

# Watercare

## Quarter 3 Performance Report

**For the period ending 31 March 2019**

*This report outlines the key performance of Watercare which includes water supply, and wastewater related activities and investments*

# Watercare Q3 summary

## Highlights, issues & risks for the quarter

### Highlights:

1. We signed the Central Interceptor (CI) construction contract with Ghella- Abergeldie Joint Venture, which will include the Grey Lynn Wastewater Tunnel extension in the original project budget for CI. It is a great outcome.
2. We launched our 40:20:20 Vision. Our targets are a 40% reduction in our build carbon across Watercare by 2024, a 20% reduction in cost of delivery of our capital programme by 2024 and a 20% year on year reduction in the number of people hurt building our infrastructure.
3. Our H&S Commitment now includes a commitment to employee wellness, including mental health.
4. We launched our Climate Change Strategy.
5. The Tunnel Boring Machine on the Hunua 4 project started a 3km journey under some of Auckland's and New Zealand's busiest roads. The name was chosen through a competition with the children at Starship. The winning name, Amiria, is a te reo Māori version of the name Amelia and means hard-working or industrious.
6. Watercare continued to negotiate a commercial contract with Waikato District Council regarding the provision of water and wastewater services. Commencement is scheduled for 1 July 2019. A paper was presented to the F&P Committee on 21 May 2019, seeking endorsement of this relationship.

### Risks

1. Major project cost overrun: In response to this risk, we have developed a new model called the Enterprise Model for the delivery of infrastructure projects. The RFP has been taken to the market to select two construction partners for the new model. Delivery of a \$2.5 billion programme over 10 years.

| Financials (\$m)              | YTD actual | YTD budget | Actual vs Budget |
|-------------------------------|------------|------------|------------------|
| Capital delivery <sup>1</sup> | 291.4      | 345.0      | (53.6)           |
| Direct revenue                | 485.3      | 472.6      | ↑ 12.7           |
| Direct expenditure            | 167.5      | 163.7      | ↑ (3.8)          |
| Net direct revenue            | 317.8      | 308.9      | ↑ 8.9            |

## Financial Commentary

- **Capital delivery:** Capital delivery is running at 84%. 50% of the capex under spend relates to a reduction in spend against budget for CI. The tender process resulted in a re-phasing of the timing of the project costs by the contractor. This does not change our delivery risk/final delivery date for CI.
- **Direct revenue:** Direct revenue is \$12.7m ahead of budget mostly due to higher actual usage volume (117.1 MLD) against budgeted volumes (111.8 MLD).
- **Direct expenditure:** Direct expenditure is \$3.8m or 2.3% over budget mostly due to unforeseen unplanned maintenance required on infrastructure assets.

## Key performance indicators

(Refer to pg. 88 for complete list)

|  | Previous Quarter | FY 19 Quarter 3 |           | Status | Commentary |
|--|------------------|-----------------|-----------|--------|------------|
|  |                  | Actual          | Target    |        |            |
| The extent to which the local authority's drinking water complies with part 4 of the drinking water standards (bacteria compliance criteria)                       | 100%             | 100%            | 100%      | Met    |            |
| The extent to which the local authority's drinking water complies with part 4 of the drinking water standards (protozoal compliance criteria)                      | 100%             | 100%            | 100%      | Met    |            |
| Median response time for attendance for urgent call-outs: from the time that Watercare receives notification to the time that service personnel reach the site     | 50 mins          | 50 mins         | ≤ 60 mins | Met    |            |
| Median response time for resolution of urgent calls-outs: from the time that Watercare receives notification to the time that service personnel confirm resolution | 2.90             | 2.80            | ≤ 5 hours | Met    |            |

1. Capital delivery numbers include capitalised interest.

# Strategic focus area – Central interceptor

## Key commentary

Up to 31 March 2019, a total of \$67.1m was spent towards the Central Interceptor against a total CI budget of \$1.269 billion.

### Highlights

1. Watercare and Ghella – Abergeldie (GA) Joint Venture signed the construction contract for the CI on 14 March 2019.
2. The Grey Lynn wastewater tunnel (1.4km) has been included in this construction contract, and within the original project budget.
3. The Contract commences on 1 May 2019, with tunnelling to commence in late 2020.

