

How NZTA and NCTIR hit the collaboration sweet spot



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New Zealand Government

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Programme funded by
New Zealand Government



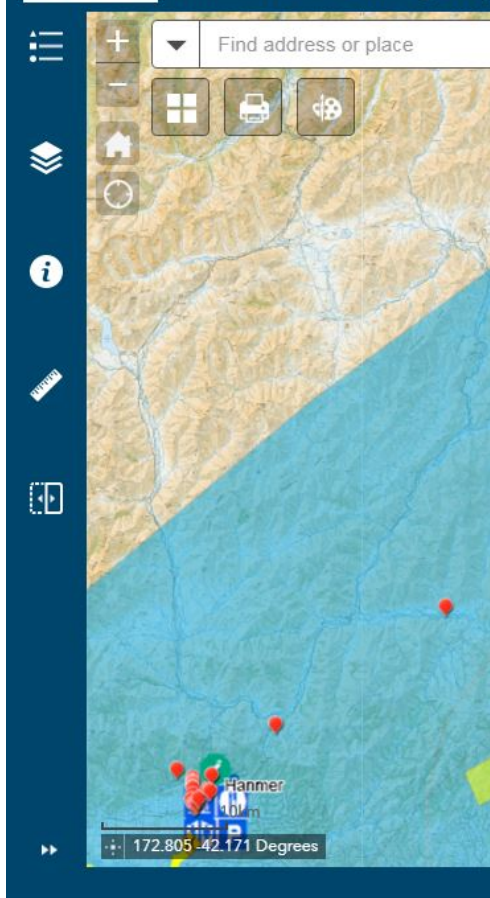
- 
- Initial Emergency Response
 - Development of NCTIR Alliance and their Geospatial Platform
 - Recovery Phase

Emergency Response



Emergency Response

NZ TRANSPORT AGENCY Kaikoura EQ Emergency Management



NZ TRANSPORT AGENCY

North Canterbury Road Status

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Interim Business as Usual



Formation of the NCTIR Alliance

- The North Canterbury Transport Infrastructure Recovery (NCTIR) alliance was set up by the Government late December 2016 to restore the road and rail network by December 2017.
- The alliance includes the NZ Transport Agency, KiwiRail, Downer, Fulton Hogan, HEB Construction and Higgins.
- The rebuild is a massive undertaking, and even when access is restored, there will be an ongoing repair programme to help keep the network.



NCTIR's Vision

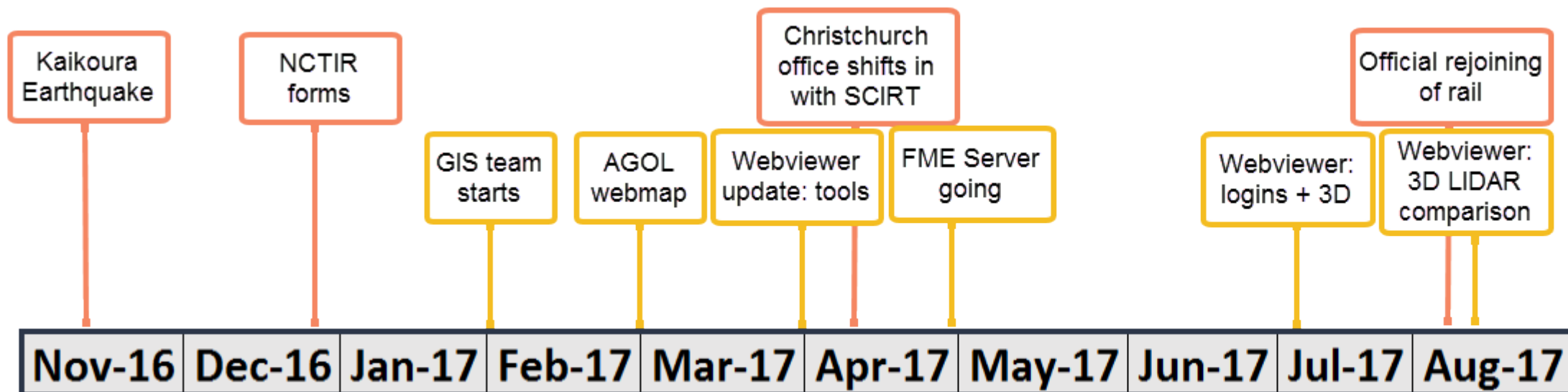
*“Moving Mountains to
Reconnect Communities”*

