

## 5.0 LEVELS OF SERVICE

### 5.1 Introduction

A key objective of this Asset Management Plan is to match the level of service provided by the asset with the expectations of customers. This requires a clear understanding of customers' needs, expectations and preferences. The current high treatment level and optimisation is planned due to Health & Drinking water Act 2007, DWSNZ and WRC variation 6. The implementation and or any changes to this new legislation to improve further the quality of water and the reporting requirements will require a relatively high financial cost. Therefore it is assumed that there will be no significant changes to the legislation for achieving full compliance with DWSNZ because the WTP optimisation /upgrades require considerable cost to communities, which have to be balanced against the likely health benefits and affordability of the communities. The council endeavours to take practical steps to utilise cost-effective technology (where affordable) to protect public health and the environment. The water take consent renewal will consider the practicality of daily abstraction volume based on seasonal demand in Taupo district. It is assumed that as per variation 6 the existing Water abstraction is considered as a permitted activity and water consent would be renewed, if the "Water Demand Management Plan" is robust and practical.

The levels of service defined in this section will be used:

- to inform customers of the proposed type and level of service to be offered
- to enable customers to assess suitability, affordability and equity of the services offered
- as a focus for the AM tactics proposed to deliver the required level of service
- to measure the effectiveness of this AM plan
- to identify the costs and benefits of the services offered

The target levels of service for water supply and current industry standards are based on:

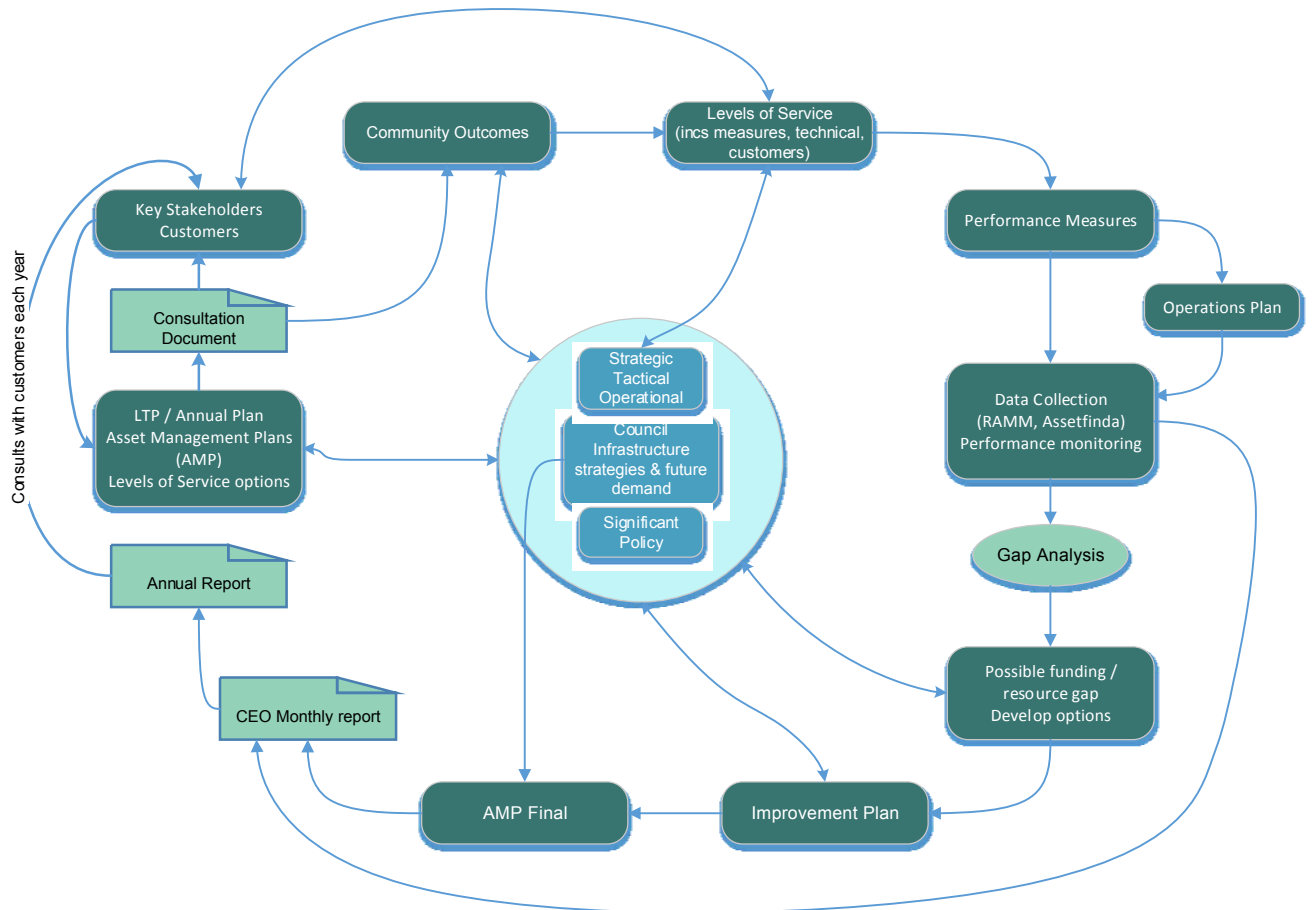
**Community Outcomes:** Provide guidelines for the scope of current and future services offered and manner of service delivery, and define general levels of service which the community wishes to receive.

