

Townsville City Council Water Demand Management Strategy 2015 - 2025

Townsville City Council has developed a strategic vision for the future of water demand management. Sitting below this vision is a number of themes and objectives that provide a focus for delivery of water demand management in Townsville.

Vision: SECURING TOWNSVILLE’S WATER FUTURE TODAY

Purpose: to continually improve the efficiency and security of our water service to the Townsville community

Principles: Leadership; Commitment; Teamwork; Consistency

Themes: in order to deliver the vision, five key themes have been identified. These themes provide a focus for future planning and delivery of the Strategy.

1. Communication and Education	2. Finance and Modelling	3. Technology	4. Strategy and Leadership	5. Customer Service
Innovative marketing, communication and education to inform and empower all users to take action, change behaviour and truly value water.	Understanding the cost of supplying a water service, modelling alternative approaches to inform decision making, and delivery of an affordable service.	Investigating, assessing and implementing the best available technology to drive integrated innovative solutions, reducing water consumption and enhancing customer service.	Implementing a strategy that is holistically supported by the organisation and community, including collaboration and co-ordination. Leadership is everyone’s responsibility within their sphere of influence.	Understanding customer expectations, providing opportunities for better outcomes, delivering consistent service, and customers understand their obligations.

Strategy Key Performance Indicators (KPI’s): to measure success of the overall Strategy, KPI’s have been linked to the relevant Key Result Areas of *TCC2015 Our Priorities*.

Water Billing - TCC is financially sustainable	Delivery - The city's assets meet the community needs	Manage - Our environment is valued	Satisfaction - The community is satisfied with the services we deliver
The Water Demand Management Strategy contributes to Townsville Water providing and maintaining water assets to meet community needs by 90% satisfaction rating in quality and reliability of water supply achieved via the Community Survey	Implementation of the Water Demand Strategy reduces the cost to supply water relative to business as usual	The Water Demand Management Strategy contributes to Townsville being a smart and sustainable city by achieving a 90% satisfaction rating in council environmental initiatives via the Community Survey	The Water Demand Management Strategy contributes to 90% satisfaction rating for the cost of water reflecting the quality and reliability of the water supply via Community Survey

Objectives and KPI’s: under each theme a series of objectives and key performance indicators (KPI’s) have been developed, setting out what the Strategy is aiming to achieve in each area, and to allow progress to be measured. See the following tables for further information.

1. Communication and Education

June 2016 (short term) Objectives	June 2018 (medium term) Objectives	2025 (long term) Objectives
<p>1.1 Imperative for change clearly articulated</p> <ul style="list-style-type: none"> Consistent and clear engagement to facilitate understanding on why change must occur Research, benchmarking and learning's to empower and educate <p>1.2 Market research undertaken</p> <ul style="list-style-type: none"> Understanding expectations Benchmarking opinions, attitudes and knowledge To inform communications and engagement strategy and technology road map. <p>1.3 Communication and Engagement Strategy approved</p> <ul style="list-style-type: none"> Tailored strategy for the 10 year Water Demand Management Strategy Stakeholders and required level of engagement identified <p>1.4 Existing communication and activities assimilated</p> <ul style="list-style-type: none"> Identify existing activities and build on them (e.g. visuals developed for plants and soil types) Utilise the existing communication to value add to the Strategy communication 	<p>1.6 Communication and Engagement Plans developed and progressively implemented</p> <ul style="list-style-type: none"> Campaigns developed, building on previous messaging Brand value Flexibility to respond to changing needs. Reviewed annually <p>1.7 Active conversation with community on water</p> <ul style="list-style-type: none"> The community has context for demand management and is prepared for specific messages <p>1.8 Need for water demand management is understood and accepted</p> <ul style="list-style-type: none"> Customers, internal and external, understand drivers for change The consequences of not changing water consumption behaviours are understood <p>1.9 Education program developed</p> <ul style="list-style-type: none"> Consultation and engagement with local education providers to provide relevant Townsville information targeting different age groups Existing engagement with education providers built on Existing water education activities built on (e.g. Creek to Coral) 	<p>1.10 Change in customer behaviour supports demand management</p> <ul style="list-style-type: none"> Community is self-regulating (socially unacceptable to waste water) Widespread knowledge of appropriate gardens for the Dry Tropics, and their maintenance Weather appropriate and efficient watering systems widespread <p>1.11 Widespread understanding of consumption, billing options and benefits of demand management</p> <ul style="list-style-type: none"> Water is accepted as a product, and the real price and value are understood Customers interact with their water demand management systems <p>1.12 Education programs established</p> <ul style="list-style-type: none"> Programs that were developed in collaboration with local education providers are embedded and supported with current information National Water Week celebrated throughout Townsville



