
Broadband Alliance of Mendocino County

Broadband Alliance Public Outreach Meeting

Friday, June 7th, 2019 10 am-12:00 noon

Community Foundation of Mendocino County

Call in Number: 605-313-4876 Access code: 108 1131#

- I. The meeting was called to order at 10:05 by Chair Wylie.
- II. Those present and participating by phone introduced themselves as follows:

Chair Kathy Wylie, Administrator Jeff Tyrrell, Mike Nicholls of Access Sonoma Broadband, Trish Steel, past Chair of the Broadband Alliance of Mendocino County, Calvin Sandeen of Access Sonoma Broadband, Katie Gibbs, past member of the Community Foundation of Mendocino County, Devon Jones, Executive Director of the Mendocino County Farm Bureau, Jim Gagnon, Comptche Emergency Preparedness Committee member, John Goldsmith, BAMC Steering Committee, Diann Simmons, BAMC Steering Committee, Jim Moorehead, BAMC Steering Committee, Rick Ehlert Coordinator, Mendocino County Office of Emergency Services, and Supervisor Ted Williams, joined later by phone.

- a. Revisions to the agenda:

To accommodate a busy schedule, it was agreed that Devon Jones would present first.

Farm Bureau

Devon Jones, Executive Director of the Mendocino County Farm Bureau, spoke about how a lack of connectivity is impacting agriculture in Mendocino County. She went on to say that many aspects of the modern farm rely on internet, including real time data entry from soil sampling, moisture monitoring, weather reporting, payroll, and recording for state and county compliance. Noting that productive lands in Potter Valley, and elsewhere, are in an internet “Black hole.” The further North one gets, the more these issues are expanded.

Livestock operators use computer-based systems to track breeding and vaccination records; these systems do not function as designed in our poorly connected areas, and require additional time and effort taking notes for later data-entry.

Devon shared a copy of a recent report from the United States Department of Agriculture (USDA) entitled [A Case for Rural Broadband](#) and reflected that everything in agriculture is continually becoming more computer-based, from equipment operation to planting strategies. These changes enhance efficiency and enable improved crop rotations. Also, global positioning satellite (GPS) information is an important element to modern vineyard and crop management by providing precise laser-leveling for improved irrigation usage and field conditions.

The [American Farm Bureau Federation](#) (AFBF) has been working with the USDA on legislation and the creation of grant funding to assist with the technological side of farming; the

Broadband Alliance of Mendocino County

Mendocino County Farm Bureau is open to grant applications of partnerships that bring improvement projects to member-farms.

Prompted by a question from Jim Moorehead, discussion shifted to the effect of flawed internet connectivity mapping data on broader coverage and successful grant applications. Diann Simmons added that a newly appointed California Public Utilities Commission (CPUC) Commissioner suggested that the mapping issue is ripe for change.

Mike Nicholls and Calvin Sandeen added a layer of complexity by detailing the requisite upload & download speed needed to meet broadband definitions under USDA and CPUC grants and mapping measurements. At the lower end, 6Mbps download and 1 Mbps upload speeds will not permit any streaming service and is insufficient for reporting as described in the Farm Bureau presentation. The USDA is looking at minimums of 25-3 Mbps, while Sonoma and Mendocino counties are working toward 100-20 Mbps, in line with the goals of Monterey Bay Consortium. Existing CAF II funding is set at 10-1, which is ridiculously low, particularly when it cannot be upgraded; it will leave us with a legacy of sub-par services. Jim Gagnon added that USDA grants for establishing 25-3 Mbps will not be given where 10-1 Mbps already exists.

Kathy Wylie suggested establishing some sort of a forum co-hosted by the Alliance and Farm Bureau to share information regarding technical challenges facing the farm communities that lack adequate connectivity. Devon expressed interest in some form of working group, which might meet at a time when farm schedules are less busy; e.g. winter.

Jim Gagnon shared details regarding his recent attempts to apply for USDA grant funds and found the required partnership of a CLEC [competitive local exchange carrier] to be an insurmountable hurdle, as no qualified providers were willing to participate. Sonic, Pacific Internet and a few other providers were approached, but were not interested in committing to being the service provider for the grant application project.

III. Words from the Chair

Chair Wylie again thanked everyone for attending, and commented on how complex, pervasive and important broadband issues are in modern life. She noted that in advance of each outreach meeting the steering committee meets to craft the agenda, and there isn't enough time in our meetings to discuss all the topics that we recognize as important. To accommodate the need, some details may be added to our meeting notes which have not have been discussed in the quarterly outreach meeting, such as [Broadband Deployment Accuracy and Technological Availability \(Broadband DATA\) Act](#) aimed at improving broadband mapping at the Federal Communications Commission.