**Customer Expectations:** Information gained from customers on expected quality and price of services.

**Statutory Requirements:** Legislation, regulations, environmental standards and Council By-laws that impact on the way assets are managed (i.e.: resource consents, building regulations, health and safety legislation). These requirements set the minimum level of service to be provided.

**Strategic and Corporate Goals:** Provide guidelines for the scope of current and future services offered and manner of service delivery, and define specific levels of service which the organisation wishes to achieve.

**Consultation Process and Strategic Linkages:** The following Figure 5.1 identifies the consultation process and reporting requirements for levels of service. It also incorporates the links to strategic documents and gap analysis and how this links into the Annual Plan and Long Term Plan.



**Figure 5.1: Consultation Process and Strategic Linkage Diagram**

## 5.2 Types of Levels of Service

### 5.2.1 OPERATIONAL

Current operational levels of service for water supply are scheduled in Table 5.2. The levels of service are “how we maintain our existing assets” for our customers.

Operational levels of service fall into two categories:

**Technical** (asset/product related) measures, which relate to the outputs the customer receives in terms of:

- Quality
- Capacity
- Quantity
- Health /Environmental impacts
- Availability
- Cost/ affordability
- Legislative requirements
- Maintainability
- Safety
- Reliability and performance
- Criticality

**Service Quality** (service process related) measures, which relate to how the customer receives the service in terms of:

*Levels of Service*

- Tangibles (information sheets etc.)
- Responsiveness
- Courtesy
- Empathy (understanding, individual attention)
- Assurance (knowledge, courtesy, trust, confidence)

### 5.2.2 TACTICAL

The levels of service stated within Table 5.1 are “why we build new assets”. These are thresholds which warrant the creation of a new asset in order to maintain an optimum level of service for the asset.

### 5.2.3 IMPLEMENTATION

The implementation levels of service stated within Table 5.2 are “the standard we build a water asset to”.

### 5.2.4 NATIONAL

A clean, safe, reliable supply of water is essential for the community. The Health (Drinking water) amendment act 2007 and DWSNZ (Drinking Water Standards New Zealand) 2008 requires Council to be able to demonstrate that the quality of the drinking-water supplied to the community, is safe to drink at all times. Therefore the council has completed installation of continuous monitoring equipment. This will allow for Council to be aware of the contaminants that may be contained within a water source before that water is treated, at all times.

Currently all the water supplies in the Taupo District are complying with part 4 (bacteria compliance criteria) of the DWSNZ. The Taupo WTP at Lake Terrace, Mangakino and Turangi WTPs has already been upgraded to meet the part 5 (protozoal compliance criteria) with DWSNZ. The small schemes may also be upgraded at least to meet the part 5 (protozoal compliance criteria) DWSNZ and will be consulted with community and council as a part of LTP process, due to the high cost involved and the affordability of the community.

### 5.3 Current Levels of Service

**Objective:** To safeguard the community and to provide treated /palatable water to ensure public health is maintained for all users connected to council's supply.

