



Gisborne District Council

IPS-FIELD MAPS INTEGRATION



IPSUF Annual Conference – August 2025

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Who are we?



A snapshot of our region Te Tairāwhiti

Tō tātau rohe Our district

OUR POPULATION BY LOCATION

51,500
people

21.7%
other townships
and rural

1% national
population

3% national
land area

1.1%
Te Karaka

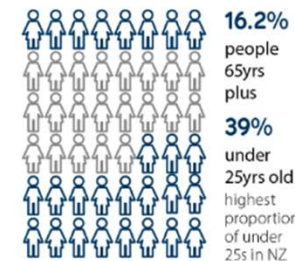
1.6%
Ruātōria

0.9%
Tokomaru
Bay

1.7%
Tolaga
Bay

72.7%
Gisborne

OUR POPULATION AGE



Source: Stats NZ - www.stats.govt.nz



Who are we?

WATER NETWORKS



Population – total

- 36,260 Gisborne
- 488 Te Karaka
- 195 Whatatutu



Percent population inside network



Percent population self-supplied



Service connections

- 14,317 Gisborne
- 167 Te Karaka
- 44 Whatatutu



Potable water produced daily

- 5.210 million m³ annually



Potable water produced annually



Reticulated pipe – (mains water)

- 14,317 Gisborne



Reticulated pipe (water laterals)

WASTEWATER NETWORKS



35,133

Population – total

- 34,637 Gisborne
- 496 Te Karaka

69%

Percent population inside network

31%

Percent population outside network

13,877

Service connections

- 13,700 Gisborne
- 177 Te Karaka

235km

Reticulated pipe – (wastewater mains)

95km

Reticulated pipe (wastewater laterals)

The Challenge: In-Field Data Capture



The Challenge: In-Field Data Capture

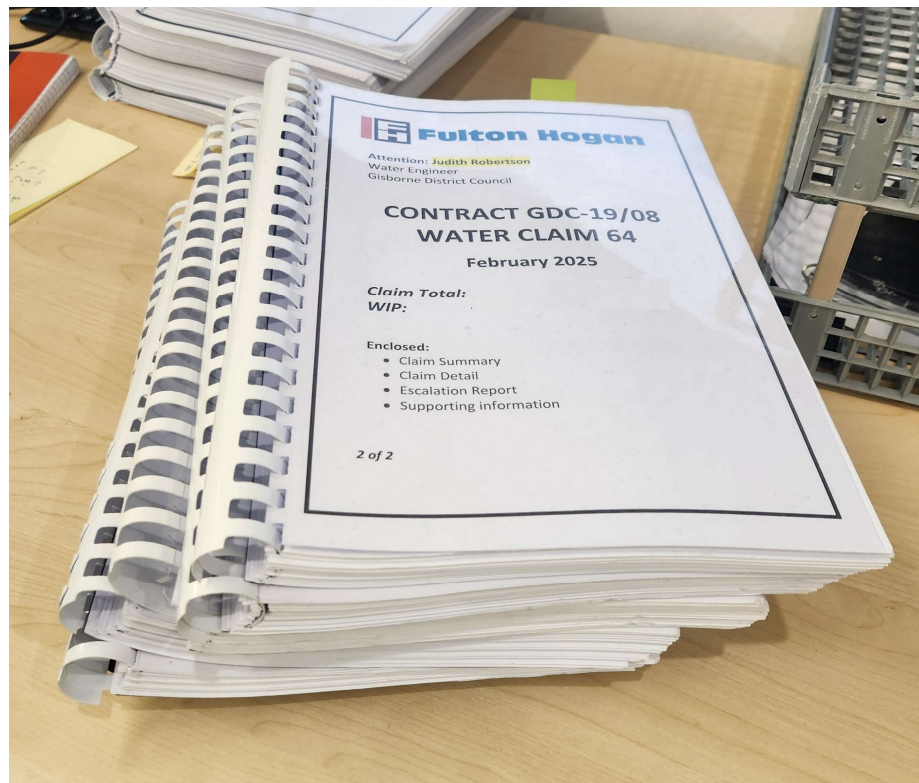
- Current Integrations
 - Requests for Service
 - Emailed to contractor
 - Work order in IPS generated
 - Work Orders
 - WorkHistoryFull layer in GIS



The Challenge: In-Field Data Capture

- Current Situation
 - Data entered manually
 - Most asset data supplied in Claim Book – yes, physical books!