NZ Transport Agency Geospatial Team Role



NCTIR GIS establishment

NCTIR Timeline

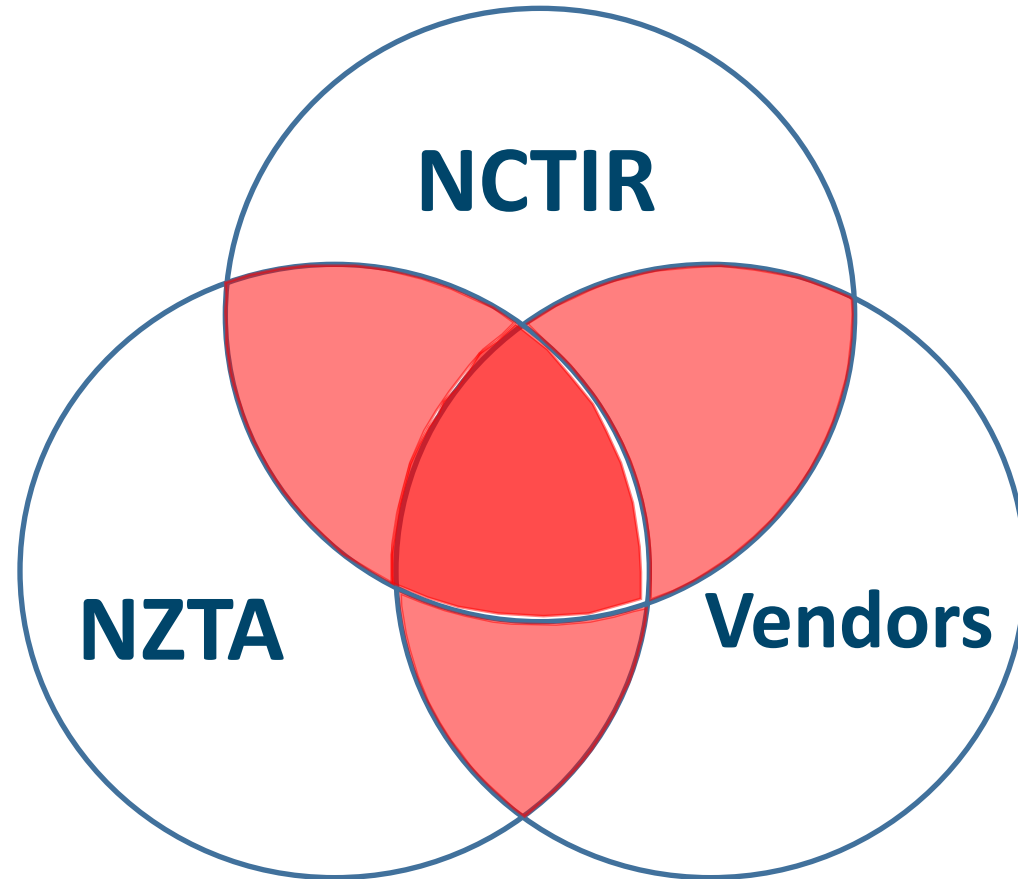


Formation of NCTIR Geospatial Team

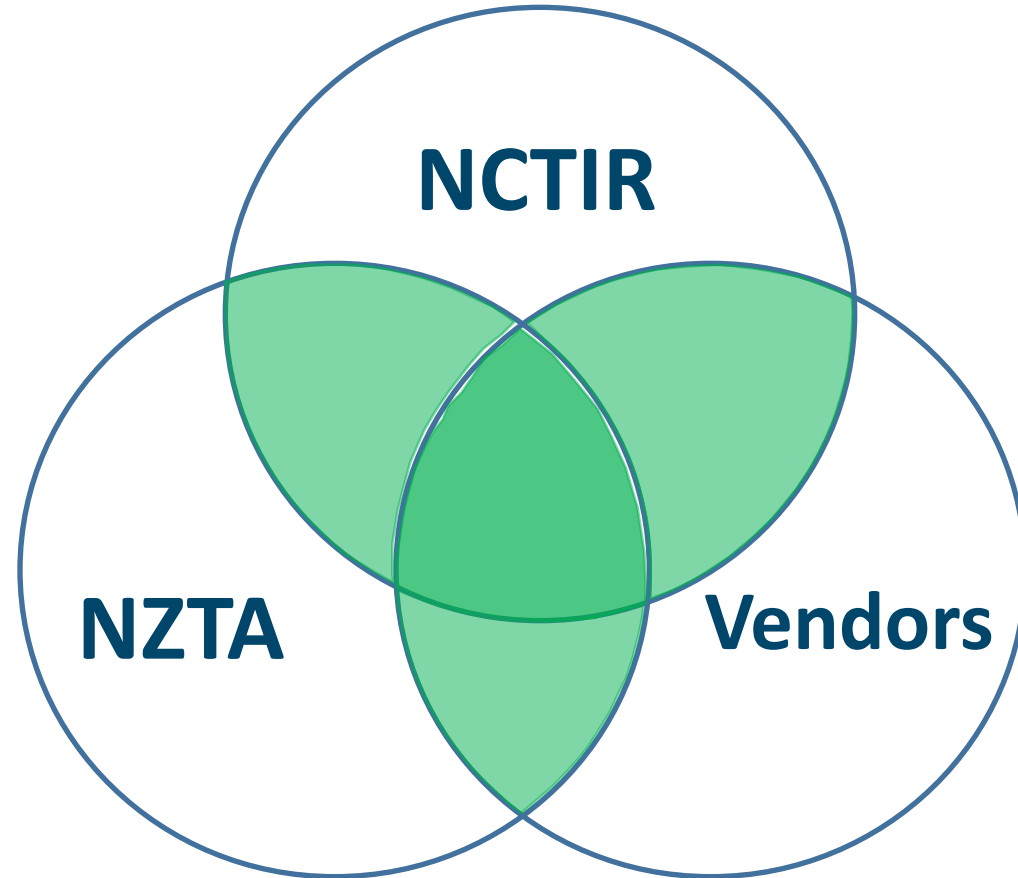
aurecon **JACOBS** **interpret** **Beca**
GEOSPATIAL SOLUTIONS



