Science and Local Knowledge: Does a participatory approach add value?

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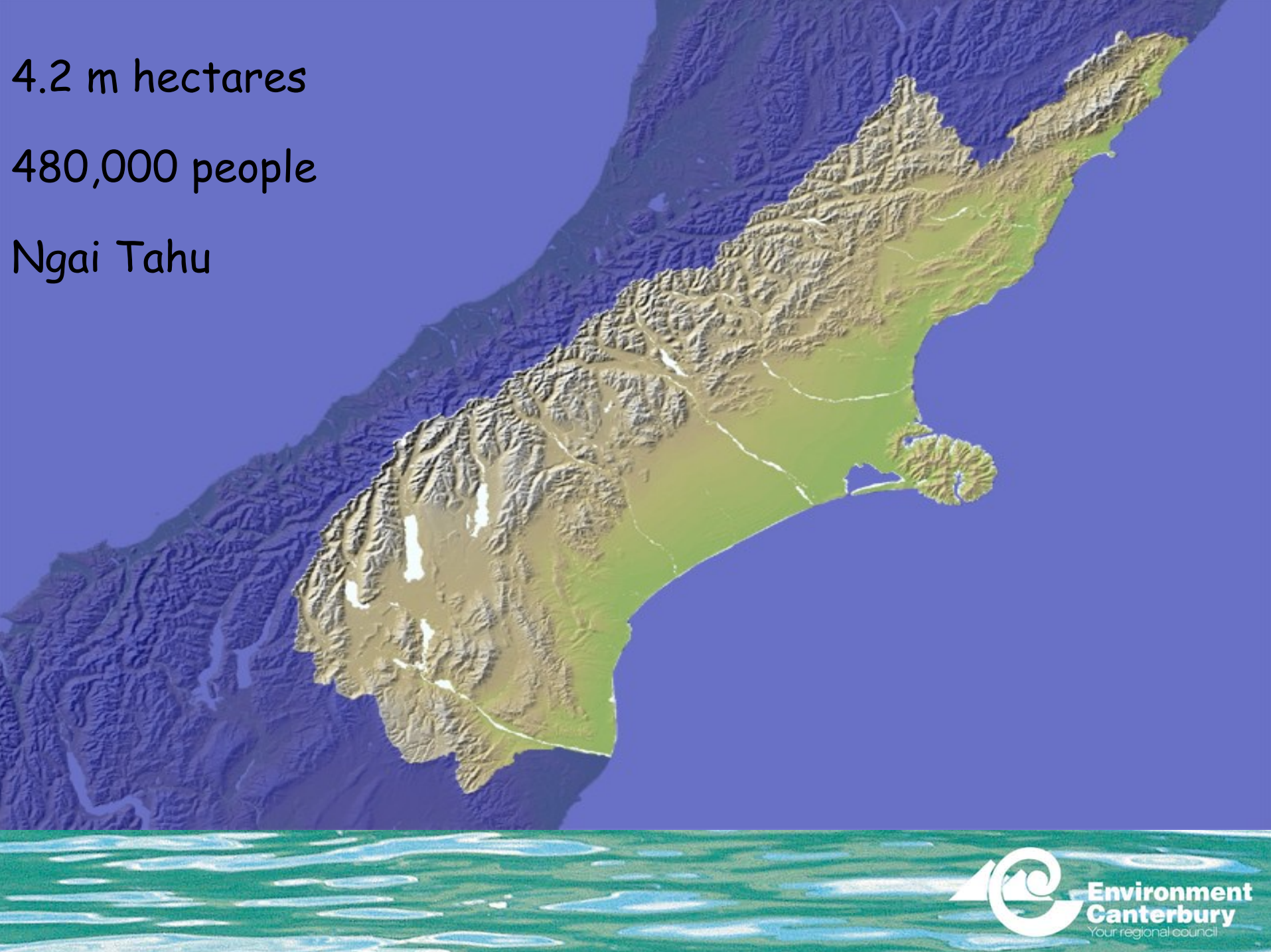
Planning Team Leader-
Environmental Flows Review

Environment Canterbury
Your regional council

Presentation Outline

- Geographic Overview
- Framework for protecting instream values
- Participatory approach
- Reflections


4.2 m hectares
480,000 people
Ngai Tahu
Environment Canterbury
Your regional council

