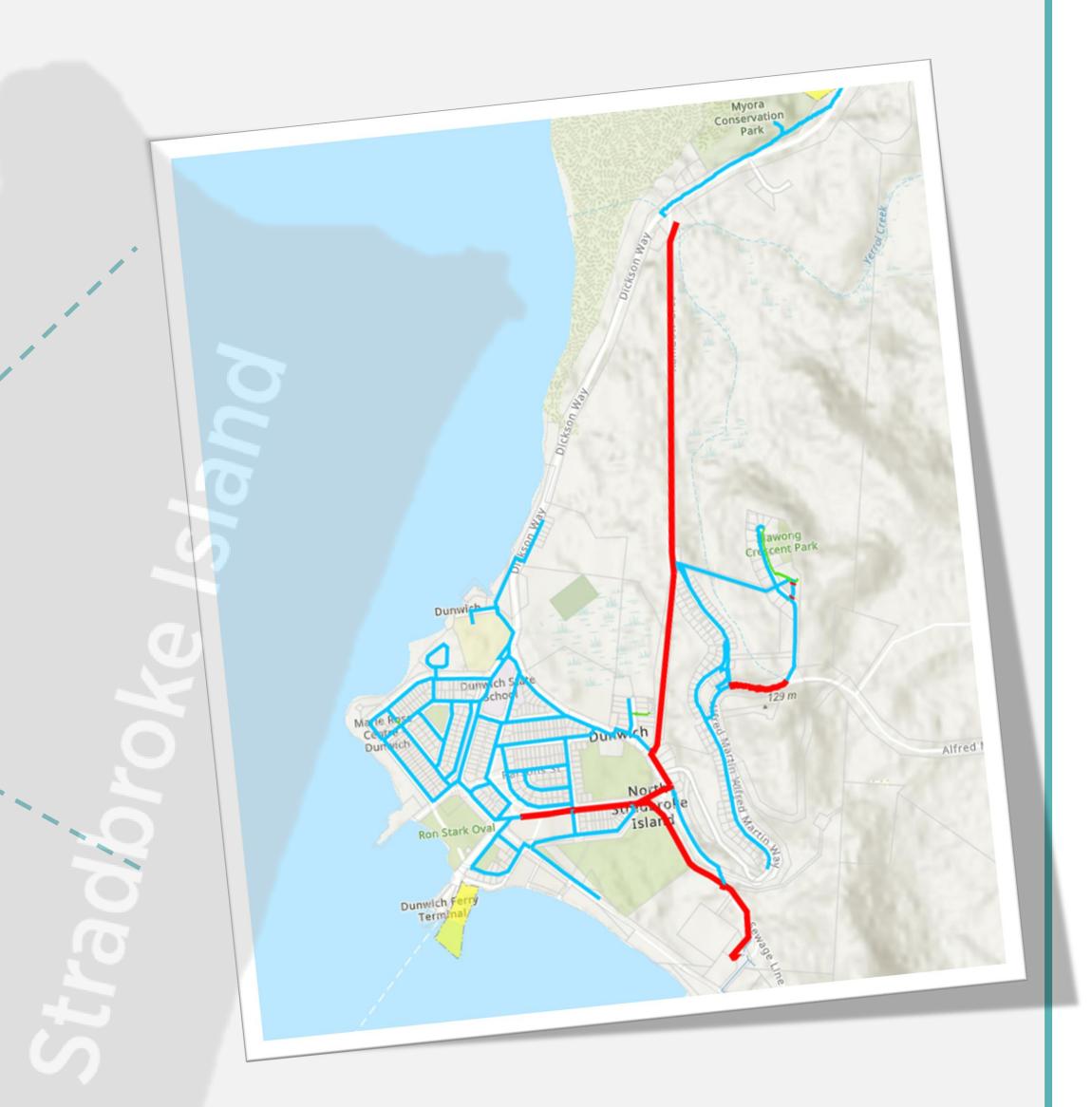
ASSET CRITICALITY ASSESSMENT ASSISTING REDLAND CITY COUNCIL TO PLAN FOR FUTURE INVESTMENT