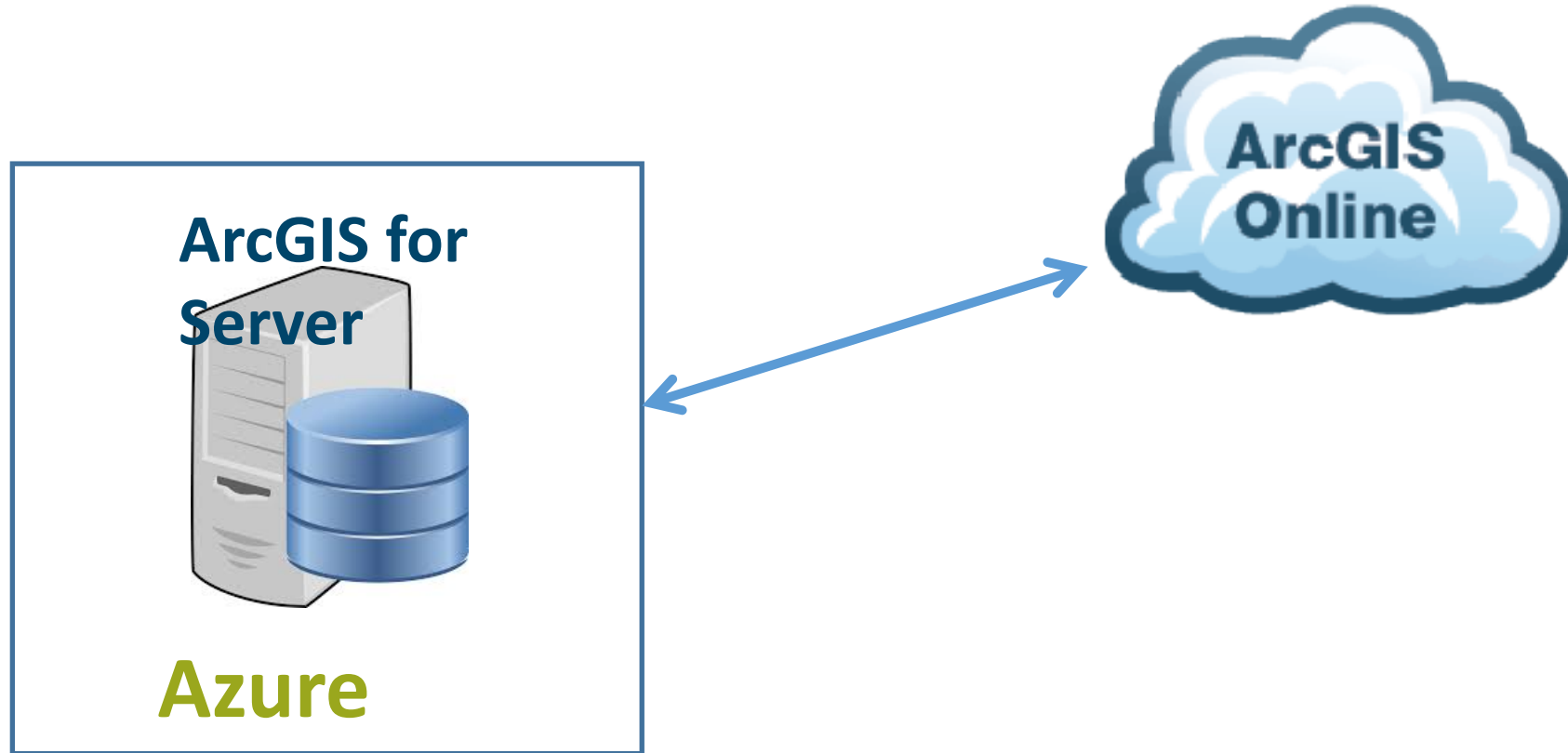
The Tensions



Collaboration

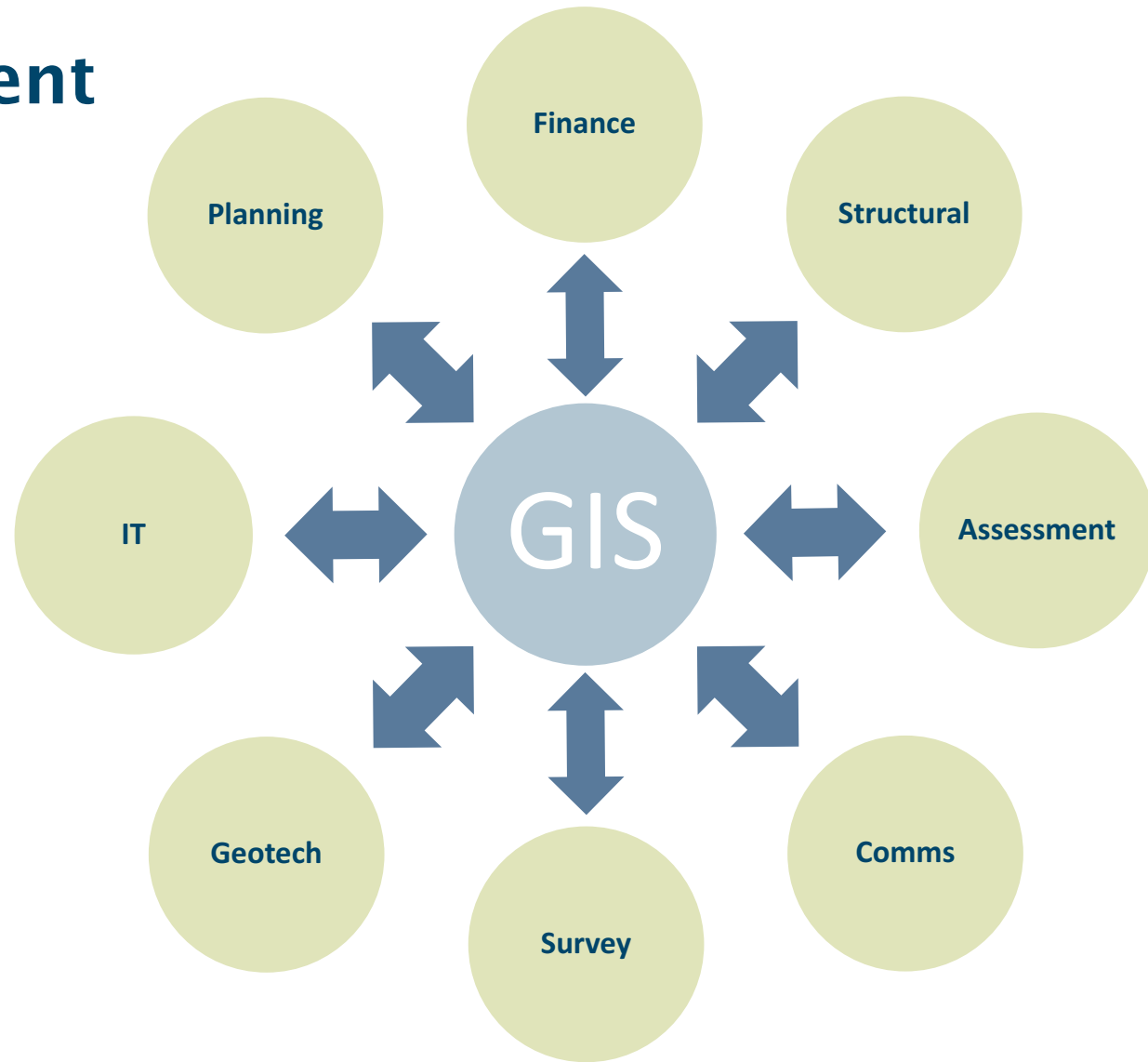


The System



NCTIR GIS establishment

Data gathering, system setup





NCTIR GIS establishment

Delivery

Desktop-based system

Data gathering, mapping, building understanding of requirements using Desktop Licenses.

Cloud and network-based system

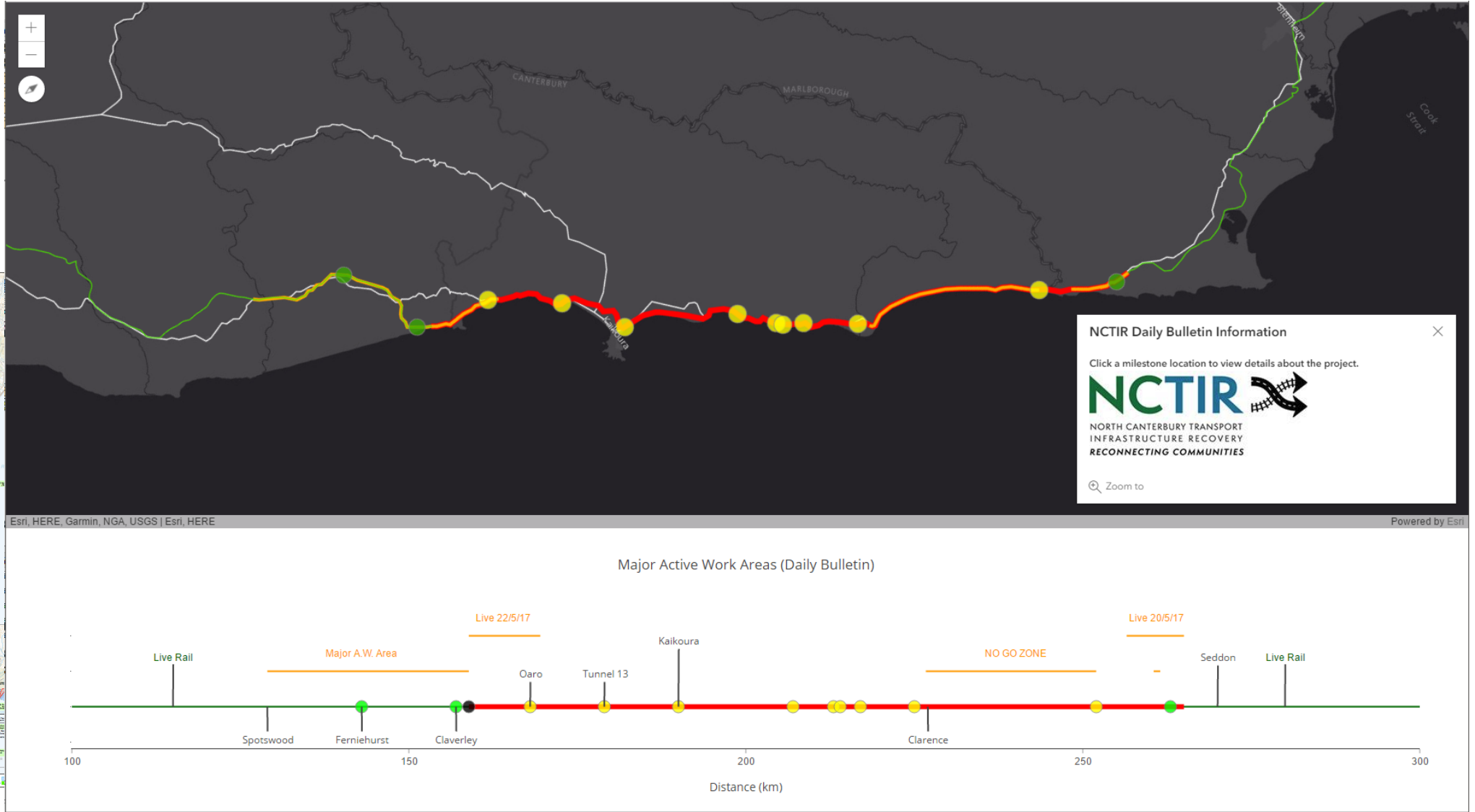
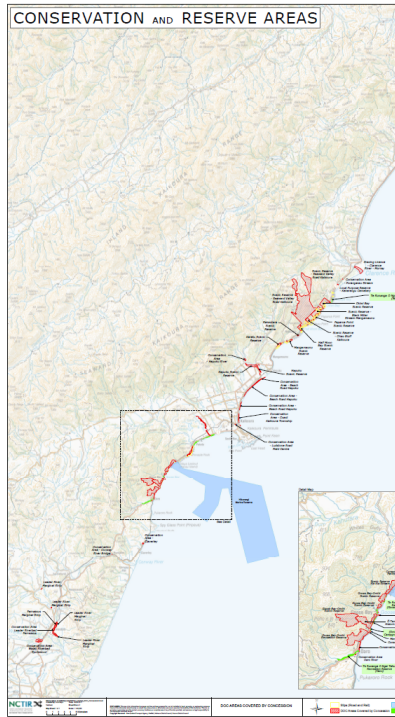
System requirements -----

