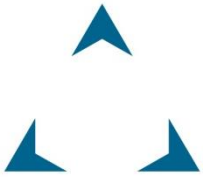
Investigating Potential Collaborative Mechanisms for FNQ Urban Water Services

FNQROC

Final Report

13 November, 2013



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Executive Summary

Background

The effective provision of urban water supply and wastewater services is an important element of local government responsibility. The sustainability of delivery of water services by local government has recently been examined by a number of National and State reviews, resulting in a view that more formalised collaboration among regional services providers may reduce the risk of service security, gain economies of scale and provide a more reactive framework to address future challenges.

Subsequently the Queensland Water Regional Alliances Program (Q-WRAP) was established as an initiative to investigate a range of matters including institutional arrangements and collaboration in the provision of water supply and wastewater services outside of South-East Queensland (SEQ). The Far North Queensland Regional Organisation of Councils (FNQROC) was selected as one of three Q-WRAP pilot regions to participate in this assessment.

An initial scoped paper completed by Q-WRAP identified three potential collaborative mechanisms to be examined:

- County Council.
- Corporation.
- Regional Alliance.

The purpose of this report is to provide a supported assessment of each of the above solutions in terms of delivery outcomes that help all stakeholders (local, state and federal government and local communities) to better manage the risks and issues around urban water provision in the FNQ region.

Approach

Six FNQROC members agreed to participate in this study, being:

- Cairns Regional Council.
- Tablelands Regional Council.
- Cassowary Coast Regional Council.
- Cook Shire Council.
- Croydon Shire Council.
- Etheridge Shire Council.

The study consisted of two phases. The first phase[1] was a review undertaken to determine the current operational and strategic position of participating councils across the following key strategic areas:

- Strategic Planning.
- Governance.
- Delivery Planning.
- Customer Service Standards.
- Asset Management.
- Legislative Compliance.
- Human Resources.
- Financial Management.

[1] Note this phase is the Stage 2 assessment as per the Q-WRAP program.

The outcome of this first phase was to establish an understanding of how each council is currently performing in relation to a nominated "best practice" benchmark, and to identify potential improvement opportunities to close the "gap" between current and best practice. The size and location of each council were taken into consideration in the assessment, along with evidence of progression towards improved practices.

The second phase[2] of the study required an impact assessment of each of the governance models facilitating change to close the service gap identified in the phase one assessment. To complete this impact assessment, the potential financial benefit and cost implications of each of the governance models were quantified.

Understanding the Industry

To provide context for the driver for the review it is critical to gain an appreciation of the challenges facing the water sector in providing safe, reliable and sustainable drinking water supply and wastewater treatment for their communities.

From industry discussions and reviews the key challenges have been summarised as:

- External factors such as population change and climatic condition changes affecting both demand and supply.
- The challenge of maintaining and replacing aging and inadequate infrastructure to meet both the community expectations and the increasing regulations and standards to reduce health risks.
- The operational service delivery issues such as profession skill shortages and the lack of choice in a competitive or restricted labour market.
- The financial pressure of increasing costs balanced with the limitation of the affordability for the community.

The initial Q-WRAP scoping paper identified that all these factors are apparent within the Far North Queensland area.

In terms of solutions, it is recognised that the current structure of the water industry being based within local government is not necessary the optimal model. Some of the failures of the current model are:

- The restriction of the revenue base to a ratepayer framework.
- The restriction of control to the local government boundary rather than the natural catchment water area.
- The lack of focus with the water activity competing with other council activities for resources and funding.

The alternative governance models that promote larger consolidated operations have identified potential benefits achieved through:

- Cost savings from economics of scale.
- Access to debt capital to ensure investment in the facilities.
- The ability to structure pricing across a wider regional basis.

Currently it appears that the sector generally accepts that current institutional arrangements in regional NSW and Queensland are sub-optimal, it also acknowledges that there is no single, best alternative, and that institutional reforms need to consider the unique needs of individual areas.

[2] Note this is the Stage 3 assessment as per the Q-WRAP program.

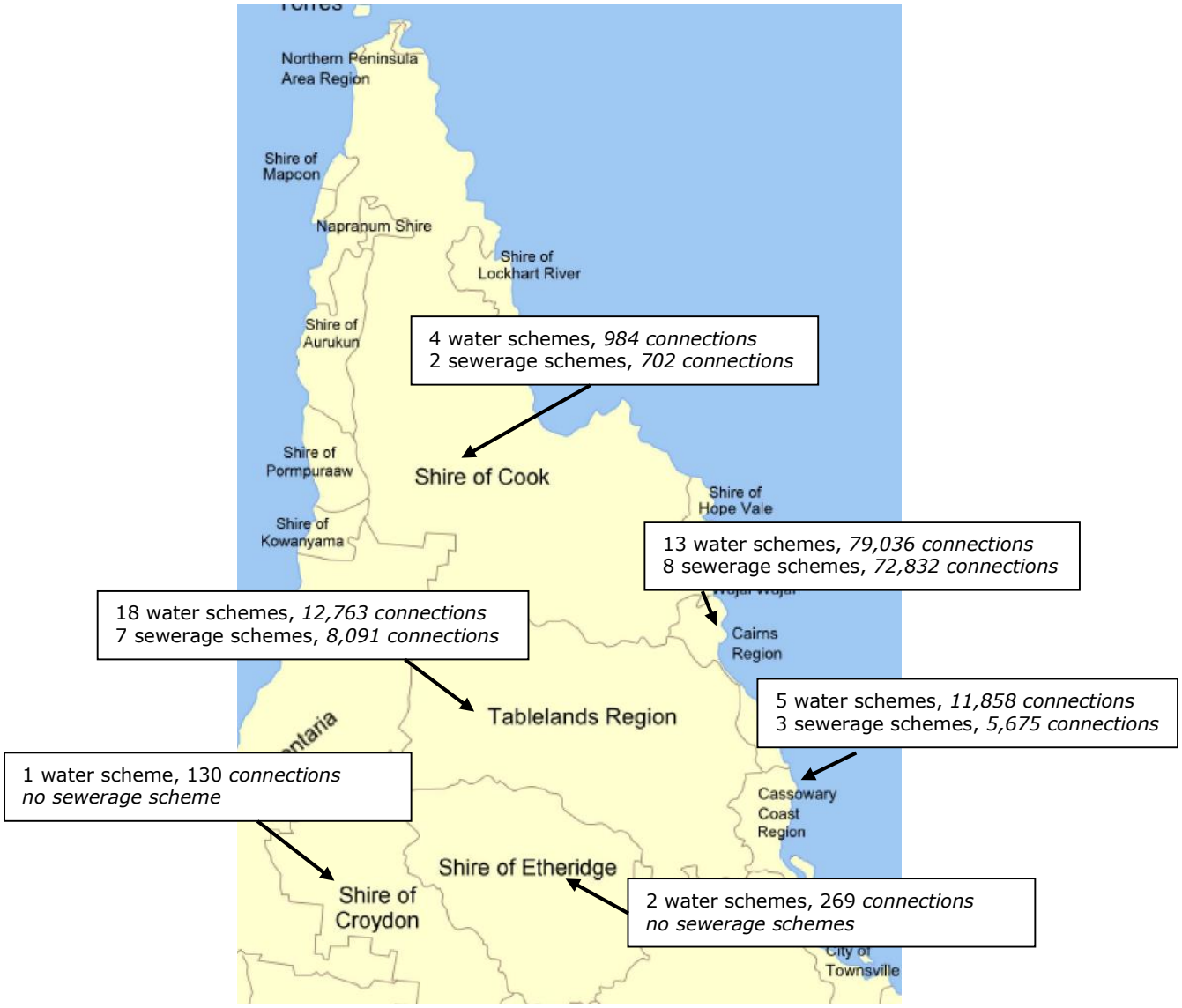
Understanding Far North Queensland

The six local government areas reviewed in this assessment are significantly different in geographical profile and population; ranging from urban profile, to rural townships and remote communities. Across the 6 councils within the study area there are a total of 43 water supply schemes and 20 waste water schemes.

Water supply schemes range from small water distribution schemes servicing less than 50 connections, through to supply, treatment and distribution schemes servicing up to 70,000 connections. The geographical disparity of these water supply schemes also mean that each network has differing water source availability and consumption profiles.

Similarly, the wastewater schemes range from small schemes servicing several hundred connections to larger urban schemes servicing over 20,000 connections.

Figure E.1: Location of Schemes



Source: AEC*group*

The geographical constraints in servicing such varying and dispersed communities in the region limits the opportunity for economies of scale usually gained by connecting the individual schemes to form larger network grids.

The small size of the schemes (all except one scheme services less than 7,000 connections) provides a challenge in terms of achieving financial sustainability with the small dispersed schemes generally having higher operating costs (per property) than larger urban

schemes. The councils need to balance full cost recovery targets at scheme and whole of business level, to ensure equity of pricing (taking into account any cross-subsidisation), whilst still ensuring affordability for customers.

Current Business Model and Performance

The assessment of current performance of each council against "best practice" focused on an evidenced demonstration of strategy, structure and processes across a range of key strategic areas. The purpose was to assess the local government progression towards the "best practice" standard and was not undertaken as an assessment of individual council performance.