The Challenge: In-Field Data Capture



The Challenge: In-Field Data Capture

- Current Situation
 - Data entered manually
 - Most asset data supplied in Claim Book – yes, physical books!
- Results in data that is:
 - Incomplete
 - Inconsistent
 - Difficult to collate and report on
- Other Challenges
 - 'Surprises' in the claim
 - Work orders incorrectly classified

EW10/02 PE25: WATER METER RENEWAL REPORT

WORK ORDER NO: 678007 TOWNSHIP: 38825

SERVICE REQUEST ID: _____

CONNECTION DETAIL
(To be completed by Contractor)

DATE: 25.7.25 TIME: 4.00

NEW METER ID NUMBER: 10906684 OLD METER ID NUMBER: _____

NEW METAL METER READING: 00000195 OLD METER READING: _____

METER SIZE: 25

METER MAKE & MODEL: Sensus

CONSUMER DETAILS

TAPPING HAND TYPE: Brass / Mechanical SERVICE PIPE DIA & TYPE: 25mm ID, mips

SERVICE PIPE DEPTH: 1.0 m SUPPLY MAIN DIAMETER: 50mm

DEPTH TO TOP OF MAIN: 0.95 m SUPPLY MAIN MATERIAL: Galv.

MAIN PRESSURE (STATIC): 10% FLOW (LITRES/SEC): _____

SCHEMATIC:

HOUSE NO: 42

31.9 m

3.0 m

STREET NAME: Salsbery Rd

METER DISTANCE FROM BOUNDARY: 3.2 m

50mm MAIN

PI OR VALVE: _____ FIRE VALVE: Salsbery 4065

DISTANCE TO HYDRANT VALVE: _____ DISTANCE TO HYDRANT VALVE: 31.8 m

(Note: Only distance to the nearest hydrant / valve is required)

GDC OFFICE RECORDING DETAIL

SERVICE LINE ID: _____ METER ID: _____ PHOTO ID: _____

ENTERED INTO HANDIN BY: _____ DATE: _____

ENTERED INTO BILLING BY: _____ DATE: _____

VERIFIED: _____ FILED: _____ SIGN OFF BY: _____

WAUGH

Objectives and Design Principles

- Solution requirements:
 - Visual / map based
 - Available offline
 - Clear & intuitive interface
 - User-friendly reporting
 - Dashboards
- Key design elements
 - Standard terminology
 - Responsive questions
 - Picklists / minimal text entry
 - Consistent format

Objectives and Design Principles

- Contractor partnership is crucial
 - Input into tasks / picklists / form flow
 - Ability to shape the Contractor QA section
 - Testing live in-field
 - Comprehensive training
 - Openness to ongoing feedback and form edits

Objectives and Design Principles

- Objectives

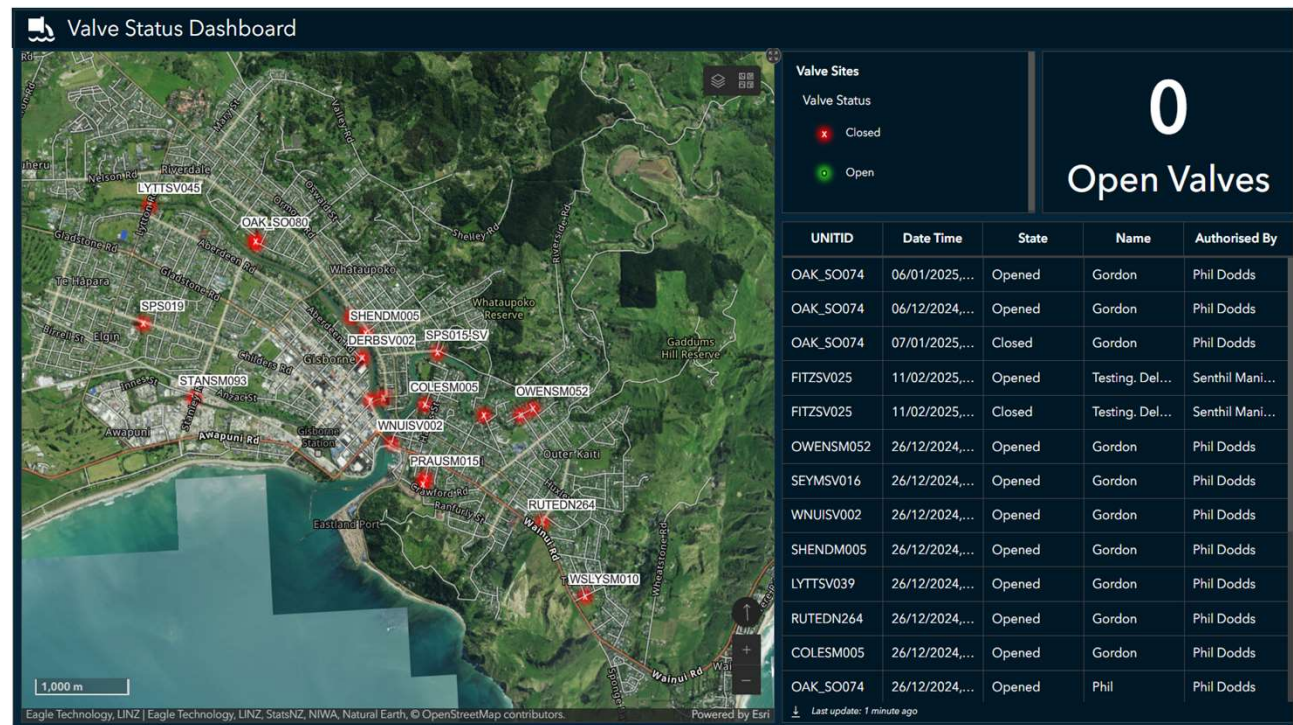
- Visibility of work order life cycle
- Better data analysis
- Streamlined compliance reporting
- Tracking identified issues for follow-up
- Simpler process to reconcile claim