Broadband Alliance of Mendocino County

IV. Update from Elected Representatives:

a. Congressman Huffman's Public Lands Telecommunications Act

As of 2017, the federal government found that 24% of rural America and 32% of those on Tribal land lack access to advanced broadband.

The Public Lands Telecommunications Act would accelerate broadband and telecommunications deployment on and near public lands by:

- Providing federal land management agencies with fee retention authority for rights-of-way and other telecommunications infrastructure use authorizations to ensure these funds are reinvested to further broadband and telecommunications deployment;
- Providing cooperative agreement authority to federal land management agencies for the administration of communications sites to break down funding silos and encourage new federal partnerships.

b. Senator McGuire: SB 670 etc.

Senator McGuire's [SB 670](#) on Outage Notifications is currently working through the Assembly. There is no real-time reporting requirement for telecommunications carriers when 911 service or emergency warning system access goes down. In order to provide residents the public safety they deserve, SB 670 would require telecommunications carriers to report outages to OES within one hour of discovery when outages affect 911 service and emergency notification systems.

Following up on [SB 833](#) - Emergency Alerts, CalOES completed their draft guidelines. While the bill required their completion by July 2019, CalOES is working to ensure adoption occurs at the local level as soon as possible.

Select Senate Committee on Governor's Wildfire Report: In response to the increasing threat of wildfires, Governor Brown signed into law SB 901. As part of SB 901, the Governor's Office of Planning and Research is required to establish a Commission on Catastrophic Wildfire Cost and Recovery to examine issues related to wildfires associated with utility infrastructure, and to produce recommendations on changes to law that would ensure equitable distribution of costs among affected parties. The Commission has just released their recommendations. The Senate's select committee on wildfires will be meeting Monday to review the recommendations and take public input on them. The summary of the report is attached.

Power shutdowns: In the Governor's may revise related to PG&E power shutdowns: The Governor proposed \$75 million General Fund to improve resiliency of the state's critical

Broadband Alliance of Mendocino County

infrastructure in response to investor- utility-led Public Safety Power Shutdown (PSPS) actions, and to provide assistance to communities, where appropriate, as specific urgent needs are identified. This proposal will provide a flexible source of funding to facilitate immediate response to utility initiated power shutdowns. In addition, it will provide planning grants to improve local preparedness for power shutdown events would be available to the County Offices of Emergency Management to convene regional stakeholders to discuss preparedness efforts, update emergency plans for shutdown events, and hold trainings, discussions, and exercises to reinforce planning assumptions.

c. Assemblymember Wood: AB 183

In recent weeks, Jim Wood's AB 183 has stalled in the Appropriation Committee, without explanation. The Bill would have required the California Public Utilities Commission (CPUC) submit a report to the Legislature on telecommunications companies' efforts to restore service interrupted by damage from an emergency or a natural disaster the governor has declared to be an emergency, and the extent of any damage to telecommunications network infrastructure or facilities, including the type of facility and infrastructure damaged. Despite this setback, the Assemblyman will continue to advocate for much needed improvements to rural broadband.

d. Supervisor Williams: Mendocino County infrastructure planning & priorities

During recent budget discussion, Supervisor Ted Williams made efforts to convince the County to increase spending related to its adopted broadband infrastructure plan. The feedback was that \$40k had been spent developing the plan. However, following a hiring freeze, it is anticipated that some funds may be freed-up at the end of the first quarter, but roads and lack of ambulance services are among the high priority considerations.

Ted has been meeting with planning department regarding how to incorporate cellular coverage and signal strength data that's being collected by electronic sensors deployed on county vehicles into ongoing GIS mapping. The objective is to create a heat-map of cell coverage for the entire county, to dispel the industry driven misconception of extent service.

Supervisor Williams has reached out to the planning commission related to the recent hearing on the AT&T 5 cell-tower projects with concerns that approval of imperfect plans may become an impediment to future improvements. Providing some coverage to a census block is not necessarily the best plan; we need to start with a strategic plan for how to provide ubiquitous coverage, with goals, maps, and proactive planning involvement. Ted is advocating for a strategic infrastructure planning session, bringing Supervisors together with the planning Department.

Katie Gibbs mentioned that in the past a map of cell towers had been created, but is now regarded as proprietary information and can't be shared publically. She expressed concern that

Broadband Alliance of Mendocino County

a new map would render the same. Ted assured her that if the data is our own, the work product will belong to the County.