Note: An asterisk\* identifies the performance measure in LTP (**Non-financial performance measures**)

Sr. No.	Community outcome	Level of Service	How we measure it (customer)	How we measure it (technical)	Current LoS Performance	How We Monitor Performance	Target LoS Medium Term (1-3 years)	Target LoS Long Term (4-10 Years)
Safety of Drinking Water Performance measure  <b>T1</b>	Economy	<u>Safe drinking water</u>  We provide a safe and continuous supply of water that will over time meet New Zealand's drinking water standards for communities  <b>THIS IS A DIA MANDATORY MEASURE.</b>	No public health incidents related to drinking water quality	The extent to which Councils drinking water supply complies with:  (a) Part 4 of the drinking-water standards (bacteria compliance criteria), and (b) Part 5 of the drinking-water standards (protozoal compliance criteria).  (c) Part 8 of the drinking-water standards (chemical compliance criteria).  This measure applies to all Council water supplies where required under the Health Act.  Note that measurement against part 8 is not a DIA mandatory measure, however given the occurrence of naturally occurring arsenic in many of the districts water supplies part 8 has been included.	Currently all the water supplies in the Taupo District are complying with part 4 (bacteria) of the DWSNZ.  Taupo, Turangi, and Mangakino schemes can achieve compliance with Part 5 (protozoa compliance).  Taupo, Turangi, Mangakino, Atiamuri, Waihaha, Tirohanga, River Road, Whareroa and Whakamaru schemes are compliant with Part 8 (chemical compliance).	Annual compliance with DWSNZ. Report issued to DWA. (WINZ database)  Any E Coli transgressions lead to boil water notice immediately with notification to DWA.  Note: Currently all our water supply schemes are equipped with continuous monitoring instruments for measurement of flow, pH, Chlorine and turbidity. Any failure of equipment / process triggers E coli monitoring till the system is back to normal.  A water quality monitoring programme as per DWSNZ is in place for water network. This water quality information is updated in WINZ data base to demonstrate part 4 of the DWSNZ (bacterial compliance criteria).	Our water supplies have adequate data to demonstrate compliance with DWSNZ at Mangakino, Turangi and Taupo.  Waitahanui – compliant by 2018/19.	All council water supplies meet part 4, 5 and 8 of the drinking-water standards New Zealand.
System and adequacy  <b>T2</b>	Economy	Sufficient capacity to meet current demands and future growth	If a connection is possible within existing network and or new growth areas	Capacity of pipework relative to capacity required. That all new development is able to be connected immediately, if previously identified under the growth model, LTP and or District Plan.	LTP includes projects to enable future subdivisions as predicted by the revised growth model to connect to network.	Through the ability to allow subdivisions within specified development areas to occur	Capacity of pipework relative to capacity required. That all new development is able to be connected immediately, if previously identified under the growth model, LTP and or District Plan.	Capacity of pipework relative to capacity required. That all new development is able to be connected immediately, if previously identified under the growth model, LTP and or District Plan.