- Key principles:

- All work requires a work order.
- All work orders need to be attached to an asset.
- All assets need to be in both IPS and GIS.

Chosen Solution: IPS/GIS Integration

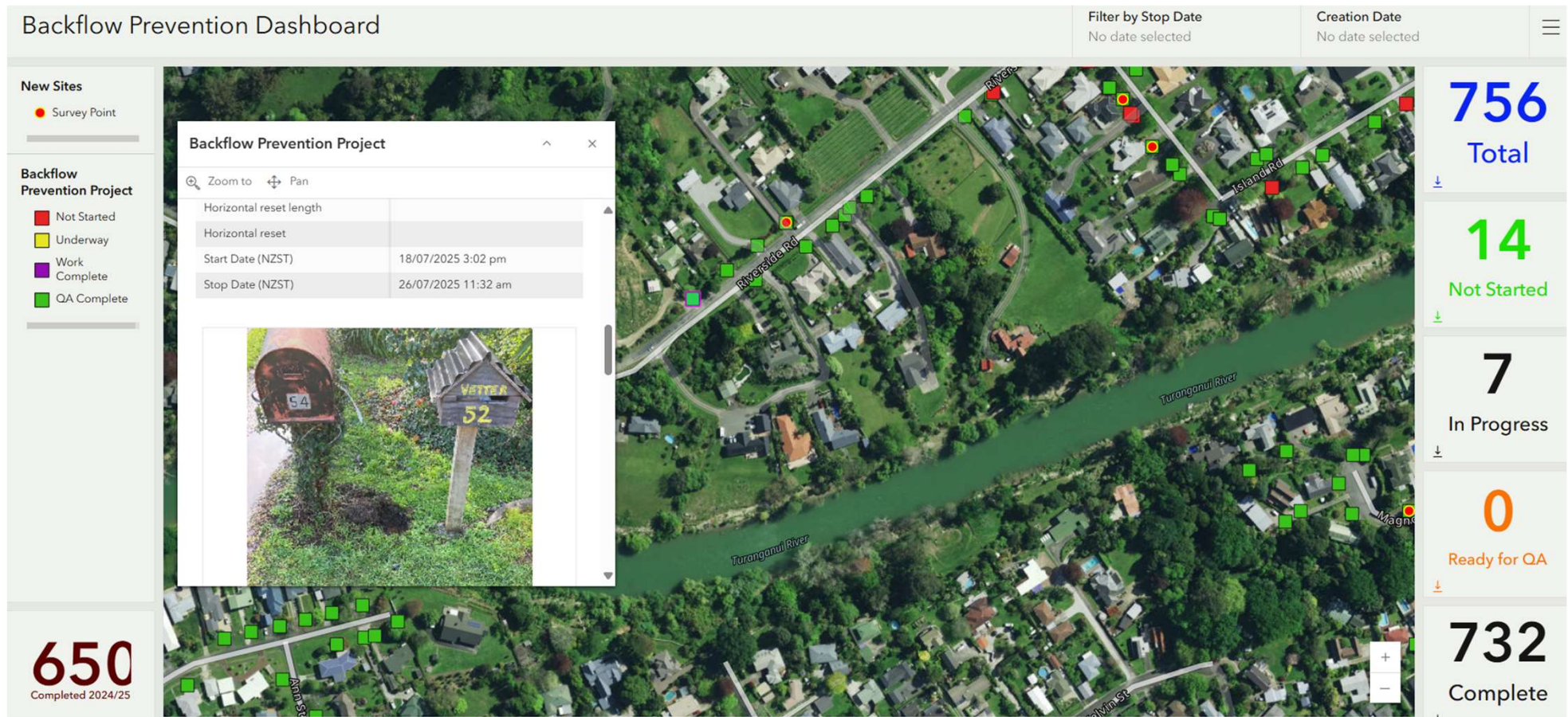
- ✓ Map Based
- ✓ Available offline
- ✓ Clear, intuitive interface
- ✓ Responsive questions
- ✓ Picklists
- ✓ Dashboards with CSV export