A measure to define the local government's progression towards "best practice" was determined by assessing the "gap" as defined by the following scale:

Table E.1: Qualitative 'Gap Scale' Applied to Identified Audit Gaps

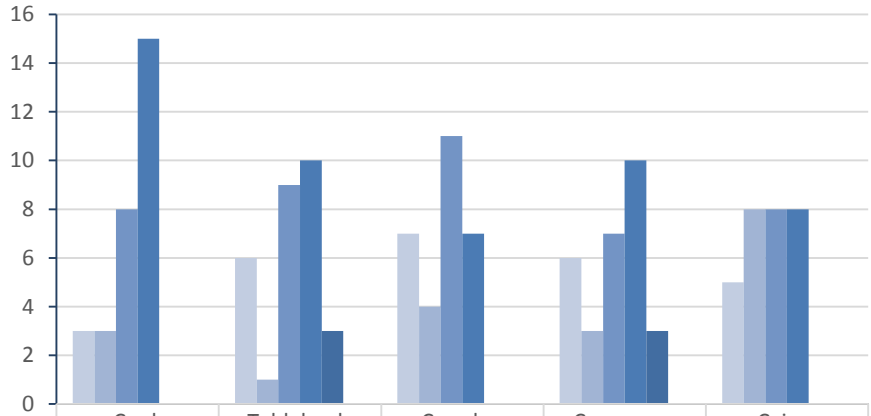
Gap Scale	Best Practice Achieved	Impact on Current Service Delivery Levels	Impact on Future Service Delivery Levels	Interpretation of Risk	Value
No Gap Identified	Yes	None	None	No gap identified as council appears to be operating in line with the industry best practice approach.	0
Negligible	No	None	None	Current approach by council does not meet industry best practice, however this appears have no apparent (or negligible) impact on current service delivery levels and is not likely to impact future service delivery levels.	1
Minor Gap	No	None	May result in impacts to service delivery in future	Current approach by council does not meet industry best practice, but the identified gap appears to have no apparent (or negligible) impact on current levels of service delivery. However a likelihood exists that in future this gap may result in misalignment to corporate direction or affect the efficiency of service delivery.	2
Moderate Gap	No	Impact on current service delivery levels	May continue to impact in the future; but no likely increase in impact	Current approach by council does not meet industry best practice. The identified gap appears to be currently impacting on effective service delivery and will result in misalignment of service delivery with future strategic direction.	3
Major Gap	No	Impact	Likely to increase in impact	Current approach by council does not meet industry best practice. The identified gap appears to be currently impacting on effective service delivery. In the future this gap is likely to increase and significantly affecting the council's ability to adequately deliver services or remain sustainable as a business.	4
Significant Gap	No	Significant impact	Significant impact	The identified gap is significantly affecting the council's ability to adequately deliver current services and/or impacting on the sustainability of Water Supply and Wastewater activities.	5

Source: AEC*group*

Findings:

The gap assessment identified the councils at each end of the size scale, Croydon and Cairns, have the highest number of no gaps and negligible gaps in regard to achieving best practices.

Figure E.2: Score by Councils



	Cook	Tablelands	Croydon	Cassowary	Cairns
No Gap	3	6	7	6	5
Negligible	3	1	4	3	8
Minor	8	9	11	7	8
Moderate	15	10	7	10	8
Major	0	3	0	3	0
Significant	0	0	0	0	0

Source: AEC*group*

Croydon has a small single scheme, which even though resourced via a part time employee, is managed in an effective manner, meeting the service requirements of the community. Long term planning and strategies were evidenced.

Cairns, with the largest schemes and the largest number of serviced properties, is well resourced and uses both internal and external technical knowledge to support not only the scheme management but also strategic future planning such as demand planning. It was noted that Cairns provides informal support and assistance to many of the other councils in the region.

The councils of Tablelands, Cook and Cassowary Coast also have multiple independent schemes varying in size. The challenge of strategically managing this wide range of schemes, combined with the constraints of finite budget resources and lack of clarity on transitional arrangements by State requirements for Scheme Asset Management Plans (SAMP), appears to be impacting on these councils achieving best practice in the areas of strategic direction, asset management (in particular knowledge management) and also in getting value from legislative plans (which appear to be purely compliance driven documents as opposed to tools for business improvement). These councils are also challenged with being regions that are experiencing no (or declining) growth as this impacts on financial sustainability and also workforce resourcing. However, this review does reveal that there are some functions of service providers that appear to be operating within the range of best practice. These include organisational structure, support functions, delivery planning, workplace health and safety, staff training, activity budgeting and meeting national competition requirements.

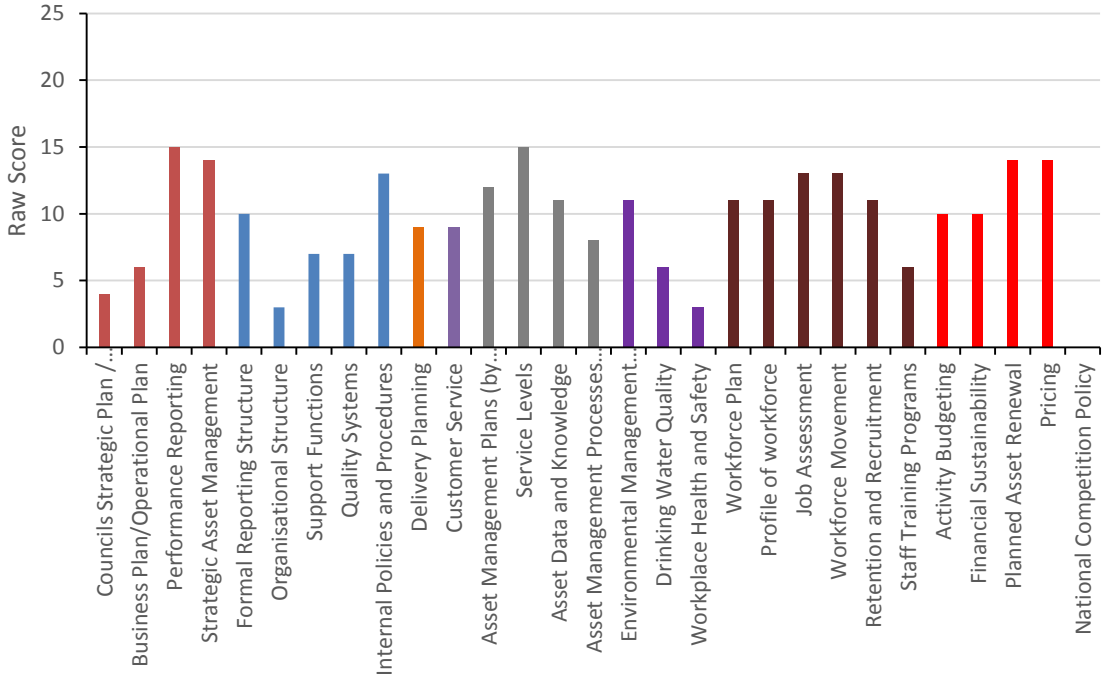
The following graph provides a perspective of the performance aggregated across all the councils and identifies there are eight areas where the most opportunities for improvements lie:

- Performance Reporting.
- Strategic Asset Management.
- Internal Policies and Procedures.

- Asset Management.
- Service Levels.
- Job Assessment.
- Strategies for Workforce Movements.
- Planned Asset Renewal.
- Pricing.

The aggregate scores shown below are the sum of the scores of each of the five councils for each area and issue based on the scoring scale as outlined in Table E.1: Qualitative 'Gap Scale' Applied to Identified Audit Gaps. Therefore a higher score indicates a greater gap between best practice and current practice.

Figure E.3: Aggregate Score across the Five Councils



Source: AEC*group*

This assessment is consistent with other sector assessments, such as the *Local Government Financial Sustainability Review*[3] and the industry sector reviews, which also identify that the key challenges and risks facing local government relate to the management of infrastructure, resourcing of workforce and the financial sustainability and affordability for communities.

Governance Models

Each governance model is outlined below:

- **Status quo:** As per the existing local government arrangements (pre de-amalgamation).
- **Regional Collaboration Model:** This arrangement is comparable to the alliance models in the Q-WRAP study. It is assumed this model will further expand on the current arrangement with FNQROC. All service delivery, governance and asset ownership would still be fully retained by each council. Resourcing for projects would come from the contribution of either staff or budget funding. The key risks associated with this model are the voluntary nature of most water service alliance structures and a lack of commitment to outcomes and reliance on annual budget allocation of each

[3] AEC*group* Ltd. (2013) Factors Impacting Local Government Financial Sustainability: A Council Segment Approach.

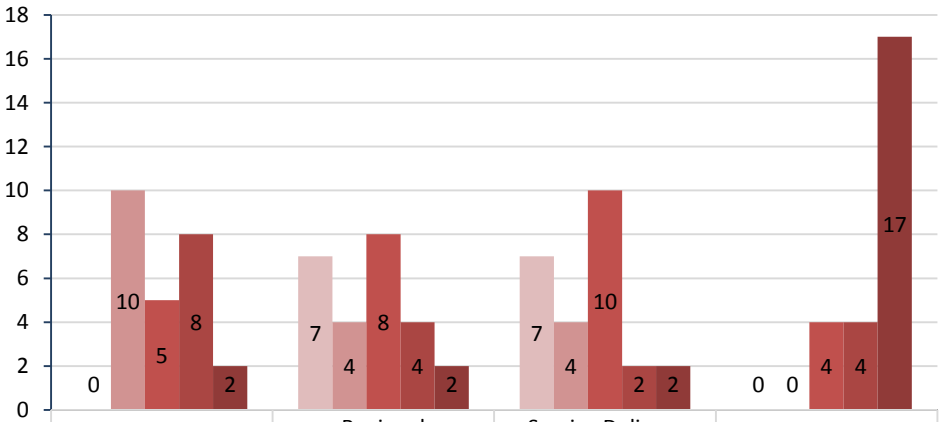
participating council. This often leads to voluntary arrangements not being able to derive optimal benefits. Ideally, participation in this alliance should be mandatory.

- **Service Delivery Model:** This arrangement is based on the county council model. Under this service delivery model, a service delivery business will be created that provides water supply services to Council. Services can include (but not limited to) operations, laboratory, maintenance and renewal programs, asset management planning, infrastructure planning and delivery, reporting tools and legislative compliance/monitoring. All asset ownership, governance responsibility, finance and price setting would be retained by councils. The business structure for this option can be either:
  - Owned and operated as a commercial business by one of the larger FNQROC councils (such as Cairns).
  - A separate entity (either corporate or alliance) jointly formed by a small number of key councils.
  - A separate entity jointly formed by all councils.
- **Corporate Ownership Model:** This organisational structure is based on the separation of not only service delivery, but also on the transfer of all aspects of governance and management, and asset ownership to a separate incorporated entity. All assets, debt and other balance sheet instruments are transferred to this entity. As a result, the councils will retain no ownership of assets or control over day-to-day operations. Ownership will be based on shareholdings (either Local or State Government) with all aspects of operations governed by a board (either through representation from participating councils or by independently appointed board members).

Impact of the Governance Models on Addressing the "Gap"

It is apparent from the analysis that across the 25 key factors assessed, the corporation model would provide the greatest likelihood of change to move towards best practice.

Figure E.4: Likelihood of Governance Model Facilitating Change



	Status Quo	Regional Collaboration Model	Service Delivery Model	Corporate Entity
Rare	0	7	7	0
Unlikely	10	4	4	0
Possible	5	8	10	4
Likely	8	4	2	4
Almost Certain	2	2	2	17

Source: AEC*group*

The Corporate Entity Model is proposed as a "new" organisation and therefore it will have the opportunity from commencement to use best practice as the base line for strategy, structure and processes.

The Service Delivery Model and the Regional Collaboration Model will facilitate change in over half the instances, indicating both these models would facilitate an improvement from the Status Quo position.

