

#### Friday 15 December 2023

| OIA IRO-530 |            |
|-------------|------------|
| Name:       |            |
| Email:      | @gmail.com |
| Kia ora     |            |

#### Official information request regarding the Seaview Wastewater Treatment Plant.

Thank you for your official information request dated Monday 20 November 2023.

The Local Government Official Information and Meetings Act 1987 (the Act) requires that we advise you of our decision on your request no later than 20 working days after the day we received it. Unfortunately, we cannot meet the timeframe and must therefore extend the time to make our decision to Friday 31 January 2023

This request is being extended in accordance with  $\frac{14(1)(b)}{b}$  of the Act. This extension is necessary because consultations necessary to make a decision on your request are such that a proper response cannot be made within the original time limit.

You have the right to seek an investigation and review by the Ombudsman of this decision. Information about how to make a complaint is available at <u>www.ombudsman.parliament.nz</u> or freephone 0800 802 602.

Ngā mihi,



**Governance Coordinator** 

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www.wellingtonwater.co.nz

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## Our water, our future.

Wellington Water is owned by the Hutt, Porirua, Upper Hutt and Wellington City Councils, South Wairarapa District Council and Greater Wellington Regional Council. We manage their drinking water, wastewater and stormwater services.



#### Wednesday 31 January 2024

| OIA IRO-530 |            |
|-------------|------------|
| Name:       |            |
| Email:      | @gmail.com |

Kia ora

# Part response to Official information request regarding the Seaview Wastewater Treatment Plant.

Thank you for your official information request dated Monday 20 November 2023. On Friday 15 December 2023, we extended your request until Wednesday 31 January 2024. You requested the following information:

- Any documents or correspondence regarding the long-term safety to the community of the chemicals used in the odour blasters at the Seaview Wastewater Treatment Plant, including any analysis considered on the long-term exposure to primary school aged children.
- Any requests to Central Government or Local Government for funding to replace, fix or remediate the Seaview Wastewater Treatment Plant.
- Any reports or advice about long term plans for the performance of the Seaview Wastewater Treatment Plant.
- Any correspondence (including emails) regarding communications plans relating to the Seaview Wastewater Treatment Plant since 2020.
- The number of complaints made to Wellington Water about the odour in Seaview since 2015 and all available details of these complaints.

We have considered your request in accordance with the Local Government Official Information and Meetings Act 1987 (the Act) and determined that we are able to grant your request in part.

Please see the below information, which we have provided to you in a Drop Box folder:

- 1. <u>Email from Regional Public Health regarding their view on the odour chemicals we</u> <u>use.</u>
- 2. <u>An email from Wellington Water to RPH on how we use the deodouriser spray and the associated Safety Data Sheets.</u>
- 3. An email sent from WWL to you regarding the deodouriser spray.
- 4. The Seaview Biofilter Comms and Engagement Plan.

Regarding your second and third points on funding requests and advice to fix the Seaview Wastewater Treatment Plant, such advice forms parts of broader advice we provide to Hutt City Council (HCC). This information will be provided to you in due course.

We have also decided to grant your request for the number of complaints we received, and the details of those. However, packaging this information will take more time and we will have that to you in due course.

Pursuant to <u>Section 7(2)(a)</u> of the Act, names and contact details are redacted to protect the privacy of individuals. We may also withhold some information within the documents under the following sections of the Act:

- Section 7(2)(f)(i) maintain the effective conduct of public affairs through—the free and frank expression of opinions by or between or to members or officers or employees of any local authority in the course of their duty.
- Section 7(2)(i) enable any local authority holding the information to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations)

Regarding the correspondence aspect of your first point, our team pulled 344,986 results from the system. Following advice from officers to narrow the scope from July 2020 (following the treatment plant receiving significant non-compliance from July 2020 to June 2021 compliance period for Odour Consent) to the date we received your request, this presented 274,490 results. We further narrowed the scope to just include items containing "Deodoriser" OR "Deodouriser" OR "Odour Blaster" which presented 3,213 items. Given the significant volume of correspondence we would have to review and then package for response, we are declining this part of your request in accordance with <u>Section 17(f)</u> of the Act.

Regarding your fourth point, our team pulled a significant volume of correspondence for the communications plan. We narrowed the timeframe to when conversations started about a communications plan (23 October 2023) and the date we received your request, 20 November 2023 and this still presented 753 times. In light of this, we decline this part of your request in accordance with <u>Section 17(f)</u> of the Act.

You have the right to seek an investigation and review by the Ombudsman of this decision. Information about how to make a complaint is available at <u>www.ombudsman.parliament.nz</u> or freephone 0800 802 602.

Ngā mihi,

Group Manager, Network Management Group

💟 @wgtnwaternz & @wgtnwateroutage

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#### www.wellingtonwater.co.nz

@wellington\_water

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| From:<br>Sent:<br>To:<br>Subject: | Monday, April 24, 2023 10:05 AM<br>@gmail.com';<br>Deodoriser Spray at Seaview WWTP - Response from Regional Public Health |  |
|-----------------------------------|--|--|
| Kia Ora                           | , I trust this reaches you both well   |  |
| Please see below                  | w the response we received from Regional Public Health regarding this concern :  |  |

"Kia ora

Thank you for getting in contact regarding concerns which residents in Bell Road, Lower Hutt brought forward at the Seaview WWTP CLG meeting on 28/03/2023. Of concern to a resident was "the safety of the deodoriser deployed to mask potential odours citing some of the ingredients were harmful to human health e.g., ammonia salts" and you asked us to provide information on the health effects.

The National Public Health Service requested information on the deodorising product that is used at the Seaview Waste Water Treatment Plant. You provided the safety data sheet and the dilution rate for Hi Chem Disinfectant Reodorant of 500:1 ratio. We have looked into this product using the Safety Data Sheet and the national TOXINZ database.

Hi Chem Disinfectant Reodorant has a Hazard Classification for skin and eye irritation by direct contact (6.4A and 6.3A) but not inhalation. It has an EPA Group Standard: HSR002530 - Cleaning Products (Subsidiary Hazard) Group Standard, with generic procedures for using this chemical. Hi Chem Disinfectant Reodorant is then diluted 500:1 by Veolia and dispersed using a cannon. The ingredient of concern are Quaternary ammonium compounds, alkylbenzyldimethyl, chlorides, which make up <10% of the Hi Chem Disinfectant Reodorant. Dilution at a 500:1 ratio results in a solution of <0.02% strength.

#### Exposure Route

**Ingestion**: Health concerns are most likely following exposure by ingestion (swallowing) solutions containing >7.5% quaternary ammonium compounds. This type of exposure would require handling undiluted product with accidental ingestion and is not relevant for potential public exposures.

**Skin Contact**: Repeated or prolonged skin contact, including via inappropriate application of therapeutic shampoos and via airborne vapour or mist, may result in local effects ranging from irritation or uncommonly allergic contact dermatitis at concentrations > 0.1%, to mild irritation at < 5%, moderate irritation at 5 to 10%, and severe irritation or skin burns at concentrations > 10%. Given the dilute nature of the product utilised in the cannon (<0.02% strength) and the further dilution as the droplets travel in the air, this is not expected to be a health concern for the general public.

**Eye Contact**: Eye contact with < 0.1% solutions are not usually associated with symptoms. Repeated exposure may cause transient irritation. Mild irritation can occur with strengths of 0.1%. The concentration of product utilised in the cannon would not be expected to be at a level that is associated with eye irritation.

**Inhalation**: Breathing in concentrated quaternary ammonium compounds, especially with repeated exposures, has been associated with reports of lung irritation, and a higher risk of developing asthma in workers using products with quaternary ammonium compounds. It is not expected that the dilute product utilised in the cannon would present a risk to the general public.

#### Summary

Potential health concerns associated with exposure to quaternary ammonium compounds are most likely associated with direct contact with undiluted product i.e. the staff preparing the solution. Staff exposure risk is managed by following the correct health and safety procedures. Quaternary ammonium compounds are often part of household cleaning and disinfection products and so exposure to the public is relatively common. Given the level of dilution of the product used in the cannon, and the distance between the placement of the cannon and potential locations for public exposure (typically this type of cannon dispersal method has an estimated droplet range of 50-100 metres) that effectively dilutes the strength further, we would not expect this to represent a health risk for the general public."

Thanks & regards



Wellington Water is owned by the Hutt, Porirua, Upper Hutt and Wellington city councils, South Wairarapa District Council and Greater Wellington Regional Council. We manage their drinking water, wastewater and stormwater services.



### Hazardous, NON-Dangerous Goods

#### 1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

## Product name: Hi Chem - Disinfectant Reodorant

Recommended use: Disinfectant

| Supplier:       | A1 Evolution Pty Ltd - Hi Chem |
|-----------------|--------------------------------|
| Company No.:    | 9429047401457                  |
| Street Address: | 3/3 Margaret Williams Drive    |
|                 | Papakura, Auckland             |
|                 | 2244                           |
|                 | New Zealand                    |
| Telephone:      | (09) 298 5635                  |
| Email:          | info@a1evolution.co.nz         |
|                 |                                |

Emergency Telephone number: 0800 764 766

#### 2. HAZARDS IDENTIFICATION

This material is hazardous according to criteria of EPA New Zealand.

EPA Group Standard: HSR002530 - Cleaning Products (Subsidiary Hazard) Group Standard



Signal Word Warning

#### Hazard Classifications

6.3A - Substances that are irritating to the skin 6.4A - Substances that are irritating to the eye

#### Hazard Statements

- H315 Causes skin irritation.
- H319 Causes serious eye irritation.

#### **Prevention Precautionary Statements**

- P102 Keep out of reach of children.
- P103 Read label before use.
- P264 Wash hands, face and all exposed skin thoroughly after handling.
- P280 Wear protective clothing, gloves, eye/face protection and suitable respirator.

#### Response Precautionary Statements

| P101 If           | medical advice is needed, have product container or label at hand.       |
|-------------------|--|
| P302+P352 IF      | ON SKIN: Wash with plenty of soap and water.                             |
| P305+P351+P338 IF | IN EYES: Rinse cautiously with water for several minutes. Remove contact |
| lei               | nses, if present and easy to do. Continue rinsing.                       |
| P332+P313 If      | skin irritation occurs: Get medical advice/attention.                    |
| P337+P313 If      | eye irritation persists: Get medical advice/attention.                   |
| P362 Ta           | ake off contaminated clothing and wash before reuse.                     |

#### Product Name: Hi Chem - Disinfectant Reodorant



#### **Storage Precautionary Statement**

Not allocated

#### **Disposal Precautionary Statement**

P501 Dispose of contents/container in accordance with local, regional, national and international regulations.

#### DANGEROUS GOOD CLASSIFICATION

Not classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

| 3. COMPOSITION INFORMATION  |           |                  |
|---|-----------|------------------|
| CHEMICAL ENTITY   | CAS NO    | PROPORTION       |
| Quaternary ammonium compounds, alkylbenzyldimethyl, chlorides<br>Ingredients determined to be Non-Hazardous | 8001-54-5 | <10 %<br>Balance |
|   |           | 100%             |
|   |           | 100%             |

#### 4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

**Inhalation:** Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

**Skin Contact:** If skin or hair contact occurs, immediately remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre or a Doctor; or for 15 minutes and transport to Doctor or Hospital.

**Eye contact:** If in eyes, hold eyelids apart and flush the eyes continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a Doctor; or for at least 15 minutes and transport to Doctor or Hospital.

**Ingestion:** Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Seek medical advice.

**PPE for First Aiders:** Wear overalls, gloves, safety glasses. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Notes to physician: Treat symptomatically.

#### **5. FIRE FIGHTING MEASURES**

Hazchem Code: Not applicable.

Product Name: Hi Chem - Disinfectant Reodorant



**Suitable extinguishing media:** If material is involved in a fire use water fog (or if unavailable fine water spray), alcohol resistant foam, standard foam, dry agent (carbon dioxide, dry chemical powder).

Specific hazards: Non-combustible material.

Fire fighting further advice: Not applicable.

#### 6. ACCIDENTAL RELEASE MEASURES

#### SMALL SPILLS

Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours or dust. Wipe up with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers or drums for disposal.

#### LARGE SPILLS

Clear area of all unprotected personnel. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.

Dangerous Goods - Initial Emergency Response Guide No: Not applicable

#### 7. HANDLING AND STORAGE

Handling: Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols.

**Storage:** Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Store away from sources of heat and/or ignition. Keep container standing upright. Keep containers closed when not in use - check regularly for leaks.

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits: No value assigned for this specific material by WorkSafe New Zealand.

**Biological Limit Values:** As per the WorkSafe New Zealand the ingredients in this material do not have a Biological Limit Allocated.

Engineering Measures: Natural ventilation should be adequate under normal use conditions..

Personal Protection Equipment: OVERALLS, GLOVES, SAFETY GLASSES.

Personal protective equipment (PPE) must be suitable for the nature of the work and any hazard associated with the work as identified by the risk assessment conducted.

Wear overalls, gloves, safety glasses. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

**Hygiene measures:** Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols. Ensure that eyewash stations and safety showers are close to the workstation location.

Product Name: Hi Chem - Disinfectant Reodorant



#### 9. PHYSICAL AND CHEMICAL PROPERTIES

| Base Units: | Litres   |
|-------------|--|
| Form:       | Liquid   |
| Colour:     | Clear or slightly coloured, low viscosity liquid |
| Odour:      | Fragrances will vary                             |

Solubility: Specific Gravity: Density: Relative Vapour Density (air=1): Vapour Pressure (20 °C): Flash Point (°C): Flammability Limits (%): Autoignition Temperature (°C): Melting Point/Range (°C): Boiling Point/Range (°C): pH: Viscosity: Total VOC (g/Litre): Completely soluble in water Approx 1.0 N Av N Av 2.37 kPa at 20°C Non-flammable N Av N Av Approximately 0°C Approximately 100°C at 100kPa N Av N Av N Av

(Typical values only - consult specification sheet) N Av = Not available, N App = Not applicable

#### **10. STABILITY AND REACTIVITY**

Chemical stability: This product is unlikely to react or decompose under normal storage conditions

Conditions to avoid: Avoid excessive heat during storage

**Incompatible materials:** Oxidizing chemicals, cationic surfactants

Hazardous decomposition products: Nil

Hazardous reactions: Nil

#### 11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

#### Acute Effects

Inhalation: Material may be an irritant to mucous membranes and respiratory tract.

Skin contact: Contact with skin will result in irritation.

Ingestion: Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract.

Eye contact: An eye irritant.

#### Acute toxicity

**Inhalation:** This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): LC50 > 20.0 mg/L for vapours or LC50 > 5.0 mg/L for dust and mist or LC50 > 5,000 ppm gas



Skin contact: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >5,000 mg/Kg bw

**Ingestion:** This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >5,000 mg/Kg bw

**Corrosion/Irritancy:** Eye: this material has been classified as a 6.4A - Substances that are irritating to the eye. Skin: this material has been classified as a 6.3A - Substances that are irritating to the skin.

**Sensitisation:** Inhalation: this material has been classified as not a respiratory sensitiser. Skin: this material has been classified as not a skin sensitiser.

Aspiration hazard: This material has been classified as non-hazardous.

Specific target organ toxicity (single exposure): This material has been classified as non-hazardous.

#### **Chronic Toxicity**

Mutagenicity: This material has been classified as non-hazardous.

Carcinogenicity: This material has been classified as non-hazardous.

#### Reproductive toxicity (including via lactation):

This material has been classified as non-hazardous.

Specific target organ toxicity (repeat exposure): This material has been classified as non-hazardous.

#### **12. ECOLOGICAL INFORMATION**

Avoid contaminating waterways.

Acute aquatic hazard: Harmful to aquatic life when diluted and in concentrate form

**Long-term aquatic hazard:** This material has been classified as non-hazardous. Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available OR in the absence of chronic toxicity data, Acute toxicity estimate (based on ingredients): >100 mg/L, where the substance is not rapidly degradable and/or BCF < 500 and/or log  $K_{ow}$  < 4.

Ecotoxicity in the soil environment: This material has been classified as non-hazardous.

Ecotoxicity to terrestrial vertebrates: This material has been classified as non-hazardous.

Ecotoxicity to terrestrial invertebrates: This material has been classified as non-hazardous.

Ecotoxicity: No information available.

Persistence and degradability: The product is readily biodegradable.

Bioaccumulative potential: No information available.

Mobility: No information available.

#### **13. DISPOSAL CONSIDERATIONS**

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

Product Name: Hi Chem - Disinfectant Reodorant

Reference No: Disinfectant Reodorant NZ SDS Oct 2020



If possible material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

#### **14. TRANSPORT INFORMATION**

#### ROAD AND RAIL TRANSPORT

Not classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

#### MARINE TRANSPORT

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

#### AIR TRANSPORT

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

#### **15. REGULATORY INFORMATION**

#### This material is not subject to the following international agreements:

Montreal Protocol (Ozone depleting substances) The Stockholm Convention (Persistent Organic Pollutants) The Rotterdam Convention (Prior Informed Consent)

Basel Convention (Hazardous Waste)

International Convention for the Prevention of Pollution from Ships (MARPOL)

#### This material/constituent(s) is covered by the following requirements:

• All components of this product are listed on or exempt from the New Zealand Inventory of Chemical (NZIoC).

• All components of this product are listed on or exempt from the Australian Inventory of Chemical Substances (AICS).

EPA Group Standard: HSR002530 - Cleaning Products (Subsidiary Hazard) Group Standard

| Approved handler          | No  |
|---------------------------|-----|
| Location test certificate | No  |
| Fire extinguishers        | No  |
| Signage                   | Yes |
| Emergency response        | Yes |
| Hazardous atmosphere zone | No  |

#### **16. OTHER INFORMATION**

Reason for issue: Revised

This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If you are an employer it is your duty to tell your employees, and any others that may be affected, of any hazards described in this sheet and of any precautions that should be taken.

```
Product Name: Hi Chem - Disinfectant Reodorant
```

Safety Data Sheets are updated frequently. Please ensure you have a current copy.



## SAFETY DATA SHEET



# This substance is not hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

## Section 3. Composition / Information on Ingredients

| CAS No.     | %   | Ingredient                |
|-------------|-----|---------------------------|
| Proprietary | 100 | Non Hazardous Ingredients |
| ┡           | 100 | Non Hazardous Ingredients |

## Section 4. First Aid Measures

Routes of Exposure:

| Eye        | Flush the affected eye with a gentle stream of water for 15 minutes. If irritation persists seek medical advice. |
|------------|--|
| Skin       | Flush with water, incidental skin contact is not harmful.  |
| Ingestion  | Give water or milk to dilute. Seek medical attention.  |
| Inhalation | This substance should not pose any adverse health conditions if accidentally inhaled.                            |

#### Most important symptoms and effects, both acute and delayed Symptoms: None known.

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## Section 5. Fire Fighting Measures

| Suitable Extinguishing media | All types of extinguishing media in line with surrounding materials  |
|------------------------------|--|
| Fire and Explosion hazards   | None   |
| Fire Fighting Instructions   | Self-contained breathing apparatus and protective clothing should be worn when fighting fires involving chemicals. |

### Section 6. Accidental Release Measures

Contain spill, collect and return large amounts to container. Use until one inch remains in the container, empty container, triple rinse and recycle.

### Section 7. Handling and Storage

Handling and Storage Advice: Store in a cool, dry area. Keep container tightly closed and upright when not in use. If frozen, thaw and mix to make usable.

### Section 8 Exposure Controls / Personal Protection

### WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

|           |           | TWA    |          | STEL   |          |
|-----------|-----------|--------|----------|--------|----------|
| Substance | CAS # (a) | ppm(b) | mg/m3(c) | ppm(b) | mg/m3(c) |

No components of this product are listed in the NZ WES tables.

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irrevers ble tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2019 11<sup>TH</sup> EDITION.

Engineering Controls:

None

Personal Protective Equipment:

Advisable to wear protective gloves and goggles for bulk handling or transferring to alternative containers.

## Section 9 Physical and Chemical Properties

Physical State: Colour: Odour: pH: Solubility: Boiling point: Melting Point: Liquid Semi-translucent Citrus/Floral N/A 100% 100<sup>0</sup>C N/A

## Section 10. Stability and Reactivity

| Stability of Substance | This product is stable when stored under recommended normal temperature and pressures. |
|------------------------|--|
| Conditions to Avoid    | None known.  |
| Incompatible Materials | Strong oxidizing substances  |
| Hazardous              | None known.  |
| Decomposition          |  |
| Products               |  |

| Section 11 | Toxicological Information |  |
|------------|---------------------------|--|
|------------|---------------------------|--|

### Acute Effects:

| Swallowed  | Not applicable. |
|------------|-----------------|
| Dermal     | Not applicable. |
| Inhalation | Not applicable. |
| Eye        | Not applicable. |
| Skin       | Not applicable. |

### **Chronic Effects:**

| Carcinogenicity | Not applicable. |
|-----------------|-----------------|
| Reproductive    | Not applicable. |
| Toxicity        |                 |
| Germ Cell       | Not applicable. |
| Mutagenicity    |                 |
| Aspiration      | Not applicable. |
| STOT/SE         | Not applicable. |
| STOT/RE         | Not applicable. |

| Acute Oral Toxicity   | LD <sub>50</sub> Rat (oral) >5000 mg/kg body weight   |
|-----------------------|---|
| Acute Dermal Toxicity | LD <sub>50</sub> Rat (dermal) >5000 mg/kg body weight |
| Long term Effects     | None anticipated                                      |

## Section 12. Ecotoxicological Information

| Environmental Precautions |   |
|---------------------------|---|
| Ecological Toxicity       | Not expected to be toxic to the environment     |
| Environmental Fate        |   |
| Soil                      | Environmentally biodegradable. Does not persist |
| Water                     | Environmentally biodegradable. Does not persist |

## Section 13. Disposal Considerations

Empty containers should be triple water rinsed before being sent for recycling.

## Section 14 Transport Information

# This product is NOT classified as a Dangerous Good for transport in NZ ; NZS 5433:2012

## Section 15 Regulatory Information

This product does not trigger any Regulatory controls in New Zealand

### Section 16 Other Information

The information herein is given in good faith, but no warranty, express or implied is made. Please contact the New Zealand proprietor, Biox International Ltd, if further information is required.

| Prepared by: | biOx International Ltd |              |              |
|--------------|------------------------|--------------|--------------|
| Date:        | 7 April 2020           | Review Date: | 7 April 2025 |

## SAFETY DATA SHEET

|  | OAI ETT BATA ONEET   |   |
|--|--|---|
| Section 1. Ider  | ntification of the material and the supplier                                   | hiOv                                      |
| Product:<br>Product Code:<br>Product Use:<br>Restriction of Use: | Odour Neutraliser PLUS<br>SCD1100<br>Deodourising Agent<br>Refer to Section 15 | DUST, ODOUR<br>AND COOLING<br>SPECIALISTS |
| New Zealand Supplier:  | biOx International Limited   |   |
| Address:   | 38/38 Ashley Place<br>Papamoa<br>New Zealand                                   |   |
| Telephone:   |  |   |
| Emergency Telephone:   |  |   |
| Date of SDS Preparation:   | 7 April 2020 version 5   |   |
| Section 2. Haz   | zards Identification   |   |

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

EPA Approval Code: HSR002530 Cleaning Products (Subsidiary Hazard) Group Standard

Pictograms:



Irritant Chronic

#### Signal Word: DANGER

| HSNO<br>Classification                                      | Hazard Code                                      | Hazard Statement  | GHS Category  |
|---|--|---|---|
| 6.3A  | H315   | Causes skin irritation.   | Skin Irrit. 2   |
| 6.4A  | H319   | Causes serious eye irritation.  | Eye Irrit. 2A   |
| 6.8A  | H360   | May damage fertility or the unborn child  | Repr. 1A  |
| 6.9B  | H373   | May cause damage to organs through prolonged<br>or repeated exposure  | STOT RE 2   |
| 9.1C  | H412   | Harmful to aquatic life with long lasting effects.  | Aquatic Chronic 3                                       |
| 9.2C  | H423   | Harmful to the soil environment.  | Records - Subar Marcola - Marcola da Subarana da Carlos |
| Hazard Code<br>H315<br>H320<br>H360<br>H373<br>H412<br>H423 | Causes ey<br>May dama<br>May cause<br>Harmful to | atement<br>in irritation.<br>e irritation.<br>ge fertility or the unborn child.<br>e damage to blood system through prolonged or repe<br>aquatic life with long lasting effects.<br>the soil environment. | eated exposure.   |
| Prevention Cod  | de Prevention                                    | n Statement   |   |
| P103  | Read label                                       | before use.   |   |
| P104  | Read safe  | ty data sheet before use  |   |
| P201  | Obtain spe                                       | cial instructions before use.   |   |

10

| P202             | Do not handle until all safety precautions have been read and understood.  |
|------------------|--|
| P260             | Do not breathe mist or spray.  |
| P264             | Wash hands thoroughly after handling.  |
| P273             | Avoid release to the environment.  |
| P280             | Wear protective gloves, protective clothing and eye protection.  |
| P281             | Use personal protective equipment as required.   |
| Response code    | Response Statement   |
| P314             | Get medical advice/attention if you feel unwell.   |
| P321             | Specific treatment (see first aid instruction on product label).   |
| P362             | Take off contaminated clothing and wash before re-use.   |
| P302 + P352      | IF ON SKIN: Wash with plenty of soap and water.  |
| P305 + P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.   |
| P308 + P313      | IF exposed or concerned: Get medical advice/ attention.  |
| P332 + P313      | If skin irritation occurs: Get medical advice/ attention.  |
| P337 + P313      | If eye irritation persists: Get medical advice/attention.  |
| Storage Code     | Storage Statement  |
| P405             | Store locked up in original container in a cool well-ventilated area out of direct sunlight and away from strong acids oxidisers and reducing agents.  |
| Disposal Code    | Disposal Statement   |
| P501             | Triple rinse container and add rinsing's to mixing vessel. Puncture empty container before disposal to landfill. Unwanted material should be disposed of as a hazardous waste via a licensed waste disposal company. |
|                  |  |

#### Section 3. Composition / Information on Ingredients

| Ingredients                    | Wt%     | CAS NUMBER. |
|--------------------------------|---------|-------------|
| Sodium Chlorite                | 1-2%    | 7758-19-2   |
| Potassium Persulphate          | <0.1%   | 7727-21-1   |
| Surfactant                     | <1.0%   | 1643-20-5   |
| Other Non-Hazardous Components | Balance | N/A         |

Section 4. First Aid Measures

Recommended on site emergency facilities:

Eye Wash, Emergency Shower

Routes of Exposure:

| IF SWALLOWED:                                | Rinse mouth. Do NOT induce vomiting. Give plenty of water to drink. Call a POISON CENTER or doctor/physician if you feel unwell (0800 764 766).  |
|--|--|
| Specific Treatment:<br>IF ON SKIN (or hair): | Remove/Take off immediately all contaminated clothing. Wash affected areas with soap and water. If skin irritation or rash occurs get medical advice/attention.  |
| IF IN EYES:                                  | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. If eye irritation persists: Get medical advice/attention.   |
| Specific Measures:<br>IF INHALED:            | Remove to fresh air and keep at rest in a position comfortable for breathing.<br>If breathing is difficult or if experiencing respiratory symptoms, remove to fresh air and<br>keep at rest in a position comfortable for breathing. Immediately call a POISON<br>CENTER (0800 764 766) or doctor/physician. |
| IF EXPOSED<br>CONCERNED:                     | Get medical advice/attention.  |
| Most important symp                          | toms and effects, both acute and delayed   |

| Inhalation: | Not applicable.                           |                                    |
|-------------|---|------------------------------------|
| Skin:       | Causes skin irritation.                   |                                    |
| Eye:        | Causes eye irritation.                    |                                    |
| Chronic:    | May damage fertility or the unborn child. | May cause damage to organs through |
|             | prolonged or repeated exposure.           |                                    |

| Section 5.          | Fire Fighting Measures  |
|---------------------|---|
|                     |   |
| Hazard Type         | Eye and skin irritant, ecotoxic liquid.   |
| Hazards from        | Chlorine and oxides of sodium.  |
| decomposition       |   |
| products            |   |
| Suitable            | All   |
| Extinguishing media |   |
| Precautions for     | Evacuate unnecessary personnel. Wear chemically resistant clothing. Wear        |
| firefighters and    | self-contained breathing apparatus, rubber boots and heavy rubber gloves.       |
| special protective  | Dilute with water spray to avoid oxidative decomposition. Intensifies fires and |
| clothing            | releases heat on decomposition. Reaction with strong acids liberates toxic gas  |
|                     | (chlorine dioxide). Contain run off. Toxic to the aquatic environment.          |
|                     | Contact with combustible materials may cause fire after impregnation and drying |
|                     | out.  |
| HAZCHEM CODE        | NA  |
|                     |   |

#### Land Spill or Leaks

Large spills should only be handled by appropriately trained personnel or the emergency services. Wear suitable PPE (see section 8 of this SDS). Avoid contact with skin or eyes. If possible and safe to do so, stop/cut off the source of the leak. Contain any released substance with suitable inert spill media (e.g. zeolite, kitty litter, sand. Recover if possible by pumping into suitable containers (HDPE). Transfer all solid spill residues into labeled hazardous waste containers. Do not allow spill residues to dry out. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling. Dispose of spill residues using a licensed hazardous waste company.

| Section 7. | Handling and Storage |
|------------|----------------------|
|            |                      |

Safe handling and storage of this substance must comply with the requirements of the site and storage conditions for ecotoxic substances (copies available from the NZ EPA website <u>www.epa.govt.nz</u>).

#### Precautions for safe handling:

- Handle in accordance with good industrial hygiene and safety procedures.
- Reduce/avoid exposure and/or contact.
- Remove contaminated clothing immediately.
- Clean contaminated clothing.
- Keep container tightly closed.
- Keep away from: Heat sources, acids, food and feedstuffs.
- Collect spillages

#### Conditions for safe storage:

- Store in a cool well ventilated place out of direct sunlight.
- Avoid storing with acids, chlorine, hypochlorite and organic solvents.
- Keep containers closed when not in use.

|  | Section 8 | Exposure Controls / | Personal Protection |
|--|-----------|---------------------|---------------------|
|--|-----------|---------------------|---------------------|

#### WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

| Substance                            | CAS # (a) | TWA<br>ppm(b) mg/m3(c) | STEL<br>ppm(b) mg/m3(c)                 |
|--------------------------------------|-----------|------------------------|---|
| Product Name: Odour Neutraliser Plus |           | SDS Prepared b         | y: Technical Compliance Consultants Ltd |
| Date of MSDS 7 April 2020 ver 5A     |           | Tel: 64 9 475 5        | 240 Website: www.techcomp.co.nz Page 3  |

#### No components of this product are listed in the NZ WES tables.

Workplace Exposure Standard - Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard - Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irrevers ble tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2019 11<sup>TH</sup> EDITION.

#### **Engineering Controls:**

Work under local exhaust/ventilation.

