FORT MYERS BEACH
FMB
ESTERO ISLAND

BCI
TECHNOLOGIES

LxPRO

Deployment Retrospective

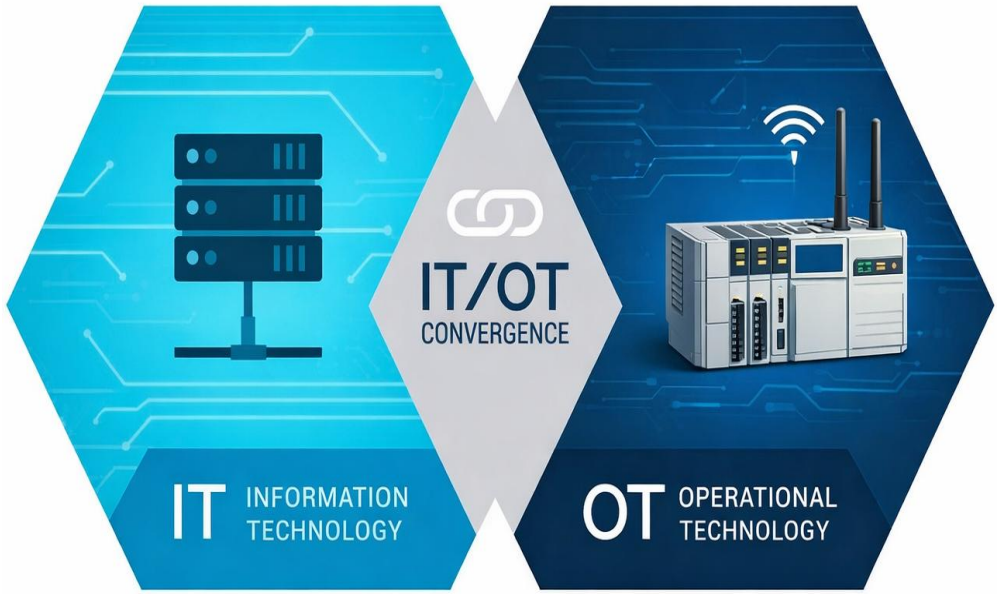


- Industrial-Strength Communications & Automation Since 1990

- BCI Technologies is a Florida-based industrial communications and automation solutions provider serving municipal water, wastewater, and critical infrastructure utilities.

- With in-house engineering, UL508A panel manufacturing, and deep field experience, BCI bridges Operations Technology (OT) and Information Technology (IT)

- We delivering secure, scalable networks that keep utilities connected, monitored, and in control.



About BCI Technologies

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Industrial Automation

- SCADA system design & integration
- Complex PLC control systems
- Instrumentation & controls (I&C)

Industrial Communications

- Radio & wireless telemetry
- Networked monitoring systems
- Mission-critical infrastructure communications

Systems & Fabrication

- UL508A control panel design & build
- Retrofit and brownfield integration
- Long-term operational support





Capabilities at a Glance

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Michael Taylor
Business Development Manager
Mr. Taylor has more than 30 years of experience in RF communications and SCADA projects. Extensive background in industrial and municipal project management and programming. Instrumental liaison for large clients and long-term business relationships.

Phillip Yancey
Sales Support Manager
Mr. Yancey brings more than 16 years of experience supporting control network design and secure OT/IT connectivity. Specializes in OT routing, secure internet front-end architectures, and integration. Serves as a trusted technical and commercial liaison, deploying reliable, scalable, and secure systems that support long-term operational needs.

John Blackburn
Senior Controls Engineer
Mr. Blackburn is a Senior Engineer with over 20 years of experience in SCADA, HMI, PLC programming, and industrial controls for water, wastewater, and power utilities. He leads complex system integrations, large-scale lift station conversions, and advanced troubleshooting efforts that reduce downtime, improve reliability, and support long-term operational performance.

Our Team

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Prior to LxPRO deployment, FMB operated with limited distribution Pumping system visibility.