The shape of the programme

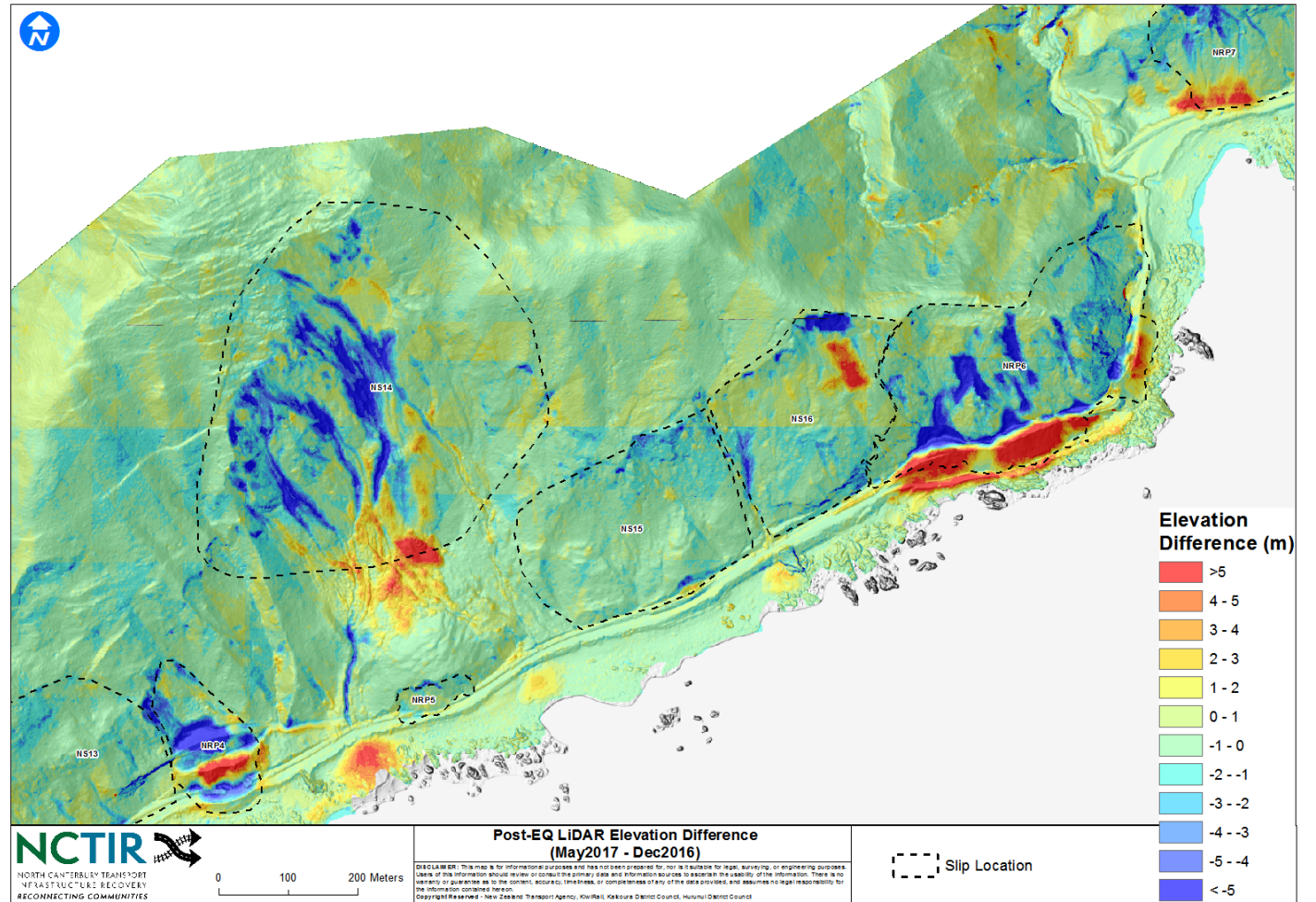
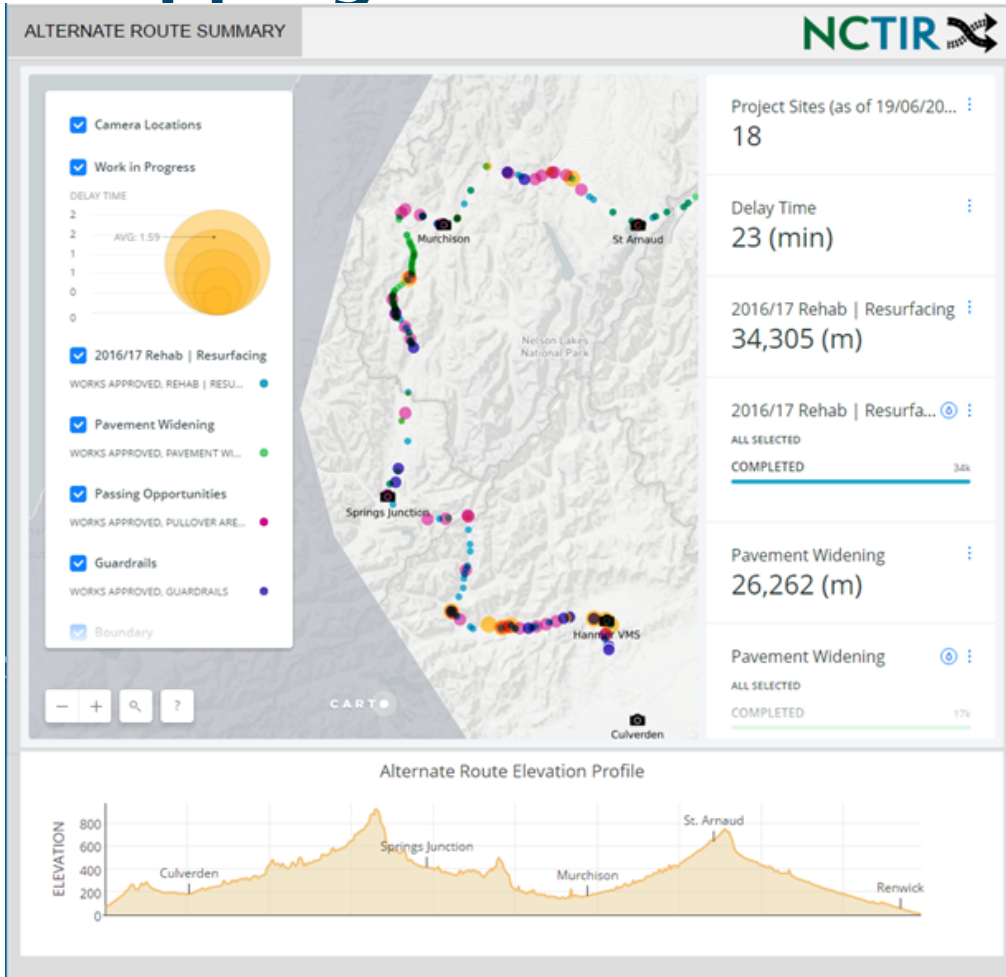
Wall maps..



