

Diverse Spatial Solutions

Liam Koedyk & Ashleigh Ross - Wellington City Council




Parks, Sport & Recreation

A vibrant bird with iridescent green and blue feathers perched on a tree branch. The bird has a dark beak and a white patch on its chest. The background is a lush, green forest with out-of-focus foliage.

Parks, Sport and Recreation is one of the largest Business Units at Wellington City Council.

Parks, Sport & Recreation



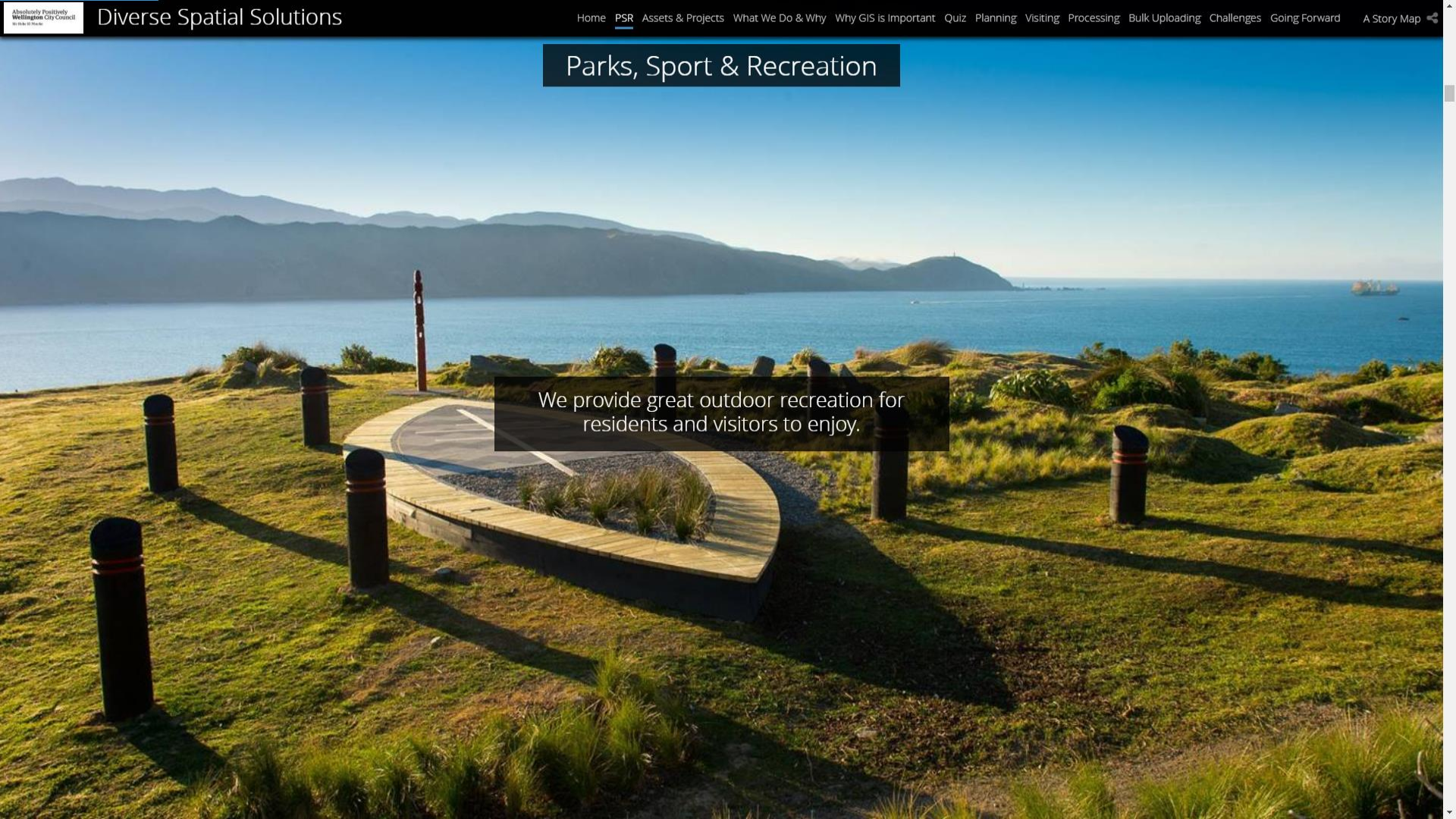
We engage in significant partnerships with sporting, recreational and environmental communities.

Parks, Sport & Recreation

We protect and enhance our natural environment.



Parks, Sport & Recreation

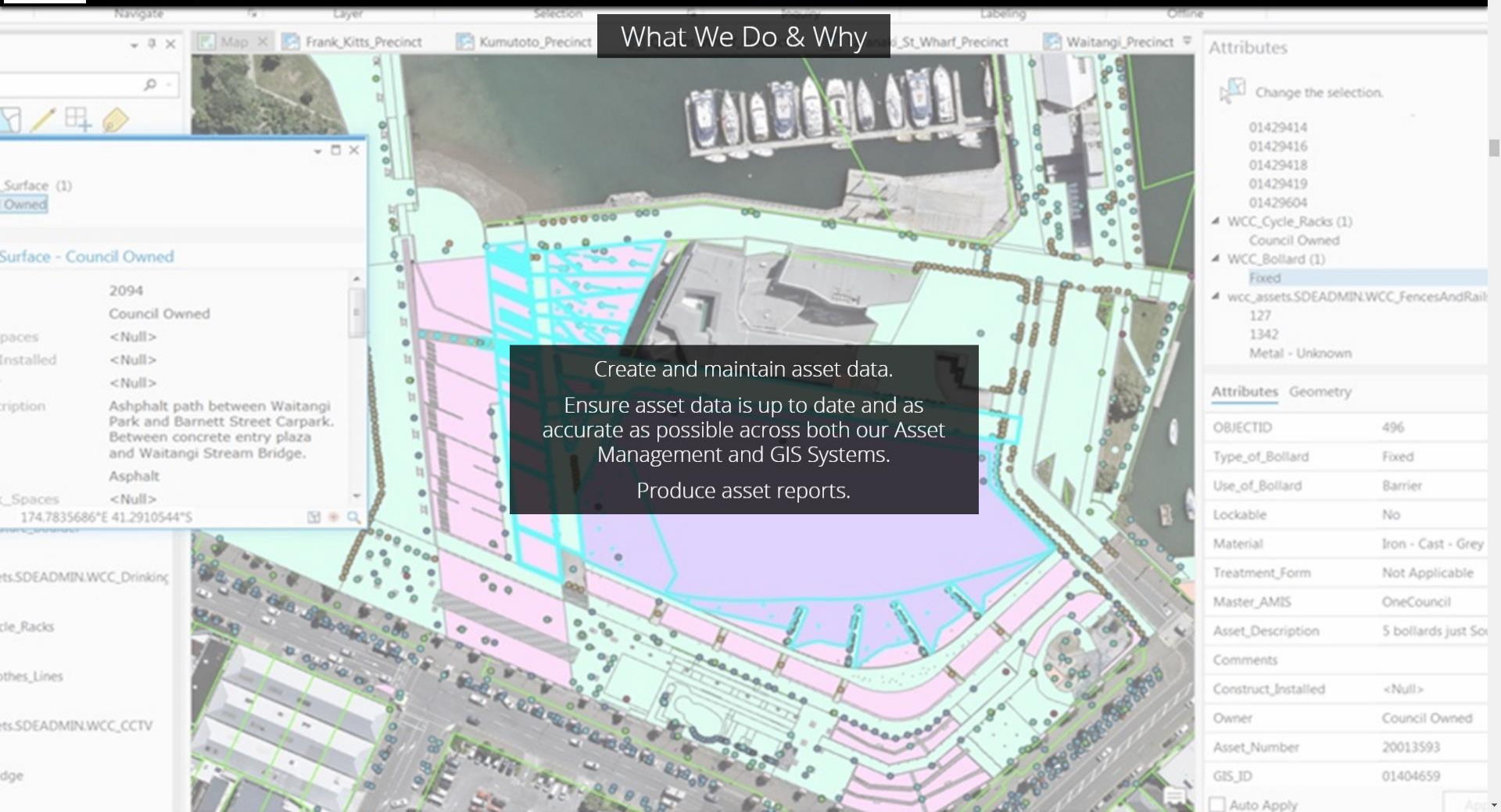


We provide great outdoor recreation for residents and visitors to enjoy.

