

NGAA



BUILDING RESILIENCE FOR THE MARLBOROUGH REGION



CONTEXT

- 51,900 Population
- Manufacturing
- Aquaculture / Viniculture
- Tourism



17 May 2023



KEY PROBLEMS



1. Leveraging Data and Information as an asset

2. Managing Local Government Reforms

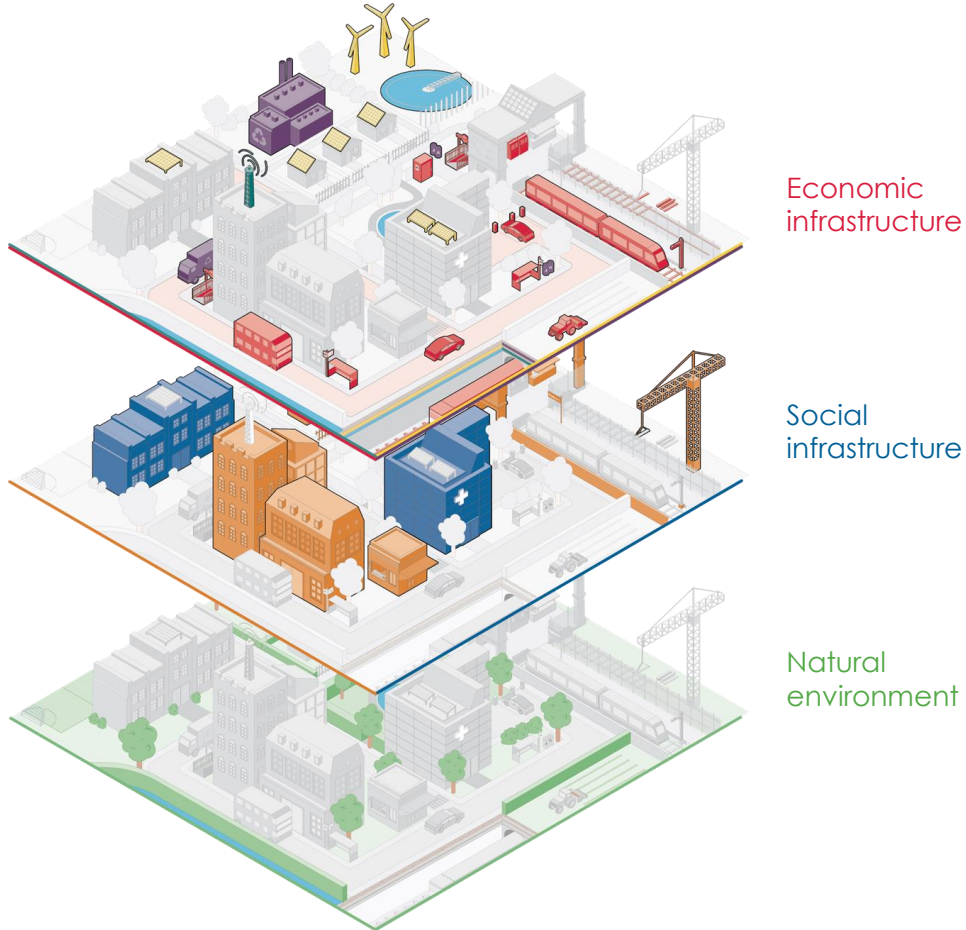
3. Managing resilience and recovery

THREE WATERS REFORM PROGRAMME

To Kaitiaki Take Kōwhiri
New Zealand Government



**So how are Marlborough
looking to solve these issues?**



“A single source of truth that connects and integrates different pieces of information so we can plan, deliver and operate better assets and services.”

Which will enable

“all parts of the organisation to consolidate their activities and data through an integrated set of capabilities which will deliver economic, social and sustainable benefits.”