**Table 5.1: Tactical Levels of Service**

Sr. No.	Community outcome	Level of Service	How we measure it (customer)	How we measure it (technical)	Current LoS Performance	How We Monitor Performance	Target LoS Medium Term (1-3 years)	Target LoS Long Term (4-10 Years)
<b>Maintenance of Reticulation Network</b> Performance measure <b>O1</b>	<u>Environment &amp; Financial Prudence</u>	<p><u>Water loss</u> Percentage of real water loss from the Council's networks reticulation system.</p> <p>State and operation of the water reticulation network infrastructure.</p> <p><b>THIS IS A DIA MANDATORY MEASURE.</b></p>	Uninterrupted water supply	Methodology in line with Water NZ "Water Loss guidelines.	We were unable to report on this measure. We are working to resolve some issues with accuracy of our water measurement and reporting to enable meaningful water loss calculations. These improvements are in progress and likely to be finalised in the next three years. We expect to have a measure determined for inclusion in the Long Term Plan 2021-31.	Use water balance measurement methodology in line with Water NZ "Water Loss guidelines	No target until water loss percentage determined	No target until water loss percentage determined
<b>Fault Response Times</b> Performance measure <b>O2</b>  Performance measure	<u>Economy</u>	<p><b>Urgent call outs<sup>1</sup></b></p> <p><u>Fault response time</u> Attendance for urgent call-outs: from the time that Council receives notification to the time that the service personnel reach the site is ≤1hr.</p> <p><u>Fault resolution time</u> Resolution of urgent call-outs: from the time that the local authority receives notification to the time that the service personnel confirms resolution of the fault or interruption is within 4 hrs.</p>	Percentage of failure responded within the specified time	Response time from Council receiving notification of the fault to the time that service personnel reach the site of the water supply fault.	<p>Urgent fault response time: (2016/17) 89% responded within 1 hour.</p> <p>Urgent fault resolution time: (2016/17) 89% responded within 4 hours.</p>	Analysis of service requests and contactors KPI.	<p>Response time for service personnel reach the site of the fault is ≤1hr (90%)</p> <p>Time to resolve the problem is ≤ 4 hrs (85% of times).</p>	<p>Response time for service personnel reach the site of the fault is ≤1hr (&gt;91%)</p> <p>Time to resolve the problem is ≤ 4 hrs (90% of times).</p>
		<p><b>Urgent call out</b></p> <p><u>Fault response time (median)</u> Attendance for urgent call-outs: from the time that Council receives notification to the time that the service personnel reach the site.</p> <p><u>Fault resolution time (median)</u> Resolution of urgent call-outs: from the time that the local authority receives notification to the time that the service personnel confirms resolution of the fault or interruption.</p> <p><b>THIS IS A DIA MANDATORY MEASURE.</b></p>	Median response time for attendance and resolution	Response time from Council receiving notification of the fault to the time that service personnel reach the site of the water supply fault.	<p>The median response time in:</p> <p>2015/16 was 0.5 hours. 2016/17 was 0.6 hours.</p> <p>The median resolution time in:</p> <p>2015/16 was 3.1 hours. 2016/17 was 2.25 hours.</p>	Analysis of service requests and contactors KPI.	<p>Less than 1 hours</p> <p>Less than 4 hours</p>	<p>Less than 1 hours</p> <p>Less than 4 hours</p>

<sup>1</sup> An urgent call-out is one that leads to a complete loss of supply of drinking water.  
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Sr. No.	Community outcome	Level of Service	How we measure it (customer)	How we measure it (technical)	Current LoS Performance	How We Monitor Performance	Target LoS Medium Term (1-3 years)	Target LoS Long Term (4-10 Years)
<b>Fault response Times</b> Performance measure  Performance measure <b>03</b>	<u>Economy</u>	<b>Non Urgent call outs<sup>ii2</sup></b>  <u>Fault resolution time</u> Resolution of non-urgent call-outs: from the time that the local authority receives notification to the time that the service personnel confirms resolution of the fault or interruption is within 7 days.	Percentage of failure responded within the specified time	Response time from Council receiving notification of the fault to the time that service personnel reach the site of the sewerage overflow resulting from a blockage.	Percentage of non-urgent faults restored within 7 days in 2016/17 was 84%.	Analysis of service requests and contactors KPI.	Time to resolve the problem is ≤ 7 days (85% of times).	Time to resolve the problem is ≤ 7 days (90% of times).
		<b>Non Urgent call out</b>  <u>Fault response time (median)</u> Attendance for non-urgent call-outs: from the time that Council receives notification to the time that the service personnel reach the site.  <u>Fault resolution time (median)</u> Resolution of non-urgent call-outs: from the time that the local authority receives notification to the time that the service personnel confirms resolution of the fault or interruption.  <b>THIS IS A DIA MANDATORY MEASURE.</b>	Median response time for attendance and resolution	Where Council attends to water supply fault in the sewage system,	The median response time:  2015/16 was 1 day. 2016/17 was 7.7 hours.  The median resolution time:  2015/16 was 2 days 2016/17 was 1.12 days.	Analysis of service requests and contactors KPI.    Less than 4 hours.    Less than 7 days.	Less than 4 hours.    Less than 7 days.	
<b>Customer Satisfaction</b> Performance measure <b>04</b>	<u>Economy</u>	<u>Customer satisfaction</u> (a) Drinking water clarity (b) Drinking water taste (c) Drinking water odour (d) Drinking water pressure or flow (e) Continuity of supply (f) Council response to these issues  <b>THIS IS A DIA MANDATORY MEASURE.</b>	Complaints by customer on (a) Drinking water clarity (b) Drinking water taste (c) Drinking water odour (d) Drinking water pressure or flow (e) Continuity of supply (f) Council response to these issues	Total complaints reported as a whole of district.  Calculate as per 1000 connections	<i>Number of complaints in 2016/17 = 7.5 /1000 connections</i>	Total number of complaints / 1000 connections.  Number of faults from the service request system.  Number of connections from the rates database.	Target number of complaints per 1000 connections ≤ 8	Target number of complaints per 1000 connections ≤ 8

