

Mobile Risk Assessment Enabling Arborists

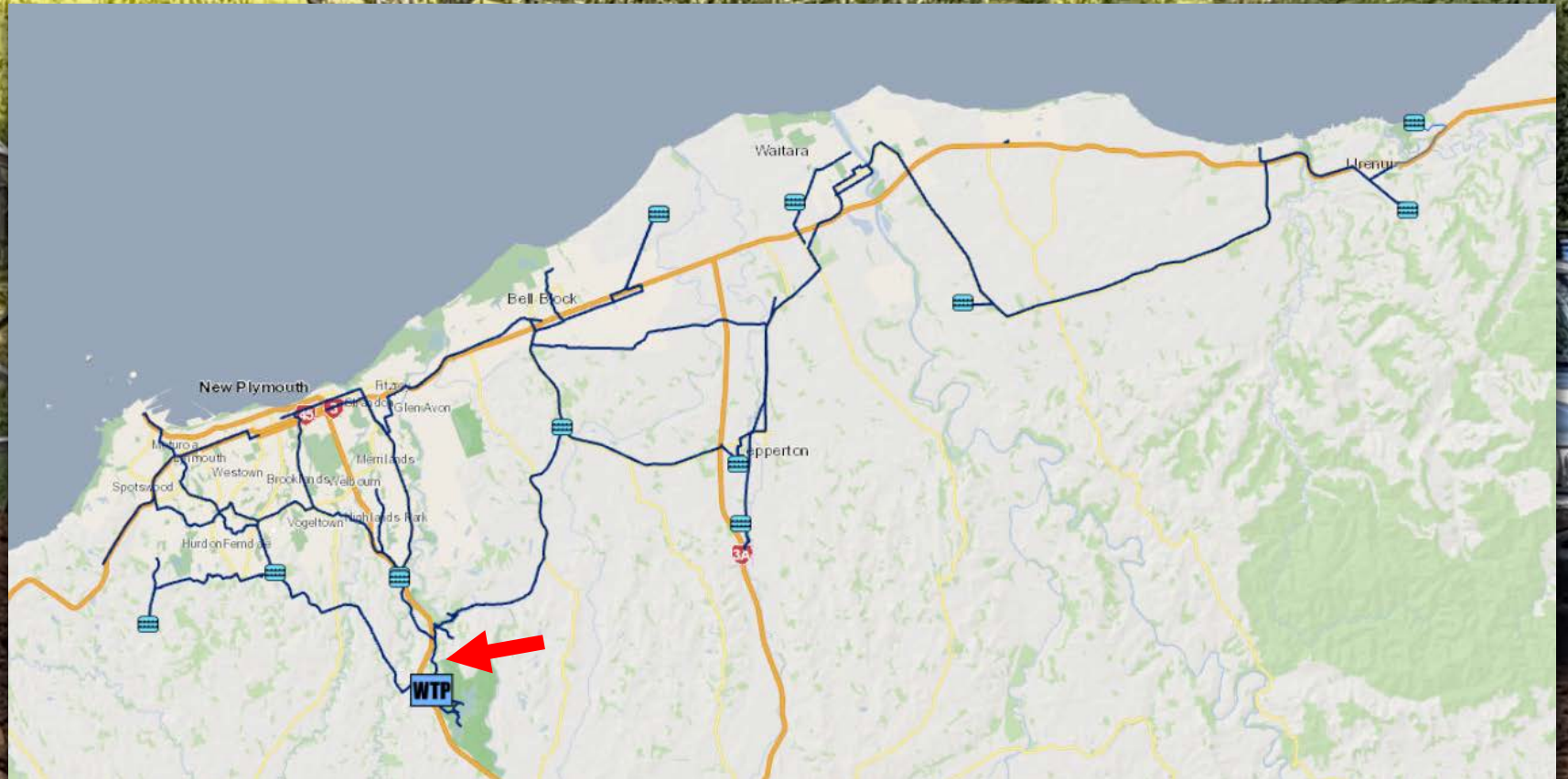
Melissa Brooks - GIS Analyst



Te Kaunihera-ā-Rohe o Ngāmotu
NEW PLYMOUTH DISTRICT COUNCIL
newplymouthnz.com

Pukekura Park

Ex Cyclone Gita



What if
you
couldn't
trust your
WATER
anymore?



S



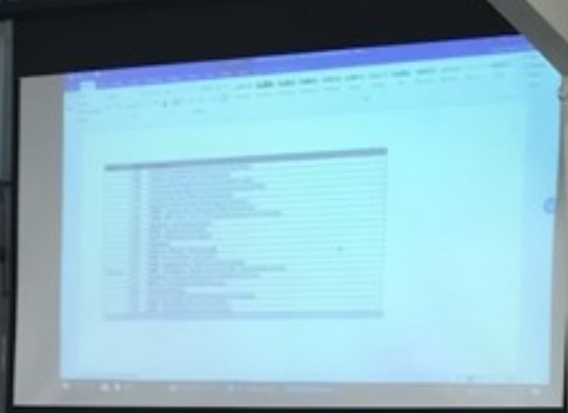
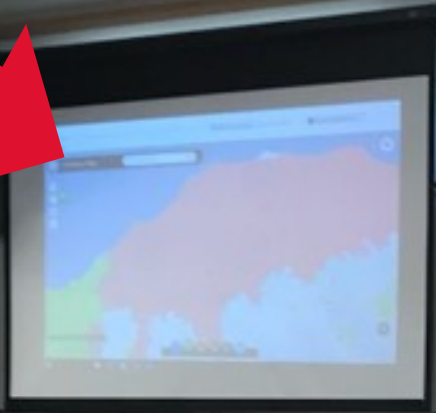
Water tankers will be available at the below locations from 6am - 5pm, with a limit of 5L per person, please remember to bring your own containers.
If you have trouble viewing the map, [click here for more information, including water tanker locations](#)

TYPE YOUR STREET NUMBER AND NAME TO FIND YOUR EMERGENCY WATER INFORMATION.
Street number and name

The map displays a geographical area with various colored zones. A legend in the top-left corner identifies blue circles as 'Port-a-toos' and a red-shaded area as 'Tankered Water Distribution'. The map also shows street names and a search bar at the top.

