tried out available providers over the years, all of whom set low monthly usage limits, due to their poor capabilities. We pay a high monthly fee for a very limited access. When these limits are exceeded, the providers penalize us by slowing our Internet down to a very slow speed. In a household of four, all of whom rely heavily on the Internet, this has been a major obstacle to overcome.



Because of our location, our only Internet access is via satellite dishes. These dishes are greatly affected by cloud cover and fog, both of which are common occurrences in our area. This only helps to slow down our Internet further. When my children need to do research, my husband needs to watch instructional farming videos, and I need to send and receive emails for my translating business, all at the same time, our current providers just don't cut it.

The Internet provides several services to agriculture: ability to keep up with cutting edge technology; ideas, concepts in the management of livestock, land, water, and ecological impacts.; allows us to market our products outside of the area; participate and communicate with fellow farmers of similar mindset throughout the world.; take on-line classes; and join and participate in agricultural roundtables and forums.

Chris Jorgensen - Point Arena Pharmacy, Owner

I can attest to the fact that broadband is not available in this area. Everyone I do business with (insurance companies, wholesalers, etc.) assume that broadband is available everywhere. Consequently, I am at a disadvantage when trying to communicate (billing, ordering, etc.). Many wasted hours weekly due to dropped electronic billings and waiting for slow responses while attempting to use the Internet to re-order prescription drugs.



Lindsay Jones - Redwood Credit Union, Branch Manager

Redwood Credit Union depends upon dependable broadband service to conduct its business, and business on the Mendonoma Coast depends on Redwood Credit Union. Even though we are located next door to a fiber-fed AT&T central office, we depend on an antiquated T1 line at exorbitant cost. To stay competitive, we need significantly faster, more reliable service, at much lower cost. We'd like to provide our patrons with complementary Wifi access, but can't due to our substandard broadband service.



Colleen Cross - Point Arena Schools, Superintendent

Broadband to the Point Arena Schools is woefully inadequate for what we need and want to do. It has become even more of a concern considering standardized testing will be all online beginning in 2014-15.

The absolute minimum requirement per California Dept of Education is 20 Mbps per school site, but the Statewide recommended level is 100 Mbps per site. Currently, both Point Arena High School and Arena Union Elementary School each have three 4.7 Mbps lines that connect the schools to the Internet.



This is not enough connectivity, since on many school days the bandwidth at both schools is completely maxed out. This causes websites, which are needed for daily operation of the school, to slow down to a crawl or not load at all. Our SIS (student information system), grading programs, electronic textbooks and supplementary instructional materials, business/accounting software, library software, and POS cafeteria sales for free/reduced lunch (we are 74% F/R) all need a reliable and fast Internet connection for us to function.

In addition, we are piloting a one-to-one computing program where every student has their own laptop for project-based learning and daily submission of homework, grade checks, etc.

This pilot will struggle to be successful if we don't have adequate bandwidth to support student work and learning activities.

Finally, of major concern for us as educators is the number of families who do not have Internet access at home. Our latest survey showed that only 50% of our families have Internet services in the home. That means students cannot work on web-housed assignments (shared docs) at home, nor can they submit homework online, access their e-textbook account, email the teacher with HW questions, or do research needed for their assignments. Robust broadband access, both in the home and at school is critically important to educating our students to be competitive, highly functional 21st Century citizens.

Diane Agee – Redwood Coast Medical Clinic, CEO

RCMS is the sole provider of medical services in the community with an urgent care/primary care office in Gualala and a medical and dental office in Point Arena. Since the closest hospital is one and a half hours away, the RCMS urgent care center serves as an emergency room. It is vital to transmit digital images to specialists in Santa Rosa to seek additional expertise and avoid costly helicopter and ambulance transports. The lack of adequate broadband impedes this process. Now that RCMs has implemented an Electronic Medical Record system it is vital to be able to transmit patient data to facilitate care- this is currently impossible on the limited T1 lines available. **The lack of broadband access is posing a serious barrier in life and death situations.**



Mindy Kittay – Mendocino County Librarian

The Mendocino County Libraries are the public education centers of our communities. We are the only place where everyone is welcome and there is no charge for information. We provide equal access to information and resources for all type of needs to every person in Mendocino County. But we are unable to do this effectively and at the same level of other libraries in the United States because of our limited ability to access the Internet at most of our branches. Our role is to eliminate the digital divide, which is alive and well here in Mendocino County, so that everyone has access to information and right now, as much as we would like to, we cannot.



