



**For now &
our future**

Long-term Plan Workshop

19 July 2023

Workshop Outline

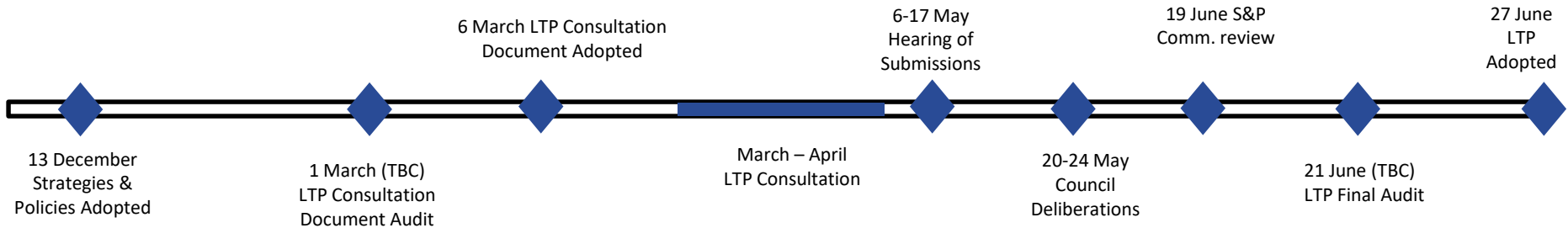
- Overview of LTP process
- Strategic context and direction
- Infrastructure Strategy
- Next steps

Environment Southland Long Term Plan 2024- 2034



- ### Key Components for LTP
- Infrastructure Strategy
 - Financial Strategy
 - Significant Forecasting Assumptions
 - Groups of Activities including Levels of Service
 - Summary of Significance & Engagement Policy
 - Funding Impact Statement
 - Revenue & Financing Policy
 - Statement of Accounting Policies
 - Marine Fee Allocation Policy
 - Treasury Policy
 - Funding Needs Analysis
 - Fees & Charges Schedule

Current Planned Workshops



Recap: Climate change and community resilience environmental issues

| Issue | Current or future issue? | Spatial extent and scale | Magnitude of change | Irreversibility or lasting effect | Impact on things people value | Score |
|--|--------------------------|--------------------------|---------------------|-----------------------------------|-------------------------------|-----------|
| Flood frequency and intensity is increasing. Projected to get worse under climate change projections. | Current | High | Moderate | High | High | 11 |
| Water shortages and droughts are projected to increase in frequency and intensity. | Current | High | Moderate | High | High | 11 |
| Predicted sea level rise and storm surges adversely impacting on coastal infrastructure | Future | Low | Low | Low | Moderate | 5 |
| Predicted sea level rise resulting in loss of coastal ecosystems and species e.g. coastal turfs. | Future | Low | Low | High | Unknown | 5 |
| Predicted sea level rise, storm surges and changing flood frequency poses an erosion and contamination risk to coastal and riparian landfills. | Future | Low | Low | Low | Unknown | 3 |

To obtain score, High = 3; Moderate = 2; Low = 1

Emerging LTP theme

Building resilience and adapting to a changing climate

- *Immediate: flood protection for at risk communities*
- *Medium to longer term: managed transition*



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LTP 30-Year Infrastructure Strategy

Infrastructure Strategy 101

Identifies:

(a) **significant infrastructure issues** for a council during the period covered by its strategy (**at least 30 years**); and

(b) the **principal options** for managing those issues and the implications of those options.

Part of Long-term Plan, Local Government Act 2002, Section 101B

Infrastructure Strategy 101

- Must cover infrastructure associated with flood protection and control works
- Asset Management Plans:
 - levels of service
 - Financial forecast
 - Detail: years 1-3
 - Less detail: years 4-10
- The long-term forecast for years 10 to 30
- Impacts the funding requirements of the Long-term Plan

Workshop schedule

1st workshop: Introduction to Infrastructure Strategy

2nd workshop: Climate Resilience Rate Review/Adaption and Floodplain Management Plan.