#### **Personal Protective Equipment:**



- Where exposure through inhalation may occur the use of approved respiratory protection equipment is recommended
- Use chemically resistant goggles or face shield with safety glasses. Protective gloves apron, boots, head and face protection should be worn.
- Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
- Avoid all unnecessary exposure.
- Ensure prompt removal from eyes, skin and clothing.

#### General:

Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas. Avoid all personal contact, including inhalation. Wear protective clothing.

| Section 9 Physical and Chemical Properties |   |
|--|---|
|  |   |
| Appearance                                 | Yellow Liquid                           |
| Odour                                      | Characteristic mild chlorine-like odour |
| Odour Threshold                            | Not applicable                          |
| рН   | 8-9                                     |
| Decomposition temperature                  | >170°C                                  |
| Melting Point                              | Not applicable                          |
| Freezing Point                             | Not applicable                          |
| Flash Point                                | Not applicable                          |
| Flammability                               | Not applicable                          |
| Upper and Lower Exposure                   | Not applicable                          |
| Limits                                     |   |
| Vapour Pressure                            | Not applicable                          |
| Vapour Density                             | Not applicable                          |
| Specific Gravity                           | 1.05 g/cm <sup>3</sup>                  |
| Solubilities                               | Completely soluble in water.            |
| Partition Coefficient:                     | Not applicable                          |
| Auto-ignition Temperature                  | Not applicable                          |
| Decomposition                              | Not applicable                          |
| Temperature                                |   |
| Kinematic Viscosity                        | Not applicable                          |
| Particle Characteristics                   | Not applicable                          |

#### Section 10. Stability and Reactivity

| Stability of Substance | This product is stable when stored under recommended normal |
|------------------------|---|
|                        | temperature and pressures.                                  |
| Conditions to Avoid    | Keep away from strong acids.                                |

| Incompatible Materials              | Acids, chlorine, hypochlorite, organic solvents and organic compounds.<br>Will react with strong acids to liberate toxic gas (chlorine dioxide).                           |
|-------------------------------------|--|
| Hazardous Decomposition<br>Products | On heating may release toxic and corrosive gases/vapours.  |
| Packaging materials and containers  | Recommended: Polyester, polyethylene, stainless steel, (small quantities: glass). Not recommended: Steel, Copper, Copper and its alloys, Aluminium and its alloys, rubber. |

| Section 11 Toxicological Information |
|--------------------------------------|
|--------------------------------------|

#### Acute Effects:

| Swallowed  | Not applicable.                  |
|------------|----------------------------------|
| Dermal     | Not applicable.                  |
| Inhalation | Not applicable.                  |
| Eye        | Causes severe irritation to eyes |
| Skin       | Causes skin irritation.          |

#### **Chronic Effects:**

| Carcinogenicity        | Not applicable.   |
|------------------------|---|
| Reproductive Toxicity  | Suspected of damaging fertility or the unborn child.                            |
| Germ Cell Mutagenicity | Not applicable.   |
| Aspiration             | Not applicable.   |
| STOT/SE                | Not applicable.   |
| STOT/RE                | Causes damage to organs through prolonged or repeated exposure. Not applicable. |

#### Acute toxicity (calculated)

| Oral       | >5000mg/kg bw (Rat) |
|------------|---------------------|
| Dermal     | >5000 mg/kg bw      |
| Inhalation | >5 mg/l (mist)      |

#### Section 12. Ecotoxicological Information

**HSNO Ecotoxicity Classifications:** 9.1C = Harmful to aquatic life with harmful effects 9.2C = Harmful to the soil environment.

#### **Environmental hazards**

This substance in its undiluted form is harmful to fish and harmful in the soil environment. Do not discharge effluent containing this product into lakes, streams, rivers, ponds, oceans or other natural waters unless in accordance with local bylaws or unless you have a permit to do so. Do not discharge effluent containing this product into sewer systems unless you have a permit to do so. For guidance contact your local authority.

Environmental Precautions: Avoid release to the environment.

Individual component toxicity data.

#### Sodium chlorite solution:

SPECIES: Daphnia magna (Water flea) TYPE OF EXPOSURE: Static DURATION: 48 hr ENDPOINT: EC50 (Intoxiciation) VALUE: 0.0146, 0.012 - 0.018 PPM (= 0.0146 mg/l) Bioccumulative: ND Rapidly Degradable: Yes

SPECIES: Selenastrum capricornutum (Green algae)

TYPE OF EXPOSURE: Static DURATION: 96 hr ENDPOINT: EC50 (Intoxication) VALUE: 1.32, 1.18 - 1.47 ppm (= 1.32 mg/l) Bioccumulative: ND Rapidly Degradable: Yes

SPECIES: Cyprinodon variegatus (Sheepshead minnow) TYPE OF EXPOSURE: Flow-through DURATION: 96 hr ENDPOINT: LC50 (Mortality) VALUE: 75 PPM (= 75 mg/l) Bioccumulative: ND Rapidly Degradable: Yes

SPECIES: Activated sludge, domestic ENDPOINT: EC50 VALUE: 2.2 mg/l Soil DT 50 > 30 days: ND

SPECIES: Rat ENDPOINT: LD50 VALUE: 165 mg/kg

#### Lauryl Dimethylamine oxide

9.1A (fish)

REMARK: Refer to CAS # 112-18-5.

Bioccumulative: Yes Rapidly Degradable: Yes

CAS #: 1643-20-5 N,N-DODECYLDIMETHYLAMINE OXIDE Parameter Type : Screening Test Study Biodeg Eval: BF Rate : 96 Units : % DEGRADATION Oxygen Condition: AEROBIC Incub Time (days): 19 Chem Conc (ppm): 5 Inoculum : SEWAGE Temp (deg C) : 25

Environmental Exposure Limits: No EEL's are set.

| Section 13.     | <b>Disposal Cons</b> | iderations   |
|-----------------|----------------------|--|
| Waste informati | on:                  | Removal of residues: - Remove as a hazardous waste according to local and national regulations.  |
| Polluted packag | ging:                | Remove as a waste according to local and national regulations.   |
| Provisions rela | ating to waste:      |  |
| Disposal metho  | ods:                 | Triple rinse container and add rinsing's to mixing vessel. Puncture empty container before disposal to landfill. Unwanted material should be disposed of as a hazardous waste via a licenced waste disposal company. Dispose of spills and residues as a hazardous |

Precautions or methods to avoid: Avoid release to the environment.



#### <u>Land Transport</u> This product is not classified as a Dangerous Good for transport in NZ ; NZS 5433:2012

#### Rail, Sea and Air Transport

| UN No                | 3082   |
|----------------------|--|
| Class - Primary      | 9  |
| Packing Group        |  |
| Proper Shipping Name | ENVIRONMENTALLY HAZARDOUS LIQUID, N.O.S (Sodium Chlorite)  |
| Marine Pollutant     | Yes  |
| Special Provisions   | If the product's individual container is below 5L/kg, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG. |

| Section 15 | Regulatory Information |
|------------|------------------------|
|------------|------------------------|

EPA Approval Code: HSR002530 Cleaning Products (Subsidiary Hazard) Group Standard

| HSW (HS) Regulations 2017 and EPA Notices | Trigger Quantity                   |
|---|------------------------------------|
| Certified Handler                         | Not required                       |
| Location Certificate                      | Not required                       |
| Tracking Trigger Quantities               | Not required                       |
| Signage Trigger Quantities                | 1000L (9.1C)                       |
| Emergency Response Plan                   | 1000L (9.1C)                       |
| Secondary Containment                     | 1000L (9.1C)                       |
| Restriction of Use                        | Only use for the intended purpose. |

#### HSNO Classification: 6.3A, 6.4A, 6.8A, 6.9B, 9.1C, 9.2C

#### Section 16 Other Information

#### Glossary

- EC<sub>50</sub> Median effective concentration.
- EEL Environmental Exposure Limit.
- EPA Environmental Protection Authority
- HSNO Hazardous Substances and New Organisms.
- HSW Health and Safety at Work.
- LC<sub>50</sub> Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
- LD<sub>50</sub> Lethal dose to kill 50% of test animals/organisms.
- LEL Lower explosive level.
- OSHA American Occupational Safety and Health Administration.
- TEL Tolerable Exposure Limit.
- TLV Threshold Limit Value-an exposure limit set by responsible authority.
- UEL Upper Explosive Level
- WES Workplace Exposure Limit

References:

- 1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
- 2. Workplace Exposure Standards and Biological Exposure Indices Nov 2017 edition.
- 3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
- 4. Transport of Dangerous goods on land NZS 5433:2012
- 5. HSW (Hazardous Substances) Regulations 2017

#### Disclaimer

This document has been prepared by TCC (NZ) Ltd and serves as the suppliers Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC (NZ) Ltd or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While TCC (NZ) have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, TCC (NZ) Ltd accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

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Issue Date: 7 April 2020 Review Date:

7 April 2025



Hi thanks for your time on the phone earlier,

An action point in the recent CLG for Seaview was to clarify the safety of these kinds of products as some of the community members at the meeting had expressed concern.

As per our conversation, attached are 3 MSDS forms for 3 products of masking agent deodoriser. The one the plant <u>is</u> <u>currently</u> using and has been for some time is **Hi-Chem** which is classed as Non-Hazardous.

Veolia have explored a couple more options (the other 2 attachments), here is what the supplier recommended about these 2 products :

"We offer 2 different chemicals for odour suppression, one is the chemical I have supplied to you in the past, which is Odour Neutraliser PLUS, 2<sup>nd</sup> product is called Oda Ban.

Odour Neutraliser is our all round go to product that looks after most odour sources, as you would know this product doesn't offer a fragrance, we have supplied this chemical for 20 plus years and across all applications for the likes of Landfills, Transfer stations composting sites, Rendering plants and WWTP with excellent results.

Available in 20L, 200L and IBC.

Recommended dilution range 333:1 -500:1, we recommend 500:1 for this product.

Oda Ban is a bit of a specialist product, looks after ammonia-based odours, also offers a fragrance. Due to the product being a "specialist" product we can only offer it in 20L Jerry cans as the demand for this product is low.

Recommended dilution range 333:1 - 500:1 again, we recommend 500:1 for Oda Ban"

I was wondering if you could offer any advice on these 3 products please?

Kind regards

- Wastewater Operations & Assets Advisor



Mob Private Bag 39804, Wellington Mail Centre 5045 Level 4, 25 Victoria Street, Petone, Lower Hutt

www.wellingtonwater.co.nz



Wellington Water is owned by the Hutt, Porirua, Upper Hutt and Wellington city councils, South Wairarapa District Council and Greater Wellington Regional Council. We manage their drinking water, wastewater and stormwater services.

| r        |                                |
|----------|--------------------------------|
| From:    |                                |
| Sent:    | Friday, April 21, 2023 3:07 PM |
| To:      |                                |
| Subject: | FW: Deodouriser concerns       |
| ubject:  | FW: Deodouriser concerns       |

Hi All, good news - I've received the info we have been waiting on from RPH, please see below.....

### Cheers

| From:         | [HVDHB] <  | @huttvalleydhb.org.nz>  |
|---------------|--|-------------------------|
| Sent: Friday, | 21 April 2023 2:47 pm  |                         |
| To:           |  | @wellingtonwater.co.nz> |
| Cc:           | [HVDHB] <  | @huttvalleydhb.org.nz>  |
| Culture Des   | da unitaria da como da | c , s                   |

Subject: Deodouriser concerns

Caution: This is an external email. Please take care when clicking links or opening attachments.

#### Kia ora

Thank you for getting in contact regarding concerns which residents in Bell Road, Lower Hutt brought forward at the Seaview WWTP CLG meeting on 28/03/2023. Of concern to a resident was "the safety of the deodoriser deployed to mask potential odours citing some of the ingredients were harmful to human health e.g., ammonia salts" and you asked us to provide information on the health effects.

The National Public Health Service requested information on the deodorising product that is used at the Seaview Waste Water Treatment Plant. You provided the safety data sheet and the dilution rate for Hi Chem Disinfectant Reodorant of 500:1 ratio. We have looked into this product using the Safety Data Sheet and the national TOXINZ database.

Hi Chem Disinfectant Reodorant has a Hazard Classification for skin and eye irritation by direct contact (6.4A and 6.3A) but not inhalation. It has an EPA Group Standard: HSR002530 - Cleaning Products (Subsidiary Hazard) Group Standard, with generic procedures for using this chemical. Hi Chem Disinfectant Reodorant is then diluted 500:1 by Veolia and dispersed using a cannon. The ingredient of concern are Quaternary ammonium compounds, alkylbenzyldimethyl, chlorides, which make up <10% of the Hi Chem Disinfectant Reodorant. Dilution at a 500:1 ratio results in a solution of <0.02% strength.

#### **Exposure Route**

*Ingestion*: Health concerns are most likely following exposure by ingestion (swallowing) solutions containing >7.5% quaternary ammonium compounds. This type of exposure would require handling undiluted product with accidental ingestion and is not relevant for potential public exposures.

*Skin Contact*: Repeated or prolonged skin contact, including via inappropriate application of therapeutic shampoos and via airborne vapour or mist, may result in local effects ranging from irritation or uncommonly allergic contact dermatitis at concentrations > 0.1%, to mild irritation at < 5%, moderate irritation at 5 to 10%, and severe irritation or skin burns at concentrations > 10%. Given the dilute nature of the product utilised in the cannon (<0.02% strength) and the further dilution as the droplets travel in the air, this is not expected to be a health concern for the general public.

*Eye Contact*: Eye contact with < 0.1% solutions are not usually associated with symptoms. Repeated exposure may cause transient irritation. Mild irritation can occur with strengths of 0.1%. The concentration of product utilised in the cannon would not be expected to be at a level that is associated with eye irritation.

*Inhalation*: Breathing in concentrated quaternary ammonium compounds, especially with repeated exposures, has been associated with reports of lung irritation, and a higher risk of developing asthma in workers using products with quaternary ammonium compounds. It is not expected that the dilute product utilised in the cannon would present a risk to the general public.

#### Summary

Potential health concerns associated with exposure to quaternary ammonium compounds are most likely associated with direct contact with undiluted product i.e. the staff preparing the solution. Staff exposure risk is managed by following the correct health and safety procedures. Quaternary ammonium compounds are often part of household cleaning and disinfection products and so exposure to the public is relatively common. Given the level of dilution of the product used in the cannon, and the distance between the placement of the cannon and potential locations for public exposure (typically this type of cannon dispersal method has an estimated droplet range of 50-100 metres) that effectively dilutes the strength further, we would not expect this to represent a health risk for the general public.

#### Ngā mihi | Kind regards

(she/her)

| M:

## Health Protection Officer | Āpiha Tiaki Hauora

# Health Protection | National Public Health Service | Capital, Coast, Hutt Valley and Wairarapa

healthprotection@huttvalleydhb.org.nz www.rph.org.nz



#### Te Whatu Ora - Health New Zealand

TeWhatuOra.govt.nz

P:

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#### Seaview Wastewater Treatment Plant biofilter media replacement

#### Communications and Engagement Plan -

#### 3 November 2023

#### Background

On behalf of Hutt City Council, Wellington Water is undertaking maintenance work and investigating improvements at the Seaview Wastewater Treatment Plant to minimise the levels of odour, which are associated with the site and surrounding area.

During November and for an estimated period of three months, the plant operator Veolia will be replacing the plant's biofilter that has gone beyond its service life. While this activity is considered general maintenance for the plant and its operations, the immediate community may experience stronger levels of odour than usual.

There has been a history of complaints and dissatisfaction about current odour levels around the Seaview plant and it is likely that maintenance works will cause more odour issues and frustration among the local community. Because of this, we need to be proactive in letting the community know about the upcoming works and what the likely impact is to them.

#### Objectives

- Build trust and confidence with the affected community
- To be transparent with the Seaview community on the works and implications
- Clearly communicate the benefits of the maintenance works
- Front foot possible media interest and community unrest
- To keep our stakeholders informed and ensure we maintain engagement throughout the works.

#### Audiences

| Audience  | What do we want them to know / do / understand   | Channels to reach them   |  |
|---|--|--|--|
|   | Internal   |  |  |
| Wellington Water staff,<br>contractors, and suppliers | <ul> <li>Be aware of our key<br/>messages and works</li> <li>Be advocates for our<br/>comms and share our<br/>messages with their<br/>networks/friends/whanau</li> </ul> | <ul> <li>Woogle</li> <li>Our social media channels</li> <li>Our website</li> </ul> |  |
| Wellington Water Senior<br>Leadership Team            | <ul> <li>Be aware of works</li> <li>Be consistent with our key messages if asked</li> </ul>  | <ul><li>Briefings</li><li>SLT meetings</li></ul>                                   |  |

| Wellington Water Customer<br>Centre   | <ul> <li>Provide key messages so<br/>they can be ready to<br/>answer any questions</li> </ul>   | <ul> <li>Briefings</li> <li>Emails</li> <li>Team meetings</li> </ul>  |
|---|---|---|
|   | External  |   |
| Regional Health<br>Greater Wellington Regional<br>Council (our regulator)<br>Council communications   | <ul> <li>Be aware of the upcoming<br/>works and its impact on<br/>odour</li> <li>Be aware of the upcoming<br/>works and its impact on<br/>odour</li> <li>Be aware of the works and</li> </ul> | <ul> <li>Included in email<br/>notification out to<br/>'interested stakeholders.</li> <li>Included in email<br/>notification out to<br/>'interested stakeholders.</li> <li>Briefing (including their</li> </ul>                                       |
| <ul> <li>Hutt City<br/>Council (including the<br/>mayor's office)</li> <li>Upper Hutt City<br/>Council</li> </ul>                                   | <ul> <li>implications for the community</li> <li>Help explain why the work is important</li> <li>Be consistent with our key messages if asked</li> </ul>                                      | <ul> <li>respective comms teams)</li> <li>Social media</li> <li>Included in email<br/>notification out to<br/>'interested stakeholders.</li> </ul>  |
| Te Āti Awa (Waiwhetu Marae)   | <ul> <li>Be aware of the works</li> <li>Understand why the work<br/>is necessary and any<br/>potential impacts</li> </ul>   | Direct engagement (Wellington<br>Water Wastewater Operations<br>Team - )<br>along WWL Comms   |
| Seaview Business Association  | <ul> <li>Be aware of the works</li> <li>Understand why the work<br/>is necessary and any<br/>potential impacts</li> </ul>   | Direct engagement (Wellington<br>Water Wastewater Operations<br>Team - )<br>along WWL Comms   |
| <ul> <li>Iwi Stakeholders</li> <li>Port Nicholson Trust</li> <li>Ngatitoa</li> <li>Tekau Maori NZ</li> <li>Other individual<br/>contacts</li> </ul> | <ul> <li>Be aware of the works</li> <li>Understand why the work<br/>is necessary and any<br/>potential impacts</li> </ul>   | <ul> <li>Included in email<br/>notification out to<br/>'interested stakeholders.</li> </ul>   |
| Lower Hutt Community  | <ul> <li>Be aware of the works</li> <li>Understand why the work<br/>is necessary and any<br/>potential impacts</li> </ul>   | <ul> <li>Social media</li> <li>Council channels</li> <li>Media article</li> <li>Email notification out to<br/>'interested stakeholders'<br/>(public who have 'opted in'<br/>for updates on the Seaview<br/>Wastewater Treatment<br/>Plant)</li> </ul> |
| Media   | Be aware of the works   | Media statement   |

| is necessary and any potential impacts |
|--|
|--|

#### **Key messages**

#### **Overarching narrative/primary key messages:**

- Wellington Water is undertaking routine maintenance work on the Seaview Wastewater Treatment Plant to minimise the levels of odour.
- The work involves replacing the plant's biofilter, which has come to the end of its service life.
- Once installed, the new biofilter will minimise the levels of odour from the plant, which we appreciate has been a concern and point of frustration for some local residents.
- The work is expected to take three months and scheduled to start on Monday 13 November.
- While the works take place, stronger levels of odour may occur.
- During the works, odour blasters will be employed to reduce the odour as much as possible.
- We'd like to thank residents and local businesses in advance for their understanding while the essential maintenance works take place.
- We're working on completing these essential works as soon as possible to minimise the impact on the community.

#### Secondary key messages [or rename this heading based on the topic or audience

- The biofilter uses bacteria to remove pollutants naturally and organically from wastewater (sewerage). The process involves filtering foul air underneath a bark and shell mixture to neutralise the smell.
- Every seven years, the plant's biofilter media (essentially the bark and shell mixture) needs to be replaced to ensure the biofiltration process is working efficiently. The work involves replacing the biofilter media only.
- To minimise the odour impact of this work and ensure the works are completed safely, the biofilter will be replaced in sections at a time.

#### Strategic approach

Our strategic communications approach is to proactively let the local resident and business community know of the upcoming works and its impact on odour. We will do this through a combination of direct, face-to-face engagement, as well as letterbox drops and social media updates.

We will also keep other key stakeholders informed, including our regulator Greater Wellington Regional Council, Regional Public Health, and media.

We will clearly communicate the benefits of the maintenance, which include minimising strong odour once installed. It's also an opportunity to educate the public about the process, which is naturally occurring and organic.

#### **Communication activities**

Direct communications with residents and businesses:

• When required

#### Proactive media:

- Support the development of Hutt City Council's media release
- Be ready to respond to any media questions if needed

#### Digital:

• Create a brief project page on the website for this work, which we can drive public to for more information.

#### Social:

- Social media posts on Wellington Water and Hutt City Council's channels
- Post on relevant community groups' social media pages
- Provide regular updates via social media as the work progresses
- Monitor all feedback, comments and engagement and respond in a timely way if needed

#### Spokespeople

, Chief Advisor, Wastewater

#### **Risks and mitigation**

| Risks  | Mitigation  |
|--|---|
| Coverage of the maintenance works is presented in media as being more infrastructure failing | Proactively approach media and provide a<br>briefing in advance of the works highlighting the<br>importance of this 'maintenance' and its benefits<br>(i.e., minimising odour once installed) |
| The works take longer than expected<br>and the community becoming<br>increasingly frustrated | Ensure there are frequent updates and clear<br>messaging about progress on social media<br>channels utilising Hutt City Council and<br>community group channels.                              |
|  | It's important to highlight the fact that the maintenance will improve the management of odour at the plant once installed.   |

#### Measurement

We will measure the effectiveness of our communications through a variety of mechanisms:

- Customer feedback
- Stakeholder feedback
- Internal staff
- Council feedback
- Media coverage

### Tactics

| Timing                    | Activity   | Responsible   | Status   |
|---------------------------|--|---|--|
| w/c Monday 6<br>November  | Send out notification<br>email to 'interested<br>stakeholders' informing<br>them of upcoming<br>works and its impact on<br>odour | Wellington Water<br>Customer Service Team   | Completed  |
| w/c Monday 6<br>November  | Distribute letters to<br>local businesses and<br>residents informing<br>them of upcoming<br>works and its impact on<br>odour.    | Wellington Water<br>Wastewater Operations<br>Team alongside<br>Customer Service Team. | Completed  |
| Wednesday 8<br>November   | Update Seaview plant<br>website page   | WWL comms   | Completed  |
| Wednesday, 8<br>November  | Comms pack for HCC comms   | WWL comms   | Completed  |
| Friday, 10 November       | Proactive media<br>statement about<br>biofilter media<br>replacement   | WWL comms   | Published  |
| Friday, 10 November       | Media response to Stuff  | WWL comms   | Completed  |
| Monday, 13 November       | Proactive Facebook<br>post about works<br>starting   | WWL comms   | Published on HCC<br>community page<br>and Eastbourne<br>community page |
| Tuesday, 14 November      | Works start on the biofilter replacement   | Wellington Water<br>Wastewater Operations<br>Team                                     |  |
| Monday, 20 November<br>AM | Reactive Facebook post<br>on odour issue   | WWL comms   | Published/ HCC<br>community page<br>and Eastbourne<br>community page   |
| Monday, 20 November       | Reactive media<br>statement about odour<br>levels  | WWL Comms   | Published  |
| Monday, 20 November<br>PM | Reactive Facebook<br>post- planned<br>community meeting  | WWL comms   | Published  |
| Wednesday 22<br>November  | Direct contact<br>• Kokiri Marae<br>• Seaview<br>Business<br>Association   | WWL comms   | Completed  |

|   | Hutt Holiday   |                                     |  |
|---|--|-------------------------------------|--|
| Tuesday, 28 November                      | Park<br>Send out notification<br>email to 'interested<br>stakeholders' informing<br>them of community<br>meeting | Customer Operations<br>Service Team | Sent   |
| Tuesday, 28 November                      | Proactive Facebook<br>post promoting<br>community meeting  | WWL comms                           | Published / Petone<br>community page<br>and Eastbourne<br>community page |
| Wednesday 29<br>November                  | Devise FAQs and<br>presentation for<br>community meeting   | WWL comms                           | Completed  |
| Friday December 1                         | Draft FAQs sent to<br>at HCC   | WWL comms                           |  |
| Monday, December 4<br>November            | Proactive Facebook<br>post promoting<br>community meeting  | WWL comms                           | Published  |
| Tuesday, December 5                       | Biofilter media<br>replacement project<br>page   | WWL comms                           | Published  |
| Tuesday, December 5                       | Briefing session for<br>community meeting  | WWL Comms/Bruce<br>Hodgins          | Completed<br>FAQs confirmed<br>Presentation<br>confirmed                 |
| Wednesday, December<br>6                  | Community meeting  | WWL comms /HCC                      | Completed  |
| Friday, December 8<br>Tuesday December 12 | Billboard sign<br>Design flyer for Hutt<br>Park Holiday Park   | WWL comms/HCC<br>WWL comms/HCC      | Completed<br>Completed   |
|   | Provide Hutt Park with flyer   |                                     | Completed  |
| Wednesday, December<br>13                 | Update website on<br>biofilter replacement<br>progress   | WWL comms                           | Completed  |
| December 18                               | Progress update for<br>stakeholders/interested<br>parties  | WWL comms                           | Completed  |
| December 22                               | Final update before<br>holidays  | WWL comms                           | Completed<br>Email to interested<br>parties<br>Website update            |

#### **Community meeting December 5, 2023 Questions/talking points**

#### Why are you doing this work in summer, shouldn't you be doing it in winter?

We had hoped to do it earlier in the year, unfortunately, that was not possible. There is no ideal time to do this type of work. It wouldn't necessarily make a difference if we had done the work in summer or winter, as the wind can affect odour levels.

# It was in the media that the work to replace the biofilter should have been started in 2021. Why the delay?

The biofilter media replacement was never programmed to be replaced in 2021. There may be some confusion that can be attributed to general maintenance work undertaken with the existing biofilter media in 2021, which was published on the Wellington Water website. The biofilter media replacement was delayed earlier this year, due to condition assessment and lab testing of bark composition, and the availability of a specialist contractor to undertake what is complex works.

#### Will the biofilter media replacement make a difference?

We do expect that the biofilter media will improve odour levels. This will not be immediate as the biofiltration process is biological and it takes time for the new composition of bark and shell to become settled and established.

#### When will the biofilter media replacement be completed?

Biofilter replacement is progressing with four out of six biofilter media cells expected to be completed before Christmas. We're aiming to have the remaining two cells done by the end of January. It was always our intention to do the replacement in stages so we could minimise odour levels, while ensuring works are completed safely.

#### What upgrades do you have planned, how much will it cost?

Renewal and upgrade options are being investigated. From a recent condition inspection of the biofilter the air distribution base (plenum) has been identified as being in poor condition and an upgrade is under design. The odour ducting pipework at the site is also under review for replacement as the next significant step. In addition, odour treatment to the milliscreen and dryer buildings is another remedy under review. A budget for these works of \$13M is proposed for the 2024 HCC Long Term Plan, but the exact scope of work is still being investigated and costed.

#### Is the odour ever going to be fixed?

We acknowledge this is concerning, frustrating, and upsetting for everyone given it has been a longterm issue that has got worse in recent years. Wellington Water and Hutt City Council are committed to resolving the issue, though this is not an overnight fix, and it will take time.

#### Are there any health implications with the odour?

When odour levels are strong and unpleasant, it can make some people feel ill. We are not aware of any health implications (bacteria that can be inhaled) and are following standard health and safety guidelines with the maintenance works we are doing at the treatment plant.

#### Is it true the treatment plant was never designed to keep odour within the plant boundary?

The plant was built in the late 1990s when the surrounding area was more industrial than today. It was not designed to eliminate all odours but to mitigate the levels of odour from the plant below an "offensive or objectionable" level, as judged by regional council enforcement officers, a standard we expect would apply today. We acknowledge the odour levels recently have been particularly offensive and we're looking at how we can improve this situation. The biofilter media replacement is first step in that process.

#### How does recent odour levels meet consents?

The consent requires that odour from the plant is not 'objectionable or offensive' at the boundary. The Greater Wellington Regional Council (the regulator) makes these assessments, and we act on the outcome of these investigations.

#### Has Wellington Water ever been fined for not meeting the consents for odour management?

Yes, though it is not common. Over the past three years, the regulator, Greater Wellington Regional Council, has fined Hutt City Council, Upper Hutt City Council and Wellington Water approximately \$7,250 for plant associated odour issues.

# Is Greater Wellington Regional Council investigating a different issue that caused the strong odour several weeks ago?

Yes, they are. Regional council enforcement officers visited the plant recently in response to complaints received about the odour between 31 October and 20 November 2023. Wellington Water is preparing a response to their enquiries following the investigation. It is possible a formal warning, infringement notice and/or prosecution could result.

#### You aren't transparent about consents; we have not been consulted recently...

The resource consent in place is a long-term and expires in 2031. We have a community liaison group which meets at least once a year to go through treatment plant consent reports and issues and have held several meetings with local groups in the past few years.

#### Where can I get more information or ask any questions about the plant and the odour?

We have dedicated website page with all the relevant details about the works and future upgrades. If you have any questions or feedback, please email them to <u>Community@wellingtonwater.co.nz</u>

#### **Email to interested parties – November 28**

Kia Ora Koutou,

We would like to invite you to a community meeting to address concerns from local residents and businesses around odour levels related to the Seaview Wastewater Treatment Plant.

This meeting will adopt a collaborative approach with representatives from Wellington Water and Hutt City Council in attendance to discuss the short and long-term plans for odour management at the plant.

There will also be an opportunity for residents to ask questions, provide feedback, and share their experiences.

Where: Pelorus Sports House, Hutt Park

When: Wednesday, 6 December 2023

*Time : 5.30pm – 6.30pm* 

Please feel free to share this invitation with anyone who may be interested, we will also be promoting the meeting on our social media channels.

We look forward to seeing you there.

#### Facebook posts – November 28 & December 4

Kia ora Seaview

As promised, there will be a community meeting to discuss odour levels related to the Seaview Wastewater Treatment Plant.

This is an opportunity for residents and businesses to ask questions, provide feedback and share their experiences.

Where: Pelorus Sports House, Hutt Park

When: Wednesday, 6 December 2023

Time: 5.30pm – 6.30pm

Wellington Water and Hutt City Council people will be there to talk about current works and future plans for odour management at the plant.

If you're unable to make the meeting, or if you prefer, you can provide questions and feedback at Community@wellingtonwater.co.nz.