Chosen Solution: IPS/GIS Integration



Chosen Solution: IPS/GIS Integration



Assets

- Key challenges:
 - Asset detail mis-matches
 - Missing assets
 - Historic errors
- Business improvements:
 - Creating records for assets not previously included
 - UnitType now pushed through from IPS into GIS
 - CompKey now searchable in IPS and added to available fields for export.

Work Orders

- Work orders are classified as SCHEDULED or REACTIVE.

Work Orders

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- SCHEDULED:
 - WASTEWATER
 - Pump station inspections
 - Network maintenance
 - STORMWATER:
 - Network maintenance
 - WATER:
 - Network maintenance
 - FLOOD:
 - Pump station inspections
 - Inspections
 - Network maintenance

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- REACTIVE:
 - 3 WATERS
 - Reactive Utilities:
 - LAND RIVERS COASTAL
 - Reactive Flood

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WORK ORDER NOT ESSENTIAL

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'One form to rule them all'
 - LAND RIVERS COASTAL
 - Reactive Flood
 - WASTEWATER: Scour valve opening
 - PRE/POST STORM CHECKS
 - Wastewater / Stormwater / Land Rivers Coastal

Workflow

PASSED THROUGH FROM IPS

JOB START

WORK DONE

JOB FINISH

CONTRACTOR QUALITY ASSURANCE

PASSED BACK TO IPS

PASSED THROUGH FROM IPS

WO Number



Location



WO Comments



Photos



Alerts



Workflow

PASSED THROUGH FROM IPS

JOB START

WORK DONE

JOB FINISH

CONTRACTOR QUALITY ASSURANCE

PASSED BACK TO IPS

JOB START

Start Date/Time



Data entered by



Confirm Location



Alert Acknowledgement



Photo(s)



Workflow

PASSED THROUGH FROM IPS

JOB START

WORK DONE

JOB FINISH

CONTRACTOR QUALITY ASSURANCE

PASSED BACK TO IPS

WORK DONE

Task / Fault Found



Location



Photo(s)



Action



Comment



ACTION

- ☐ 1. No action needed / Monitor
- ☒ 2. Fixed onsite
- ☐ 3. Contractor to action
- ☐ 4. Work Order needed from GDC

Workflow

PASSED THROUGH FROM IPS

JOB START

WORK DONE

JOB FINISH

CONTRACTOR QUALITY ASSURANCE

PASSED BACK TO IPS

JOB FINISH

Stop Date/Time



Confirm Location



Photo(s)



General Comment



Workflow

PASSED THROUGH FROM IPS

JOB START

WORK DONE

JOB FINISH

CONTRACTOR QUALITY ASSURANCE

PASSED BACK TO IPS

CONTRACTOR QUALITY ASSURANCE

Schedule/Job No.



Data Completeness / Accuracy



Further Work Required



Temporary Reinstatements



QA Complete Date/Time



Workflow

PASSED THROUGH FROM IPS

JOB START

WORK DONE

JOB FINISH

CONTRACTOR QUALITY ASSURANCE

PASSED BACK TO IPS

PASSED BACK TO IPS

Stop Date/Time



Compliance Info



Fault Details



New Installation Info



Work Order Comments



Photo(s)



Integration

- IPS tools:
 - Service Profiles
 - Batch Manager
 - Enhancement Tables
 - Workflow
- GIS tools:
 - Rest Services
 - Host Feature Layers
 - Field Maps Designer
 - Web Maps

GIS SYNC

- Solution is geared towards cloud resilience.
- GIS coordinates are only on-prem process
- GIS Synch to be implemented in future – currently does not support WorkManagement

So WHERE Next



Te Kaunihera o Te Tairāwhiti
GISBORNE
DISTRICT COUNCIL

Questions



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Te Kaunihera o Te Tairāwhiti
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GDC Fix app