**Risks (Note – these risks relate to the Procurement Phase of the project, which have all been closed. For subsequent reports, we will address Construction risks as we move into that phase of the works).**

1. Costs exceed approved budget: The risk is closed as the pricing is known, and it can be confirmed that the project will be within budget, including the Grey Lynn Wastewater Tunnel.
2. Watercare resources: The risk of inadequate client side resources in a tight labour market is closed. Jacobs has been confirmed as our partner in the provision of dedicated construction management resources.
3. Delay to Contract Award: This risk is closed as the contract was awarded on 14 March 2019 in line with the schedule.

## Strategic context

The CI is a 13km wastewater tunnel, running from Western Springs to the Māngere Wastewater Treatment Plant. The CI will increase the capacity of the wastewater network, replace aging infrastructure and reduce wet weather overflows in the catchment area by around 80%. It will be extended to Grey Lynn, allowing Auckland Council and Watercare to work towards the goals that form part of the Western Isthmus Water Quality Improvement Programme. Construction begins mid-2019 and will be complete in 2025.

| Key programme of works                                      | Status          | Description  | Outlook  |
|---|-----------------|--|--|
| Finalise design and lodge consents for the Grey Lynn Tunnel | <b>On track</b> | Consents to be lodged in Q3 of FY2019.                               | Watercare Board approved the Grey Lynn Wastewater Tunnel business case in November 2018. Consent applications have been lodged.  |
| Commence Physical works                                     | <b>On track</b> | Physical works to commence in Q4 FY2019.                             | GA takes possession of the sites in the first week of May 2019. This will involve site establishment at Māngere WWTP and May Road, followed by construction of the shafts. |
| Commence tunnelling   | <b>On track</b> | Tunnelling is to commence in late 2020.                              | Single Tunnel Boring Machine launching from Māngere Wastewater Treatment Plant.  |
| Main works into service                                     | <b>On track</b> | The main works (Central Interceptor) are to go into service in 2026. | This will include Grey Lynn Wastewater Tunnel extension.   |

# Strategic focus area – Water supply investment

## Key commentary

For the nine months to 31 March 2019, \$102m was spent towards water supply investment against a year to date budget of \$130m.

### Highlights

1. On 29 January 2019, we produced 524m litres of water for Metro Auckland. This was 20m litres more than the previous record set on 14 December 2017. Including non-metro (Warkworth, Waiuku, etc), total peak use was 549m litres. We successfully met this record-level demand.
2. On 22 February 2019, Mayor Goff officially opened the new Warkworth Water Treatment Plant. A powerful moment from the opening was the unveiling of a pouwhenua that stands at the entrance to the plant and depicts Waawaia, the Taniwha of Te Awa Waihe. This signifies the relationship between the land, environment and Ngāti Manuhiri who are Mana Whenua for Puhinui (Warkworth). Staff, iwi and local board members attended.
3. We also officially opened the Tirohanga Whanui Bridge, Albany in conjunction with NZTA. The Bridge provides a walkway and cycleway across the Northern motorway and houses a 2.5km long section of our Albany-Pinehill watermain.

### Risks

1. Ardmore Water Treatment Plant is now classified as a “Major Hazard Facility” due to the quantity of chlorine stored. Worksafe has reviewed the Safety Case and recommended the installation of chlorine scrubber which is designed to contain and neutralise chlorine leaks. Planning for this work is underway with completion in July 2021.
2. The high demand remains within our planned peak demand envelope. To ensure sufficient water is available this summer, we are maximising the use of Waikato River, which is part of normal abstraction planning. We are also encouraging water conservation via our Water Efficiency Strategy.