#### Facebook post – December 8

Kia ora Te Awa Kairangi ki Tai Lower Hutt,

Thank you to everyone who turned up at the Seaview community meeting on Wednesday night, your attendance and views were much appreciated.

We are committed to resolving the odour issue and will be working with Hutt City Council to get the necessary upgrades prioritised.

We know you want us to keep investing in the local wastewater system. Hutt City Council will be considering odour control upgrades as part of their long-term plan meeting next Tuesday.

Hutt City Council has proposed \$13 million dollars to be spent over the next 3 years on the odour control upgrade work, along with other significant upgrades for the Seaview Wastewater Treatment Plant.

For updates on the current works at the Seaview Plant including the presentation from the community meeting, please check out our dedicated website page - https://www.wellingtonwater.co.nz/projects/seaviewwwtp/...

*If you have questions or queries about the works or the Seaview – please email Community@wellingtonwater.co.nz* 

| From:        | Official Information  |
|--------------|---|
| То:          |   |
| Cc:          | Official Information  |
| Subject:     | Remaining information for OIA IRO-530   |
| Date:        | Friday, 16 February 2024 11:56:12 am  |
| Attachments: | 1. WWL Preliminary Y3&4 Capital Delivery Plan advice to HCC Nov 22 (1).pdf                        |
|              | 2. WWL 2023-24 Preliminary OPEX Advice Nov 22 - HCC.pdf   |
|              | 3. Dec 2022 WWL 2023-24 Annual Plan OPEX Advice - HCC.pdf   |
|              | 4. Feb 2023 WWL CAPEX Advice to Hutt City Council.pdf   |
|              | 5. 2 Feb 2023 supplementary detail to support WWL FY2023-24 Annual Plan advice - HCC reissued.pdf |
|              | 6. April 2023 WWL CAPEX Advice to Hutt City Council (1).pdf                                       |
|              | 7. HCC prereading material for 13 Sept Council Workshop - final.pdf                               |
|              | <u>8. HVSC material for 22 Sept Council Workshop - final (1).pdf</u>                              |
|              | 9. HCC A3 handout.pdf   |
|              | <u> 10. Public - HCC stage 2 advice - precirculation material (final) (1).pdf</u>                 |
|              | 11. 2023 11 10 HCC stage 3 advice - workshop presentation (2).pdf                                 |
|              | image001.jpg  |
|              | image002.png  |
|              | <u>OIA IRO-530 - Seaview WWTP Complaints - July 2014 to June 2019.pdf</u>                         |
|              | <u> OIA IRO-530 - Seaview WWTP Odour Complaints – August to December 2019.pdf</u>                 |
|              | <u>OIA IRO-530 - Seaview WWTP Odour Complaints – 2020.pdf</u>                                     |
|              |   |

#### Tēnā koe

#### Official information request regarding the Seaview Wastewater Treatment Plant.

Please see attached our advice to councils, and complaints data.

Up until August 2019, complaints data does not contain details as to the nature of those complaints.

Ngā mihi nui

(he/him) Governance Coordinator - Business Services



Tel 04 912 4400 Private Bag 39804, Wellington Mail Centre 5045 Level 4, 25 Victoria Street, Petone, Lower Hutt

#### www.wellingtonwater.co.nz

| ? |  |
|---|--|
|   |  |
|   |  |

Wellington Water is owned by the Hutt, Porirua, Upper Hutt and Wellington city councils, South Wairarapa District Council and Greater Wellington Regional Council. We manage their drinking water, wastewater and stormwater services.

From: Official Information <official.information@wellingtonwater.co.nz> Sent: Wednesday, January 31, 2024 5:30 PM To: @gmail.com> **Cc:** Official Information <official.information@wellingtonwater.co.nz> **Subject:** Decision and Part Response to OIA IRO-530

Kia ora

Official information request regarding the Seaview Wastewater Treatment Plant.

Please see our Decision and Part response to your request attached.

Ngā mihi nui,

(he/him) Governance Coordinator - Business Services



#### Tel 04 912 4400

Private Bag 39804, Wellington Mail Centre 5045 Level 4, 25 Victoria Street, Petone, Lower Hutt

#### www.wellingtonwater.co.nz



Wellington Water is owned by the Hutt, Porirua, Upper Hutt and Wellington city councils, South Wairarapa District Council and Greater Wellington Regional Council. We manage their drinking water, wastewater and stormwater services.

From: Official Information <<u>official.information@wellingtonwater.co.nz</u>> Sent: Thursday, December 21, 2023 4:22 PM To: @@mail.com> Cc: Official Information <<u>official.information@wellingtonwater.co.nz</u>>

Subject: Notice of Extension - OIA IRO-530

Kia ora

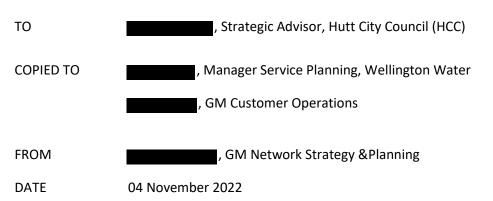
I am sorry for the time it has taken me to get back to this email.

This extension is still required.

We are working as best as possible to ensure that we pull this information and review it so that we can package it for response, and will endeavour to provide you with the information as soon as possible.

Ngā mihi nui,





# Preliminary Advice to HCC on Three Waters Services Capital Delivery Plan for the Financial Years 2023/24 and 2024/25

### Action sought

|                        | Action sought   | Deadline         |
|------------------------|---|------------------|
| Strategic Advisor, HCC | Note the recommendations in this<br>paper.<br>Meet with Wellington Water to<br>discuss proposals for delivery | 30 November 2022 |
|                        | outlined in this paper.   |                  |

#### Purpose

- 1. This paper informs HCC (referred to hereon in as 'Council') of:
  - a) the indicative budget that Wellington Water is requesting Council allocate for financial year (FY) 2023/24,
  - b) an indicative budget range for FY 2024/25, and
  - c) risks to the capital delivery plan (CDP).
- 2. The paper does not provide details of specific projects that will be delivered during FY 2023/24; this is currently being developed and will be issued to Council in December 2022.

#### Recommendations

- 3. Wellington Water recommends that Council:
  - a) notes the budget for FY 2023/24
  - b) **notes** the intention to carry over any remaining budget from FY 2022/23 into the final budget for FY 2023/24 and the estimated values of these carry-overs

- c) **notes** that the list of projects to be delivered in FY 2023/24 are currently under development and will be issued to Council in December 2022
- d) **notes** that the total value of the proposed projects will exceed the proposed budget and the council's long-term plan (LTP) budget for FY 2023/24; this is purposely to help mitigate delivery of risk of underspending against council budgets
- e) considers the risks presented in this memo
- f) **notes** that industry wide cost pressures mean fewer projects can be delivered under current budget levels than initially planned for in the LTP
- g) notes the proposal to work with Council to continue to optimise the FY 2024/25 programme ahead of the preparation of the next draft annual plan and engagement with the National Transition Unit

#### Introduction

- 4. Wellington Water is committed to providing service excellence to Council. Our focus is on delivering the right assets at the right time; whether that be a renewal, level of service increase or to support growth, although our current emphasis is on renewals.
- 5. We are also working to improve the efficiency of our programme delivery. Beginning to bring in projects from the Very High Criticality Assets (VHCA) assessment programme will contribute to improving our effectiveness.
- 6. Over the past year Wellington Water has experienced significant increases in the costs of material and labour due to higher than anticipated inflation and market capacity pressures. This has placed pressure on Council's capital expenditure (Capex) programme, meaning fewer projects are able to be delivered than initially planned for in the LTP. There is a risk that the current levels of inflation continue, or potentially increase, through 2023 and 2024. This will continue to impact the costs of projects as currently scoped, necessitating either rescoping of key projects, reallocation of budgets from lower priority projects, or increased budgets from Council.

# FY 2023/24 Capital Expenditure (Capex)

- 7. The **budget requested for FY 2023/24 is \$85.5M.** This aligns with the budget information provided to Wellington Water on 20 October 2022.
- 8. Further work is required to provide greater certainty of the budget required to deliver Council's FY 2023/24 Capex programme, taking regional deliverability into account. Until this additional work has been completed, Wellington Water asks that Council retain the LTP approved budget for FY 2023/24, including any carry-overs from FY 2022/23, but note that this figure could shift.
- 9. Further information on the projects to be delivered is currently being finalised and will be presented in an update to this memo in December 2022.
- 10. In a similar manner to the approach adopted for the Year 2&3 CDP, we will target a total project value of the programme for FY 2023/24 of 120% of the proposed budget i.e., \$102M. This over-programming against the proposed budget is purposely introduced to mitigate delivery risks and optimism bias in delivery capacity.
- 11. Wellington Water intends to manage the delivery of these projects within the agreed budgets, using delegated authorities within Wellington Water and Council to manage movements between council budgets as required.

- 12. Progress against the budget spend will be reported throughout FY 2023/24 via the established monthly finance and programme meetings.
- 13. Once finalised, the programme of works (projects list) will be updated throughout the remainder of the financial year as project information develops. Updates will be presented to Council on a quarterly basis.
- 14. Key risks to the FY 2023/24 programme include availability of resources (materials and personnel) across the region and the challenges associated with the transition to Entity C under Water Reforms. These are detailed later in this memo.

### FY 2024/25 Capex

- 15. Wellington Water has been working on sustainably growing the Capex programme over the past few years. Providing a signal of investment is an important way to continue to grow the delivery capability and capacity in the region and provide greater certainty to the market of ongoing three waters investment into the future.
- 16. Continuing with this growth model, a budget range for FY 2024/25 is being provided at this point. This range will be further refined throughout FY 2023/24 as the next 3-year Long-Term Plan (LTP) is developed, noting that FY 2024/25 falls into the next LTP cycle.
- 17. Council's budget range for FY 2024/25 is estimated at \$60m to \$83m.
- 18. The lower figure is aligned with the HCC 10-year LTP values for FY 2024/25. This is similar to the low-point of the 'sustained uplift' approach, adopted by Wellington Water for Years 1-3 of the current LTP, projected into FY 2024/25.
- 19. The upper figure represents sustainable growth of 30% year-on-year from the anticipated FY 2022/23 spend.
- 20. The programme of projects for delivery in FY 2024/25 will be further developed throughout FY 2023/24. This work will also provide greater certainty of the budget range for FY 2024/25.

#### Risks

- 21. Water Reforms and Transition to Entity C has potential to disrupt delivery of the capital programme if not managed well. Areas of note, include funding mechanisms and contracting arrangements for existing and new projects; alignment of governance structures across the entities and change management, including personnel experience for those transitioning to the new entity.
- 22. Inflation as noted, there is a risk that current levels of inflation continue, or potentially increase, over the Y3&4 period. If so, this will require decisions from Council on whether key projects should be re-scoped, budgets reallocated from lower priority projects, or increased budgets provided from Council.
- 23. Regional Water Supply an issue was recently identified regarding a significant increase in the amount of leakage from the potable water supply across the region. Provision of safe drinking water is a key priority for Wellington Water, and it may be necessary to reprioritise resources (and budgets) to address issues on potable water supply. Wherever possible, we will do this within agreed budget envelopes, but where this cannot be achieved within the potable water budgets, we will present options for discussion with Council.
- 24. Resource and Supply Chain Constraints there is currently an industry-wide constraint in availability of resources (both materials and personnel) which may impact the delivery of projects. To mitigate the likelihood and impact of this risk, we have worked with consultants and contractors to only propose projects that we are confident of delivering within the current constraints.

- 25. Delivery of Proposed Capital Delivery Programme historically, Wellington Water has underspent capital against council budgets. We have worked to mitigate this risk by over-programming against the LTP across the three years.
- 26. Future delivery of the assets assessed as part of the VHCA programme The VHCA condition assessment project sought to identify which of the Council's very high criticality three waters assets are in poor condition requiring renewal in the short term. The programme has identified and scoped some of the work required to renew VHCA assessed assets. However, the full scale of future investment required on these assets is not yet fully understood. Council should anticipate that Capex funding above current levels will be required in future years to complete these critical works; the future capital delivery programme to bring these most critical assets up to standard will be significant.
- 27. COVID Pandemic we continue to face impacts of the global COVID pandemic. It is likely to present challenges with global supply chains, freight and transportation and associated price increases, which will impact delivery of the programme.

#### Next steps

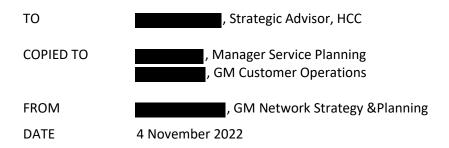
- 28. Meet with Council in December 2022 to review the proposed budgets and projects.
- 29. Progress against the budget spend will be reported throughout FY 2022/23 via the monthly finance and programme meetings, and should any variance be noted, the impacts on the FY 2023/24 budget will be communicated via updates to this memo.
- 30. Agree any carry-over budgets from FY 2022/23 with Council and incorporate into the final budget for FY 2023/24 delivery.
- 31. Once the FY 2023/24 draft budget is agreed with Council, we will communicate the plan with Wellington Water Business Units, the Consultant Panel and Contractor Panel, and commence delivery.
- 32. We will develop the FY 2024/25 plan through FY 2023/24 with a plan to submit the final FY 2024/25 CDP in April 2024.
- 33. We are committed to working with you and look forward to meeting to discuss the content of this memo.

GM Network Strategy & Planning

Ph:

@wellingtonwater.co.nz





# PRELIMINARY THREE WATERS 2023/24 ANNUAL PLAN OPEX ADVICE FOR HUTT CITY COUNCIL

|                              | Action sought                    | Deadline         |
|------------------------------|----------------------------------|------------------|
|                              | Note the recommendations in this | 30 November 2022 |
| Strategic Advisor, Hutt City | paper.                           |                  |
| Council                      |                                  |                  |
|                              | Meet with Wellington Water to    |                  |
|                              | discuss content of this paper.   |                  |

#### Purpose

- 1. This paper informs Hutt City Council (Council):
  - a) of the approved 2023/24 Long Term Plan (LTP) operational expenditure (OPEX) budget, and the risks of keeping the budget at this level, and
  - b) that Wellington Water advises additional OPEX funding should be provided above the 2023/24 LTP approved level to maintain existing levels of service and that subsequent advice on a proposed 2023/24 OPEX budget will be provided to Council in February 2023.

#### Recommendations

- 2. Wellington Water recommends Council:
  - b) **notes** the risks associated with keeping the FY 2023/24 OPEX budget at the LTP approved level
  - c) **notes** that Wellington Water will provide subsequent advice on the recommended OPEX budget for FY 2023/24, and that this will exceed the approved 2023/24 LTP budget
  - d) **notes** advice on FY 2024/25 OPEX budgets will be provided as part of Wellington Water's FY 2024-2034 LTP advice
  - e) **notes** the FY 2021-31 LTP OPEX budget does not include funding for significant emergency events, which Council funds separately
  - f) notes that Wellington Water will need a response from council on whether it accepts the risks outlined in this document related to continuing with the FY 2023/24 OPEX LTP approved budget or is willing to provide Wellington Water with additional OPEX funding to reduce risks and maintain existing levels of service.
  - g) **agrees** to increase the FY 2023/24 OPEX budget above the approved 2023/24 Long Term Plan level for the following priority areas, at a minimum:



- i Asset condition assessments
- ii Sustainable water supply and leakage management
- iii Investigations to inform forward capital works plans
- iv Wellington Water management fee

#### Context

- 3. Wellington Water provides Council with three waters advice, management and repair services against budgets provided through the Long-Term Planning process. Advising Council of issues and impacts that arise, which may impact on our ability to work within those budgets and provide agreed service levels is a vital part of our role as your service provider.
- 4. Our advice is developed in the context of the strategic investment priorities agreed with our owners and set out in our Statement of Intent. These priorities are maintaining existing infrastructure, supporting growth, ensuring a sustainable supply of drinking water, improving environmental water quality, reducing carbon emissions and increasing the resilience of services to the impacts of climate change. Funding decisions made for the FY 2021/31 LTP mean that only limited performance improvements will be achieved. The expected impact of the investment decisions and the residual risks are set out in the Regional Service Plan<sup>1</sup>.
- Council-owned three waters assets are ageing. This means they're not being renewed or replaced as quickly as they're wearing out, and that means increasing issues and outages. Over time, this results in higher reactive costs including maintenance, repairs, and renewals.
- 6. Over the past year Wellington Water has experienced significant increases in the costs of material and labour due to a variety of inflationary factors (inflation in the past financial year has reached over 7%). This has put pressure on the CAPEX and OPEX programmes Wellington Water is delivering on behalf of its client councils. Additionally, new information has been discovered through investigations and additional data analysis. For example, our leak management programme has given us a much better understanding of the extent of water loss across the network, and the impacts of that loss. These pressures mean OPEX investment at the FY 2023/24 LTP approved level will be insufficient to meet Council's level of service targets.
- 7. Wellington Water remains committed to assisting Council achieve its service level targets, but we are concerned that current agreed funding provided for provision of our services will not allow those targets to be achieved.

#### Summary of previous advice from Wellington Water

- 8. Council's approved LTP OPEX budget for the FY 2023/24 is \$23.537 million. This is less than the amount required to respond to all the strategic investment priorities.
- 9. In April 2022, we advised Council we were concerned that the 2023/24 agreed budget would not be sufficient to meet Council's required service level targets.
- 10. Table 1 illustrates the difference in approved LTP 2023/24 budget, and the budget Wellington Water advised in April 2022 was necessary. The recommended funding was \$26.021 million, or 9.5% higher than the budget amount.

<sup>&</sup>lt;sup>1</sup> Available at https://www.wellingtonwater.co.nz/publication-library/advice-and-work/regional-service-plan/.



| Activity<br>(\$ x 1,000)          | Recommended<br>2023/24 funding –<br>April '22 advice | Council approved<br>2023/24 LTP funding | Difference |
|-----------------------------------|--|---|------------|
| Treatment Plant                   | \$6,910  | \$6,910                                 | -          |
| Planned maintenance               | \$3,936  | \$3,575                                 | -\$363     |
| Reactive maintenance              | \$7,077  | \$6,057                                 | -\$1,020   |
| Monitoring & investigations       | \$4,301  | \$3,200                                 | -\$1,101   |
| Operations                        | \$183  | \$183                                   | -          |
| Management & advisory<br>services | \$3,613  | \$3,613                                 | -          |
| Totals                            | \$26,021   | \$23,537                                | -\$2,484   |

#### Table 1: Wellington Water advised budget versus LTP agreed budget (uninflated)

#### Risks of keeping the FY2023/24 OPEX budget at the approved LTP level

- 11. In our April 2022 advice, we identified several risks associated with Council's approved OPEX budget. Many of these risks still stand, and some may have increased in likelihood and/or severity. In addition, new risks have been identified. This highlights that an OPEX budget above the approved LTP level is needed if Council intends to meet its level of service targets.
- 12. The following risks are identified and detailed below. All costs are yet to be determined and will be provided in advice we give Council in February 2023.
  - a Planned maintenance completing critical planned maintenance is prudent asset management practice and allows for planned work on critical assets. The current level of investment in planned maintenance will mean the frequency of stormwater network flushing and drinking water network maintenance such as hydrant flushing, and valve maintenance will reduce. This will increase the risk of blockages and overflows reoccurring, with poor environmental outcomes. A lower level of planned drinking water maintenance carries a risk that hydrants and valves will not operate reliably when needed. As mentioned, these maintenance reductions place additional pressure on reactive maintenance budgets. There also remains a risk that underinvestment in pump station maintenance will result in significant issues, as there is no allowance for increasing maintenance costs, for the rising number of failures or the ability to address deferred maintenance issues.
  - b Reactive maintenance is considerably below the level of expenditure required. It will result in a reduction in levels of service in response times and low priority faults not being addressed.
  - c Sustainable water supply and leakage management gross water consumption over the first quarter of FY23 for the Wellington metropolitan area averaged 2.9% higher than the corresponding time last year and 7.0% above our 5-year target. All networks are performing poorly based on standardised water loss metrics, with Hutt City Council sitting in the "poor" infrastructure leakage index (ILI) category. Minimum night flows and water balance analyses, climate and population correction modelling, and analysis of dry weather wastewater flows all indicate that leakage is the primary driver of rising demand. A full programme of mitigation measures has been developed and prioritised; however, Wellington Water requires additional OPEX funding from Hutt City Council of an estimated \$1.2m to support these measures. The leak repair programme that was funded through



stimulus funding in FY2020/21 and FY2021/22 is no longer funded. This means there is insufficient funding to make a significant impact on water loss and demand. Water use in metropolitan Wellington is now at an all-time high, and it is important to continue to prioritise leak detections and repair as an important tool for managing water loss. Without additional funding, the leak issue and overall consumption will continue to increase, negating recent gains and putting even greater stress on the water supply for the region. As a result, there is an increased likelihood of level 3 or higher water restrictions being needed to control demand this summer. If Level 3 or 4 restrictions are required, then mayors will need to lead and support communications.

- d Wellington Water has advised the Water Committee it is prioritising leak detection and remediation in response to significantly increased water usage over the 2022 winter. We expect Council will also prioritise this activity, though the underfunding we have identified will significantly impede Council's ability to contribute to this region-wide initiative. Reduced leak detection will likely also see water consumption continue to rise and community engagement in conservation decrease. The leak repair programme that was funded through stimulus funding in FY2020/21 and 2021/22 is no longer funded. This means there is insufficient funding to repair the leaks that have been identified.
- e Investigations Reducing general investigations limits the ability to identify and resolve service issues, potentially resulting in ongoing customer and environmental impacts and places a constraint on preparing forward capital works plans.
- f Very High Criticality Assets (VHCA) between June 2020 and July 2022 Wellington Water completed a condition assessment project to identify VHCA assets. While there is always risk of assets failing unexpectedly, the VHCA programme has significantly improved our understanding of the condition of those assets assessed. Assets identified as requiring remedial actions will need to be funded to prevent unplanned failures. Additional investment in ongoing condition assessment work is strongly recommended to ensure reliable operation of the networks.
  - i Historically, planned maintenance on reservoirs has been limited by very constrained budgets. The VHCA and Water Safety Planning programmes highlighted the need to review the planned maintenance budgets to adequately mitigate contamination risk for reservoirs. The VHCA programme confirmed that contamination risks have surfaced through lack of regular inspection of these reservoirs. An additional \$560k is required to clean and undertake inspections and maintenance of Council reservoirs to mitigate contamination risks.
- g Backflow prevention a regionally consistent backflow prevention policy and programme is being implemented to ensure Wellington Water meets the requirements of the Water Services Act 2021 and Taumata Arowai's expectations. Without a single regional policy and backflow prevention programme in place for all councils, there is a risk that water supplied to customers becomes contaminated within council networks due to activities within private property, potentially causing widespread illness or death. For HCC, it is estimated that \$25k is required annually to complete surveys and inspections to understand the contamination risks of all unknown, medium, and high-risk properties in Council's area and the current status/suitability of boundary devices to protect the public network.
- h Asset register all activities that Wellington Water performs for Council rely on a complete and accurate asset register. Stimulus funding enabled good progress on fixing long standing issues with the asset register; the VHCA Programme identified VHCA assets and assessed their condition, and in-roads were made on asset data and information processing backlogs. Council allocated some funding for ongoing condition assessment work in the

# Wellington Water

approved FY 2023/24 LTP and has recently provided additional funding for asset data completeness and quality work. In both areas ongoing funding is required and further increases in funding will enable Wellington Water to accelerate work and enable positive impacts on service provision. This work also contributes to the National Transition Unit understanding the full complement of assets Council currently owns (providing a complete asset valuation) and supporting smooth transition of services to the new Water Services Entity, thus benefitting Hutt City residents.

- i Labour costs since the 2021 LTP budgets were agreed, labour costs have increased. This is largely due to current skill shortages in New Zealand resulting in increased demand for subcontractors/contractors in place of permanent staff. We are expecting significant increases in remuneration of subcontractor work. This will have an overall impact on the cost of completing work, particularly for reactive maintenance.
- j Growth studies undertaking growth planning studies in FY2023/24 will help inform the capital delivery programme that will be developed for the 2024-34 LTP. We will continue to work with Council to ascertain whether Council wishes for this work to be undertaken. We estimate \$100k is required for consultant support to complete Council's current growth studies.
- k Wellington Water management fee Wellington Water is absorbing additional management costs in FY2023 and will continue to bear the cost in FY2024 if additional funding is not made available. The key reasons for the increasing management fee are:
  - i inflation running at a higher rate than forecast when developing the LTP
  - ii an increase in wages to match market rates and an increase in the proportion of contractors and consultants being used across the industry, and
  - iii increases in staff numbers due to the larger CAPEX and OPEX programmes Wellington Water is delivering, and an increased regulation and compliance activity.

The Wellington Water management fee is charged proportionally across all councils. For HCC, this means that in FY 2023/24 we require an increase of \$372k from the FY 2023/24 LTP budget, to cover the management costs absorbed by Wellington Water to date and to sustain our core business functions. If additional funding cannot be secured from Council to accommodate this year-on-year uplift, Wellington Water will need to reallocate funds from other OPEX budgets to make up for the deficit in management fee. This will further impede Council's ability to achieve its service level targets. It is also worth noting that the management fee is covering some internal staff time costs for work required to be undertaken by Wellington Water to prepare and support the transition to the new Water Services Entity. However, most of these costs are being met from the additional funding that Council is providing out of DIA's Transition Support Funding.

In addition, under the Government funded stimulus programme we made progress on understanding and mitigating immediate cyber security risks across the water network. The Department of Internal Affairs approved stimulus funding for this work to be carried through to FY22/23. Wellington Water requires ongoing investment from Council in cyber security in FY23/24 to continue risk mitigation. Note, at the time the 2021-31 LTP was developed, we did not know the extent of work required for cyber security, and associated ongoing costs, hence the reason this programme has not been budgeted for beyond FY2022/23. At a minimum, ongoing funding of current cyber security activity needs to continue. Split proportionately across councils, this equates to \$74k being requested from Hutt City council to continue with current cyber security measures. The actual budget needed will be higher



than this as cyber security threats change, and we gain greater understanding of the detail of our current security risk.

In total, the updated management fee is \$4.16m including the increase of \$372k in management costs, and the additional funds requested for cyber security activity.

#### Next steps

- 13. We will continue to work on your OPEX needs over the coming months and provide detailed OPEX budget advice to Council in February 2023. In the February advice, Wellington Water will recommend Council increase its FY2023/24 OPEX budget above the approved LTP level.
- 14. In parallel to providing Council's OPEX Annual Plan advice, we are also determining a 10-year unconstrained OPEX forecast for Council, for submission to the National Transition Unit. This information is due in early December 2022.
- 15. We are committed to working with you and are keen to meet to discuss the content of this memo when suits.

GM Network Strategy & Planning

Ph:

@wellingtonwater.co.nz



# Advice to Hutt City Council (HCC) Regarding Three Waters Operating Expenditure for the 2023/24 Annual Plan

| то        | , Strategic Advisor, Hutt City Council  |
|-----------|---|
| COPIED TO | Manager Service Planning, Wellington Water; Manager General Manager Customer Operations, Wellington Water |
| FROM      | , Group Manager Network Strategy & Planning, Wellington Water   |
| DATE      | 2 December 2022   |

#### Action sought

|   | Action sought  | Deadline        |
|---|--|-----------------|
| Strategic Advisor, Hutt City<br>Council | <b>Note and respond</b> to the recommendations in this paper | 13 January 2023 |

# Contact for telephone discussion (if required)

| Name | Position   | 1st Contact  |
|------|--|--------------|
|      | Group Manager Network Strategy & Planning,<br>Wellington Water |              |
|      | Manager Service Planning, Wellington Water                     | $\checkmark$ |

#### Purpose

 This paper advises Hutt City Council (Council) on Wellington Water Limited's operating expenditure (OPEX) budget for the FY2023/24 Annual Plan. It advances our previous advice to Council dated 4 November 2022.

#### Recommended action

- 2. It is recommended that Council:
- a. **note** that Hutt City Council's confirmed OPEX investment in Three Waters is \$23.54m for the 2023/24 financial year;
- b. **note** Wellington Water recommends an OPEX budget of \$29.24m is needed for FY2023/24 to meet current levels of service.
- c. agree to:

#### EITHER

- i. proportionally increase OPEX funding across all investment categories with priority, at a minimum, on the following activities:
  - I. Asset condition assessments
  - II. Sustainable Water Supply and Demand and leakage management
  - III. Investigations to inform forward capital works plans
  - IV. Wellington Water management fee including cyber security; and
- ii. accept that a budget below \$29.24m will result in reduced levels of service of Council assets;

OR

- i. increase Wellington Water's OPEX funding for FY2023/24 by \$5.7m to a total OPEX budget of \$29.24m;
- d. **advise** Wellington Water of the process, including the impacts of our advice on Council's Significance and Engagement Policy, timeframes and any further information needed to support progressing the development of Council's Annual Plan;
- e. **meet** with Wellington Water to discuss the content of this paper to agree appropriate funding levels within Council's financial constraints; and
- f. **note** that this advice will be released and published on Wellington Water's website within 30 working days of being sent to Council.

#### Context and key messages

- 3. In our preliminary advice to you dated 4 November 2022 ('*Preliminary Three Waters 2023/24 Annual Plan OPEX advice for Hutt City Council'*) we signalled risks with keeping Council's OPEX budget at the current LTP approved level. We also noted possible OPEX cost increases to address those risks, where known.
- Following further analysis, we now have a better understanding of the OPEX budget required for FY2023/24. Wellington Water recommends \$29.24m is needed to maintain and operate Council's Three Waters assets in FY2023/24.
- 5. We acknowledge this is a sizeable step-up from Council's approved LTP budget. We appreciate that Council will be facing financial pressures across all its budgets and any increase in funding to Wellington Water will need to be considered alongside other Council priorities.
- 6. The OPEX budget proposed by Wellington Water reflects the funding required to deliver existing levels of service. In the situation where an OPEX budget is approved below the amount proposed, we would welcome a conversation with Council to confirm priorities and the trade-offs in levels of service.

# Hutt City Council's Three Waters Operating Investment

#### Wellington Water's recommended OPEX budget for the 2023/24 financial year is \$23.537m

7. Table 1 below outlines Wellington Water's recommended changes to our approved OPEX budget for FY2023/24. Advice on our proposed CAPEX budgets will be provided separately in early 2023.