- V. Community Partner Reports:
 - a. Office of Emergency Services

Rick Ehler briefed the group on details related to PG&E's proactive shutdowns during "Red Flag Warnings." Mendocino County and most of California will be subject to power outages which can last from days to a week or more. It goes without saying that reliable internet presupposes reliable electricity, and good communication is the life-blood of emergency response.

Based on topographical fire danger and the location of power equipment, various tiers have been designated, but each tier is likely to experience shutdowns. Roughly 90% of Mendocino County falls under tier 2 designation, with some tier 3 areas near and around Willits. However, anticipated shutdown of transmission lines, as well as distribution lines, may even effect our safer tier 1 areas, since the transmission lines that serve those areas originate beyond the more fire prone geography.

The Office of Emergency Services has conducted statistical analysis, looking back through data from 2008, and finds that inland Mendocino County averages 2-4 "Red Flag Warning" annually, with as many as 8 events in a year. Fortunately, not every "Red Flag Warning" will result in a public safety power shutdown. The average Red Flag Warning lasts 24 hours, while some are only a few hours, if for instance the winds do not meet projections and the warning is subsequently cancelled.

PG&E anticipates that the powerlines will remain de-energized for 24-48 hours after the secession of the "Red Flag Warning." The transmission lines can be inspected relatively quickly by helicopter, but the distribution lines must be inspected from the ground, because of the tree canopy.

Keep in mind that County residents may be effected by transmission-line shutdowns even when fire danger is not predicted locally. Numerous large transmission line come from Southern Oregon through the Shasta region, and if those lines are endangered we can anticipate rolling blackouts. The PG&E system does not appear to have the sufficient shut-off capability to isolate problem areas as effectively as the public might expect.

Prompted by a question by John Goldsmith, Rick indicated that PG&E has been increasingly sensitive to the significance of Red Flag Warnings, and the magnitude of needed inspection following high wind events. To be fair, PG&E has made significant investment into wildfire prevention and become hyper-vigilant regarding the threat of high winds. They have deployed wind sensors to monitor weather conditions, and contracted their own firefighters to immediately react to events surrounding PG&E equipment. PG&E's system was built for

Broadband Alliance of Mendocino County

continuous reliability, without fully preparing for the complexities of shutting everything down. Yet, they are adapting policies and making significant responsive infrastructure investments.

These power outages will test our broadband and communications infrastructure as communities and PG&E struggle to notify residents about how long until electricity is restored. It is estimated that 70% of people nationwide use cell phones primarily, and 50% use cell phones exclusively. The 18-24 hour battery back-up period for cell towers will greatly impact the effectiveness of the County warning system. PG&E has taken out full-page newspaper ads, T.V. ads, and utilized paper billing to educate the public about related details, but the City of Ukiah is working out the protocols of notifying their residential power customers.

The big issue is that people will not be able reach 911, once the power goes down at the cell-towers and battery backups run out.

b. Schools /Mendocino County Office of Education
No report

c. Farm Bureau
See above

VI. New deployments and Broadband Provider updates

- a. Comptche/Cameron [passed]
- b. Boonville [passed]
- c. Manchester [continued]
- d. Hartstone Bible Camp/Potter Valley [continued]
- e. Whitesboro [passed]

Group discussion on the cell tower projects was generalized, and the links above provide details for each, such as heights, area maps, and configuration.

Diann began discussion regarding public concern related to tower height and distance from homes, as expressed during the Planning Commission hearing. Three towers were approved and two were continued. One of the towers was held for further consideration, in part because of its height relative its proximity of residents. However, it was noted that tree coverage was thought to obscure view of the tower, and reconsidering the configuration may not have effect on the view-scape. While counter-intuitive, building the tower as designed would provide optimal coverage without negatively impacting esthetics, vis-à-vis a shorter tower.

Tower projects submitted to the Mendocino County Planning Commission require variances if the distance to adjacent properties are less than 125% of the tower height for safety, and less

Broadband Alliance of Mendocino County

that 500% of tower height for visual impact. At least one of the recent proposals did not meet that threshold, yet waivers were not gathered by the applicant, from the owners of the neighboring parcels. The commission was left asking the rhetorical question of whether most of residents in the service area supported or opposed of the respective projects. Diann noted that a few voices of opposition spoke against several of the projects, while fewer members of the public came forward in support; adding that people who want improved projects need to speak up. Jim Gagnon commented that placement of each tower seemed “mysterious,” going on to explain that, by appearance, more people could be served by better tower locations.