## Strategic context

Watercare provides safe, reliable “Aa” grade drinking water to 1.6m Aucklanders. The company collects, treats and distributes water from 27 water sources including the Waikato River, 12 dams, and underground aquifers. We operate 15 water treatment plants, 91 water reservoirs, and over 9,000km of water pipes.

| Key programme of works                            | Status          | Description  | Outlook   |
|---|-----------------|--|---|
| Hunua 4 Watermain                                 | <b>On track</b> | This is a 31km pipe that will connect the reservoirs in Redoubt Road, Manukau to those in Khyber Pass, Newmarket providing security of water supply for a growing Auckland.  | Tunnel boring machine is installed, with tunnelling commencing in early May 2019 under Khyber Pass Road (400m). Open cut work is approximately 50% complete.                        |
| North Harbour No.2 Watermain                      | <b>On track</b> | This pipe will service growth in the north. It also provides an alternative route for conveying water from the west to the north to provide security and resilience.         | Causeway reclamation has commenced and pipe-laying is underway beside the North-Western motorway.   |
| Huia Water Treatment Plant replacement            | <b>On track</b> | The plant is nearing the end of its operational life. It needs to be replaced to continue to supply a growing Auckland with high quality water from our western supply dams. | Following community consultation further changes have been made to the original plan. The Assessment of Environmental Effects, and consent application, will be lodged in May 2019. |
| Nihotupu No.1 and Huia No.1 watermain replacement | <b>On track</b> | This project involves two critical watermains nearing the end of their design lives, which are being replaced.   | Construction due to commence in Golf Road, New Lynn in late May. Detailed design of this section of the pipeline is also being progressed.  |

# Strategic focus area – Wastewater investment

## Key commentary

For the nine months to 31 March 2019, \$187m was spent towards wastewater investment against a year to date budget of \$209m.

### Highlights

1. We launched a communications campaign in partnership with Plunket to communicate the correct way to dispose of wet wipes. The programme is reaching out to Plunket's networks' clinics and outreach programme.
2. We now have a Western Isthmus Community Liaison Group. We continued our work with Healthy Waters to devise a 12 month work programme for the Western Isthmus. Work is underway in 3 catchments.

### Risks

1. The Māngere Wastewater Treatment Plant's anaerobic digestion process suffered a biological upset in January 2019 which resulted in odour issues: Our teams worked hard to bring the digesters back within their normal operational parameters by April 2019. An international expert is conducting a forensic examination so we can identify the cause and develop a mitigation strategy for the future.
2. Failure to treat wastewater to the required standard and convey wastewater flows. The risk relates to environmental impacts and failure to meet consent conditions, with a flow on effect to stakeholder support and confidence. To address this enterprise risk, we continue to invest in our non-metropolitan WWTPs and major WWTP renewal and upgrade programmes have been completed at Māngere and are underway at Rosedale. We are also continuing with network upgrades to address capacity constraints and inflow and infiltration investigations to address illegal and incorrect storm water connections.

## Strategic context

Watercare provides safe, reliable wastewater services to 1.6m Aucklanders. We treat that wastewater to a high standard 24/7. The two main wastewater treatment plants servicing Auckland are at Māngere on the Manukau Harbour and Rosedale on the North Shore. We have over 8,000km of wastewater pipes, 514 wastewater pump stations and 18 wastewater treatment plants.

| Key programme of works  | Status   | Description   | Outlook   |
|---|----------|---|---|
| Northern Interceptor  | On track | This pipe will divert flows from Māngere to Rosedale. It will replace aged infrastructure, increase capacity of the network and reduce wet weather overflows.     | Wainoni Park pipe laying is complete and on schedule. Directional drilling mobilising in May 2019. Harbour reclamation construction is underway. Remaining pipeline design continues. |
| Pukekohe Wastewater Treatment Plant upgrade   | On track | The upgrade will provide capacity for population growth in the Pukekohe, Buckland, Tuakau and Pokeno catchment area.  | Main construction works commenced in December 2018. The project is on track to meet the new consent conditions by October 2021.   |
| Sub-regional wastewater servicing – North East  | On track | Upgrade will cater for population growth in Warkworth and Snells Beach and will produce high quality wastewater for discharge. Completion is due April 2022.      | Warkworth to Snells Transfer Pipeline consent lodged and in tender phase. The Snells Beach WWTP design is complete, with tender due 2020. Snells-Algies Outfall design is underway.   |
| Sub-regional wastewater servicing – South West  | On track | Upgrade caters for population growth in Kingseat, Clarks Beach, Glenbrook Beach, Waiuku. The programme includes a new Waiuku WWTP, new outfall pipeline and tidal | Discharge consent for the project was granted in 2018. We now have 8 years to deliver. Concept design is underway with business case approvals targeted for mid-2019.                 |
| Western Isthmus Water Quality Improvement Programme (Joint programme with Healthy Waters) | On track | Watercare is investing \$412m over 10 years. Benefits include reduced wastewater overflows into the environment.  | Investigation works are continuing in 3 of the 10 catchments. These are Herne Bay/St Mary's Bay, Waterview and Freemans Bay.  |