PSR Assets & Projects

Responsible for the maintenance and renewal of infrastructure and built PSR assets.
More than 20,000 assets across over 4,000 ha of parks and open space.





What We Do & Why

Create and maintain asset data.
 Ensure asset data is up to date and as accurate as possible across both our Asset Management and GIS Systems.
 Produce asset reports.

Surface (1)
Owned

Surface - Council Owned

2094
Council Owned

<Null>

<Null>

<Null>

Ashphalt path between Waitangi Park and Barnett Street Carpark. Between concrete entry plaza and Waitangi Stream Bridge.

Asphalt

<Null>

174.7835686°E 41.2910544°S

Attributes

Change the selection.

- 01429414
- 01429416
- 01429418
- 01429419
- 01429604
- WCC_Cycle_Racks (1)
Council Owned
- WCC_Bollard (1)
Fixed
- wcc_assets.SDEADMIN.WCC_FencesAndRail
127
1342
Metal - Unknown

Attributes	Geometry
OBJECTID	496
Type_of_Bollard	Fixed
Use_of_Bollard	Barrier
Lockable	No
Material	Iron - Cast - Grey
Treatment_Form	Not Applicable
Master_AMIS	OneCouncil
Asset_Description	5 bollards just so
Comments	
Construct_Installed	<Null>
Owner	Council Owned
Asset_Number	20013593
GIS_ID	01404659

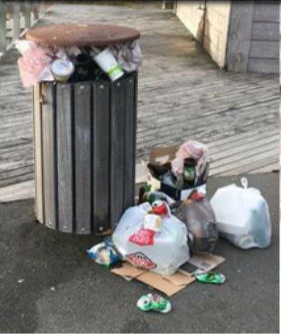
Auto Apply

What We Do & Why

Three yearly condition assessment cycle.
NAMS guidelines for condition assessments

Rank	Description of Condition	Action
1	Very Good Condition	Continue any planned maintenance activity.
2	Good Condition – Minor Defects Only	Minor maintenance.
3	Fair or Moderate Condition.	Significant maintenance required.
4	Poor Condition	Consider rehabilitation or renewal.
5	Very Poor Condition	Unserviceable / beyond rehabilitation, requires replacement to restore function.



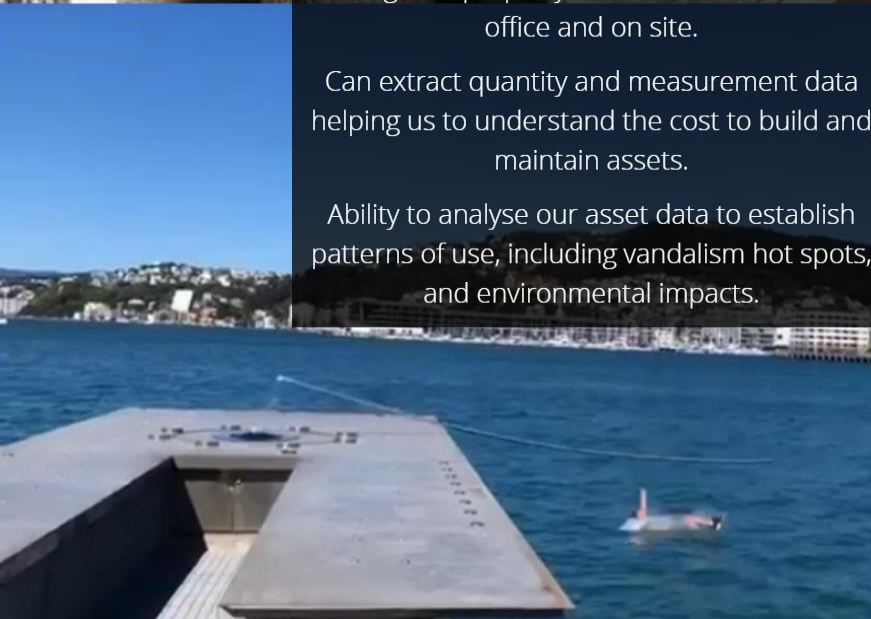


Why GIS is Important

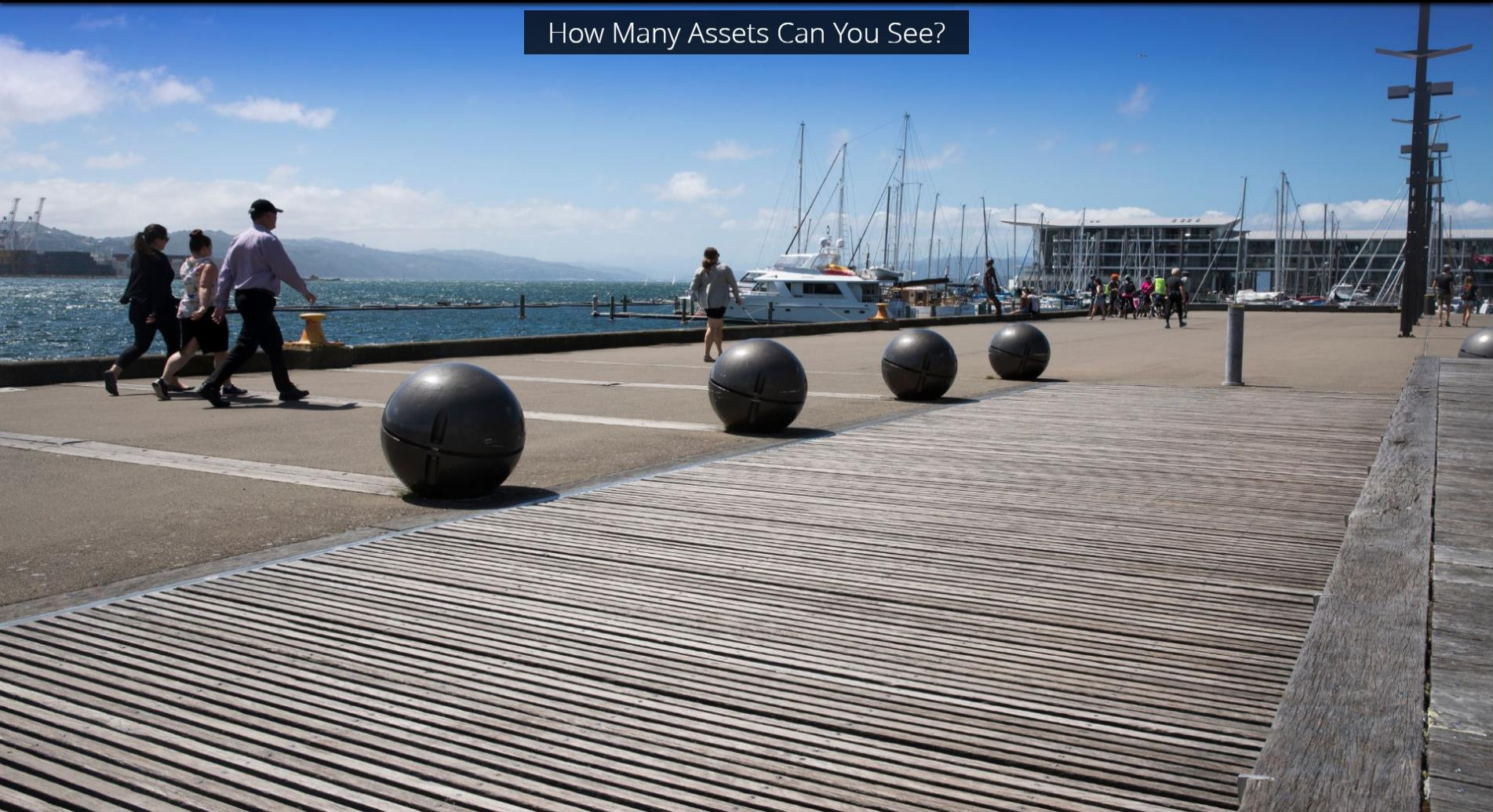
Able to visualize and understand our assets along with property boundaries both in the office and on site.