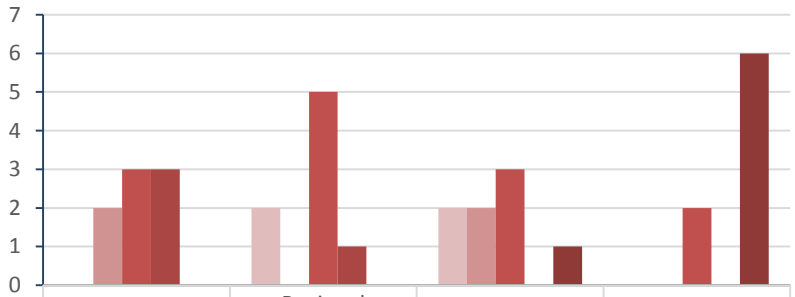
However, to determine the impact of change, the likelihood of change should be considered in relationship to the areas that have been identified with the largest "gap", that is the areas where the change would have the most positive benefit.

The assessment has identified the following eight areas as those where the greatest benefit would be achieved from improvement opportunities.

- Performance Reporting.
- Strategic Asset Management.
- Internal Policies and Procedures.
- Asset Management.
- Service Levels.
- Job Assessment.
- Strategies for Workforce Movements.
- Planned Asset Renewal.
- Pricing.

The following graph outlines which governance model will have the most likelihood of change.

Figure E.5: Likelihood of Change in the Lowest Performance Areas



	Status Quo	Regional Collaboration Model	Service Delivery Model	Corporate Entity
Rare	0	2	2	0
Unlikely	2	0	2	0
Possible	3	5	3	2
Likely	3	1	0	0
Almost Certain	0	0	1	6

Source: AEC*group*

As expected the Corporate Entity Model would promote the greatest likelihood of change. This structure involves a significant departure from the current structure. The physical process to restructure and amalgamate services between councils into a regional corporate entity will involve significant changeover process to both the Corporation and each council.

The Status Quo Model is the next option that will provide the most likely change (3 instances) and possible change (3 instances). However, it should be noted that one of the main constraints for change in an organisation is the limitation of resources to promote change and the desire for change to occur. Ultimately the promotion of change will be dependent on the councils (and Executives) focus, budget constraints and other externalities (such as State legislation).

The Regional Collaboration Model is the third model that provides the greatest possible likelihood for change (5 instances). The rating of possible is a reflection of that the Regional

Collaboration Model can provide the framework for change but it is still reliant on each of the individual council's implementation of the frameworks.

The Service Delivery model provided the least impact in the areas identified.

Financial Assessment of Alternative Business Models

The financial assessment reviewed the revenue and cost structure of the combined councils (status quo) to identify potential savings (or costs) arising from the move to a new governance model. The savings and costs have been assessed on the basis of the impact on the region, and therefore considers both the new governance model and existing council impact. The table below summaries the savings and costs applied in the assessment.

Table E.2: Calculation of Financial Impact from Alternative Business Models

Item	Regional Collaboration Model	Service Delivery Model	Corporate Entity
Water and Wastewater Operations			
Upfront Cost/(Benefit)			
Transition Costs	**$50,000**	**$1,000,000**	**$5,000,000**
Ongoing Cost/(Benefit)			
Governance	$0	$150,000	$400,000
Programs	$250,000	$0	$0
Bulk Purchasing Arrangements	-$618,554	-$479,226	-$1,546,385
Human Resources	$400,000	-$836,229	-$1,278,300
Corporate Support – Service Provider Impact	$0	$0	-$1,000,000
Other Cost Efficiencies	$0	$0	-$114,318
Total Ongoing Cost/(Benefit)	**$31,446**	**-$1,165,455**	**-$3,539,003**
Annualised Cost/(Benefit)	**$36,446**	**-$1,065,455**	**-$3,039,003**
Council Impact			
Upfront Cost/(Benefit)			
Possible Staff Redundancy Costs	**$0**	**$1,045,286**	**$1,597,875**
Ongoing Cost/(Benefit)			
Inefficient Transfer of Corporate Support	**$0**	**$0**	**$2,700,000**
Annualised Cost/(Benefit)	**$0**	**$104,529**	**$2,859,788**
Total Regional Impact Cost/(Benefit)	**$36,446**	**-$960,926**	**-$179,215**

Note: Corporate Support costs represent the cost incurred by participating councils
Source: AEC*group*

The Corporate Entity Model has the highest ongoing benefit but also the highest upfront cost. This results in the highest annualised saving for water and sewerage service delivery if the full corporate model is mandated and introduced across the region. However, from a regional perspective, the outcome is less positive as the Corporate Entity savings have to be offset by the cost incurred by councils (through inefficient transfer of corporate services and possible redundancies). Therefore, from a total regional perspective, the Service Delivery model provides the largest saving.

A Regional Collaboration Model provides the lowest upfront cost, and is the only delivery model not incurring an ongoing saving. A regional collaboration model will focus improved practices and therefore resolve service delivery gaps. However it is not possible to assess the impact of the improved practices on performance and quantify those that will result in cost savings.

A Service Delivery Model results in the largest ongoing saving with a substantial upfront cost resulting in the highest annualised regional financial benefit. This is due to a Service Delivery Model achieving some volume based savings and efficiencies, but will result in minimal improvement of service delivery to achieve best practice.

From a water service provision perspective (excluding impact to council services), the corporate entity provides the greatest saving; with a 2.68% saving to operating costs and an increase to the operating surplus of water and sewerage services by 8.65%.

Regional Financial Impact

The cost benefit outcome reveals that both the Service Delivery and Corporate Entity models will provide financial benefits to the region; with a Regional Collaboration Model resulting in cost increases.

Given that Service Delivery and Regional Collaboration models do not represent any change to ownership, governance and pricing, this saving (or cost) is likely to be passed directly onto ratepayers.

However, the corporate entity will be bound by National Competition Policy requirements to achieve full cost pricing therefore any benefits and savings may not be passed on through price reductions to water and sewerage levies; and instead be passed onto shareholders as a return on investment. Under a council-owned corporate entity, this saving would form part of an increased dividend and be used to fund other council activities; with some possibility of indirect savings then passed onto ratepayers through the general rate. However, if a State-owned corporate entity is established, there is risk that savings will not be passed onto the region's ratepayers.

It also is uncertain what price path a corporate entity's governing board of directors may adopt for the region, but the 2 key approaches to cost recovery are:

- **Standard Region-Wide Approach:** This approach would result in minimal impacts to pricing for the smaller unprofitable councils (Cook, Croydon and Etheridge), but would mean that the ratepayers in Cairns and Tablelands (which are generating a surplus) would effectively subsidise the provision of water to these smaller councils.
- **Scheme Based Approach:** Under this approach, each council's water and sewerage charges would be progressed toward full cost recovery. This would have negligible impact for schemes achieving a full cost recovery such as Cairns and Tablelands, but all other schemes would incur significant increases to water and sewerage charges.

Under a council-owned corporate entity, the adopted approach to shareholding and dividend share may pose a significant risk to the larger councils of Cairns, Cassowary (water component only) and Tablelands who are already pricing to achieve a surplus. Depending on the approach, dividend entitlements for Cairns, Cassowary and Tablelands could be eroded under a corporate entity.

The most common approaches to allocating a return on investment to shareholders are through an equity share, a revenue share, or surplus share approach. The following table provides the contribution each council would provide a corporate entity in terms of operating revenue, surplus and equity (written down value of non-current assets applied).

Table E.3: Share of Revenue, Surplus and Non-Current Assets

Item	Cairns	Cassowary	Cook	Croydon	Etheridge	Tablelands
Surplus Share	77.5%	4.5%	0.0%	0.0%	0.0%	18.0%
Revenue Share	74.6%	10.3%	1.8%	0.1%	0.2%	13.1%
Equity Share	74.2%	11.2%	3.9%	0.9%	0.3%	9.5%

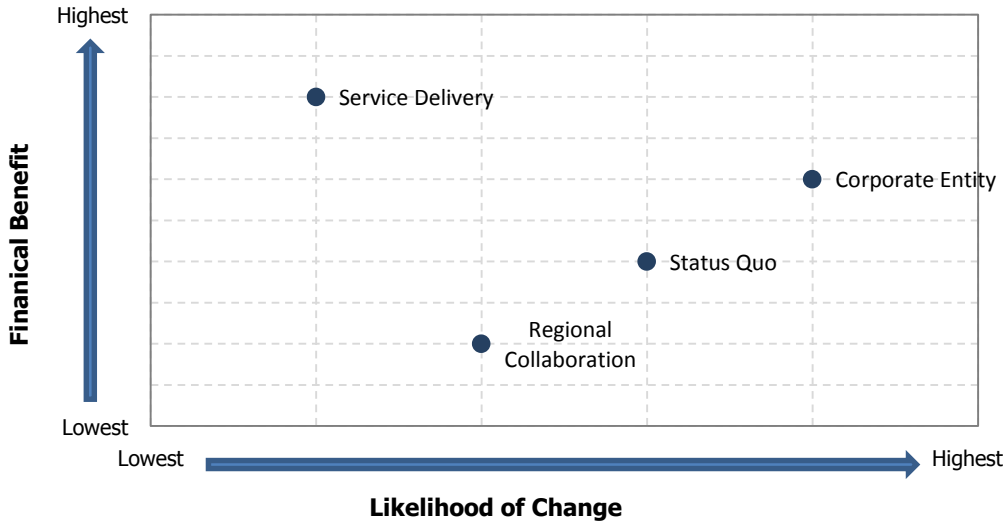
Source: AEC*group*

- **Surplus Share:** Under the current delivery model, each council decides on how the water service's surplus is allocated (i.e. reinvested into capital, held in reserves for future use, or paid as dividend). So the revenue share represents current outcomes under status quo.
- **Revenue Share:** This approach will erode return on investment for Cairns and Tablelands given that, even though the smaller councils are operating at a loss, their contribution to revenue is now recognised. Cassowary, which is currently operating at a loss for sewerage services will also increase entitlements.
- **Equity Share:** This approach may further erode return on investment availability for Tablelands given the more efficient investment in infrastructure needed to service its revenue base compared to the smaller councils.

Findings

The assessment has revealed that the **Corporate Entity Model** would promote the greatest certainty of change and provide an ongoing financial benefit.

Figure E.6: Assessment Outcome



Source: AEC*group*

This outcomes is based on the premise that the new entity would be created based on a best practice model and therefore would be able to drive economies of scale and operational efficiencies. To achieve this outcome, the new entity would need to have the independence to be able to make appropriate business decisions rather than be constrained by current structures and business frameworks. For example, the new entity would determine the required level of resourcing and the remuneration framework, and then proceed to establish the workforce. This may create a negative burden on the existing councils if they are required to redeploy existing staff that are not selected for the new identity. Similarly the new entity would select and implement corporate support structures and systems resulting in inherent redundancy in systems and resources within councils. These factors have been included with in the assessment.