Table 1: Summary of proposed operational expenditure for FY2023/24 by investment category

| Investment category<br>(\$ x 1,000) | FY23 Budget | Council approved<br>2023/24 LTP funding | 2023/24<br>recommended budget | Recommended<br>increase above LTP<br>approved budget |
|-------------------------------------|-------------|---|-------------------------------|--|
| Treatment Plant                     | 6,540       | 6,910                                   | 7,800                         | 890  |
| Planned<br>maintenance              | 2,792       | 3,575                                   | 3,984                         | 410  |
| Reactive<br>maintenance             | 5,844       | 6,057                                   | 8,161                         | 2,104  |
| Monitoring and<br>investigations    | 4,234       | 3,200                                   | 4,901                         | 1,701  |
| Operations                          | 200         | 183                                     | 228                           | 46   |
| Management and advisory services    | 3,354       | 3,613                                   | 4,164                         | 551  |
| TOTAL                               | 22,964      | 23,538                                  | 29,238                        | 5,702  |

8. Consistent with industry-wide trends, Wellington Water is seeing significant cost increases across all activities within its service delivery portfolio. Cost increases associated with higher labour, consultant/contractor and material costs as well as growth factors and rising demand for water have contributed to the budget shifts across all investment categories in Table 1. Additional factors driving changes within specific investment categories are summarised below.

#### **Treatment plants**

- 9. The Treatment Plant investment category, groups all activities relating to the operation of treatment plants, planned and reactive maintenance. The OPEX budgets for all other activities delivered by Wellington Water are separated under the relevant investment category.
- 10. The recommended budget uplift, in addition to general inflation factors, reflects expected cost increases due to:
  - higher gas and electricity tariffs the contracts for power and gas will expire in 2023. We have budgeted a 15% increase for FY2023/2024.
  - sludge disposal costs to landfill are increasing by 12.5% in FY2023/2024
  - increased outfall pipe maintenance the frequency of unplanned maintenance to the Seaview outfall pipe has increased. On average, outfall maintenance costs have been in the order of \$130,000 per incident. We have budgeted an allowance for two incidents in FY2023/24
  - variation in the contract with the Plant Manager Veolia.

#### **Planned maintenance**

11. A large proportion of the recommended uplift is due to inflation and higher costs for goods and services. In addition, growth and water demand is putting pressure on maintenance programmes to ensure pump stations and other assets across the network are being maintained to required operational service levels.

#### **Reactive maintenance**

- 12. Existing funding is insufficient to meet customer requirements, therefore the recommended budget supports Wellington Water to increase activity to meet target service levels. In addition, significant cost increases associated with higher labour, consultant/contractor and material costs are contributing to the uplift recommended for reactive maintenance.
- 13. We know that capital investment is insufficient to address the backlog of pipe renewals, as such the network is continuing to age and increased levels of failure and repairs are expected. Budget uplift is recommended to meet forecast reactive maintenance costs across your Three Waters infrastructure with a large proportion to stormwater and potable water network maintenance which includes leak repairs. We support Council's early signals to Wellington Water that reactive maintenance including leakage management is a priority for any additional budget funding.
- 14. Alternatively, if additional budget is not available or to the level recommended, we advise agreeing to amend target levels of service to increase response times and reduce delivery of lower priority reactive maintenance.

#### Monitoring and investigations

15. The recommended increase is largely due to the following key work areas:

- Condition assessment as previously signalled, we have made good progress on completing Very High Criticality Assets (VHCA) condition assessments. We are recommending an uplift of \$729k to complete condition assessment on High Criticality Assets (HCA) assets, physical pipe inspections, testing of critical pumps, wastewater treatment plant pump and blower performance testing and the development of pump station asset management documents. The additional funding for condition assessment activities accounts for 42% of the Monitoring and Investigation uplift requested. As a priority, we strongly advise ongoing funding in condition assessments, including for non-VHCA, to further improve understanding of Council's assets and to identify where remedial action is needed to minimise unplanned failures.
- Investigations, including for the Hutt Valley Joint Venture trunk mains; to meet increased levels
  of service for the Active Leak Control Programme; resilience, fireflow, pressure management,
  and reservoir structural assessments; wastewater overflow reduction and the frequency. We
  recommend an uplift in funding of 23% in investigations to help inform forward capital
  programmes as a priority.
- 16. Also accounting for the uplift is increased laboratory costs and new sampling programmes required to meet changing water regulation and new resource consent requirements.

#### Operations

17. The uplift recommended is for preventative maintenance activities across Council's stormwater, wastewater, and potable water asset control systems. It is important these systems are operational for controlling and monitoring the Council's treatment plant, pump station, flow meter, and valve assets.

#### Management and advisory services

- 18. The higher management costs we have been experiencing in FY2022/23 due to higher inflation rates, wage growth consistent with market rates, a higher proportion of contractors and consultants being used across the industry, and increased staff numbers to deliver larger CAPEX and OPEX programmes, are trending to continue through FY2023/24.
- 19. In addition to the general cost increases, ongoing funding for cyber security activity is needed. No specific funding for cyber security was provided in the approved LTP. Therefore, this programme has not been budgeted for beyond FY2022/23. Cyber risk is growing globally. As an organisation delivering essential infrastructure services, it is vital investment is made to protect against cyber-attack.
- 20. We endorse Council's early signals to Wellington Water that management and advisory services (including cyber security) is a priority for budget uplift.

#### Sustainable water supply

- 21. We strongly recommend as a priority, consistent with Council's early signals, increased investment in Sustainable Water Supply activities. These activities are important to: help ensure water is available to support economic, social, and cultural wellbeing; improve efficiency of supply across the network; and improve environmental outcomes.
- 22. The costs for Sustainable Water Supply activities are split across the proposed planned maintenance, reactive maintenance, operations and monitoring and investigation budgets outlined above. In total this represents \$575k of the total recommended budget.

#### Next steps

- 23. Please provide a response to the recommendations in this paper to **1998** by 13 January 2023.
- 24. Following your response to this report and any discussion meeting, Wellington Water will proceed to deliver services within agreed budgets.

# Wellington Water

# Advice to Hutt City Council (HCC) Regarding Three Waters Capital Expenditure for the 2023/24 Annual Plan

| то        | , Strategic Advisor, Hutt City Council   |
|-----------|--|
| COPIED TO | , Manager Service Planning, Wellington Water; <b>Manager</b> , General Manager Customer Operations, Wellington Water |
| FROM      | , General Manager Network Strategy & Planning, Wellington Water  |
| DATE      | 02 February 2023   |

# Purpose

 This paper advises Hutt City Council (Council) on the level of capital expenditure (CAPEX) Wellington Water Limited recommends that Council budgets for in the FY2023/24 Annual Plan. It advances our previous advice to Council dated 2 December 2022 but is not the full CAPEX advice Wellington Water will provide to Council. Further analysis is required to confirm the final capital delivery programme Wellington Water will recommend Council adopt in FY2023/24 and FY2024/25. This full advice will be provided in late February 2023.

# **Recommended** action

- 2. It is recommended that Council:
- a. **agree** to continue enabling growth in the three waters capital delivery programme by approving a budget for the 2023/24 financial year of \$65m-\$68m. This budget is above the forecast expenditure for the 2022/23 financial year (\$60m)
- b. **agree** to increase the total CAPEX budget available for the three-year 2021/24 Long Term Plan (LTP) to \$154-\$157m, which is \$3m-\$6m above the currently approved budget.
- c. **notes** that this advice will be released and published on Wellington Water's website within 30 working days of being sent to Council.

# Context and key messages

3. In our preliminary advice to you dated 4 November 2022 ('WWL Preliminary Y3&4 Capital Delivery advice to HCC\_Nov 22') we requested Council provide a capital budget of \$85.5m in FY2023/24. This aligned with the information provided to Wellington Water from Council on 20 October 2022. This assumed that approximately \$20m would be brought forward to enable funding of additional investment, increasing this year's budget from \$41.8m to \$60m which is at the top of the delivery range of (\$42m-60m).



- 4. In subsequent advice to you dated 2 December 2022 (*'Feb 2022 WWL CAPEX Advice to Hutt City Council'*) we confirmed we are seeking a CAPEX budget of between \$65-68m for FY2023/24.
- 5. The budget of \$65-68m for FY2023/24 reflects a level of investment we believe is deliverable within the Capital programme in FY2023/24. It includes approximately \$45m of projects that are on track to have contracts awarded by the end of June 2023, for example the Avalon Wastewater Catchment Renewals Programme.
- 6. We will target a total value of the programme for FY2023/24 of ~120% of the proposed budget. This over-programming against the proposed budget is purposely introduced to mitigate delivery risks and optimism bias in delivery capacity.
- 7. Table 1 illustrates the proposed FY2023/24 overprogrammed CAPEX expenditure by water type and Local Government Act (LGA) criteria. As mentioned, this overprogrammed is an interim update and full advice will be provided in late February 2023.

| Water          | Investment Category | FY2023/24 WWL Recommended<br>Overprogrammed Budgeted<br>(\$000s) |
|----------------|---------------------|--|
| Drinking Water | Growth              | 6,025  |
|                | Level of Service    | 2,110  |
|                | Renewal             | 14,940   |
|                | Total               | 23,075   |
|                |                     |  |
| Stormwater     | Growth              | 350  |
|                | Level of Service    | 3,193  |
|                | Renewal             | 6,947  |
|                | Total               | 10,490   |
|                |                     |  |
| Wastewater     | Growth              | 188  |
|                | Level of Service    | 415  |
|                | Renewal             | 28,640   |
|                | Total               | 29,243   |
|                |                     |  |
| Wastewater JV  | Level of Service    | 2,410  |
|                | Renewal             | 12,960   |
|                | Total               | 15,370   |
| Total          |                     | 78,177   |

 Table 1: Summary of proposed Overprogrammed expenditure for FY2023/24 by water and investment category (\$000)

- 8. Appendix A provides a detailed list of the projects that make up Council's interim overprogrammed FY2023/24 CAPEX programme.
- 9. Table 1 and Appendix A, illustrate that a significant portion of the FY2023/24 programme is recommended to be in renewals activity. Investment in renewals reduces the risk of asset failures and has positive flow on effects to future maintenance budgets. Increasing CAPEX investment in FY2023/24 provides an opportunity to address Councils growing backlog in renewals projects.



# Sustainably growing the CAPEX programme

- 10. As noted in our previous advice, Wellington Water has been working on sustainably growing the CAPEX programme over the past few years. The proposed budget of \$65-\$68m for FY2023/24 follows this growth model:
  - 2021/22 expenditure = \$29m
  - 2022/23 risk adjusted forecast expenditure = \$60m
  - 2023/24 proposed expenditure = \$65-68m
- 11. Council's total 3-year LTP budget is \$151m. A FY2023/24 budget between \$65-68m exceeds Councils' 3-year budget by between \$3m-\$6m (total 3-year programme budget of \$154-\$157m).
- 12. It's important we continue to provide greater certainty to the market of ongoing investment in three waters into the future. We are seeing the contractor market ramp up resourcing for delivery in three waters and growing the level of investment year on year is an important part of this. Signalling sustained growth in investment will provide stability in the market and reduce the risk of contractors shifting to other large-scale programmes such as transport and housing which also have growing CAPEX programmes.



### Appendix A: Interim FY2023/24 Programme

| _        | LGA            |   |                                       |
|----------|----------------|---|---------------------------------------|
| Water    | Classification | Project Name  | Budget                                |
| Drinking |                |   |                                       |
| Water    | Growth         | Naenae No 2 Reservoir and Outlet Main   | 6,000,000                             |
| Drinking |                |   |                                       |
| Water    | Growth         | Drinking water development projects – reactive                                      | 25,000                                |
| Drinking | Level of       |   |                                       |
| Water    | Service        | HCC Management of Fire Hydrant Use  | 650,000                               |
| Drinking | Level of       |   |                                       |
| Water    | Service        | Kingsley Reservoir Seismic replacement  | 500,000                               |
| Drinking | Level of       |   |                                       |
| Water    | Service        | District Meter Area (DMA) meter fleet   | 250,000                               |
| Drinking | Level of       |   |                                       |
| Water    | Service        | Point Howard to Lowry Bay Link Main   | 200,000                               |
| Drinking | Level of       |   |                                       |
| Water    | Service        | HCC Firefighting upgrades - Hutt Valley Floor                                       | 100,000                               |
| Drinking | Level of       |   | · · · · · · · · · · · · · · · · · · · |
| Water    | Service        | Critical Pipelines Seismic Upgrade - Maungaraki Reservoir inlet main                | 88,128                                |
| Drinking | Level of       | City pump stations seismic strengthening programme - provisional subject to further |                                       |
| Water    | Service        | assessment  | 60,000                                |
| Drinking | Level of       |   |                                       |
| Water    | Service        | Critical Pipelines Seismic Upgrade - Myrtle St                                      | 45,464                                |
| Drinking | Level of       |   |                                       |
| Water    | Service        | Critical Pipelines Seismic Upgrade - Major Drive                                    | 41,645                                |
| Drinking | Level of       |   |                                       |
| Water    | Service        | HCC Modelling - Potable Water Network   | 40,000                                |
| Drinking | Level of       |   |                                       |
| Water    | Service        | HCC Firefighting upgrades - Wainuiomata   | 39,706                                |

|            | Velling<br>Vater |  |           |
|------------|------------------|--|-----------|
| Drinking   | Level of         |  |           |
| Water      | Service          | Critical Pipelines Seismic Upgrade - Hutt Road                             | 33,696    |
| Drinking   | Level of         |  |           |
| Water      | Service          | Sweetacres Watermain Upgrade + PRV + meter                                 | 21,082    |
| Drinking   | Level of         |  |           |
| Water      | Service          | Naenae Reservoir - Water Safety  | 20,000    |
| Drinking   | Level of         |  |           |
| Water      | Service          | Naenae Reservoir overflow extension  | 13,824    |
| Drinking   | Level of         |  |           |
| Water      | Service          | HCC Authorised Tanker Fill Points  | 6,000     |
| Drinking   |                  |  |           |
| Water      | Renewal          | HCC Water Main Renewals  | 7,000,000 |
| Drinking   |                  |  |           |
| Water      | Renewal          | Wainuiomata Water Supply Renewals 21 - 22                                  | 4,000,000 |
| Drinking   |                  |  |           |
| Water      | Renewal          | Ava Street Water Main Renewal  | 2,000,000 |
| Drinking   |                  |  |           |
| Water      | Renewal          | Closing Bulk Water Cross Connections - Rata and Sunville Rezoning          | 1,100,000 |
| Drinking   |                  |  |           |
| Water      | Renewal          | HCC Reservoir VHCA Remedial Works  | 600,000   |
| Drinking   |                  |  |           |
| Water      | Renewal          | Waddington Drive (Naenae Road to Seddon to Rata Street) water main renewal | 200,000   |
| Drinking   |                  |  |           |
| Water      | Renewal          | Copeland Street and Oxford Terrace – Critical Pipelines Seismic Upgrade    | 20,000    |
| Drinking   |                  |  |           |
| Water      | Renewal          | Wilkie Cres Watermains Renewal and Upgrade                                 | 20,000    |
| Stormwater | Growth           | Riverlink Woburn Stormwater Pipeline                                       | 100,000   |
| Stormwater | Growth           | Black Creek improvements - A   | 50,000    |
| Stormwater | Growth           | Marsden St Pump Station, Marsden St & Bridge St Upgrade                    | 50,000    |



| Stormwater | Growth   | Riverlink Melling Stormwater Pipeline  | 50,000    |
|------------|----------|--|-----------|
| Stormwater | Growth   | William St Pump Station and South St Upgrade                                   | 50,000    |
| Stormwater | Growth   | Woburn + Riddiford St SW Diversion   | 50,000    |
|            | Level of |  |           |
| Stormwater | Service  | Muritai Rd (92-96) Rona St, Marine Parade (19) Stormwater Upgrades             | 2,500,000 |
|            | Level of |  |           |
| Stormwater | Service  | HCC Stormwater Network Modelling   | 200,000   |
|            | Level of |  |           |
| Stormwater | Service  | HCC Stormwater Management Strategy   | 150,000   |
|            | Level of |  |           |
| Stormwater | Service  | Network discharges programme: subcatchment stormwater management plan          | 110,000   |
|            | Level of |  |           |
| Stormwater | Service  | Freshwater Management tool - Build   | 100,000   |
|            | Level of |  |           |
| Stormwater | Service  | SP3-1 - CAPEX SW quality: Green Infrastructure Delivery                        | 23,333    |
|            | Level of |  |           |
| Stormwater | Service  | DC3 - CAPEX SW quality: Restoring and/or daylighting natural channels.         | 20,000    |
|            | Level of |  |           |
| Stormwater | Service  | OM4-1 - CAPEX SW quality: Condition assessments Programme                      | 20,000    |
|            | Level of |  |           |
| Stormwater | Service  | SP7-1 - CAPEX SW quality: Leading by Example                                   | 20,000    |
|            | Level of |  |           |
| Stormwater | Service  | Wellesley College stream inlet and outlet erosion protection                   | 20,000    |
|            | Level of |  |           |
| Stormwater | Service  | HCC Global consent for operations and maintenance works in streams             | 15,000    |
| _          | Level of |  |           |
| Stormwater | Service  | DC1 - CAPEX SW quality: Stormwater Catchment Management Plan (SCaMP) Programme | 14,400    |
| Stormwater | Renewal  | Knights Road - Colin Grove E Coli - Stormwater                                 | 3,500,000 |



|            | Nater               |  |            |
|------------|---------------------|--|------------|
| Stormwater | Renewal             | Jackson Street Stormwater Renewals   | 2,600,000  |
| Stormwater | Renewal             | Te Mome Pump Station Renewal and Optimisation                              | 700,000    |
| Stormwater | Renewal             | VHCA - Horlor St to Pilcher Cres SW Renewal                                | 119,045    |
| Stormwater | Renewal             | VHCA - 427 Hutt Road SW Renewal  | 27,962     |
| Wastewater | Growth              | Beaumont Ave WW pump station connection / storage tank                     | 50,000     |
| Wastewater | Growth              | Lower Hutt CBD Wastewater (excl JV) Bypass                                 | 50,000     |
| Wastewater | Growth              | Seaview Wastewater (excl JV) Treatment Plant storage                       | 50,000     |
| Wastewater | Growth              | Fleet St WW storage  | 28,000     |
| Wastewater | Growth              | Wastewater (excl JV) development projects reactive                         | 10,000     |
| Wastewater | Level of<br>Service | HCC Wastewater Model   | 150,000    |
| Wastewater | Level of<br>Service | Epuni and Woburn WW Network Upgrades                                       | 150,000    |
| Wastewater | Level of<br>Service | Resource consent wet weather waste water network overflows - consequential | 100,000    |
| Wastewater | Level of<br>Service | Resource consent dry weather waste water network blockages                 | 15,000     |
| Wastewater | Renewal             | Avalon WW Renewals Programme 21-22   | 12,000,000 |
| Wastewater | Renewal             | Knights Road - Colin Grove E Coli - Wastewater                             | 5,500,000  |
| Wastewater | Renewal             | Gracefield Wastewater Renewals   | 4,000,000  |



| Wastewater | Renewal  | Wainuiomata Wastewater Renewals 21-22   | 3,000,000 |
|------------|----------|---|-----------|
|            |          |   |           |
| Wastewater | Renewal  | Seaview WWTP Sludge Dryer   | 2,000,000 |
| Wastewater | Renewal  | Wainui Road and Rishworth Street Sewer Renewals                                   | 1,100,000 |
| Wastewater | Renewal  | Seaview WWTP Outfall  | 1,000,000 |
| Wastewater | Renewal  | Naenae Sewer Renewals - Wilkie Swainson & Grierson Seddon St                      | 20,000    |
| Wastewater | Renewal  | Bell Road   | 20,000    |
| Wastewater | Level of |   |           |
| JV         | Service  | Seaview WWTP Wastewater Storage   | 1,900,000 |
| Wastewater | Level of |   |           |
| JV         | Service  | Seaview Backup Power Supply Project   | 200,000   |
| Wastewater | Level of |   |           |
| JV         | Service  | Seaview WWTP Process Model Development  | 200,000   |
| Wastewater | Level of | Network discharges programme: pilot subcatchment wastewater wet weather overflows |           |
| JV         | Service  | reduction plan  | 110,000   |
| Wastewater |          |   |           |
| JV         | Renewal  | Trunk Type B Network Development - Petone Collecting Wastewater Upgrade           | 5,000,000 |
| Wastewater |          |   |           |
| JV         | Renewal  | Seaview WWTP Biological Treatment Process Automation                              | 5,000,000 |
| Wastewater |          |   |           |
| JV         | Renewal  | Seaview Dryer Replacement   | 2,000,000 |
| Wastewater |          |   |           |
| JV         | Renewal  | Seaview UV Renewal Project  | 500,000   |
| Wastewater |          | Trunk Type B Network Development - Barber Grove to Wastewater Treatment Plant     |           |
| JV         | Renewal  | Duplication   | 160,000   |
| Wastewater |          |   |           |
| JV         | Renewal  | Seaview WWTP Main Outfall Renewal (on hold as of Oct 22)                          | 100,000   |

|                  | Velling <sup>.</sup><br>Vater | ton  |            |
|------------------|-------------------------------|--|------------|
| Wastewater<br>JV | Renewal                       | VHCA-Rising Main PS241                     | 80,000     |
| Wastewater<br>JV | Renewal                       | Seaview WWTP Consent Renewal               | 50,000     |
| Wastewater<br>JV | Renewal                       | Seaview WWTP Spares                        | 50,000     |
| Wastewater<br>JV | Renewal                       | Seaview Odour Control Modification/Upgrade | 20,000     |
|                  |                               | Total                                      | 78,177,284 |



# Supplementary advice to Hutt City Council regarding Three Waters Operating Expenditure for the 2023/24 Annual Plan

| то        | , Strategic Advisor, Hutt City Council  |
|-----------|---|
| COPIED TO | , Manager Service Planning, Wellington Water; General Manager<br>Customer Operations, Wellington Water; General Manager,<br>Hutt City Council |
| FROM      | , Group Manager Network Strategy & Planning, Wellington Water   |
| DATE      | 2 February 2023   |

#### Action sought

|                                      | Action sought                   | Deadline |
|--------------------------------------|---------------------------------|----------|
| Strategic Advisor, Hutt City Council | Note the contents of this paper | None     |

# Contact for telephone discussion (if required)

| Name | Position  | 1st Contact |
|------|---|-------------|
|      | Group Manager Network Strategy & Planning, Wellington Water |             |
|      | Manager Service Planning, Wellington                        | x           |

#### Purpose

1. This paper provides supporting detail requested by the Hutt City Council (the Council) on the recommended increases to Wellington Water Limited's operating expenditure (OPEX) budget for the FY2023/2024 Annual Plan. It updates the earlier advice to Council dated 2 December 2022 ('Advice to Hutt City Council (HCC) Regarding Three Waters Operating Expenditure for the 2023/24 Annual Plan').

#### **Recommended action**

- 2. It is recommended that Council:
- a. **note** that Hutt City Council's confirmed OPEX investment in Three Waters is \$25.602m for inclusion in the 2023/24 draft Annual Plan for public consultation including the \$1.490m uplift approved by Council on 20 December 2022;
- b. **note** that Wellington Water recommends an OPEX budget of \$29.974m is needed for FY2023/24 to meet current levels of service and that a budget below this level will result in a reduction in the level of service provided for Council assets;
- c. agree to increase the FY2023/24 OPEX budget above \$25.602m;
- d. **advise** Wellington Water of the process, including the impacts of our advice on Council's Significance and Engagement Policy, timeframes and any further information needed to support progressing the development of Council's Annual Plan and the associated Council public consultation process; and
- e. **note** that this advice will be proactively released and published on Wellington Water's public website, subject to any redactions consistent with the Local Government Official Information and Meetings Act 1987, within 30 working days of being sent to Council.

#### Background

- 3. In our preliminary advice to you dated 4 November 2022 ('*Preliminary Three Waters 2023/24 Annual Plan OPEX advice for Hutt City Council*') we signalled risks with keeping Council's OPEX budget at the current Long Term Plan (LTP) approved level. We also noted possible OPEX cost increases to address those risks, where known.
- 4. Our 2 December 2022 advice provided an update and included recommendations on the level of OPEX we considered necessary to maintain and operate Council's Three Waters assets in FY2023/24.
- 5. On 12 January 2023, staff from Wellington Water Limited met with Council officers to discuss our advice. Council officers requested Wellington Water provide additional rationale to support our proposed budget increases above approved levels. This paper seeks to provide that detail and also updates some of the figures previously provided to reflect further information that has since become available including the additional funding of \$1.490m approved by Council on 20 December 2022.

#### Wellington Water's recommended Three Waters Operating Investment

#### Wellington Water's recommended OPEX budget for the 2023/24 financial year is \$29.974m

6. Table 1 provides a breakdown of Wellington Water's recommended changes to the allocated OPEX budget for FY2023/24 by water type.

| Water Type            | Investment Category                 | Current  | FY23/24 | FY23/24  | Variance | Variance |
|-----------------------|-------------------------------------|----------|---------|----------|----------|----------|
| water type            | investment category                 | Approved | LTP     | Proposed | FY23/24  | FY23/24  |
|                       |                                     | Budget   | Budget  | budget   | LTP vs   | LTP vs   |
|                       |                                     | FY22/23  | •       |          | FY23/24  | FY23/24  |
|                       |                                     |          |         |          | Proposed | Proposed |
|                       |                                     |          |         |          | budget   | budget   |
|                       |                                     |          |         |          |          | (%)      |
| <b>Drinking Water</b> | Monitoring & Investigations         | 1,736    | 1,578   | 2,014    | 436      | 28%      |
| (DW)                  | Operations                          | 56       | 55      | 66       | 11       | 20%      |
|                       | Planned Maintenance                 | 923      | 1,205   | 1,564    | 359      | 30%      |
|                       | Reactive Maintenance                | 3,055    | 3,788   | 4,927    | 1139     | 30%      |
| DW Total              |                                     | 5,769    | 6,626   | 8,571    | 1,944    | 29%      |
| Stormwater            | Monitoring & Investigations         | 977      | 635     | 965      | 330      | 52%      |
| (SW)                  | Operations                          | 26       | 26      | 30       | 4        | 15%      |
|                       | Planned Maintenance                 | 770      | 781     | 1,025    | 245      | 31%      |
|                       | Reactive Maintenance                | 759      | 699     | 975      | 276      | 39%      |
| SW Total              |                                     | 2,532    | 2,141   | 2,995    | 854      | 40%      |
| Wastewater            | Monitoring & Investigations         | 1,237    | 1,276   | 1,655    | 379      | 30%      |
| (WW)                  | Operations                          | 98       | 107     | 110      | 3        | 3%       |
|                       | Planned Maintenance                 | 598      | 672     | 749      | 77       | 11%      |
|                       | Reactive Maintenance                | 1,664    | 1,538   | 1,665    | 127      | 8%       |
|                       | Treatment Plant                     | 344      | 315     | 249      | (65)     | (21%)    |
| WW Total              |                                     | 3,941    | 3,907   | 4,428    | 520      | 13%      |
| Wastewater            | Monitoring & Investigations         | 2847     | 231     | 435      | 203      | 88%      |
| Joint Venture         | Operations                          | 20       | 20      | 23       | 3        | 15%      |
| (VLWW)                | Planned Maintenance                 | 501      | 867     | 646      | (221)    | (25%)    |
|                       | Reactive Maintenance                | 366      | 500     | 593      | 93       | 19%      |
|                       | Treatment Plant                     | 6,197    | 7,002   | 8,119    | 1,117    | 16%      |
| WWJV Total            |                                     | 7,367    | 8,620   | 9,816    | 1,196    | 14%      |
| Management<br>Total   | Management and Advisory<br>Services | 3,354    | 4,308   | 4,164    | (144)    | (3%)     |
| Grand Total           |                                     | 22,963   | 25,602  | 29,974   | 4,372    | 17%      |

| Table 1. Commence   | Construction of the second second | I among the second | - FV2022/24 human    | and increase and and and the second s | 1000  |
|---------------------|-----------------------------------|--------------------|----------------------|--|-------|
| Table 1: Summary of | j proposea operationa             | r expenditure jo   | r F12023/24 by water | and investment category (\$  | 5000) |

- 7. Since our advice of 2 December 2022, further information has become available resulting in an additional \$0.736m to be proposed over our recommended budget of \$29.238m. This is due to:
  - changes to the power estimate within the Treatment Plant investment category (additional \$0.569m); and
  - the omission of budget in FY2023/24 for the continued development of the asset register within the Monitoring and Investigations investment category (additional \$0.167m).
- Detail on these changes as well as the drivers and rationale for the budgets proposed in Table 1, the relative priorities of expenditure, and potential risks from lower levels of investment are outlined in the following sections.

#### Investment prioritisation

9. Some activities within the proposed OPEX budget are considered unavoidable and will need to be covered by Council. These costs relate to activities that are mandatory or cannot be avoided or deferred as they are essential for the operation and maintenance of Councils assets. For example,

costs required for the day-to-day operation of critical services where the consequence of failure is very high or for maintaining compliance with legislation, regulation, or industry standards.

- 10. In the following sections we have highlighted the costs Wellington Water advises are unavoidable where this is currently known. However, it is important to note that there may be additional unavoidable costs that have not been specifically identified. Wellington Water therefore strongly recommends against increasing OPEX budgets to only address the known unavoidable costs.
- 11. Wellington Water strongly recommends that the proposed budget for the following investment categories is imperative for delivering these essential services:
  - Treatment Plants
  - Operations
  - Monitoring
  - Management & Advisory Services.
- 12. It is possible the budgets for the Planned Maintenance, Reactive Maintenance, and Investigations investment categories could be reduced by making strategic decisions to discontinue or reduce certain activities. However, this comes with increased risks to service delivery. These risks are explained further in the following sections.

#### General factors contributing to budget increases across all investment categories

- 13. Consistent with industry-wide trends, Wellington Water is seeing significant cost increases across all activities within its service delivery portfolio. Cost increases associated with higher labour, consultant/contractor and material costs as well as growth factors and rising demand for water have contributed to the budget shifts across all investment categories in Table 1. Additional factors driving changes within specific investment categories are summarised in the relevant sections below.
- 14. To accurately reflect current market conditions, a 10% increase has been applied to labour and plant allocations across all water types and investment categories. This adjustment considers the impact of inflation, which was lower at the time when LTP budgets were initially set. This adjustment will ensure that resources are allocated in a manner that is consistent with current economic conditions.