Mapping

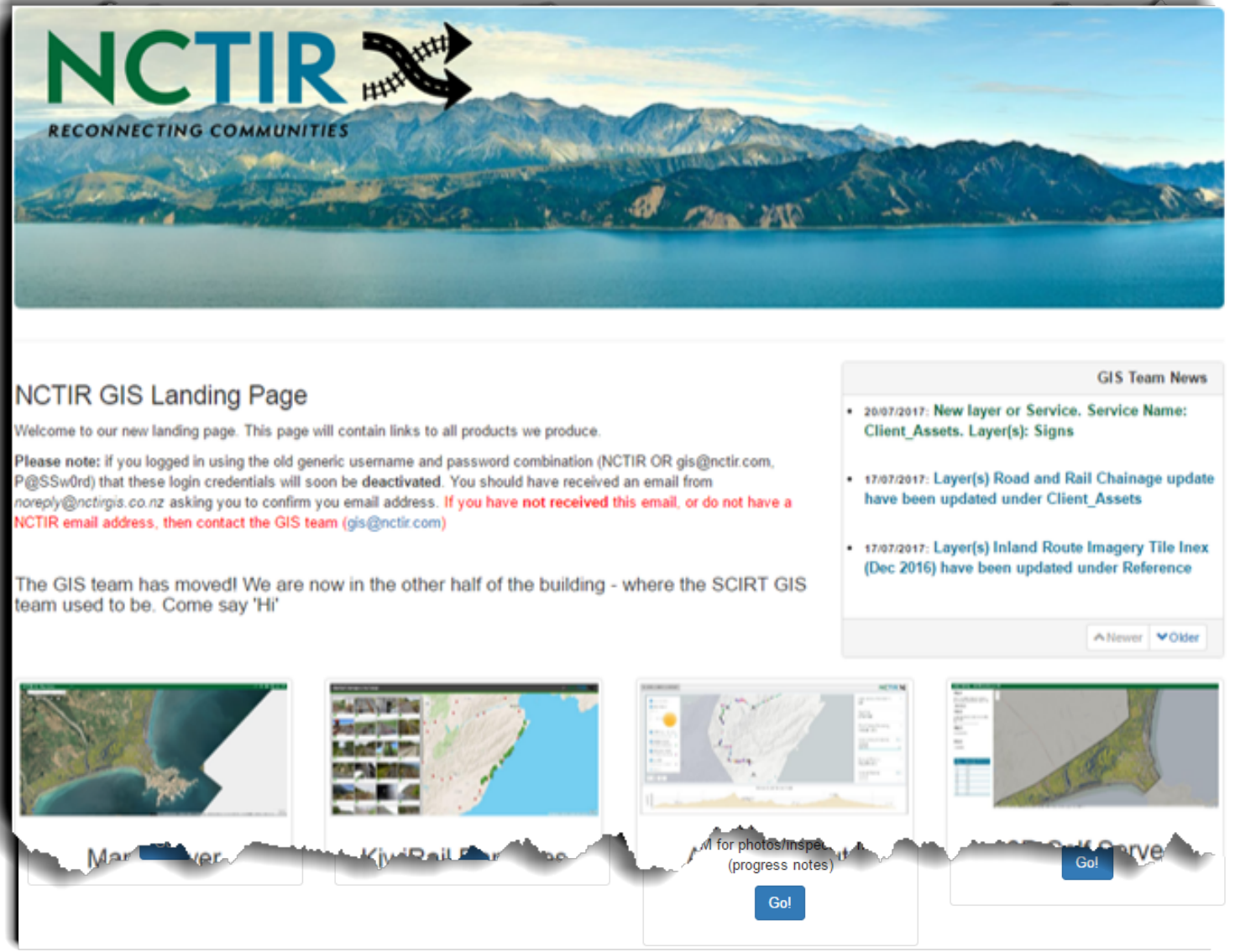


Mapping



NCTIR GIS Team

NCTIR GIS Viewer



NCTIR
RECONNECTING COMMUNITIES

NCTIR GIS Landing Page

Welcome to our new landing page. This page will contain links to all products we produce.

Please note: If you logged in using the old generic username and password combination (NCTIR OR gis@nctir.com, P@SSw0rd) that these login credentials will soon be deactivated. You should have received an email from noreply@nctirgis.co.nz asking you to confirm your email address. **If you have not received this email, or do not have a NCTIR email address, then contact the GIS team (gis@nctir.com)**

The GIS team has moved! We are now in the other half of the building - where the SCIRT GIS team used to be. Come say 'Hi'

GIS Team News

- 20/07/2017: **New layer or Service. Service Name: Client_Assets. Layer(s): Signs**
- 17/07/2017: **Layer(s) Road and Rail Chainage update have been updated under Client_Assets**
- 17/07/2017: **Layer(s) Inland Route Imagery Tile Inex (Dec 2016) have been updated under Reference**

Map Viewer KivRail for photos/insp. (progress notes) Self Serve

Go! Go!