Coordinated response

Intelligence Intelligence



Whiteboard with handwritten notes and diagrams.

Whiteboard with handwritten notes and diagrams.

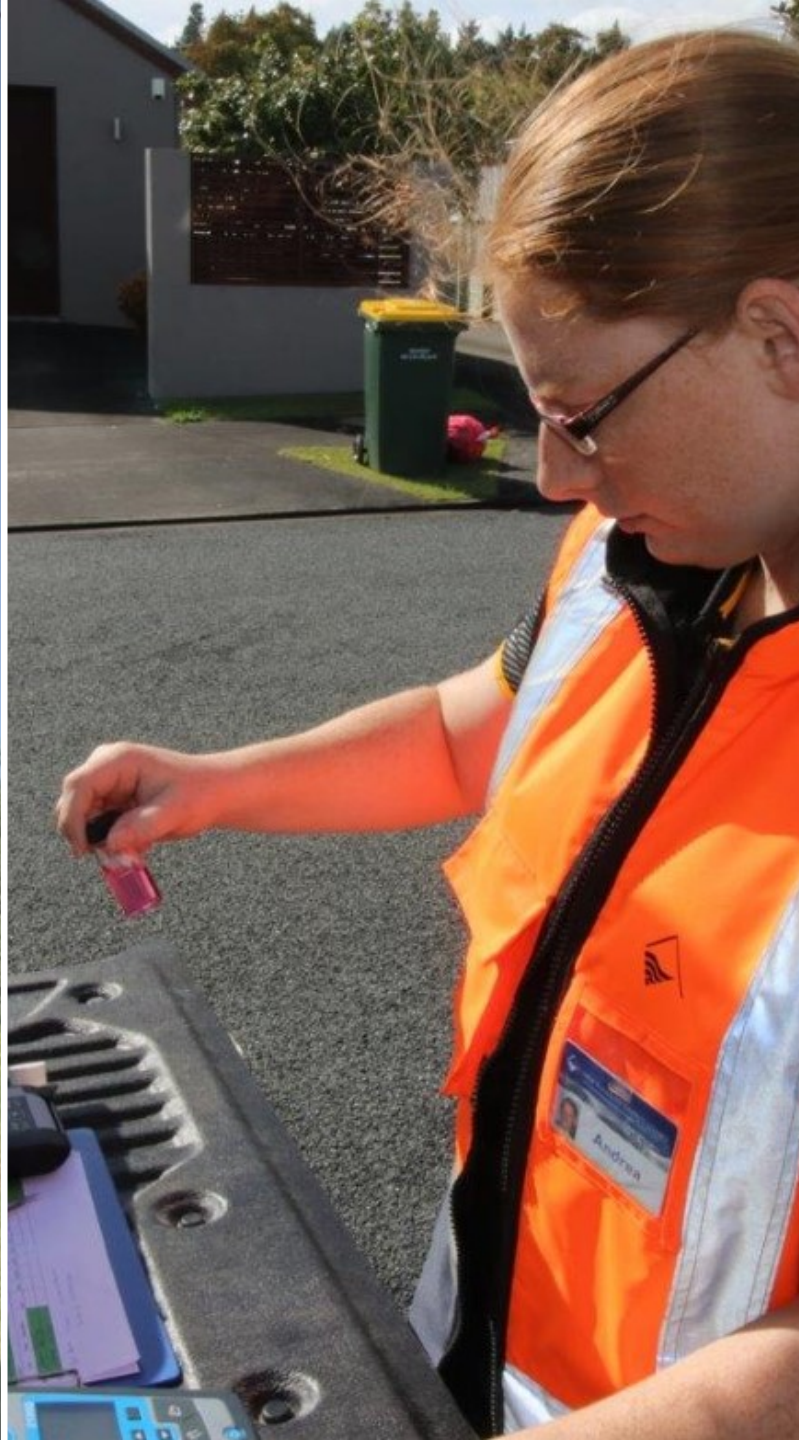
Whiteboard with handwritten notes and diagrams.



Coordinated response

150 Volunteers







Cancelled.

ps. → Monitoring Maps
ures Su

ay 2 to
* Peter Hancock
* Nongori School
GerBok - update
* Follow up w

THANK
YOU!

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YOU!

A photograph of a stack of books on a wooden surface. In the foreground, two books are open, showing their pages. The book in front has a blue bookmark. Behind it is another open book with a red cover. To the left and right are stacks of closed books, some with green spines. A semi-transparent teal banner is overlaid across the middle of the image, containing white text.

But there's more to the story...

Reducing Risk



We're better together ...

Jack Johnson

ASPLUNDH



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Coastal Walkway

ARBORIST REPORT

1.0 Site 1

Address: 567 Junction

Site location: see above

Potential

Age

Height

Health
shedding

To the
Centre

Future Hazards
Kowhai and Ponga etc.

