

Inspection Frequency, Have you got it right?

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Introduction

- Background
- Catchpit inspections
- What the data tells us
- Where to next?



Background

- Failings of the past
- Level of service
- Inspection methodology
- How to manage this?



Considerations

Collecting Field Info

Job Management

Asset Data

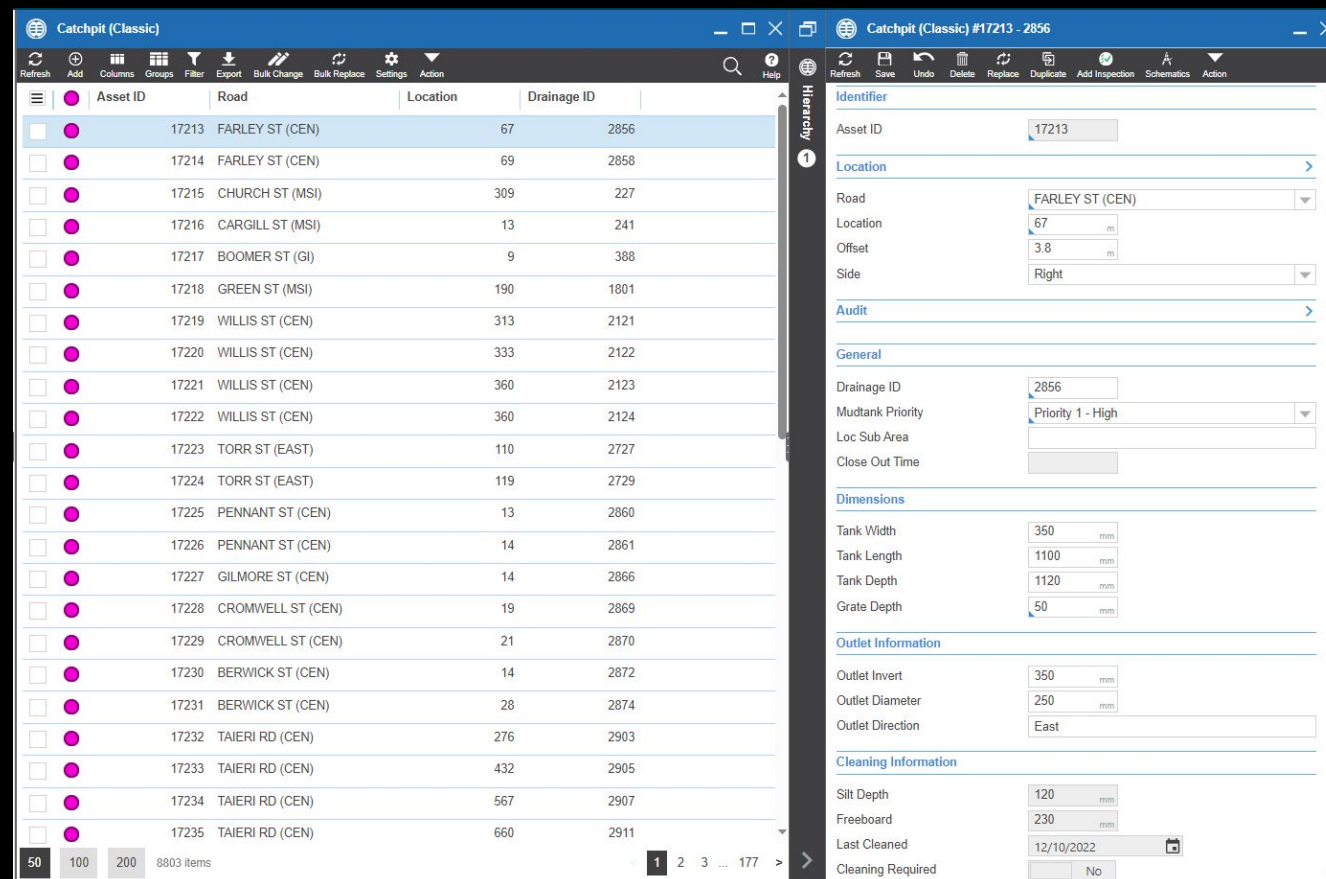
Reporting

Catchpit Management

Level Of Service

Storing Asset Data

Inspection Frequency - Have we got it right?



