

## Problems facing GBID

- Aging infrastructure needs replacement
- Water quality standards have increased and are not met
- Fire protection water requirements not met
- If we don't show progress Province may step in but we will still have to pay for it

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## Why we need to act now

- Pipes and valves now over 60 years old
- Pipes are still intact but connections are failing
- Of 29 valves to control flow in GB only 12 still work
- Upgrade of water system will raise pressure and find weak spots
- Emergency repairs are much more expensive than planned replacement

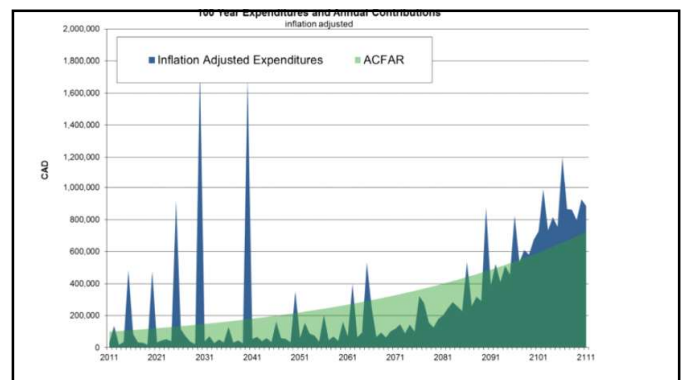
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## 10 YEAR RENEWAL PLAN

Aquavic 2012 estimate \$100K per year

- 13 year delay – inflation over 36% since 2012
- Waterline Replacement begins 2025
- Aim to replace 1 km per year till 2035
- Estimated cost \$200,000 per km in 2026

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## Water quality issues

- Coliform bacteria reduction – not met
- Cryptosporidium reduction - not met
- Dissolved organic carbon < 2 mg/L – not met
- Turbidity – OK

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## POSSIBLE TREATMENT SOLUTIONS

### 1. Ion exchange filtration like Van Anda

Moderate build cost, expensive to operate  
Van Anda has lower TOC than GB

### 2 Slow sand filtration + UV

Recommended by KWL and Anderson reports  
Least expensive to build, moderate operating cost  
High TOC will require additional filtration9///

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