Aerial view of Site 1



Arborist Assessment – NPDC Water Mains February 2018

Site 4 showing adjacent trees

ARBORIST REPORT

ARBORIST REPORT

Arborists Disclosure Statement

Arborists are tree specialists who use their education, knowledge and experience to assess tree health and recommend measures to enhance the appearance and the health of trees. Clients may choose to accept or disregard the advice given.

Arborists cannot guarantee the health of trees. Likewise, remedial work does not guarantee the health of trees.

Treat
proper
such con
then be e

Trees can be
eliminate all
knowledgeable
experience unex

Assumptions and Limitations

1. Any legal descriptions are assumed to be correct and are assumed to be rendered in accordance with any and all applicable laws and competent management practices.
2. It is assumed that any applicable governmental regulations have been taken into account.
3. Care has been taken to obtain all necessary permits where possible; however, the consultant shall not be responsible for obtaining contractual arrangements are made.
4. Loss or alteration of any part of this report is the responsibility of the person to whom it is addressed.
5. Possession of this report, or a copy thereof, shall not be construed as an endorsement of the person to whom it is addressed.
6. Neither all or any part of the contents of this report shall be disclosed to anyone, including the client, to the public through any means without the prior written consent of the consultant.

Arborist Assessment – NPDC Water Mains February 2018

8. This report and any values expressed herein represent the opinion of the consultant and the consultant's fee is in no way contingent upon the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.
9. Sketches, diagrams, graphs, and photographs in this report, being intended as visual aids, are not necessary to scale and should not be construed as engineering or architectural reports or surveys.
10. Unless otherwise expressed: 1) Information contained in this report covers only those items that were examined and reflect the condition of those items at the time of inspection; and 2) the inspection is limited to visual examination of accessible components without dissection, excavation, or probing unless otherwise noted. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.

ARBORIST REPORT

4.0 Site 3b

Address: 7 Hydro Road, New Plymouth

Site location: Crossing the river on approach to TOPEC

Potential Hazards: Crossing the river on approach to TOPEC

Age: Semi Mature

Height: 15 meters (est)

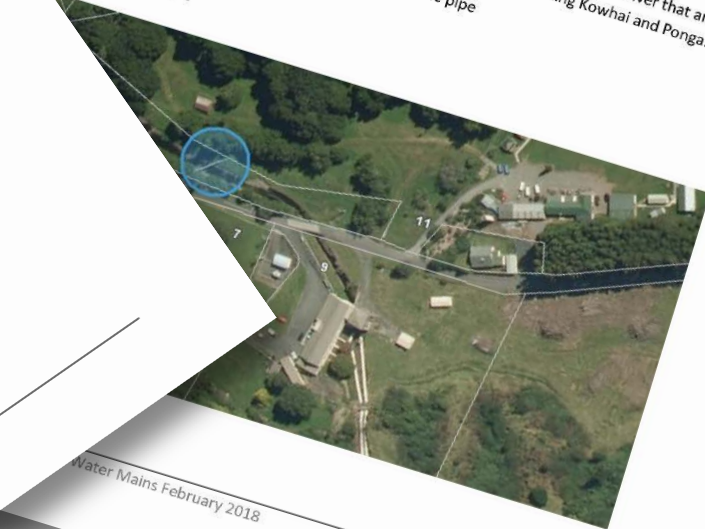
Health and Condition: In general, the trees adjacent to the pipe appear to be in good health.

Immediate Hazards: There is no threat to the pipe from this vegetation.

Fall Distance Hazards: There are two Liquid Amber trees on the opposite side of the river that are within falling distance. There are also some semi mature native trees including Kowhai and Ponga.