#### Monitoring and Investigations

- 15. The monitoring and investigations investment category includes activities such as condition assessments, resource consent compliance monitoring, water sampling and monitoring, investigations, design studies, asset management, and the development of an asset register which was not accounted for in our 2 December 2022 advice.
- 16. A total budget of \$5.069m is recommended to meet forecast monitoring and investigations costs. This is an uplift of \$1.349m over the FY2023/24 LTP allocated budget of \$3.720m. Table 2 below provides the breakdown of the recommended budget by water type.

| Investment Category<br>(\$000s) | Water Type                  | 2023/24 LTP Budget | 2023/24 Proposed<br>Budget | Increase above<br>LTP Budget |
|---------------------------------|-----------------------------|--------------------|----------------------------|------------------------------|
|                                 | Drinking Water              | 1,578              | 2,014                      | 436                          |
|                                 | Stormwater                  | 635                | 965                        | 330                          |
| Monitoring &                    | Wastewater                  | 1,276              | 1,655                      | 379                          |
| Investigations                  | Wastewater Joint<br>Venture | 231                | 435                        | 204                          |
|                                 | Total                       | 3,720              | 5,069                      | 1,349                        |

Table 2: Summary of proposed Monitoring and Investigations OPEX for FY2023/24 by water type

17. The recommended increase to the Monitoring and Investigations investment category is for:

- investigations, including for inflow and infiltration studies to drive water quality, stormwater network and catchment master plans, growth modelling, an overflow strategy, and a flood management strategy; the Hutt Valley Joint Venture trunk mains; to meet increased levels of service for the Active Leak Control Programme; resilience, fireflow, pressure management, and reservoir structural assessments; and wastewater overflow reduction and frequency
- condition assessments to complete condition assessment on High Criticality Assets (HCA) assets, physical pipe inspections, testing of critical pumps, wastewater treatment plant pump and blower performance testing and the development of pump station asset management documents
- increased laboratory costs and new sampling programmes required to meet changing water regulation and new resource consent requirements.
- 18. The Monitoring and Investigations investment category contains some unavoidable costs for activities already committed or to meet statutory requirements.
- 19. Of the \$0.960m recommended budget for monitoring activities within the Monitoring and Investigations investment category, most is considered unavoidable costs required to undertake sampling and testing activity, or monitoring to meet consent requirements. This also covers HCC's share of software which had not previously been budgeted for.
- 20. Within the investigations activities, approximately \$1.790m could be deferred. However, this comes with risks. The following activities account for most of the investment expenditure in this investment category. The risks of not providing sufficient budget for these in FY2023/24 are noted below.
  - General investigations account \$1.456m of the recommended Monitoring and Investigations budget. These investigations include a mix of unavoidable activity, and activity that could be deferred, depending on their association with compliance to safety regulations. The risks of not funding these items are varied, but mainly relate to significantly limiting WWL's ability to understand the life and condition of assets, and the ability to prepare for future climate change (modelling), to report emission reductions, and to understand how we can achieve 2050 emissions targets.

A reduction in the investigations budget would result in renewals investigations being deferred. This would impede the timely execution of future renewal initiatives and risks:

i failing to identify and address potential infrastructure failures or weaknesses, leading to costly repairs or even potential failure of the system

- ii being able to comply with regulatory requirements which could result in fines and penalties
- iii being able to plan for long-term maintenance and replacement needs which could lead to unexpected expenses and service interruptions
- iv reduced capacity to respond to, and recover from, natural disasters or other emergencies
- v reduced ability to improve the overall quality and reliability of the water supply for consumers.
- Condition assessments account for \$1.119m of the recommended Monitoring and Investigations budget for FY2023/24. This is an increase of \$0.354m above the \$0.765m budgeted in FY2022/23. It is recommended operational condition assessment budgets are increased to enable the balance of the highest risk and priority Very High Critical Assets (VHCA) and Highly Critical Assets (HCA) to be assessed. Wellington Water requires sufficient funding for condition assessments to inform and guide the development of capital delivery programmes. Without the knowledge obtained through thorough condition assessments:
  - i maintenance efforts will be increasingly reactive and based on issues as they arise, leading to increased costs and less efficient use of resources. Reactive maintenance often results in a higher average cost of maintenance than proactive maintenance.
  - ii the frequency of repairs required and duration of outages impacting consumers are likely to increase.

Not completing enough condition assessments to support the capital works programme can result in:

- i inadequate budgeting without a comprehensive understanding of the condition of the assets, it may be difficult to estimate costs of the capital works programme and budget accordingly
- ii the capital works programme may not address the most critical issues or may not be optimized for the specific needs of the assets. This can lead to inefficiencies and wasted resources
- iii safety hazards may be overlooked, putting workers and the public at risk
- iv unnecessary repairs may be made, increasing costs and diverting resources away from more critical issues
- reduced asset lifespan without proper condition assessment assets may not be maintained properly, which can lead to a reduction in their useful lifespan and result in increased costs over time
- Human health monitoring (HHMP) is a component of the budget for wastewater investigations. The requested budget for these activities, which typically incur costs of around \$10,000 to \$15,000 per event, is \$0.242m. A significant portion of this budget (approximately \$60,000) is unavoidable being necessary for mitigating potential impacts on human health.

# Operations

- 21. The Operations investment category includes the control systems covering the electrical, instrumentation and automation systems for Council's stormwater, wastewater, and potable water assets. It is important these systems are operational for controlling and monitoring Council's treatment plant, pump station, flow meter and valve assets.
- 22. A total budget of \$0.229m is recommended to meet forecast operations costs. This is an uplift of \$0.021m over the FY2023/24 LTP approved budget of \$0.208m due to:
  - labour and plant allocations 10% uplift applied over the FY2022/23 budget across all water types

Supplementary advice to Hutt City Council regarding Three Waters Operating Expenditure for the 2023/24 Annual Plan

- software licences for Scada and hardware maintenance
- additional preventative maintenance to maintain the capacity and capability of control system assets.
- 23. Table 3 below provides the breakdown of the recommended budget by water type.

Table 3: Summary of proposed Operations OPEX for FY2023/24 by water type

| Investment Category<br>(\$000s) | Water Type                  | 2023/24 LTP<br>Budget | 2023/24 Proposed<br>Budget | Increase above<br>LTP Budget |
|---------------------------------|-----------------------------|-----------------------|----------------------------|------------------------------|
|                                 | Drinking Water              | 55                    | 66                         | 11                           |
|                                 | Stormwater                  | 26                    | 30                         | 4                            |
| Operations                      | Wastewater                  | 107                   | 110                        | 3                            |
|                                 | Wastewater Joint<br>Venture | 20                    | 23                         | 3                            |
|                                 | Total                       | 208                   | 229                        | 21                           |

24. Figure 1 highlights that the recommended budget for FY2023/24 is only marginally higher than the forecast expenditure in FY2022/23, and below the actual expenditure in FY2021/22.

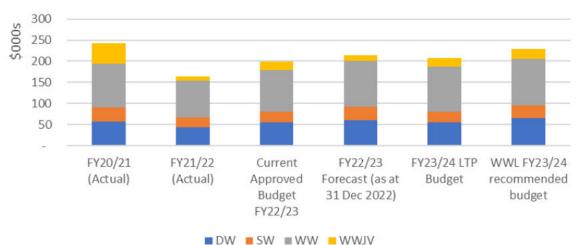


Figure 1: Actual, budget, forecast and proposed operations budgets for FY2020/21 - FY2023/24

- 25. Wellington Water advises that the majority of the proposed budget for Operations is unavoidable, being necessary to cover the costs essential for the running of Council control system assets. A small proportion of the budget (\$0.046) allocated for preventative maintenance of control systems could be reduced. However, this could result in significant risks including:
  - equipment failure without proper maintenance, control system assets such as valves, pumps, and control panels can malfunction or break down in some cases resulting in immediate loss of service, leading to disruptions in water supply and potential safety hazards
  - system downtime if control system assets are not maintained, they may require more frequent repairs or replacements, leading to extended downtime and decreased efficiency

- increased costs neglecting preventative maintenance can lead to more costly repairs and replacements in the long run, as well as increased energy consumption and labour costs
- environmental risks poorly maintained control systems can lead to leaks or spills, which can have
  negative impacts on the environment and local communities.

#### Planned Maintenance

- 26. The planned maintenance investment category includes water and wastewater pump station, utility and network asset maintenance, and stormwater maintenance activities.
- 27. A total budget of \$3.984m is recommended to meet forecast planned maintenance costs. This is an uplift of \$0.460m over the FY2023/24 LTP allocated budget of \$3.525m. Table 4 below provides the breakdown of the recommended budget by water type.

| Investment Category<br>(\$000s) | Water Type                  | 2023/24 LTP<br>Budget | 2023/24 Proposed<br>Budget | Increase above<br>LTP Budget |
|---------------------------------|-----------------------------|-----------------------|----------------------------|------------------------------|
|                                 | Drinking Water              | 1,203                 | 1,564                      | 359                          |
|                                 | Stormwater                  | 781                   | 1,025                      | 245                          |
| Planned Maintenance             | Wastewater                  | <mark>67</mark> 2     | 749                        | 77                           |
|                                 | Wastewater Joint<br>Venture | 867                   | 646                        | (221)                        |
|                                 | Total                       | 3,525                 | 3,984                      | 460                          |

Table 4: Summary of proposed Planned Maintenance OPEX for FY2023/24 by water type

- 28. A large proportion of the recommended budget increase in the Planned Maintenance investment category is due to inflation and higher costs for goods and services. Other reasons for the increase include:
  - growth and water demand is putting pressure on maintenance programmes to ensure pump stations and other assets across the network are being maintained to required operational service levels
  - additional funding required for non-residential demand management. This is to support the focus on Sustainable Water Supply and Demand
  - reservoir maintenance, pump station maintenance and area water meters and flushing wastewater pipe activities.
- 29. Figure 2 highlights the growth in the recommended budget for FY2023/24, reflecting the factors noted above driving cost increases.

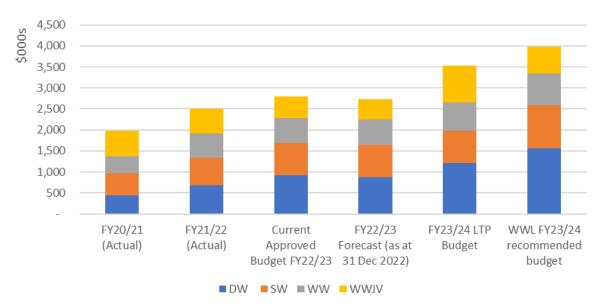


Figure 2: Actual, budget, forecast and proposed planned maintenance budgets FY2020/21 - FY2023/24 (\$000s)

- 30. It is possible for some reductions within the Planned Maintenance investment category. However, not providing funding to the recommended levels comes with the following risks:
  - If funding for drainage investigations is reduced, Wellington Water will have reduced capacity to respond to pollution events in waterways and will not be able to:
    - o respond to environmental impacts in accordance with global stormwater consents
    - fully plan or deliver a structured infiltration and inflow investigation programme to increase asset capability, capacity and life.
  - If there is any reduction to work on water loss management, Wellington Water's ability to triage leaks and complete repairs will be limited, restricting high-priority efforts to manage leakage through the water loss programme.
  - If network planned maintenance is reduced, Wellington Water will have limited ability to deliver planned activities across linear assets, impacting on asset life, and therefore levels of service (failures would occur sooner, and could be more expensive to repair if they have not had sufficient planned maintenance).
  - If pump station inspections are reduced, the potential for overflows increases, potentially leading to enforcement action. Odour complaints would likely increase, and Wellington Water would have to adopt a 'run to failure' asset management approach.
  - If non-critical valve maintenance is reduced, maintenance backlogs will further increase, risking the potential for assets to not operate when required, particularly in response to mains failures.

#### **Reactive Maintenance**

- 31. A total budget of \$8.161m is recommended for reactive maintenance activities. This is an uplift of \$1.635m from the FY2023/24 LTP approved budget of \$6.526m (including the additional \$1.020m approved by Council on 20 December 2022).
- 32. Table 5 below outlines Wellington Water's recommended changes to the allocated Reactive Maintenance FY2023/24 OPEX budget.

| Investment Category<br>(\$000s) | Water Type                  | 2023/24 LTP<br>Budget | 2023/24 Proposed<br>Budget | Increase above<br>LTP Budget |
|---------------------------------|-----------------------------|-----------------------|----------------------------|------------------------------|
|                                 | Drinking Water              | 3,788                 | 4,927                      | 1,139                        |
|                                 | Stormwater                  | 699                   | 975                        | 276                          |
| Reactive Maintenance            | Wastewater                  | 1,538                 | 1,665                      | 127                          |
|                                 | Wastewater Joint<br>Venture | 500                   | 593                        | 93                           |
|                                 | Total                       | 6,526                 | 8,161                      | 1,635                        |

Table 5: Summary of proposed Reactive Maintenance OPEX for FY2023/24 by water type

- 33. While dependent on the number of failures, reactive maintenance costs are anticipated to increase based on failure trends experienced to date, the average age of assets and the anticipated resulting rates of renewal/replacement.
- 34. The main reasons for the recommend increase to the Reactive Maintenance investment category budget include:
  - significant cost increases associated with higher labour, consultant, contractor and material costs
  - to reduce the backlog in stormwater and potable water network maintenance including leak repairs
  - leaks are more expensive to detect and repair given the uplift of 20% in contractor costs. They are also becoming increasingly more complex to repair.
- 35. Figure 3 shows previous reactive maintenance expenditure, forecast expenditure for FY2022/23 against budget and the proposed increase reflecting the factors noted above. As shown in Figure 3, Wellington Water's recommended budget increase is consistent with current trends, noting that current forecasts for FY2022/23 indicate expenditure of \$7.066m for reactive maintenance.

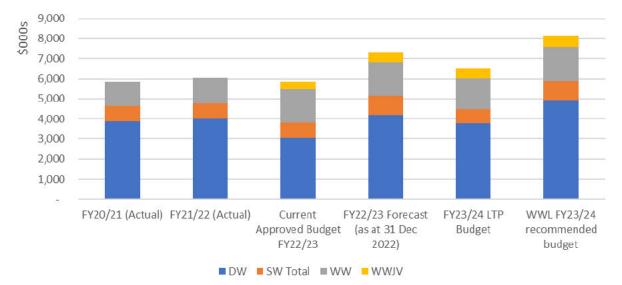


Figure 3: Actual, budget, forecast and proposed reactive maintenance budgets FY2020/21 - FY2023/24

Supplementary advice to Hutt City Council regarding Three Waters Operating Expenditure for the 2023/24 Annual Plan

- 36. Within the Reactive Maintenance investment category recommended budget, \$0.425m could be deferred, however, there is a risk in doing so. This funding is being requested to enable an uplift in strategic leak repairs as part of the Sustainable Water Supply and Demand programme (\$0.225m), and carbon reduction for the wastewater joint venture (\$0.200m). We strongly recommend as a priority, consistent with Council's early signals, increased investment in Sustainable Water Supply activities.
- 37. Approximately \$6.159m of the reactive maintenance budget could be reduced by actively choosing to reduce or stop responding to certain unplanned network maintenance jobs for all water types, including the joint venture. The risks with reducing the budget for unplanned network maintenance in FY2023/24 include:
  - A reduction or a complete stop of non-urgent instructed works, such as the installation of new valves to reduce the size of a shutdown area, or customer requests/complaints. The consequence of not doing instructed works is that we fail to improve the efficient operation of the network, so water outage areas become bigger, resulting in longer outages with a greater number of customers affected
  - A reduction in targeted subcontractor spend would reduce the available resources to attend to customer calls, by only attending to high priority or medium priority (P1 and P2) work requests. This means that the non-urgent work backlog will grow.

An analysis of leakage data (see Figure 4) reveals that despite undertaking a comparable number of repairs during the first half of the current financial year (FY2022/23) compared to the previous financial year (FY1021/22), the backlog of unresolved leaks remains high at 325. This is due to an increase in the number of reported leaks in the current financial year (FY2022/23), which is already exceeding the total number of reported leaks for the entirety of the previous financial year. While there are no specific projections for the number of leak repairs forecast to be completed in the coming financial year (FY2023/24), the current backlog, which is 41% higher than the total backlog of the previous financial year, suggests that a greater number of repairs will be necessary to prevent further escalation of the backlog.

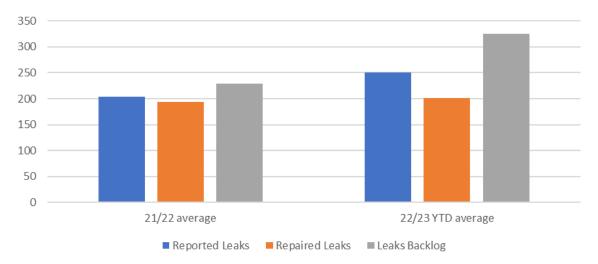


Figure 4: Reported, Repaired and Backlog Leaks – FY21/22 – FY 22/23 (Year to date)

Any significant reduction of subcontractor spend will likely drive skilled workers elsewhere and securing them back, if additional funding becomes available, will take time. We note that the current job backlog sits at over 1,014 jobs (see Figure 5) and increases to this number would likely result in increased customer dissatisfaction.



Figure 5: Number of open jobs (June 2020 - January 2023)

- It has been observed that since the first quarter of FY2022/23, the unit price for wastewater and stormwater jobs has experienced a roughly 37% increase. As a result, completing the same number of jobs in the second quarter has become more costly in comparison to the first quarter. Any additional pressure on the reactive maintenance budget is likely to have a significant impact on Wellington Water's ability to provide appropriate levels of service in FY2023/24.
- A reduction in after-hours jobs would reduce costs given the penal rates applied. After hours work is mainly governed by the type of work required. There could be a significant risk to local businesses with this approach, as water supplies may be cut during the working day to address issues that could otherwise be addressed at night.
- 38. It is important to note that the proposed operating budget for FY2023/24 does not account for any allocation of funds for unforeseen emergency events. These types of expenses are typically handled through separate funding channels by the Council.

#### **Treatment plant**

- 39. The Treatment Plant investment category groups all activities relating to the operation of both wastewater and wastewater joint venture treatment plants. This includes planned and reactive maintenance, operations, and investigations<sup>1</sup>.
- 40. Wellington Water advises that the proposed budget for Treatment Plants is unavoidable, covering activities essential in delivering this service.
- 41. The recommended budget for Treatment Plants for FY2023/24 is \$8.368m, which is \$1.052m above the LTP allocated budget of \$7.316m, as indicated in Table 6 below:

| Investment Category<br>(\$000s) | Water Type                  | 2023/24 LTP Budget | 2023/24<br>Proposed Budget | Increase above<br>LTP Budget |
|---------------------------------|-----------------------------|--------------------|----------------------------|------------------------------|
|                                 | Wastewater                  | 315                | 249                        | (65)                         |
| Treatment Plant                 | Wastewater Joint<br>Venture | 7,002              | 8,119                      | 1,117                        |
|                                 | Total                       | 7,316              | 8,368                      | 1,052                        |

Table 6: Summary of proposed Treatment Plant OPEX for FY2023/24 by water type

42. As a proactive measure, Wellington Water has already implemented cost savings by deferring treatment plant investigations, resulting in a reduction of \$0.65m in the wastewater budget. This has

<sup>1</sup> This is different to the OPEX budgets for all other activities delivered by Wellington Water which are separated under the relevant investment category.

Supplementary advice to Hutt City Council regarding Three Waters Operating Expenditure for the 2023/24 Annual Plan

been reflected in the recommended budget numbers and explains why the proposed budget is lower than the LTP approved budget.

- 43. In addition to general inflation factors, the following key drivers account for the increase in the recommended Treatment Plant budget (both Wastewater and Wastewater Joint venture):
  - a 15% increase has been assumed over projected costs for FY2022/23 for gas
  - the cost of power is expected to increase in FY2023/24 by 55% over the current FY2022/23 budget<sup>2</sup>
  - the tariff for sludge disposal is increasing from \$207/tonne in FY2022/23 to \$347/tonne for FY2023/24 (including GST and the plant operator's 9% markup)
  - a Consumer Price Index (CPI) of 20% has been assumed impacting management and overhead costs (not included within Wellington Water's general Management and Advisory Services fee) and maintenance and operational costs
  - variation in the contract with the Plant Manager, Veolia, which is currently under negotiation
  - increase in outfall pipe maintenance we have budgeted an allowance for two incidents in FY2023/24 based on current trends.
- 44. Figure 6 highlights the growth in the recommended budget for FY2023/24, reflecting the factors noted above driving cost increases.

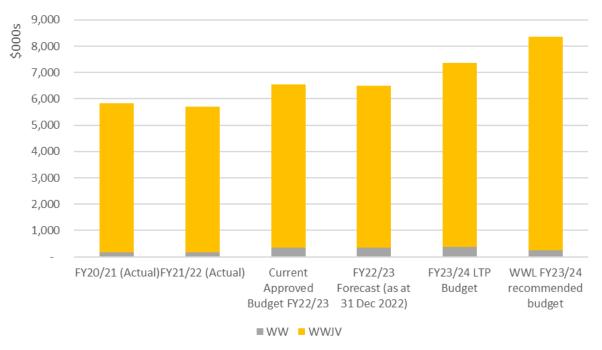


Figure 6: Actual, budget, forecast and proposed Treatment Plant budgets FY2020/21 - FY2023/24

45. Reducing treatment plant planned maintenance would increase the likelihood of equipment malfunction and failure. This could result in a severe disruption to treatment plant operations. Such disruptions could have a significant negative impact on service levels from decreased efficiency in the treatment of wastewater and potential environmental degradation associated with the release of untreated wastewater. As such, it is crucial that an adequate level of preventative maintenance is maintained to minimise the risk of equipment breakdown and ensure continuity of service.

<sup>2</sup> Figures based on the January 2023 approved electricity tender recommendation.

Supplementary advice to Hutt City Council regarding Three Waters Operating Expenditure for the 2023/24 Annual Plan

#### **Management and Advisory Services**

- 46. A total budget of \$4.164m is recommended for Management and Advisory Services. This is \$0.144m lower than the allocated LTP budget of \$4.308m (including the uplift approved by Council on 20 December 2022).
- 47. The reason for this difference is due to a difference in the information held between Wellington Water and the Council's systems which has since been resolved. It is recommended this difference be used to address the shortfalls identified within other investment categories.



## Advice Hutt City Council Regarding Three Waters Capital Delivery Plan for the Financial Years 2023/24 and 2024/25

| то        | , Strategic Advisor, Hutt City Council   |
|-----------|--|
| COPIED TO | , Head of Service Planning, Wellington Water; , General Manager<br>Customer Operations, Wellington Water |
| FROM      | , Group Manager Network Strategy & Planning, Wellington Water  |
| DATE      | 27 April 2023  |

#### Action sought

|                   | Action sought   | Deadline    |
|-------------------|---|-------------|
| Strategic Advisor | Note the contents of this paper and respond in writing to the recommendations | 24 May 2023 |

#### Contact for telephone discussion (if required)

| Name | Position   | 1st Contact |
|------|--|-------------|
|      | Group Manager Network Strategy & Planning,<br>Wellington Water |             |
|      | Head of Service Planning, Wellington Water                     | x           |

#### Purpose

- 1. This paper advises Hutt City Council (Council) of:
  - a. the capital delivery plan Wellington Water Limited (Wellington Water) plans to deliver within the approved FY2023/24 budget; and
  - b. an indicative capital delivery plan for FY2024/25.
- 2. This paper advances our previous advice to Council dated 2 February 2022.

#### Recommended action

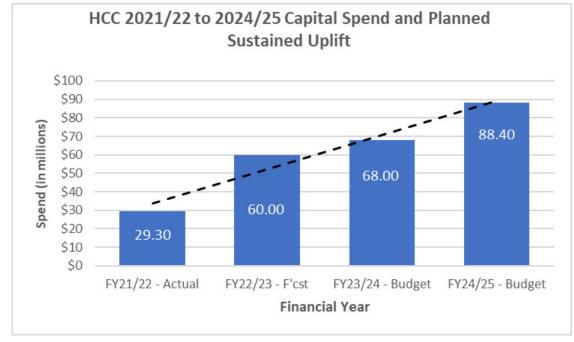
It is recommended that Council:

- a. **confirm** the three waters capital budget for FY2023/24 is \$68.00m;
- b. **agree** to carry over any remaining budget from FY2022/23 into the final budget for FY2023/24,
- c. **note** that the total value of the projects in the FY2023/24 capital delivery plan has been intentionally overprogrammed to exceed Council's FY2023/24 budget to mitigate the risk of underspend;
- d. **note** that Wellington Water is signalling an indicative FY2024/25 budget of \$88.40m, \$6.20m above Council's FY2024/25 approved Long Term Plan (LTP) budget of \$82.20m, to continue year-on-year growth of the capital delivery plan;
- e. **note** that the proposed capital delivery plan for FY2024/25 is indicative only and is subject to funding approval through the Council FY2024-34 Long-Term Plan or Three Waters Reform processes (pending confirmation on requirements from the Department of Internal Affairs);
- f. **note** that this advice will be released and published on Wellington Water's public website, subject to any redactions consistent with the Local Government Official Information and Meetings Act 1987, once Council has considered and made decisions regarding this advice.

#### FY2023/24 and FY2024/25 Capital Delivery Plan

- 3. In previous advice to you dated 2 December 2022 and 2 February 2023 respectively, we confirmed we are seeking a CAPEX budget of between \$65-68m for FY2023/24, exceeding Council's 3-year Long-Term Plan (LTP) budget by between \$3m-\$6m. It was recommended that Council increase the total CAPEX budget available for the three-year 2021-24 LTP to \$154-\$157m. On 23 March 2023, in response to this recommendation, Council approved a FY2023/24 budget of \$68.00m.
- 4. As noted in our previous advice, Wellington Water has been working on sustainably growing the capital programme over the past few years. Council's FY2024/25 LTP budget is \$82.2m and while the final funding levels from FY2024/25 onwards are subject to Council LTP and Three Waters Reform processes, Wellington Water proposes an indicative FY2024/25 budget of \$88.4m should be considered by Council. This level of funding would continue the year-onyear capital growth model. It would also ensure Council's capital programme is well placed with a healthy level of capital investment underway when Council's assets move into a new three waters entity.

5. An FY2024/25 budget of \$88.4m is a 30% increase on the approved FY2023/24 budget. This will ensure Council's capital programme is well placed with a healthy level of capital investment underway when Council's assets move into a new entity.



6. Figure 1 illustrates the year-on-year growth of Council's capital delivery plan.

Figure 1: Hutt City Council CAPEX – FY2021-2025

- 7. We have now developed a capital delivery plan for FY2023/24 and indicative plan FY2024/25 budgeted between:
  - a. FY2023/24: \$68.00m (100%) \$79.03m (116% overprogrammed); and
  - b. FY2024/25: \$88.40m (100%) \$141.63m (160% overprogrammed).
- 8. The overprogrammed budgets help mitigate delivery risk and ensure the capital delivery plan comes in close to budget at the end of the financial year. This is achieved by having new projects available to start should the schedules of other projects underway start to shift.
- Council's FY2023/24 overprogrammed capital delivery plan includes a total of 126 projects. Our intention is to manage delivery of these projects within the approved budget. The FY2023/24 plan comprises:
  - 76% renewals projects by value = \$60.59m
  - Seven major projects = \$10.15m
  - 119 other capital projects (including Projects self-delivered by operations (minor works and reactive)) = \$68.88m, of which:
    - 10 are VHCA projects = \$6.67m
  - significant renewal and level of service investment in the Seaview Wastewater Treatment Plant = \$8.77m.
- 10. The capital delivery plan also includes drinking water reactive renewals. This is to support the water loss initiative and renew water pipes that repeatedly leak rather than keep repairing them. This is more effective and efficient, overall causing less down time of the water network and reducing overall water loss.

## 11. Table 1 illustrates expenditure levels of the overprogrammed FY2023/24 and FY2024/25 capital delivery plan by water type and Local Government Act 2002 (LGA) classification.

| Water                   | LGA<br>Category     | FY2023/24 Approved<br>Budget (\$) | FY2023/24<br>Overprogrammed<br>Budgeted (\$) | FY2024/25 Indicative<br>Proposed Funding (\$)<br>(1) | FY2024/25<br>Overprogram<br>med Budgeted<br>(\$) |
|-------------------------|---------------------|-----------------------------------|--|--|--|
| Drinking Water          | Growth<br>Level of  | 495,521                           | 2,025,000                                    | 644,177  | 25,025,000                                       |
|                         | Service             | 4,821,888                         | 5,999,988                                    | 6,268,454  | 13,035,870                                       |
|                         | Renewal             | 20,453,542                        | 18,608,300                                   | 26,589,605   | 18,215,000                                       |
| Total Drinking<br>Water |                     | 25,770,951                        | 26,633,288                                   | 33,502,236   | 56,275,870                                       |
| Stormwater              | Growth              | 179,107                           | 2,150,000                                    | 232,839  | 2,600,000  |
|                         | Level of<br>Service | 2,595,967                         | 1,037,333                                    | 3,374,757  | 1,583,066  |
|                         | Renewal             | 1,368,867                         | 11,589,091                                   | 1,779,527  | 9,788,550  |
| Total Stormwater        |                     | 4,143,941                         | 14,776,424                                   | 5,387,123  | 13,971,616                                       |
| Wastewater              | Growth              | 5,240,518                         | 1,200,000                                    | 6,812,673  | 6,100,000  |
|                         | Level of<br>Service | 6,461,899                         | 1,179,867                                    | 8,400,469  | 5,228,000  |
|                         | Renewal             | 26,382,684                        | 23,041,490                                   | 34,297,489   | 30,751,738                                       |
| Total<br>Wastewater     |                     | 38,085,101                        | 25,421,357                                   | 49,510,631   | 42,079,738                                       |
| Wastewater JV           | Growth              | -                                 | ÷  |  | 5  |
|                         | Level of<br>Service | ÷                                 | 4,846,600                                    | -  | 4,531,600  |
|                         | Renewal             | -                                 | 7,350,000                                    |  | 24,770,000                                       |
| Total<br>Wastewater JV  |                     | -                                 | 12,196,600                                   | 12   | 29,301,600                                       |
| Grand Total             |                     | 67,999,993                        | 79,027,669                                   | 88,399,991   | 141,628,824                                      |

Table 1: Summary of proposed overprogrammed expenditure for FY2023/24 and FY2024/25 by water and LGA classification (\$)

(1) Subject to confirmation through the Council LTP process and/ or by the NTU.

12. Council's overprogrammed capital delivery plan includes seven major projects and three significant projects that together amount to 42% and 85% of the FY2023/24 budget and FY2024/25 indicative proposed budget respectively. Table 2 highlights these projects.

Table 2: Major Projects for FY2023/24 & FY2024/25 by Water and LGA Classification (\$)

| Water             | LGA<br>Classificati<br>on | Project Name   | FY2023/24<br>WWL<br>Recommen<br>ded<br>Budgeted<br>(\$s) | FY2024/25<br>WWL<br>Recommen<br>ded<br>Budgeted<br>(\$s) |
|-------------------|---------------------------|--|--|--|
| Drinking<br>Water | Growth                    | Naenae No 2 Reservoir and Outlet Main                                      | 2,000,000  | 25,000,000   |
|                   | Total                     |  | 2,000,000  | 25,000,000   |
| Wastewater        | Growth                    | Seaview Wastewater (excl JV) Treatment Plant storage                       | 50,000   | 500,000  |
|                   | Renewal                   | Seaview WWTP Sludge Dryer  | 2,000,000  | 10,000,000   |
|                   |                           | Seaview WWTP Outfall   | 1,000,000  | 2,000,000  |
|                   | Total                     |  | 3,050,000  | 12,500,000   |
| Wastewater        | Level of                  |  |  |  |
| JV                | Service                   | Seaview WWTP Wastewater Storage  | 1,900,000  | 920,000  |
|                   | Renewal                   | Trunk Type B Network Development - Petone Collecting<br>Wastewater Upgrade | 2,000,000  | 15,000,000   |

| Proportion of     | approved/ ind   | icative proposed budget  | 42%        | 85%        |
|-------------------|-----------------|--|------------|------------|
| Grand Total       |                 |  | 18,500,000 | 21,500,000 |
|                   | Total           |  | 11,500,000 | 11,500,000 |
|                   | 4               | Knights Road - Colin Grove E Coli - Wastewater   | 5,500,000  | 5,500,000  |
| Wastewater        | Renewal         | Avalon WW Renewals Programme 21-22   | 6,000,000  | 6,000,000  |
|                   | Total           |  | 7,000,000  | 10,000,000 |
| Drinking<br>Water | Renewal         | HCC Water Main Renewals  | 7,000,000  | 10,000,000 |
| Other significa   | nt projects >\$ | 5M   |            |            |
| Grand Total       |                 |  | 10,150,000 | 53,420,000 |
|                   | Total           |  | 5,100,000  | 15,920,000 |
|                   |                 | Trunk Type B Network Development - Barber Grove to<br>Wastewater Treatment Plant Duplication | 1,200,000  |            |

Appendix A provides the full list of projects that make up Councils overprogrammed FY2023/24 capital delivery plan and indicative FY2024/25 capital delivery plan.

