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#### Water New Zealand Stormwater Conference 23-25 May 2023 I Auckland Te Roopu Wai Āwhātanga

#### Stormwater Delivery – An Opportunity to Reset?

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In pictures: Cyclone Gabrielle broken trees, storm surges o

02:00, Feb 14 2023



### New Zealand floods: State of emergency declared in Auckland due to torrential rain

© 27 January · ₱ Comments 21:38, Feb 17 2023

World

Africa



India

Middle East

United Kingdom

**NEW ZEALAND / NATURAL DISASTERS** 

Politics Pacific

Te Ao

CINN

### Flood-affected Auckla Auckland floods: More heavy beg council to clean strain ahead for New Zealand's mayor tells them it'll clargest city

Americas

Asia

Auckland floo ahead for New

# New Zealand's biggest city braces for more heavy rains after deadly floods

China

Europe

Australia

() 30 January

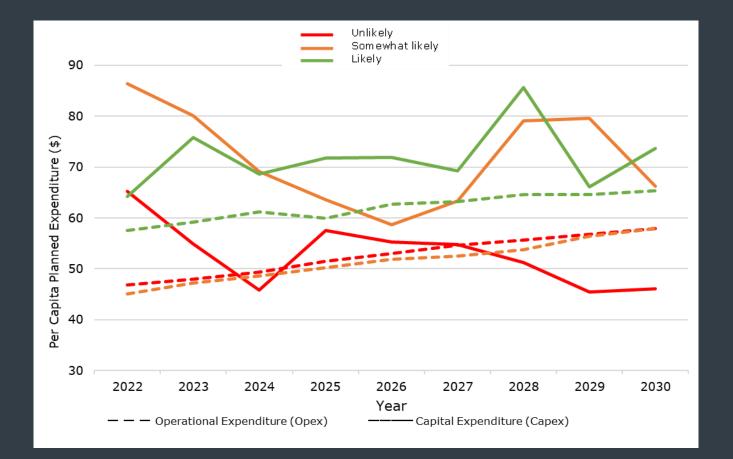
- 1. Introduction & Research Question
- 2. Four Stormwater Delivery Focus Areas
- 3. Next Steps and Recommendations
- 4. Conclusion

### Research Question

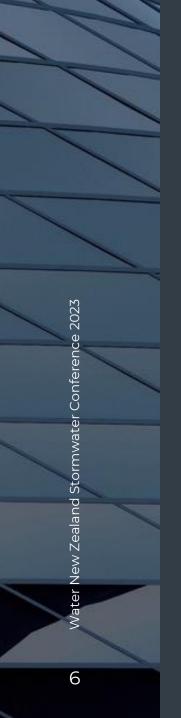
Are our 67 territorial authorities (councils) appropriately allocating funding to improve stormwater quality outcomes, enabling the enhancement of our waterways?

### Results

- 54% of Councils have water quality as a desired stormwater outcome
- 11% of Councils have improved stormwater quality as a level of service



2022-2030 average per capita district expenditure by score and expenditure type. Population projections based on StatsNZ (2020)



### Industry Interviews



"If money was not a constraint, how would you go about delivering better stormwater outcomes for your community?"

## Research Question 2.0

We currently have an opportunity to reset stormwater management in Aotearoa New Zealand. How do we capitalise on this opportunity to deliver on the aspirations of Te Mana o te Wai?

### Four Key Focus Areas

- Mindset Shift
- Funding
- Technical Resourcing
- Entity and Policy Support

## Section 2 Mindset Shift





#### **Mindset Shift**

- Historical approach to drain as efficiently as possible
- Paradigm shift towards management of flood risk
- NPS-FM introduced drivers for water-sensitive design
- Holistic, multi-valued, catchment based approach