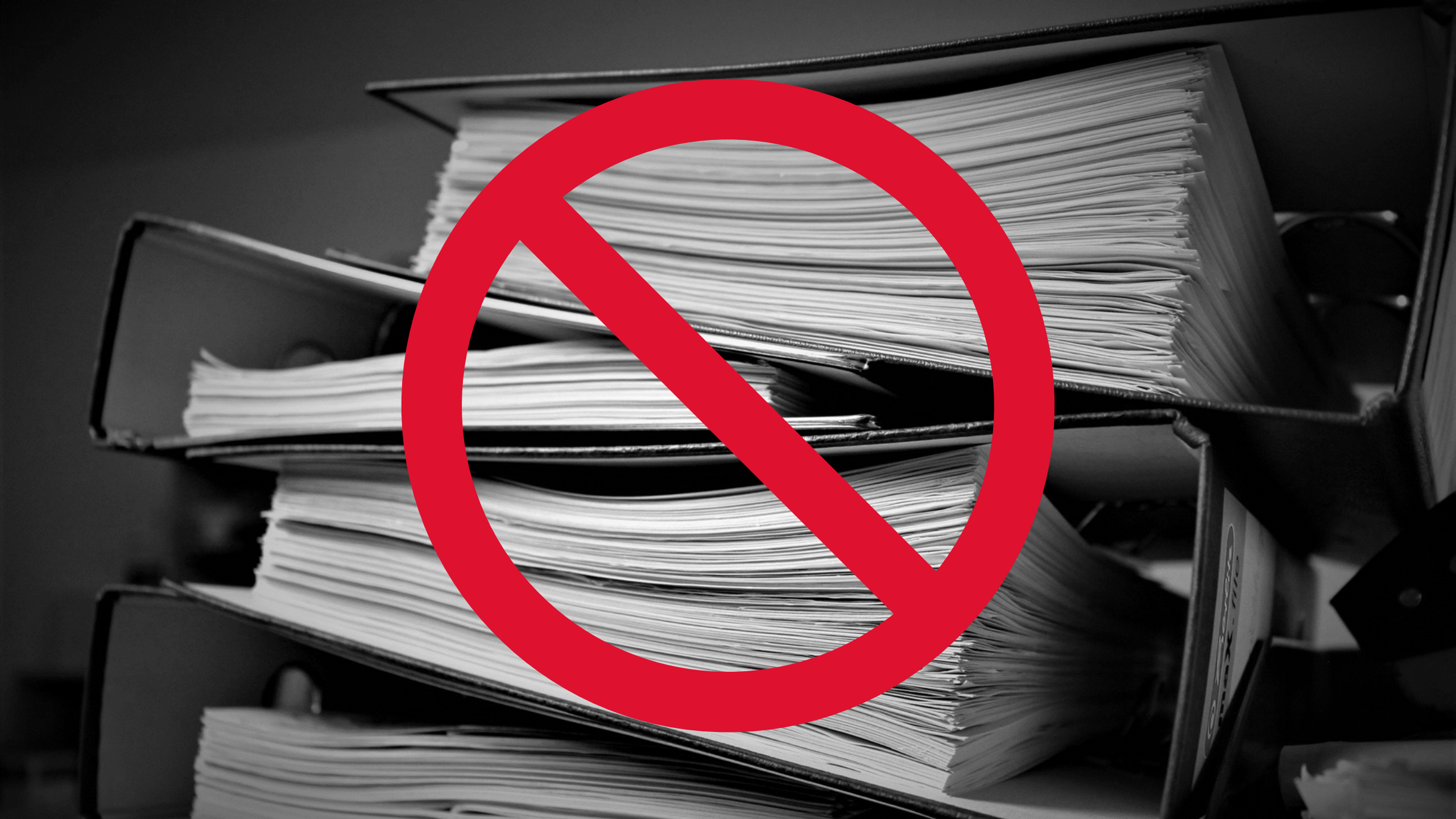
Future Hazards: There is one silver poplar to the west of the pipe

Image below shows site 4



Arborist Assessment – NPDC Water Mains February 2018

February 2018



A hand is pointing at a document held by another hand. A large, red, rectangular stamp with the words "SPOILER ALERT" in bold, white, sans-serif capital letters is overlaid on the document. The background is a blurred outdoor scene with dry grass and a bright light source, possibly the sun, creating a warm, golden glow.

SPOILER ALERT

We successfully supported the capture of **390** initial site assessments of over **10,000** trees by two arborists over **2 weeks**



How ?





Prioritising pipes

Mobile data capture

Desktop App

- 1
- 2
- 3
- 4

Prioritising pipes

140km of critical pipe with no redundancy (ie no backup)

















40km (30%) category 1 or 2

Planning for the Mobile data capture solution and the Desktop Web Map App

Search Arborist

1 - 4 of 4 in Arborist

Sort by: Date Modified

<input type="checkbox"/>	Title		Modified
<input type="checkbox"/>	 Risk Assessment - Arborist Report (collector)	Web Map	   Aug 10, 2018
<input type="checkbox"/>	 Risk Assessment - Arborist Report (viewer)	Web Mapping Application	   Aug 3, 2018
<input type="checkbox"/>	 Risk Assessment - Arborist Report	Feature Layer	   Aug 3, 2018
<input type="checkbox"/>	 RiskAssessmentArboristBase	Map Image Layer	   Jul 26, 2018

Schema: Version 1

The original report with open
entry areas for responses

A static map from
screen capture

ASPLUNDH

SEQNZ

ASPLUNDH SEQ MANUAL

Version 1.0

Original Issue Date: 1 July 2016 / Current Revision Date: 1 July 2016

ARBORIST REPORT

1.0 Site 1

Address: 567 Junction Road, New Plymouth

Site location: see above

Potential Hazards: Pine, *Pinus radiata*

Age: Age range 20 years (est)

Height: Range from 25-35 meters (est)

Health and Condition: Canopy indicates overall fair to good health and vigor, with natural needle shedding. The needles are normal shape and color with minor insect and wind damage.

To the north of the event site and the first section of exposed pipe to the north of the Water Treatment Centre. The pipe is located to the north west of a new track cut into the block and on the edge of a forestry block.

Immediate Hazards: There are no trees that appear to have suffered damage due to the recent storm and are none that look like they would fail under normal weather conditions.

Fall Distance Hazards: There are approximately 150 Pines within falling distance of the exposed pipe and one very large and spreading pine to the south of the pipe. The pines are of a similar or same age as the tree that failed on the 20th of February.

Future Hazards: There are no future hazards or new planting in the area except for some small natives, ponga etc.