Natural Resources Regional Plan Objective

Environment Canterbury
Your regional council

Safe-guard, preserve or protect

Environment Canterbury
Your regional council

Safe-guard, preserve or protect

Environment Canterbury
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Safe-guard, preserve or protect

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Safe-guard, preserve or protect

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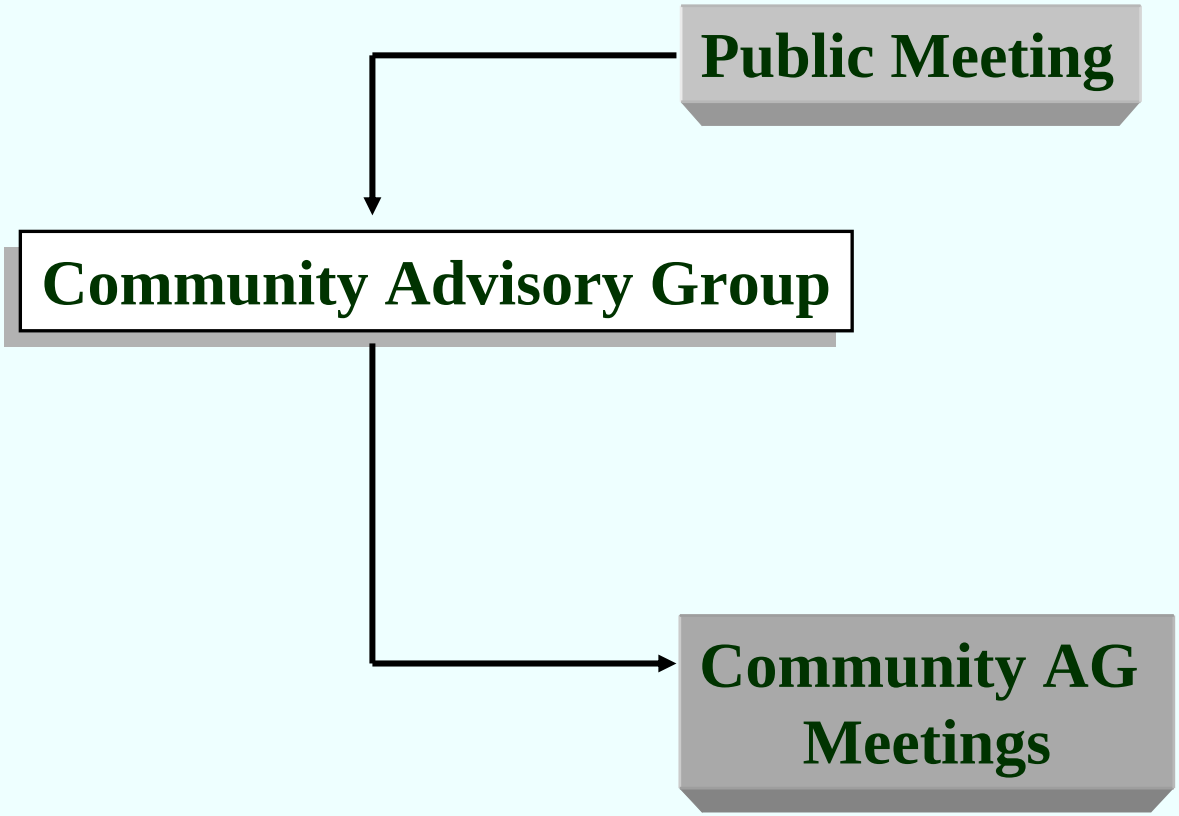
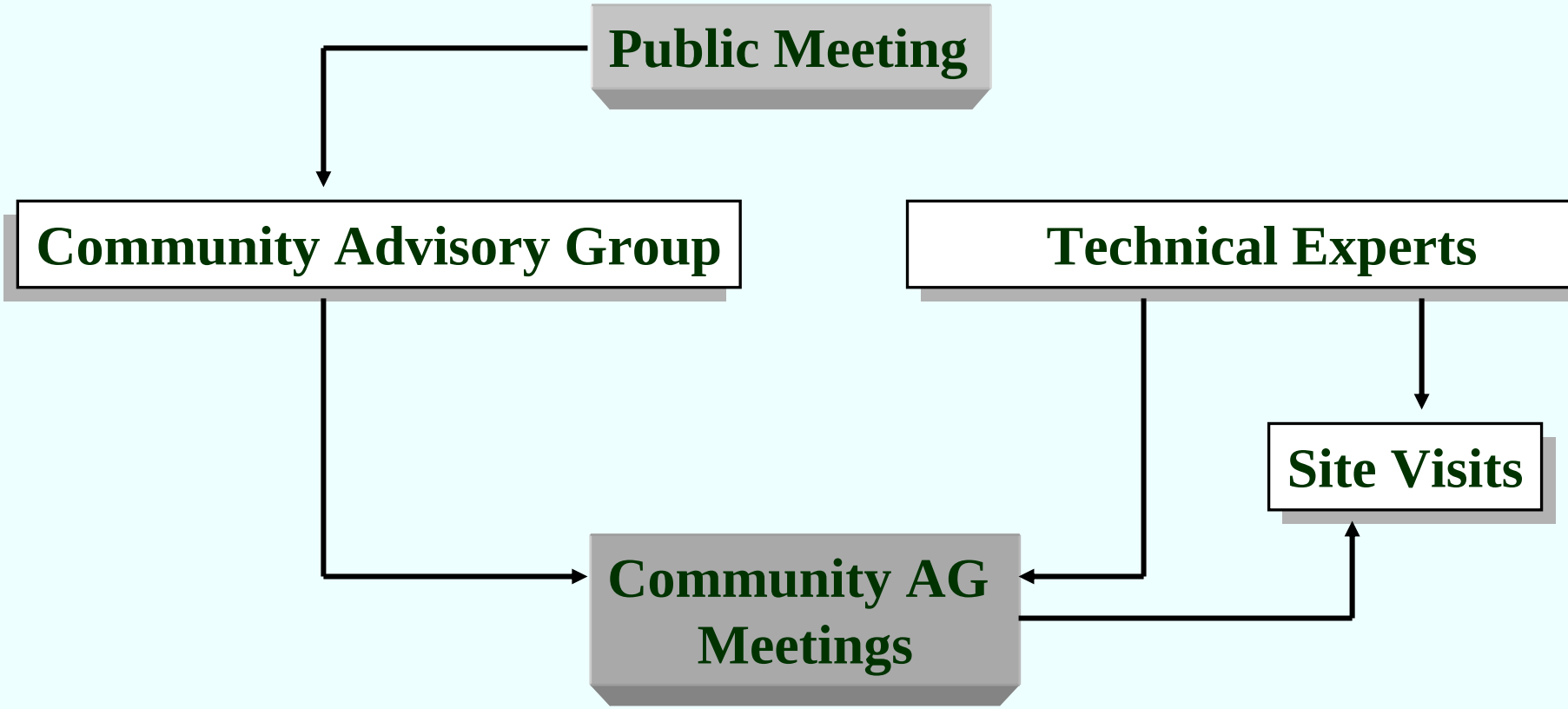
The coming together of local knowledge and scientific advice