The **Service Delivery Model** is based on efficient operational service delivery resulting in significant potential savings while incorporating some improvement towards best practice. Similar to the Corporate Entity model, the adoption of a Service Delivery approach may result in some inherent redundancy in systems and resources within councils.

The **Regional Collaboration Model** will promote improved progression towards best practice, however, this may not necessary provide quantifiable cost savings. The implementation of improved practices, and the potential efficiency gains from these will be unique to each council resulting from a combination of their program adoption rate and the quantum of improvement the program facilitates.

The **Status Quo Model** will likely continue to provide some improvements in practices driven by a combination legislative requirements and benefits being driven by the current FNQROC programs. Again progression will be limited by each council's capacity to resource and implement program changes.

The Q-WRAP Scoping Paper also showed that a corporate structure would provide the greatest net benefits. The key issues of governance and planning, human resources and asset management were identified by Q-WRAP as being most likely to benefit from a corporate structure. This is broadly comparable to this assessment, which identified strategic planning and direction, legislative compliance and human resources as the key beneficial areas from a corporate structure.

However, in considering the most appropriate governance structure for the region's water service providers, the following external factors should also be taken into consideration:

- **Existing Alliance Structure:** FNQ councils already have a strong functioning regional organisation in place (FNQROC) which has historically proven to be an effective platform for delivering beneficial outcomes, such as improvements to service delivery (Asset Management program) and produced economies of scale (joint purchasing program).
- **Other Queensland Water Service Structures:** The corporatisation of water services providers has only occurred in a small number of cases in Queensland, with Wide Bay Water being the only regional corporatised Queensland water retail entity. Recent studies and media releases indicate that this sole example of a regional water services corporation has not achieved their original structure review's forecasted economies of scale, and Fraser Coast Regional Council is now considering de-corporatisation for Wide Bay Water. The creation of corporate regional water services in South-East Queensland has resulted in a more complex governance and regulatory environment with the region still to resolve ongoing issues such as pricing.
- **De-amalgamations:** Following referendums in March 2013, both Cairns and Tablelands Councils are in the process of de-amalgamations for their regions. The creation of a corporate water services entity during the de-amalgamation and re-establishment period for these councils is likely to future compound a complex process and add significant strain on service delivery for the respective councils.
- **Social Impacts (Community Perception):** For these regional communities, particularly where a network scheme may service as little as 500 properties, the creation of a corporate entity may impact the community perception of the service, council and the community's ownership of its direction.
- **Social Impacts (Affordability):** A corporate water services entity may be large enough to trigger higher levels of conformity to the National Competition Policy, with a possible push towards full cost pricing across all schemes in the short-to-medium term. The result is that prices may increase to a point that impacts on affordability for ratepayers in smaller regional communities (where previously it was acknowledged that these schemes were not viable and provided for the community benefit).

The following table provides an assessment of impact of these factors based a risk-based approach.

Table E.4: Assessment of Impact of Risk Factors

Issue	Likelihood	Consequence	Risk	Rationale	Mitigation Option
The alliance structure would be limited to supporting other council activities and may disappear under the Corporate Entity model or become part a sub set of the Corporate Entity.	Very high	High Adverse Impact	Very High	The regional alliance benefits will not be available to any councils that remain outside the corporate structure. There may be areas of duplication or conflict between the Corporate Entity and the alliance programs.	Corporate Entity is mandated to include all councils and required to partner with FNROC.
There may be resistance to a corporate model based on the past examples in Queensland.	Moderate	High Adverse Impact	High	The amalgamation and subsequent de-amalgamation of the SEQ water entities and impacts of the consumers has been extensively debated in the media	The resistance could be mitigated by the communication and community consultation undertaken to support the establishment of the Corporate Entity.
Councils will not make any decisions until the de-amalgamated councils are operational.	Very High	Very Adverse Impact	Very High	The decision and option for progression of a change in governance model will be delayed and the drivers for the change may alter over time.	No mitigation strategy
Strong local community opposition in regional	Moderate	Moderate Adverse Imapct	Mediu m	The benefits of each governance model varies of each local government.	The resistance could be mitigated by the communication and community

Issue	Likelihood	Consequence	Risk	Rationale	Mitigation Option
communities to Corporate Entity.					consultation undertaken to support the establishment of the Corporate Entity. Councils with limited activity could opt to not be part of the Corporate Entity.
Significant increases in prices for regional communities.	Very High	High Adverse Impact	Very High	The transition to full cost pricing may require the recognition of community subsidisation. The burden for this would need to be borne by the wider community.	Clear pricing policies which identify subsidisation.

Source: AEC*group*

Overall these factors provide a very high risk to the adoption of the **Corporate Entity Model** as the governance model. However, all the risks can be mitigated and appropriate mitigation strategies would need to be developed.

Recommendation

In consideration of above analysis, it is recommended that in the long term, a Corporate Entity Model is the appropriate governance model.

The composition of the corporate entity should consist of those councils where the water and sewerage activity is a significant activity and therefore Croydon and Etheridge should be excluded from the structure.

In determining the equity structure of a corporate entity, especially in a council shareholding model, it is essential the basis for the allocation of shares is determined on a valid and consistent base. This study has identified a number of areas where the current information basis and processes are insufficient to provide the information that will facilitate an efficient transition. The four key areas that should be are:

- **Strategic Asset Management**

  Asset management plans provides the overarching framework for the management of the infrastructure to provide a defined level of service in a sustainable manner. Essential information extracted from the asset management plans such as value of asset base and the condition of the assets are required to determine a comparable value across the regional infrastructure. Other information such as renewal profile and depreciation basis are essential information for the new entity to determine the level of resources required to delivery an efficient operation. As one of the major cost elements, depreciation is a critical factor in the development of full cost pricing. A consistent depreciation framework is required to ensure the depreciation calculation used across the region is equitable.

- **Regional Demand and Supply Assessment**

  One of the core premise of the Corporate Entity is the ability to gain efficiencies through the creation of a wider (but not necessary interlined) network across the region. The benefits from this can only be derived once an understanding of how the capacity and supply across the region is aligned to the demand.

  The councils have undertaken demand studies for specific communities, and a regional water supply strategy[4] has been developed.

- **Legislative Requirements**

  The legislative requirements of the DWQMS and EMS provide the frameworks for the quality service delivery.

[4] Far North Queensland Regional Water Supply Strategy, Department of Environment and Resource Management, March 2010.

Currently the councils across the region are at varying levels of implementation of these frameworks. Although each council may have a different level of response, the provision of the systems should form one of the key decision basis for the determination of the composition of the Corporate Entity.

- **Full Cost Pricing**

  To understand the full implications of the cost and funding of schemes across the region, particularly in terms of cross subsidisation, a full cost pricing assessment on each scheme is required.

  This will provide the transparency of the financial sustainability of each scheme and allow identification of the issues of cross subsidisation between rural, remote and urban schemes.

Recommendations for Regulatory/Policy Environment

In order for the water services industry in Far North Queensland to optimise performance and service delivery, it is essential that it exists in a 'smart' regulatory environment. This review identified 2 key issues that appear to affect the region's ability to operate in a 'smart' regulatory environment:

- Firstly, this assessment revealed that the SWIM data appears to lack quality assurance and is viewed purely as a compliance exercise by council. The current program which is underway to streamline the SWIM data requirements into one format and one data set will be welcomed by councils. However, councils themselves have a responsibility to ensure the quality of the data provided, as there are potential future benefits from having a reliable regional information base.
- Secondly, the lack of direction in regard to the replacement of the SAMP with AMPs has resulted in some councils delaying the process of reviewing, replacing or updating their asset plans; given they are relucent to invest in new strategic documents that may ultimately need to be changed or modified.

Transition Plan

It is not practical to outline a detailed transition plan until there is resolution of the future governance structure. However, based on the above recommendations, it is envisaged that the region would require a lead period of at least three years to prepare for the transition to a Corporate Governance Model. The following provides an outline of a high level transition plan:

Table E.5: High Level Transition Plan

Action	Timeframe	Lead Agency
Outline of Proposed Corporate Structure developed	March 2014	Qldwater
Risk Management Plan Developed	March 2014	Qldwater
Briefing paper developed	March 2014	Qldwater
Resolution of consideration of governance structure	June 2014 (in consideration of the current de-amalgamation process)	Qldwater
Community Consultation	July 2014 – Sept 2014	Councils/Qldwater
Regional Water Supply Strategy recommendations implemented	Ongoing	Each Council
Implementation of DWQMS and EMS	June 2014	Each Council
Full Cost Pricing Assessment	June 2014	FNQROC
Strategic Asset Management	December 2014	FNQROC
Detailed Implications Assessment undertaken on each Council	October 2014 – November 2014	Qldwater
Council decision on Governance Structure	December 2014	Councils
Implementation of transition Plan	January 2015 – June 2016	Qldwater
New Entity	July 2017	

Source: AEC*group*

In the interim, the FNQROC should continue to promote and lead programs for the region. In particular, an expansion of the current ROC programme to include additional support for standardisation via the use of templates, joint programs of work across the region such as Asset Management Plans and a strong use of regional knowledge via the use of joint recruitment and training programs. These activities would provide an outcome that offers immediate benefits without the cost of structure change.

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1. Project Background

1.1 Background

The effective provision of urban water supply and wastewater services is essential for ensuring liveable communities and is therefore an important element of local government responsibility in Queensland.

A number of recent national reviews of the water sector[5] in Australia have highlighted the institutional and structural issues within the industry that are contributing to the significant challenges in the provision of sustainable water supply and wastewater services to communities.

In these reviews, there has been some criticism of the Queensland water sector, with a key issue being the need (real or perceived) for more formalised collaboration among regional water service providers to ensure the sector is able to:

- Manage the risks involved in the provision of water supply and wastewater services.
- Leverage off economies of scale and scope in order to offset cost and resourcing pressures.
- Remain abreast of industry pressures and be prepared for future change.

The Queensland Water Regional Alliances Program (Q-WRAP) is an initiative to investigate a range of matters including institutional arrangements and collaboration in the provision of water supply and wastewater services outside of South-East Queensland (SEQ).

The intention of Q-WRAP is that by taking a proactive and strategic approach to water management, local governments will be able to ensure that appropriate local solutions are developed rather than having an inappropriate solutions mandated by higher levels of government that fail to recognise the local context.