# Other statement of intent focus areas

## Three Waters review

- **Three Waters s17A Value for Money Review:** Watercare continues to work with Council on implementing the recommendation of Council's s17A Value for Money Review into the "Three Waters". Before the end of FY19, the CFOs of Watercare and Auckland Council will take leadership and provide oversight of the implementation of the Three Waters recommendations and transferring the work programme into "BAU".
- **Auckland's Waters:** Watercare continues to work with Council on the Auckland's Waters Strategy, which overlaps with the s17A Three Waters Review. Public consultation occurred in Q3, with the results to be presented to Council and Watercare in Q4.
- **Central Government Three Waters Review:** The DIA hosted a number of workshops around New Zealand to "road-test" their proposed regulation of Three Waters. Stakeholders from the Ministry of Health, Councils, Regional Councils, consultants, private water suppliers attended the sessions. Watercare attended a number of sessions. The workshops highlighted that there was general acceptance that public health was more important than cost, but it was apparent that smaller suppliers lacked the capacity, capability and funding ability to meet the challenges ahead. The DIA is expected to report back to Cabinet in June 2019.

## Climate change

- In March 2019, we launched our Climate Change Strategy with internal events and external publication.
- We are now developing 4 value streams to deliver on the Strategy.
- Planning for Māngere Thermal Hydrolysis is underway with a completion date of June 2024. This is a key component supporting our energy neutrality target for Māngere and Rosedale by 2025.
- Our first solar array is now installed in Pukekohe. Wellsford and Redoubt Road arrays will be installed by June 2019.
- We are supporting Auckland Council with the Auckland Climate Action Plan (ACAP) and were involved in the Auckland Climate Symposium (18 – 20 March).
- Watercare presented at the Global Water Summit on the future of the water industry, including net zero emissions.
- Five staff members became accredited Infrastructure Sustainability professionals to support the delivery of the Infrastructure Sustainability of Australasia (ISCA) tool on projects.
- We launched our 40:20:20 Vision for building better infrastructure, reducing carbon and improving health and safety outcomes.

## Contribution towards Māori outcomes

### Kaitiakitanga outcomes (particularly water):

- In March 2019, Watercare's CE Raveen Jaduram and Richard Waiwai, Watercare's Poutiaki Tikanga Māori (Principal Advisor) led Council family presentations on Te Toa Takitini priorities to Mayor Goff, Councillors and the IMSB.
- The Trade Waste Bylaw 2013 is under review. We updated the Kaitiaki forum on the process and highlighted the next steps.
- The Manukau Harbour hydrodynamic and water quality model is expected for completion in August 2019. Two members of the Kaitiaki forum represent mana whenua on the monthly project management meetings for the model, where all decisions are made.

### Identity and Culture

- Mana whenua is being engaged to incorporate Iwi interpretations through signage, artworks (tukutuku panels) whakairo (carvings) at Watercare sites.
- Restoration strategies take a holistic view, maximising mana whenua values and beliefs with mātauranga māori being created and implemented. Warkworth Wastewater Treatment plant in collaboration with Ngāti Manuhiri is a perfect example of this.

## Councillor, Local board and community engagement

- We kept the Waitakere Ranges, Whau and Puketapapa Local Boards updated on progress with the Huia No. 1 and Nihotupu No. 1 watermain replacement in the interests of no surprises.
- Community Liaison Group, Local Board and Councillors were kept updated on progress with the consent for the Huia Water Treatment Plant replacement.
- All Local Board members received information on the Trade Waste Bylaw review and the final step in the process involving public submissions.
- Local Board members received updates on Watercare's participation in the consent appeals for proposed water quality upgrades in St Marys Bay and the Western Isthmus water quality improvement programme.
- Updates on odour issues associated with the digesters at the Māngere Wastewater Treatment Plant were sent to Māngere and Puketāpapa Local Board members.
- Major wastewater upgrades in Glen Innes have been causing some disruption. Local Board members have been kept up to date with progress reports. Watercare continues to work with AT. Unfortunately, there is little opportunity to change traffic management and some degree of disruption will continue throughout the year.
- We attended a Franklin Local Board meeting to discuss future development in the area and the Local Board was appreciative of Watercare's attendance.