Aerial view of Site 1:



Arborist Report Fields Version 2.xlsx - Excel

Melissa Brooks

1	SurveyID	x	y	Location description	Trees on site	Tree - Count	Main Type	Exposed Pipe	Immediate Hazard	IH - Count	IH
2	auto	auto	auto	text	y/n	integer	Water Wastewater Stormwater	y/n	y/n	integer	te
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											

Data Dictionary | Retic | TreeAge

READY

Schema: Version 2

Domains

Database Properties

General Domains Connections Editor Tracking

Domain Owner	Domain Name	Description
GISADMIN	ActionType	Action Type
SDE	Airport	Airport Clearance Colour
GISADMIN	AirportPestType	Airport Pest Type
GISADMIN	Arbor_ReticType	Text based Retic Class
GISADMIN	Arbor_TreeAge	Text based Tree Age Des
GISADMIN	AssetCondition	Asset Condition
SDE	Attr_Length	
SDE	Attr_Length KM	

Domain Properties:

Field Type	Text
Domain Type	Coded Values
Split policy	Default Value
Merge policy	Default Value

Coded Values:

Code	Description
Ju	Juvenile
SM	Semi-mature
M	Mature
InD	In decline

OK Cancel Apply

IH - Age

Search


<no value>

Juvenile

Semi-mature

Mature

In decline



Attachments



The screenshot shows a list of layers in a GIS application. A red box highlights the layer 'WebEditor.GISADMIN.RiskAssessmentArbo...'. A context menu is open over this layer, with 'Manage' selected. A sub-menu is open for 'Manage', and 'Create Attachments' is highlighted. Red arrows indicate the sequence of actions: from the layer to the 'Manage' menu item, and then to the 'Create Attachments' option.

- Copy (Ctrl+C)
- Delete
- Rename (F2)
- Create Layer...
- Manage**
- Export
- Load
- Review/Rematch Addresses...
- Properties...

- Register with Geodatabase
- Analyze...
- Add Global IDs...
- Privileges...
- Locks...
- Register As Versioned...
- Unregister As Versioned
- Enable Archiving
- Disable Archiving...
- Enable SQL Access
- Create Attachments**
- Delete Attachments
- Enable Editor Tracking...
- Disable Editor Tracking

Fe

Service Editor

Connection: arcgis on nt244_6080 (admin) Service Name: RiskAssessmentArboristReport

General
Parameters
Capabilities
Mapping
Feature Access
Pooling
Processes
Caching
Item Description

Capabilities

Choose the capabilities you would like enabled for this service:

- Mapping (always enabled)
- WCS
- WMS
- Feature Access
- Schematics
- Mobile Data Access
- Network Analysis
- KML
- WFS

OK Cancel

Report

Search Arborist

1 - 4 of 4 in Arborist

<input type="checkbox"/>	Title
<input type="checkbox"/>	Risk Assess
<input type="checkbox"/>	Risk Assess
<input type="checkbox"/>	Risk Assess
<input type="checkbox"/>	RiskAssess

Modified

2018

018

018

018

Table Of Contents



Layers

- sde.DEFAULT (gissql)
 - Risk Assessment - Immediate Hazard
 -
 - Risk Assessment - Water Main
 - Risk
 - 1
 - 2
 - 3
 - 4
 - Risk Assessment - Wastewater Main
 - Risk
 - 1
 - 2
 - 3
 - 4
 - Risk Assessment - Arborist - Property Information
 - Person contacted
 - NPDC
 - DOC
 - OTHER

Map Image Layer



Sort by: Date Modified

Modified

<input type="checkbox"/>	Risk Assessment - Arborist Report (collector)	Web Map		Aug 10, 2018
<input type="checkbox"/>	Risk Assessment - Arborist Report (viewer)	Web Mapping Application		Aug 3, 2018
<input type="checkbox"/>	Risk Assessment - Arborist Report	Feature Layer		Aug 3, 2018
<input type="checkbox"/>	RiskAssessmentArboristBase	Map Image Layer		Jul 26, 2018

The background of the slide features a repeating pattern of puzzle pieces. One piece in the upper right quadrant is filled with a dark, textured, cross-hatched pattern, while the other pieces are empty outlines. A solid green horizontal bar is positioned in the lower half of the image.

Putting it all together

- Contents
- Risk Assessment - Arborist Report
 - Risk Assessment - Arborist Base Layers
 - Risk Assessment - Immediate Hazard
 - Risk Assessment - Water Main
 - Risk Assessment - Wastewater Main
 - Risk Assessment - Arborist - Property Information
 - Aerial



Configure Pop-up

Risk Assessment - Arborist Report

Show Pop-ups

Pop-up Title

Pop-up Contents

Display:

These field attributes will display:

- SurveyID {SurveyID}
- Location Description {Location_Description}
- X coord {expression/expr0}
- Y coord {expression/expr1}

[Configure Attributes](#)