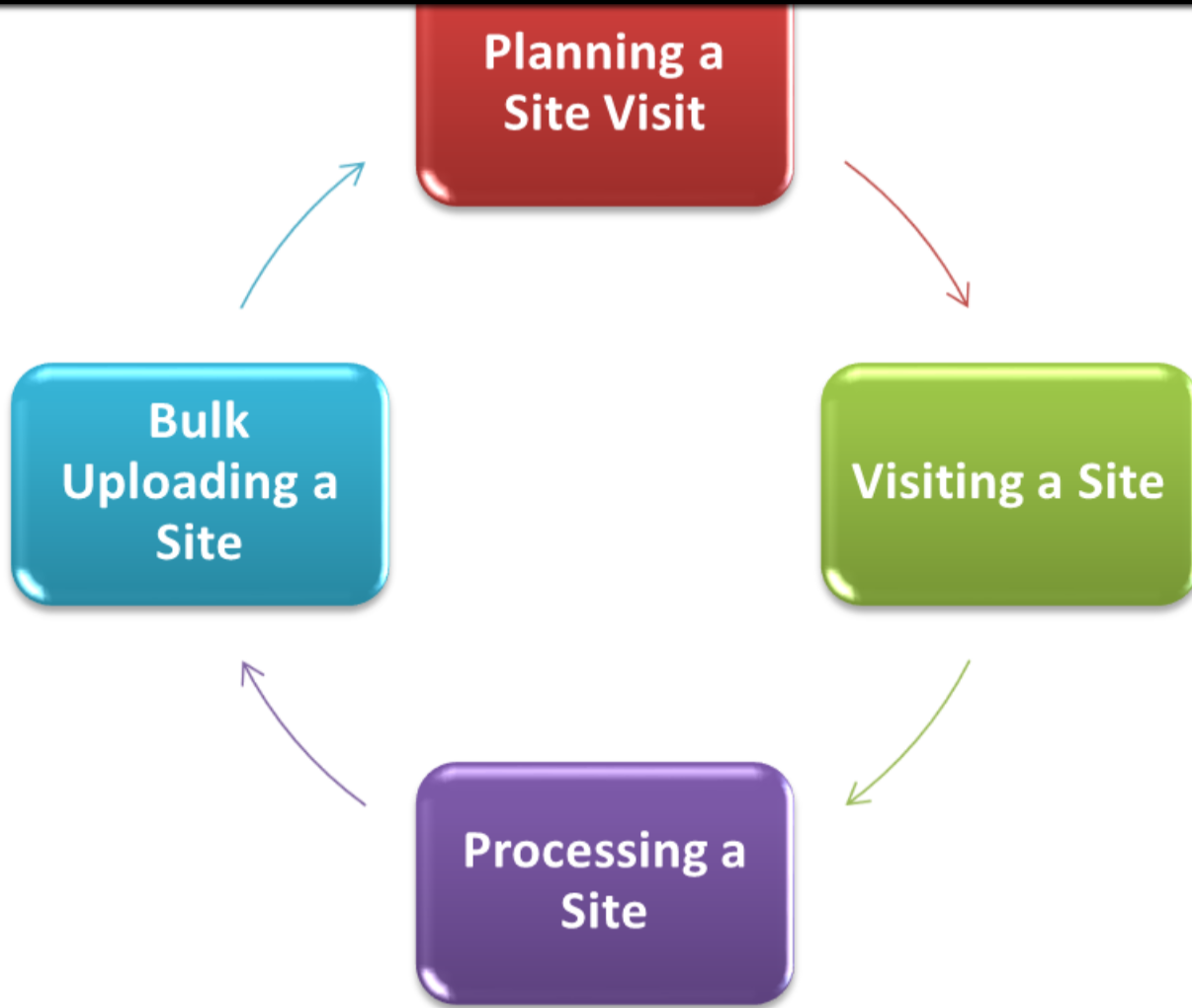
Can extract quantity and measurement data helping us to understand the cost to build and maintain assets.

Ability to analyse our asset data to establish patterns of use, including vandalism hot spots, and environmental impacts.

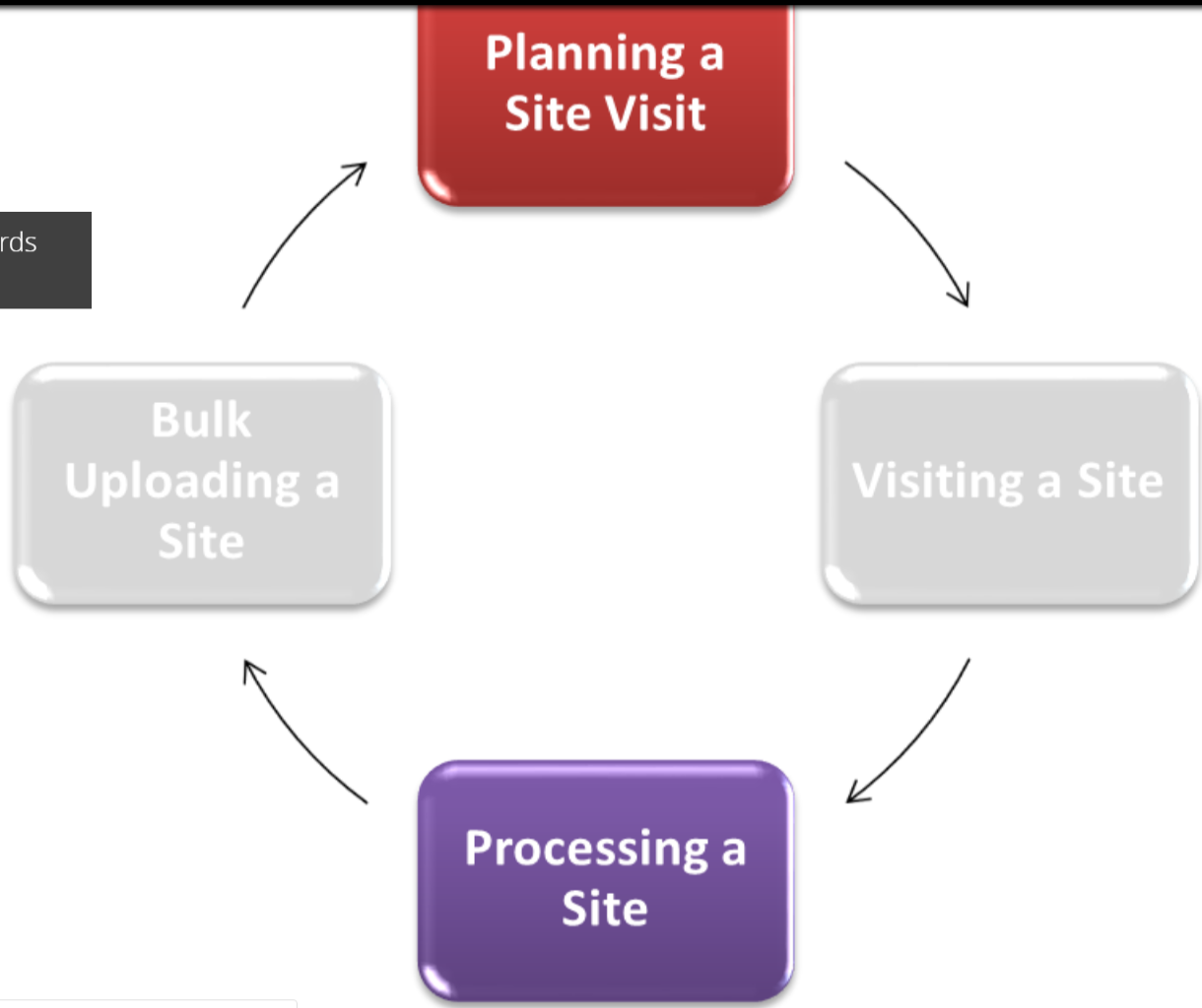


How Many Assets Can You See?