- No telemetry or system visibility
- Infrastructure previously managed by Lee County Utilities
- FMB had no ownership or insight into operations
- Manual checks performed once per day
- Emergency-only response model (no proactive monitoring)
- Average response time: ~1 hour drive one-way to site



Background & Initial State

Limited visibility created significant operational and compliance challenges:

Frequent emergency callouts:

- Occurring multiple times per week
- Often during nights and weekends

Dispatch costs:

- ~$250 per trip (4-hour minimum labor)
- Trips often required just to gather basic system data

Operational impacts:

- Low pressure and chlorine uncertainty
- Reactive troubleshooting with no system insight

Regulatory risk:

- Difficulty responding to DEP inquiries
- No ability to verify chlorine levels or system performance







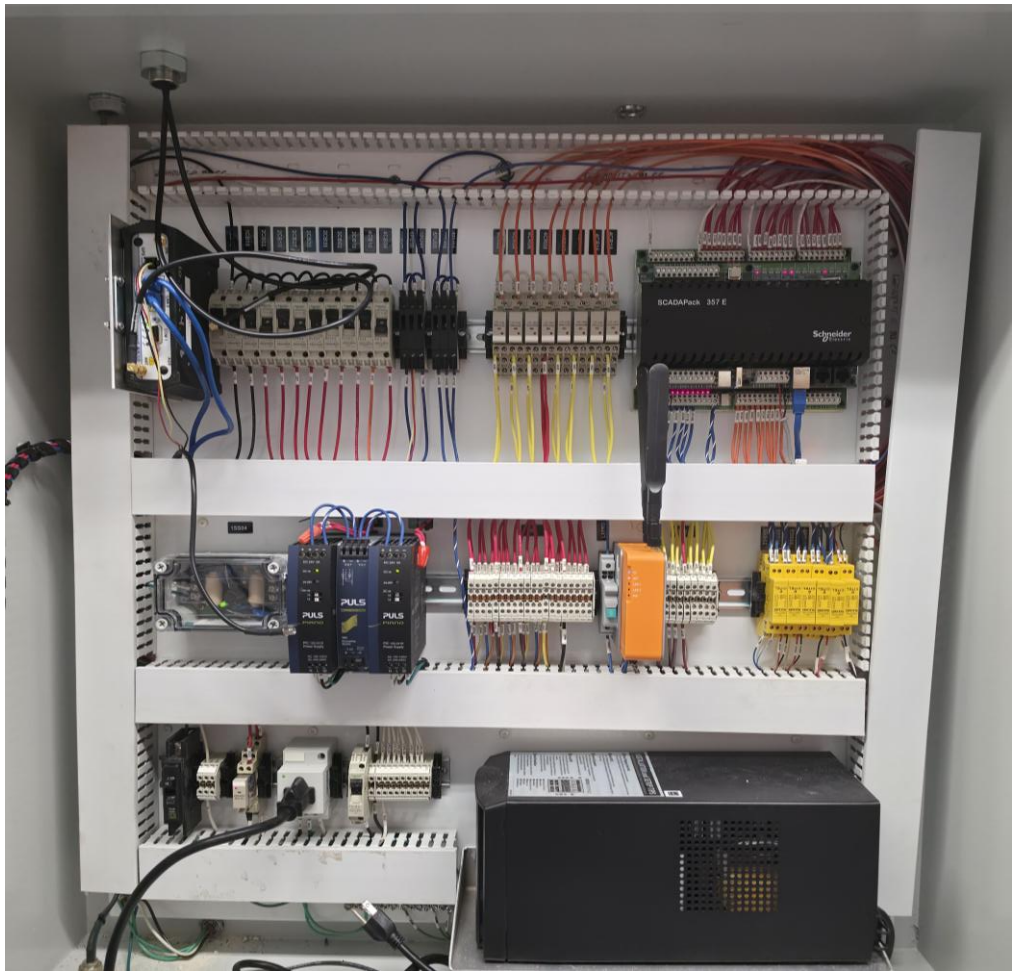
Problem Observed

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Actions Taken

BCI deployed a phased implementation of LxPRO across Fort Myers Beach:

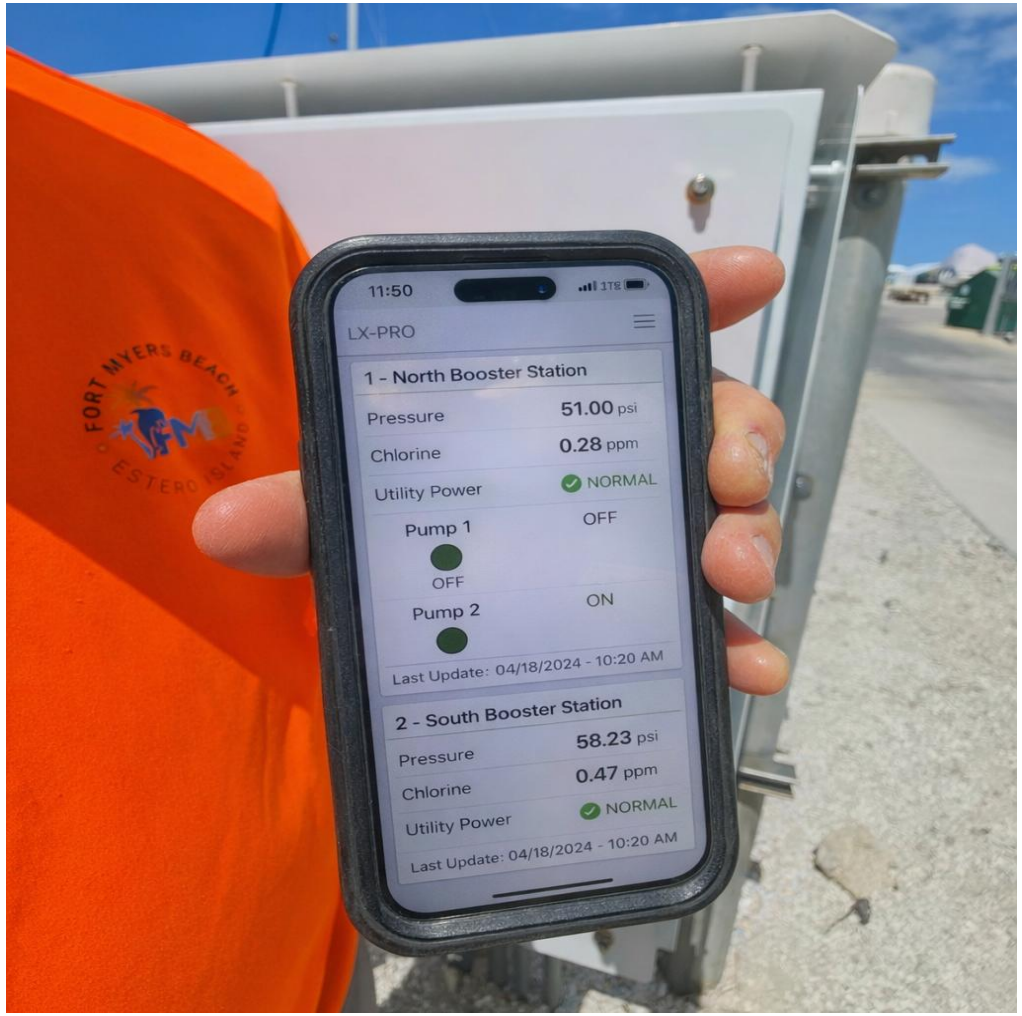
- Deployment across **4 distribution pumping stations**
- Gradual rollout to ensure stability and validation
- Full turnkey delivery:
  - Engineering
  - Installation
  - Integration
  - Commissioning
- System designed for simplicity:
  - No formal training required
  - Intuitive interface for immediate adoption
- Enabled real-time visibility into:
  - Chlorine levels
  - System pressure
  - Flow behavior



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Operational performance improved significantly after deployment:

- Emergency dispatches reduced to:
  - ~1 trip every 3 weeks
- Shift from emergency to **planned, informed visits**
- Transition from:
  - Reactive → Proactive operations
- Improved response efficiency:
  - Issues identified before escalation
  - Faster, data-driven decision making
- Avoided:
  - Unnecessary field trips
  - Emergency response scenarios



Results Achieved

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Direct Cost Reduction:

- Average dispatch cost: $250 per trip

Before LxPRO

- ~2–3 trips per week
- **$26,000 – $39,000 annually**

After LxPRO:

- ~1 trip every 3 weeks
- **$4,250 annually**

Estimated Annual Savings: $21,000 – $34,000

Labor & Efficiency Gains

- ~350–550 hours/year saved
- Reduced weekend and after-hours callouts
- Shift from emergency response → planned visits

- Additional Value
  - Reduced DEP compliance risk
  - Avoided boil water notices
  - Extended equipment life (~$2K per asset avoided)
  - Improved contractor efficiency with real-time data

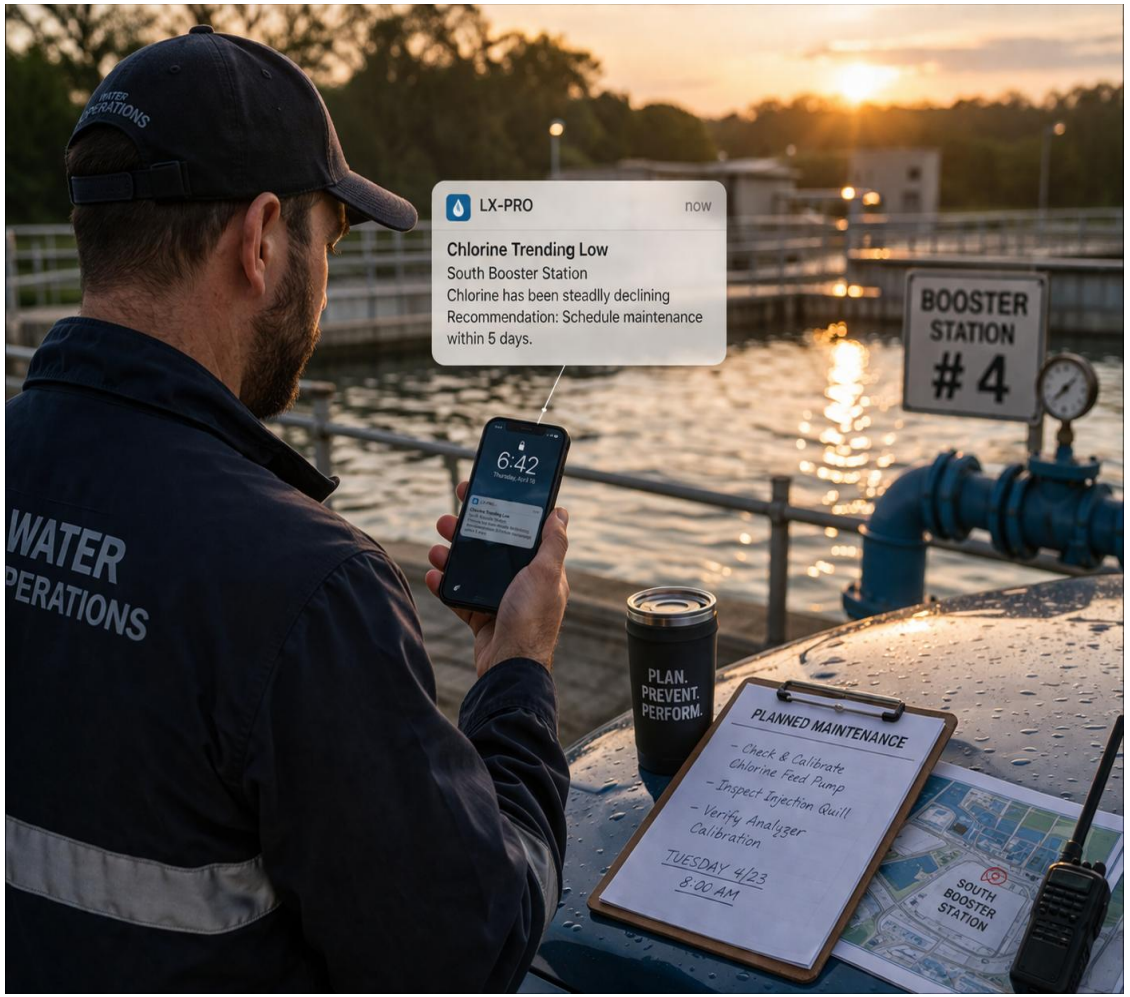


Financial Impact

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New visibility enabled proactive and predictive operations:

- Real-time monitoring of:
  - Chlorine levels
  - System pressure
- Trend-based insights:
  - Early detection of system anomalies
  - Identification of chlorination maintenance needs
- Improved coordination:
  - Better communication with contractors
  - More accurate field expectations
- Predictive capability:
  - Ability to distinguish short-term issues vs long-term trends



Operational Improvements

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Improved system visibility strengthened compliance and public confidence:

- Enhanced ability to respond to DEP inquiries
- Improved validation of:
  - Chlorine levels
  - System events (e.g., water breaks)
- Reduced risk of:
  - Boil water notices
  - Compliance violations
- Increased public trust:
  - Better communication and system awareness
  - More reliable utility operations



Regulatory & Community Impact

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Before vs After Transformation

- Before:
  - No visibility into system conditions
  - Dependent on other utilities for information
  - Emergency-driven operations
  - Frequent field dispatches
- After:
  - Full real-time system visibility
  - Independent monitoring and control
  - Proactive, data-driven operations