3rd workshop: Future Work Programme and Resourcing

Outline

1. Scope
2. Context
3. Key issues
4. Proposed response and discussion points

Scope of Infrastructure Strategy

Current vs Proposed

| Current 2021-31 | Proposed Update 2024-34 |
|--|---|
| Flood Protection Scheme, including “shovel” ready | Add an ‘Assets Excluded’ section |
| River management and control works | Continue to exclude land drainage schemes (consistent with other councils) |
| | Exclude detention dams, monitoring sites, plant and equipment, depots and offices, fleet, software. Managed in other ways, potential to include in 2027-37. |
| LGNZ guidance “any significant funding requirements within the next 10 years needs to be included” | |

Context

- Increasing community and audit expectations driven by climate change
- Need to do more across both our maintenance and capital works programmes i.e. further investment needed
- No further national climate resilience budget at this stage

Key issues

- A changing climate
- A decreasing level of flood protection
- Need for more info to understand impacts and options
- Condition of assets and defects, along with data gaps
- Funding

A changing climate

- Overtopping events are more frequent, and assets will be tested more frequently
- Levels of service are going to reduce

A decreasing level of flood protection

Urban = 1:100 year design level of service

Rural = 1:20 year design level of service

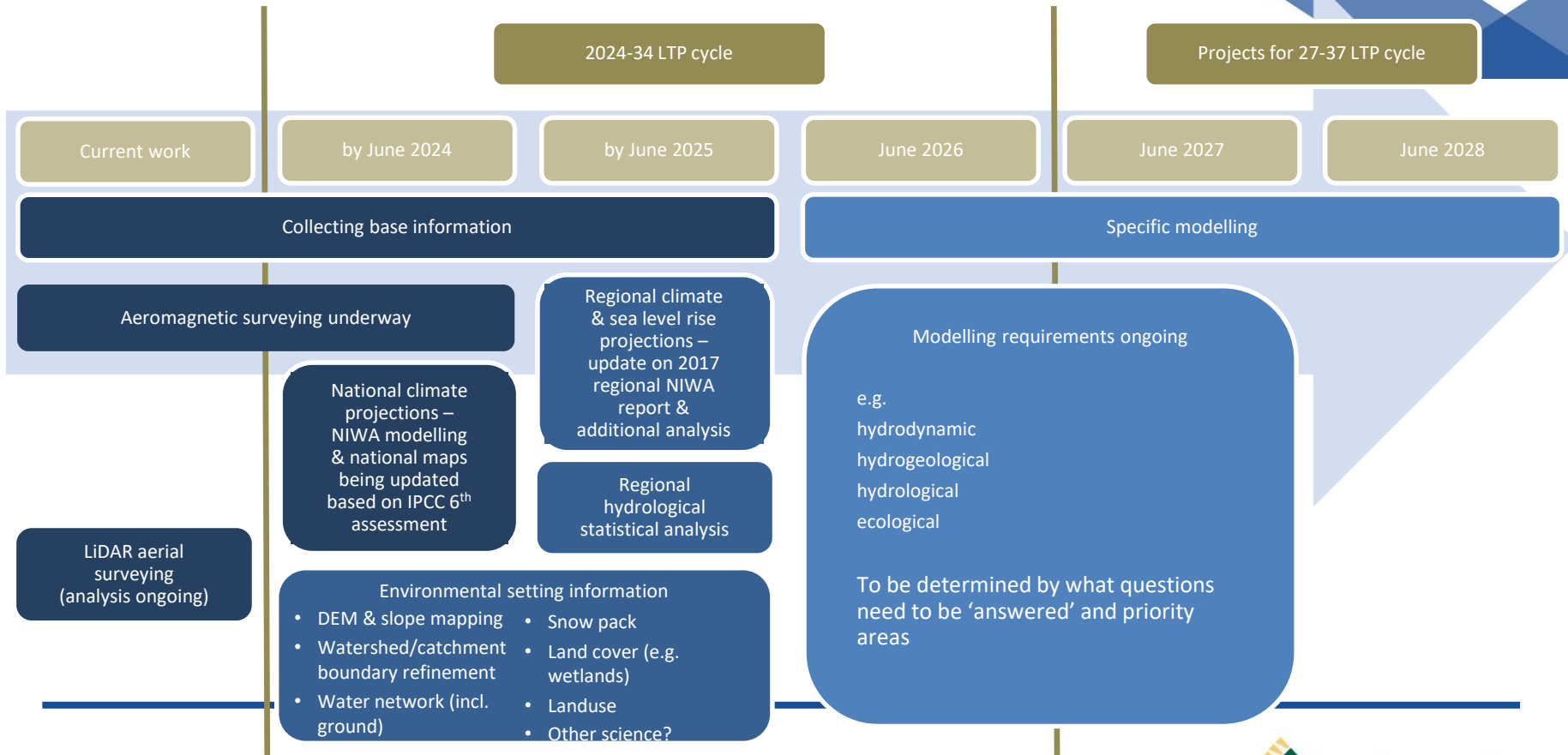
Climate change modelling changes these considerably.

