

Update on Gillies Bay Internet Society progress in 2013

It's been over a year since I last reported on the Gillies Bay Internet Society network progress. It's been pretty amazing, but we do seem to be doing very well indeed in achieving our original objectives when we set up the non-profit society in July, 2008. We hoped to bring 'good high speed internet service at a reasonable cost to the residents of Gillies Bay and the surrounding area'.

So we have about 120 clients now, our system has expanded to 6 access points in 5 locations and our speeds are around 10 to 12 Mbps down 3.0 Mbps up and ping time average about 15ms. We do subsidize installation costs for new customers to some extent, but the average still comes in at around \$150.00. Our free monthly bandwidth is now 20Gb and we bill at \$2.00 GB for overage with no slowdown or upper limit on that. Annual prepaid charge remains at \$400.00 including tax and we make no charge for joining or leaving the network. We offer online connection for one month at a flat \$40.00, overage at the standard rate, again unlimited use without slowdown. I'm being specific for you because I find Xplornet and Telus, Rogers in particular tend to have limits and extra charges that many people are very unhappy about.

I handle much of the day to day network maintenance, problem troubleshooting and new client installations, but I could not run the system for very long without the help of Larry Manahan on Lasqueti who works as network technical manager for Lasqueti Internet Access Society and us. LIAS also provide financial services and handle most of the revenue collection for the two networks.

The new entry Point of Presence where the Telus fibre feed transfers into our server at the Sunshine Coast Health Centre south of town has been upgraded from E10 to E30, three times as much bandwidth as before, at twice the cost to us. Currently we think this feed will cover our bandwidth needs at least up to the end of 2014, when I expect we will have about 150 clients.

One point I want to emphasize is the very high quality of the hardware we use and it's incredibly low price. Ubiquity are producing advance technology products that are proving to be very reliable indeed, quite easy to work with in terms of operating system, and cheap. They continually advance the technology in house and we are seeing substantial improvements in performance especially in cases where older hardware was far less efficient in coping with signal path obstacles. It is still very difficult to find online forums that provide help with networks like ours. This type of wireless internet system is ideal for smaller communities world wide, but adoption rate seems to be still very slow. In our experience the range and coverage of each AP is 4 to 6 km with horizontal coverage angle of up to 140 degrees. Each AP can handle at least 40 clients.

Our new tower on Mt. Pocahontas is proving to be useful for other wireless users. It's used by the BC Ambulance service, and the government run emergency preparedness program supported by ham radio groups in Powell River and on Vancouver Island. The City of Parksville is also involved and financed a link to a node there and we are providing a service to Environment Canada to backup a weather radio being installed on Pocahontas.

Here are some shots of the new GBIS tower on the mountain:—



Upper section of the GBIS tower on Mt. Pocahontas, Texada Island.



GBIS tower on Pocahontas - large Parksville link dish for ambulance service of BC below with ham radio antenna above it. The top section has internet radios only.



GBIS crew upgrading wireless equipment at the top of the Pocahontas tower, June 2013. Dishes handle links to Powell River & Lasqueti, flat panels serve 3 BH's to subnets. The two vertical boxes on the left are the two access points providing service to about 63 of the 120 users.

In many respects the more rural area of BC are not well served by the existing ISP's and many could benefit from the type of technology in use here on Texada. We continue to depend on the help of volunteers in both the network expansion and day to day operation of the network, but we also have sufficient revenue to pay for specialist help from qualified professionals.

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