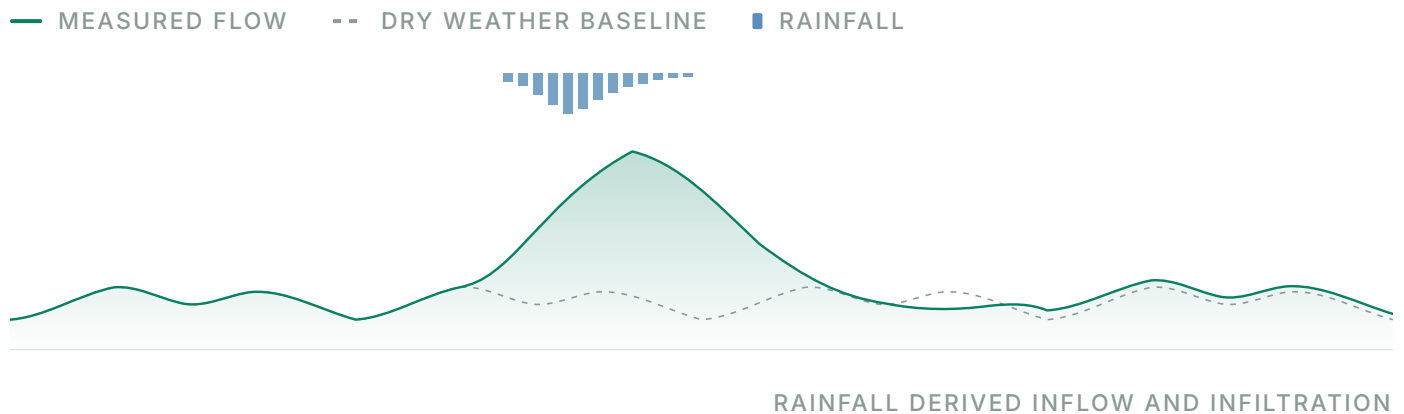


Your loggers give you numbers. FlowSense gives you answers.

FlowSense is the all-in-one platform for monitoring your sewer network. It gives your team the operations picture to act on this morning, the analysis behind it, and the engineering evidence that justifies the capital spend. All of it sits in one continuous chain, and nobody re-keys the data between stages.

[Book a live demo →](#)

[See what it does](#)



4

Layers, from the instrument in the pipe to the board paper

15

Modelling modules, project and scenario based

6

Selectable methods behind the infiltration heat map

60s

Refresh on the operations picture, with live updates in between

The vendor portal stops exactly where the engineering starts.

Most monitoring programmes end at a web page full of readings. Everything that turns those readings into a decision happens somewhere else, by hand, and is rebuilt each time somebody asks.

The data lands in a spreadsheet

Every infiltration study starts with an export, a pivot table and a week of somebody's time. The working is in a file on one person's laptop, and the next study starts again from zero.

The numbers cannot be defended

An engineer asks how a volume was totalled, or which storms a model was fitted against. Often the honest answer is that nobody recorded it. That is fatal in a business case.

You find out afterwards

A blocked reach, a flat battery or a fortnight of missing record is usually found late. The first sign is an overflow, a complaint or a report that has already gone out wrong.

One chain, four stages, no re-keying.

Each stage reads the stage before it. The volume in the board paper traces straight back to the reading that produced it. You can follow it the whole way without leaving the platform.

STAGE 01 Monitor Readings arrive automatically, and EDS runs that chain for you. One screen shows the whole fleet live, with each site judged against its own usual. Alarms, communications, telemetry health, battery condition and gaps surface before you go looking.	STAGE 02 Analyse The analyst's workbench, with no export step in the middle. It covers infiltration and inflow, dry weather flow, depth versus velocity, catchment balance, trade waste and data quality, on the record as it stands.
STAGE 03 Engineer Fifteen modules share a GIS canvas: calibration and validation, a dynamic wave model of the whole network, scattergraphs, pump station performance, overflow forecasting and capital appraisal. A consultancy engagement, built into the product.	STAGE 04 Deliver Seven report templates carry your own branding and export as PDF or CSV. Scheduled delivery can also send them straight into the systems your organisation already runs on.

Vendor independent by design. Instruments from several manufacturers sit side by side, and their readings land in one record, with one set of units and one timeline. EDS onboards new site types without a platform change. You are not locked in to what you bought last time.

What your team gets on day one.

Everything below is part of the one subscription, with no editions, no add on modules and no per user fees. It all runs in any modern browser on desktop, tablet or mobile, and there is nothing to install. A trade waste account adds a room of its own. It holds the discharger register, approvals, probe monitoring, breach alerts, statements and charges worked to the NSW guidelines.



Network Overview

The live operations picture across your whole network, refreshed every 60 seconds with live updates in between.

