South Rockhampton Flood Levee
IPWEAQ CQ Branch Conference

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Structure

1. History & Context
2. Current Status
3. Technical Details
4. What’s next
What is a levee?

Raised, predominantly earth, structures that provide protection against river flooding. Can include:

- Flood walls
- Pumps
- Gates
- Spillways … and more

Vital part of modern flood risk management.

12,000 levee systems throughout the United States

Several thousand kilometres of levees in Australia
History & Context
History of Studies

1. Fitzroy River Barrage Study (Department of Local Government) 1964
2. The Yeppen Model (Capricornia Institute of Advanced Education) 1977
3. Rockhampton Flood Management Study (CMPS&F) 1992
4. Rockhampton Floodplain Management Policy (Willing & Partners) 1999
5. Lower Splitters Creek Flood Study (Fisher Stewart) 2001
6. Fitzroy River Flood Study (Aurecon) 2011
7. Fitzroy River Floodplain and Road Planning Study (AECOM) 2012
8. SRFL Planning and Design (AECOM) 2014
Floodplain Risk Management Principles

Flood Risk:

- **Existing Risk** – refers to existing buildings and developments on flood-prone land; exposed to an “existing” risk of flooding.

- **Future risk** – refers to buildings and developments that will be built on flood-prone land; exposed to “future” flood risk.

- **Residual risk** – refers to the risk that remains with floods.

Land Use Planning  Mitigation  Development Controls  Flood Warning Systems

Most Proactive  —  Most Reactive
Local Example – NRFMI
Local Example – NRFMI (2017 Event)

Protected Area
SRFL Objectives

Overarching objectives:

• **Protect low-lying areas of Rockhampton occupied by:**
  - Homes
  - Businesses
  - Schools
  - Parks
  - Infrastructure … *from major flood events.*

• Improve the flood immunity of Lower Dawson Road.

• Minimise adverse impacts (visual amenity, hydraulics, environmental, existing infrastructure, resumptions).
Current Status
Timeline

2011 → Major Flood Event (TC Yasi)

2014 → Original Concept Design

2017 → Major Flood Event (Ex-TC Debbie)

2018 → Early Works Packages

2019 → Updated Design, Statutory Approvals, EOI + ETI
Approvals Background

Nov 2018:
- SRFL receives “Prescribed Project” status.
  “Enables the Office of Coordinator General (OCG) to intervene in State and Local Government approval processes to ensure timely decision making for the prescribed project.”

May 2019:
- Notice of proposed Ministerial Infrastructure Designation received.
- Statutory consultation period commenced (closes 21st June).
- EAR released to the public

SRFL = 1st Linear Infrastructure Designation Project
Technical Details
Levee Overview
Levee Types – Earth Embankment
Levee Types – Composite Wall Systems

Day-to-Day

During Flood
Levee Types – Crib Walls
Rail Crossing
Road Crossings
Pump Stations
Flyover Placeholder

INSERT
What’s Next
Moving Forward

- Designation approval & EPBC mid-2019
- EOI closing end of May
- Council adopting GC21 (conditions of contract)
- QR & PUP agency ongoing liaison
- Finalising land acquisitions
- Reviewing material borrow sources
- Commence early works (river bank revetment)
- Anticipated construction period:
  - Ancillary Infrastructure = 2019 wet season
  - Levee System = 2020 dry season
  - Commissioning = 2021