#### Risks

- 13. Changes to the Three Waters Reform, and the subsequent requirement for councils to include water infrastructure in their 2024-34 LTPs, increases uncertainty of the short-term budgets available for the capital programme. Wellington Water has continued to plan for a capital delivery plan in FY2024/25 that follows the year-on-year capital delivery plan growth model, despite this uncertainty. Continuing with this approach ensures Council is aware of the flow on investment needs in FY2024/25 that result from investment decisions made in FY2023/24. It also highlights to the National Transition Unit, and sector, that Council has a programme of capital work ready to continue beyond next financial year.
- 14. 85% of the indicative proposed FY2024/25 budget of \$88.4m is made up of major and significant projects that have already commenced or are due to start in FY2023/24. If all these projects do become committed prior to FY2024/25, there will be limited budget available for other programmes of work in Council's capital delivery plan unless funding is increased above the level Wellington Water is currently signalling should be adopted at a minimum (\$88.4m). Note, the proportion of the budget made up of major and significant projects increases to 91% of the FY2024/25 capital delivery plan if FY2024/25 budgets remain at the current LTP level of \$82.2m. To mitigate this risk, Council could consider increasing the FY2024/25 budget above \$88.4m. This will ensure as many projects as possible which have started in FY2022/23 or earlier, can continue to progress through FY2024/25. Without additional FY2024/25 budget, some projects may need to be slowed down or pushed out.
- 15. As noted, Wellington Water intends to manage the programme within the overall approved budget but to do this, some projects may need to be slowed down or pushed out. This type of programme management approach will likely increase individual project costs further.
- 16. As noted in previous advice to Council, Wellington Water is experiencing significant increases in the costs of material and labour due to higher than anticipated inflation and market capacity pressures. This has placed pressure on Council's capital delivery plan, meaning fewer projects may be delivered in FY2023/24 than initially planned for in the LTP.
- 17. Should inflationary pressures continue to put pressure on project budgets as currently scoped, Council may need to make decisions around rescoping projects, reallocating budgets from lower priority projects, or increasing budgets throughout the year.
- 18. Industry-wide resource and supply chain constraints of both materials and personnel continue to impact the delivery of projects. To mitigate the likelihood and impact of this risk, we will continue to work with consultants and contractors to only propose projects in the

overprogrammed capital delivery plan that we are confident of delivering within the approved budgets.

#### Next steps

19. Please provide a response to the recommendations in this paper to **2023**.

| Water  | LGA Classification | Project Name   | Asset Type      | FY2023/24 WWL<br>Recommended<br>Overprogrammed<br>Budgeted (\$s) | FY2024/25 WWL<br>Recommended<br>Overprogrammed<br>Budgeted (\$s) |
|--|--------------------|--|-----------------|--|--|
| Drinking Water   | Renewal            | HCC Water Main Renewals  | Network         | 7,000,000  | 10,000,000   |
| Drinking Water   | Renewal            | Wainuiomata Water Supply Renewals 21 - 22                                  | Network         | 4,000,000  | 4,000,000  |
| Drinking Water   | Renewal            | Ava Street Water Main Renewal  | Network         | 1,800,000  | 1,000,000  |
| Drinking Water   | Renewal            | Closing Bulk Water Cross Connections - Rata and Sunville Rezoning          | Network         | 1,100,000  | <del>.</del>   |
| Drinking Water   | Renewal            | Kamahi Street Pressure Control Valve Installation                          | Control systems | 1,000,000  | 10,000   |
| and the second sec | Renewal            | Dedicated Service Connections Renewals                                     | Network         | 900,000  | 900,000  |
| Drinking Water   | Renewal            | HCC Reservoir VHCA Remedial Works  | Reservoirs      | 600,000  | 500,000  |
| Drinking Water   | Renewal            | Waddington Drive (Naenae Road to Seddon to Rata Street) water main renewal | Network         | 200,000  |  |
| Drinking Water   | Renewal            | HCC District meter area PLANNED renewals                                   | Network         | 200,000  | 200,000  |
| Drinking Water   | Renewal            | HCC Reactive Renewals (Water Supply)                                       | Network         | 140,000  | 100,000  |
| Drinking Water   | Renewal            | Taita Pump Station Renewals  | Pump Stations   | 100,000  | 50,000   |
| Drinking Water   | Renewal            | WCC PRV Renewals   | Network         | 100,000  | 100,000  |
| Drinking Water   | Renewal            | HCC Water Pump Station PLANNED Renewals                                    | Pump Stations   | 90,000   | 50,000   |
| Drinking Water   | Renewal            | HCC Water Pump Station REACTIVE Renewals                                   | Pump Stations   | 85,000   | 50,000   |
| Drinking Water   | Renewal            | HCC Reactive Works Reservoirs (Operations)                                 | Reservoirs      | 75,000   | 75,000   |
| Drinking Water   | Renewal            | HCC WS Reactive Renewals - Storage   | Reservoirs      | 60,000   | 60,000   |
| Drinking Water   | Renewal            | HCC District meter area REACTIVE renewals                                  | Network         | 50,000   | 75,000   |
| Drinking Water   | Renewal            | (WSP_02.1) Reservoir leakage remediation - HCC                             | Reservoirs      | 25,000   | 25,000   |
| Drinking Water   | Renewal            | HCC Resilient Reservoir Emergency Supply Equipment Procurement             | Reservoirs      | 22,000   |  |
| Drinking Water   | Renewal            | Wilkie Cres Watermains Renewal and Upgrade                                 | Network         | 20,000   | -  |
| Drinking Water   | Renewal            | Copeland Street and Oxford Terrace – Critical Pipelines Seismic Upgrade    | Network         | 20,000   | <del>.</del>   |
| Drinking Water   | Renewal            | HCC Security Locks Reservoirs  | Reservoirs      | 20,000   | 20,000   |
| and a second   | Renewal            | HCC CIR Equipment Renewals   | Other           | 1,300  | -  |
| Drinking Water   | Renewal            | Drinking Water Reactive Renewals   | Network         | 1,000,000  | 1,000,000  |
| Drinking Water   | Level of Service   | District Meter Area (DMA) meter fleet                                      | Network         | 250,000  | 172  |
| Drinking Water   | Level of Service   | Localised Pressure Management Pilot  | Network         | 100,000  | <u> </u>   |
| Drinking Water   | Level of Service   | Naenae Reservoir - Water Safety  | Reservoirs      | 20,000   | -  |
| Drinking Water   | Level of Service   | HCC Management of Fire Hydrant Use   | Other           | 650,000  | <u></u>  |
| Drinking Water   | Level of Service   | Point Howard to Lowry Bay Link Main  | Network         | 200,000  | 4,000,000  |
| Drinking Water   | Level of Service   | Kingsley Reservoir Seismic replacement                                     | Reservoirs      | 500,000  | 500,000  |
| Drinking Water   | Level of Service   | HCC Modelling - Potable Water Network                                      | Non-asset based | 40,000   | 50,000   |
|  | Level of Service   | HCC Firefighting upgrades - Hutt Valley Floor                              | Network         | 100,000  | 1,362,192  |
| Drinking Water   | Level of Service   | Critical Pipelines Seismic Upgrade - Maungaraki Reservoir inlet main       | Network         | 10,000   | 90,000   |

#### Appendix A: Projects for FY2023/24 & FY2024/25 by Water, LGA Classification and Asset Investment Category (\$)

| Drinking Water | Level of Service | City pump stations seismic strengthening programme - provisional subject to further assessment           | Pump Stations                | 10,000    | 60,000     |
|----------------|------------------|--|------------------------------|-----------|------------|
| Drinking Water | Level of Service | Critical Pipelines Seismic Upgrade - Myrtle St   | Network                      | 10,000    | 50,000     |
| Drinking Water | Level of Service | Commerical Water Meter - Change of Ownership   | Network                      | -         | 500,000    |
| Drinking Water | Level of Service | Critical Pipelines Seismic Upgrade - Major Drive   | Network                      | 10,000    | 40,000     |
| Drinking Water | Level of Service | HCC Firefighting upgrades - Wainuiomata  | Other                        | 39,706    | 397,062    |
| Drinking Water | Level of Service | Critical Pipelines Seismic Upgrade - Hutt Road   | Network                      | 10,000    | 35,000     |
| Drinking Water | Level of Service | Sweetacres Watermain Upgrade + PRV + meter   | Network                      | 21,082    | 210,816    |
| Drinking Water | Level of Service | HCC Authorised Tanker Fill Points  | Network                      | 6,000     | 60,000     |
| Drinking Water | Level of Service | Critical pipelines seismic upgrade - 21 George St Emergency Cross Connection (Kingsley to Delaney zones) | Network                      | -         | 40,000     |
| Drinking Water | Level of Service | Korokoro water pump station seismic upgrade  | Pump Stations                | -         | 30,000     |
| Drinking Water | Level of Service | Stokes Valley and Wainuiomata Galvanised Iron RiderMain Renewals   | Network                      | 3,000,000 | 5,000,000  |
| Drinking Water | Level of Service | Reservoir Access Health and Safety Improvements  | Reservoirs                   | 20,000    | 20,000     |
| Drinking Water | Level of Service | Pressure Management Stage 2 - Pressure monitoring and optimisation - HCC                                 | Network                      | 703,200   | 590,800    |
| Drinking Water | Level of Service | Reservoir safety improvements  | Reservoirs                   | 300,000   | -          |
| Drinking Water | Growth           | Naenae No 2 Reservoir and Outlet Main  | Reservoirs                   | 2,000,000 | 25,000,000 |
| Drinking Water | Growth           | Drinking water development projects – reactive   | Other                        | 25,000    | 25,000     |
| Stormwater     | Renewal          | Naenae VHCA SW Buller Grove Renewals   | Network                      | 4,886,371 | -          |
| Stormwater     | Renewal          | Knights Road - Colin Grove E Coli - Stormwater   | Stormwater Storage/Treatment | 3,500,000 | 4,500,000  |
| Stormwater     | Renewal          | Jackson Street Stormwater Renewals   | Network                      | 2,600,000 | 3,500,000  |
| Stormwater     | Renewal          | Te Mome Pump Station Renewal and Optimisation  | Pump Stations                | 300,000   | 500,000    |
| Stormwater     | Renewal          | SWPS_Pump Station Reactive Renewals (SW)   | Pump Stations                | 60,000    | 60,000     |
| Stormwater     | Renewal          | VHCA - Horlor St to Pilcher Cres SW Renewal  | Network                      | 50,000    | 150,000    |
| Stormwater     | Renewal          | Manor Park Reservoir   | Reservoirs                   | 50,000    | 50,000     |
| Stormwater     | Renewal          | HCC Stormwater Pump Stations PLANNED Renewals  | Pump Stations                | 50,000    | 50,000     |
| Stormwater     | Renewal          | HCC-SW-VHCA Pipe Renewal Programme   | Network                      | 40,000    | 500,000    |
| Stormwater     | Renewal          | VHCA - 427 Hutt Road SW Renewal  | Network                      | 27,962    | 27,962     |
| Stormwater     | Renewal          | Stokes Valley VHCA SW Renewals Project   | Network                      | 24,758    | 450,588    |
| Stormwater     | Level of Service | Freshwater Management tool - Build   | Non-asset based              | 100,000   | 100,000    |
| Stormwater     | Level of Service | HCC Global consent for operations and maintenance works in streams                                       | Resource Consents            | 15,000    | 15,000     |
| Stormwater     | Level of Service | Wellesley College stream inlet and outlet erosion protection   | Network                      | 20,000    | -          |
| Stormwater     | Level of Service | Muritai Rd (92-96) Rona St, Marine Parade (19) Stormwater Upgrades                                       | Network                      | 200,000   | 200,000    |
| Stormwater     | Level of Service | Stokes Valley Catchment Flood Mitigation   | Network                      | -         | 20,000     |
| Stormwater     | Level of Service | HCC Stormwater Management Strategy   | Non-asset based              | 150,000   | 125,000    |
| Stormwater     | Level of Service | HCC Stormwater Network Modelling   | Non-asset based              | 200,000   | 250,000    |
| Stormwater     | Level of Service | Network discharges programme: subcatchment stormwater management plan                                    | Non-asset based              | 189,000   | 237,600    |
| Stormwater     | Level of Service | SP3-1 - CAPEX SW quality: Green Infrastructure Delivery  | Other                        | 23,333    | 233,333    |
| Stormwater     | Level of Service | DC3 - CAPEX SW quality: Restoring and/or daylighting natural channels.                                   | Other                        | -         | 20,000     |
| Stormwater     | Level of Service | OM4-1 - CAPEX SW quality: Condition assessments Programme  | Non-asset based              | 20,000    | 100,000    |

| Stormwater | Level of Service | SP7-1 - CAPEX SW quality: Leading by Example                                 | Other             | 20,000    | 100,000    |
|------------|------------------|--|-------------------|-----------|------------|
| Stormwater | Level of Service | Capital Carbon Modelling   | Non-asset based   | -         | 35,000     |
| Stormwater | Level of Service | MI3 - CAPEX SW quality: Site-specific contaminant load model                 | Non-asset based   | -         | 23,333     |
| Stormwater | Level of Service | OM1-1 - CAPEX SW quality: Enhanced Streams Works programme                   | Non-asset based   | -         | 21,000     |
| Stormwater | Level of Service | MI2 - CAPEX SW quality: Regional Contaminant Load Model                      | Non-asset based   | -         | 2,800      |
| Stormwater | Level of Service | Climate Resilience Plan  | Non-asset based   | 100,000   | 100,000    |
| Stormwater | Growth           | Woburn Stormwater Upgrades (PS+Pipeline)                                     | Network           | 1,000,000 | 1,000,000  |
| Stormwater | Growth           | Black Creek improvements - A   | Network           | 50,000    | 500,000    |
| Stormwater | Growth           | Melling Stormwater Upgrades (PS+Pipelines)                                   | Network           | 1,000,000 | 1,000,000  |
| Stormwater | Growth           | Stormwater development projects – reactive                                   | Network           | 100,000   | 100,000    |
| Wastewater | Renewal          | Avalon WW Renewals Programme 21-22   | Network           | 6,000,000 | 6,000,000  |
| Wastewater | Renewal          | Knights Road - Colin Grove E Coli - Wastewater                               | Network           | 5,500,000 | 5,500,000  |
| Wastewater | Renewal          | Gracefield Wastewater Renewals   | Network           | 3,000,000 | 20,000     |
| Wastewater | Renewal          | Wainuiomata Wastewater Renewals 21-22  | Network           | 3,000,000 | 20,000     |
| Wastewater | Renewal          | Seaview WWTP Sludge Dryer  | Treatment Plants  | 2,000,000 | 10,000,000 |
| Wastewater | Renewal          | Wainui Road and Rishworth Street Sewer Renewals                              | Network           | 1,100,000 | -          |
| Wastewater | Renewal          | Seaview WWTP Outfall   | Treatment Plants  | 1,000,000 | 2,000,000  |
| Wastewater | Renewal          | AliceTown - Hume Street Area Renewals  | Network           | 575,998   | 671,998    |
| Wastewater | Renewal          | Tama Street Area Renewals  | Network           | 265,492   | 309,741    |
| Wastewater | Renewal          | HCC Wastewater Pump Stations PLANNED Renewals                                | Pump Stations     | 200,000   | 400,000    |
| Wastewater | Renewal          | Naenae Wastewater Renewals   | Network           | 100,000   | 2,000,000  |
| Wastewater | Renewal          | Wainuiomata Wastewater Renewals  | Network           | 100,000   | 3,000,000  |
| Wastewater | Renewal          | HCC Wastewater Pump Stations REACTIVE Renewals                               | Pump Stations     | 100,000   | 80,000     |
| Wastewater | Renewal          | Bell Road  | Network           | 20,000    | -          |
| Wastewater | Renewal          | Naenae Sewer Renewals - Wilkie Swainson & Grierson Seddon St                 | Network           | 20,000    | -          |
| Wastewater | Renewal          | Stokes Valley Road Wastewater Renewal  | Network           | 20,000    | 400,000    |
| Wastewater | Renewal          | HCC-WW-VHCA Pipe Renewal Programme   | Network           | 20,000    | 50,000     |
| Wastewater | Renewal          | VHCA-Rising main ADS-Ava Sewer   | Network           | 20,000    | 150,000    |
| Wastewater | Renewal          | VHCA-Gravity main Epuni rail crossing  | Network           | -         | 100,000    |
| Wastewater | Renewal          | VHCA-Gravity main Esplanade 2  | Network           | -         | 30,000     |
| Wastewater | Renewal          | VHCA-Gravity main Esplanade  | Network           | -         | 20,000     |
| Wastewater | Level of Service | Epuni and Woburn WW Network Upgrades   | Network           | 150,000   | -          |
| Wastewater | Level of Service | HCC Wastewater Model   | Non-asset based   | 150,000   | 150,000    |
| Wastewater | Level of Service | Resource consent dry weather waste water network blockages                   | Resource Consents | 32,400    | 162,000    |
| Wastewater | Level of Service | Wainuiomata North Trunk Wastewater Renewals                                  | Network           | 270,000   | 4,700,000  |
| Wastewater | Level of Service | Smart Wastewater Network (Regional) - HCC                                    | Network           | 115,467   | -          |
| Wastewater | Level of Service | Taita Rock Wastewater Pipe Protection  | Network           | 300,000   | -          |
| Wastewater | Level of Service | Network Discharges Programme: Early establishment of collaborative committee | Non-asset based   | -         | 54,000     |

| Wastewater    | Level of Service | Network Discharges Programme: wet weather overflows Strategic Reduction Plan                     | Non-asset based   | 162,000    | 162,000     |
|---------------|------------------|--|-------------------|------------|-------------|
| Wastewater    | Growth           | Beaumont Ave WW pump station connection / storage tank   | Storage           | 50,000     | 500,000     |
| Wastewater    | Growth           | Lower Hutt CBD Wastewater (excl JV) Bypass   | Network           | 1,000,000  | 5,000,000   |
| Wastewater    | Growth           | Seaview Wastewater (excl JV) Treatment Plant storage   | Storage           | 50,000     | 500,000     |
| Wastewater    | Growth           | Wastewater (excl JV) development projects reactive   | Network           | 100,000    | 100,000     |
| Wastewater JV | Renewal          | Trunk Type B Network Development - Petone Collecting Wastewater Upgrade                          | Network           | 2,000,000  | 15,000,000  |
| Wastewater JV | Renewal          | Trunk Type B Network Development - Barber Grove to Wastewater Treatment Plant Duplication        | Network           | 1,200,000  | -           |
| Wastewater JV | Renewal          | Seaview WWTP UV Renewal Project  | Treatment Plants  | 1,000,000  | 3,000,000   |
| Wastewater JV | Renewal          | VHCA-Western Hutt Trunk Sewer Renwal JV  | Network           | 1,000,000  | 3,500,000   |
| Wastewater JV | Renewal          | HCC WWJV - Major Pump Stations PLANNED Renewals  | Pump Stations     | 600,000    | 500,000     |
| Wastewater JV | Renewal          | HCC WWJV - Major Pump Stations REACTIVE Renewals   | Pump Stations     | 400,000    | 300,000     |
| Wastewater JV | Renewal          | HCC JV WWTP Planned Renewals   | Treatment Plants  | 300,000    | 300,000     |
| Wastewater JV | Renewal          | Seaview WWTP Spares  | Treatment Plants  | 300,000    | 300,000     |
| Wastewater JV | Renewal          | HCC JV WWTP Reactive Renewals  | Treatment Plants  | 200,000    | 200,000     |
| Wastewater JV | Renewal          | Seaview WWTP Odour Control Modification/Upgrade  | Treatment Plants  | 150,000    | 250,000     |
| Wastewater JV | Renewal          | Seaview WWTP Aeration System Renewal   | Treatment Plants  | 100,000    | 1,000,000   |
| Wastewater JV | Renewal          | VHCA-Rising Main PS241   | Network           | 80,000     | 320,000     |
| Wastewater JV | Renewal          | Seaview Odour Control Modification/Upgrade   | Control systems   | 20,000     | 100,000     |
| Wastewater JV | Level of Service | Seaview WWTP Wastewater Storage  | Treatment Plants  | 1,900,000  | 920,000     |
| Wastewater JV | Level of Service | HCC Wastewater Trunk Resource Consent Renewals   | Resource Consents | 577,800    | 324,000     |
| Wastewater JV | Level of Service | Seaview WWTP RAS System Modification and Replacement   | Treatment Plants  | 500,000    | 1,000,000   |
| Wastewater JV | Level of Service | Seaview WWTP Milliscreens Replacement  | Treatment Plants  | 500,000    | 500,000     |
| Wastewater JV | Level of Service | Seaview WWTP Backup Power Supply Project   | Treatment Plants  | 200,000    | 500,000     |
| Wastewater JV | Level of Service | Seaview WWTP Sludge Dewatering Renewal   | Treatment Plants  | 150,000    | 300,000     |
| Wastewater JV | Level of Service | Seaview WWTP Screening Wash Press Replacement  | Treatment Plants  | 100,000    | 300,000     |
| Wastewater JV | Level of Service | Seaview WWTP Effluent Pump Station Renewal   | Treatment Plants  | 400,000    | -           |
| Wastewater JV | Level of Service | Seaview WWTP General Instrumentation Replacement   | Treatment Plants  | 100,000    | 250,000     |
| Wastewater JV | Level of Service | Network discharges programme: pilot subcatchment wastewater wet weather overflows reduction plan | Non-asset based   | 118,800    | 237,600     |
| Wastewater JV | Level of Service | Seaview WWTP Process Model Development   | Treatment Plants  | 200,000    | 100,000     |
| Wastewater JV | Level of Service | Seaview WWTP Clarifier Renewal   | Treatment Plants  | 100,000    | 100,000     |
|               |                  |  |                   | 79,027,669 | 141,628,824 |

# 2024-34 Investment Planning and Advice

**Hutt City Council** 

Step 1: Council briefing on challenges and priorities

13 September 2023 – pre-reading



# Purpose – Setting the scene for investment decisions in three waters for Hutt City



To outline the immediate and long-term challenges facing your three water assets and services; the nature of investment needed over the next 10 years; and seek your direction on the desired outcomes for water in your community



## Recap on investment in three waters from the 2021-31 Long Term Plan

Over the first three years of the 2021-31 Long Term Plan period, Hutt City Council has progressively increased investment in three waters

In the last Long Term Plan, the Hutt City Council made decisions to focus on getting the basics right with significant investment in core infrastructure including three waters. This investment supported:

- Increased funding for asset renewals to avoid asset failures and disruption of services
- Providing infrastructure required for future growth
- Ensuring sustainable water supply for the future including provision for water meters, recognising their role as an important tool to identify leaks and reduce water consumption
- Improving the health of urban waterways
- the move towards zero carbon through reduced operational carbon emissions
- Making infrastructure more sustainable and resilient to the impacts of climate change Thank you!



## The information and evidence we have to inform the 2024-34 Long Term Plan has improved

New knowledge gained, along with increased costs to meet levels of service, indicate that investment in three waters needs to increase

Since the 2021-31 Long Term Plan was developed, we have gained greater knowledge of Hutt City Council's three waters assets and future investment needs through:

- Asset condition and criticality assessments
- Hutt City Council Three Waters Growth Study 2022
- Regional sustainable water supply and demand strategy
- Global stormwater and wastewater overflow consents
- Refinement of the age based network and pump station renewals profiling
- New methodology for measuring and reporting on leaks and faults in the network
- Technical studies (e.g. material deterioration rates which helped identify the issue with leakage from Galvanised Iron pipes)



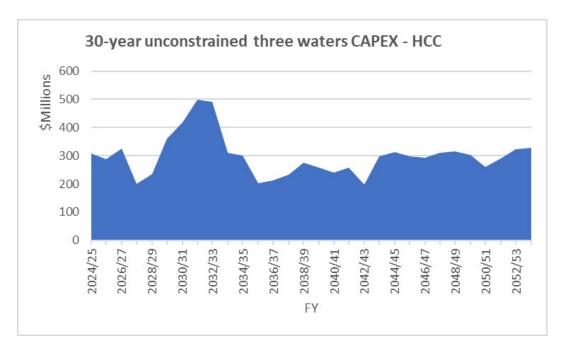
## Context for 2024-34 three waters investment decisions Wellington Water

The scale of three waters investment needed is significant and decisions made today will influence the activity that is delivered over the next ten years. Existing commitments will form the basis of investment in the short term.



# Context for 2024-34 three waters investment decisions Wellington (cont.)

Data collected for the NTU has provided a foundational, and unconstrained, view of the scale of investment need. While capital delivery has increased, there is a limit. Investment will be constrained by both delivery capacity and funding.



The graph shows forecast three waters capital works investment required for the next 30 years. This information has been provided to the NTU for its planning purposes in March 2023.

Caveats to note about this unconstrained 30-year view of Capital Expenditure:

- It is significantly greater than the current capital programme
- Would exceed the current capacity of the market to deliver
- The cost assumptions have formed the source inputs to the 2024-34 LTP, but are being updated to reflect current knowledge.
- The NTU submitted costs also include some duplications, where it is not yet clear which solution would be preferred

# Five priorities guide 2024-34 investment planning



#### These priorities support Hutt City's vision of a connected, resilient and inclusive city where everyone thrives.

The region's three waters strategic priorities are:

- Looking after existing infrastructure
- Supporting a growing population
- Sustainable water supply and demand
- Improving environmental water quality
- Achieving net zero carbon emissions

We also need to ensure resilience to natural hazards and the impacts of climate change is reflected.

The Water Committee has re-endorsed these priorities from the previous 2021-31 LTP and the National Transition Unit is supportive of them.

Each of these areas presents major challenges if we are to achieve the outcomes desired by communities.

# The headline challenges for water



#### Lower Hutt and the region face pressing issues for three waters

- Water assets are ageing at a faster rate than renewals. Historic underinvestment has resulted in aged infrastructure increasingly prone to failure
- We are facing *acute water shortages*, with demand increasing while supply is becoming more vulnerable
- The extent and speed of *urban growth is putting pressure on existing and future three waters infrastructure and services*, increasing the likelihood and consequences of network disruption and failing to meet performance expectations
- The *quality of water in the environment must be improved* to meet community expectations and regulations, but leaking, blocked or directly discharging stormwater and wastewater networks risk returning unsafe, contaminated water to the environment
- Risks from *natural hazards and climate change are leaving communities and water assets vulnerable* to disruption and economic loss

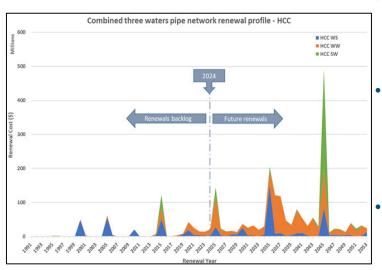
## Water assets are ageing faster than they're being renewed



# The desired state is where the reliability of the network improves and customers receive agreed levels of service across all three waters.

## What do we know?

- Based on length, an age-based desk-top study estimates approximately 51% of Lower Hutt's pipe network assets are due for renewal within the next 30 years (~31.5km per year)
- While investment in renewals has increased, it is still below the rate necessary to reduce the growing backlog (14.5km delivered FY22/23)
- We know more about the very high and high critical assets through condition assessments and this will ensure renewals investment is targeted at the highest need assets



The peaks on the left of the dashed line represent renewals that didn't happen; those on the right represent renewals that should happen.

## 2024-34 investment need

Continued investment in condition assessments and maintenance activities for the highest risk and priority very high and high criticality assets

Significant and targeted replacement of the highest risk network assets using latest condition and criticality assessments to minimise service failures

Year-on-year increase in renewals to address the renewals backlog and support the water loss strategy to maintain existing service levels

Significant investment is needed at the Seaview Wastewater Treatment Plant to address compliance, capacity, and emerging issues

## Metro Wellington is likely to face acute water shortages this summer and ongoing summers



The desired state is where water isn't wasted, supply meets demand, and customers and the network are more resilient in times of shortage

### What do we know?

- Water use in the Wellington metropolitan area continues to increase and is at an alltime high, primarily due to water loss across the network
- Approximately 37% of water being supplied to the Lower Hutt community is being lost through leaks in the public network
- Our supply capacity is no longer sufficient to meet summer peak demand due to treatment and distribution constraints
- To implement Whaitua recommendations, less water will be available during summer



Acute water shortages will mean increasing levels of water restrictions for residents

### 2024-34 investment need

Coordinated regional investment required over the next 10 years in:

- Water loss management activities such as leak detection and repair
- Demand management initiatives such as universal domestic water meters
- Additional storage capacity through the proposed Pākuratahi lakes

# Urban growth is putting pressure on three waters services

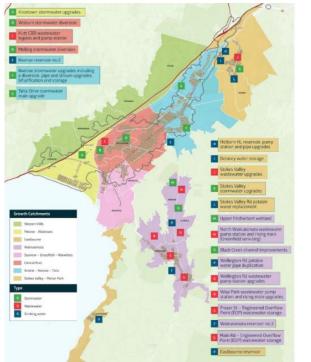


The desired state is where growth can be achieved while ensuring target levels of service are met or exceeded

## What do we know?

- A growth study completed late 2022 by Wellington Water forecast potential growth of 43% for HCC over 30 years (from 2021-2051)
- The study identified that there is a significant programme of investigative, design and physical works needed to meet the demands of future growth and bring existing networks to target levels of service
- The topography of the Hutt brings significant challenges for wastewater and stormwater
- Growth-driven initiatives typically also provide level of service benefits

Note: HCC has already approved \$174M within its budgets in water and wastewater growth works associated with Riverlink and the IAF programme



Location of proposed service improvements

## 2024-34 investment need

- Three waters investment in the order of \$1.27 billion will be required over the next 30 years to support the city's growth including:
  - New drinking water reservoir storage (Eastern Hills Reservoir)
  - New wastewater pump station and rising mains
  - Wastewater improvements to upgrade pipes, increase capacity and provide storage to address capacity constraints
  - Stormwater network capacity improvements and flood management
- Developers have a role to play in contributing to growth driven infrastructure needs

# The quality of water in the environment must be improved

The desired state is improved water quality. Te Mana o Te Wai is enhanced; mahinga kai regenerates; regulatory requirements are met, No-Swim days are reduced

## What do we know?

- Leaking, blocked or directly discharging stormwater and wastewater networks return unsafe, contaminated water to the environment
- Mana whenua iwi and our communities want our fresh and coastal waters to be healthy and clean
- The Government has put in place regulation that puts the health and wellbeing of water first, with Te Mana o te Wai at the heart of water management
- Global Stormwater Consent and Wastewater Network Overflow Consent have been lodged



Communities want to ensure that rivers remain swimmable. This will require substantial investment.