Show feature attachments as links

Attribute Expressions

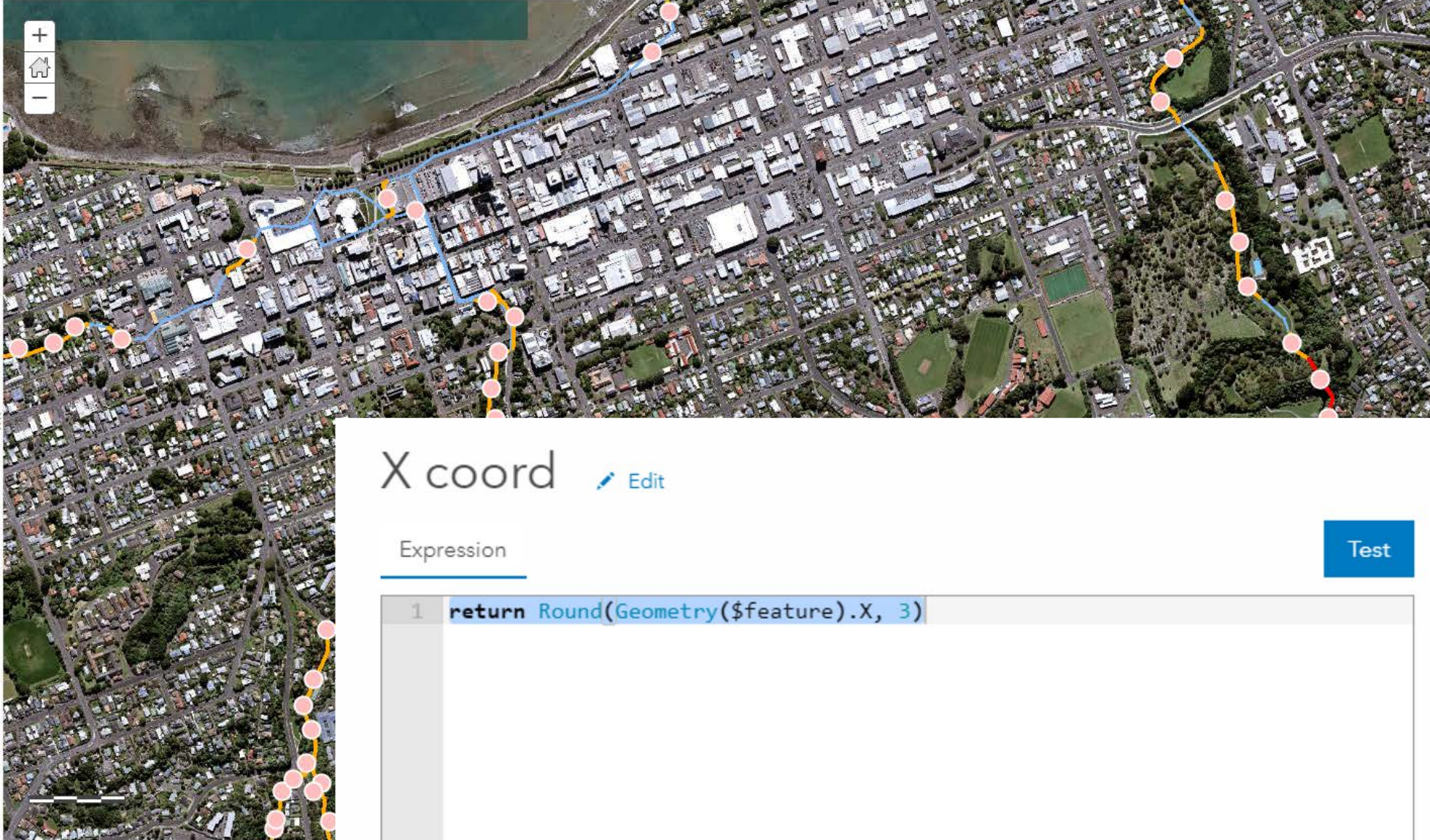
Adding expressions allows you to create new information from existing fields for use in pop-ups.

- X coord {expression/expr0}
- Y coord {expression/expr1}

Pop-up Media

Display images and charts in the pop-up:

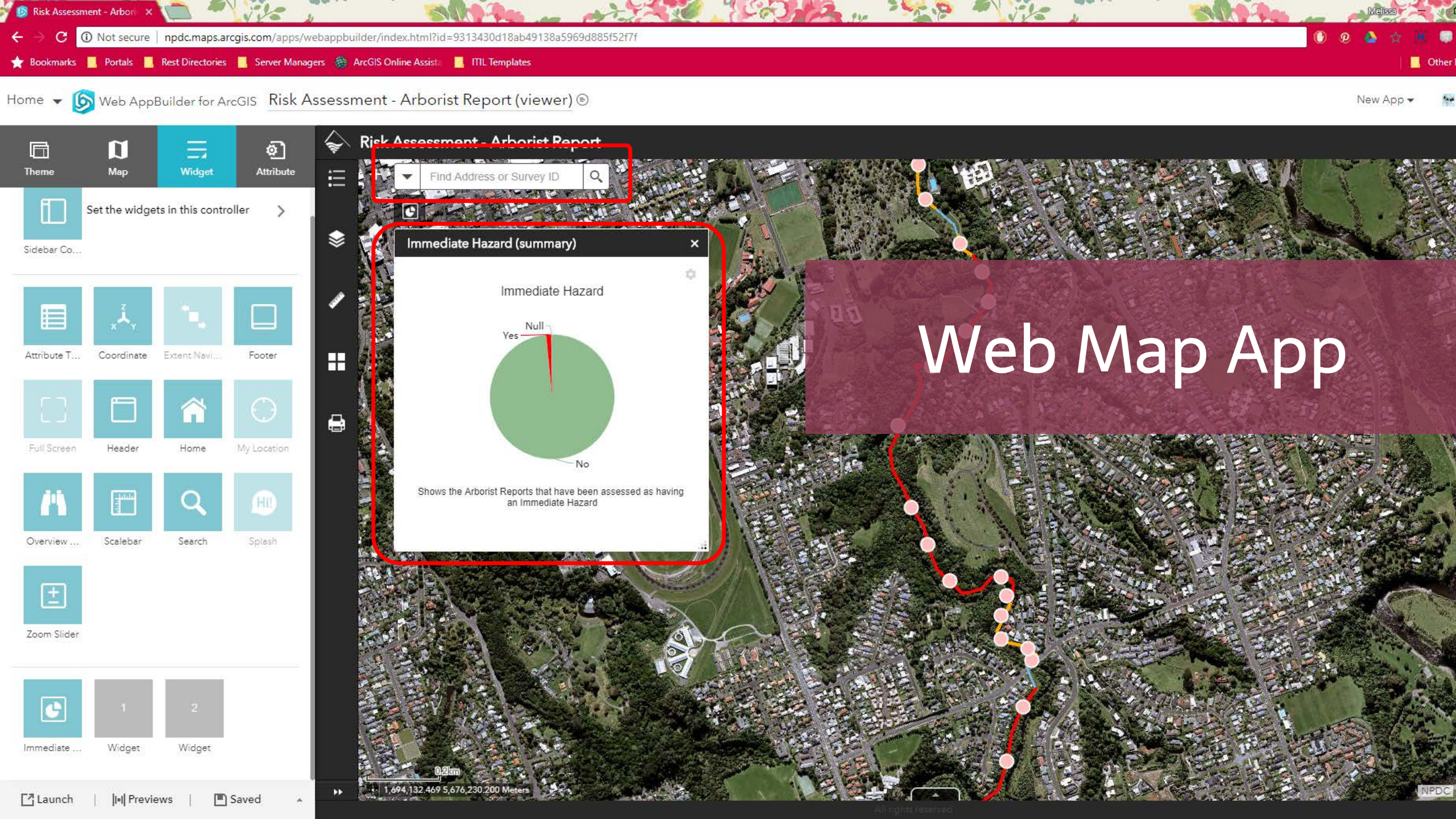
Esrri.com | ArcGIS Marketplace | Help | Terms of Use | Privacy | Contact Esri | Report Abuse | Contact Us