Public Meeting
Community Advisory Group
Community AG Meetings

- The level of Harts Creek is down approximately 20% since 1950, caused mainly by drainage and farm development.
- Irrigation from bores in the area has little connection with creek flows.
- The little amount of pumping directly from the creek will be phased out.
- Water quality has improved dramatically in the last 30 years.
- Fencing and native planting currently underway should enhance the creek.
- Each creek and stream has its own characteristics and should have its own management plan.
- If more irrigation takes place on the plains ground-water levels and creek flows in this coastal area may rise and drainage may be more of a problem.
- Above Locheads Road, Harts Creek is mainly fed by a few large springs but no drains. Therefore, flows are totally dependent on groundwater levels.
- Harts Creek doesn't flood.
- Harts Creek irrigation had been shut off for two months, and there was no noticeable affect on the creek.
- The springs are very deep. Connection to irrigation sources very unlikely.
- At the top end of Harts Creek the Rakaia River has an effect.


Public Meeting
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Lee River -hydrology

Observed flow

2151 L/s

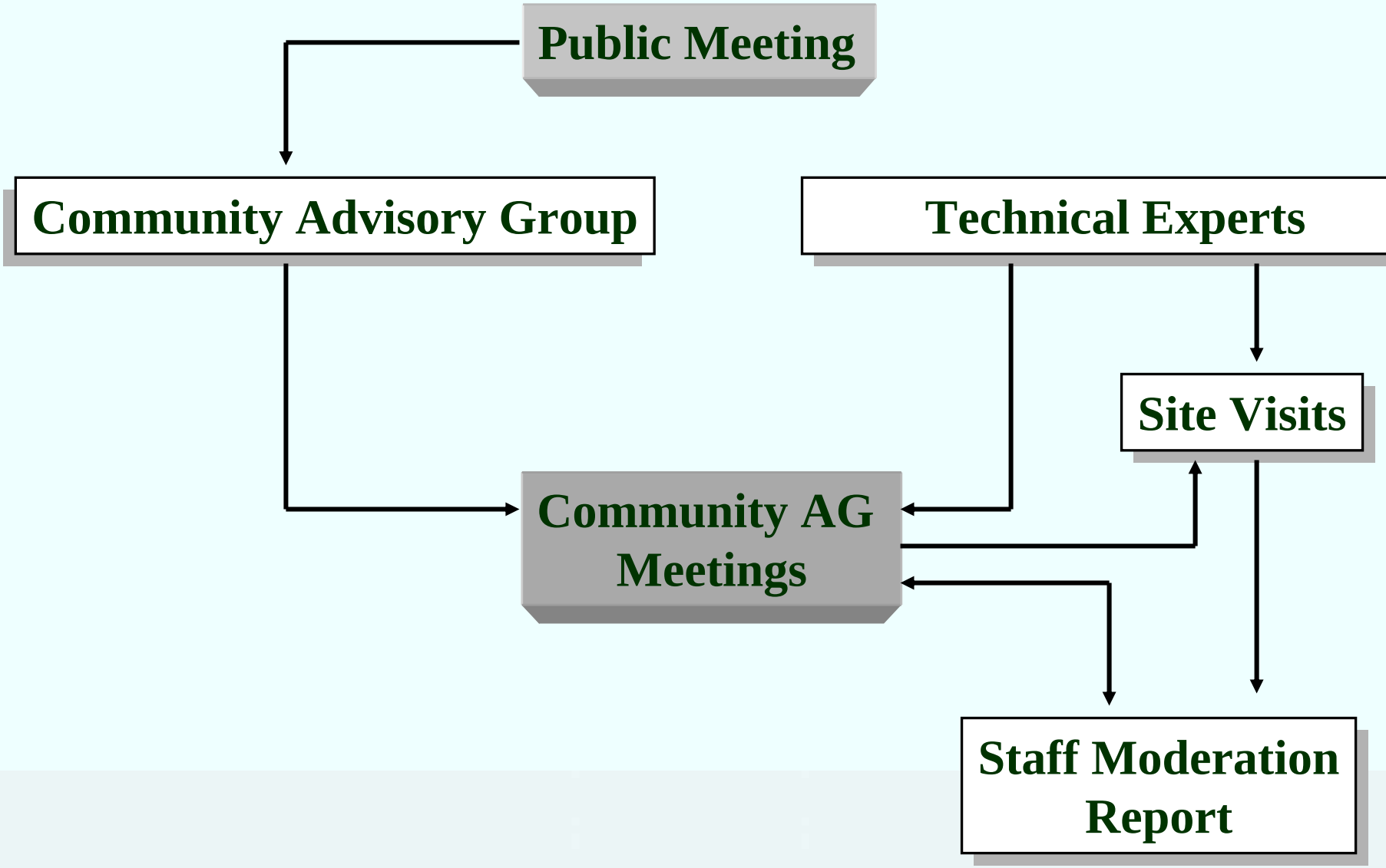
7D MALF

1704 ± 72 L/s

Current Minimum Flow

1600 L/s

Lee River – Instream Values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Staff Moderation Report