## 2024-34 investment need

- We need to change the way we manage stormwater and wastewater networks to reduce the frequency of wastewater overflows and reduce contaminants in stormwater entering the environment
- Improving the networks to support water quality targets will take decades and significant investment
- Ongoing investment to progressively implement the consents through activity such as:
  - source control and constructed wetlands for stormwater contaminants, and
  - inflow and infiltration programmes, storage tank, pump station and pipe upgrades, and treatment plant improvements for wastewater

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# The impacts of natural hazards and climate change are becoming more prominent



The desired state is where infrastructure and services adapt to the changing environment and corresponding land-use decisions. Carbon emission targets are met

### What do we know?

- Stormwater flooding analysis shows that parts of Lower Hutt are subject to flooding
- Council has acknowledged there is a climate emergency and signed up to Net Carbon Zero by 2050
- Lower Hutt contributes around 20% of Wellington Water's operational inventory carbon emissions with most of these coming from the Seaview Wastewater Treatment Plant
- There are opportunities to reduce emissions when renewing assets



Community water stations are part of ensuring a resilient water network

### 2024-34 investment need

- To ensure 10-year level of service against flooding risk is achieved, investment in initiatives to address existing flooding issues in Lower Hutt is required
- Improve available information on flooded properties
- Continue to investigate opportunities to reduce carbon emissions from assets
- Through the Hutt Valley Joint Venture, continue to invest in climate change risk assessments and associated initiatives

# **Operational Expenditure**



Council-owned three waters assets are ageing. This means they're not being renewed or replaced as quickly as they're wearing out, and means increasing issues and outages. Over time, this results in higher reactive costs including maintenance, repairs, and renewal. In response to this issue, Hutt City has increased its OPEX budgets.

- Operational expenditure activity includes:
  - Planned and reactive maintenance on all assets
  - Maintaining the systems needed to operate treatment plants, pump stations and valve assets
  - Investigations such as condition assessments, strategic studies, and some emergency investigations
  - Monitoring of consent compliance, water sampling and asset management
  - Indirect costs to manage three water assets on behalf of council
- As directed by legislation, the operational expenditure budgets recommended to council for the 2024-34 LTP, will ensure the levels of service currently planned to be provided this year, will at least be maintained
- For FY2023/2024, Hutt City Council approved Wellington Water's recommended three waters OPEX budget of \$29.974M to deliver agreed levels of service



Ageing networks break down more often, requiring more reactive repairs

# Shaping your direction for 2024-34 three waters investment



# We will be running an interactive session to identify the priorities that will be used to help shape proposed investment scenarios

#### Activity 1. Getting the renewal level right

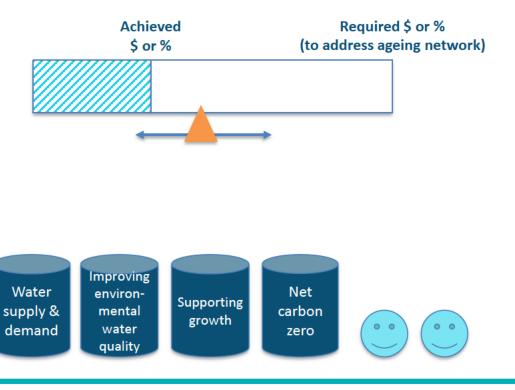
During the presentation we will talk about Looking After Existing Infrastructure and renewing them as foundational to good asset management.

If we don't renew things before they fail, we increase the risk of harm to people and the environment, poor service and higher operational costs in the long run.

Thinking about these risks and the other needs we outline, we seek to run an exercise to determine **Where would you like to see the renewal rate set? The same as last year? Less? Or higher?** 

#### Activity 2. What else should we do?

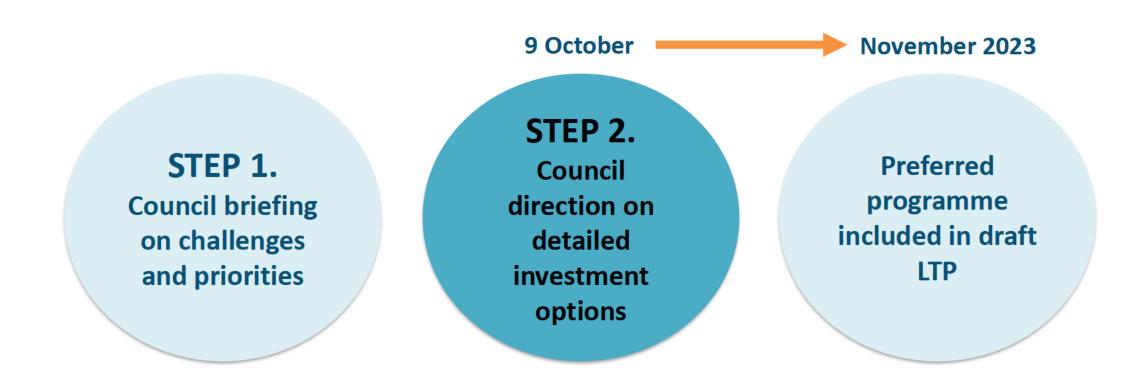
Thinking about the other priority areas – water shortage risk – environmental water quality – supporting growth – reducing carbon emissions (and noting that these outcomes are addressed through renewals as well), Which <u>two</u> of these would you prioritise?



# **Next steps**



## The process from here



# Hutt Valley Trunk Wastewater –

# Long Term Plan Investment Briefing

**Hutt Valley Services Committee** 

22 September 2023

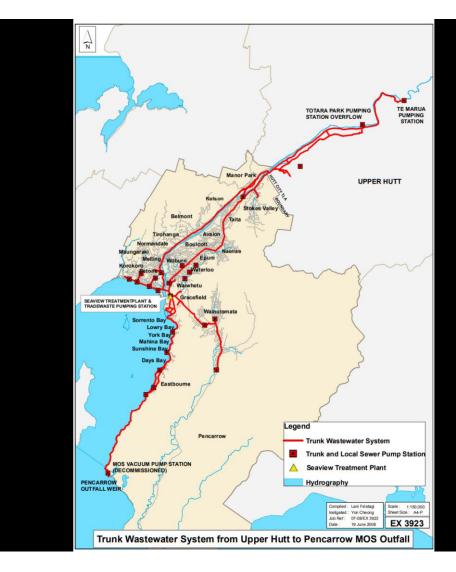




# Hutt Valley Trunk Wastewater System

The joint wastewater system serves the two Councils – Hutt City and Uppe

- Originally developed by the Hutt Valley Drainage Board, administered under the Hutt Valley Drainage Act 1967.
- The extent of the shared assets includes:
  - Approximately 95 kilometres of trunk pipelines
  - 24 wastewater pumping stations
  - Seaview WWTP and main pumping station
  - 18km Main Outfall Pipeline to Pencarrow outfall.
- Wainuiomata was incorporated into the system as part of the F Valley & Wainuiomata Wastewater Design Build Operate project
- Wainuiomata portion is funded solely by HCC.
- The allocation of costs is recalculated annually dependant on design capacity, water use and population.





## **Context for 2024-34 three waters investment decisions**

The scale of investment needed in Hutt Region is significant, and decisions made today will influence the activity that is delivered over the next ten years

Levels varied subject to Council funding decisions



- Councils need to provide water services to their communities for up to the first two financial years of their 2024-34 Long-Term Plans (LTP)
- From year 3 onwards, decisions on ongoing funding and pricing will be set by the new entity

- Existing commitments will form the basis of investment in the short term
- Costs associated with the Hutt Valley Trunk System will form commitments from both UHCC & HCC



# The Long Term Planning Process 2024-2034

Due to the age of the networks, there are a number of major investment within HVJV which needs to be considered in the upcoming LTP.

- The Long Term Planning process is currently underway and significantly more requests for projects have been made than current funding, or even the market deliverability.
- Under the Water Services Act, the Department of Internal Affairs National Transition Unit is effectively responsible for the 2026/27 and beyond years.
- A new prioritization tool for 2026 onward is being developed, liaising with councils on investment planning will be required.
- Cost estimates have increased significantly since 2021 LTP, under pressure from market inflation, revised approach to cost estimation and temporary work requirements.
- Not all of the investment proposals will not be able to be delivered, and the risk of not delivering them within recommended timeframes will have to be considered carefully.



# **Seaview Wastewater Treatment Plant Overview**

Services the Hutt Valley, Wainuiomata and Eastern Bays population of approximately 160,000 and treats 60 million litres /day

- Receiving wastewater since 1962
- Milliscreening since 1984
- Secondary & UV treatment since 2002
- Large site on reclaimed ground, low lying
- 18km pipe to Pencarrow outfall
- Wet weather and maintenance bypass to Waiwhetu Stream (fully treated)
- Sludge dryer on site, disposed at Silverstream landfill

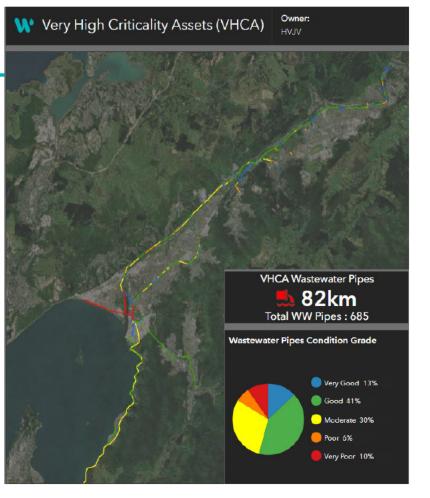




# Key issues – Investment is needed in the Network

Due to the condition of the network, there are a number of major renewal investments that need considering in the upcoming LTP. Increasing environmental requirements from Natural Resources Plan are also emerging.

- The Main Outfall Pipeline is the largest investment uncertainty, driven by consenting and water quality more than condition.
- The Petone Collecting Sewer is the main network renewal priority.
- The Ava Branch Sewer from Wakefield Street to the Esplanade is also considered poor condition.
- Some sections of the main gravity trunk mains have sections in poor condition.
- Whaitua plan changes will require network overflows to be reduced significantly over the coming years which may also require trunk network capacity upgrades.





# **Change will be required for Treated Wastewater disposal**

The 18km Main Outfall pipeline has been operating since 1962 and performance requirements are increasing to meet environmental and growth needs. The current bypass of the MOP to Waiwhetu Stream requires improvements to reconsent.

- There has been about one leak per annum since it was built, the outfall leaks may be increasing again, with three last year. Each leak requires bypass for approximately 1 week.
- Has had its maximum operating pressure lowered twice in order to reduce leak frequency.
- The capacity of the pipeline is further overloaded as increased wet weather flows are sent from Silverstream Storage Tank and from Wainuiomata to reduce wastewater overflows in the network.
- Growth projections in the Hutt Valley mean that significant increases in overflow frequency are expected.
- Maintaining the existing system will not be sustainable in the medium term.



# **Duplicating or Renewing Main Outfall Pipeline is complex**

Renewing the pipeline to the Pencarrow outfall is being considered. Alternatives to the outfall will also be considered. Outcome is safe and appropriate disposal of treated wastewater from the Hutt Valley.

- Initial concept work on alignment has identified three options for renewal
- Comparative estimates in 2022 ranged between \$546M and \$658M at Level 1 estimate
- Temporary outfalls are required for any work on the existing alignment
- Existing route is vulnerable to erosion
- Harbour pipeline is current preference
- Capacity would be increased
- Alternatives will need to be considered
- Further investigation needed

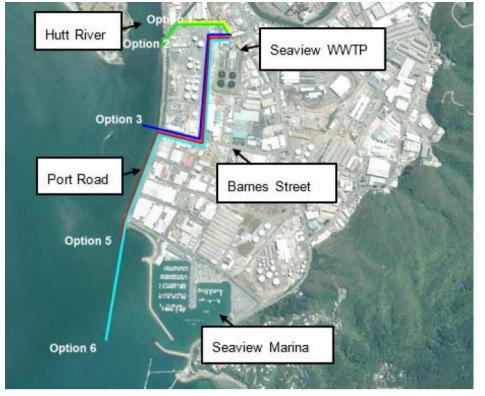




# Replacing the Waiwhetū overflow consent is complex

The Waiwhetū overflow pipe is used when the Main Outfall Pipeline capacity is reached and when the MOP is off-line for joint repairs or maintenance. Reducing network overflows and population growth may send even more flow to Seaview.

- A consent application for Option 2 was lodged in 2017
- Updated growth flow projections mean that application is on hold while options are reconsidered
- 2017 proposal to extend the Waiwhetu overflow and build 10ML storage now estimated to cost around \$40M
- Mana whenua have advised that removal of current discharges from Waiwhetū Stream is expected
- Replacing the MOP with larger pipeline would achieve this
- Other alternatives need to be worked through
- This needs to be considered alongside the wider issue of network overflows



Options assessed in 2016, existing overflow in yellow



# **Key issues – Investment in Seaview Wastewater Treatment Plant**

Due to the age of the plant, there are a number of mechanical and electrical plant items which are at or near the end of their design life and require renewal.

- The sludge dryer is the largest WWTP investment required. The current dryer is approaching the end of its design life, and is breaking down once or twice a year.
- Other major mechanical equipment at Seaview at or approaching the end of their design life which are critical to ensure compliance, including sludge thickening, aeration system, UV disinfection, odour control, return sludge pumping, clarifier mechanisms, instrumentation and other equipment.
- Obsolescence and long lead times make repair quite difficult and replacements are planned. Assets can be replaced as reactive renewals but often at higher cost when fast tracked and additional spend on extending service or temporary service, e.g. trucking undried sludge.



# The Sludge Dryer is at end of life and requires replacement

The sludge dryer is requiring replacement due to capacity constraint and is reaching the end of its design life, the estimated 2024 LTP budget has increased to \$112M.

- Comparative estimates were prepared in 2022 for four options which ranged between \$73M and \$114M at a level 1 estimate.
- Key objective of the project is that the replacement dryer has lower carbon emissions, with the existing natural gas being the largest single source emission in Council control.
- The replacement needs to have capacity to accommodate for expected future growth.
- Work is underway with Council officers to investigate future pathways for the beneficial use of biosolids to move away from landfill disposal.





# **Investment in Seaview Wastewater Treatment Plant**

The treatment plant consent requires renewal in the upcoming LTP. Growth is being planned for. The Seaview site is vulnerable to long term sea level rise and will need to consider land use planning.

- Renewals are sized for growth when they are undertaken.
- The discharge consent for the WWTP expires in 2031.
- Timely asset renewals will support treatment performance, important to demonstrate reliable performance for consent renewal
- Expenditure is also needed to increase treatment capacity, to improve discharge quality at higher population flows.





# **Proposed Investment List for the Hutt Valley Trunk Wastewater Network**

These major investments are an overview of projects, in order of value and are yet to be prioritised.

| Project   | 2024 – 2034 Estimate | Recommended timing |
|---|----------------------|--------------------|
| Main Outfall Pipeline renewal & capacity increase | \$700M               | 2024 - 2033        |
| Seaview Dryer renewal                             | \$112M               | 2024 - 2028        |
| Petone Collecting Sewer                           | \$55M                | 2024 - 2028        |
| Assorted mechanical renewals                      | \$32.6M              | 2024 – 2034        |
| Solids handling renewal & upgrade                 | \$29.75M             | 2029 – 2034        |
| Consent renewal related upgrade                   | \$25.5M              | 2029 – 2034        |
| Pump station renewals                             | \$24.8M              | 2024 – 2034        |
| Odour control renewal & upgrade                   | \$16.5M              | 2024 – 2027        |
| Planned WWTP renewals – site wide                 | \$11.5M              | 2024 – 2034        |
| Grit removal upgrade                              | \$8M                 | 2028 – 2032        |
| UV renewal  | \$7.5M               | 2024 – 2026        |
| Reactive WWTP renewals – site wide                | \$5M                 | 2024 - 2034        |

Note – other network renewal projects are still being collated, previous unconstrained advice to NTU included a total of approximately \$66M

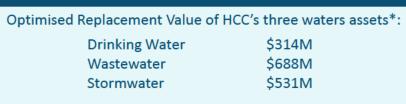


# **Overview of Hutt City Council's Three Waters Renewals**

Handout for Activity 1: Getting the renewal level right (Workshop 13 September 2023)

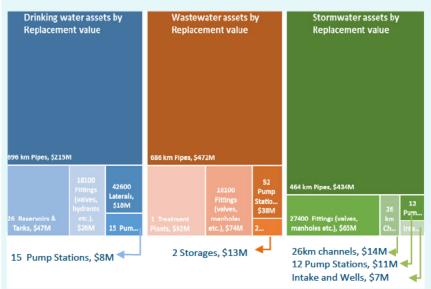
### Wellington Water

### VALUE OF HUTT CITY'S THREE WATERS ASSETS



TOTAL Three Waters \$1,533M

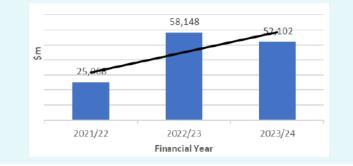
\*Optimised Replacement Value reflects the current and most economic cost of replacing an asset that provides a similar level of capacity and/or service.



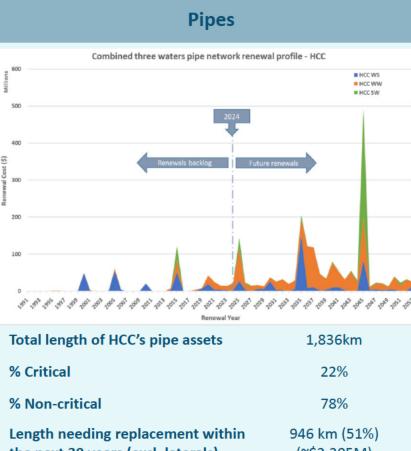
#### Figures based on:

- March 2023 Asset quantities
- HCC June 2022 Valuation values (these may not reflect the actual renewal cost of assets)

### YEAR-ON-YEAR RENEWALS INVESTMENT







| the next 30 years (excl. laterals)                          | (~\$2,205Ⅳ)          |
|---|----------------------|
| Average replacement length needed per year (excl. laterals) | 31.5km<br>(~\$73.5M) |
| What was delivered 2022/23                                  | 14.5 km              |

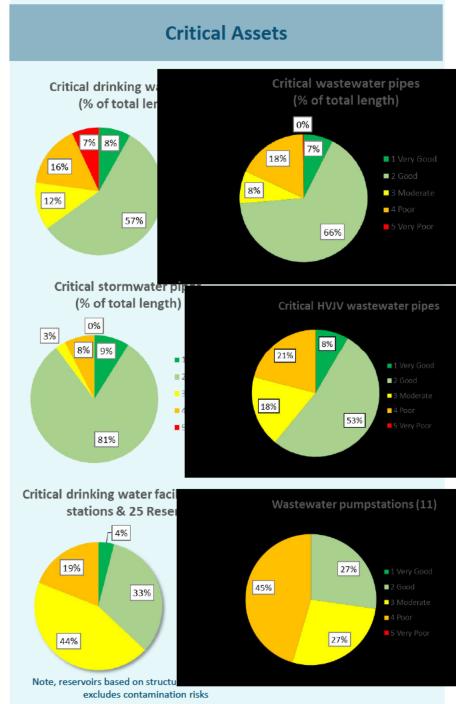
### Pump Stations (all waters)

| Renewals Backlog  | \$1.710M  |
|---|-----------|
| Renewals required within the next<br>30 years (incl. backlog) | \$34.405M |

^HVJV Treatment Plant and Pump Station renewals information not provided



100% of HCC's three waters pipe network has had a criticality assigned and condition assessed either via physical or desktop assessment.



# 2024-34 Investment Planning and Advice

**Hutt City Council** 

Step 2: Council direction on detailed investment options 9 October 2023





# **Purpose and outcome sought**



### Supporting Hutt City Council's vision of a 'connected, resilient and inclusive city where everyone thrives'

This advice is to present options with indicative budget levels, high-level activities and risks, for investing in your three waters assets and services. It is intended to assist you, as part of a staged process, in developing and making decisions on your 2024-34 Long Term Plan.

Wellington Water seeks your direction on:

- Council's affordable funding level for three waters assets and services
- Council's preferred option for investing in three waters assets and services

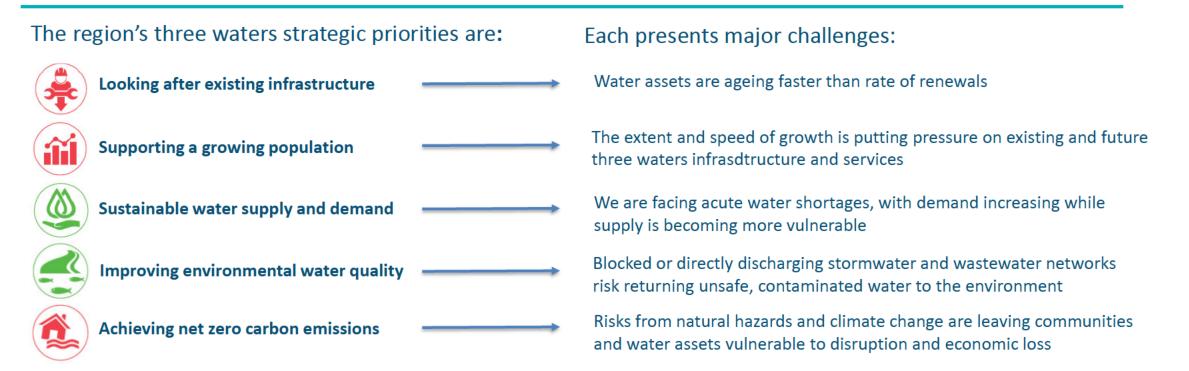


### Recap – Where we are at in the process:

# Five priorities guide 2024-34 three waters investment



The Wellington Water Committee has endorsed for inclusion in the 2024-34 investment planning advice for each council, the following regional strategic priorities. These priorities are a continuation of the investment direction for the region established in 2021-31 Long-Term Plans.



We also need to ensure resilience to natural hazards and the impacts of climate change are reflected.

### **Context and assumptions to investment options**



We have framed our advice to reflect the maximum we consider can be delivered over the 24-34 investment period. This will be different to what is affordable to Council. We appreciate that Council will be facing financial pressures across all of its budgets and any increase in funding to your three waters assets and services will need to be considered alongside other Council priorities. The budgets proposed in this advice will be refined over the next stages of developing your LTP

- Under current legislation, Councils are required to provide water services to their communities for the first two financial years of their 2024-34 LTPs. Decisions on ongoing funding and pricing will then be set by the new Water Services Entity (year 3 onwards)
- We have provided a 10-year view of investment to ensure consistency and alignment between your LTP and transition to the new entity the investment programme we would recommend would be the same regardless of who was making the funding decision
- Work already in progress and contractually committed forms the basis of budgets for the first few years of this 10-year period. However, decisions made by Council will influence the work that is investigated, designed and delivered in the longer term through the new entity
- Since the previous long-term planning process, we have delivered year-on-year increases across Capex programmes. While inflationary pressures have driven some of this increase, past performance shows a very strong record of growth in delivery where funding has been made available by our owner Councils
- Our advice continues this growth trend. Based on previous growth and market responsiveness to increased investment across our client councils, it is considered feasible that we could deliver 30% year on year increases, or approximately \$100m, over the next three years and beyond (subject to a number of assumptions). This represents the maximum we consider can be delivered across the region
- Despite the uplift in investment and delivery, there is more work than can be done even within a 30 year time frame.
- We have prioritised our recommended work programme based on:
  - The region's strategic priorities for water
  - Our recommendations on what is of most importance (in terms of risk) and is of highest criticality
  - What we have heard from you on your priorities
  - Compliance, consenting and regulatory requirements, as well as human health and safety needs that must be met
  - Increases needed to maintain current levels of service and to mitigate risks

## What we have heard

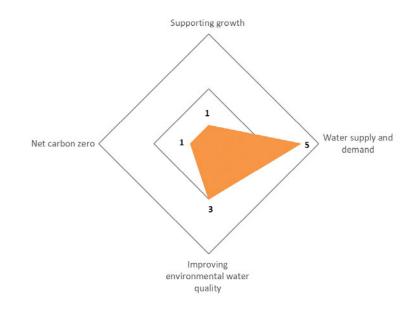


On 13 September 2023 we met with you to: outline the immediate long-term challenges facing your three water assets and services; understand the nature of investment needed over the next 10 years; and seek your direction on the desired outcomes for water in your community.

During the discussion we heard:

- Council is running a parallel process to the Water Reform Programme, assuming delivery of three waters for the full 10years of the LTP
- Support for water meters with questions around the value of delivering these sooner to address challenges with leaks
- Support for a regional approach to delivery to create efficiencies, particularly for large projects
- A targeted list of critical assets requiring renewals immediately and identifying where renewals can be added to the backlog
- The level of renewals investment should be targeted to match depreciation

# Water supply and demand was identified as a priority, followed by improving environmental water quality

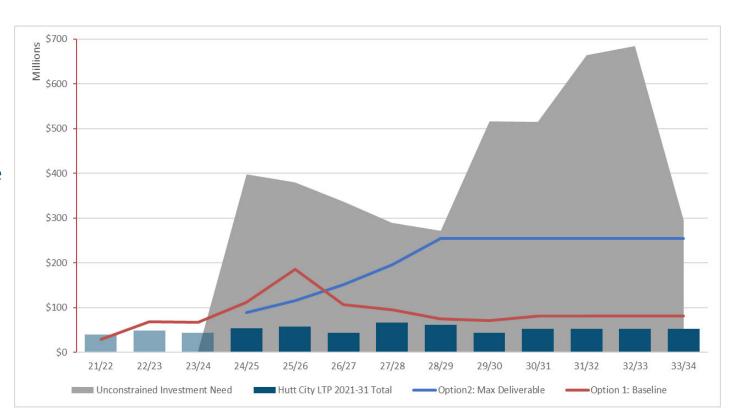


# **Summary Overview**



### The following chart summaries Wellington Water's investment story for Hutt City.

- The unconstrained investment need (grey) represents the total investment considered necessary for operating, maintaining and meeting current and future water services needs. This level is more than what Wellington Water can deliver and what is affordable to Council. Therefore, decisions are needed on what to prioritise. All Councils are facing this challenge.
- The baseline programme (red line) reflects a adjustments HCC has made to the 21-31 LTP budget levels
- The maximum deliverable (blue line) is the level of investment Wellington Water considers it can deliver (HCC's proportional share of a regional deliverability view)

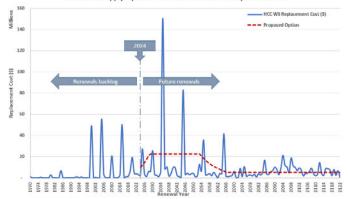


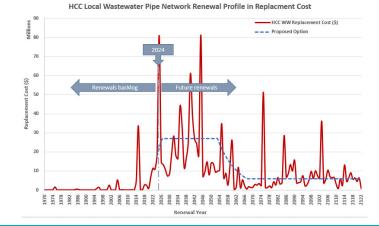
### **Renewals**



Renewals are one solution to looking after existing infrastructure. Despite an uplift in renewals expenditure, the average age of the asset base continues to increase. To assure agreed levels of service and to operate within agreed risk tolerances, the required state is to continuously renew assets at the same rate as they deteriorate.

- Specific renewals budgets are proposed aimed at achieving a sustainable asset base that is renewed at a pace that matches deterioration. These budgets have been built from:
  - Requirements for treatment plants, reservoirs and storage, pump stations and pipe networks
  - Looking at forward requirements over the lifecycle of the asset base
  - Retain a level of budget for reactive renewals (based on history) to ensure that failed items can be replaced immediately
- To note:
  - Renewals needs are heavily dominated by pipe networks.
  - The recommended programme has been prioritised to achieve a balance between critical and non-critical assets
  - Deferral of renewal projects that make up the proposed budgets will lift the risk of increased service failures resulting in interrupted water supply and continued leakage, and unplanned overflows from wastewater pipes as well as elevated health and safety risks arising from collapsed or failed assets. Consequential rise in unplanned maintenance expenses





#### HCC Water Supply Pipe Network Renewal Profile in Replacment Cost

# **Operating Expenditure**



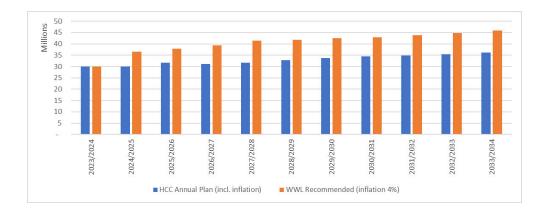
Within OPEX budgets there are a number of activities considered unavoidable that need to be covered by Council. These relate to activities that are mandatory or cannot be avoided or deferred as they are essential for the operation and maintenance of Councils assets. For example, costs required for the day-to-day operation of critical services where the consequence of failure is very high or for maintaining compliance with legislation, regulation, or industry standards.

There is some discretion predominantly within the budgets for Investigations and planned and reactive maintenance investment categories, however there are risks in with any reductions or deferrals with expenditure likely be required in the future.

High-level factors influencing Council's recommended 24-34 OPEX budgets:

- Impact of inflationary factors driving up the cost of materials, labour, services, and utilities costs
- The need to urgently repair ageing infrastructure resulting in higher operational costs.
- Impact of the bulk water levy, which hasn't been included in our advice, but will need to factored into HCC considerations – we are speaking to the Greater Wellington LTP Committee late October.