1.2 Purpose of the Study

Local governments represented by the Far North Queensland Regional Organisation of Councils (FNQROC) have self-selected as one of three Q-WRAP pilot regions to undertake an assessment of potential collaborative mechanisms that may assist in the provision of water supply and wastewater services in the FNQ region.

Each pilot group is required to undertake an assessment of the potential costs (risks) and benefits (opportunities) of at least the following three formal regional collaboration models for its member councils:

- County Council.
- Corporation.
- Regional Alliance.

The objective of the assessment is to identify appropriate solutions to help all stakeholders (local, state and federal government and local communities) to better manage the risks and issues around urban water provision in the FNQ region.

AEC*group* has been commissioned by the FNQROC to undertake the assessment for the participating local governments within FNQ region.

[5] The project uses the terminology "urban water services", however, to reduce confusion and reflect the profile of Far North Queensland the word "urban" has been removed throughout the report and the terminology "water services" is used instead.

1.3 Review Methodology

The Q-WRAP assessment consists of three stages:

Stage 1 - Scoping Paper

This background paper was completed by Q-WRAP and focused on:

- The rationale (drivers) for considering alternative industry arrangements for the regional urban water industry.
- An overview of potential institutional arrangements for the sector.
- Assessment of state-wide factors impacting alternative models.

The paper has been used to inform this review.

Stage 2 - Review of Current Water Service Provider Operations

Stage 2 involves a benchmark assessment of the current performance of each participating local government, and the development of a gap analysis to identify the risks and improvement opportunities for each local government.

Stage 3 - Review of Governance Arrangements and Business Model Options

Stage 3 involves a review of new potential models for the delivery of water services in the FNQ region which may enable the closing of the gaps identified in Stage 2 and improve ongoing risk management.

1.3.1 Methodology of Assessment

The approach taken in this review is outlined the three sections of this report.

Section 1: Profile of the service

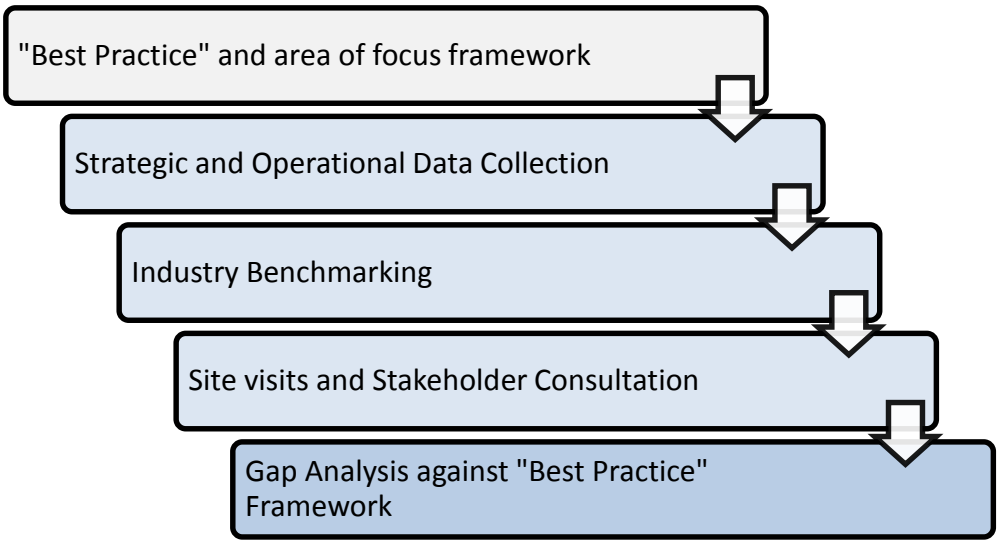
This section provides a profile of the schemes assessed within the review based on performance data on factors of demand, cost, quality and pricing.

Section 2: Review of Current Water Service Provider Operations

The purpose of this section was to establish an assessment of the current performance of the local governments cross a series of strategic and delivery areas against a nominated performance level. This provided the platform to identify opportunities for improvement.

To achieve the outcome a comprehensive review process was undertaken to determine the current operational and strategic position of participating Councils (see Figure 1.1 below).

Figure 1.1: Review of Current Water Service Provider Operations Methodology



Source: AEC*group*

The areas of strategic and operational delivery were determined as:

- Strategic Direction Planning.
- Governance.
- Structure.
- Delivery Planning.
- Customer Service Standards.
- Asset Management.
- Legislative Compliance.
- Human Resources.
- Financial Management.

A set of criteria that define "best practice" were listed for each of the areas. These criteria were developed by consideration of sector guidelines and legislative requirements.

Key operational and strategic data were gathered via a detailed information request to participating councils, desktop research, on-site visits and consultation with council representatives.

Performance indicators were considered against industry benchmarks, and strategic documentations and processes were analysed in relation to regulatory requirements and industry best practice.

The outcome of the current operations review is an assessment of the performance of the council in comparison to a "best practice" approach, highlighting performance gaps and resultant potential risks for the delivery of water supply and wastewater services. The potential risks arising from the gap assessment and possible improvement opportunities have been identified.

Section 3: Review of Governance Arrangements and Business Model Options

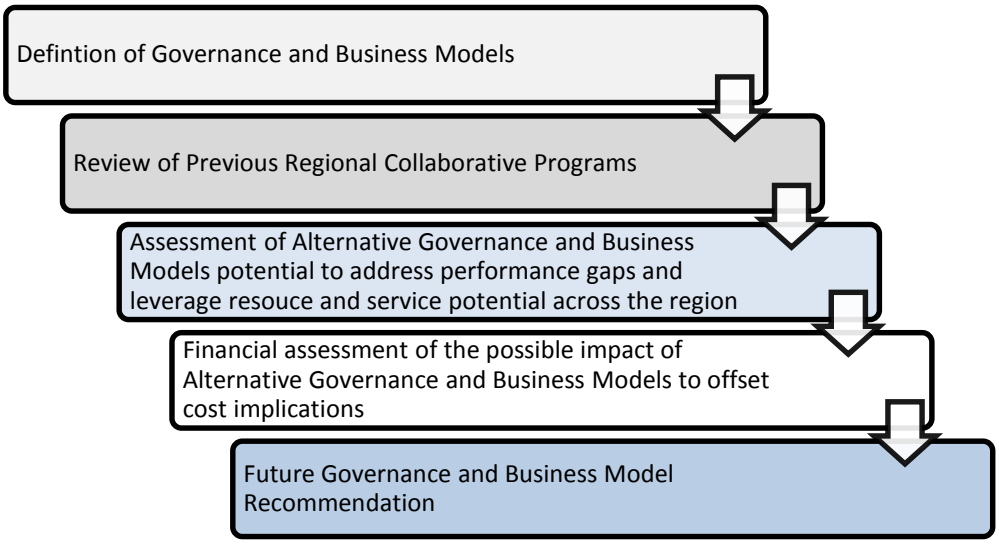
The purpose of this section is to take the opportunities for improvement identified in the Stage 2 assessment and determine the likelihood of the status quo and alternative business models facilitating the improvement opportunities that would close the identified gap and provide for economies of scale and scope to offset cost and resourcing pressures.

The Q-WRAP paper identified two alliance organisation structures and two corporate structures for consideration. Given the wide degree of variation in institutional arrangements, the following options for discussion have been termed as:

- **Regional Collaboration Model**: This is based on an alliance model.
- **Service Delivery Model**: This is based on the county council model and can take the form of an owned and operated commercial business by one of the larger FNQROC councils or a separate entity formed by some or all of the participating councils.
- **Corporate Ownership Model**: This is based on the corporate model with ownership held by the participating shareholders (FNQ Councils) or a State ownership.

The process for this stage is as outlined below:

Figure 1.2: Review of Governance Arrangements and Business Model Options



Source: AEC*group*

Consideration of the outcome of each alternative model could have on addressing the gaps and providing economies of scale and scope to offset cost and resourcing pressures has a resulted in a recommended future governance and business model.

1.4 Institutional Arrangements Considered in Q-WRAP Scoping Paper

The Q-WRAP Scoping Paper reviewed a range of models for governance management of the water sector and determined a list of possible options that are most feasible for the Queensland sector within current legislation. These are:

- Individual local government water service providers (status quo).
- Alliances amongst regional group of councils (varying degrees of formality).
- Regional, joint council-owned corporations.
- Regional, state-owned corporations.
- Some combination of the above.

For information purposes, the following table summarises the key characteristics of the range of delivery models identified by the Q-WRAP Scoping Paper. The four models identified by Q-WRAP for further investigation are shaded.

Table 1.1: Properties of Institutional Arrangements Identified by Q-WRAP

#	Model	Ownership	Staff	Governance	Examples
1	Council owned and operated.	Single Council	Council staff.	LG Councillors.	Most Queensland and NSW regional councils. Most Canadian and NZ water services.
2	Council owned and operated with arms-length commercialisation of the water business.	Single Council	Council staff.	LG Councillors.	Larger Qld and NSW councils have differing degrees of separation.
3	Individual council-owned corporation	Single Council	Staff employed by corporation.	Board which is responsible to owner councillors.	Wide Bay Water.
4	Regional Alliance	Two or more Councils	Employed across two or more councils.	LG Councillors.	Macquarie regional alliance
5	Mandatory (binding) regional Alliance	Two or more councils	Employed across two or more councils with some pooled resources.	LG Councillors.	No Water examples but Davis et al. (2008) name the 'Weight of Loads Groups' (NSW) as an example of a LG mandatory alliance.
6	County Council (with service provision only)	Two or more councils	Employed by county council.	Board of participating LG Councillors.	There are 4 water supply and one water and sewerage county councils in NSW.
7	County Council (including asset ownership)	Two or more councils via a county council.	Employed by county council.	Board of participating LG Councillors.	Midcoast Water (NSW). Regional Council model in NZ is similar (e.g. Wellington)
8	Joint Council-Owned Regional Corporation or Statutory Authority	Two or more Councils	Staff employed by corporation/ authority.	Board which may have appointments by State or local Government.	SEQ distribution and retail entities. Tasmanian water businesses. Gosford Wyong water utility.
9	State-owned Regional Water Authority.	State Government	Employed by the water utility.	State appointed Board often reporting to responsible Minister(s).	SEQ Water, Gladstone Area Water Board, Victorian Water Utilities, Sydney Water.
10	Single State-wide agency	State Government	Employed by the water utility.	Independent Board often reporting to responsible Minister(s).	WA WaterCorporation, SA Water, NT Power and Water.
11	Government owned with majority of functions outsourced to private contractors.*	Owner Organisation	Mix of staff employed by owner and contractors.	Governance of ownerorganisation plus contractual	Linkwater (SEQ), SA Water for Adelaide, Water Corp WA for Perth.
12	Privatised water utilities.*	Varies – often a private entity owns the assets.	Private industry staff.	Governance of private entity – usually a corporations law company.	European countries, UK. Australian electricity sector. ActewAGL is publically owned but has substantial private partnership.