The screenshot displays the 'Catchpit (Classic)' software interface. On the left, a table lists asset data with columns for Asset ID, Road, Location, and Drainage ID. On the right, a detailed view for asset #17213 - 2856 is shown, including fields for Identifier, Location, Audit, General, Dimensions, Outlet Information, and Cleaning Information.

Asset ID	Road	Location	Drainage ID
17213	FARLEY ST (CEN)	67	2856
17214	FARLEY ST (CEN)	69	2858
17215	CHURCH ST (MSI)	309	227
17216	CARGILL ST (MSI)	13	241
17217	BOOMER ST (GI)	9	388
17218	GREEN ST (MSI)	190	1801
17219	WILLIS ST (CEN)	313	2121
17220	WILLIS ST (CEN)	333	2122
17221	WILLIS ST (CEN)	360	2123
17222	WILLIS ST (CEN)	360	2124
17223	TORR ST (EAST)	110	2727
17224	TORR ST (EAST)	119	2729
17225	PENNANT ST (CEN)	13	2860
17226	PENNANT ST (CEN)	14	2861
17227	GILMORE ST (CEN)	14	2866
17228	CROMWELL ST (CEN)	19	2869
17229	CROMWELL ST (CEN)	21	2870
17230	BERWICK ST (CEN)	14	2872
17231	BERWICK ST (CEN)	28	2874
17232	TAIERI RD (CEN)	276	2903
17233	TAIERI RD (CEN)	432	2905
17234	TAIERI RD (CEN)	567	2907
17235	TAIERI RD (CEN)	660	2911

Asset #17213 - 2856 Details:

- Identifier: 17213
- Location: FARLEY ST (CEN), 67 m, Offset 3.8 m, Side Right
- Audit: (empty)
- General: Drainage ID 2856, Mudtank Priority Priority 1 - High, Loc Sub Area (empty), Close Out Time (empty)
- Dimensions: Tank Width 350 mm, Tank Length 1100 mm, Tank Depth 1120 mm, Grate Depth 50 mm
- Outlet Information: Outlet Invert 350 mm, Outlet Diameter 250 mm, Outlet Direction East
- Cleaning Information: Silt Depth 120 mm, Freeboard 230 mm, Last Cleaned 12/10/2022, Cleaning Required No

Asset Data

Field Collection

Data Queries

Reporting

Inspection Process – DCC Mudtanks

This should be used in conjunction with the Fulton Hogan Guide on Inspections in the field. This is to highlight extra steps in the process specific to the **Mudtank** inspection required for the Dunedin City Council

- Identify the correct inspection record Pocket RAMM and open the inspection.
- Start an assessment by selecting the button below

MUDTANK CROSS SECTION

- X - DEPTH OF SILT
- V - DEPTH OF TANK
- Z - DEPTH OF OUTLET PIPE
- ∇ - WATER LEVEL
- - SILT

- Check grate is 90% clear of debris and record pass or fail in the assessment.
- Check Kerb and Channel is 90% clear for 5m either side of tank grate and record pass or fail in the assessment.
- Using measuring device establish measurements "X" and record in the assessment. For double grates dip the grate closest to outlet pipe
- Select condition in the assessment question from Excellent to Very Poor. **This will update the asset details for you so step 10 can be skipped!!!!**
- Once all questions are answered (seen onscreen by the tick beside the question). Complete the Assessment by Clicking on the tick in the top left corner of the window.

- Pass the inspection by clicking on the pass button. Only fail the dispatch if you cannot find an asset at this location.