X coord

Expression

```
1 return Round(Geometry($feature).X, 3)
```

Web Map App

Find Address or Survey ID



Summary



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NEW PLYMOUTH DISTRICT COUNCIL
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Mt Taranaki

A close-up photograph of a person's hands holding a tablet computer in a field. The person's left hand is pointing at the screen, while their right hand holds the bottom edge. The background is a soft-focus field of tall grasses under a warm, golden sunset sky. A semi-transparent dark blue banner is overlaid at the bottom of the image, containing white text.

We successfully supported the capture of **390** initial site assessments of over **10,000** trees by two arborists over **2 weeks**

*“ Thanks for the winning attitude.
It’s pretty fun working with people that find
challenges a good learning opportunity.
Massively appreciating all your work ”*

Paula Wright

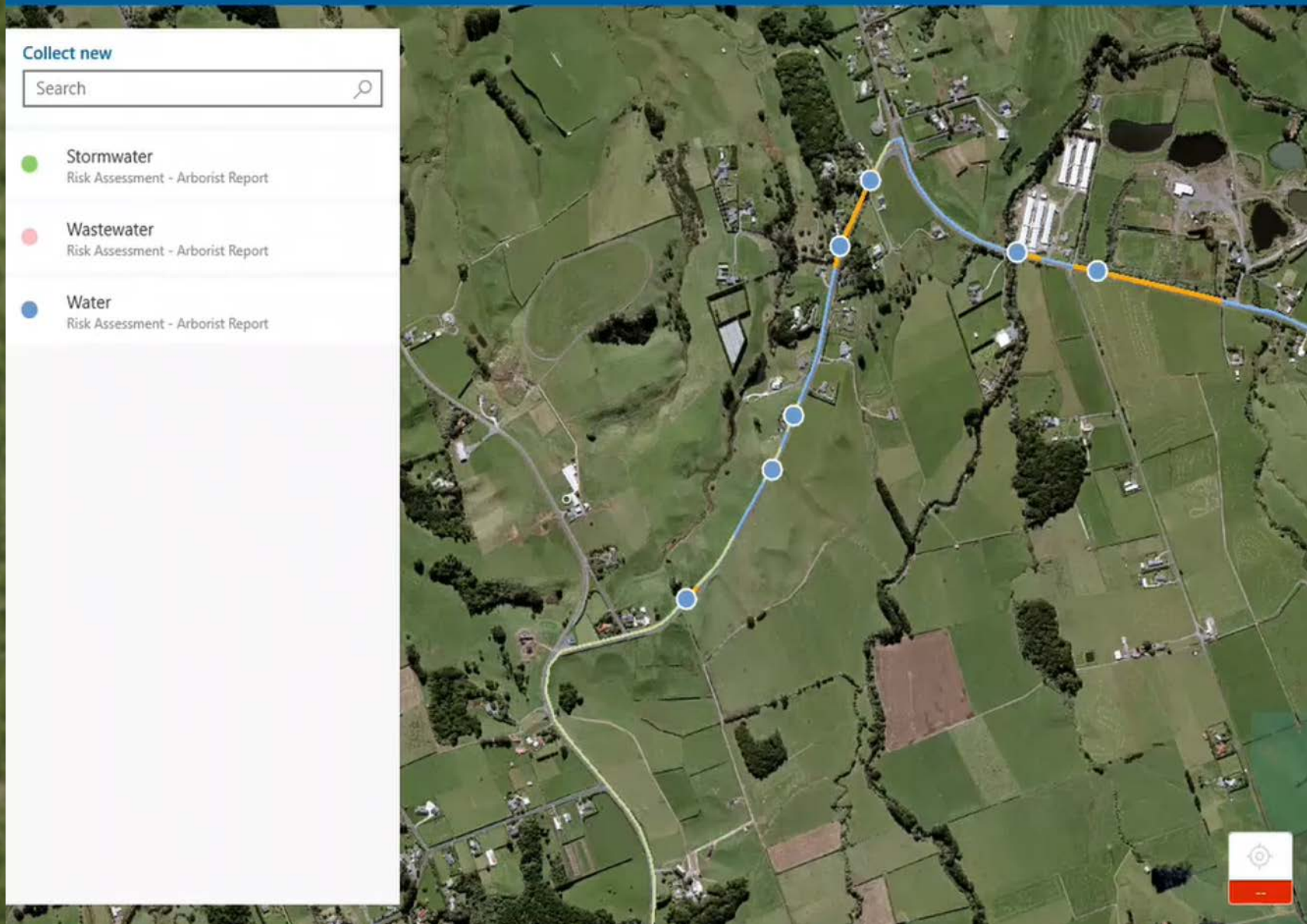
Infrastructure Project Manager / Chem+Process Engineer