Kirimoko Park, Wānaka - Ecco Landscapes, 2020

## Section 3 Funding





### Funding Gap

- Competing with funding for other public services
- Three waters fund shortfalls:
  - Auckland Council \$2.1 to \$9.3 billion required to achieve their stormwater level of service commitments
  - 2. Wellington Water ~\$2 billion required to support a proposed Stormwater Discharge Consent application
  - Nationally \$120 to \$180 billion required over the next 30 years to address the three waters renewal backlog and upgrade assets.
- Cost-effective solutions, that achieve multiple benefits are sought



Auckland Anniversary Flooding-Local Government Magazine, 2023

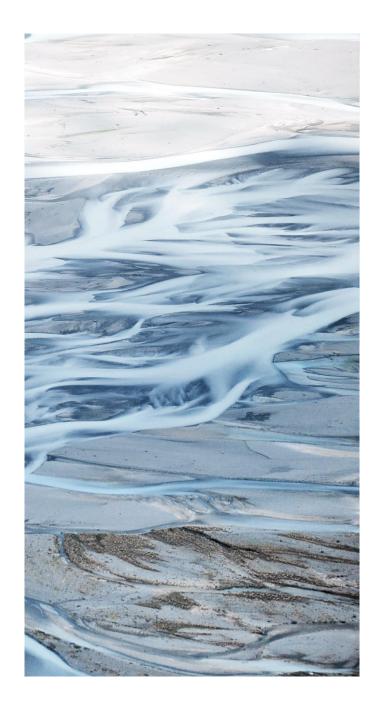
## Section 4 Technical Resourcing





#### **Technical Resourcing**

- A lack of technical expertise and technical guidance documents
- Felt most acutely by small and rural councils
- A "one size fits all approach" cannot be applied to stormwater guidance



#### Section 5

## Entity and Policy Support





#### **Entity and Policy Support**

- Currently a quickly changing space
- Implementing strong policy requires strong leadership
- A "whole system" stormwater management framework with clearly defined roles is needed



### Section 5 Next Steps and Recommendations





#### **Lessons and Opportunites**



Improve our water management in catchments



Streamline and improve our policy & legal frameworks



Accelerate digital & analytical approaches



National approaches to communication and education



Consolidate approaches to delivering alternative future funding opportunities



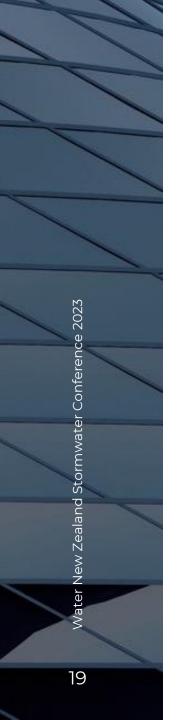
Shifting our delivery to total expenditure (TOTEX) thinking



 Prepare our waterways for the future – deliver a vision for each waterbody

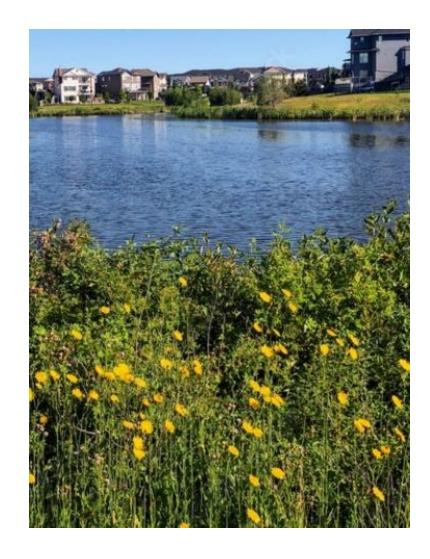


Making stormwater a career of choice



#### Conclusion

- We have come a long way in our thinking and management of stormwater.
- We should be proud of many recent achievements
- Analysis of AMPs and LTPs confirms that stormwater funding is not set up to deliver enhanced outcomes.
- Four key barriers: funding, mindset shift, technical resourcing, and entity and policy support
- All four of these areas need to be addressed to deliver appropriate outcomes under the NPS-FM framework.



## Thank you

Ka ora te waiIf the water is healthyKa ora te whenuaThe land is healthyKa ora ngā tāngataThe people are healthy



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