1.5 Community groups engaged

- Relevant groups active in water demand management identified and engaged

Key Performance Indicators

- Current Water Watchers Program (or a billing option that promotes efficient water usage) participation increases every year
- Increase in community awareness of water demand management goals, measured by a bi-annual focus group
- Participation in education programs increases annually

2. Finance and Modelling

June 2016 (short term) Objectives
<p>2.1. Projects set up to establish baselines on where/who/how much and why</p> <ul style="list-style-type: none"> • Need to understand where we are at with all aspects of water demand before being able to quantify what changes need to be made, and to measure their success • Benchmarking with other water providers
<p>2.2. Financial model developed</p> <ul style="list-style-type: none"> • A robust financial model for demand management initiatives/projects to inform business cases • Quantification of savings initiatives to prioritise and justify spending on demand management
<p>2.3. Scope complete for water billing investigation</p> <ul style="list-style-type: none"> • Determining needs, objectives and constraints for investigation into water billing for Townsville • Integrate the potential functionality of the Smart Water Solution with water billing options (such as seasonal, daily and/or peak usage periods) • Approval of scope

June 2018 (medium term) Objectives
<p>2.4. Baselines understood and benchmarking undertaken</p> <ul style="list-style-type: none"> • Projects to establish baselines completed • Target water use determined • Information is being used to inform projects/initiatives to be undertaken/prioritised • Understanding of business as usual consumption and the factors that contribute to that consumption
<p>2.5. Business cases developed using financial model</p> <ul style="list-style-type: none"> • Consistent method of determining costs for benefits realised
<p>2.6. Water billing investigation complete</p> <ul style="list-style-type: none"> • Information on how billing options can impact on water use in Townsville. • True cost of current service is understood • Research other organisations • Build on best practice water billing models • Assessment of integration of available technology and water billing

2025 (long term) Objectives
<p>2.7. Water demand management has improved efficiency in servicing Townsville with water</p> <ul style="list-style-type: none"> • Average and peak water demands have been reduced, leading to lower capital and operational costs • Infrastructure deferrals due to reduction in per capita consumption has led to cost savings for Townsville Water and the community
<p>2.8. Existing infrastructure optimised</p> <ul style="list-style-type: none"> • Security of existing bulk water supply increased due to demand management. • Existing treatment and distribution asset life able to be optimised.
<p>2.9. Best practice water billing implemented</p> <ul style="list-style-type: none"> • Customers are willing to pay for their water • Billing structure able to adapt to changing costs and technology advances

Key Performance Indicators

- Cost of supplying water has reduced relative to business as usual
- Water demand management financial model used annually to test solutions for specific items and determine optimised overall strategy