  - Reduced emergency response and field visits



What Changed

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Lessons learned from the deployment.

- Visibility eliminates guesswork
- Real-time data reduces emergency response
- Predictive insights prevent failures before they occur
- Operational efficiency improves rapidly after deployment
- Simple, intuitive systems drive fast adoption
- Reliable data improves compliance confidence



Key Takeaways

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"We now have eyes on the island. BCI gave us the ability to monitor and protect the health and safety of our residents, visitors, and businesses with real-time data, something we simply didn't have before." – Mark Ashton



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Town of Fort Myers Beach, FL

Scada-as-a-service (SaaS) includes:

- Secure Amazon Web Service platform
- Secure web portal with Unlimited Users
- Cellphone, Tablet, or Computer
- Encrypted Communication
- Mapped location of sites
- Pump statistics
- Runtimes and Starts
- Standard Reports
- Can be directly exported to Excel
- Report-by-exception alarming
- Text & Email Alerts for Alarms
- Cellular Communications
- Technical Support

Lx-PRO Standards	**Digital Version**	**Analog Version**	**Additional Notes**
Non-metallic weatherproof enclosure 12in x 10in x 6in	Yes	Yes	
Input Power required	120 VAC @1.5A	120 VAC @ 1.5A	
Internal Power	24 VDC @ 2.5A	24 VDC @ 2.5A	
Cellular RTU	Yes	Yes	
Digital Inputs (24 VDC)	8	4	*Additional Hardware may be required
Analog Inputs (4-20mA)	-	4	*Analog Isolation may be required
LED Status on IO points	Yes	Yes	
24 VDC Battery Backup included	Yes	Yes	
Internal Antenna	Yes	Yes	
Pre-wired 15 ft whip for power and IO	Yes	Yes	
Fully Configured and Tested prior to Installation/Delivery			
Preconfigured in Web Portal Prior to Installation/Delivery			
As-built Drawing provided			
Training provided			
1 Year Warranty on Hardware			
Additional Add On Features *Additional Charges will apply.			
Lx-PRO Options	**Digital Version**	**Analog Version**	**Additional Notes**
Digital Outputs (24 VDC)	6	4	*Additional Hardware may be required
Analog Outputs (4-20mA)	-	2	
External Panel Mounted Antenna	optional	optional	
Installation	optional	optional	
Customized Reporting			
Customized Web User Interface			

Technical Specifications

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