Kenilworth River Park Bank Stabilisation Project

SOURCE STORE SUPPLY

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Agenda

- Welcome
  Dan Spiller, Seqwater

- Project overview
  John Howlie, Seqwater

- Our partners
  Mary River Catchment Coordinating Committee
  Sunshine Coast Regional Council

- Questions

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Welcome

Dan Spiller

General Manager Asset Portfolio
Development and Delivery

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Erosion Repair at Kenilworth River Park (Charles Street)

Tim Odgers and John Howlie

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Overview

- Why conduct works at Kenilworth River Park?
- What are the underlying issues that have led to the current situation?
- Who is involved?
- How will this be addressed?
- What are the timeframes?

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Purpose

- An important component of the Kenilworth's town water supply system
- An important nesting site for the iconic, endemic and threatened Mary River Turtle
- An important community asset with direct access to the river
- A significant source of sediment into the Mary River

Underlying challenges

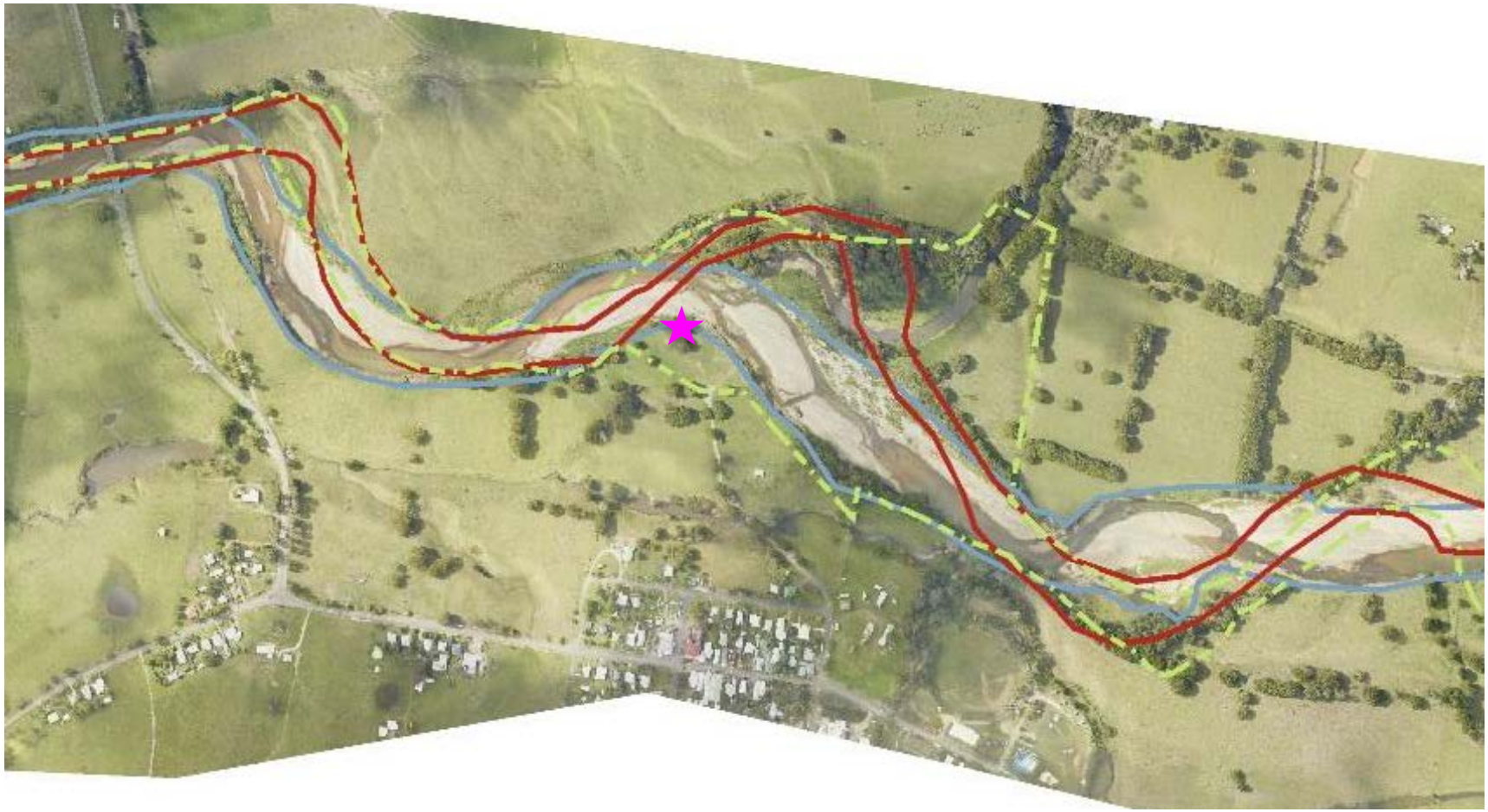
- Historic clearing of riparian vegetation
- Historic and more recent gravel extraction