Two projects were continued, Potter Valley and Manchester. Regarding Potter Valley, the nearest resident to the tower actively opposed the project, while the Manchester project seemed only to require more clarity and slight revision.

Supervisor William suggested that the County may wish to include accurate comparative coverage maps as a required element of the planning application. He further added that the County should consider ‘pre-approving’ sites which research identifies as optimal for providing service to the greatest number of residents and businesses.

VII. Economic Development & Financing Corporation - County Broadband Coordination

a. Updates on Local and Regional Activities:

Diann Simmons reported for the [Economic Development and Financing Corporation](#) regarding the potential of two public/private partnerships with local wireless service providers in Caspar and Round Valley. Both are early in the feasibility phase, and regarding the Caspar project they are finding the original cost estimates to too low. EDFC will need to look for additional funding options to make them happen.

The City of Fort Bragg adopted the Mendocino County Digital Infrastructure Plan, and Willits and Point Arena have expressed interest in doing the same. They are being encouraged to adopt the plan to begin to bring more consistency to aid future broadband projects. EDFC is also reaching out to the cities to help identify resources and improve policies.

EDFC has also talked with the local staff of California State Parks about potential collaboration through use of assets for service to surrounding areas.

b. CENIC Meeting and outcomes

EDFC brought [CENIC](#), the Corporation for Education Network Initiatives in California a state non-profit, to meet with county-wide jurisdiction staff. Their recommendation was that more

Broadband Alliance of Mendocino County

work needs to be done to develop consistent broadband policies across the county. However, several potential projects were byproducts of the meeting, and will be explored further.

c. Meeting with local Wireless Internet Service Providers (WISPs)

EDFC met with four local providers to discuss potential collaborations. The meeting generated good information regarding the regions served by the respective providers. The service providers gave updates about their future projected service areas, and effort to reduce duplicative service coverage. Two of the four providers expressed interest in working collaboratively on new projects.

d. [California Public Utilities Commission](#) (CPUC) Workshop

e. NBNCBC Update and CPUC – California Advances Services Fund grant application

Diann Simmons, together with Mike Nicholls & Calvin Sandeen, attended the workshop above, and came away with the positive impression that California Public Utility Commissioner Martha Guzman Aceves is focused on addressing the issues of rural broadband. There seems to be a shift in attitude at the CPUC and a recognition that the census tract approach to service measurements is inadequate. Networking and follow-up conversations have been positive.

Mike Nicholls & Calvin Sandeen –

Updates on Sonoma County and regional broadband activities

Mike indicated that Verizon has notified Sonoma County that they will be dismantling the 3G network, which will result in decreased penetration of wireless coverage in rural areas because of the smaller footprint of 4G. In recent weeks, there have been disruptions of services while work of removing the 3G system is being performed. To provide ubiquitous service across a given area, more 4G towers are needed, when compared to 3G, and new coverage gaps are bound to emerge, even in places that were previously covered. Rick Ehlert confirmed that the same notifications have been issued in Mendocino County, but apparently, Verizon has delayed implementing their plans. The plan described in Mendocino County includes transitioning from 3G to a plan that includes Voice-over LTE. Other carriers, AT&T and T-Mobile, have not reported like plans.

Calvin reported that Sonoma has been focused on public safety and has completed their broadband strategic plan. The broadband plan has been incorporated into Office of Emergency Recovery and Resiliency framework. Increased broadband infrastructure is clearly needed to support emergency recovery, resilience, as well as economic development. Research shows that 81% of 911 calls originate from cell phone, and significant coverage gaps exist. Their ongoing work is trying to find ways to close the gaps in public safety communications. The County is looking for funding sources and solutions, including the possibility of a distributed

Broadband Alliance of Mendocino County

antenna system along Highway 1. The County is exploring partnerships with major carriers to enhance services at the Fairgrounds, primarily for emergency/public safety use.

Sonoma County is working on ways to incentivize carriers to deploy infrastructure in low density, unserved areas. Additionally, work is being done to adapt The Sea Ranch model to other areas, which would make use of available grant funding with differing partnership configurations.

Calvin indicated that the North Bay North Coast Broadband Consortium's Memorandum of Understanding is nearing completion. Approval by the Sonoma County Board of Supervisors is scheduled for June 11, followed by circulation among other member counties.

Mike Nicholls concluded by giving anecdotal evidence about how the issue of rural broadband is becoming more widely acknowledged by groups, organizations and Presidential candidates.

VIII. Other Updates, Final Comments and Future Agenda items

Meeting adjourned at 11:55 am.

IX. Next meeting: Friday, September 6th, 2019