- What needs attention first, beside a map that rings each site you point at
- Every site judged against its own usual pattern, in words
- Alarms still breaching shown apart from those waiting to be acknowledged, plus telemetry coverage, battery health and rainfall
- What changed since you last looked, your watched sites, and any site found by name in a keystroke



Site detail

Whatever a site measures, from flow and level to pump runs, pH, conductivity or gas, goes on one interactive chart with several axes. You can zoom, pan, pick a date preset and export each chart.

- Pumps and alarms read as runs and states, never averaged
- Depth versus velocity against the theoretical curve, where both are measured
- Per site infiltration analysis and flow balance
- Alarm history, calibration log and field notes, and a summary per channel with its coverage



Infiltration and inflow

The headline module for any sewer authority. Rainfall response separated from sanitary flow, quantified and charted.

- Peak response, response volume in kilolitres, and the percentage over dry weather flow
- Lag time, night baseline and the 24 hour diurnal profile
- The response hydrograph: measured flow against baseline and rainfall
- Baselines that tell weekdays from weekends, so weekend flow is not mistaken for inflow



Engineering workspace

Fifteen modelling modules on a shared GIS canvas, organised by project and scenario, with pipes, nodes, pump stations and catchments as layers.

- Calibration and independent validation of unit hydrograph models
- Scattergraph checks that detect silt, surcharge, backwater and meter faults
- Pump station performance from wet well level, with early warning on each pump's output and its remaining useful life
- Overflow forecasting, multi site catchment modelling and capital appraisal



Network hydraulic model

A dynamic wave model of your whole gravity network, built from your GIS and driven by the same validated telemetry as everything else.

- Design storms to AR&R 2019, with pump and gate control rules
- Per pipe friction by Manning or Colebrook-White
- A mass continuity check on every run, and a print ready run report
- Runs export to Excel, GeoJSON, CSV and EPA SWMM, so the model travels with you



Blockage Watch

Predictive early warning that reads the overnight trough, where a restriction shows up long before it shows up anywhere else.

- Eight signatures, including conveyance at matched depth where velocity is measured
- Names the mechanism: silt and grease, sudden obstruction, downstream restriction, or simply more load
- Built on dry days only, so rainfall cannot trigger a false call
- Opens a case with an assignee, and closes with a recorded outcome



Capital planning

The board paper output. Cost benefit appraisal that ranks candidate works on what they actually buy you.

- Net present value and benefit cost ratio per option
- Discounted cost per kilolitre of infiltration removed
- Licence limit compliance checked straight from telemetry
- An overflow register alongside the compliance record



Alarms and notifications

FlowSense checks threshold and no data rules, site wide or channel specific, automatically every minute. A pump condition finding raises an alarm of its own.

- Edge triggered, so you are told when the state changes, not on every cycle
- A dead logger frozen on a breaching value cannot hold an alarm open
- Per rule recipient lists and cooldown periods
- Delivered by email and SMS, acknowledged individually or in bulk



Your team, self managed

Account owners run their own users without raising a ticket with us, and decide exactly what each person sees.

- Create users, reset passwords and suspend accounts
- Named sub teams that mirror your own org structure
- Per user site, channel and page access
- Every sign-in, export and admin action kept on an audit trail

The infiltration heat map, painted on the real network.

Straight line interpolation between gauges spreads severity across roads, parks and catchment boundaries that water never crosses. FlowSense paints severity onto the actual gravity sewer network instead. It follows catchments and flow direction, so each reach is coloured by what genuinely drains to the meter that measured it.

The map shows how far to trust each estimate. A kriging engine adds a confidence overlay, from 0 to 1, across the whole surface. Where flows in upstream pipes are inferred from the downstream meter, FlowSense labels them a calibrated estimate, never a measurement.

It exports as GeoJSON, CSV, JPG and a formatted A4 report. As part of setup, we bring in your own GIS network data.

01 Network constrained attribution DEFAULT

Combines the observed severity at each gauge and spreads it along the pipes that drain to it.

02 Rainfall response events

Detects each rain event in the window and scores every gauge storm by storm.

03 Hydraulic capacity scoring

Allocates measured flow up the network and reads it against pipe capacity.

04 Depth and velocity condition

Reads the hydraulic telemetry directly, with no model in between.

05 Upstream and downstream mass balance

Pairs meters along the network and subtracts one from the other to isolate the gain.

06 Unit hydrograph classification

Calibrates a three component model per catchment and maps the fitted response.

Numbers you can put your name to.

Engineers buy from people who show their working. Every calculated figure in FlowSense carries a note explaining how it was reached. The platform is built to refuse a guess rather than dress one up.

INTEGRITY

Real field timestamps, always

A reading keeps the time the instrument recorded it, never the time the platform collected it. A record with no trustworthy timestamp is skipped rather than guessed at. A partial batch never lands.

METHOD

Volumes totalled the way you total them

Daily volumes are the average flow for each local day multiplied by 86,400 seconds. They are summed over the period, with partial days at each edge prorated. It matches the spreadsheet your own team already keeps.