NCTIR GIS Viewer

Essential Tools

The screenshot displays the NCTIR Map Viewer interface. At the top, there is a search bar labeled "Find address or place" and a "Help" button. The main map area shows a coastal region with a 1km scale bar. Several tool panels are open:

- Elevation Profile:** Contains a "Measure" tab and a "Profile Result" tab. It includes instructions: "Use the Measure tool to draw a line on the map that you want to see the elevation profile for." and a note: "NOTE: The current extent of the tool is limited to the area captured after the Kaikoura earthquake by AAM. You cannot generate an elevation profile outside of this area." Below this is an "Elevation Profile" chart showing "Elevation in Meters" on the y-axis (0 to 100) and distance on the x-axis (0 to 2). A peak is labeled "73 Meters" and a point is labeled "-50".
- Draw:** Includes a "Hide drawings" toggle and "Add a drawing" options with drawing mode icons.
- Measurement:** Shows a "Measurement Result" of "1,192.8 Meters".
- Select:** Features a "Select" button, a list of layers (e.g., "NCTIR Dispatch Points", "Project Areas"), and "Selection Actions" such as "Zoom to", "Pan to", "Export to CSV file", "Export to Feature Collection", "Export to GeoJSON", "Add a Marker", "View in Attribute Table", and "Clear Selection".
- Add Data:** Offers options to "Generalize features for web display" and "DROP OR BROWSE" data files in formats like "SHP", "CSV", "GPX", and "GeoJSON".

The interface is powered by Esri, as indicated by the logo in the bottom right corner. A footer note states: "Sourced from the LINZ Data Service and licensed for re-use under the Creative Com..."

NCTIR GIS Viewer 3D options

NCTIR  NCTIR 3D Viewer: NRP6

Make your own!

DECEMBER 2016

MAY 2017

IMAGERY

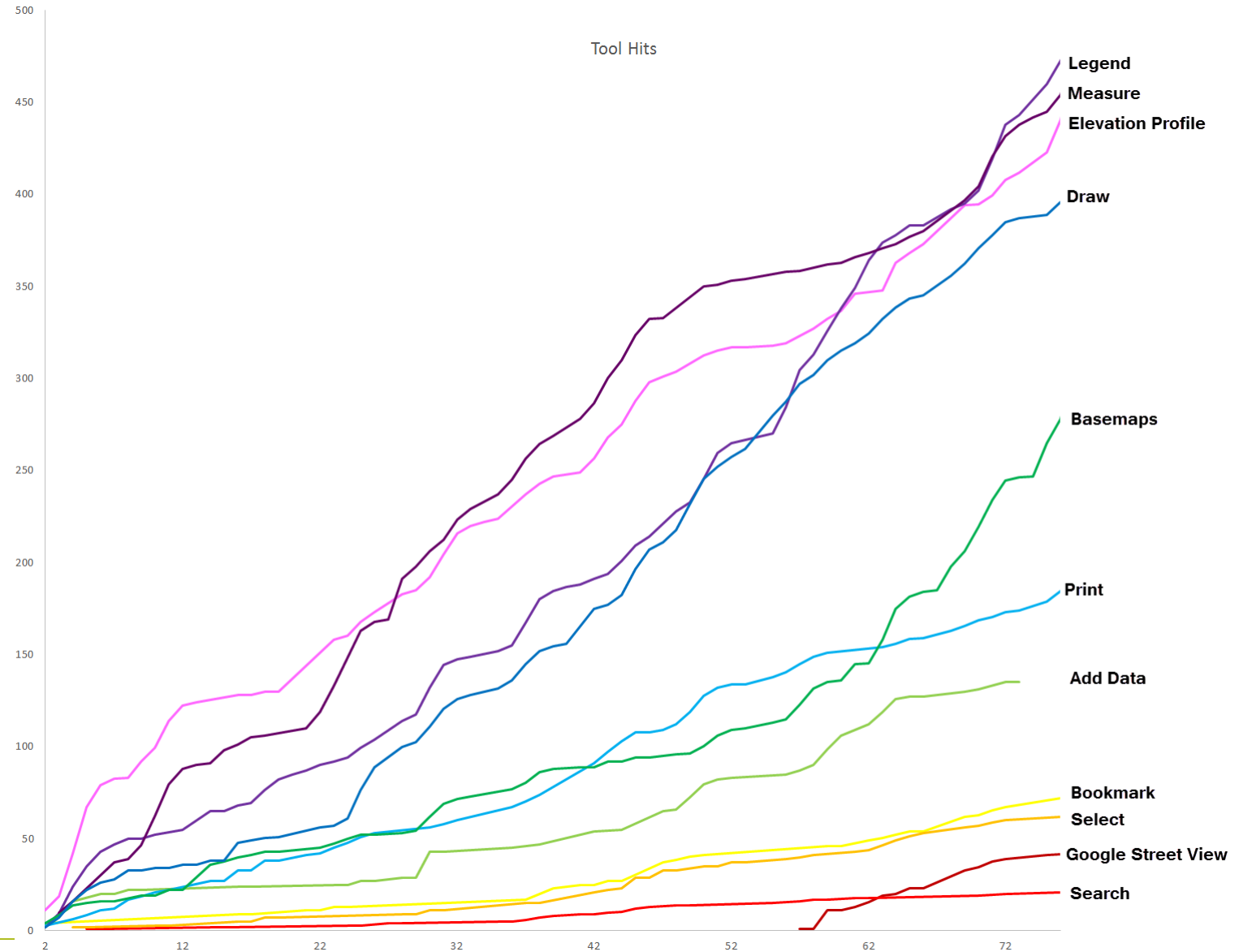
HILLSHADE

MESH (TIN)