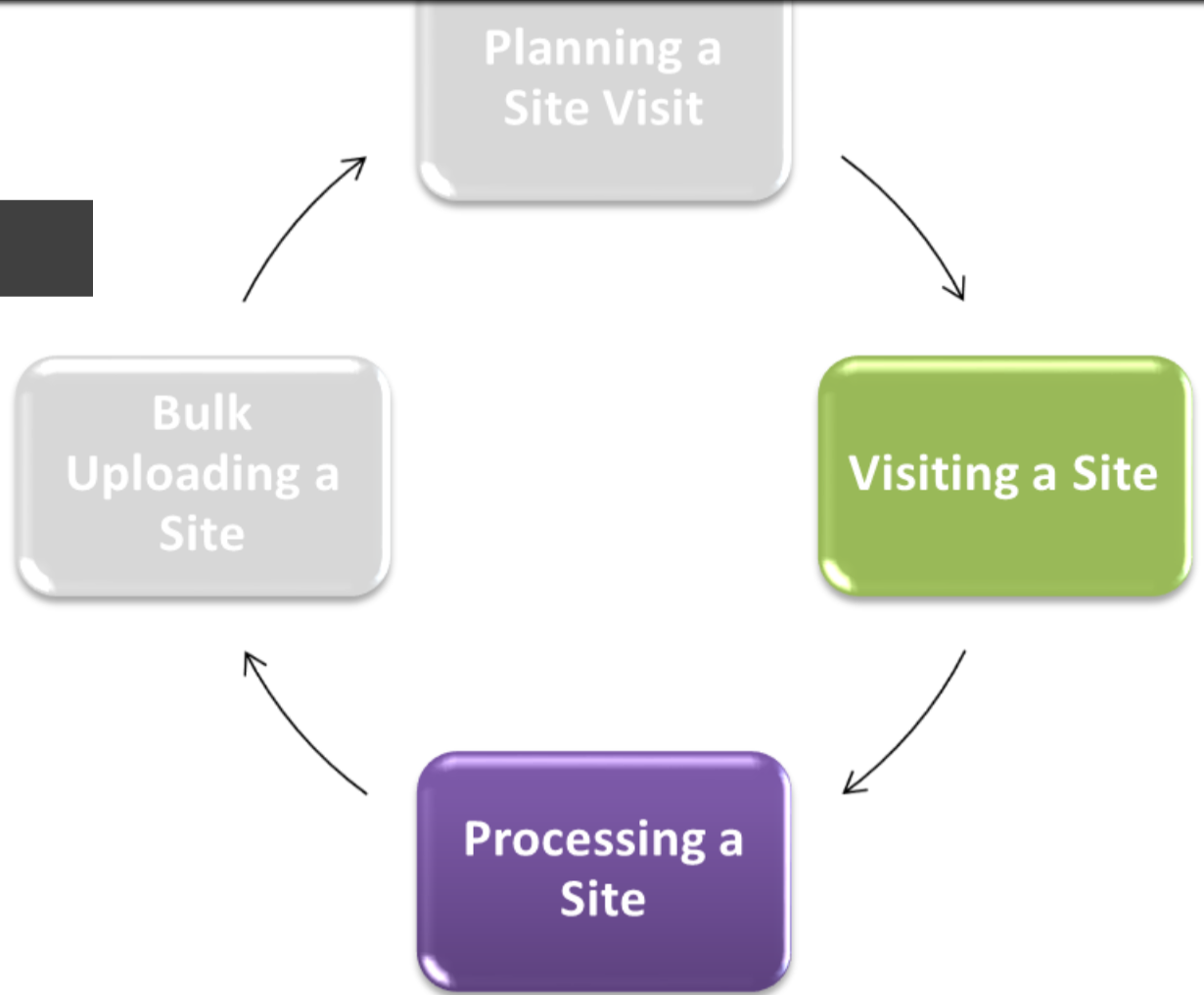
Operations Dashboards

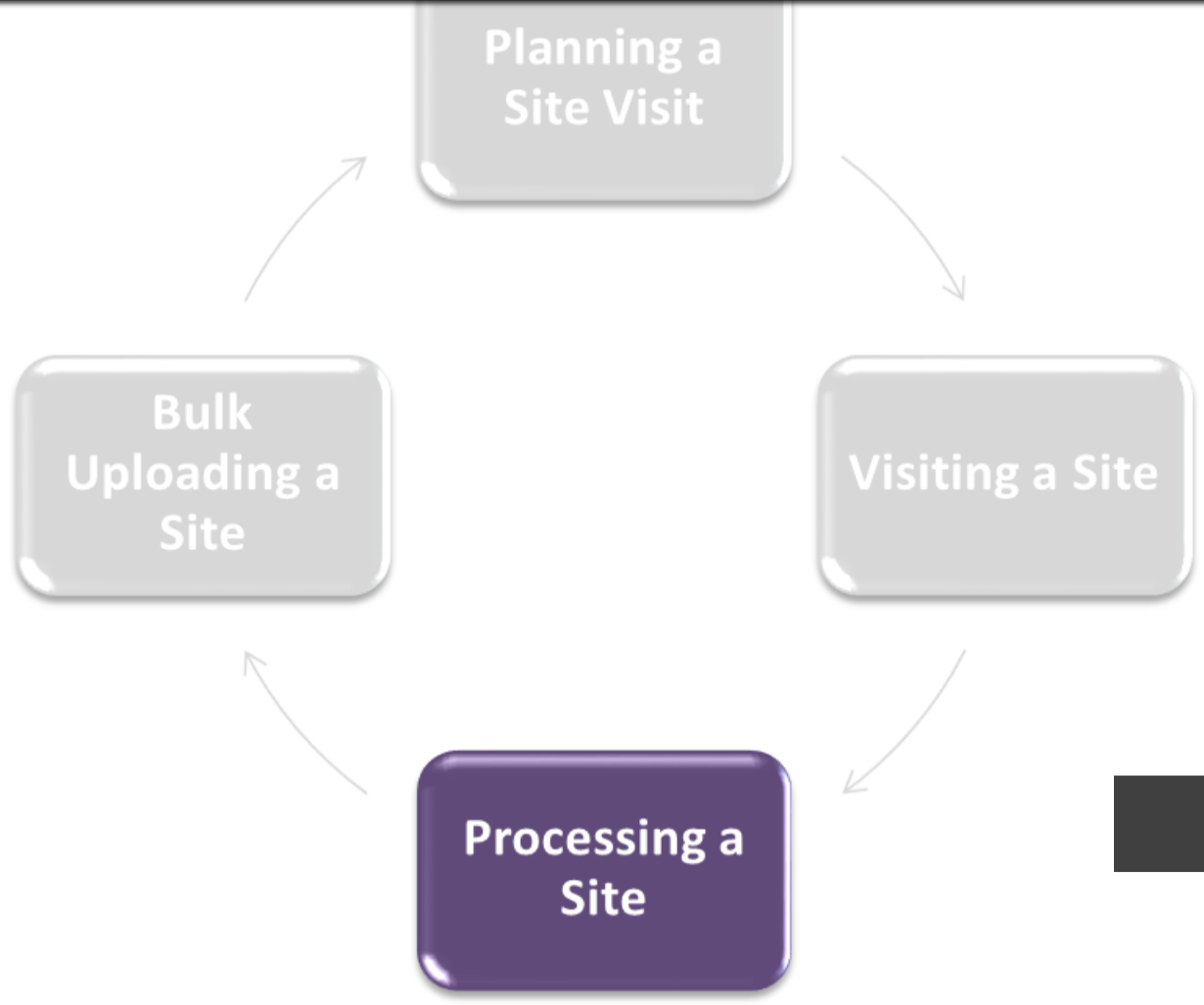




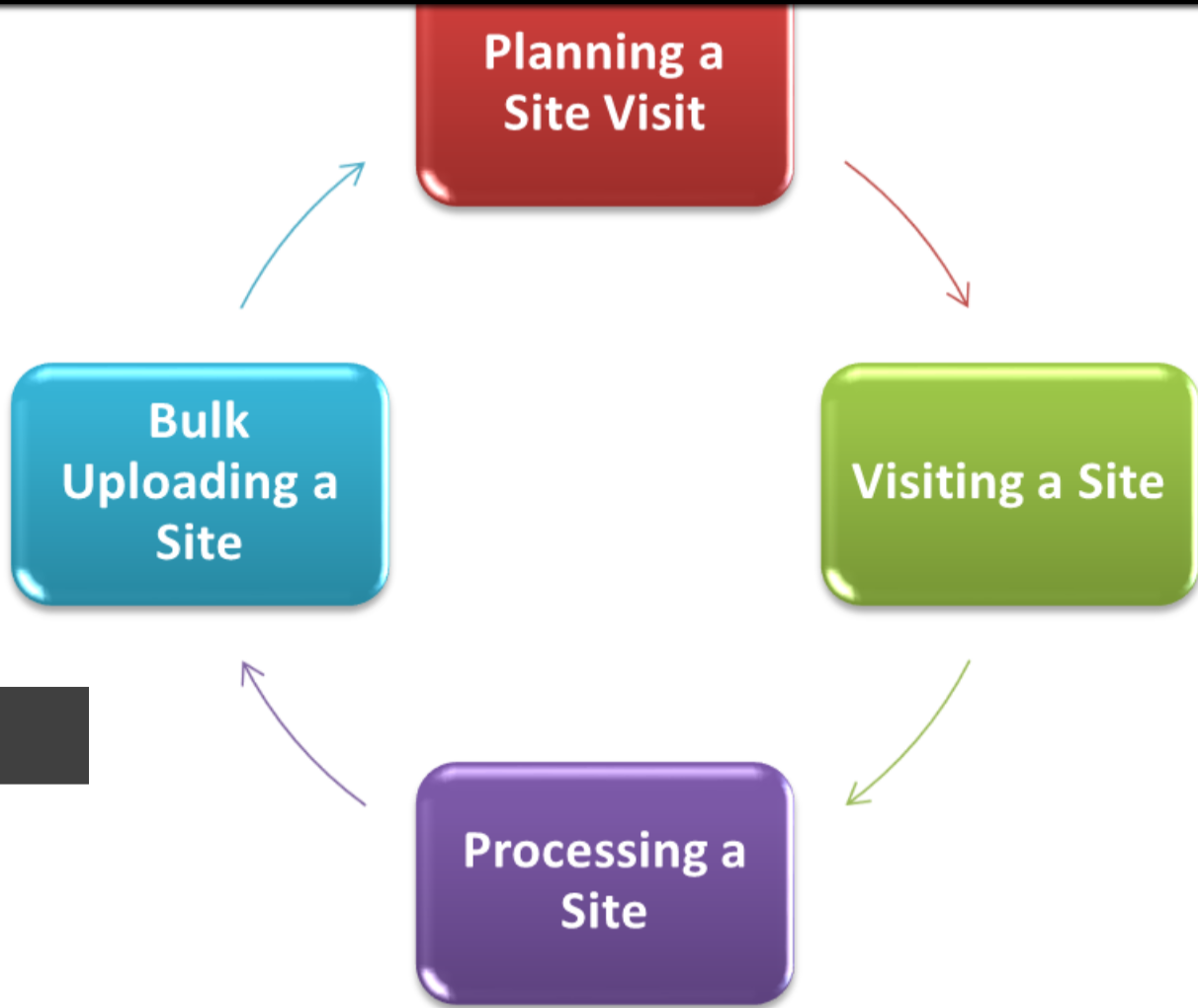
Collector

Survey123





ArcGIS Pro