Find & Visualise



**Leveraging Data
and Information
as an assets**

Analyse & Understand

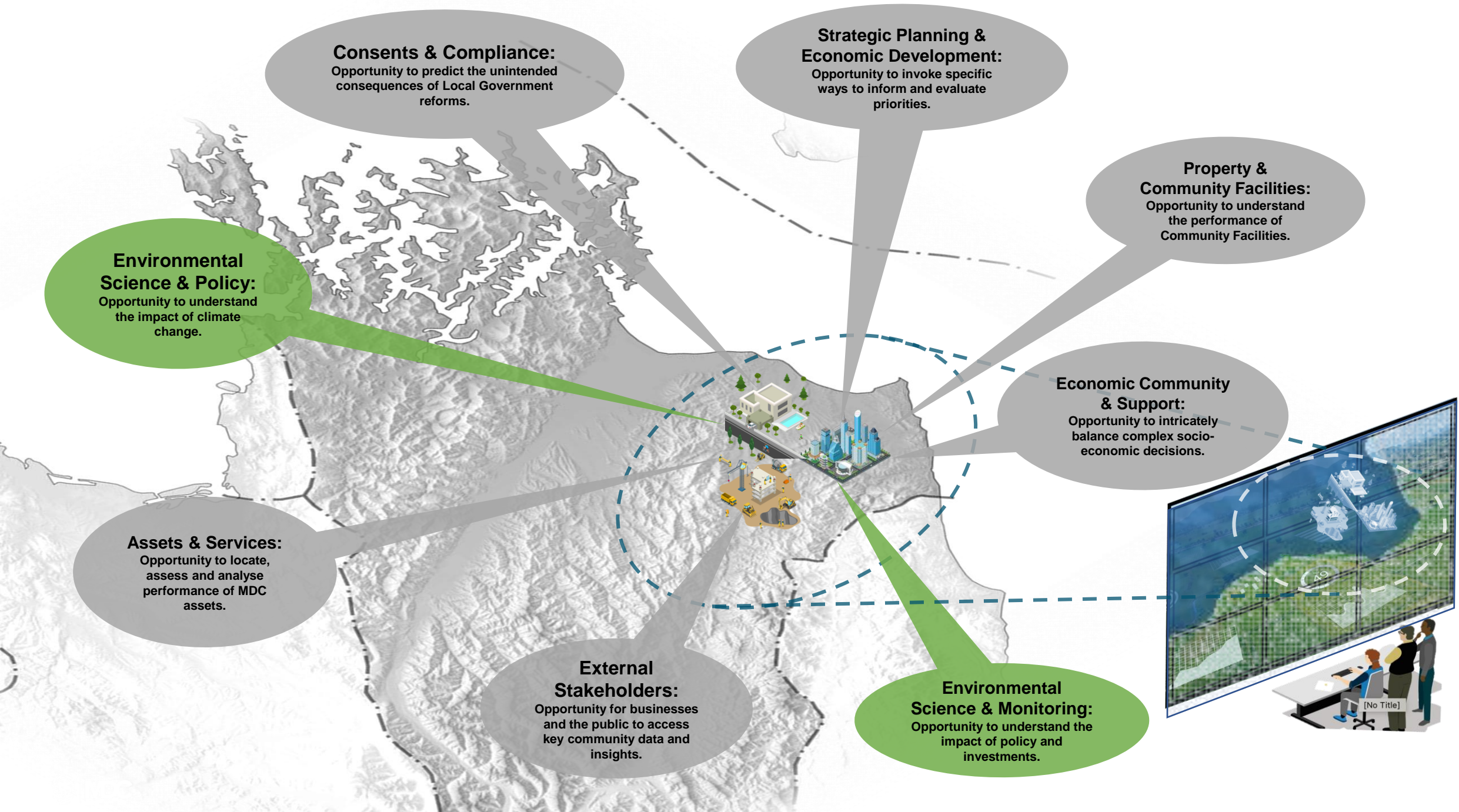


**Managing Local
Government
Reforms**

Simulate & Predict



**Managing
resilience and
recovery**



STRATEGIC ALIGNMENT

Smart + Connected Strategic Objectives (Community Outcomes)							ENABLES
MDC Services	Governance Enabling people to participate and shape the future through strong leadership	People Opportunities to succeed for a vibrant, flourishing, diverse and inclusive community	Economy Balance economic growth with wellbeing and the environment	Environment Embracing and preserving the natural environment and biodiversity	Mobility Accessibility and engagement with recreational, cultural and business activities	Living Health, safety and social connection with opportunities for a better life	PARTIALLY ENABLES
Environmental Science & Policy							
Economic, Community & Support							
Strategic Planning & Economic Development							
Property and Community Facilities							
Environmental							
Assets & Services							
Consents & Compliance							

