TREATMENT AND STORAGE · PREPARED FOR WATER UTILITIES AND MUNICIPALITIES

# Levels, quality and pumps, live.

How level, quality and pump sensors show the state of bulk supply, so storage and treatment never run blind.



## From the dam to the reservoir

ILLUSTRATIVE SCENE




### A SCENARIO A — Supply, continuously

**Levels**
Dams, reservoirs and towers report their level.

**Quality**
Turbidity, chlorine and pH are read at treatment.

**Pumps**
Status, power and run hours per pump.

**Alarm levels are set with your operations and quality teams.**

### B SCENARIO B — When supply is at risk

**Alert**
Low level, poor quality or a pump trip raises the alarm.

**Dispatch**
The nearest technician is sent.

**Record**
The event and fix are logged.

**Remote sites use Kinéis satellite IoT** where there is no signal.

## What the operations team sees

in the control room or on a tablet

01
**Storage**
Every reservoir and tower.

02
**Quality**
Readings at each works.

03
**Pumps**
Running, tripped or due.

04
**Power**
Mains and backup status.

DISTRIBUTION NETWORK · PREPARED FOR WATER UTILITIES AND MUNICIPALITIES

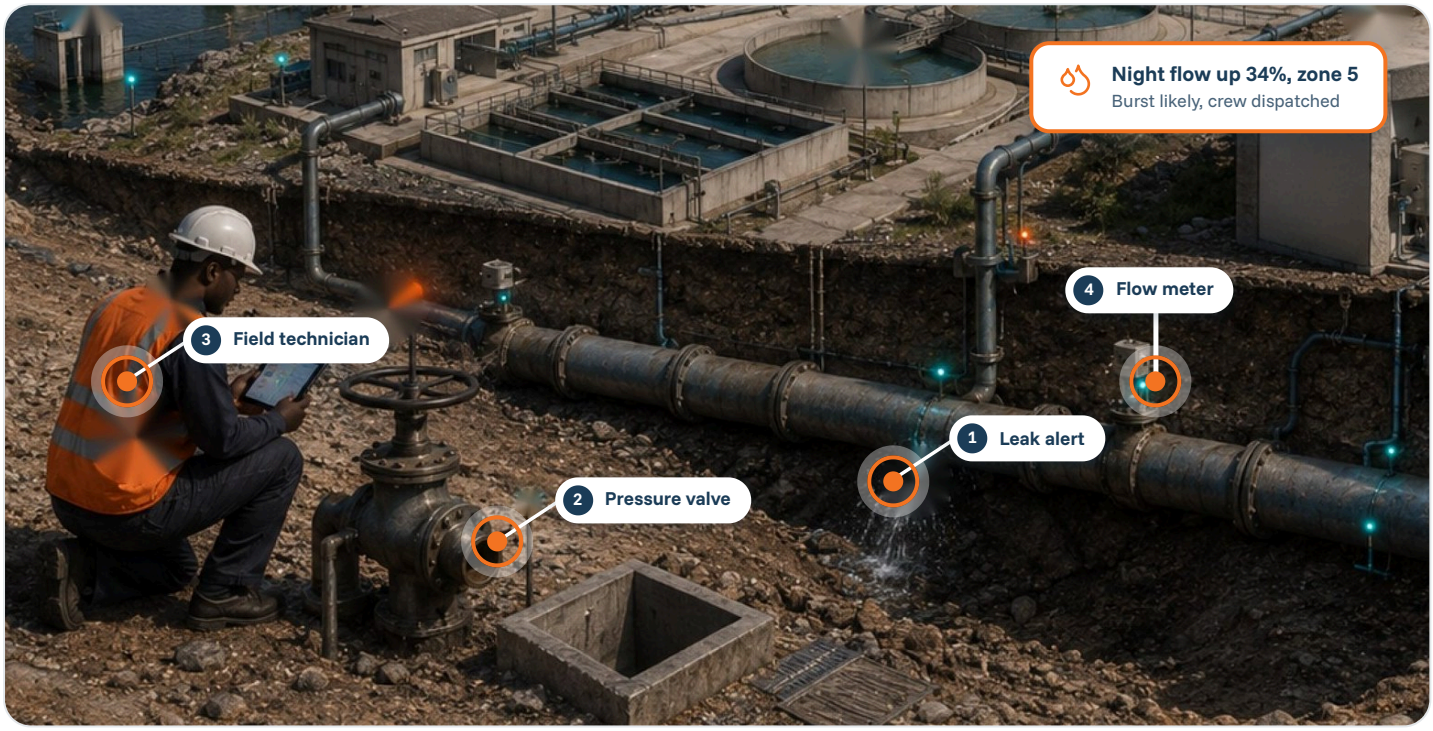
# Find the leak before the street floods.

How flow, pressure and smart meters show where water is lost, so crews fix bursts faster and cut non-revenue water.