STANDARDS

Built to the published standards

FlowSense is built to the CIWEM Urban Drainage Group Code of Practice, WEF MOP FD-6, QARTOD, WSA 02, AS/NZS 3500.3, AR&R 2019, the NSW Liquid Trade Waste Guidelines and the EPA SWMM manuals. The methods, the acceptance bands and the thresholds come from the standards themselves. The test suite fails if the software stops agreeing with them.

VALIDATION

Synthetic readings rejected on arrival

A reading stamped "as of now" looks like healthy data and silently masks an outage. FlowSense refuses them at the door, so a quiet site reads as quiet.

VERIFICATION

Every storm scored separately

A score over the whole series can look respectable while the model misses every peak, because dry stretches dominate it. FlowSense scores each storm on its own against the acceptance bands consulting practice uses. Three assessable storms are the minimum for a verified result.

HONESTY

A thin window says it was thin

Every run carries a data adequacy report: storm count, record coverage and the dry days behind the baseline. A fortnight too wet to judge is reported as "not enough dry weather", not as "normal".

RECOVERY

Gaps get repaired, not inherited

When a site goes quiet, FlowSense finds the missing window and repairs it, so an outage does not leave a permanent hole in the record. These gaps never fill themselves in, and nobody notices them until a report is already wrong.

DELIVER

Seven reports, your branding, one click.

Choose your sites, your date range and an optional comparison period, such as this quarter against last. Include or exclude any section, so one template serves several audiences. Each report is charted in the preview and the PDF. Export it as PDF or CSV, or schedule it daily, weekly or monthly by email.

REPORT	WRITTEN FOR	WHAT IT COVERS
Flow Totals	Operations	Hourly, half day, daily, weekly and monthly volumes
Executive Summary	Management	Performance, cost of infiltration and inflow, data availability, risk indicators, alarms, telemetry health, rainfall and recommendations
Flow Analysis (RDII and I/I)	Engineering and planning	Infiltration and inflow levels and their cost, storm by storm rainfall response, wet weather uplift and dry weather flow per catchment

REPORT	WRITTEN FOR	WHAT IT COVERS
Engineering Diagnostic	Engineering	Rainfall response, dry weather flow, anomalies, infiltration, hydraulic performance, flow balance and calibration history
Site Investigation	Field crews	A field ready pack: notes, calibrations, alarms, telemetry history and nearby assets
Network Performance	Asset planners	Catchment performance, wet weather response, performance comparisons, high risk assets, asset risk rankings and the asset register audit
Pump Station Performance	Operations, with PSM	Arrivals, pumped volume, pump delivery against rating, pump condition and remaining useful life, cycling, overflows and data quality

Part of your data infrastructure, not another login.

It runs in both directions. Your SCADA can feed FlowSense, and FlowSense feeds your systems on a schedule. Plenty of platforms will export to a control room. Far fewer will take a control room's data in.

Your own SCADA, straight in

Pump stations, treatment inlets and years of historian data belong on the same timeline as your loggers. There are five ways in, and a push or a file drop needs nothing opened on your side.

HTTP PUSH

MQTT

API

SFTP

FTPS

IGNITION

VTSCADA

GEO SCADA

AVEVA

CITECT

WONDERWARE

WINCC

- You send: your SCADA posts to us, or your historian uploads CSVs to a folder we host
- We collect: we subscribe to your broker, poll your API with a key or OAuth2 client credentials, or fetch historian CSVs from your server
- A push or a file drop only goes out from your network, so there is no inbound firewall rule to argue about
- A tag nobody has mapped waits for review with a sample value, and

Your data, into your systems

FlowSense delivers your data on a schedule, as files or as messages, with the channels you choose. Your own tools can also read it through an API, and hear about alarms and blockages by webhook.

SFTP

FTPS

MQTT

CSV

JSON

READ API

WEBHOOKS

- Test the connection and preview the payload before you commit
- Manual runs and a full run history alongside the schedule
- FlowSense marks data as delivered only after a fully successful send, so a failed delivery never loses data quietly
- Credentials encrypted at rest

never becomes a channel by itself

- Ingest credentials are write only, so a token in a control system script cannot read your data back
- Once mapped it is an ordinary channel: same charts, reports, heat maps, models and alarms

History that never had a logger

Records that arrive as a file rather than from an instrument belong in the same place as everything else.

- Create a site by hand, place it on the map and give it its channels
- Upload a 2019 flow survey, a temporary gauge or a meter long since out of the ground
- Review the import on a chart, old against new, before it commits, and undo it within 30 days
- From that point a heat map, a model or a volume total reads it exactly as it reads a live site

NEXT STEP

See it running on a real network.

The fastest way to judge FlowSense is to watch somebody drive it. Book a live walkthrough and we will take you from the operations picture through to a costed capital option in about 45 minutes.

[Book a live demo →](#)

[Call 1300 721 683](#)

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READ MORE

Take the detail away with you.

The platform overview is the illustrated tour, module by module, and the best place to start. The manual is the full reference, screen by screen. Both are free, and there is no form to fill in.