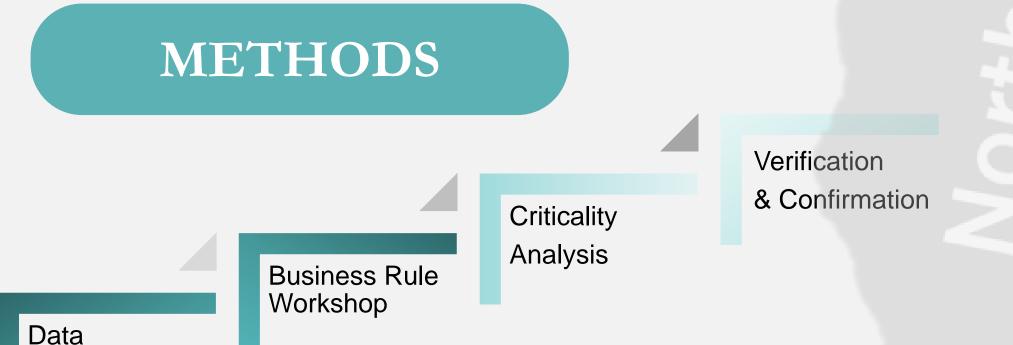
Joanne Pu and Moira Zeilinga Clear Idea, Parrearra, QLD

INTRODUCTION

Asset criticality assessments can help Councils determine how critical their water and sewerage assets are so they can prioritise their spend according to the asset criticality, failure likelihood and overall risk. This means that projects for asset renewals can be prioritised based on risk and maintenance programs can be optimised according to criticality, helping Council to understand and limit their risk exposure.



In 2021, Redland City Council decided to embark on the journey of applying the *qldwater* Network Asset Criticality Guideline (developed by Clear Idea for *qldwater*) on a test case in North Stradbroke Island (water facilities on the whole island and water mains at Dunwich) to determine if they were comfortable with applying the framework to their water and wastewater assets.



CONCLUSIONS

This project has successfully demonstrated that the framework is a useful tool that can be implemented across their remaining water and



B C D E F G H I J K L M N O P Q

This network asset criticality tool has been developed for qldwater (in association with Mackay Regional Council, Fraser Coast Regional Council, Whitsunday Regional Council) by Clear Idea to provide a simplified methodology and framework, including definitions with criticality score ratings and what they mean for both water supply, sewerage and recycled water network and facilities assets.

Issue Date: 10/11/2020 Version: V1 0

This is a BETA Version. Please contact qldwater if you identify any errors in the worksheet and we will consider modification

isclaimer: Users use this tool at their own risk and neither qldwater, nor Mackay Regional Council, Fraser Coast Regional Council, Whitsunday glonal Council or Clear Idea are responsible or accountable for how users use this tool or the decisions made by users as a result of the outcomes of ing this tool

low to use this tool.

Each Council or Water Utility may have a different risk appetite. For this reason, this guideline provides the base weighting for each risk category. Th user may select to weight the risk categories according to their organisation's Corporate Risk Appetite. Once selected, this tool will automatically adjust the scoring.

Each Council or Water Utility must decide whether they will assign criticality per individual scheme or per region for an asset class.

Once this is decided, select the asset which is known to be the most critical asset for the individual scheme or per region for the selected asset class and undertake the criticality assessment using this tool. The asset criticality score for this asset will become the highest possible asset criticality score for this scheme or region within this asset class and ranked HIGH (5.0). All other assets in this scheme or region for this asset class will be assessed relatively against this asset by using this raw score when assessing criticality of other assets within this class. Care needs to be taken to not confuse the highest raw asset criticality score for different asset classes or regions or schemes. The reason the tool was developed in this manner is to enable small or large entities to assess their asset criticality relative to their individual assets and attribute it to a 1.0 - 5.0 criticality number.

Iser input fields are shown as follows within the tool:

Field with drop down

CLEAR IDEA

Connecting people and ideas

https://www.clearidea.com.au/

sewerage infrastructure. Redland City Council now has a more robust method for understanding their infrastructure risk and have also been able to identify some asset data improvements as part of the project.

The successful completion of this project is a win for the industry as the wider Queensland water industry has benefitted from learnings shared back with *qldwater*. Criticality will be used to optimise future decision making for the assets assessed and the framework will be rolled out across other assets.