These activities have altered the stability of the river leading to:

- a wider and straighter river
- faster and consequently more powerful flows

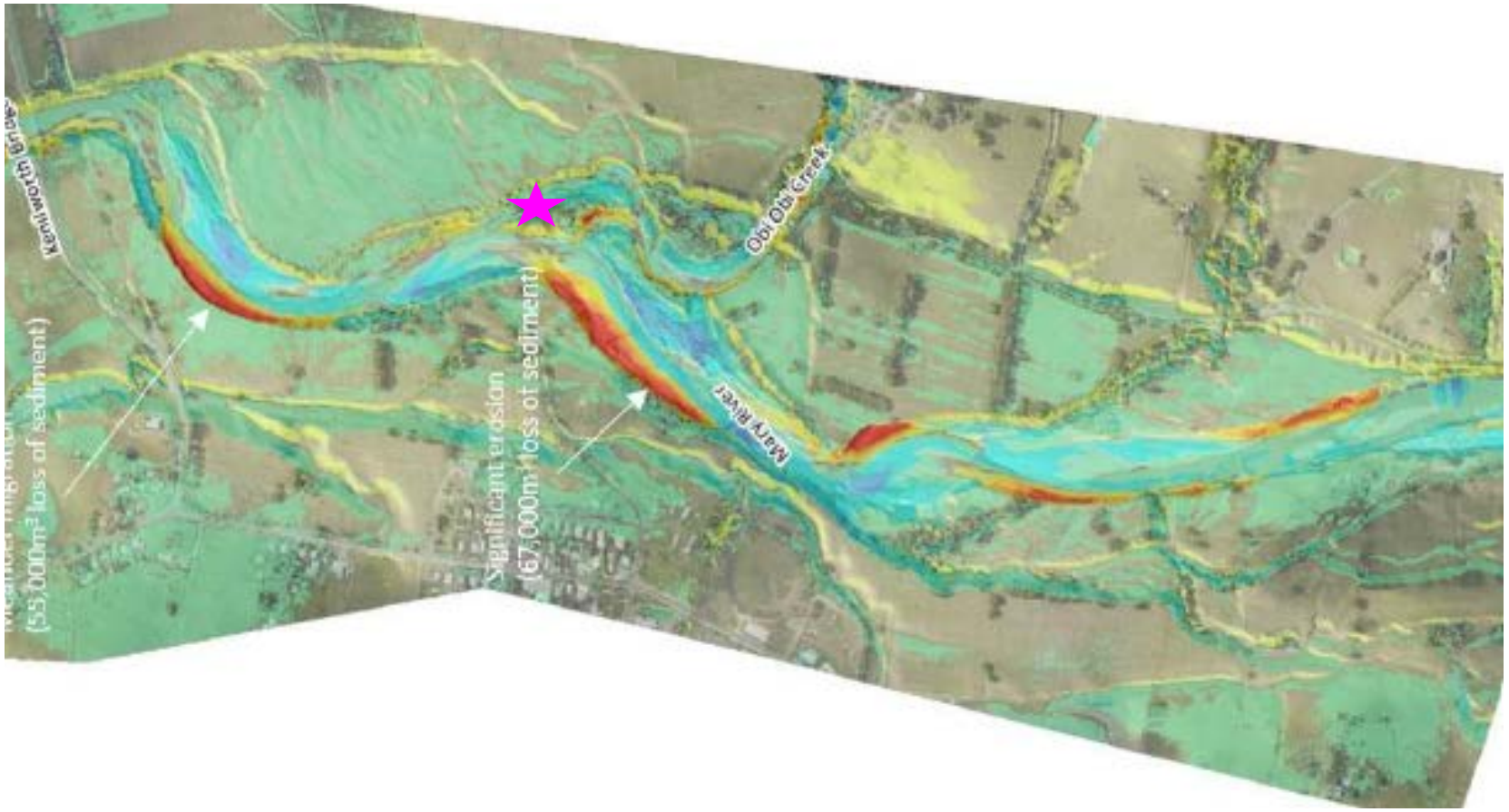
What are the processes occurring?

