

LimnoTech Selects Senet's Radio Access Network (RAN) Platform to Deploy LoRaWAN® Network Across Great Lakes Region

LoRaWAN Network and Environmental Monitoring Sensors Deployed for Smart Lake Erie Watershed Initiative

Portsmouth, NH – (November 1, 2022) – [Senet, Inc.](#), a leading provider of cloud-based software and services platforms that enable global connectivity and on-demand network build-outs for the Internet of Things (IoT) and [LimnoTech](#), an environmental science and engineering firm, today announced a partnership to deploy a public LoRaWAN® network across the Great Lakes region of the United States, providing connectivity across area wetlands, parks, coastlines, rural and urban areas, and open waters. The effort is part of a broader rollout of the [Cleveland Water Alliance](#) (CWA) Smart Lake Erie Watershed initiative, a state and federally funded program to increase the region's ability to monitor and manage area waterways and provide opportunities for area businesses, cities, and universities to accelerate water technology development.

LimnoTech, and its new subsidiary [Freeboard Technology](#), has partnered with Senet to deploy and manage the network using Senet's [Radio Access Network \(RAN\) Provider Services](#), which provide a full suite of tools for network and site planning, gateway procurement and deployment, and RAN management through Senet's cloud-based RAN Provider Portal. LimnoTech will also be participating in Senet's patented [Low Power Wide Area Virtual Network \(LVN™\)](#), contributing to the unified carrier-grade LoRaWAN connectivity service managed by Senet across the United States.

Using Senet's RAN planning tools, LimnoTech identified ideal locations for gateway placement. The network buildout started in August 2022 with LimnoTech deploying gateways on a tower, at the University of Toledo's Lake Erie Center, on buildings at Case Western Reserve University's Cleveland Campus, on the William Mather ship docked at the Great Lakes Science Center, and atop the Anthony J. Celebrezze Federal Building in downtown Cleveland. Additional gateway deployments are planned along the Ohio shoreline and other key inland and urban areas across Northern Ohio.

The first uses of the network include transmitting data from specialized buoys that monitor water conditions offshore for the City of Cleveland Water Department near its water intakes. Additional water-focused uses of the network that can take advantage of this new regional network include tracking toxic algal blooms, chemical spills, urban flooding, and other applications that require dozens to hundreds of sensors to monitor environmental conditions.

"With Senet's RAN Provider Services, LimnoTech has been able to rapidly deploy, manage, and expand the network coverage footprint across key portions of the Great Lakes region, creating new business opportunities and enabling organizations to rethink how they plan and pay for connected sensors and environmental monitoring solutions," said Ed Verhamme, Principal at

LimnoTech and President of Freeboard Technology, the Ohio-based company responsible for maintaining portions of the network and hundreds of new sensors deployed in the region. “Because of its cost structure, this first of its kind LoRaWAN network in the region supports research and monitoring that have been limited by the high cost of cellular communication plans and lack of cellular coverage. With LoRaWAN, we’re getting regular connections to areas where cellular coverage isn’t available, including to our buoys 17 miles from shore.”

“LimnoTech is a great example of an innovative organization using LoRaWAN technology to solve some of the more critical environmental and sustainability issues we face today,” said Bruce Chatterley, CEO of Senet. “We share in the excitement of LimnoTech and the Cleveland Water Alliance and applaud their approach of operating an open network for water utilities, university researchers, and others who can benefit from the data sharing opportunities across the Lake Erie region.”

Organizations interested in learning more about the project and how to expand the number of sensors deployed across the region are encouraged to reach out to the Cleveland Water Alliance directly at info@clewa.org.

For more information on Senet’s RAN Provider Services or other LoRaWAN managed network services for highly scalable IoT solution deployments, please contact info@senetco.com or +1 877-807-5755.

LoRaWAN® is a mark used under license from the LoRa Alliance®.

About Senet, Inc.

Senet develops cloud-based software and services used by Network Operators, Application Developers, and System Integrators for the on-demand deployment of Internet of Things (IoT) networks. In addition to industrial and commercial applications, Senet has designed smart meter networks for many municipal water utility districts across the United States, representing millions of households. With a multi-year head start over competing Low Power Wide Area Network technologies, Senet offers services in over one hundred and eighty countries and owns and operates one of the largest publicly available LoRaWAN® networks in the United States. Our disruptive go-to-market models and critical technical advantages have helped us become a leading connectivity provider with recognized expertise in building and operating global IoT networks. For additional information, visit www.senetco.com.

About LimnoTech

[LimnoTech](http://www.limnotech.com) is an environmental science and engineering firm providing water-related services to clients. Founded in 1975, LimnoTech is an employee-owned company headquartered in Ann Arbor, Michigan, with a new subsidiary, [Freeboard Technology](http://www.freeboardtechnology.com), located in Cleveland, Ohio. Its projects have addressed almost every major freshwater issue including watershed assessment



and management, climate resiliency, impacts of water withdrawals, wastewater discharges, agricultural runoff, and ecosystem restoration.

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