# Watercare Q3 financials



## Direct operating performance

| (\$ thousands)                      | Notes    | FY 18          | FY 19 Quarter 3 YTD |                |                | FY 19          |
|-------------------------------------|----------|----------------|---------------------|----------------|----------------|----------------|
|                                     |          | Actual         | Actual              | Budget         | Variance       | Budget         |
| <b>Net direct revenue</b>           |          | <b>392,293</b> | <b>317,826</b>      | <b>308,872</b> | <b>8,954</b>   | <b>412,118</b> |
| <b>Direct revenue</b>               | <b>A</b> | <b>641,586</b> | <b>485,302</b>      | <b>472,580</b> | <b>12,722</b>  | <b>631,040</b> |
| Fees & user charges                 |          | 490,537        | 393,752             | 383,804        | 9,948          | 508,019        |
| Operating grants and subsidies      |          | -              | -                   | -              | -              | -              |
| Other direct revenue                |          | 120,838        | 91,550              | 88,776         | 2,774          | 123,021        |
| <b>Direct expenditure</b>           |          | <b>219,082</b> | <b>167,476</b>      | <b>163,708</b> | <b>(3,768)</b> | <b>218,922</b> |
| Employee benefits                   |          | 74,491         | 54,929              | 55,796         | 867            | 75,007         |
| Grants, contributions & sponsorship |          | 102            | 309                 | 572            | 263            | 672            |
| Other direct expenditure            | <b>B</b> | 144,489        | 112,238             | 107,340        | (4,898)        | 143,243        |
| <b>Other key operating lines</b>    |          |                |                     |                |                |                |
| AC operating funding                |          | -              | -                   | -              | -              | -              |
| AC capital funding                  |          | -              | -                   | -              | -              | -              |
| Vested assets                       |          | 30,201         | 29,685              | 15,000         | 14,685         | 20,000         |
| Depreciation                        |          | 218,731        | 182,322             | 189,032        | 6,710          | 252,300        |
| Net interest expense                |          | 93,583         | 65,799              | 66,963         | 1,164          | 90,861         |



## Financial Commentary

**A:** Direct revenue is \$12.7m ahead of budget mostly due to higher actual usage volume (117.1 MLD) against budgeted volumes (111.8 MLD).

**B:** Other direct expenditure is \$4.9m or 4.5% over budget due to unforeseen unplanned maintenance required on infrastructure assets and costs associated with higher actual usage.

# Watercare Q3 performance measures

| Key performance indicators   | Previous Quarter | FY 19 Quarter 3 |             | Status | Commentary   |
|--|------------------|-----------------|-------------|--------|--|
|  |                  | Actual          | Target      |        |  |
| <p><b>Note: Watercare has a total of 14 LTP measures and 16 SOI measures. Non-LTP measures are marked with an *</b><br/> <b>For the nine months to 31 March 2019, all of our measures are tracked monthly. One measure is a yearly measure.</b><br/> <b>In Q3, we are meeting 13 of the 16 measures and not meeting 2 measures. Our annual measure into wet-weather overflows was tracking above the target, but is now coming down.</b></p> |                  |                 |             |        |  |
| The extent to which the local authority's drinking water complies with part 4 of the drinking water standards (bacteria compliance criteria)   | 100%             | 100%            | 100%        | Met    |  |
| The extent to which the local authority's drinking water complies with part 5 of the drinking water standards (protozoal compliance criteria)  | 100%             | 100%            | 100%        | Met    |  |
| Average number of wet weather overflows per engineered overflow point per discharge location in the transmission system *  | 2.63             | 2.1             | <2 per year | N/A    | Yearly measure: The adverse result in December 2018 was due to a significant rainfall event. Monthly rainfall in December 2018 was 224mm, compared to March 2017 (Tasman Tempest) rainfall of 269mm. |
| The number of dry weather overflows from Watercare's sewerage system, expressed per 1000 sewerage connections to that sewerage system  | 0.37             | 0.38            | ≤ 10        | Met    |  |
| Median response time for attendance for urgent call-outs: from the time that Watercare receives notification to the time that service personnel reach the site   | 50 mins          | 50 mins         | ≤ 60 mins   | Met    |  |
| Median response time for resolution of urgent calls-outs: from the time that Watercare receives notification to the time that service personnel confirm resolution of the fault or interruption  | 2.90             | 2.80            | ≤ 5 hours   | Met    |  |
| Median response time for attendance for non-urgent call-outs: from the time that Watercare receives notification to the time that service personnel reach the site   | 1.80             | 1.60            | ≤ 5 days    | Met    |  |