Asset Data

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```

1  --IF STATEMENTS DROPPING ALL TABLE NAMES THAT ARE TO BE USED IN THIS CODE
2  IF object_id('tempdb.dbo.#assessment_calculations', 'U') IS NOT NULL
3      DROP TABLE #assessment_calculations;
4
5  IF object_id('tempdb.dbo.#Most_Recent_Asset_Assessment', 'U') IS NOT NULL
6      DROP TABLE #Most_Recent_Asset_Assessment;
7
8  IF object_id('tempdb.dbo.#Most_Recent_Clean', 'U') IS NOT NULL
9      DROP TABLE #Most_Recent_Clean;
10
11 IF object_id('tempdb.dbo.#Most_Recent_Clean_dispatch', 'U') IS NOT NULL
12     DROP TABLE #Most_Recent_Clean_dispatch;
13
14 --CREATING A DUMMY TABLE WITH THE MOST RECENT CLEANING DISPATCH_ID FOR EACH DRAINAGE_ID RECORD
15 CREATE TABLE #Most_Recent_Clean_dispatch (asset_id INT,most_recent_clean_dispatch INT);
16
17 INSERT INTO #Most_Recent_Clean_dispatch
18 SELECT d.system_id,max(d.dispatch_id)
19 FROM mt_dispatch d
20 WHERE d.asset_type = 5
21 AND fault = 'DCC' --Note this needs to be the specific fault code for cleaning mudtanks
