Mākarika - Flood Resilience Update

Rohe: Mākarika
Location: Mākarika School
Date: 10 Oct 2026



Tō Tātau Huarahi Whakarauora
Recovery

Te Kaunihera o Te Tairāwhiti
GISBORNE DISTRICT COUNCIL

25 June Council Report – Council Endorsement

Prioritisation & Ranking

Council endorsed prioritisation framework and ranking of projects.

Endorsed by Council

Stage 2 Advancement

Seven priority projects endorsed subject to benefit cost ratio >1.

7 Projects promoted

Benefit-Cost Ratio (BCR) Methodology

Crown requires BCR methodology as the basis for funding justification.

BCR submitted – Pending Crown Approval

East Coast Projects

Rank	Project	P50 Cost	P95 Cost
1	Tokomaru Bay Mangahauini Stopbank	$0.46M	$0.59M
2	Waiotu Stream Capacity Improvement	$3.35M	$4.31M
3	Tikitiki / Poroporo Stopbank	$5.31M	$6.82M
4	Mākarika Close-In Stopbank	$2.07M	$2.67M
5	Ūawa Northern Stopbank Stage 2 scoping only	$5.85M	$7.57M

Gisborne City / North Projects

Rank	Project	P50 Cost	P95 Cost
1	Turanganui River Dredging ~1m	$7.91M	$10.17M
2	Gisborne North Matokitoki Stormwater Upgrades	$14.74M	$18.95M

Close-In Stopbank
Benefit Cost analysis:

Cost Estimate (P50):	$2.07M	**Benefit:**	$1.35M	**BCR:**	**0.65**
Stopbank	$1.38M				
Drainage Option 1	$0.69M				



Projects with BCR less than 1

are Declined by Crown / Not funded

Geomorphic Assessment

- **Extreme sediment supply:**
  ~210,000 t/year from gully erosion
- **Rapid sediment transport:**

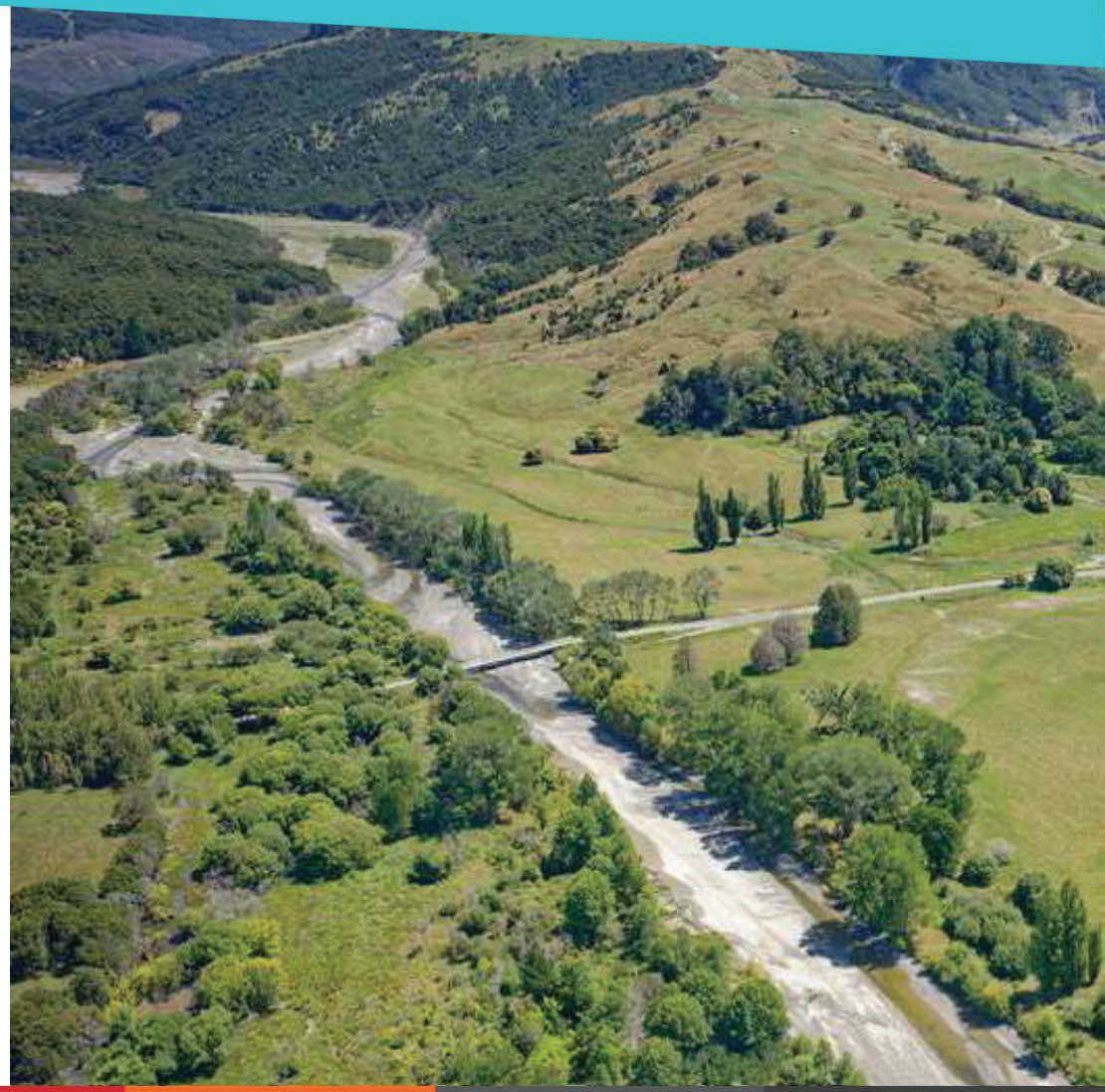
  Steep upper channel delivers sediment downstream
- **Rapid Channel aggradation:**

  Bed build-up increases floodplain spill risk new flow paths likely



Investigation outcomes

- **No sustainable long-term solution**
- Rapid river aggradation continues to increase flood risk over time.
- Structural works would only provide short-term risk reduction at high cost.
- **No viable long-term engineering solution** has been identified.
- **Future adaptation planning required.**



Support Available

- CDEM support *(community awareness/education, embed resilience, container resource)*
- Flood Warning *(Flood forecasting software updated, BUT low confidence due to flashy catchment, no rain gauge, riverbed aggradation)*



Further Kōrero & Pātai

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