KEY USE CASES

Use Case Name
<i>Amalgamated Council Property Management</i>
<i>Utilities Coordination</i>
<i>Survey Efficiency</i>
<i>Customer & Community Insights</i>
<i>Iwi and Business Engagement</i>
<i>Environmental Policy & Activity Impact</i>
<i>Environment and Climate Analysis</i>
<i>Flood Management</i>
<i>Flood Simulation & Risk Management</i>
<i>Data Management Hub</i>
<i>Sounds Recovery Event Simulation</i>
<i>Regional Talent Planning</i>
<i>Water Management Analysis</i>
<i>Energy Resilience Planning</i>
<i>Emergency Planning Portal</i>
<i>Place Consent Management</i>
<i>Policy Impact Analysis</i>
<i>Precinct Planning</i>
<i>Customer Demand Planning</i>
<i>Sounds Activity Analysis</i>
<i>Development Impact Analysis</i>
<i>Regional Development for Tourism</i>

Resilience Use cases

Environmental Policy & Activity Impact

Environment and Climate Analysis

Flood Management

Flood Simulation & Risk Management

Sounds Recovery Event Simulation

Water Management Analysis

Energy Resilience Planning

Emergency Planning Portal

Policy Impact Analysis

Sounds Activity Analysis

Development Impact Analysis

Flood Simulation & Risk Management (CE04)

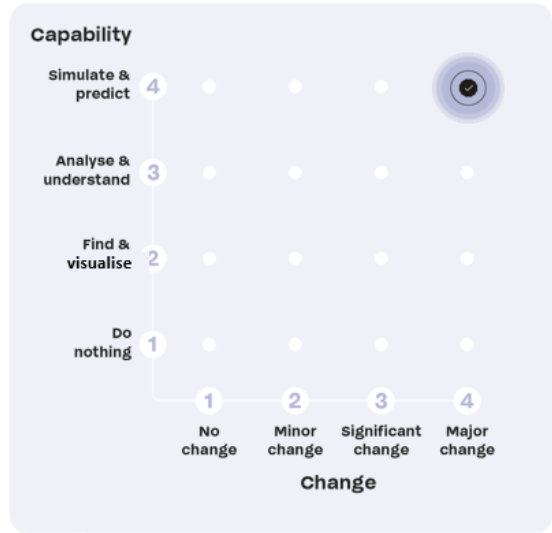
Activity

MDC cannot currently model or simulate the future impact flood events on planned developments throughout the Region cannot. This impedes MDC's ability to manage future flood risk through proactive initiatives and investments.

Target Outcome

MDC needs a digital platform which allows for spatial visualisation of subterranean assets (storm water drainage, infrastructure pipelines and outflow), other built environment information and aggregated real-time data (e.g., water level, rain gauges).

THEME: Climate & Environmental
Impact Management



Intended Benefits

- +Improved flood management & response
- +Improved flood planning and asset allocation
- +Reduced subsequent redevelopment due to planning errors.
- +Enhanced safety and wellbeing
- +Reduced disruption to economic production
- +Reduced planning costs



ANZ DIGITAL TWIN - PROJECTS

	Client & Engagement	Strategy & Implementation			
	Client	Strategy	Business Case	Implementation Plan	Delivery
1	NSW Spatial Digital Twin	✓	✓	✓	✓
3	Digital Twin Victoria	✓	✓	✓	✓
4	City of Melbourne - City Intelligence Hub	✓	✓		
5	WA Landgate	✓	✓		
6	SEQ Digital Twin	✓	✓		
7	Greater Hobart Digital Twin	✓	✓		
8	Marlborough District Digital Twin (NZ)	✓	✓		
9	Sydney Metro	✓	✓		
10	Sydney Water	✓	✓		
X	UK Government (HS2 , Highways England) Environment Agency, House of Commons)	✓	✓	✓	✓

A photograph of a modern building facade with glass balconies, partially obscured by a red semi-transparent overlay on the right side.

KEY TAKE AWAYS

- 1. Understand the key problems you are looking to solve**
- 2. Understand what capabilities you have and need**
- 3. Have executive buy-in and have a strategy**





THANK
YOU

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