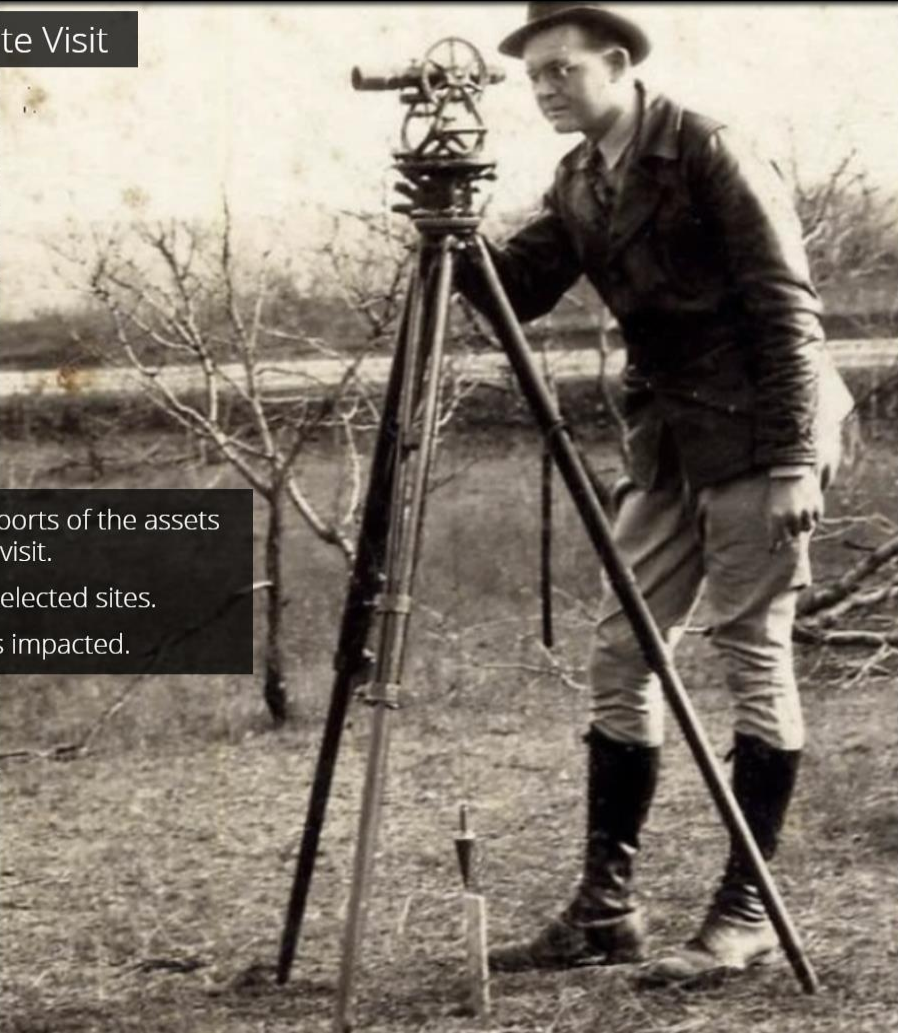


StoryMaps

Planning a Site Visit



In the past had to print reports of the assets prior to site visit.
Limited to only visit selected sites.
Quality of data was impacted.