Frank Bell - The Sea Ranch, General Manager

The Sea Ranch would like to consider developing a last mile broadband service, but despite Verizon's new fiber, Sea Ranch can't get middle-mile bandwidth. Levels like 500MBS or 1GBS just aren't available from their fiber and OCS3, 150 Mbps, is priced at \$30k/month way too high for backhaul. We believe that Golden Bear Broadband's Route 1 Corridor Project would make this available. The Sea Ranch is very concerned about Verizon's lack of investment in our telephone service. Verizon's in-ground copper plant is in need both of repair and of additional capacity. Sea Ranchers requesting additional lines have been told that there are no more lines available. Verizon's CASF grant approved in Jan 2010 specified 7MBS service. The service was finally initiated in Jan 2013 but the offering is only 3MBS maximum, half the threshold for under-served.



Jeff Watts - Gualala Municipal Advisory Council, Chair

Broadband is a birthright as was the Rural Electrification Act of 1937. Our nation's rural and urban youth are the very foundation of our nation's future and broadband is the bedrock upon which it shall stand. It is gross hypocrisy that the AT&Ts of our nation shall have the political power to discriminate regarding who shall have access and where and who shall not.

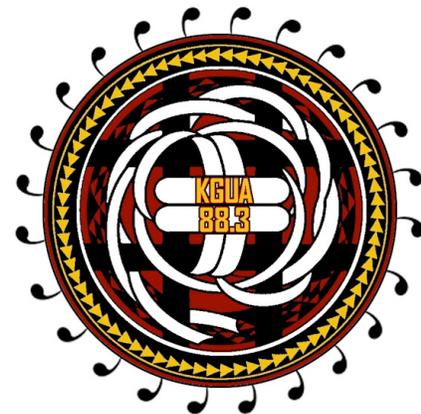


Peggy Berryhill - KGUA Community Radio, General Manager

KGUA, 88.3 FM, is the only non-commercial radio station serving the southern Mendocino and northern Sonoma coast. Running a small business is challenging enough but add in the need to download a minimum of 5 gigabytes a week of radio programs, and to maintain a social media presence, is a huge challenge.

The issues I encounter are a common experience by residents of Gualala where we have only one service provider. The issues of inconsistent speeds, outages, some brief and some of longer duration plague local users. Common complaints include:

- Intermittent quality along with poor customer service
- Slow upload speeds at a high cost per customer. I pay for "up to" 1 Mbps uploads but rarely have I reached beyond 250 Kbps upload speed. The download speed of "up to" 10 MB has been adequate reaching between 7.00-8.75 Mbps.



- Unexpected downtimes create problems for small businesses, especially those who rely on point of sale systems to connect to credit card authorization systems.
- I also feel strongly that the CPUC needs to work closely with our County policies so that they are not punitive to small businesses, especially in the telecommunications and broadband service arenas. When counties charge excessive fees for use and other permits it becomes punitive and hinders growth in our rural areas where we so desperately need broadband ,which means the need for towers and antennas.

One last thing - our radio station has an existing tower that could be used for as a location for antennas to help provide service.

I hope that the CPUC can find solutions to bring about a solid broadband service/s to our communities so that we can thrive and not merely survive.

Steve McLaughlin - Independent Coast Observer, Owner

The Independent Coast Observer is a weekly newspaper in a remote community that needs reliable Internet connectivity for every aspect of our mission.

Many meetings are accessible for our reporters to attend over the Internet — as long as we have the bandwidth to support the video link. Many if not most documents and other objects of research are only available through our Internet connection, and even our completed newspaper pages are transmitted to our printer on-line.



Last Wednesday night, for example, our uplink speed was so slow that it took over a half an hour for our PDF newspaper pages to transmit to our printer. This is not typical, but when upload speeds were as low as 2.6 Kbs per second, I wondered if I was going to have to physically carry a thumb-drive with our files over 45 miles of winding rural roads to get our paper printed Thursday morning!

If our Central Valley Cable connection fails, we're out of luck. There is no other practical data link from our office to the outside world.

Broadband for our rural area is an essential to keep us connected — and it is becoming more critical with every passing month.

Walt Wells - South Coast Seniors, Treasurer

South Coast Seniors is currently under contract with AT&T MiFi for Internet service. We signed up for this service when we learned we were unable to get CVC or Wildblue in the building our offices are in. MiFi Internet has been very frustrating and time consuming to work with. When the weather is foggy, windy, or rainy (which is 80% of the time in PA) the connection fails and we sometimes spend a few hours a day trying to get back on-line.



This is a big problem for our organization. We work on a lot of deadlines because we have various reports due throughout the month for funding. If we were unable to email a report on time we would not only lose funding for that month but it could put our annual contract in jeopardy. It also becomes a problem when we have to do research for a grant or respond to important emails from our seniors clients, donors or Board of Directors.