Source: Q-WRAP

1.5 Sector Trends

1.5.1 Outcomes from Recent Reviews

A number of recent reviews investigating alternative institutional arrangements for urban water provision have been undertaken at the regional, state, and national level. A detailed summary of the findings and outcomes of the most relevant reviews are provided in Appendix C.

A consistent theme throughout the industry reviews is that urban water service providers currently face significant challenges in the provision of safe, reliable and sustainable drinking water supplies and wastewater treatment for communities. Key identified risks to the industry include:

- Population change.
- Changing climatic conditions.
- Aging and inadequate infrastructure.
- Human health risks.
- Increasing community expectations.
- Increasingly strict regulations and standards.
- Difficulty achieving cost-reflective pricing.
- Skills shortages.

Each of the reports offers different windows into the urban water industry. However, a general consensus exists that the current structure of the water industry in regional Queensland and New South Wales does not provide an optimal model to adequately manage the risks involved in the provision of urban water services. Identified issues with the current institutional arrangements in regional Queensland and NSW include:

- Insufficient and declining ratepayer base in many areas leading to:
    - An inability to support the capital cost of infrastructure.
    - Difficulty attracting and retaining staff.
    - Difficulty responding to regulatory obligations, increases in cost of water provision and community expectations.
- Governance based on local government boundaries rather than catchment areas creates difficulties allocating water resources between different user groups and the environment.
- A lack of commercial focus created by the multifunctional structure and competing priorities of local governments.

While it was generally accepted that current institutional arrangements in regional NSW and Queensland are sub-optimal, it was also acknowledged that there is no single, best alternative, and that institutional reforms need to consider the unique needs of individual areas.

A key recommendation from the Productivity Commission (2011) report was:

> *There is a strong case for undertaking aggregation of small water and wastewater utilities in regional areas of New South Wales and Queensland. The precise approach including identification of affected councils and the preferred grouping of councils should be assessed and determined by relevant State Governments, in consultation with Local Governments and affected communities. This process should consider the relative merits of alternative organisational structures, including county councils, regional water corporations and regional alliances (or regional organisation of councils).*

A range of institutional alternatives have been suggested with urban water providers to be aggregated to a sustainable size based on catchment boundaries and existing alliances. The most common alternative institutional arrangements offered for recommendation include:

- Regional alliance.

- Council owned water corporation.
- Privatised water corporation.

The majority of the reviews suggest that consolidation of water providers would generate a number of benefits, including:

- Scale economies arising though:
  - Shared resources (including skilled labour, administrative functions, and corporate services).
  - Scale in procurement, administration and training.
  - Greater potential to access debt capital to fund infrastructure works.
- Utilities would be large enough to justify oversight by existing independent pricing regulators.

However, several potential risk factors were also identified in relation to the aggregation of urban water provision, including:

- Loss of scale economies across local government functions.
- Potential loss of focus on the needs of individual communities.
- Potential for significant cross-subsidisation between aggregated councils.

Several key studies also noted that the potential for scale economies through aggregation may be moderate for regional areas where the distance between schemes is significant. Also many of the viability challenges created by the small size and remoteness of many regional communities are unlikely to be solved through amalgamation.

1.5.2 Industry Review of Alternative Arrangements

Interstate Institutional Arrangements for Water and Wastewater

Water utilities across the country have adopted differing corporate structures according to location (i.e. which state and also part of the state they are located in), level of state maturity in progressing National Competition Policy initiatives etc. Currently in Australia government (state and local) still retains ownership of the numerous water and wastewater businesses in operation.

Business size also differs significantly from one state to another, from one single entity providing water and wastewater services in ACT (ACTEW Water) and Western Australia (WA Water Corporation) through to Queensland that has a variety of large and small state and local government owned entities in operation. Victoria, similar to ACT and Western Australia applies a state owned statutory authority operated model sixteen water corporations. Generally corporations have been created where larger regional entities have been established to serve a wider customer base.

Tasmania recently (2009) amalgamated local government operations into three local-government owned regional businesses, with a further corporation (Onstream Pty Ltd) established to provide shared (administrative and procurement) services to the three water corporations. While a single state-owned corporation was considered, a council-owned regional was chosen due to:

- Most of the economies of scale benefits of a single State-wide entity would still be achieved by regional level corporations.
- Regional level models would provide greater focus on service to individual areas than a state-wide entity.

The following table provides a brief state by state summary of the current business models applied in Australia.

Table 1.2: Summary of Business Models Applied By State

State	Description
ACT	• Until June 2012 one single entity (ActewAGL) provides water and wastewater services to the ACT community • Multi utility business with both distribution and retail partnerships • 50% private ownership in each partnership - AGL Energy (retail), SPI Assets (Australia) Pty Ltd (distribution) • Since June 2012 full ownership was returned back to the ACT government, operating through the State-owned ACTEW Corporation
New South Wales	• Two State owned metropolitan water corporations (Sydney Water, Hunter Water Corporation) • Joint Council owned statutory authority (Gosford – Wyong Council's Water Authority, Essential Water, Fish River Water Scheme, Cobar Water Board) • Individual Council owned (including 96 Council and 3 County Council owned)
Northern Territory	• One single entity (Power Water Corporation) provides water and wastewater services to the NT community (with a subsidiary Essential Services Pty Ltd providing water and sewerage services to remote indigenous communities) • The corporation is wholly owned by the NT State government
Queensland	• Predominantly individual Council owned water service providers • State government owned bulk water entities (SEQwater, Sunwater, Gladstone Area Water Board, Linkwater) • Two local government owned statutory authorities (QUU, Unitywater) • Local government owned corporation (i.e. WBWC)
Tasmania	• Three local government owned corporations established in 2009 to provide water supply and sewerage services across the state (Southern Water, Cradle Mountain Water, Ben Lomond Water) • A further corporation (Onstream Pty Ltd) was established to provide shared services to the three water corporations. Onstream is incorporated as a proprietary company limited by shares under the Corporations Act
Victoria	• All water supply and sewerage services provided by state owned statutory authorities • Sixteen water corporations provide water supply and sewerage services to urban customers throughout Victoria • City West Water, South East Water, and Yarra Valley Water provide water supply and sewerage services to urban customers in Melbourne • Melbourne Water Corporation provides bulk water and bulk sewerage services to water corporations in the Melbourne metropolitan area
Western Australia	• WA Water Corporation (state government statutory authority) is the principal supplier of water supply and sewerage services across WA • A small number of state owned water boards also operate (Bunbury, Rottnest Island, Busselton)

Source: AEC*group*

Queensland Collaboration Experiences

SEQ water and wastewater business activities were recently amalgamated into three distribution/retail entities (Queensland Urban Utilities, Allconnex Water and Unitywater) that are separate entities from the shareholding Councils. The new entities are statutory bodies (integrated retail and distribution authorities) established under the *South East Queensland Water (Distribution and Retail Restructuring) Act 2009*.

From 1 July 2012, Allconnex Water in SEQ no longer exists and the respective water and wastewater business activities now again reside with the Gold Coast, Logan and Redland Councils. Logan Water will operate under the Commercialised Business Unit (CBU) model in 2012/13 and it appears based on available information that Redland Water and Gold Coast City are also adopting a CBU structure.

1.5.3 Local Government Financial Sustainability Review

To provide context to the identified gaps to achieving best practice service delivery, AEC*group* recently undertook a review for the Local Government Association of Queensland[6] on factors affecting local government sustainability. This review highlighted

[6] Factors Impacting Local Government Financial Sustainability: A Council Segment Approach

the biggest two issues/impediments affecting sustainability of local government segments in Queensland from the local government perspective are:

- **Asset Renewal:** Ability to source appropriate levels of internal and external funding, ageing infrastructure, funding depreciation, demand for new assets at the expense or renewing existing assets, more significant issues in smaller communities and ability to rationalise infrastructure given competing political and community priorities.
- **Queensland & Commonwealth Government Funding:** Constrained and reduced funding assistance, funding uncertainty of the level and stability of grants, high dependence on funding by smaller Local Governments, devolution of financial and other responsibilities and the lack of constitutional recognition.

The study assessed the major issues/impediments by council segment and found that the different segments had different issues.

- **Rural/Remote: (Croydon)** the level of economic activity to support the local rate base and community capacity to pay, along with the ability to fund infrastructure renewal.
- **Rural/Regional: (Tablelands)** appropriate long-term financial and asset management planning, and the ability to fund infrastructure renewal given the lack of Queensland Government subsidies.
- **Resources: (Cook and Etheridge)** impact of high levels of economic activity on infrastructure capacity and service delivery, ability to attract and retain appropriate resources in competition with the mining sector, and the ability to recoup sufficient revenue from the mining sector.
- **Coastal: (Cassowary Coast and Cairns)** the need to fund growth-driven infrastructure faced with infrastructure renewal pressures and capped infrastructure charges, devolution of (and therefore increasing) responsibilities, and the impact of policy and regulation on resourcing.

The study found a number of asset management and sustainability issues faced by the FNQROC council's such as the ability to fund the renewal/replace of aging infrastructure are not dissimilar to the challenges currently being experienced by other local government authorities in Queensland.

The report identified a number of strategy recommendations. The following table provides a summary of the challenges which relate to the provision of infrastructure.