Completed in Last 3 Years

Older Than 3 Years

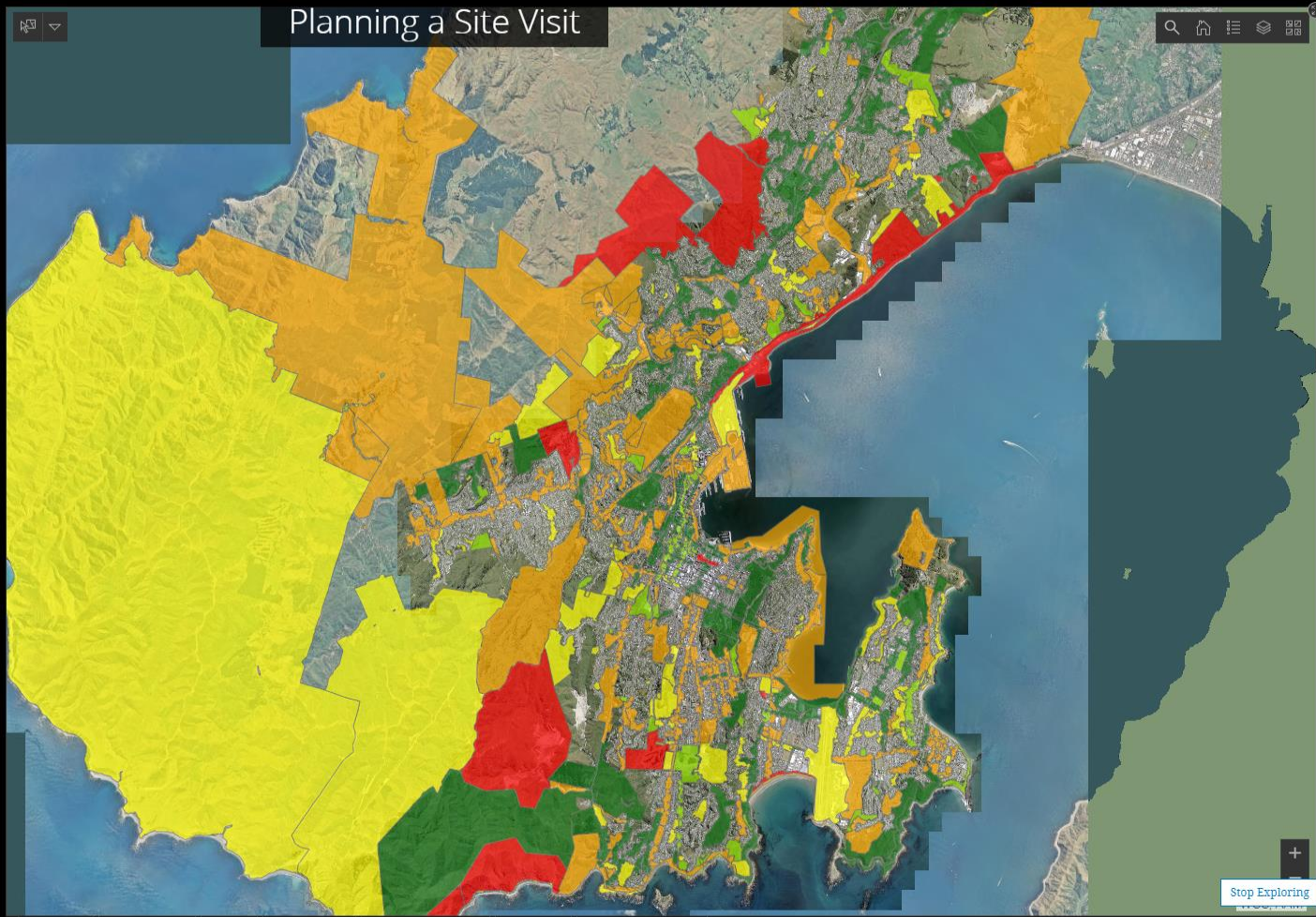
412

594

Assets Inspected In 2019

34%

Planning a Site Visit



	Wellington Regional Aquatic Centre -WRAC Min Year: 2000 - Total Assets: 21
	Owhiro Bay Quarry Min Year: 2004 - Total Assets: 100
	Red Rocks / Sinclair Head Reserve Min Year: 2004 - Total Assets: 5
	Berhampore Golf Links, Nursery Min Year: 2005 - Total Assets: 408
	Southern Landfill & Gullies Min Year: 2005 - Total Assets: 41
	Courtenay Pl Min Year: 2005 - Total Assets: 15
	Karori Cemetery Min Year: 2006 - Total Assets: 594
	Otari Wiltons Bush Min Year: 2007 - Total Assets: 566
	Hataitai Park Min Year: 2007 - Total Assets: 299
	Karori Park and Play Area Min Year: 2007 - Total Assets: 272
	Te Ahumairangi

Last update: a few seconds ago

[Old Sites](#) [Area](#) [Largest Sites](#) [Check](#) [Liam](#) [Ashleigh](#)

[Main Map](#) [Sites to Check](#) [Layers](#) [Editable Map](#) [Editable Layers Map](#) [Site Detail](#) [Detailed Information](#)

Stop Exploring

Planning a Site Visit

Improved understanding of what sites need to be visited.

Flexibility in the field.

Easily delegate responsibility of site to specific person to inspect.

Team can visualise where our key focus is/will be in future.