## Along the distribution network

ILLUSTRATIVE SCENE




A

SCENARIO A

### Every zone balanced

**Measure**
Flow and pressure are read per zone.

**Balance**
Supply is compared with metered use.

**Report**
Non-revenue water is reported per zone.

**Pressure targets are set with your network engineers.**

B

SCENARIO B

### When water goes missing

**Detect**
Night flow or a pressure drop points to a burst.

**Locate**
The zone and nearest crew show on the map.

**Repair**
A work order is raised and tracked to close.

**Smart meter data is personal information,** handled in line with POPIA.

## What the network team sees

in the control room or on a crew tablet

01
**Zone map**
Pressure and flow by zone.

02
**Losses**
Non-revenue water per zone.

03
**Repairs**
Open and closed jobs.

04
**Meters**
Consumption and tamper.

CONTROL ROOM · PREPARED FOR WATER UTILITIES AND MUNICIPALITIES

# One control room for the whole network.

How the control room sees alarms, crews and site security together, and reports to council with one record.



## In the control room

ILLUSTRATIVE SCENE




A SCENARIO A

### Daily operations

**Monitor**
All sites and alarms on one map.

**Coordinate**
Crews talk to the control room by push-to-talk.

**Report**
Daily and monthly reports for council.

**Reporting formats are set with your management team.**

B SCENARIO B

### When a site is attacked

**Detect**
Cameras and door sensors flag intrusion.

**Verify**
The operator checks live video.

**Respond**
Security is sent and the event is logged.

**Battery backup** keeps alarms online during outages.

## One response, whichever way the alarm starts

in the network control room

01 **Locate**
Sites and crews on one map.

02 **Talk**
Push-to-talk to crews.

03 **See**
Site cameras.

04 **Respond**
The nearest crew or guard.

05 **Record**
Logged for council.

ONE PLATFORM · PREPARED FOR WATER UTILITIES AND MUNICIPALITIES

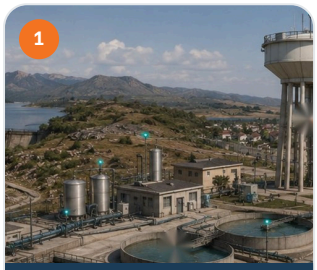
# Three solutions. One view of the network.

Each solution works on its own. All three run on Sentiv.IoT, so operations, network crews and the control room share one live picture of the network.

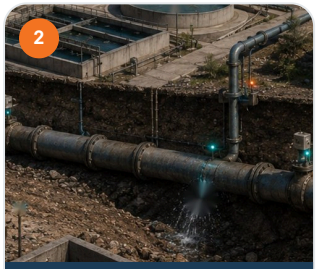


## Every feed, one screen

ILLUSTRATIVE VIEW



1 Bulk supply



2 Losses

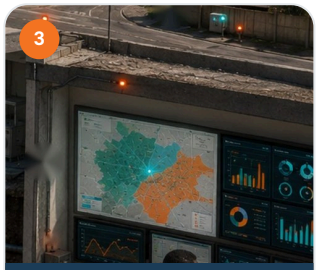
**Sentiv.IoT · Network overview** — ALL ZONES · LIVE

1 · BULK SUPPLY
**71%**
average storage level
1 low reservoir

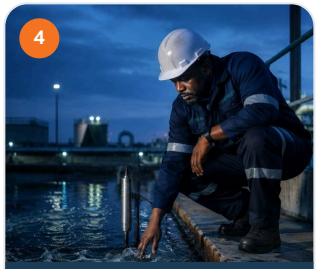
2 · LOSSES
**24%**
non-revenue water
Down 3 points

3 · CONTROL
**3**
open bursts
Crews on site

PLATFORM
**2,860**
meters reporting
Live



3 Network control



4 Field crews

## How it fits together

**Sense**
Level, flow, pressure, quality, pump and meter sensors

**Connect**
LTE, long-range IoT and Kinéis satellite IoT, with last-mile fibre, LTE, 5G or fixed wireless

**Sentiv.IoT**
Maps, alerts, dashboards and work orders for every team, locally hosted

**Record**
One timeline of readings, alarms, repairs and reports

## What one view makes possible

SOLUTIONS COMBINED

1 Supply · 2 Losses
**Water balance**
Supply and metered use compared per zone.

2 Losses · 3 Control
**Burst to repair**
Bursts dispatched and tracked to close.

1 Supply · 3 Control
**Pump stations protected**
Pump status and site security together.

1 Supply · 2 Losses
**Pressure and energy**
Pump energy matched to zone demand.

All three solutions
**Every team, the same picture**
Each team sees its own view, drawn from the same live data, so nobody works from an old report.

1 Supply · 2 Losses · 3 Control
**One record for council**
Losses, quality and repairs in one report.

## Start with one. Grow on the same platform.

1 **Losses and pressure first**
Non-revenue water is the biggest cost, and the first feed into Sentiv.IoT.

2 **Add bulk supply and control**
Reservoirs, pumps and security on the same platform.

3 **Extend to every zone**
All zones and works join the same view.