3. Technology

June 2016 (short term) Objectives	June 2018 (medium term) Objectives	2025 (long term) Objectives
<p>3.1. Smart Water Solution Project team established</p> <ul style="list-style-type: none"> Meters, communication and data analytics investigated Engagement with stakeholders, including Knowledge Management Skill base for smart water solution determined Will make recommendations on a Smart Water Solution for Townsville <p>3.2. Technology road map developed</p> <ul style="list-style-type: none"> Metering, communications, data management, analytics, system integrations, external sensors, big data, 'internet of things' Assessment of technology options and associated costs and timeframes Determination of strategy for up skilling for new technologies <p>3.3. Specification and guideline improvement plan developed</p> <ul style="list-style-type: none"> Determination of the specifications and guidelines, both for council and the development industry, that require updating (e.g. the Development Manual) Ensuring consistency with council policies and the Townsville City Plan New specification needs identified (e.g. for Smart Water Solution, sub- metering) Strategy for when and what information is required for the updates Ensures specifications and guidelines remain contemporary 	<p>3.4. Smart Water Solution recommendations proceeding</p> <ul style="list-style-type: none"> Investigations complete, business case/s made Solution will include inter alia demand (such as customers metering) and supply (such as pressure management) considerations <p>3.5. Technology road map effected</p> <ul style="list-style-type: none"> Opportunities to deploy the best technology options available at the time are realised Training program to build skill base for smart water solution set up Pathway for adoption of technology is adopted in collaboration with internal and external stakeholders <p>3.6. Specification and guideline improvement plan implemented</p> <ul style="list-style-type: none"> Plan for the review and updating of specifications and guidelines has been developed and the recommendations are being implemented. Ongoing improvement process as we learn more about water use in the Dry Tropics, and technology changes are identified 	<p>3.7. Smart Water Solution successfully installed</p> <ul style="list-style-type: none"> Townsville completely serviced by meters connected to communication network with options for service providers, and data analytics integrated with billing. Demand and supply side leakage reduced. Real time water network system information feeds into system management tools <p>3.8. Workforce appropriately skilled</p> <ul style="list-style-type: none"> Training is embedded and on-going to achieve effective delivery of water demand management in Townsville On-going collaboration across council to maximise efficiency <p>3.9. Specifications and guidelines updated on an on-going basis</p> <ul style="list-style-type: none"> Specifications and guidelines remain contemporary as technology and customer expectations change Specifications and guidelines reflect water savings in the system, and contribute to lower capex and opex

Key Performance Indicators

- Overall water losses from the water system reduce annually relative to business as usual
- Delivery dates identified in the technology road map are met

4. Strategy and Leadership (including co-ordination and collaboration)

June 2016 (short term) Objectives	June 2018 (medium term) Objectives	2025 (long term) Objectives
<p>4.1. Engagement with all levels of government</p> <ul style="list-style-type: none"> Formal and informal engagement to engender political will and collaboration Establishment of coalition of the willing to influence and give the broad message of importance of water demand management to all levels of government and industry <p>4.2. Strategy adopted</p> <ul style="list-style-type: none"> Framework and consistent objectives to achieve the vision for water demand management for TCC into the future Strategy approved by the Project Sponsor and adopted by council Alignment across the organisation achieved during the development of the Strategy <p>4.3. Action plan developed</p> <ul style="list-style-type: none"> Detailed step by step plan for delivery of identified initiatives and projects, including activities, responsibilities and timeframes Delivers the objectives of the Strategy. Consideration of technological, fit for purpose water, and social solution/s Utilises the financial model to develop preliminary business cases to prioritise projects Will be reviewed annually 	<p>4.5. Leadership at all levels of government</p> <ul style="list-style-type: none"> Appropriate resources are committed to achieving water demand management Water demand management is a topic of discussion between local, state and federal political representatives Collaboration and open dialogue between council and state departments <p>4.6. Review process for Strategy and Action Plan established</p> <ul style="list-style-type: none"> To ensure the Strategy and Action Plan remains on-track, relevant, and evolves with technology and community expectations <p>4.7. Water Demand Management Team recognised and active</p> <ul style="list-style-type: none"> Successfully driving forward water demand management internally and externally The team is recognised as having open and transparent goals and results, and is openly committed to the Strategy Water Demand Management is integrated into core procedures 	<p>4.10. Demand management is part of core business</p> <ul style="list-style-type: none"> The Water Demand Management Team is embedded as business as usual, and is leading innovative solutions to water demand management The use of 'fit for purpose' water is optimised The total water cycle is considered in decisions across council <p>4.11. Succession plan developed for Strategy</p> <ul style="list-style-type: none"> Work commences in 2023 to allow enough time Water Demand Strategy 2025 – 2035 has been developed and adopted <p>4.12. Recognised as industry leaders</p> <ul style="list-style-type: none"> TCC is recognised as a leader in water demand and change, management Collaborating with other councils to improve learning and reduce individual costs (e.g. CTM alliance expanded) The management of water for Townsville's open space is recognised as best practice Case study documenting Townsville's transformation produced