22 AND call_complete_actual IS NULL
23 AND d.system_id IN (SELECT m.drainage_id
24                    FROM ud_mudtank m)
25 GROUP BY d.system_id;
26
27 --CREATING A DUMMY TABLE WITH DATE THE MOST RECENT ASSESSMENT COMPLETED DATE FOR EACH DRAINAGE_ID RECORD
28 CREATE TABLE #Most_Recent_Asset_Assessment(asset_id INT,most_recent_assessment DATE,assessment_id INT);
29
30 INSERT INTO #Most_Recent_Asset_Assessment
31 SELECT a.asset_id, MAX(a.added_on),MAX(a.assessment_id)
32 FROM as_assessment_dtl a
33 WHERE a.assessment_id IN(SELECT x.assessment_id
34                        FROM as_assessment x
35                        WHERE x.asset_type = 4) --This needs to be changed to the "Assessment Asset type"
36 AND a.assess_item = 290 --This needs to be changed to the "Question" for silt depth (assess_item) ID from
37 GROUP BY a.asset_id;
38
39 --CREATING A DUMMY TABLE WITH THE MOS RECENT CLEANING DATE FOR EACH DRAINAGE_ID
40 CREATE TABLE #Most_Recent_Clean(asset_id INT,most_recent_clean DATE);