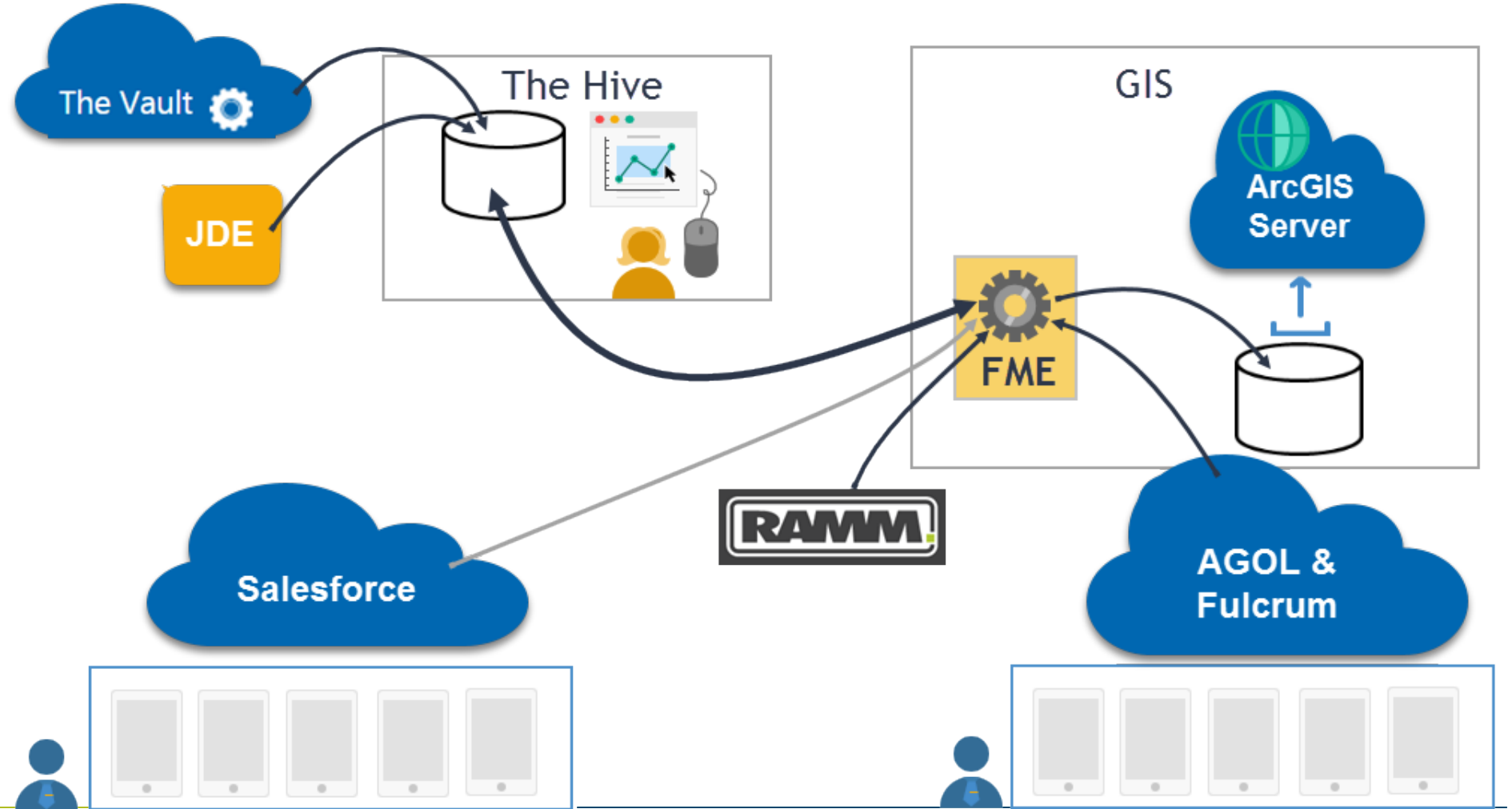
NCTIR GIS Team

Analytics – viewer usage uptake



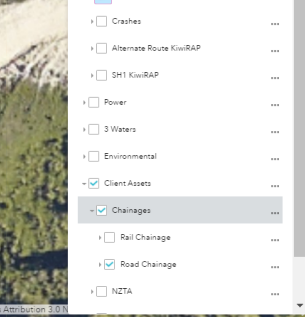
Systems Integration: Overview

Business Systems



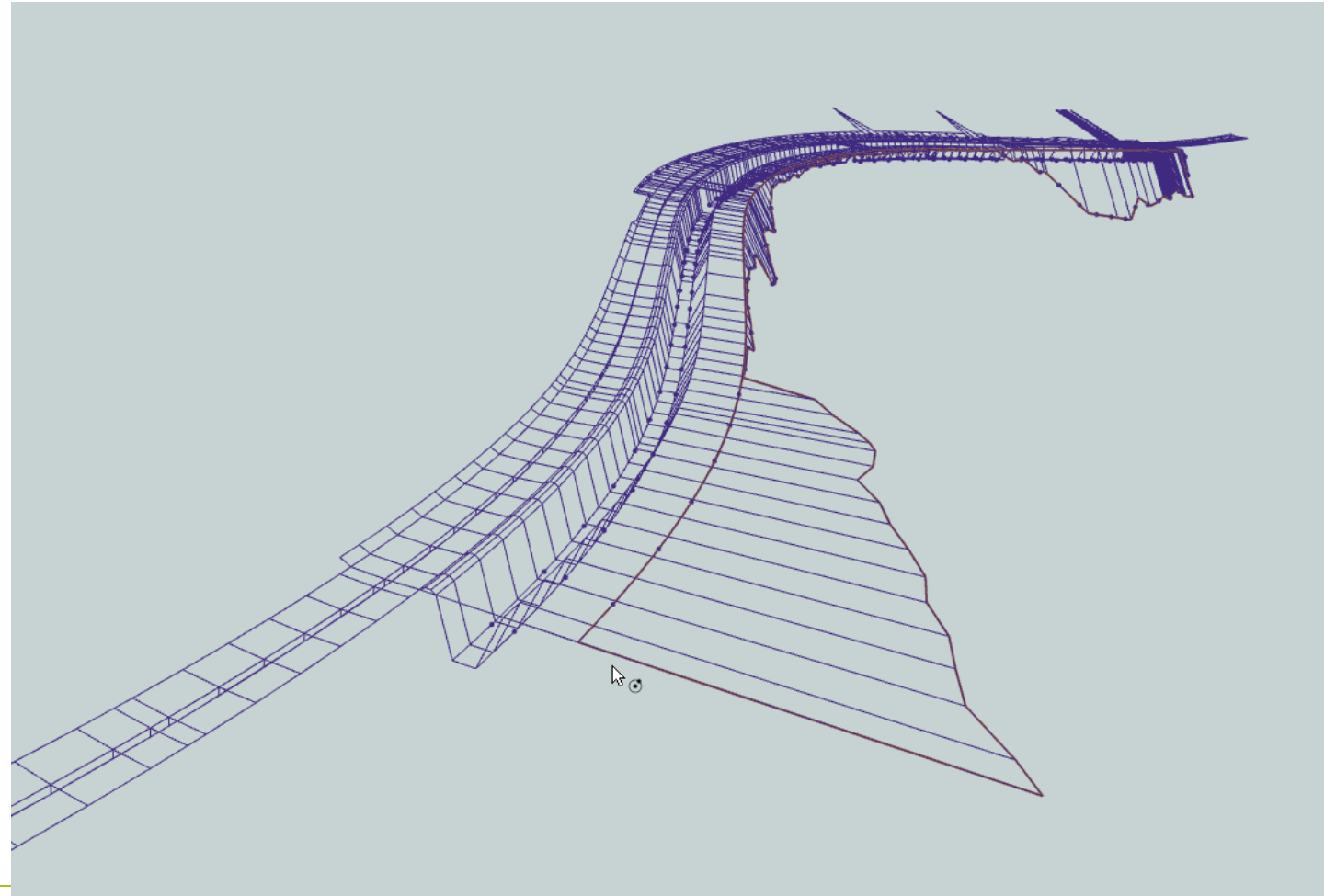
Data Integration: Assessments

Linear referencing