<sup>2</sup> An urgent call-out is one that leads to a complete loss of supply of drinking water.  
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Sr. No.	Community outcome	Level of Service	How we measure it (customer)	How we measure it (technical)	Current LoS Performance	How We Monitor Performance	Target LoS Medium Term (1-3 years)	Target LoS Long Term (4-10 Years)
<b>Demand Management</b> Performance measure  <b>05</b>	All	<u>Demand Management</u>  Sustainable use of potable water. We use our water efficiently.	Drinking water is always available	Average summer consumption per day per household equivalent unit within district.  Take total water supplied for urban water supply schemes and divide this by the total household equivalent units (connected) for these areas.  We include the following schemes: Acacia Bay / Mapara, Atiamuri, Bonshaw Park, Hatepe, Kinloch, Mangakino, Motuoapa, Omori, River Road, Taupo, Turangi, Waitahanui, Whakamaru, Whakamoenga, Whareroa.	The peak summer (January) water consumption is ~1.4 m <sup>3</sup> /HEU per day.	We take monthly water consumption data the HEU for each area water supply.	Summer peak household water consumption less than or equal to 1.5m <sup>3</sup> /day/HEU.	Summer peak household water consumption less than or equal to 1.50m <sup>3</sup> /day/HEU.
<b>Fire water flows</b> <b>06</b>	Economy	We provide adequate water for fire fighting in urban schemes.	Fire hydrant will have adequate water flow and pressure.	Minimum of FW2 fire water classifications are met in urban hydrants or exception agreed with NZ Fire service.	Most recent fire water testing met FW2 standards summer 2016/2017 where 5.2% of hydrants were tested.	By testing at least 5 % fire hydrants during peak seasons for coincident demands.  If inadequate water flow / pressure, we either upgrade the network or if it is cost prohibitive then advise fire services the limitations.	Our water pressure in urban areas meets FW2 fire fighting code of practice standards	Our water pressure in urban areas meets FW2 fire fighting code of practice standards

**Table 5.2: Operational Levels of Service**

## 5.4 Consultation

Council have identified following community outcomes:

- Economy – our communities prosper in a thriving local economy with a diverse range of rewarding employment opportunities
- Environment – a shared responsibility for places we are proud of
- Engagement – Council is connected with its communities, advocating for their social and cultural well-being

At present resident contact is generally on a one on one situation in the handling of customer complaints or in council and community board meetings. Council staff is working with Lakes and waterways action group. Regular advertised public forums are held to encourage and provide for ratepayer opinions and concerns to be heard. Submissions and suggestions for desired project and improvement work for Council consideration and inclusion into the LTP are called for during consultation.

## 5.5 Change to Level of Service

The level of service for Turangi, Mangakino and Taupo is increased because the water treatment plants are upgraded to meet full compliance with DWSNZ. Council applied for MoH funding to meet full compliance with DWSNZ by reticulation and was successful in obtaining approval from Taupō WTP supply. The level of service provided to Waitahanui will increase if council and community consultation outcome is positive.

Potential impacts on level of service could be: Local government amalgamation, long term funding constraints, regional delivery of water services, expiry of resource consents, funding changes, water takes limits, environmental effects, loss of access to land, treaty settlements.

The levels of service in the AMP have not been changed from the previous however some of the tidy up of how we measure and report has been improved and aligned with the mandatory DIA measures where required.

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