<p>4.4. Water Demand Management Team established</p> <ul style="list-style-type: none"> • Collaborative team with representatives from each Division, which will drive the future of demand management in council • Project teams will report back to the Water Demand Management Team on progress • Governance structure to be developed and Terms of Reference Agreed upon 	<p>4.8. Alternative water supply solutions explored</p> <ul style="list-style-type: none"> • Fit for purpose water investigations / projects undertaken • Consideration of alternatives such as river water, recycled water and rain tanks <p>4.9. Leadership established in the community</p> <ul style="list-style-type: none"> • Collaboration with community groups is leading to community led solutions • Water demand management business opportunities are recognised and established (e.g. potential of assisting turf growers to provide and market water efficient lawn species) 	<p>4.13 Commitment is strong</p> <ul style="list-style-type: none"> • Council and the community are proud of the achievements made, and remain committed to demand management • Resourcing remains adequate for demand management and innovation to continue evolving
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Key Performance Indicators

- Annual increase in developers incorporating water efficient philosophies into new areas and builds relative to business as usual
- Water use in council’s open space areas in the "high efficiency band" for the type of vegetation and environment increases annually, based on 2016 baseline
- Annual reporting of water demand management targets

5. Customer Service

June 2016 (short term) Objectives	June 2018 (medium term) Objectives	2025 (long term) Objectives
<p>5.1. Scope complete for payment options investigation</p> <ul style="list-style-type: none"> • Baseline and benchmarking with other utilities • Customer engagement • Billing and payment options • Communication methods • Separating water bill from rates • Consideration of payment options for fit for purpose water <p>5.2. Engagement with key non-residential customers</p> <ul style="list-style-type: none"> • Identify key non-residential customers • Benchmark non-residential customer service by other utilities • Establish dialogue <p>5.3. Review Townsville Water customer service standards</p> <ul style="list-style-type: none"> • Implications of Strategy and Smart Water Solution examined 	<p>5.4. Payment options investigation complete</p> <ul style="list-style-type: none"> • Takes into account water billing investigation results • Best practice payment options to be considered for Townsville • Residential and non-residential considered <p>5.5. Non-residential water demand management plans developed</p> <ul style="list-style-type: none"> • Assistance to, and collaboration with, key non-residential customers to develop individual water demand management plans • Innovation for non-residential customers with high demand is investigated • Targeted approach for bulk water customers • Development of plans in collaboration with internal council customers (e.g. Open Space, Property Management) <p>5.6. Customer service standards review recommendations effected</p> <ul style="list-style-type: none"> • Customer service standards evolve with new technology and customer expectations • Greater understanding of non-residential customer needs, and offering new ways to undertake business with them 	<p>5.7. Water billing and payment options available to meet needs</p> <ul style="list-style-type: none"> • Water billing options are available (e.g. pre-paid, time of use, off-peak pricing) • Payment options are available to suit customer needs <p>5.8. Easily accessible and understood information</p> <ul style="list-style-type: none"> • Customer obligations have been communicated clearly and are widely understood • Customer demand information is available through a communication method of choice, and presented in an easily understood format • Customer leaks are quickly identified and communicated, avoiding excess water charges <p>5.9. Customers empowered to manage their own demand</p> <ul style="list-style-type: none"> • Through understanding how their water is used, the impacts on their costs, and how demand can be impacted by choices they can make, customers actively manage their own demand



Key Performance Indicators

- Contested bills reduce annually relative to business as usual
- Annual reduction in complaints regarding water billing and metering relative to business as usual