Lee River Minimum Flow Recommendation

Instream Values

- **All high**

Flow requirements

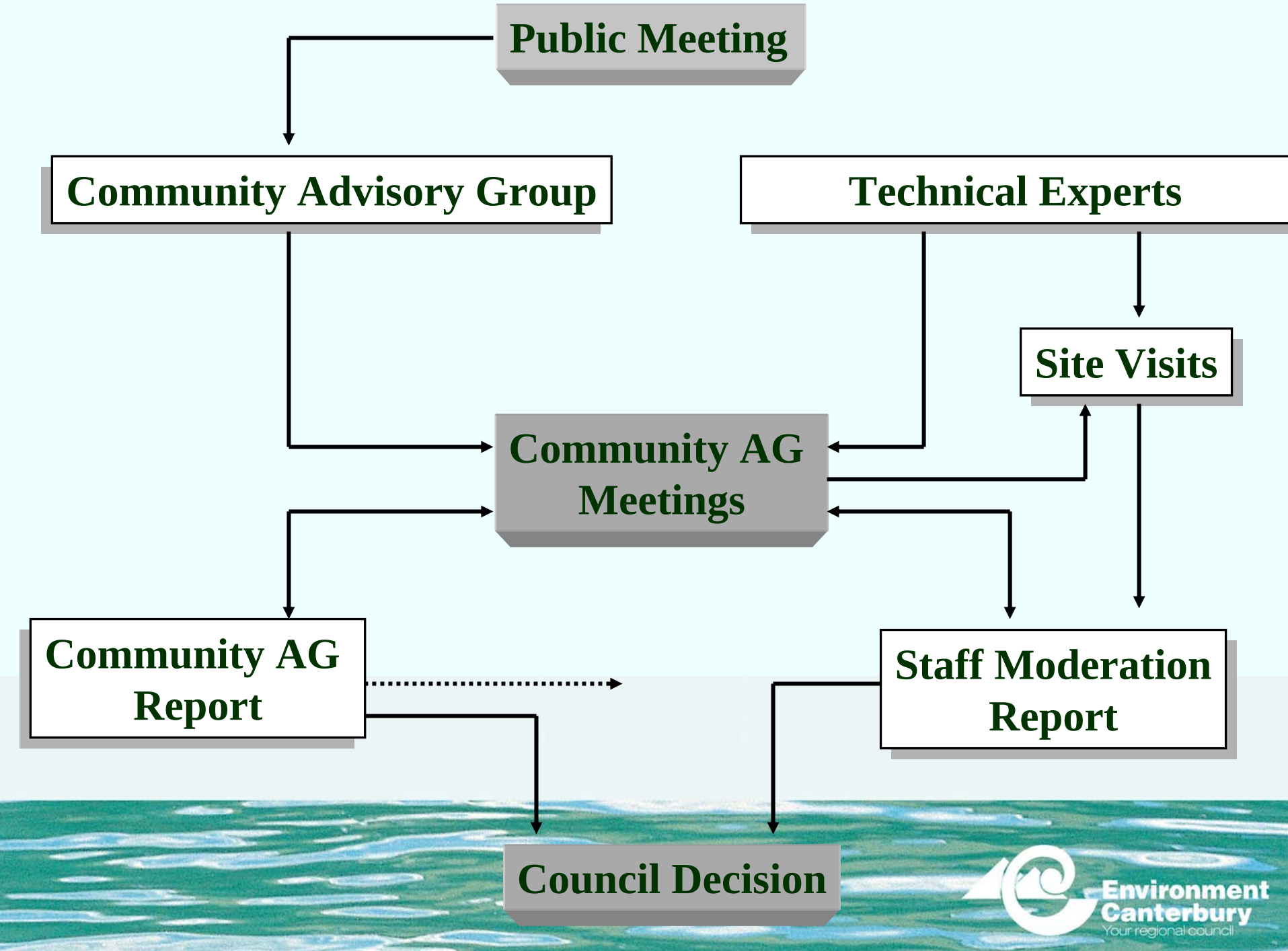
- **1600 – 2300 L/s (no sw abstraction)**
- **1600 – 1700 L/s considered appropriate**
- **Meets Te Taumutu NRP**
- **Little to be gained for native plants**

Reliability

- **No change to surface water, impact on groundwater (SDE)**

Recommendation

- **1600 L/s**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Community AG Report
Staff Moderation Report
Council Decision
Environment Canterbury
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Reflections

Builds appreciation/trust
Reduces statutory litigation

Time consuming
Misused
Mediocre consensus

Provides a lasting platform for further initiatives Eg water user groups, local monitoring, enhancement.

"Action may not always bring happiness

but there is no happiness without action"