

# FIXING WATER WITHOUT BREAKING THE BANK

The scale, source, implications, trade-offs and solutions to the challenge

David Walker

Market Leader - Advisory





Proudly brought to you by Water New Zealand



# What I'm covering

- The size of the problem
- How did we get here?
- Real life implications
- Awkward trade-offs
- The silver bullet
- Other parts of the solution

# The size of the problem

- Previous government estimated \$120-\$185
   billion for Three Waters
- Timeframe of 30-40 years
- Debate over this figure → each excavation holds surprises
- Debate over structure, but less debate over the need
- Previous approach often mis-reported as "making water cheaper" rather than "making water cheaper than it would otherwise be"

## The size of the problem

- But water (and stormwater within it) is only one demand on financial resources
- Energy transition: \$50 billion over next 25 years
- End-of-life hospitals: \$17 billion over 15 years
- Transport: Funding model is broken
- Community infrastructure: Libraries, pools, museums, town halls
- Tourism infrastructure





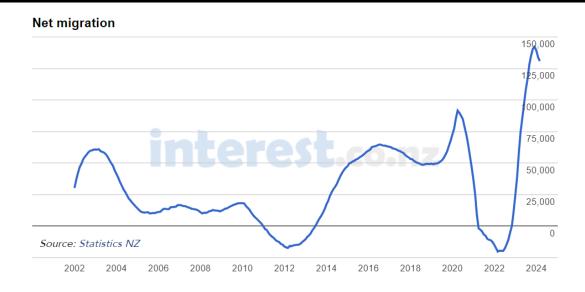
### How did we get here?

#### **Population growth is off the charts**

- Minus 47,700 NZers
- Plus 178,600 migrants

Poor way to grow an economy – skills loss / retraining required

- Centrally-made decisions, but with very local infrastructure impacts
- How will we house/infrastructure 2.5% a year growth just through migration?



## How did we get here?



#### Failure to adequately depreciate

- Not adequately depreciating assets OR
- When it comes time to fund from depreciation, the funds are used elsewhere → stormwater has often been the neglected cousin

#### Incorrect charging for growth

- Many councils don't charge enough in development contributions or targeted rates on growth
  - → subsidy from ratepayers to raw landowners
- Combined with pressure to keep rates rises low
   no money for renewals or service level upgrades

## How did we get here?

#### Changing legislative / policy expectations

- Mixed levels of regard for affordability or unintended consequences
- Some regional councils go even beyond the implications of central government direction

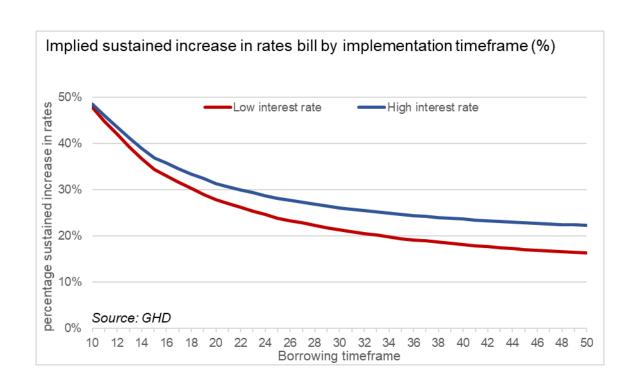
#### **Community expectations**

- Society won't accept some of the poor environmental outcomes we accepted in the past
- Sometimes inadequate regard for affordability impacts or for the lowest income / socio-economic groups who may be affected most





### Real life examples



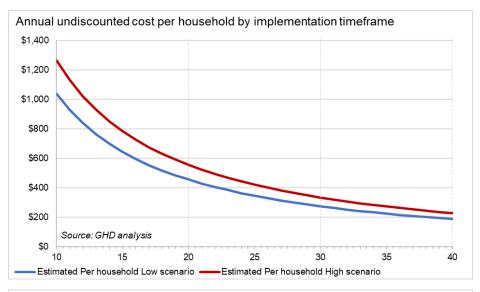
#### No mixing zones allowed?

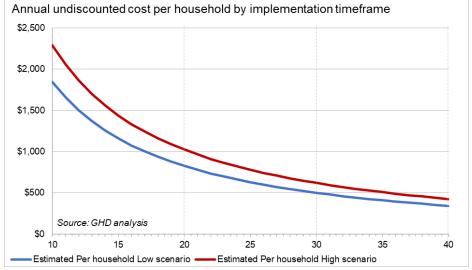
- A smaller council recently approved \$100m in spending on a new WTTP
- They were concerned at how the regional council may interpret what was allowed
- Target attribute states being applied at "end of pipe" without mixing zone was a further \$400m in costs for a single WWTP → sustained 27-32% rates rise for 20 years for a single piece of infrastructure

### Real life examples

#### **Region-wide improvements**

- Desire of a regional council was to set target attribute states higher than the NPS requires
- Affordability study completed for wastewater
- Stormwater costs estimated to be 2 to 6 times higher than these figures
- Back of envelope implication for stormwater is \$1,050 to \$3,000 a year step change in rates for 20 years





### **Awkward trade-offs**

#### Between "domains"

- Do we reduce flooding and wastewater overflows, or fix the earthquake prone library?
- Do we reduce flooding and wastewater overflows, or keep rubbish collection weekly rather than fortnightly?

