

# CASE STUDY:

**About** Pinnacle Environmental Technology Inc. of Langley, BC, Canada is the Master Canadian Distributor for Bio-Microbics Inc. Specializing in Residential Systems for Single Family Homes, Cottages, Townhomes, and Small Subdivisions to Municipal and Subdivision systems, Pinnacle provides environment friendly, regulatory approved septic systems for all private, business and government applications. Celebrating 10 Years of Customer Service, we offer simple and affordable wastewater treatment solutions that provide protection to all water sources. Whether for shopping malls, recreational facilities, commercial restaurants, hotels, cities, or towns & villages, Pinnacle focuses on the long-term results for the project. Also, see our work with Mobile Sewage Treatment that provides solutions for Nomadic, Work Camps, and Disaster Relief.

## About Bio-Microbics

Founded in the 1996, Bio-Microbics provides a complete line of modular treatment plants for houses, villas, hotels, commercial activities from pre-treatment to advanced wastewater recycling treatments. Over the past 15 years, Bio-Microbics has grown to become a global leader with more than 42,000 installations in more than 60 countries.

Our Fixed Integrated Treatment Technologies (FITT®) wastewater and stormwater solutions involve FITT®-for-purpose treatment designed for individual residential or commercial properties and small communities. With decades of experience and real-world operating history, our products are pre-engineered to allow flexible and fast installations with less excavation (low impact development) and less labor management (operators).

Our Research and Development team maintains an onsite environmental laboratory and test site in an ongoing R&D program. Our Products, Policies, and People make the difference. Visit [www.biomicrobics.com](http://www.biomicrobics.com) to learn more about Product certifications and additional information. Watch Youtube video of Bio-Microbics receiving the "2011 Kansas Exporter of the Year" Award.

Applications in Canada? Contact

**Pinnacle Environmental Technologies Inc.**

**1-866-514-7555**

[www.pinnacleenvironmental.com](http://www.pinnacleenvironmental.com)

# REMOTE FISHING FACILITIES CHANGE THEIR WATER 'WAYS'



## The Situation:

With a natural grandeur and isolation coupled with teeming seas and streams, British Columbia has long been considered Canada's premier destination for fishing. The isolated Pacific Coastal Mountain Range protects this secluded valley bottom and provides a location for a booming fishing lodge industry.

Besides the fishing lodges that have cropped up in recent years, there are three types of remote fishing lodges: Land/coastal-based off shore, floating hotel barges, and individual floating cabins. These floating cabins have become a popular part of the experience by allowing fishermen to seek better water levels and avoid over fished areas with the added benefit of extended stay packages.

A mobile floating cabin would provide all the amenities (i.e. private bathrooms, showers, kitchens, etc.) that fishermen would expect from land-based lodges, however, normal septic holding tanks would not allow for this much usage. Due to the fact that most of these remote locations have no roads with only boat and air access, this creates a challenge for the sewer infrastructure.

The British Columbia's remote fishing lodge industry was threatened by federal regulators due to not meeting the Fisheries Act requirements. Unless better "eco-friendly" septic treatment was addressed, these lodges would be closed or fined up to \$200,000. If these fishing lodges wanted to continue to provide the best levels of services, facilities, comfort and safety; better ways to provide wastewater treatment became top priority. Pinnacle Environmental Technologies kept them open and operating.

## The Solution:

The unique issues to be resolved for the floating fishing lodges were to (a) change the direction of the wastewater from a direct discharge into the waterway into a wastewater treatment unit, (b) manage the weight distribution of a fully operational treatment unit, (c) manage the affect of the waterway's colder water environment, (d) select a treatment technology that would not only meet the Federal government's Fisheries Act requirements but also meet these requirements of operation.

Pinnacle Environmental Technologies Inc. solved the treatment levels problem on day one by utilizing the BioBarrier® Membrane BioReactors by Bio-Microbics Inc. inside on-deck and/or floating tanks. The BioBarrier® is the only tested and proven system that meets the NSF Standard 350 for reclaimed water and meets the Canadian Federal Fisheries Act. Pinnacle also provided various solutions to meet other site specific needs from custom built sewage lift stations that fit under the log booms to macerating specialized pump systems and additional aeration systems for high strength wastewater.



## The Results:

Pinnacle Environmental Technologies Inc. solved the sticker problem of meeting the objectives of the Fisheries Act on day 1. The Fishing Lodge and all of the floating cabins met the requirements and the Directives. Pinnacle has addressed the last of the properties' units for this year's fishing season.

Can't wait to book our own excursion and enjoy this beautiful part of Canada.