- River widening and straightening

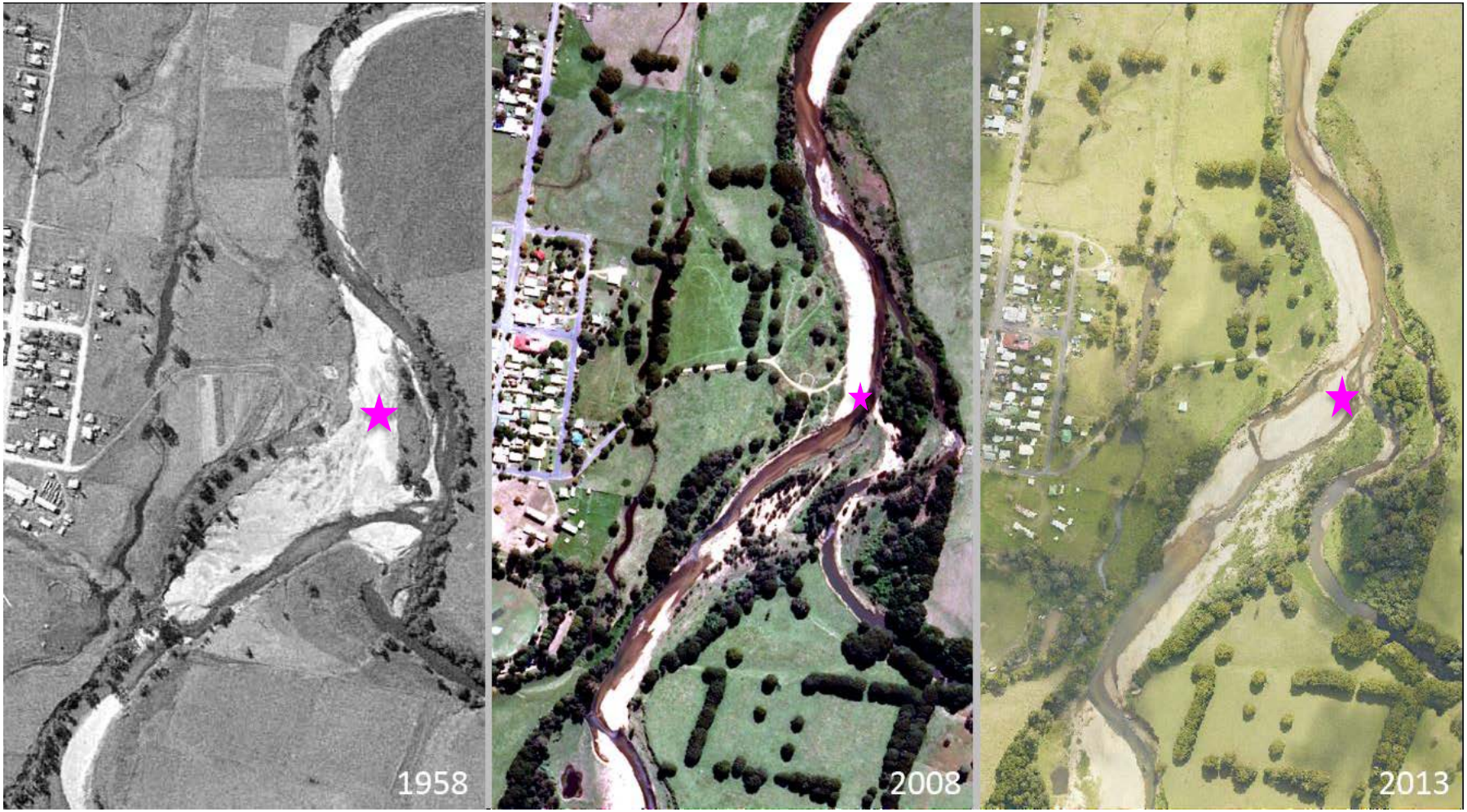


What are the processes occurring?