RECORDED LIVE



Collect new

- Stormwater
Risk Assessment - Arborist Report
- Wastewater
Risk Assessment - Arborist Report
- Water
Risk Assessment - Arborist Report



Risk Assessment - Arborist Report

Legend

Risk Assessment - Arborist Report

- Water
- Wastewater
- Stormwater

Risk Assessment - Arborist Base Layers

Risk Assessment - Immediate Hazard

-

Risk Assessment - Water Main

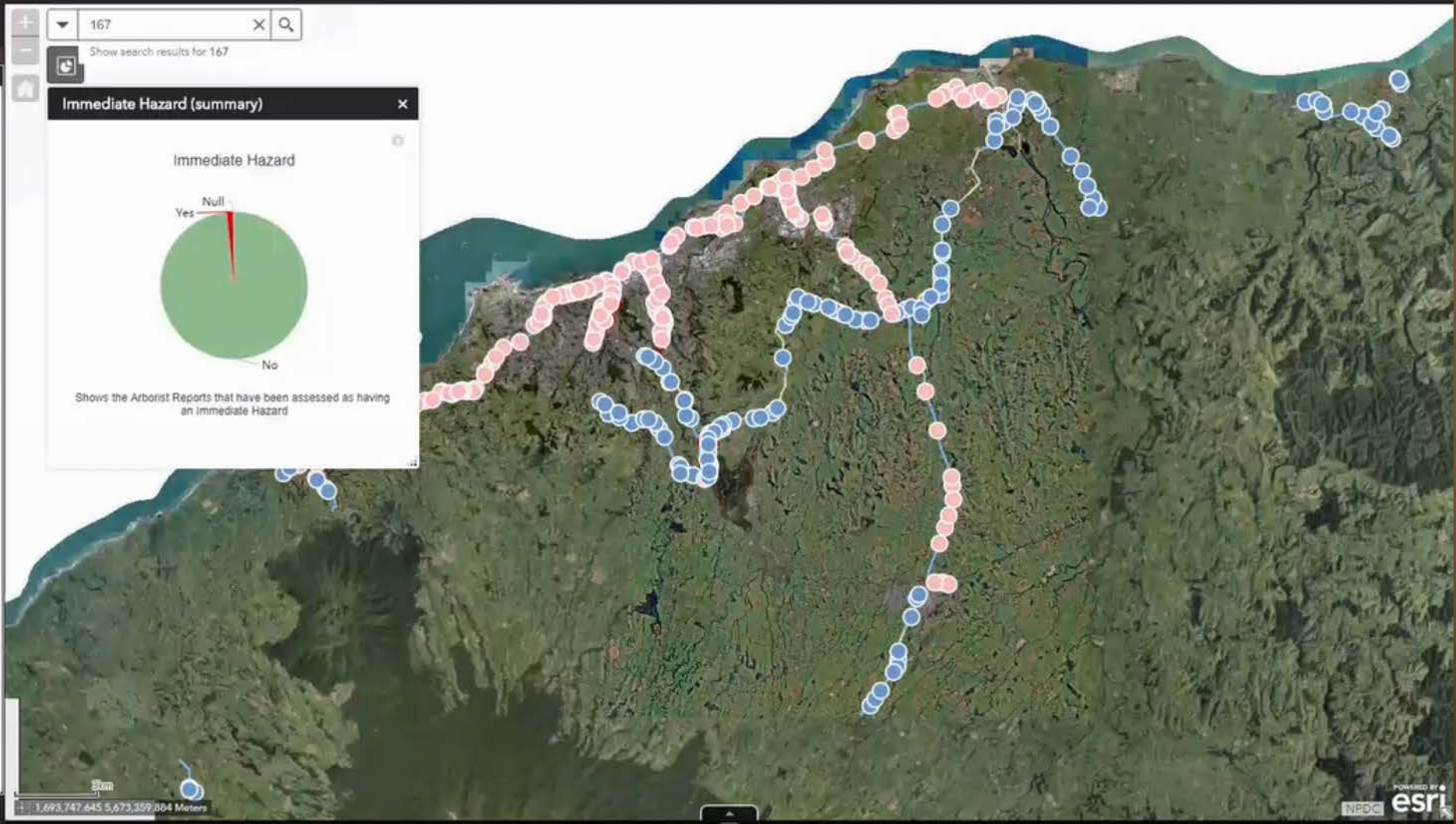
- 1
- 2
- 3
- 4

Risk Assessment - Wastewater Main

- 1
- 2
- 3
- 4

167

Show search results for 167



Whārski o rāsi?

Melissa Brooks
GIS Analyst



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