Table 1.3: Local Government Financial Sustainability Review Findings and Strategies

Challenge	Impact on Sector	Strategy Recommendations
Financial Challenge 5. *Ability to fund the renewal/replacement of aging infrastructure*	Rural/Remote: Significant Rural/Regional: Significant Resources: Significant Coastal: Significant	• Commit resources (either local or shared) to improve asset management planning and integrate outcomes into budgeting and financial forecasting processes. • Greater commitment towards priority funding for appropriate asset renewal and replacement. • Fully review service levels (and manage community expectations) and investigate alternative means of service delivery and undertake appropriate business case assessments (including full recognition of lifecycle costs) before investing in the replacement of existing assets. • Commit to principles of asset management in ensuring that existing infrastructure can be maintained before committing to building new infrastructure. • Improvement in procurement approaches through the greater utilisation of joint procurement contracts (i.e. leveraging off region-wide and State-wide partnerships).
Resourcing Challenge 1: *Difficulty in attracting and retaining appropriately skilled employees.*	Rural/Remote: Significant Rural/Regional: Moderate Resources: Significant Coastal: Moderate	• Resource sharing at the regional level for skilled/technical positions. • Workforce strategies to better manage and build capability of the local workforce, and assist in the attraction and retention of professional and skilled technical employees. • Investigate strategies and partnerships to improve affordable housing.
Resourcing Challenge: 2. *Compliance burden and a one size fits all approach to regulation, reporting and infrastructure standards.*	Rural/Remote: Significant Rural/Regional: Moderate Resources: Significant Coastal: Moderate	• Resource sharing at the regional level for compliance functions. • Consider consolidation of front office functions (e.g. customer services) and back office functions (e.g. payroll, ICT, information security, compliance and reporting) at statewide and regional levels and with councils that have similar service areas, to enhance economies of scale and scope and reduce system requirements (where considered cost effective and beneficial for local communities). • Adoption of a 'Centre for Excellence' approach at the ROC level for asset management and specialist technical expertise for major infrastructure and community service functions (e.g. water, sewerage, waste, roads). • Improvement in procurement approaches through the greater utilisation of joint procurement contracts (i.e. leveraging off region-wide and State-wide partnerships).
Resourcing Challenge: 3. *Lack of economies of scale for management, administration and technical support costs*.	Rural/Remote: Significant Rural/Regional: Minor Resources: Significant Coastal: Minor	• Resource sharing at the regional level for management, administration and technical functions. • Consider consolidation of front office functions (e.g. customer services) and back office functions (e.g. payroll, ICT, information security, compliance and reporting) at statewide and regional levels and with Councils that have similar service areas, to enhance economies of scale and scope and reduce system requirements (where considered cost effective and beneficial for local communities).. • Adoption of a 'Centre for Excellence' approach at the ROC level for asset management and specialist technical expertise for major infrastructure and community service functions (e.g. water, sewerage, waste, roads).
Resourcing Challenge: 4. *Commitment to long-term financial sustainability and asset management planning*.	Rural/Remote: Significant Rural/Regional: Significant Resources: Significant Coastal: Moderate	• Focus budget development, key decision making and reporting on long-term financial sustainability outcomes. • Commit resources (either local or shared) to improve asset management planning and integrate outcomes into budgeting and financial forecasting processes. • Greater commitment towards priority funding for appropriate asset renewal and replacement. • Fully investigate alternative means of service delivery and undertake appropriate business case assessments (including full recognition of lifecycle costs) before investing in the replacement of existing assets and the addition of new assets. • Invest in training and capacity building initiatives for elected members, focusing on improving financial / business acumen skills.
Resourcing Challenge: 5. Risk management and internal audit procedures	Rural/Remote: Moderate Rural/Regional: Moderate Resources: Moderate Coastal: Minor	• Resource sharing at the regional level for risk management and audit functions. • Adoption of a 'Centre for Excellence' approach at the ROC level for risk management and audit expertise.

Source: AEC*group*

This outcome supports the approach that the implementation of some form regional collaboration for water services in the FNQROC will provide a more effective vehicle to deliver best practice outcomes to the region's water supply and sewerage customers.

1.5.4 Key Findings – Sector Trends

The key external drivers for change identified in the recent studies are:

- Population change.
- Changing climatic conditions.
- Aging and inadequate infrastructure.
- Human health risks.
- Increasing community expectations.
- Increasingly strict regulations and standards.
- Difficulty achieving cost-reflective pricing.
- Skills shortages.

In viewing the industry trends across the Australia, it is apparent that there is preference for consolidated water entities. The consolidation of water provides can result in the following benefits and risks.

Table 1.4: Benefits and Risks of Consolidation of Water Providers

Benefits	Risks

• Scale economies arising though:
  ○ Shared resources (including skilled labour, administrative functions, and corporate services).
  ○ Scale in procurement, administration and training.
  ○ Greater potential to access debt capital to fund infrastructure works.
• Utilities would be large enough to justify oversight by existing independent pricing regulators.
	• Loss of scale economies across local government functions.
	• Potential loss of focus on the needs of individual communities.
	• Potential for significant cross-subsidisation between aggregated councils.

Source: AEC*group*

In summary while it is generally accepted the current institutional arrangements in regional NSW and Queensland are sub-optimal, it was also acknowledged that there is no single, best alternative, and that institutional reforms need to consider the unique needs of individual areas.

Section 1: Scheme Profile

This section provides a profile of the schemes considered within the assessment.

2. Current Schemes

This chapter provides a profile of the schemes within the local government areas considered by the review.

2.1 Overview

FNQROC is made up of a membership of 9 diverse councils with differing models for the provision of water and wastewater services (see

Figure 2.1: FNQROC Region

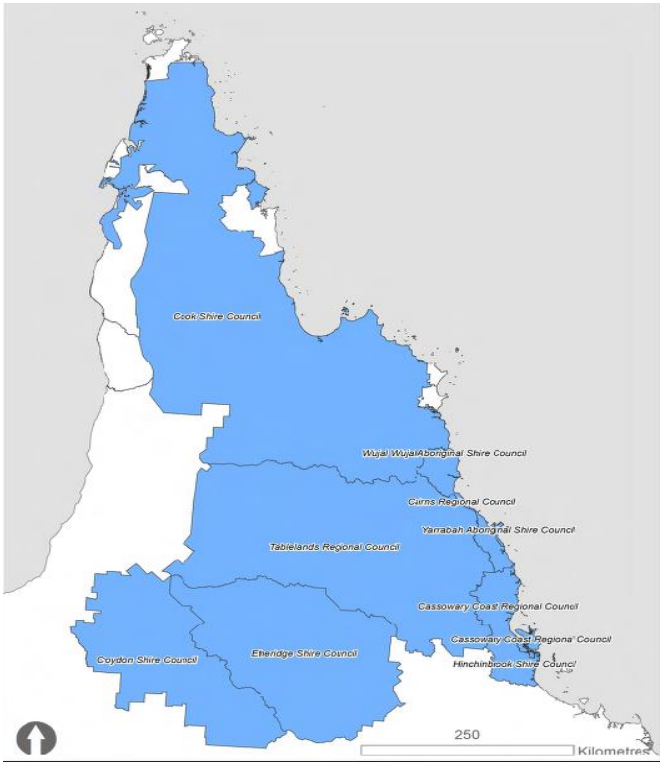


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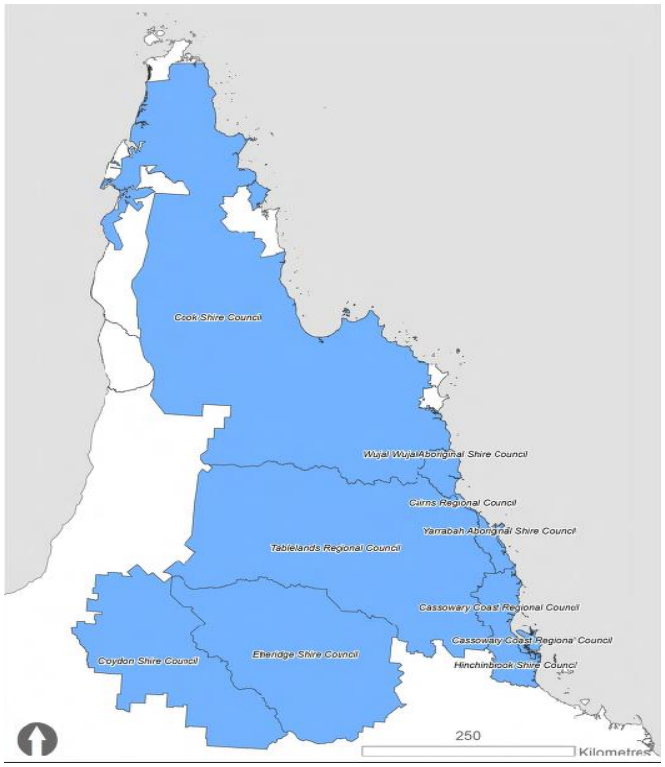
Figure 2.1: FNQROC Region



Source: FNQROC

After the 1 January 2014, the FNROC will have 11 members; the addition of the newly formed Mareeba and Douglas local governments and the withdrawal of Etheridge which will join the North West ROC.

Six FNQROC members have participated in the discussions regarding the potential collaboration in water services based on a common set of interests and challenges that are unique in Queensland:

- Cairns Regional Council
- Cassowary Coast Regional Council.
- Cook Shire Council.
- Croydon Shire Council.
- Etheridge Shire Council.
- Tablelands Regional Council.

Although Etheridge Shire Council indicated they wished to be involved in the study, no response was provided to the data information request and therefore they have been excluded from the Stage 2 assessment.

During the study timeframe the de-amalgamation process of the separation of Mareeba Council from Tablelands Regional Council and Douglas Council from Cairns Regional Council has commenced. The impact of this process on operational and strategic activity of the affected council has not been incorporated into the study, as the transfer of operations does not commence until 1 January 2014.

The study comprises a large area, spanning almost 250,000 square kilometres. There are currently 43 water and 20 wastewater schemes in operation across the six participating councils. The participating councils differ considerably in population and remoteness. Even the most densely populated participating council (Cairns) has a population density one tenth of SEQ (Brisbane Statistical Division).

Each individual council faces distinct challenges and opportunities. Cairns has experienced strong population growth averaging 2.4% per annum over the past 10 years, while both Cassowary Coast and Etheridge have experienced declining populations. There exist significant challenges for each of the councils dealing with demographic change in the face

of increasing regulation against a tropical climate and need for whole-of-water-cycle management in context of two World Heritage-listed areas.

Table 2.1: Participating Council Population and Area Benchmarks

Council	2011 Population	Area (sq km)	Number of Properties	Population Density (Persons/ sq km)	Number of Water Schemes	Average Population per scheme	Number of Waste water Schemes	Average Population per Scheme
Cook	4,494	106,170	2,274	0.04	4	1,124	2	2,247
Tablelands	45,243	65,009	20,275	0.70	18	2,514	7	6,463
Etheridge	915	39,324	731	0.02	2	458	0	-
Croydon	322	29,579	207	0.01	1	322	0	-
Cassowary	28,627	4,700	13,618	6.09	5	5,725	3	9,542
Cairns	162,740	4,129	79,978*	39.41	13	12,518	8	20,343
*Brisbane Statistical Division***	*2,083,315*	*5,964*	*647,685*	*349.32*	-	-	-	-

Note: *Cairns Regional Council Budget Information 2012-13
**Brisbane Statistical Division refers to the SEQ region of Brisbane, Ipswich, Logan, Moreton Bay and Redland Councils.
Source: QRSIS; ABS Census (2011); Department of Local Government Comparative Information 2010-11; Council Budget Information 2012-13.

