

# Executive Summary

Hydrosight Systems Inc., established in 2016, is a Canadian-based technology company at the forefront of smart infrastructure solutions for sustainable water management. Leveraging a robust technical foundation, Hydrosight integrates high-precision IoT sensors, advanced AI-driven analytics, and intuitive dashboards to deliver comprehensive water management capabilities. The company's flagship product, the FlowSense platform, enables real-time monitoring of water usage, rapid anomaly detection, and predictive maintenance, ensuring that clients can proactively address inefficiencies and potential issues within their water systems.

Designed for municipalities, commercial facilities, and large-scale residential developers, Hydrosight's solutions offer a transformative approach to water conservation and regulatory compliance. By reducing water waste, detecting leaks swiftly, and providing actionable insights, the FlowSense platform empowers clients to achieve measurable operational improvements and sustainability goals. The seamless integration of cutting-edge technology and user-centric design positions Hydrosight Systems Inc. as a trusted partner for organizations seeking to optimize water management and drive long-term value.

## Value Proposition

The FlowSense platform from Hydrosight Systems Inc. delivers a compelling value proposition for organizations seeking to modernize and optimize their water management practices. By adopting this solution, clients benefit from a suite of advanced features and proven outcomes that directly address operational efficiency, sustainability, and compliance objectives.

1. **Achieve Significant Water Savings:** FlowSense has demonstrated up to 35% water savings in commercial pilot programs, enabling clients to reduce operational costs and support sustainability initiatives.
2. **Accelerate Leak Detection and Response:** The platform reduces leak detection times from several days to less than 30 minutes, minimizing water loss, property damage, and associated remediation expenses.
3. **Benefit from Long-Life Sensor Technology:** Hydrosight's high-precision sensors are engineered for durability, offering lifespans of up to 10 years, which reduces maintenance overhead and ensures reliable long-term performance.
4. **Streamline Compliance and Reporting:** Built-in reporting tools facilitate seamless support for environmental certifications and carbon offset estimations, simplifying regulatory compliance and enhancing ESG reporting capabilities.

5. **Leverage Multidisciplinary Expertise:** Clients gain access to a team of engineers, environmental experts, and data scientists who provide tailored guidance and ensure optimal deployment and ongoing system performance.
6. **Enjoy Ongoing Optimization and Support:** Hydrosight's strong post-implementation success model ensures continuous system optimization, proactive issue resolution, and responsive support, maximizing the value delivered over the solution's lifecycle.

## Why Hydrosight Systems Inc.

Hydrosight Systems Inc. stands out as a premier partner for organizations seeking to advance their water management capabilities through innovative technology and measurable results. The company's deep domain expertise, combined with a proven track record of delivering tailored deployments, ensures that each client receives a solution precisely aligned with their operational needs and infrastructure. Hydrosight's ability to achieve up to 35% water savings and rapid leak detection in pilot programs underscores its commitment to delivering tangible, quantifiable impact.

Furthermore, Hydrosight Systems Inc. distinguishes itself through seamless integration with existing systems and a robust client support framework. The company's flexible implementation models and ongoing optimization services are designed to maximize client benefits, ensuring that each deployment not only meets but exceeds expectations. This client-centric approach, coupled with a focus on continuous improvement and measurable outcomes, positions Hydrosight as a trusted and reliable provider in the smart water management sector.

## 1. Scope of Work & Project Methodology

### 1.1 Scope of Work

#### 1. Requirements Analysis and System Design

- Conduct comprehensive requirements analysis through stakeholder consultations and site inspections.
- Assess existing metering devices, data transmission capabilities, and mapping resources such as GIS or CAD floor plans.
- Define performance benchmarks, including acceptable water loss rates and incident response time targets.
- Develop detailed system architecture and sensor placement strategies, specifying supported communication protocols and integration architecture.

#### 2. Solution Configuration and Customization

- Configure and calibrate ultrasonic flow meters to site-specific parameters.
- Customize the FlowSense dashboard for user-defined reporting, alerting, and analytics.
- Implement dynamic thresholds, trigger-based alerts, escalation protocols, and visualizations for ESG indicators, leakage trends, and compliance tracking.
- Integrate FlowSense with third-party platforms such as BMS, SCADA, CRM, and billing systems.

### 3. Deployment and Integration

- Schedule and coordinate sensor installations during phased or low-disruption windows.
- Ensure connectivity through cellular backup or dual-mode gateways for sites lacking reliable Wi-Fi.
- Perform unit, integration, and system-level testing to validate end-to-end functionality.
- Provide system architecture blueprints, troubleshooting guides, and standard operating procedures.

### 4. Training, Go-Live, and Post-Deployment Support

- Deliver role-based training for operations teams, sustainability officers, and IT administrators.
- Activate live dashboards, alert systems, and provide immediate go-live assistance with Tier-1 technical support.
- Conduct quarterly reviews to evaluate sensor performance, data integrity, and system adoption.
- Refine AI-driven detection thresholds and retrain machine learning models as needed, with ongoing sustainability dashboard upgrades and ESG compliance reporting.

## 1.2 Project Methodology

To ensure the successful delivery of the FlowSense solution, Hydrosight Systems Inc. presents two robust project methodologies tailored to client governance, regulatory requirements, and stakeholder environments.