Having more reliable Internet in our area would save a lot of hours of frustration that can be used more effectively on office work and making sure we meet all of our deadlines, without the extra pressure of not knowing whether we can turn our work in on time.

Brian Churm - Pacnet, Director Engineering & Operations, Americas & Europe

Our company constructs and operates trans-oceanic cables which drive communications long the west coast. For example, we recently finished the Unity cable to Japan which lands terabits of capacity in Los Angeles and contributes to the overall business growth in the SoCal region. The industry is already looking forward to the next cable construction project. A northern California cable landing station exists right here in Mendocino County - just outside of Point Arena.



However, because of the lack of fiber along the northern California coast and the near-monopolistic lock on what few strands do exist, construction engineers are avoiding this region and are instead looking north towards Oregon and Washington. The CPUC needs to broaden their scope when considering the impact of not having accessible fiber along the northern California coast. It is not just a rural problem of connecting a few farm towns to the Internet as some may frame it.

Fiber infrastructure - and the lack thereof - impacts the whole State; from Silicon Valley to Sacramento. Where a cable lands, data centers follow and so do jobs; and right now those jobs and companies - along with their tax revenues - are headed out of State.

Mike Nicholls - Access Sonoma Broadband, Co-Chair

Although I am considered served and have broadband supplied by Comcast, those 1/8 of a mile from me in the community of Cazadero are on dial up or satellite (if they have an unobstructed view of the SW sky) due to lack of expansion by either Comcast or DSL offerings by our local telco, Verizon. This is troubling as Verizon was granted \$1.8 million in CASF funding three years ago to provide DSL service in the Cazadero area, construction was completed in 2011 and still there is no indication of when (or if) service will be implemented. Verizon fiber is within 70 feet of my residence and is a closed network without public access.



I've personally been involved in working closely with the Broadband Alliance of Mendocino County, a co-founder of Access Sonoma Broadband and testifying in Sacramento for the rural expansion of affordable, high speed broadband.

Jim Moorehead - Broadband Alliance of Mendocino County, Executive Committee Chair

Since 2007 I have been involved in attempting to bring broadband to Mendocino County, starting first with the Mendocino Coast Broadband Alliance (MCBA), which tried to bring FTTP in to neighborhoods east and south of Mendocino Village. The project was too small to be economically feasible, and lacked the capability to get grant funding.

Today, these neighborhoods are still unserved, even though it is shown served on the California Broadband Map. In 2010, as a board member of the Community Foundation of Mendocino County, I helped identify broadband deployment as an economic development priority, and helped found the Broadband Alliance of Mendocino County.



Since then, the Alliance has helped forge a strong working relationship with Sonoma County that has resulted in the Route 1 Corridor Project, which is part of the Golden Bear Broadband Project for all of Northern California. Construction of the Route 1 Corridor Project is a crucial building block necessary for the two counties to close the persistent digital divide. The incumbents have clearly demonstrated their unwillingness to solve the problem; the CASF legislation was enacted precisely to solve these rural broadband deployment challenges. Logic suggests that the CPUC should approve the Golden Bear project so that the R1CP can be built.

Greg Jirak - Mendocino Broadband Associates, President

My wife and I have invested in coastal real estate for our retirement, but our retirement dollars are shrinking rapidly due to lack of broadband. Coastal realtors can cite many examples of comparable properties whose value is radically different due to the difference in broadband access. In response to this problem, the North Bay Association of Realtors (NORBAR) is a sponsor of the Broadband Alliance of Mendocino County.



Personal experience also shows emergency services delayed due to lack of broadband - a family member's injury on Schooner Gulch State Beach, a few hundred yards west of State Highway 1, was airlifted a few hundred yards east of the highway to a private airfield. The ambulance couldn't get a cellular connection at the airfield and had to waste 20 minutes going to Point Arena, and back, to determine the appropriate hospital.

Even along state highways, and on state beaches, public safety is impaired due to substandard broadband, and tourism, a staple of the Mendocino County economy, suffers accordingly. Without improved broadband service, the economy of Mendocino County will wither and die.

Life on the Wrong Side of the Digital Divide

These stories, from people living and working on the Mendocino and Sonoma Coast, show how difficult it is to live one's life, and conduct one's business, with substandard broadband.

Substandard broadband condemns rural California to a perpetual digital divide, and economic oblivion.

Broadband Alliance
of Mendocino County



Broadband Alliance of Mendocino County & Access Sonoma Broadband

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