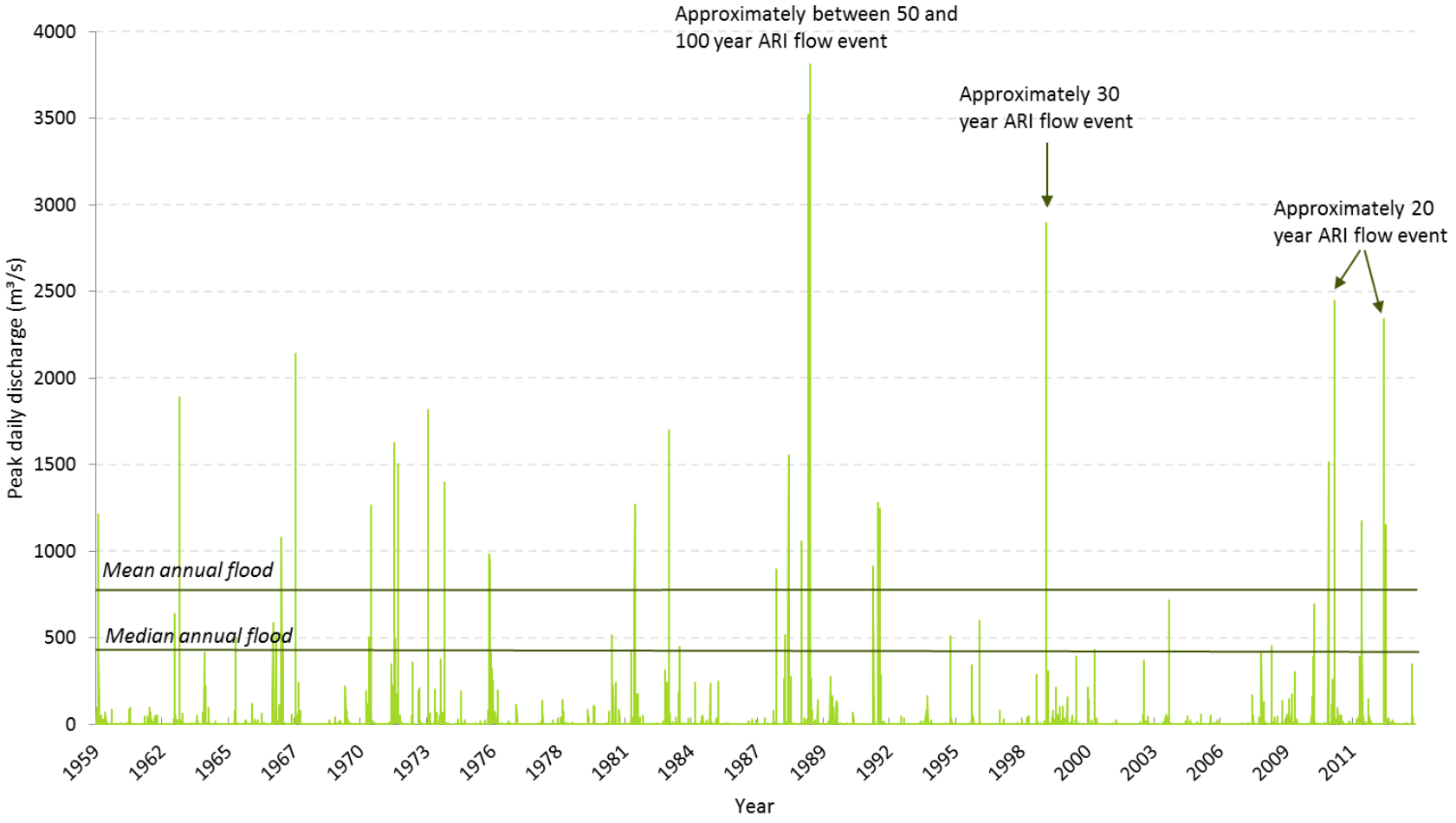
- This has led to a situation where excess power is exerted on the stream banks and meanders are starting to reform