| Key performance indicators   | Previous Quarter | FY 19 Quarter 3 |              | Status  | Commentary  |
|--|------------------|-----------------|--------------|---------|---|
|  |                  | Actual          | Target       |         |   |
| Median response time for resolution of non-urgent call-outs: from the time that Watercare receives notification to the time that service personnel confirm resolution of the fault or interruption   | 2.7 days         | 2.2 days        | ≤ 6 days     | Met     |   |
| Attendance at sewerage overflows resulting from blockages or other faults: median response time for attendance - from the time that Watercare receives notification to the time that service personnel reach the site                                    | 45 mins          | 44 mins         | ≤ 60 mins    | Met     |   |
| The average consumption of drinking water per day per resident (gross PCC) (12 month rolling average)  | 273              | 2 month delay   | 266 +/- 2.5% | Not met | An extremely hot and dry January and February 2019 resulted in record water consumption by Watercare customers and also consumers outside Watercare's jurisdiction via water tanker operators. This will adversely affect this measure for the year.                                    |
| Attendance at sewerage overflows resulting from blockages or other faults: median response time for resolution - from the time that Watercare receives notification to the time that service personnel confirm resolution of the blockage or other fault | 2.9 hours        | 2.9 hours       | ≤ 5 hours    | Met     |   |
| The total number of complaints received by Watercare about any of the following:<br>a) sewerage odour<br>b) sewerage system faults<br>c) sewerage system blockages<br>d) the territorial authority's response to issues with its sewerage system.        | 18.6             | 18.6            | ≤ 50         | Met     |   |
| The percentage of real water loss from Watercare's networked reticulation system (rolling 12 month average)  | 13.0%            | 13.4%           | ≤ 13%        | Not met | 2 month lag on data. 13.4% figure is the February 2019 figure. We are continuing our work into the accuracy of our Bulk Supply Points. Our teams are also pursuing theft, replacing old meters with new, accurate meters and ensuring water meters are read in line with our programme. |
| Net Promoter score – strive to achieve a score of >30*   | 30               | 37              | >30          | Met     | In January 2019, we launched our in-house Voice of the Customer survey system, which informs our NPS score. The survey questions have been clarified, which has rendered a higher NPS result.   |

| Key performance indicators  | Previous Quarter | FY 19 Quarter 3 |                                 | Status | Commentary |
|---|------------------|-----------------|---------------------------------|--------|------------|
|   |                  | Actual          | Target                          |        |            |
| Compliance with Watercare’s resource consents for discharge from its sewerage system measured by the number of:<br>a) abatement notices<br>b) infringement notices<br>c) enforcement orders<br>d) convictions<br>received by Watercare in relation to those resource consents           | 0                | 0               | a) ≤2<br>b) ≤2<br>c) ≤2<br>d) 0 | Met    |            |
| The total number of complaints received by Watercare about any of the following:<br>a) drinking water clarity<br>b) drinking water taste<br>c) drinking water odour<br>d) drinking water pressure or flow<br>e) continuity of supply<br>f) Watercare’s response to any of these issues. | 4.4              | 4.5             | ≤ 10                            | Met    |            |
|   |                  |                 |                                 |        |            |
|   |                  |                 |                                 |        |            |
|   |                  |                 |                                 |        |            |
|   |                  |                 |                                 |        |            |