Visiting a Site

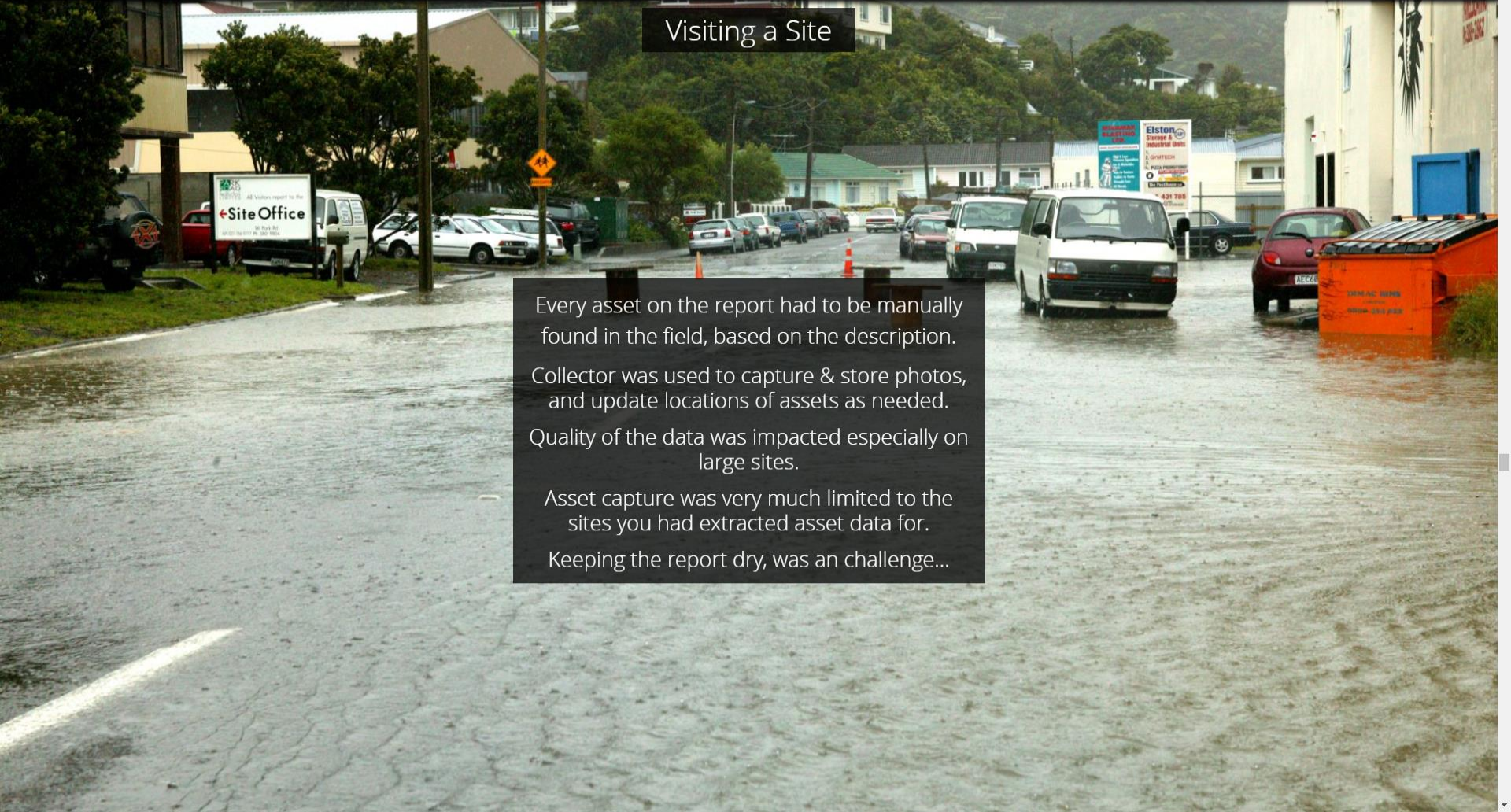
Every asset on the report had to be manually found in the field, based on the description.

Collector was used to capture & store photos, and update locations of assets as needed.

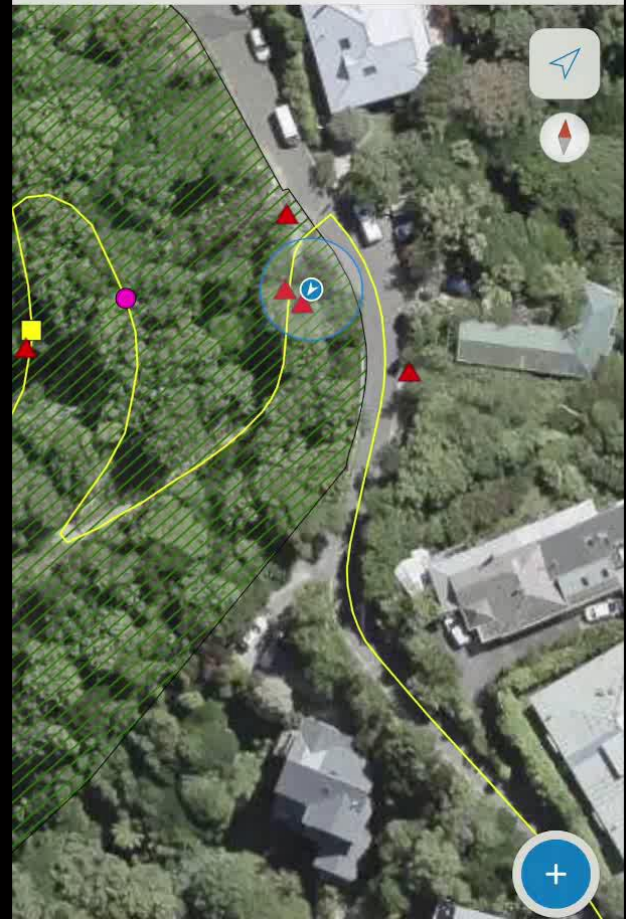
Quality of the data was impacted especially on large sites.

Asset capture was very much limited to the sites you had extracted asset data for.

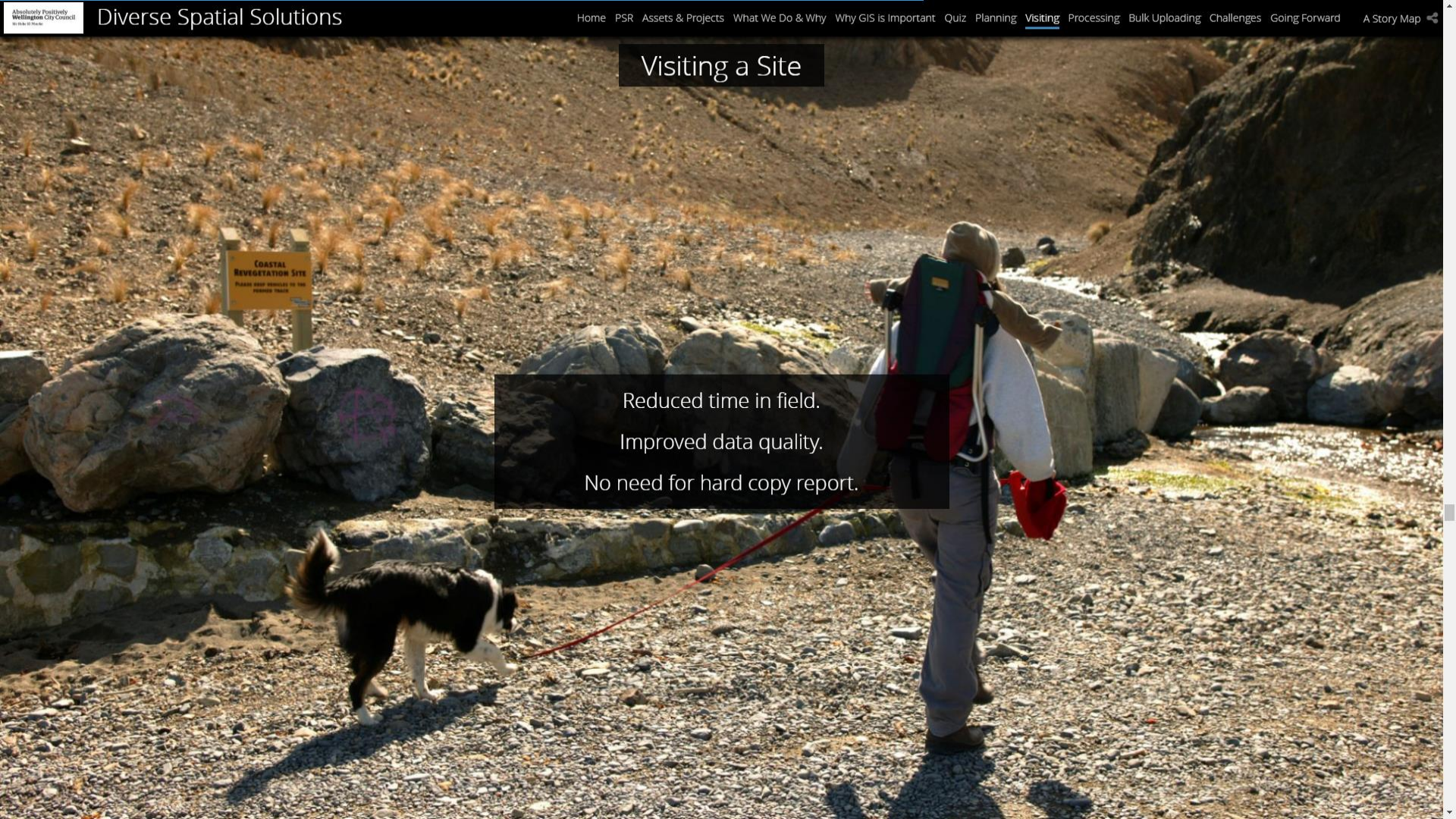
Keeping the report dry, was an challenge...