Example: Gore/Mataura

Mataura 2020 flood design event of 2,400 cumecs

Revised level of service from 1:100 to 1:75 year level of service for Gore and Mataura

New statistics for 1:100 year event = 3,150 cumecs



Current Assets and Conditions

Flood protection scheme assets

- 516 km of stop banks
- 456 km are rural 1:20 level of service stop banks
- 60 km of urban banks at 1:100 level of service

Stopbank Condition Scores



Condition 1



Condition 2



Condition 3



Condition 4



Condition 5

Stopbank Defects



Condition of Flood Protection Scheme Assets

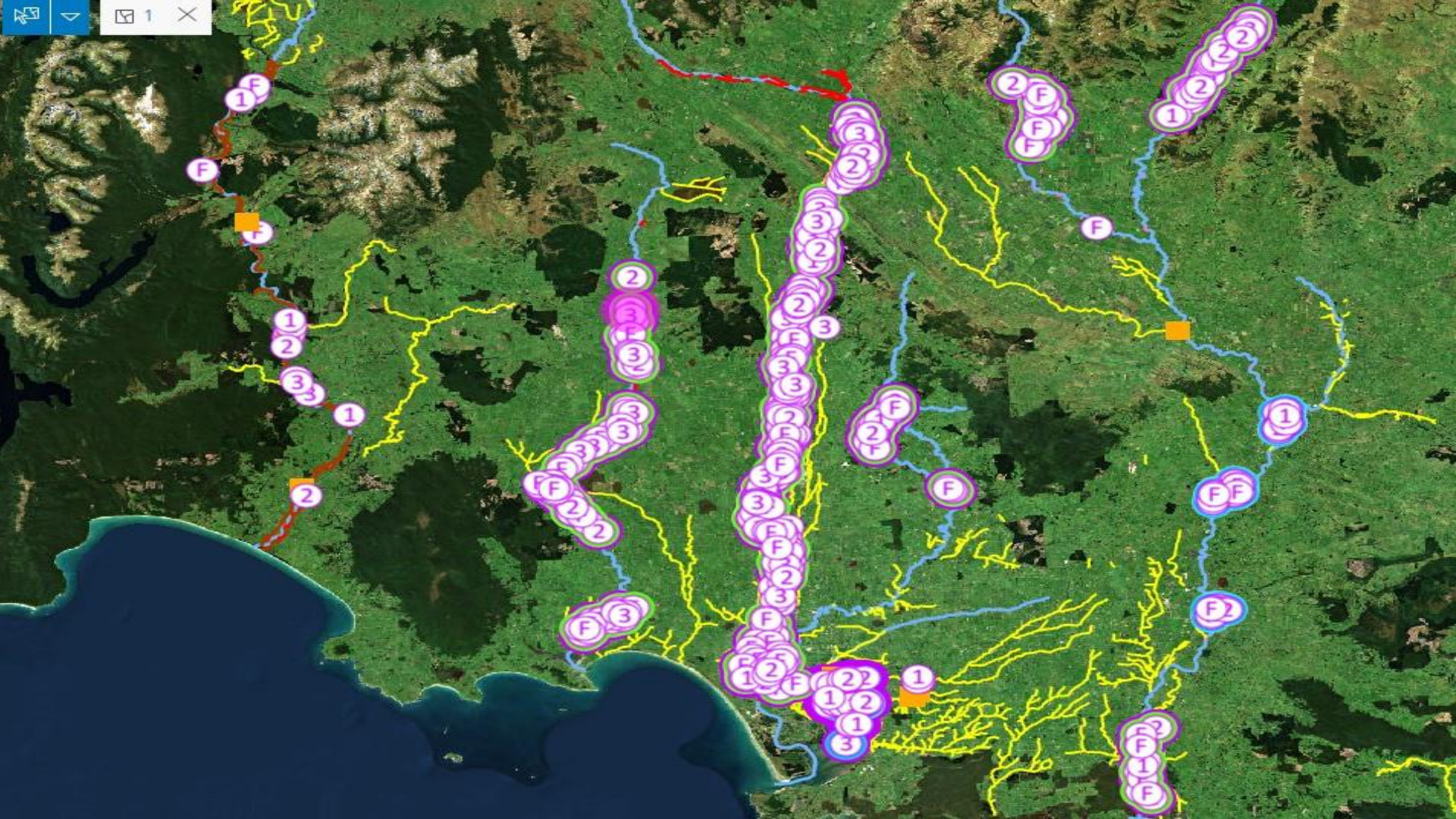
- 2020 floods exacerbated the condition of our assets.
- 6% of our urban assets and 19% of our rural assets currently have a poor or very poor condition score (improved from two years ago).
- There is also a significant data gap with 32% of our assets having no condition score.
- Current funding insufficient to resolve.

