



BETTER CONNECTIONS FOR REMOTE LOCATIONS

Internet connectivity in Canada presents unique obstacles to overcome. Remote areas are often the norm rather than the exception, and the lack of broadband infrastructure significantly restricts access to reliable, high-speed Internet. Cellular solutions do exist, but they're frequently cost-prohibitive and not nearly as capable.

Whitecap was in need of a cost-effective, dependable and proven solution—and Hybrid Wireless was engaged to deliver on those expectations. Read on to discover how the company—in conjunction with MBSI WAV and Cambium Networks—was able to bring secure internet to some of the most isolated parts of Western Canada.



The Problem

Whitecap sought trustworthy internet connectivity for corporate purposes—and especially for their employees stationed in remote camps. Filling vacancies at these secluded worksites can be challenging, and being able to deliver quality internet helps to attract top talent.

Hybrid Wireless was engaged after Whitecap received several quotes—each of which brought significant pricing concerns. In some instances, upfront capital costs were an issue but monthly fees were not—and in others, the scenarios were reversed but equally out of range. Whitecap contacted Hybrid knowing they had been working with the county on some wireless links to other Oil & Gas clients.

In order to meet Whitecap's goals and hit pricing targets, Hybrid Wireless was challenged to craft an unorthodox solution that would strike the balance between value and quality.





The Solution

Working closely with Whitecap's IT department, Hybrid Wireless designed and deployed a custom network that could deliver consistent, stable internet services to rural facilities.

Hybrid Wireless engineered a path study from a county tower which has bandwidth fed by a Cambium 850 licensed link from their fiber POP site in Fox Creek. They also constructed a 30-meter self-support tower near Edson, AB. From Fox Creek to Emerson County is a PTP 850 licensed link at 55.3km. With the amount of available bandwidth at the Emerson County tower it was easy for Hybrid Wireless to serve Whitecap via an unlicensed link using PTP670's. The PTP link ended up being 45.5km. It was installed Feb 15, 2022. Whitecap is happy since they have had zero downtime.

To accomplish this, Hybrid Wireless leveraged several products by Cambium Networks:

Outdoor Access | The PTP 670 was chosen to cover rural and unlicensed areas, while the PTP 850 was installed in all licensed regions.

Indoor Access | e410 and e430 Cambium access points were used to facilitate service in all individual living spaces and indoor common areas.

Point-to-Point | Force 180s and Cambium

WiFi products were used to provide short, point-to-point services. Specifically, the ePMP platform was selected, as it offers a superior cost-to-performance value.

All Cambium Networks products were procured via **MBSI WAV**—the region's premier distributor of quality hardware and technologies. MBSI WAV proudly serves the Canadian wireless market, with proven technical and sales expertise.

Throughout the design process, MBSI WAV partnered extensively with Hybrid Wireless—leveraging their vast product knowledge to ensure an optimal outcome for Whitecap. And when it came time to deploy the solution, MBSI WAV offered a comprehensive complement of accessories—including enclosures, power solutions, cabling and other components.

After thoroughly configuring and bench-testing the devices, Hybrid Wireless installed all the equipment on existing (and in some cases, newly-constructed) towers. The team worked diligently to align every dish and ensure peak operating efficiency, and began to monitor the entire system using Cambium Networks' **cnMaestro** software.

The Results

Thanks to the suite of purpose-built hardware and software (and a collaborative approach between all parties), Whitecap has already seen an upswell in productivity and an increase in revenue. Hybrid Wireless continues to closely monitor the system; with cnMaestro, they can manage the whole network from a single user interface—allowing them to detect and correct any unexpected disruptions, and provide detailed daily/monthly usage reports.



Four Keys to Success

At the onset of the engagement, Hybrid Wireless identified four success metrics that would prove pivotal in providing Whitecap with reliable internet services:

1

Top-shelf Tech

The Canadian wilderness is unforgiving, and making hardware repairs can be a dicey, costly proposition. Thus, it was vital that Hybrid Wireless select a technology supplier whose products are known for durability and resiliency—and Cambium Networks hit the mark.

2

An 'Engineered' Solution

Hybrid Wireless' experienced team of engineers partnered directly with MBSI WAV to develop a successful strategy for Whitecap. Working in concert, they designed a quality network and brought it to life with affordable, robust hardware—and outstanding, cost-effective software.

3

A Balanced Budget

Hybrid Wireless knew that pricing would be a major concern for Whitecap; previous proposals either required too much initial investment, or charged above-average monthly fees. But they also understood that rolling out a sub-standard, “cheap” solution would jeopardize their long-term client relationship.

However, by deploying a powerful, steadfast network and staying within budget, Hybrid Wireless successfully demonstrated its value.

4

Reliable Partners

Hybrid Wireless relies on MBSI WAV—a top Canadian supplier—to provide the equipment necessary to fulfill connectivity scopes of varying size and complexity. The company has long trusted MBSI WAV not only for their prompt delivery, but because they offer unique technical expertise not typically found in other distribution companies. As a result, MBSI WAV operates a consultative partner for Hybrid Wireless—and not just as a transactional vendor.





Why Hybrid Wireless?

With more than a century of experience in the field, Hybrid Wireless is the leading communications provider across western Canada. We align with world-class manufacturers to deliver products, services and solutions for telecom, energy, education and industrial verticals.

It's our ambition to be the partner of choice for Western Canada's CLEC/ILEC's, governments and enterprises—and we achieve this goal by helping them to design, implement and maintain innovative, reliable and cost-effective wireless communication networks.

Interested in working with us? We'd love to hear from you! Reach out to us today by calling **1 (866) 494-5059** or emailing us at info@hybridwirelessinc.com.