GPS accuracy 8 m



Visiting a Site

A person wearing a large backpack and carrying a white bag is walking away from the camera on a rocky, gravelly path. A black and white dog is walking on a red leash to the left of the person. In the background, there are large grey rocks and a wooden sign that reads "COASTAL REVEGETATION SITE PLEASE KEEP VEHICLES ON THE PAVED TRACK". The terrain is dry and rocky with some sparse, dry grass. The sky is bright and clear.

Reduced time in field.
Improved data quality.
No need for hard copy report.

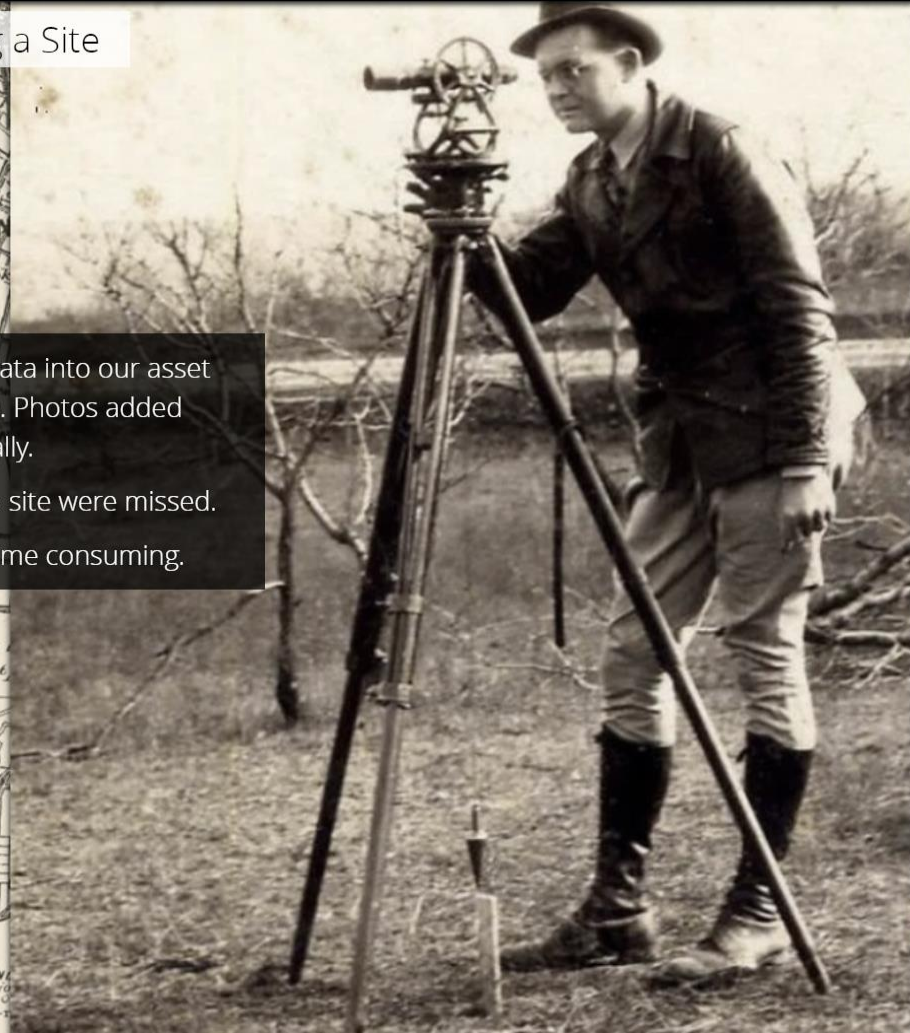




Processing a Site

Manually entered the data into our asset management system. Photos added individually.

Often 1-2% of assets on site were missed. Again, this was very time consuming.



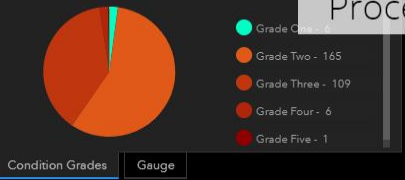
New Assets

816

Existing Assets

369

Processing a Site



Existing Assets



Tim

6

Capture Point

Karl

0

New Sign

Ranger

2

New Sign

Condition Grade - Steps

Site Name:

Asset Description:

Notes:

ross3a_WCC

Condition Grade - Mowing

Site Name: Khandallah Pk

Asset Description:

Notes:

ross3a_WCC

Condition Grade - Mowing

Site Name: Khandallah Pk

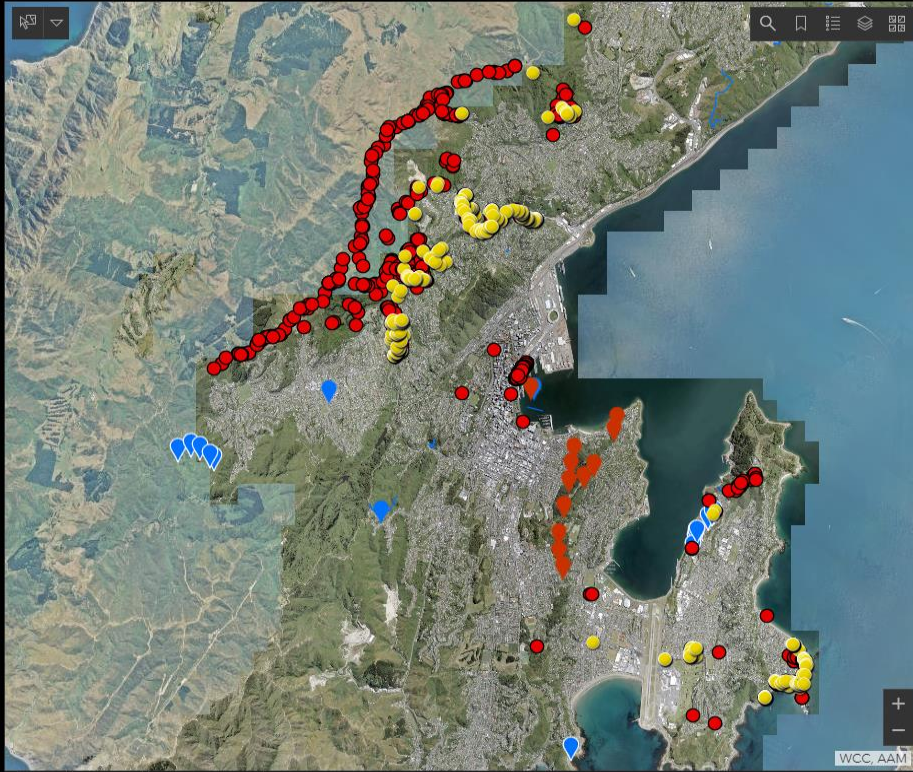
Asset Description:

Notes:

ross3a_WCC

Condition Grade - Sign

Last update: a few seconds ago



Map Monthly Processing Time

ross3a_WCC

Bulk Upload

Layer

Asset Number*

Asset Description*

Owning BU*

Asset Operating Status*

[Explore](#)

Updated Condition Rating

Processing a Site

Improved data quality.

Reduced processing time.

Spatial record of sites completed.

Quick summary of statistics.

Multiple data sources all feeding into one place.



Bulk Uploading a Site

Previously was nothing was bulk uploaded.



Bulk Uploading a Site

Less manual work.
Improved data quality.

Challenges

Manual process for new assets.
Initial problems with offline areas.
Credit Usage.

Going Forward

Keeping our workflow adaptable
Streamline the process further when we can.

Questions?