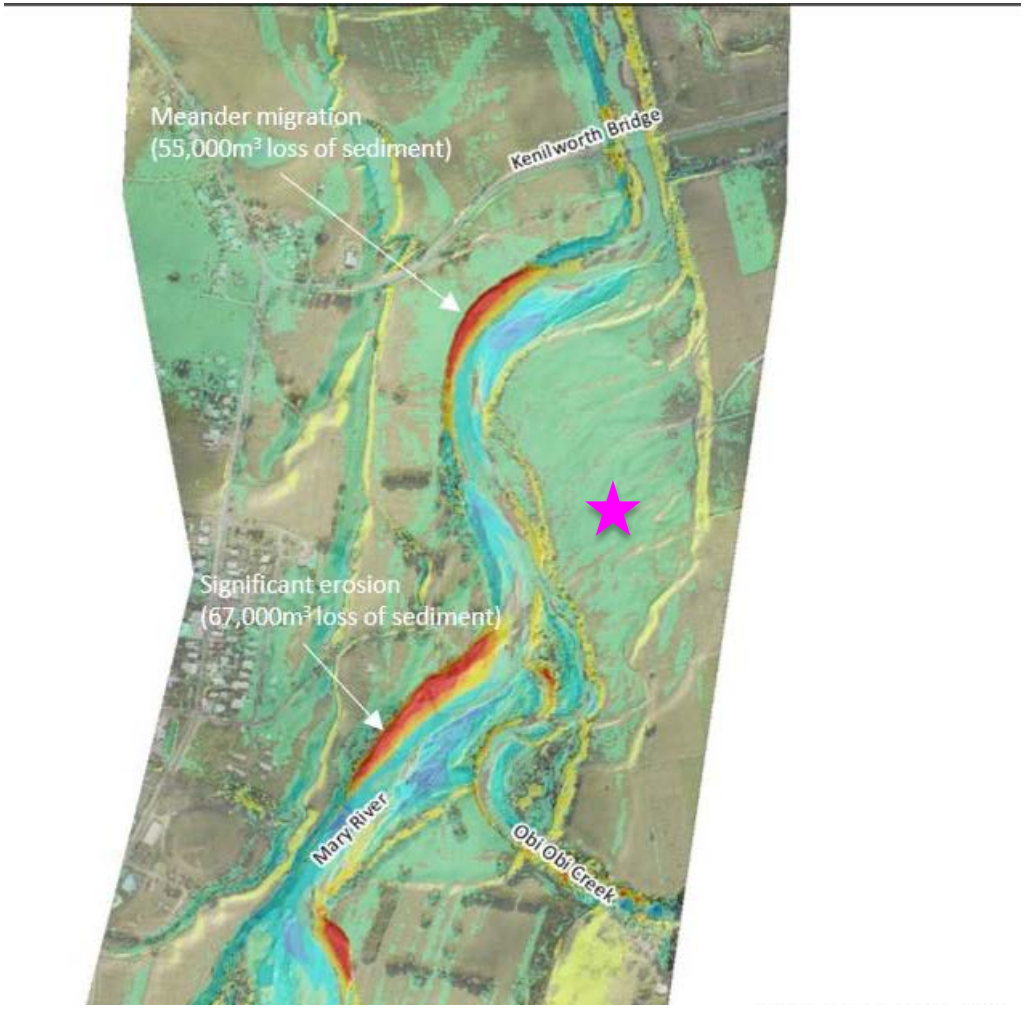
Changes over time



Issues with erosion



Changes between 2009 - 2013



Tropical cyclone Marcia

Loss of stream bank in 2015 after Cyclone Marcia

Loss of sand bank filtration

Aerial

1 May 2015

Aerial

1 May 2015

Solution

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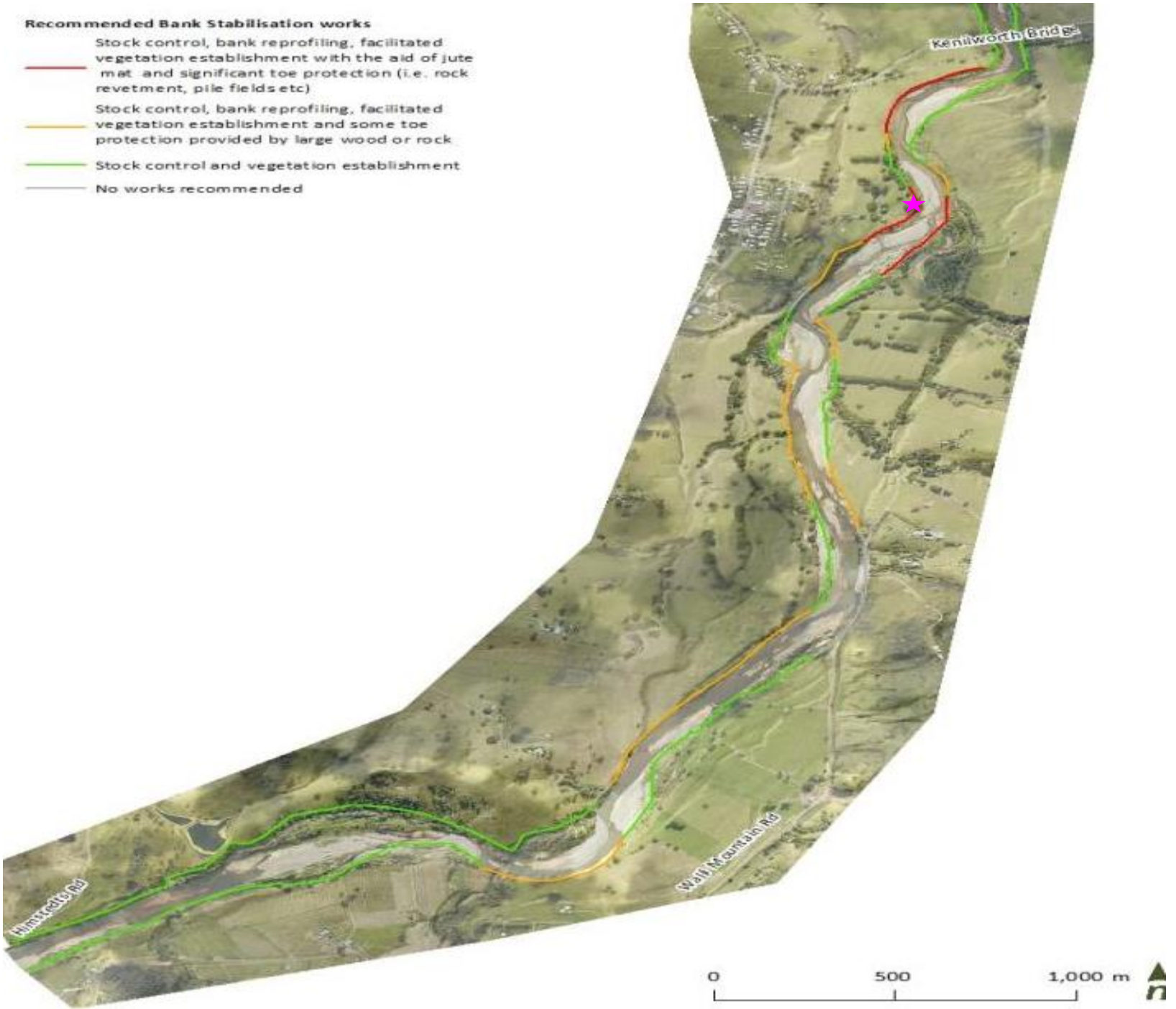
The partnership

- Partnership between Seqwater, Mary River Catchment Coordinating Committee, Burnett Mary Regional Group and Sunshine Coast Council

- An extensive study with recommendations and designs has been undertaken

- The last heavy rain event led to extensive erosion at Kenilworth River Park

- The partners are driven by risk to Kenilworth’s water quality and supply, environment and parkland


Recommended Bank Stabilisation works
Stock control, bank reprofiling, facilitated vegetation establishment with the aid of jute mat and significant toe protection (i.e. rock revetment, pile fields etc)
Stock control, bank reprofiling, facilitated vegetation establishment and some toe protection provided by large wood or rock
Stock control and vegetation establishment
No works recommended
Kenilworth Bridge
Wall Mountain Rd
Hunstretts Rd
0
500
1,000 m

Roles

Project Partners

- Seqwater – Water supply infrastructure management, seed and core project funding, project management
- MRCCC – Local NRM group, project support, stakeholder engagement, initial study and report management as well as environmental issue management
- BMRG – flood relief funding and support
- SCC – Council approvals, parkland interface, community engagement, revegetation management and maintenance

