Remote Monitoring of Operations in Real Time, 24/7
Access the dashboard any time and pull up the digital twin of any connected asset to check on its performance, and eliminate the need for on-site personnel to record measurements and communicate them to stakeholders.

Remote Control of Discrete Equipment in Real Time, 24/7
Remotely adjust settings, like pump speed, flowrate, and fluid blend, on individual pieces of equipment without having to task on-site personnel to do so.

Centralized, Holistic View of Assets
Displaying equipment on a job site in a central, web-based interface affords users an all-encompassing degree of control over operations, enabling fine-tuning of discrete components to optimize overall performance.

Alerts & Localized Safety Mechanisms
Receive alerts in real-time when operating parameters deviate from set ranges or critical issues arise, allowing quick corrective or preventive action and avoiding costly incidents and nonproductive time. All safety mechanisms are localized and function regardless of cellular or satellite connectivity, ensuring assets are not unexpectedly orphaned if communication is interrupted or severed.

Customized Reports & Data Analytics
Receive customized reports on operating trends and other valuable data analytics via email as either Excel or PDF files. Reports can be customized according to region, sub-region, job title, and other criteria. Such reports are an indispensable means of gauging operational efficiency, identifying risk and areas for improvement, assessing discrete costs, and planning similar operational configurations.

FIGURE 2 – Job management map view of the cloud-based dashboard displays the location of operating assets.
Cloud-Based Dashboard

The nerve center of our BlueLinx automated control system is the cloud-based dashboard connected via either cellular or satellite links to field equipment sensors—so you are always connected to your operations no matter when or where they take place. The dashboard displays the operating metrics of each asset in real time, providing immediate access to readings including inlet and outlet pressures, fluid composition, water conductivity, storage level, and equipment status and performance.

1. Automated Water Transfer
   Automated Pumping System
   The TETRA automated pumping system optimizes water transfer while markedly lowering both cost and risk. A cloud-based dashboard provides immediate control of pressure and flow rate, as well as real-time monitoring of pump speed, flow rate, and water pressure. The design also includes localized safety features that function regardless of cellular or satellite connectivity.

2. Automated Water Treatment & Recycling
   Oil Recovery After Production Technology (ORAPT™) Oil Separation System
   The TETRA ORAPT™ oil separation system uses proprietary technology to separate and recover oil from the sales pipeline and ensure water quality meets discharge regulations. In some cases, the recovered oil can even offset the cost of the system.

3. Automated Sand Management
   Automated Sand Management
   TETRA automated sand management systems use proprietary cyclonic technology to separate and capture sand and solids far more efficiently and effectively than competing sand management systems. Best of all, the operation is fully automated, thus freeing the need for on-site personnel to weigh tanks, dump the sand, and perform routine tasks. The system also automatically notifies operators in the event of high sand levels, thereby helping them avoid incidents like overflows and the associated nonproductive time.

Applications

The BlueLinx automated control system provides remote, real-time control and monitoring of (1) water transfer; (2) water blending and distribution; (3) water storage; (4) water treatment and recycling; and (5) sand management.

Benefits of using BlueLinx automated control system

- Cellulite (optional satellite) connectivity
- Up to 50% in personnel savings
- Up to 30% reduction in fuel consumption
- Reduced environmental and human risk
- Customized daily reports sent electronically
- Reduced risk of failure due to function of connectivity

FIGURE 3 – TETRA Integrated Water Management Solution can help deliver the lowest cost per barrel of water through automated technologies and service integration.