#### Within domains

 Do we reduce flooding and wastewater overflows, or build the new WWTP?



We can't do it all

#### Between "domains"

 Do we fix our flooding problems, or complete a daylighting project?

# The silver bullet

## The silver bullet

Current & Future Ratepayers =
Current & Future Taxpayers =
Current & Future Water Utilities Customers



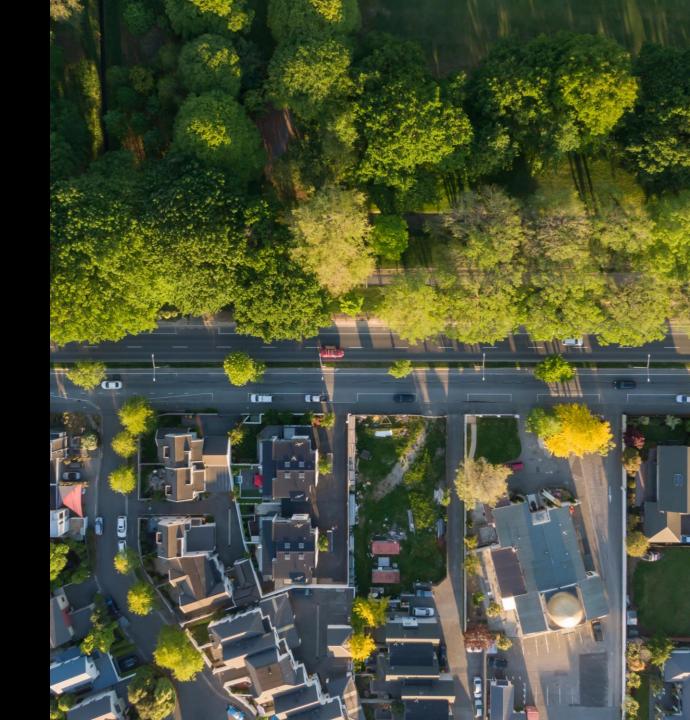
Whoever owns water provision, we will be paying more

#### Charge accurately for growth

- FACT: Charging accurately for (storm) infrastructure does not increase house prices
- Some councils are beginning to do better → Hamilton, Auckland
- Signal the change in stance firmly
- Phase in more accurate pricing if required for political support
- Think, price and charge for infrastructure needs beyond the 10-year LTP

#### **Charge accurately for existing needs**

 Signal where underfunding has occurred that redevelopment will trigger additional funding





#### Make trade-offs explicit

- Push back against ideological bottom lines that ignore the reality of trade-offs or are unquantified
- Be explicit about the trade-offs we are being asked to make: "If we spend on this, there will be no money to spend on that."

#### Reduce legislative and policy ambiguity

- NPS could set the expected water standards, and set requirements for evaluation of affordability impacts
- Close gaps for wide differences in interpretation at regional level

#### **Treat depreciation adequately**

- Full depreciation that does not go into the general pot of money
- Plan for fact that replacement kit be a "different product" from the depreciated original build

#### Reduce legislative and policy ambiguity

- Set expected water standards, and requirements for evaluation of affordability and disadvantaged group impacts
- Close gaps for wide differences in interpretation at regional level



#### Are we getting this right first?

#### SELF-ACTUALIZA-TION

morality, creativity, spontaneity, acceptance, experience purpose, meaning and inner potential

#### **SELF-ESTEEM**

confidence, achievement, respect of others, the need to be a unique individual

#### LOVE AND BELONGING

friendship, family, intimacy, sense of connection

#### SAFETY AND SECURITY

health, employment, property, family and social abilty

#### PHYSIOLOGICAL NEEDS

breathing, food, water, shelter, clothing, slee

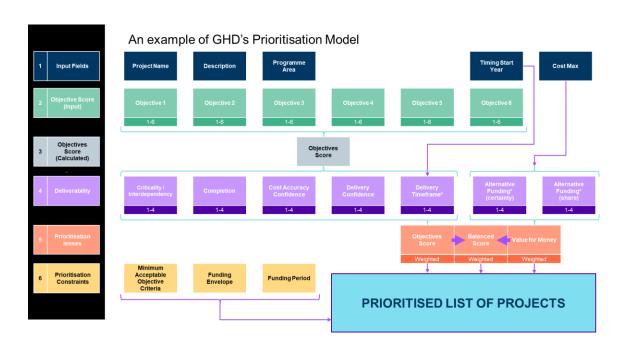
### Other solutions

#### Prioritise better

- Back to first principles → agreed objectives and Plans with wide community support
- Maslow's hierarchy of needs
- Would the private sector deliver this?
- Who benefits, who pays, and are these broadly aligned?
- Can we demonstrate the benefits (environmental, social, cultural, financial) and costs (usually financial)?
- How do we prioritise between competing domains such as transport, water, community infrastructure?
- How do we prioritise within domains or subdomains?
  - → Will regional water entities achieve this?

#### Prioritise better cont'd

- How do we prioritise in a way that survives political change?
- How do we reduce optimism bias and subjectivity?
- Can we pinpoint out of sequence projects that have an outsized benefit?
- How do we balance big impacts on community objectives at big costs with smaller impacts at much smaller costs?



# In summary

- The challenge is huge.
- Trade-offs are inevitable.
- We have made mistakes.
- Will we learn from them?
- Let us be judged by how we tackle the challenge.



# Thank you