41
42 INSERT INTO #Most_Recent_Clean

```



Catchpit (Classic) #17351 - 2578

Refresh Save Undo Delete Replace Duplicate Add Inspection Schematics Action

Audit

General

Drainage ID: 2578

Mudtank Priority: Priority 1 - High

Loc Sub Area:

Close Out Time: 21

Cleaning Information

Silt Depth: 0 mm

Freeboard: 1100 mm

Last Cleaned: 16/02/2024

Cleaning Required: No

Open Cleaning Dispatch ID:

Last Assessed: 26/01/2024

Compliance

Inspection Compliance: Yes

Freeboard Compliance: Yes

Asset Data

Field Collection

Data Queries

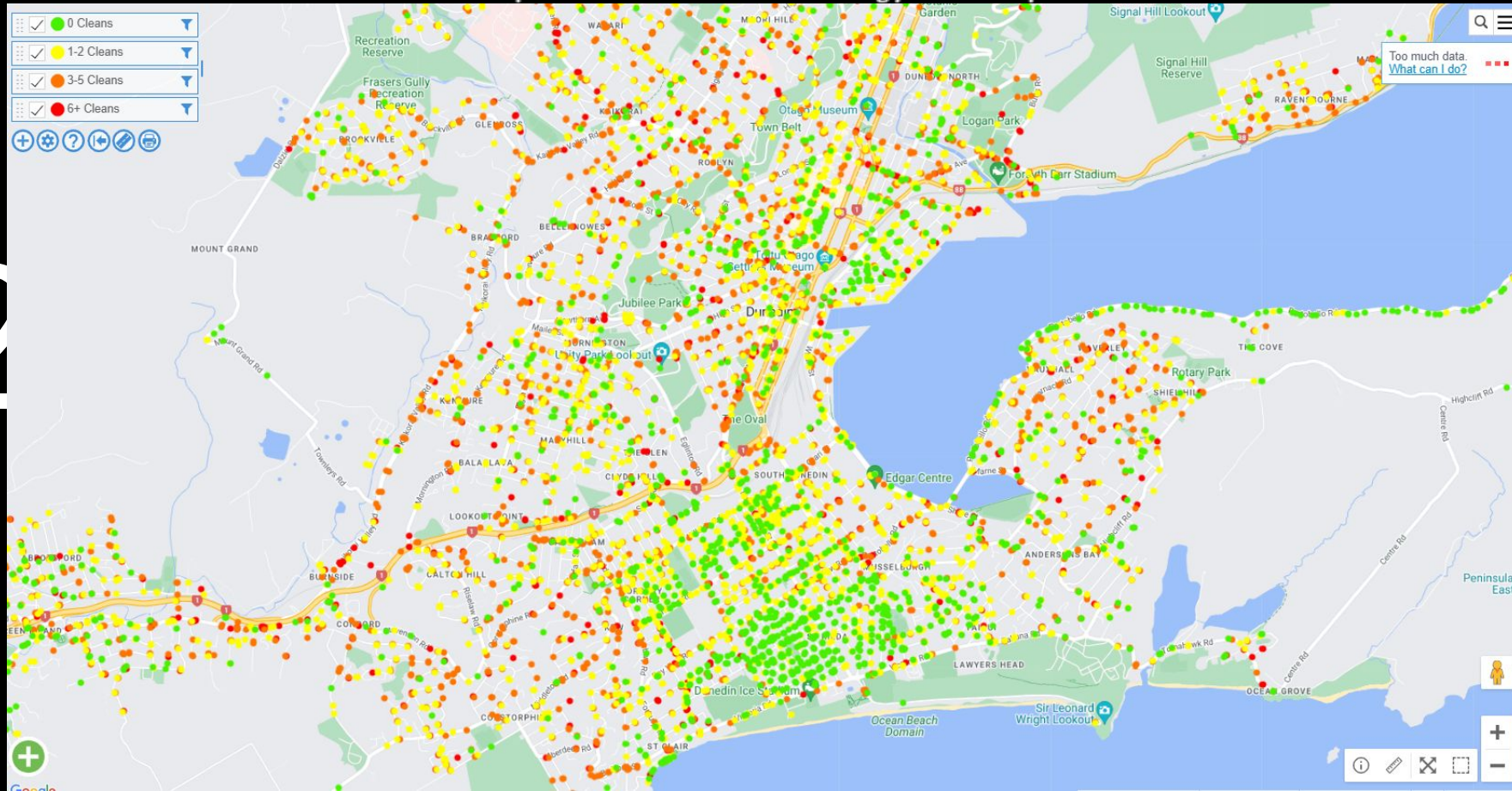
Reporting

Inspection Frequency - Have we got it right?

What we learned from the data?

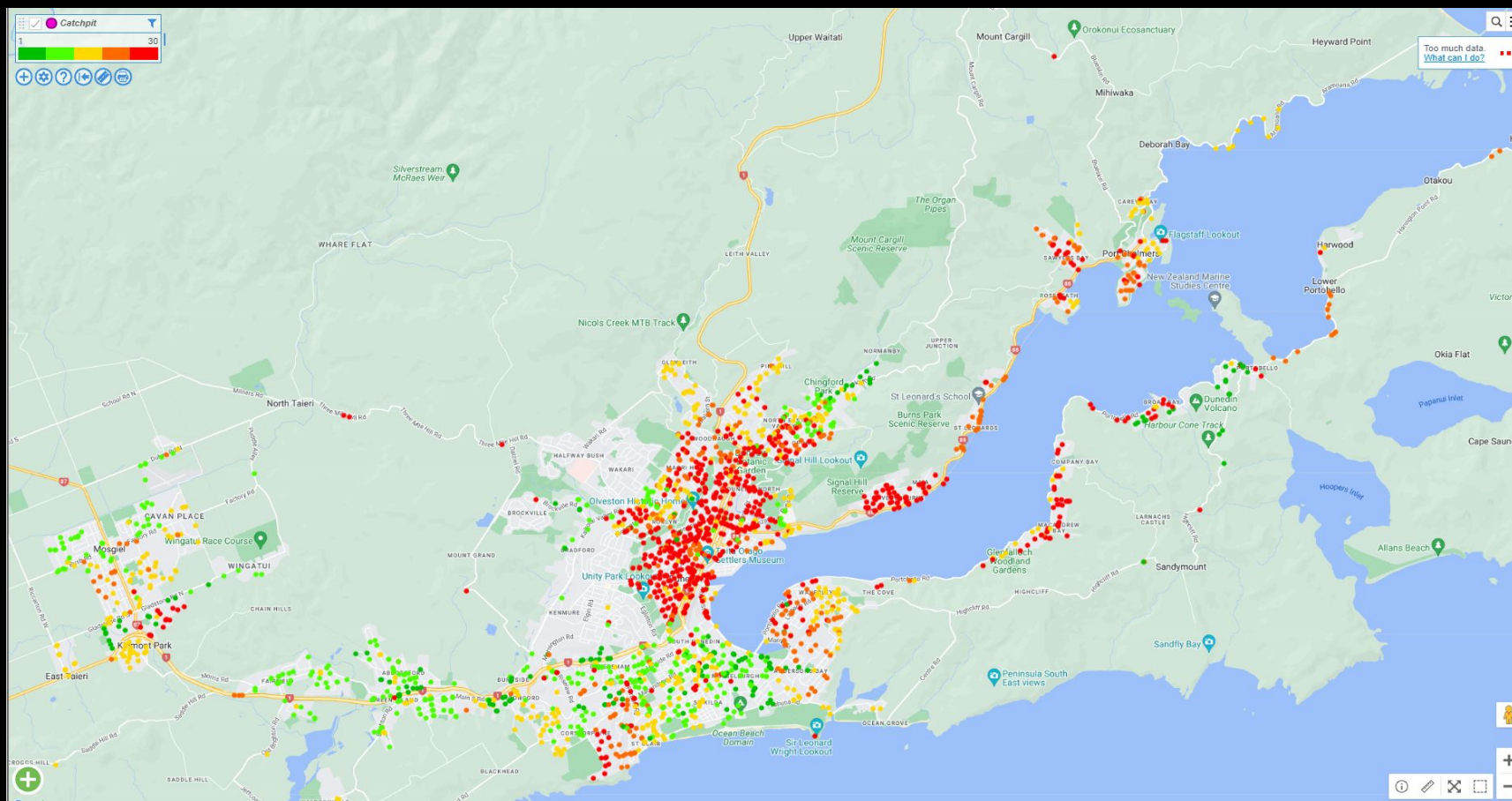
Catchpit Cleans since Methodology was Adopted

72



%

What we learned from the data?



How could we further optimise?

- Inspections vs. Work
- Risk based assessment frequency
- Combination of Cycles/Inspections
- AMDS → Data Structure
- I.O.T.



Inspection Frequency - Have we got it right?

Thank you