### 1. Agile-Driven Iterative Delivery

- Biweekly Sprints: The project is divided into two-week development cycles, allowing for rapid progress and frequent reassessment of priorities.
- Early Prototypes: Initial prototypes are delivered early in the process, enabling stakeholders to provide feedback and validate functionality.
- Continuous Validation: Ongoing validation with client stakeholders ensures alignment with evolving requirements and expectations.

- **Weekly Stand-Ups and Sprint Demos:** Regular meetings facilitate transparent communication, progress tracking, and demonstration of completed features.
- **Collaborative Tools:** Utilization of Jira and Confluence for task management, documentation, and knowledge sharing.
- **Progressive Rollout:** Features are incrementally deployed, allowing for phased adoption and risk mitigation.

## 2. Phased Waterfall Execution

- **Sequential Phases:** The project follows a structured sequence—requirements gathering, configuration, validation, deployment, training, and support—ensuring thoroughness at each stage.
- **Formal Documentation:** Comprehensive documentation is produced at each phase, supporting traceability and regulatory compliance.
- **Stage-Wise Approvals:** Each phase concludes with formal client approval, providing clear checkpoints and accountability.
- **Structured Configuration and Validation:** System configuration and validation are performed methodically to ensure all requirements are met before deployment.
- **Training and Support:** Dedicated training sessions and post-deployment support are provided to ensure smooth transition and user adoption.

A dedicated project manager, technical engineer, and post-deployment customer success representative are assigned to oversee the project, ensuring expert guidance and consistent communication throughout the engagement.

## 1.3 Communication Plan and Client Interface

Effective project execution for the FlowSense solution is supported by a clearly defined client interface and communication plan. The following points of contact and communication cadence ensure seamless collaboration and transparency throughout the project lifecycle.

### 1. Points of Contact

- **Project Manager:** Responsible for overall coordination, serving as the primary client liaison, and tracking deliverables and timelines.
- **Technical Lead:** Oversees technical architecture, sensor deployment, and system integration to ensure technical excellence.
- **Data Analyst:** Configures analytics, tracks key performance indicators, and designs dashboards tailored to client needs.
- **QA Manager:** Manages testing workflows, ensures adherence to quality standards, and facilitates system validation.
- **Client Stakeholders:** Participate in decision-making, logistics coordination, and provide necessary data and feedback.

### 2. Communication Plan

- Kickoff Meeting: Conducted at project initiation to align objectives, roles, and expectations (one-time event).
- Weekly Meetings: Regular status calls to review progress, address issues, and update action items (weekly).
- Milestone Reviews: Formal reviews at key project milestones to assess deliverables and secure approvals (as milestones are reached).
- Ad Hoc Meetings: Scheduled as needed to address urgent matters or specific topics requiring immediate attention.

Communication channels include email summaries, shared documents, and live virtual meetings via Microsoft Teams or Zoom, with on-demand support available to address emerging needs.

## 1.4 Project Assumptions

The following assumptions are fundamental to the successful implementation of the FlowSense solution by Hydrosight Systems Inc.:

### 1. Client Collaboration and Support

- The client will provide active participation and timely support throughout the project lifecycle.
- Internal stakeholders will be available for consultations, feedback, and decision-making as required.

### 2. System Access and Integration

- Hydrosight will be granted access to relevant facilities, system data, and internal teams, including operations and IT.
- The client's technology environment will support integration with FlowSense via APIs, databases, or third-party systems.

### 3. Timely Inputs and Approvals

- Design decisions, configuration approvals, and other project inputs will be provided within agreed timelines to avoid delays.
- Project schedules are established with the expectation of no major external delays, with adjustments possible if scope changes or unforeseen dependencies arise.

### 4. Infrastructure and Licensing

- The client will provide necessary IT infrastructure for cloud-based or on-premises deployment.
- Any required external software licenses or platform dependencies will be managed by the client.

## 5. Data Privacy and Security

- All parties will adhere strictly to data privacy and security standards, including the anonymization of sensitive data.

## 6. Training and Adoption

- Key client personnel will participate in scheduled training sessions and pilot exercises to ensure effective system adoption.

## 7. Ongoing Review

- Working assumptions will be reviewed regularly to ensure continued alignment with project objectives and requirements.

# 1.5 Project Risks & Mitigation

Hydrosight Systems Inc. recognizes that the successful deployment of the FlowSense solution requires proactive identification and management of potential project risks. The company is committed to maintaining a robust risk mitigation framework throughout the engagement.

## 1. Scope Creep

- Clear scope definition and structured change management processes are implemented to prevent unplanned features or changes from impacting the project timeline and budget.

## 2. Client Resource Availability

- Advance scheduling, backup support arrangements, and continuous monitoring of dependencies are employed to mitigate delays caused by limited client resource availability.

## 3. Technical Integration

- Comprehensive pre-deployment assessments and the use of middleware solutions address challenges associated with integrating FlowSense into legacy or siloed systems.

## 4. Data Security & Privacy

- Adherence to regulatory compliance standards and the anonymization of sensitive datasets ensure that data exposure risks are minimized.

## 5. User Adoption

- Comprehensive training programs, ongoing support, and iterative dashboard refinement are provided to drive high user adoption and maximize system value.

## 6. Infrastructure Limitations

- Proactive assessment of network bandwidth and server capacity, along with tailored recommendations, address potential infrastructure constraints.

Continuous monitoring and timely updates to mitigation strategies ensure that emerging challenges are addressed before they can impact project delivery, reinforcing Hydrosight's commitment to client success.