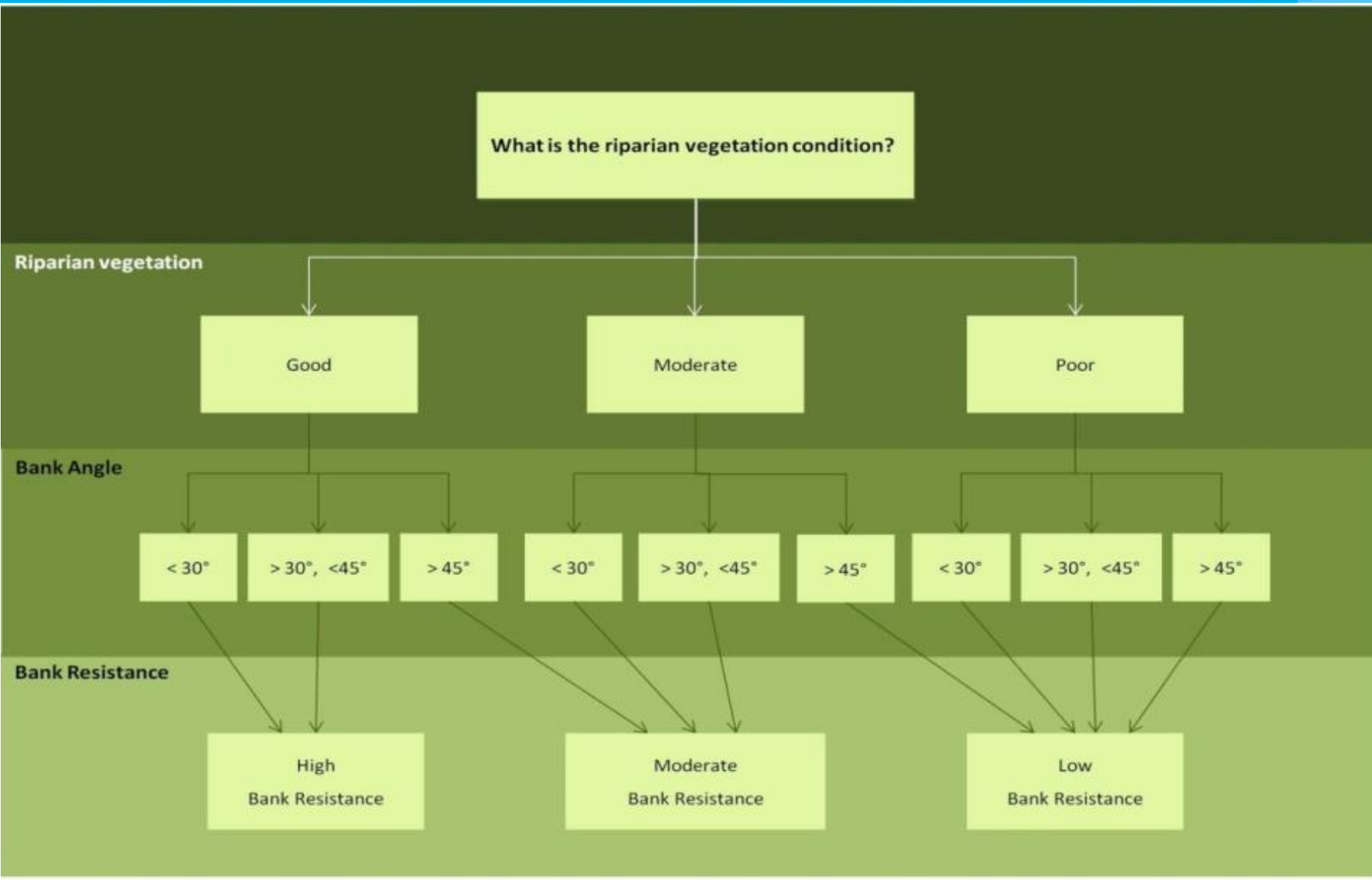
Consultants

- Alluvium – Geomorphic Engineers, research and project design

Contractor

- GWT Earthmoving

Bank stability



Proposed design

Design examples

Pile field examples

Pile field examples

Newly installed pile field

Established pile field

Environmental considerations

- Mary River Turtle
  - The design has been influenced so as not to impact on potential nesting areas for the MRT. Limited rock revetment at the toe to provide access to the sandy banks, use of pile fields as the preferred option for stabilisation of the toe of bank.
  - The Mary River Turtle nesting period is from October to January. Nesting is triggered by storm rains in October.
- Rainbow Bee Eaters
  - Were actively using the bank prior to the last event, they finish nesting in January and start again in August.
- Riparian restoration to the bank is critical to the success of this project

Anticipated delivery

Activity	Timeframe
Design	Completed
Contract	Contractor engaged
Site establishment	May 2015
Civil works	June 2015
Park restoration	July-August 2015
Planting	August 2015

Partners

Mary River Catchment
Coordinating Committee

Ian Mackay

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Partners

Sunshine Coast Council

Cr Greg Rogerson

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Thank you

- Questions

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