Oreti example

| | 2023/24 | Activity |
|-----------------------------|---------|---|
| Flood warning | 24,972 | |
| Stop bank Insurance | 60,000 | |
| Channel Maintenance | 168,658 | Land drainage |
| Riverbed Vegetation Control | 194,000 | Aerial and ground spraying |
| Structure Maintenance | 82,559 | Replacing/maintaining culverts and repairs to F/banks |
| River works | 666,306 | Rock and willow edge protection |
| Stopbank Inspections | 18,000 | Annual inspection |
| Direct and support costs | 228,333 | |

Defects

- Defects as @ 31/05/2023
- 275 properties with open defects
- Total defects = 1,127
- Use of Flood Control Bylaw

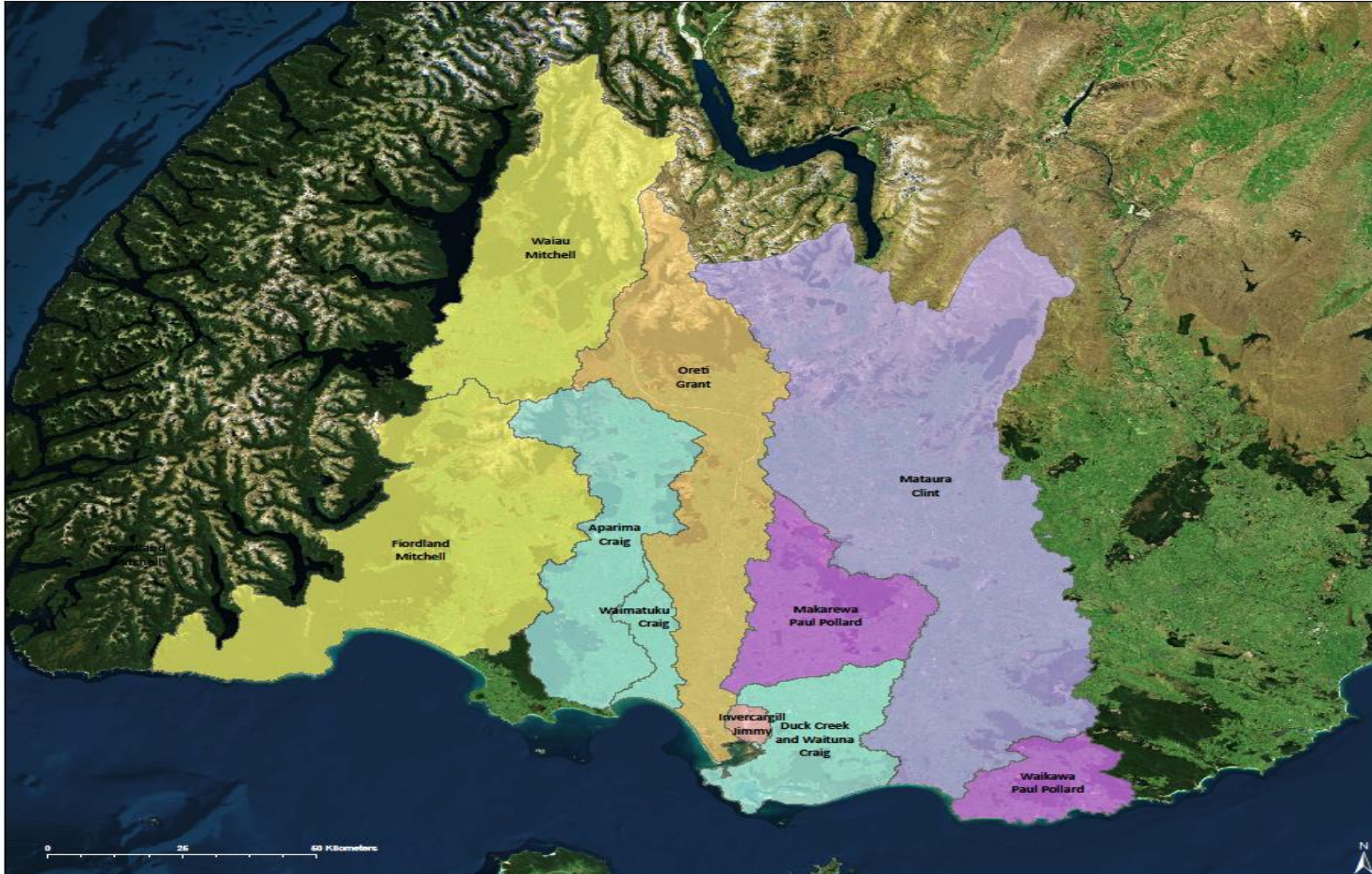


Work Supervisors



Catchment Supervisors

- Clint
- Craig
- Grant
- Jimmy
- Mitchell
- Paul Pollard



Scale: 1:800,000 at A3
Map created: 23/06/2023

While every effort has been made to ensure the content is correct, Environment Southland cannot guarantee the accuracy of the data. This information should not be reused in any manner without consultation.

DATA SOURCE: ES GIS 2023

Proposed Response

- Defects and maintenance programme
 - Options to address and close the current defects within 10, 5, or 3 years
- Consultation on preferred level of service
- Flood protection scheme review years 1 to 3 of LTP (reliant on climate info)
- Capital works programme

Goals for defects and maintenance programme

- Goal 1 - 100% of properties to get initial defect letter per annum
- Goal 2 - 100% of priority defects to get follow up per annum
- Goal 3 – 100% of priority defects per annum to get close out inspection

- Landowner defect remediation could be managed and delivered by the Catchment Operations team

Discussion points

The current rate of defect closure equates to a 10 year programme of defect remediation @ 120 closures a year.

Guidance needed on whether to consider advancing more quickly to address defects (5 or 3 year options)

Who should be responsible for addressing defects (landowner or ES)?

What do you want to know more about for next workshops?

Level of service

Climate change – increased overtopping events

Flood protection scheme failure or breaches – higher risk

Potential consultation options

| Do nothing | Maintain | Improve |
|--|-------------------------------------|--|
| Community accepts reduction in level of service overtime | Restore the design level of service | Capital works projects to improve the resilience of the flood protection scheme from breach or increase the level of service |

Discussion points

Should we prioritise urban flood protection schemes over rural?

Should we use defects programme to restore design level of service where appropriate? (would need funding set aside)

What do you want to know more about for next workshops?

Capital Works Programme

The priority is to review the flood protection schemes

No capital works budget for 20+ years until climate resilience funding

Floodplain management plan for each catchment - all require more data and science

Summary

Workshops to follow

2nd workshop: Climate Resilience Rate Review/Adaption and Floodplain Management

3rd workshop: Future Work Programme and Resourcing

Presenting options for consideration and debate