### Proposed 24-34 operating expenditure against baseline (from 23/24 annual plan)



## **Recommended 2024-34 Operating Expenditure**



### Proposed OPEX for 24-34 by investment category

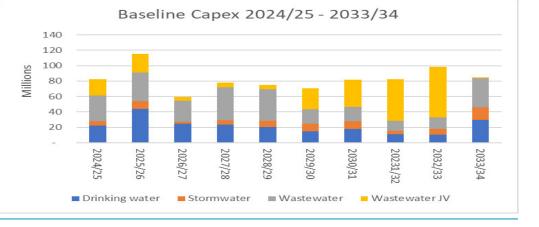
|                                   | 23/24<br>Baseline | Year 1<br>(24/25) | Year 2<br>(25/26) | 10-year<br>total | Drivers for investment   |
|-----------------------------------|-------------------|-------------------|-------------------|------------------|--|
| Monitoring &<br>Investigations    | \$5,459M          | \$6.426M          | \$7.085M          | \$78.245M        | <ul> <li>Includes activities such as condition assessments, resource consent compliance monitoring, water sampling and monitoring, investigations, design studies, and asset management. Uplift on 23/24 budget levels due to:</li> <li>Critical Asset Condition Assessments – physical pipe inspections and to pick up high criticality assets going forward, pump station asset management documentation and action and smart response plans, and testing of critical pumps</li> <li>Increased active leakage control and water loss management – based on increased levels of service to get on top of growing leaks (7% yearly increase)</li> <li>Catchment growth planning</li> <li>WWJV Emissions monitoring (new activity)</li> <li>Regional Biosolids management – strategy and plan for the beneficial reuse of wastewater biosolids</li> </ul> |
| Operations                        | \$0.202M          | \$0.238M          | \$0.238M          | \$2.523M         | Includes the control systems covering the electrical, instrumentation and automation systems for Council's stormwater, wastewater, and potable water assets. Uplift on 23/24 budget levels to account for increased labour and plant allocations.  |
| Planned<br>Maintenance            | \$3.764M          | \$4.683M          | \$5.537M          | \$63.581M        | <ul> <li>Includes water and wastewater pump station, utility and network asset maintenance, and stormwater maintenance activities.</li> <li>Uplift on 23/24 budget levels due to:</li> <li>Planned maintenance activities required across pump station, reservoir and network assets</li> </ul>  |
| Reactive<br>Maintenance           | \$8.007M          | \$9.510M          | \$9.070M          | \$103.454M       | Reactive maintenance costs have been increasing based on failure trends experienced to date, the average age of assets and the anticipated resulting rates of renewal/replacement. For the 24-34 investment period, higher reactive maintenance budgets are anticipated due to ageing assets and to reduce the leakage rate.   |
| Treatment Plant                   | \$8.377M          | \$10.139M         | \$10.231M         | \$102.809M       | Covers all activities relating to the operation of the wastewater treatment plant including planned and reactive maintenance, operations, and investigations. The majority of the recommended increase for the 24-34 period is from increased flows, a new gas contract starting in October 2023, anticipated increases in power costs, residuals disposal costs, and variation of Veolia contract conditions.   |
| Management &<br>Advisory Services | \$4.164M          | \$4.164M          | \$4.164M          | \$41.643M        | NB. Does not include allowances for required investments in WWL systems and people in the event that transition to Entity G does not occur.  |
| TOTAL                             | \$29,974M         | \$35.159M         | \$36.325M         | \$392.255M       |  |

# Summary Overview: Option 1 (CAPEX) – Continuation of LTP baseline



### Option One represents a continuation of the current 2021-31 LTP, including any additions or adjustments made since.

| Option One: Baseline |              |                 |                 |                        |  |
|----------------------|--------------|-----------------|-----------------|------------------------|--|
|                      | 23/24 Budget | Year 1<br>24/25 | Year 2<br>25/26 | 10-year total<br>(\$m) |  |
| Drinking<br>Water    | \$25.771M    | \$46.866M       | \$45.953M       | \$238.049M             |  |
| Stormwater           | \$-1.876M    | \$3.68M         | \$5.866M        | \$170.258M             |  |
| Wastewater           | \$35.357M    | \$31.662M       | \$63.413M       | \$391.374M             |  |
| Wastewater<br>JV     | ТВС          | ТВС             | ТВС             | ТВС                    |  |
| WWL<br>Subtotal      | \$59.251M    | \$82.208M       | \$115.231M      | \$799.681M             |  |
| IAF projects*        | \$8.748M     | \$30.005M       | \$70.228M       | \$174.467M             |  |
| TOTAL                | \$67.999M    | \$112.213M      | \$185.459M      | \$973.548M             |  |



### Risks

- Water demand outstrips supply due to water loss in the network and growth. Networks are not optimised in accordance with Te Mana o te Wai
- Ageing infrastructure impacting delivery of safe drinking water as well as having environmental and cultural impacts. Increased unplanned spend required to remediate critical failures
- Not maintaining baseline increases the likelihood of not meeting WSE Act 2021 obligations, health and safety standards, and impacting works already in progress

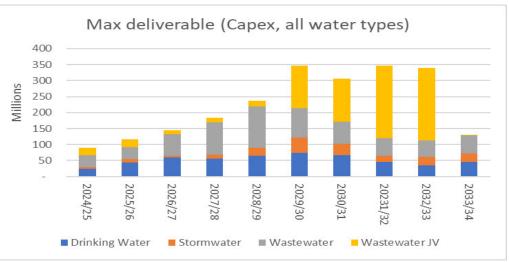
\*Funding for IAF projects are not included within WWL budgets

# Summary Overview: Option 2 (CAPEX) – Maximum deliverable

**Option Two: Maximum deliverable** 

Option Two represents the maximum programme WWL recommends can be delivered irrespective of total investment need, affordability and other constraints outside of WWL's control.

#### 23/24 Budget 10-year total Year 1 Year 2 24/25 25/26 (\$m) Drinking \$24.771M \$24.318M \$44.231M \$514.937M Water Stormwater \$5.730M \$10.153M \$5.420M \$217.640M Wastewater \$38.085M \$36.436M \$37.249M \$692.098M Wastewater TBC \$23.086M \$24.555M \$813.645M JV WWL \$68.586M \$93.993M \$111.445M \$2,238.320M subtotal **IAF** projects \$8.748M \$30.005M \$70.228M \$174.467M TOTAL \$77.33M \$124.00M \$181.68M \$2,412.787M



### Risks

- As with option 1 but lower
- Inflationary pressures putting pressure on scoped project budgets resulting in potential for rescoping projects, reallocating budgets from lower priority projects, or increasing budgets
- Potential for resource and supply chain constraints of both materials and personnel impacting the delivery of projects.

### Our water, our future.

Vellinaton

# Proposed investment by strategic priority: Looking after existing infrastructure

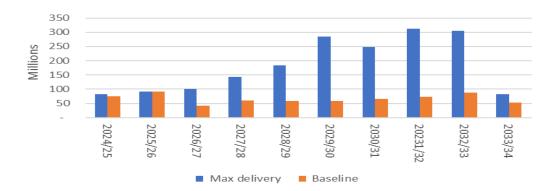


Existing assets and services need to be operated, maintained, and replaced to ensure they deliver the services expected by customers. The desired state is where the reliability of the network improves and customers receive agreed levels of service across all three waters.

#### **Option 1: Baseline (\$m)**

Focuses on immediate risk where high likelihood of critical failure only. Partial lift in renewals to work towards elimination of backlog of end of life assets within 30 years

|                | Year 1<br>24/25 | Year 2<br>25/26 | 10-year total |
|----------------|-----------------|-----------------|---------------|
| Drinking Water | \$21.3M         | \$23.5M         | \$138.5M      |
| Stormwater     | \$5.03M         | \$7.5M          | \$36.8M       |
| Wastewater     | \$29.0M         | \$36.9M         | \$248.4M      |
| Wastewater JV  | \$20.2M         | \$23.9M         | \$245.2M      |
| TOTAL          | \$75.3M         | \$91.8M         | \$668.9M      |



#### **Option 2: Maximum deliverable (\$m)**

Replacement of assets with known failure history or poor condition only within first 10 years, looks to replace waterpipes in high leakage areas, and seeks to lift renewals to achieve elimination of backlog of end-of-life assets within 30 years

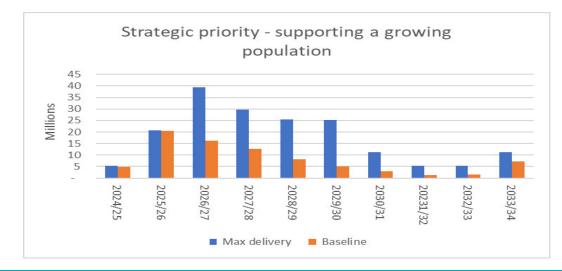
|  | Year 1<br>24/25 | Year 2<br>25/26 | 10-year total     |
|--|-----------------|-----------------|-------------------|
| Drinking Water   | \$23.2M         | \$23.6M         | \$323.0M          |
| Stormwater   | \$5.5M          | \$7.6M          | \$97.0M           |
| Wastewater   | \$31.6M         | \$37.2M         | \$602.0M          |
| Wastewater JV  | \$22M           | \$24.0M         | \$812.0M          |
| TOTAL  | \$82.3M         | \$92.6M         | \$1,834.0M        |
| Key projects: Option   | 1               | Option 2        |                   |
| <ul> <li>WW reactive renewals</li> <li>SW reactive renewals and Te Mome<br/>Pump Station renewal</li> <li>VHCA reservoir renewals</li> <li>DW reactive renewals</li> </ul> |                 | UV renewals and | dryer renewal and |

### Proposed investment by strategic priority: Supporting a growing population



Water services exist to serve communities. As the number of people in towns and cities increases, the extent of water services must grow with them. The desired state is where growth can be achieved while ensuring target levels of service are met or exceeded

| Option 1: Baseline (\$m)               |              |              | Option 2: Maximum deliverable (\$m)   |                |              |              |               |
|--|--------------|--------------|---|----------------|--------------|--------------|---------------|
| Minimal investment in growth projects. |              |              | Significant investment in key infrastructure that supports growth in Lower Hutt |                |              | Lower Hutt   |               |
|  | Year 1 24/25 | Year 2 25/26 | 10-year total   |                | Year 1 24/25 | Year 2 25/26 | 10-year total |
| Drinking Water                         | \$0.36M      | \$20.2M      | \$50.4M   | Drinking Water | \$0.39M      | \$20.4M      | \$95.6M       |
| Stormwater                             | \$0.23M      | \$0.25M      | \$11.3M   | Stormwater     | \$0.25M      | \$0.25M      | \$37.6M       |
| Wastewater                             | \$4.4M       | -            | \$18.9M   | Wastewater     | \$4.8M       | -            | \$45.9M       |
| Wastewater JV                          | -            | -            | -   | Wastewater JV  | -            | -            | -             |
| TOTAL                                  | \$4.99M      | \$20.5M      | \$80.7M   | TOTAL          | \$5.4M       | \$20.6M      | \$179.0M      |



| Key projects: Option 1                              | Option 2  |
|---|---|
| <ul> <li>Naenae no.2 Reservoir and Outlet</li></ul> | <ul> <li>Wainuiomata North Wastewater Trunk</li></ul> |
| Main <li>Wainuiomata Black Creek SW</li>            | Network Upgrade                                       |

# **Proposed investment by strategic priority: Sustainable water supply and demand**

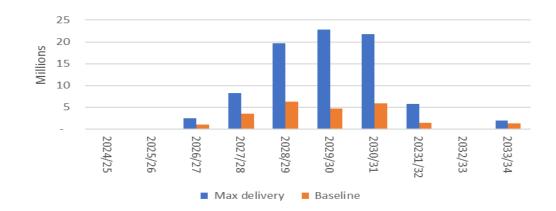


Our communities want to have enough water when they need it, while Te Mana o te Wai is enhanced by using it efficiently and leaving enough water in the rivers to sustain freshwater ecosystems. The desired state is where water isn't wasted, supply meets demand, and customers and the network are more resilient in times of shortage

#### **Option 1: Baseline (\$m)**

Provision for sustainable water supply and demand related activities.

|                | Year 1 24/25 | Year 2 25/26 | 10-year total |
|----------------|--------------|--------------|---------------|
| Drinking Water | \$0.021M     | \$0.149M     | \$24M         |
| Stormwater     | -            | -            | -             |
| Wastewater     | -            | -            | -             |
| Wastewater JV  | -            | -            | -             |
| TOTAL          | \$0.021M     | \$0.149M     | \$24M         |



#### Option 2: Maximum deliverable (\$m)

The water needs of communities are met while maintaining the health and mauri/mana of the source water. Predominant focus on supporting measures to reduce water demand and water leakage to address regional water shortage challenge. Reflects full suite of measures required and updated cost assumptions.

|                      | Year 1 24/25       | Year 2 25/26      | 10-year total       |
|----------------------|--------------------|-------------------|---------------------|
| Drinking Water       | \$0.023M           | \$0.15M           | \$82M               |
| Stormwater           | -                  | -                 | -                   |
| Wastewater           | -                  | -                 | -                   |
| Wastewater JV        | -                  | -                 | -                   |
| TOTAL \$0.02M        |                    | \$0.15M           | \$82M               |
| Key projects: Option | 1                  | Option 2          |                     |
| Partial costs towa   | rds Smart Metering | Universal Residen | tial Smart Metering |
|                      |                    |                   |                     |

### **Proposed investment by strategic priority: Improving environmental water** quality

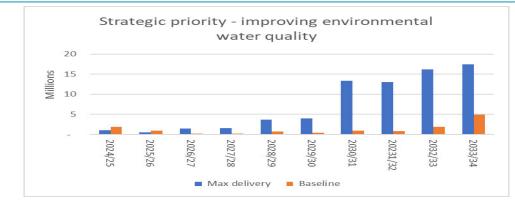
Wellington Water

Stormwater and treated wastewater are returned to the environment. Pollutants enter the water, making it unsafe for people and ecosystems. Stormwater management can also significantly modify the natural characteristics of creeks and streams. The desired state is improved water quality, Te Mana o Te Wai is implemented, mahinga kai regenerates, and regulatory requirements are met.

#### Option 1: Baseline (\$m)

Provision for minimum level of activities to support improving environmental water quality. Does not reflect costs associated with global stormwater and wastewater consents. To note some activities delivering improved environmental water outcomes covered under Looking After Existing Infrastructure through renewals programme

|                | Year 1 24/25 | Year 2 25/26 | 10-year total |
|----------------|--------------|--------------|---------------|
| Drinking Water | -            | -            | -             |
| Stormwater     | -            | -            | \$10.3M       |
| Wastewater     | \$0.03M      | -            | \$15.7M       |
| Wastewater JV  | \$0.93M      | \$0.49M      | \$1.4M        |
| TOTAL          | \$0.97M      | \$.049M      | \$27.4M       |



#### **Option 2: Maximum deliverable (\$m)**

Major projects aimed at improving environmental water quality. The current consent process will result in changes to how SW and WW is managed. This programme supports UHCC in meeting new requirements.

|   | Year 1 24/25 | Year 2 25/26      | 10-year total   |
|---|--------------|-------------------|-----------------|
| Drinking Water  | -            | -                 | -               |
| Stormwater  | -            | -                 | \$26.9M         |
| Wastewater  | \$0.038M     | -                 | \$43.99M        |
| Wastewater JV   | \$1.02M      | \$0.49M           | \$1.5M          |
| TOTAL   | \$1.06M      | \$0.49M           | \$72.4M         |
| Key projects: Option  | 1            | Option 2          |                 |
| <ul> <li>Stormwater and wastewater planning<br/>for future network improvements<br/>including:</li> <li>Wastewater overflow reductions<br/>programme</li> <li>Storm water quality improvements</li> </ul> |              | Implementation of | a sub catchment |

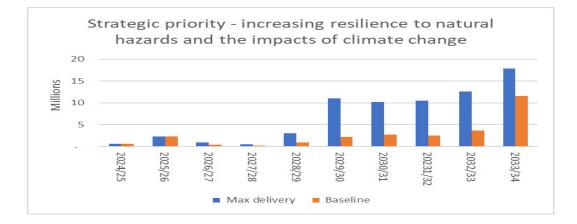
### Increasing resilience to natural hazards and the impacts of climate change



Water services are at risk from natural hazards such as earthquakes and landslides and from more intense rainfall events and sea level rise caused by climate change. The desired state is resilient infrastructure that provides essential water services safely during an emergency event.

| Minimal activities ain emergency | ned at ensuring resiliend | ce of water services follo | owing a major |
|----------------------------------|---------------------------|----------------------------|---------------|
|                                  | Year 1 24/25              | Year 2 25/26               | 10-year total |
| Drinking Water                   | \$0.6M                    | -                          | \$5.6M        |
| Stormwater                       | \$0.005M                  | \$2.3M                     | \$21.6M       |
| Wastewater                       | -                         | -                          | \$0.03M       |
| Wastewater JV                    | -                         | -                          | -             |
| TOTAL                            | \$0.62M                   | \$2.3M                     | \$27.2M       |

Option 1: Baseline (\$m)



| Option 2: Maximum deliverable (\$m) |                          |              |               |  |
|-------------------------------------|--------------------------|--------------|---------------|--|
| Activities included ain             | ned at improving network | resilience   |               |  |
|                                     | Year 1 24/25             | Year 2 25/26 | 10-year total |  |
| Drinking Water                      | \$0.68M                  | -            | \$13.3M       |  |
| Stormwater                          | \$0.005M                 | \$2.3M       | \$56.3M       |  |
| Wastewater                          | -                        | -            | \$0.08M       |  |
| Wastewater JV                       | -                        | -            | -             |  |
| TOTAL                               | \$0.7M                   | \$2.3M       | \$69.7M       |  |

| Key projects: Option 1  | Option 2                                |
|---|---|
| <ul> <li>Stormwater modelling projects</li> <li>Capital carbon modelling for three waters</li> <li>Dowse Drive and Muritai Road SW<br/>upgrades</li> <li>Fire Hydrant management and use project</li> </ul> | Stormwater Projects for Petone Flooding |

# **Next steps**



### The process from here



# 2024-34 Investment Planning and Advice

**Hutt City Council** 

13 November 2023



# **Purpose and outcome sought**

Provide options for three waters capital investment and seek your direction on the desired investment level





## **Seeking Council direction on three waters CAPEX budgets**



To date WWL has presented a baseline budget and a maximum deliverable budget to Council. Now, WWL is seeking direction from Council on what an affordable three waters budget is for Hutt City CAPEX so the three waters programme can reflect Council's direction.

#### **Capital Expenditure**

- Council's three waters baseline CAPEX budget is lumpy in the first four years of the 2024-34 LTP period. For example, the year three budget is
  roughly half of the year two budget. To ensure continuity of projects underway, the CAPEX programme will be built to balance over the five
  years budget from FY2023/24 to FY2028/29.
- A budget below the maximum deliverable budget is expected to carry compliance, regulatory and health and safety risk. The scale of this will depend on where the final budget lands.
- We understand the funding constraints Council is under and appreciate the three waters programme needs to be weighed up against other Council budgets.

# **CAPEX options overview**



### WWL has worked with Council officers to present four CAPEX options for Council consideration

| Options for consideration  |                 |                 |                 |                  |
|--|-----------------|-----------------|-----------------|------------------|
|  | Year 1<br>24/25 | Year 2<br>25/26 | Year 3<br>26/27 | 10-year<br>total |
| Option 1 – Programme to fit<br>HCC LTP Baseline budget   | \$69M           | \$108M          | \$90M           | \$1,237M         |
| Option 2 – Option 1<br>+ universal residential smart<br>meters                                       | \$71M           | \$115M          | \$107M          | \$1,309M         |
| Option 3 – Option 1 +<br>network renewal backlog<br>strategy   | \$89M           | \$116M          | \$144M          | \$2,154M         |
| Option 4 - Option 1 +<br>universal residential smart<br>meters + network renewal<br>backlog strategy | \$91M           | \$123M          | \$162M          | \$2,227M         |

Note the figures in this presentation reflect the latest baseline budget agreed with Council officers

#### Option 1 Baseline programme differs from the Year 2 Annual Plan programme

• Year 2 of the Annual Plan was an indicative overprogrammed list of activity that was being lined up for delivery in FY2024/25, based on historic priorities. When developing the LTP we have reviewed these activities alongside all the other investment need for Council and moved projects based on the latest cost estimates, risks and investment priorities as directed by Council.

#### **Option 1 Baseline programme includes the following activity:**

- Committed projects (inc. UHCC JV projects) all projects underway
- Compliance / consenting projects and programmes, for example for resource consent renewals and progressing the global stormwater and network overflow consents
- Control systems and modelling these programmes that are considered essential activity to manage assets and support other investment
- Reactive renewals for all asset types

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- Planned renewals for known VHCA at a minimum and additional planned renewals where budget permits.
- Other level of service projects and growth projects

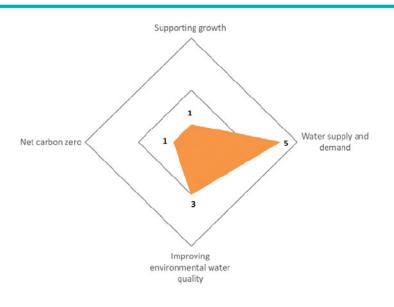
## **Delivering on the five strategic priorities**

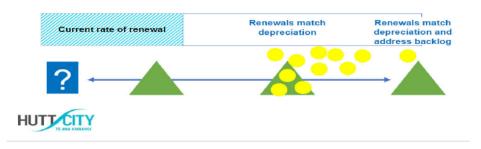


# In the Stage 1 workshop, you told us your investment priorities were Looking After Existing Infrastructure, Sustainable Water Supply and Demand and Improving Environmental Water Quality

#### **Option 1 - Programme to fit HCC LTP Baseline budget**

- Balances investment across the five strategic priorities but focuses investment on:
  - Looking After Existing Infrastructure, and
  - o Improving Environmental Water Quality
- Options 2 and 4 improves outcomes in Sustainable Water Supply and Demand with the addition of universal residential smart meters in the programme
- Options 3 and 4 improve outcomes in Looking After Existing Infrastructure, achieved through increased investment in network renewals





# **Option 1 – Programme to fit HCC LTP Baseline budget**



# Option 1 includes key council activity however it requires some major projects to be delivered later than recommended, it does not allow for sufficient investment in planned network renewals required to address the backlog within 30 years and excludes Universal Residential Water Meters

|                |              | 0            |              |               |
|----------------|--------------|--------------|--------------|---------------|
|                | Year 1 24/25 | Year 2 25/26 | Year 3 26/27 | 10-year total |
| Drinking water | \$19M        | \$18M        | \$14M        | \$351M        |
| Stormwater     | \$7M         | \$16M        | \$6M         | \$179M        |
| Wastewater     | \$19M        | \$5M         | \$11M        | \$191M        |
| Wastewater JV  | \$24M        | \$69M        | \$59M        | \$516M        |
| TOTAL          | \$69M        | \$108M       | \$90M        | \$1,237M      |

**Option 1: Programme to fit HCC LTP Baseline budget** 



#### Projects included in first three years

#### Seaview WWTP JV:

- Backup Power Supply
- RAS System Renewal
- UV Renewal
- Wastewater
  - Seaview WWTP Sludge Dryer Replacement
  - Seaview WWTP Storage
  - Main Effluent Outfall Renewal
  - Petone Collecting Sewer Wastewater Upgrade
- Required level of planned and reactive renewals at the treatment plants, reservoirs, and other assets
- Required levels or reactive network and pumpstation renewals
- Planned network renewals at approximately 50% of the required level

#### **Delivering on the strategic priorities**

• Option 1 balances investment across the five strategic priorities but focuses investment on Looking After Existing Infrastructure and Improving Environmental Water Quality.

# **Option 1 – Programme to fit HCC LTP Baseline budget**



The following major projects need to be delivered later than recommended:

| Major projects excluded in first three years        | Risk of excluding project  |
|---|--|
| Universal residential smart<br>meters               | HCC has come close to not providing sufficient water to customers in the past. WWL's options study demonstrates that attempting to meet<br>the region's (including HCC's) water supply requirements without universal smart metering and increased water loss management will<br>require investment in water supply options that will cost significantly more than smart meter investment, will result in increased carbon<br>emissions, and create worse outcomes for freshwater and the environment. |
| Naenae No 2 Reservoir and<br>Outlet Main<br>DELAYED | This has some risk as water storage does not currently comply with minimum back-up storage standards and additional growth on the valley floor over the next 5 years will exacerbate that situation. Continuing to push this project out also increases the risk of inflation price increases to the project.  |
| Naenae No2 Reservoir<br>Pipeline DELAYED            | Gracefield reservoir requires replacement, as inspections have identified structural issues, which have been repaired, but which are not a long-term solution. The reservoir cannot be taken offline until the additional supply from the proposed Naenae no.2 reservoir becomes available.  |
| Seaview WWTP Odour Control<br>Renewal<br>DELAYED    | Compliance risk – HCC are receiving abatement and infringement notices for odour which increase the risk of escalating compliance action<br>that may lead to prosecution from GWRC. There are also community impacts from frustrated residents, iwi group and nearby business<br>owners. HCC and UHCC Councillors also requires WWL to provide monthly updates for the resolution of the plant's odour concerns.   |

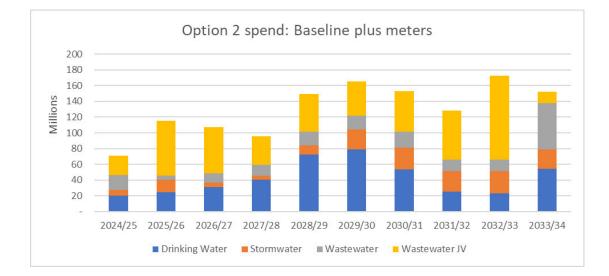
The risks of delaying the Naenae No 2 Reservoir, Outlet Main and Pipeline, and the Seaview WWTP Odour Control Renewal projects are present under all four options.

# **Option 2 – Option 1 + universal residential smart meters**



#### **Option 2 carries the same outcomes and risks as Option 1 but includes universal residential water meters**

| <b>Option 2 – Option 1 + universal residential water meters</b> |              |              |              |               |
|---|--------------|--------------|--------------|---------------|
|   | Year 1 24/25 | Year 2 25/26 | Year 3 26/27 | 10-year total |
| Drinking water  | \$20M        | \$25M        | \$31M        | \$424M        |
| Stormwater  | \$7M         | \$16M        | \$6M         | \$179M        |
| Wastewater  | \$19M        | \$5M         | \$11M        | \$191M        |
| Wastewater JV   | \$24M        | \$69M        | \$59M        | \$516M        |
| TOTAL   | \$71M        | \$115M       | \$107M       | \$1,309M      |



#### Projects included in first three years

All of Option 1 baseline projects plus Universal smart water meters.

Installation of universal residential smart meters supports meeting the region's (including HCC's) water supply requirements. There are significant costs savings to be realised as HCC is better able to manage water loss, reduce carbon emissions and support achievement of Te Mana o te Wai outcomes.

Planned network renewals remains at approximately 50% of the required level under Option 2.

#### **Delivering on the strategic priorities**

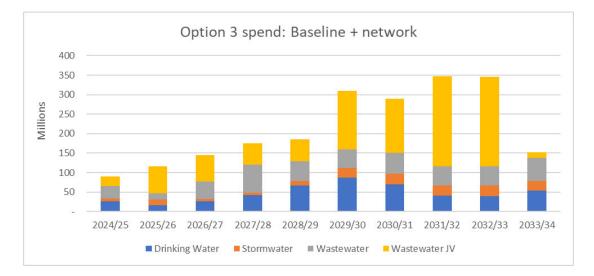
• Option 2 increases investment in the Sustainable Water Supply and Demand strategic priority.

# **Option 3 – Option 1 + network renewal backlog strategy**



#### Option 3 carries the same outcomes and risks as Option 1 but includes network renewal backlog strategy

| Option 3 – Option 1 + network renewal backlog strategy |              |              |              |               |
|--|--------------|--------------|--------------|---------------|
|  | Year 1 24/25 | Year 2 25/26 | Year 3 26/27 | 10-year total |
| Drinking water   | \$27M        | \$16M        | \$26M        | \$468M        |
| Stormwater   | \$7M         | \$15M        | \$6M         | \$176M        |
| Wastewater   | \$31M        | \$16M        | \$46M        | \$474M        |
| Wastewater JV  | \$24M        | \$69M        | \$67M        | \$1,036M      |
| TOTAL  | \$89M        | \$116M       | \$144M       | \$2,154M      |



# Projects included in first three years All of Option 1 baseline projects with increased investment in network renewals. Planned network renewals increases to approximately 68% of the required level under Option 3.

#### Delivering on the strategic priorities

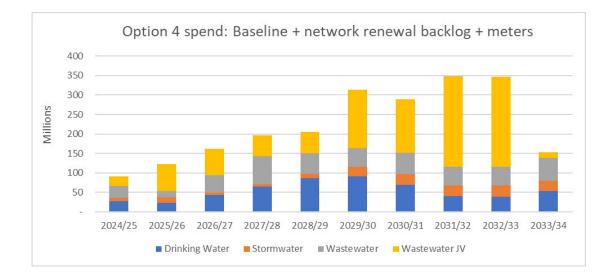
• Option 3 increases investment in the Looking After Existing Infrastructure strategic priority.

## **Option 4 – Option 1 + Network renewal backlog strategy + universal residential smart meters**



Option 4 builds on Option 1 deliver increased investment in network renewals and universal residential water meters

| Option 4: Option 1 + Network renewal backlog strategy + universal residential smart meters |              |              |              |               |
|--|--------------|--------------|--------------|---------------|
|  | Year 1 24/25 | Year 2 25/26 | Year 3 26/27 | 10-year total |
| Drinking water   | \$28M        | \$23M        | \$43M        | \$540M        |
| Stormwater   | \$7M         | \$15M        | \$6M         | \$176M        |
| Wastewater   | \$31M        | \$16M        | \$46M        | \$474M        |
| Wastewater JV  | \$24M        | \$69M        | \$67M        | \$1,036M      |
| TOTAL  | \$91M        | \$123M       | \$162M       | \$2,227M      |



| Projects included in first three years  |
|---|
| All of Option 1 baseline projects with increased investment in network renewals and universal residential smart meters. |
| As with Option 3, planned network renewals increases to approximately 68% of the required level under Option 4.         |
|   |

#### Delivering on the strategic priorities

• Option 4 increases investment in Looking After Existing Infrastructure and Sustainable Water Supply and Demand strategic priorities.

# **Recap - Operating Expenditure**



At the Council Long Term Plan Committee meeting of 30 October, Council agreed to Wellington Water's recommended annual OPEX budget of \$35.047M for year one only, with all subsequent years remaining at this investment level adjusted each year for inflation

|                                   | 23/24 Baseline | Year 1<br>24/25 | 10-year total |
|-----------------------------------|----------------|-----------------|---------------|
| Monitoring &<br>Investigations    | \$5.46M        | \$6.43M         | \$64.26M      |
| Operations                        | \$0.20M        | \$0.24M         | \$2.38M       |
| Planned<br>Maintenance            | \$3.76M        | \$4.68M         | \$46.83M      |
| Reactive<br>Maintenance           | \$8.01M        | \$9.51M         | \$95.1M       |
| Treatment Plant                   | \$8.38M        | \$10.23M        | \$102.31M     |
| Management &<br>Advisory Services | \$4.16M        | \$4.05M         | \$40.52M      |
| TOTAL                             | \$29.97M       | \$35.05M        | \$350.47      |

An annual OPEX budget of \$35.047M is an increase of 17% on the FY2023/24 budget.

- A flatlining OPEX budget carries risk:
  - The recommended OPEX budget increased significantly over the 10-year period reflecting the operating needs of an ageing network. A flatlined budget may not be able to respond to these needs, including for reactive maintenance leak repairs.
  - Energy and disposal costs at the treatment plant can vary and are essential expenditure. Any increases here will reduce available OPEX for other operational activity.