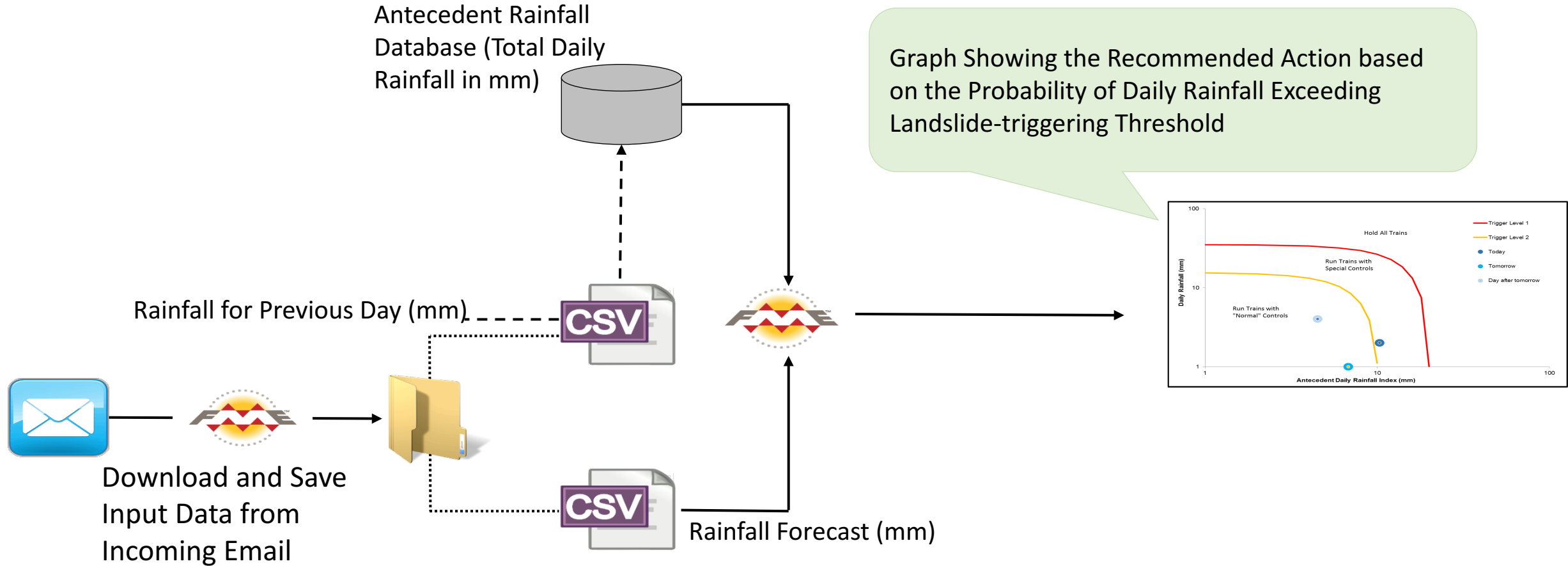
Data Integration: Design

12d/AutoCAD to GIS



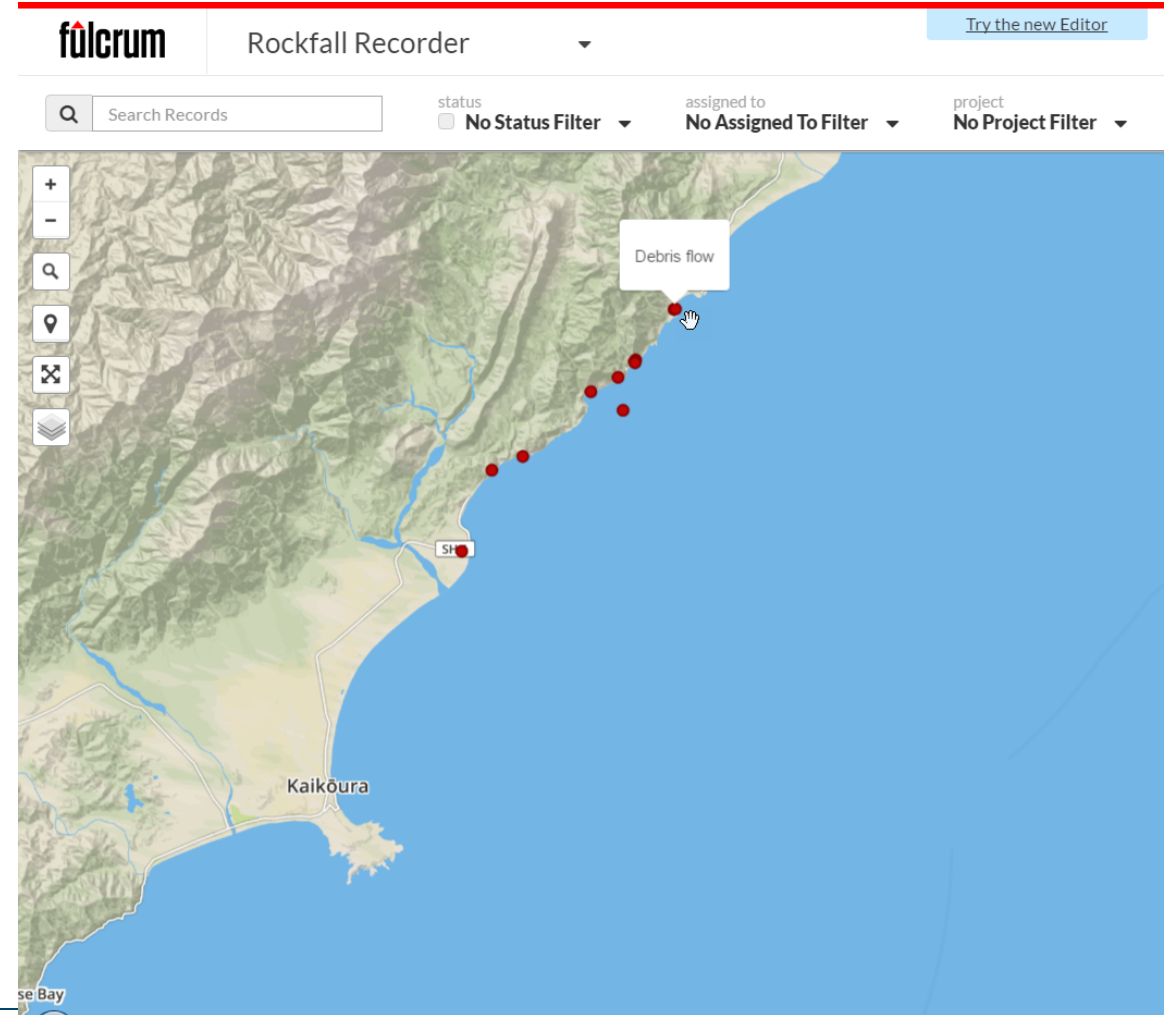
Tools:

Rain threshold for slip risk



Tools:

Field Data Capture Apps



Ongoing Collaboration





Thanks

Questions?

Contact us:

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