

February 3, 2003

Federal Communications Commission
RE: FCC 02-381
Facilitating the Provision of Spectrum-Based Services
To Rural Area and Promoting Opportunitites for
Rural Telephone Companies to Provide Spectrum-
Based Services

Dear Sir or Madam:

Applegate Broadband LLC, a Wireless ISP (WISP), serves the Applegate Valley of Southern Oregon with broadband Internet services (up to 1.5/1.5Mbps) using the 2.4GHz unlicensed band. The Applegate Valley is a very rural area of some 800 square miles and about 8 thousand households in it, very few of which are served by any competing broadband access method other than satellite.

Applegate Broadband has seen very enthusiastic uptake in our year of existence, with quite a few of the small businesses and households in the area signing up even given a very low level marketing effort. Many of these customers require our low-latency, symmetrical service to work from home; something that satellite service cannot offer. The local phone company has gone AWOL as far as the broadband customers here, and we certainly hope that the FCC is not about to give them preferential access to spectrum, now that we are offering service in this formerly neglected area.

The FCC also needs to take note of the market failure of the selling of valuable MMDS spectrum for rural areas, before considering auctioning off additional spectrum. This spectrum was sold in the early 1990's with the intent of allowing the creation of a wireless broadband service. It hasn't happened, and the holders of that spectrum are simply withholding it from the beneficial use of the citizens of the Applegate and other rural areas. Rural areas are simply too expensive to serve with purchased spectrum, which is more applicable (but not much) to more congested areas. The FCC should look at ways to make MMDS spectrum available on a unlicensed basis for deployments in rural areas, and not consider additional allocations that are auctioned off. The record shows this approach doesn't work.

The FCC asked what sort of wireless broadband services are being offered in rural areas. Applegate Broadband is currently offering wireless speeds up to 1.5/1.5Mbps, and hopes to offer 2.3Mbps to end users soon. Applegate Broadband is also looking with considerable interest at the 802.16a, 802.11g, and 802.11a emerging technologies/standards and hopes to offer a very high speed wireless service for the Applegate area in the future, perhaps in the 2.3-10Mbps range.

The two things that would improve our ability to better serve the Applegate are: (1) more unlicensed spectrum at above 3GHz and below 700MHz (the latter especially interesting for it's NLOS properties) to allow us to offer very high speeds (say above 50Mbps) in the future, and (2) a relaxing of EIRP restrictions in the 2.4 and 5.8 GHz ranges in rural areas like ours that have very light use of the spectrum due to low population density --so that WISPs can serve larger areas with the same infrastructure. Relaxing permissible power limits would harm no one in this very lightly populated area that in characterized by lots of geological features that stop RF very well.

In addition to the previously mentioned points, since we serve an area that has lots of federal ownership (BLM and USFS), we'd like to see more WISP-friendly procedures and fee structures for repeater sites. The current regime is oriented to NLOS broadcast/cell infrastructure and doesn't fit well

with low density areas that have to be served via LOS wireless technologies. One example would be a valley with 30-40 households in it, surrounded by a mountainous area that is federally owned.

We urge the FCC to build on the successes of the WISP industry by implementing this “noise-temperature” approach to EIRP limits, and allocate more unlicensed spectrum. Rural America deserves and wants broadband access, and WISPs are delivering it to them now. Help us do more!

Sincerely,

Norm Young
CEO, Applegate Broadband LLC