An overview of the current water and wastewater service operations across the six Local Government Areas (LGA's) is provided in the following sections.

2.2 Profile the service/facilities provided in the region

The following tables provide an outline of the Water and Wastewater Schemes within each local government area.

Table 2.2: Participating Potable Water Schemes

Council	Scheme	Water Source	Number of Connections	Length of Mains (km)
Cook	Coen Water	Coen River (Coen Dam), Lankelly Creek, 3 bores	93	8.3
	Cooktown Water	Annan River, 6 bores	826	66.3
	Lakeland Water	4 bores	42	2.3
	Laura Water	2 bores	23	2.0
Tablelands	Atherton Water Supply	Two (2) surface water supplies and five (5) bores which are chlorinated prior to storage and reticulation	4,300	183.0
	Bellview Estate Water Supply	Vine Creek	43	2.9
	Cassowary Heights Water Supply		22	2.9
	Chillagoe Water Supply (Mareeba Shire)	2 bores	150	9.9
	Dimbulah Water Supply (Mareeba Shire)	From the Mareeba-Dimbulah Irrigation Area Water Supply Channel. The irrigation channel is supplied mostly from Tinaroo Dam and a small portion from the Walsh River via the Collins Weir.	278	11.0

Council	Scheme	Water Source	Number of Connections	Length of Mains (km)
	Herberton Water Supply	Water is supplied from the Wild River, which in turn feeds a series of dams before reaching Herberton. The Middle Dam (56 ML) and the Wild River Dam (400 ML). Flowing into a small weir (30 kL), Herberton Weir.	423	26.7
	High Country Estate water Supply	Groundwater bore	30	2.2
	Johnstone River Estate Water Supply	North Johnstone River	63	2.6
	Kuranda Water Supply (Mareeba Shire)	Extracted from the Barron River by two submersible pump	895	39.0
	Mareeba Water Supply (Mareeba Shire)	From the Mareeba-Dimbulah Irrigation Area Water Supply Channel. The irrigation channel is supplied mostly from Tinaroo Dam and a small portion from the Walsh River via the Collins Weir.	3,758	102.0
	MAWSS Water Supply		741	19.0
	MillaaMillaa Water Supply	North Beatrice River	213	17.2
	Millstream Estates Water Supply	Millstream River	433	24.9
	Mt Garnet Water Supply	Herbert River by two raw water pumps into Warruma Swamp	159	27.2
	Ravenshoe Water Supply	North Cedar Creek, Millstream River	491	18.8
	Tabo Water Supply	Eastine Creek Dam & bores	42	6.2
	Tinaroo Park Water Supply	Two bores provide the water, and it is chlorinated and dosed with soda ash (to lower the pH) prior to storage and reticulation.	77	4.0
	Walkamin Water Supply	Bore water	94	3.3
	Yungaburra Water Supply	Barron River Catchment. Tinaroo Dam is considered to be a stable supply. Sunwater utilises the Barron Resource Operations Plan which ensures that the Barron River is sustainably managed.	614	17.0
Etheridge	Forsayth Water Supply	Big Reef Dam	66	8.4
	Georgetown Water Supply	Etheridge River Aquifer	203	13.5
Croydon	Croydon Town Water Supply	Lake Belmore Dam	130	10.8
Cassowary	Cardwell Water Scheme	Meunga Creek	960	84.5
	Innisfail Water Scheme	North Johnstone River	5,870	302.1
	Nyleta Water Scheme	Nyleta Creek 80% Jurs Creek water bore 20%	1,836	139.7
	Tully Water Scheme	Bulgun Creek 50% Boulder Creek 50%	3,192	388.9
Cairns	Babinda	Frenchmans Creek	716	43.2
	Bartle Frere		208	32.6
	Bellenden Ker	Junction Creek	147	15.9
	Bessie Point	Mick Creek	177	17.5

Council	Scheme	Water Source	Number of Connections	Length of Mains (km)
	Bramston Beach	Worth and Joyce Creek	150	11.4
	Copperlode/Behana Scheme	Behana Creek and Copperlode Falls Dam	69,330	1918.0
	Daintree	Intake Creek	79	4.5
	Fishery Falls	Fishery Creek	202	21.1
	Miriwinni	Pughs Creek	224	24.5
	Mossman/Port Douglas	Rex Creek	6,929	195.7
	Mountain View		25	2.4
	Orchid Valley		45	3.7
	Whyanbeel	Little Falls Creek	786	74.5

Source: SWIM Database; Local Governments

Table 2.3: Participating Wastewater Schemes

Council	Scheme	Disposal Mechanism	Number of Connections
Cook	Coen Sewerage	Effluent is used to irrigate an area of grassland and trees adjacent to the STP and a sports field.	89
	Cooktown Sewerage	Effluent is discharged to the Endeavour River and utilised as irrigation water for Lions Park	613
Tablelands	Atherton WWTP	Effluent is discharged to Mazlin/Priors Creek	3,042
	Kuranda WWTP (Mareeba Shire)	Effluent is discharged to the Barron River	320
	Malanda WWTP	Estimated 75% of treated water disposed through pasture irrigation and 25% cent discharged into the North Johnstone River.	559
	Mareeba WWTP (Mareeba Shire)	Effluent is discharged to Two Mile Creek	3,102
	Ravenshoe WWTP		383
	Tinnaroo Town WWTP	Effluent is discharged to the Barron River	167
	Yungaburra WWTP	Effluent is discharged to Lake Tinaroo	518
Cassowary	Innisfail Sewerage Scheme	Effluent is discharged to the Johnston River via Ninds Creek	3,284
	Mission Beach Sewerage Scheme	Sewage is pumped to Tully for treatment at the Tully sewerage treatment plant	1,472
	Tully Sewerage Scheme	Effluent discharged to Banyan Creek	919
Cairns	Babinda STP	Effluent is chlorinated and discharged to Babinda Creek.	544
	Edmonton STP	Effluent is treated with UV and discharged to Trinity Inlet.	7,901
	Gordonvale STP	Clarifier Effluent is chlorinated and discharged to the Mulgrave River	1,853
	Marlin STP	Effluent is treated with UV and discharged to a feeder drain that enters Half-moon Creek	13,163
	Mossman STP	Effluent is Chlorinated and discharged to the Mossman River.	1,039
	Northern STP	Effluent is discharged to the Barron River.	20,943
	Port Douglas STP	Effluent is treated with UV and discharged to Dickson's inlet.	5,578
	Southern STP	Effluent is discharged to Trinity Inlet.	21,811

Source: SWIM Database; Local Governments

2.3 Key Findings – Service Provision Profile

The above data highlights that the study consists of five local government areas that are significantly different in geographical profile and population. The profile of the population spread and density drives the demand for water and wastewater services.

This geographic and population profile is distinctly different from other areas in the State of Queensland, in particular as compared to regions such as South-East Queensland which have undergone significant industry governance reforms over the last decade.

Each local government provides solutions that reflect the location and size of the community, hence a total of 43 water supply schemes and 20 waste water schemes are dispersed across the five local government areas.

Even within a local government area, multiple schemes are being maintained that vary in scale. Water supply schemes range from small schemes servicing less than 50 connections, through schemes servicing up to 70,000 connections. Similarly the sewerage schemes range from small schemes servicing several hundred connections to larger urban schemes servicing over 20,000 connections.

The diversity of the profile of the local government areas in itself, and need to service a population base spread over a wide geographical area generates a range of challenges that must be addressed as outlined below:

Table 2.4: Challenges Resulting from the Geographic Profile of Schemes

Feature	Challenge
Independent systems	• Ensuring the service provision provided is relevant to each community rather than applying a one size solution • Ability to operate and maintain infrastructure located across a wide geographical area where staff and other resources may need to be shared between locations and may be located remotely from the infrastructure • Provide consistency of operational delivery and standards across disparate schemes
Different regional growth profiles	• Different community size and growth rates require unique planning responses to provide for additional infrastructure for high growth areas or managing the maintenance of existing infrastructure in static or contracting communities
Climatic disparity	• The region covers an area ranging from tropical coastland, to hinterland through to inland areas. Climate variability (in rainfall, temperature and evaporation) has a significant impact on demand and cost, and is difficult to forecast. A key example is decreased rainfall, which affects water availability and can trigger demand management measures. Demand management activity incurs operating costs and also reduces the volume of water supplied. In turn, that affects revenue from water consumption charges, which then affects profitability.[7]
Financial sustainability	• Ensuring equity across the communities in terms of cross subsidization across schemes • Determining pricing strategies that balance full cost recovery with affordability

Source: AEC*group*

In conclusion, due to the geographical spread of the geographic distance between the schemes, there is limited opportunity for increased interconnectivity between schemes in order to create a larger connected network grid (as has occurred in other regions such as SEQ along with governance reforms).

This does not mean that benefits will not occur from the establishment of collaborative mechanisms between service providers, simply that it needs to be noted that potential efficiencies from sharing sources of supply and network infrastructure is unlikely.

[7] National Water Commission, National Performance Report 2011-12, Drivers of performance

3. Service Delivery Performance

The following chapter provides a selection of the water and wastewater service performance indicators for the time period 2008-2009 to 2011-12 to outline the factors of demand, cost, quality and pricing. The purpose of this information is to provide an understanding of the current schemes profile and performance.

3.1 SWIM Data

State-wide Water Information Management (SWIM) Online is a joint initiative of Qldwater, and the Local Government Association of Queensland in partnership with the Queensland and Commonwealth Government. Created in 2006, SWIM was designed to aid Local Governments in meeting data reporting requirements by coordinating the data requests of Queensland Government departments into a single data request. Queensland water and wastewater service providers submit around 200 indicators into the SWIM online portal once each year, and are provided in return with data reports to forward directly to the Queensland Government.

To facilitate this assessment, indicators were extracted from a consolidated spreadsheet of SWIM data provided by the Queensland Government. A review of this data revealed a number of data gaps and inaccuracies which ultimately impacts on the quality and robustness of the SWIM database.

In order to address the identified SWIM data gaps, AEC*group* contacted participating council's to obtain clarification on missing SWIM data. Where no comparable estimates could be obtained, average historical responses have been utilised. As a result, the data presented in the following Sections represents a revised SWIM data position that appropriately informs the outcomes of this assessment, which provides adequate results for the assessment.

Opportunities for Improvement – SWIM Data Quality

The level of missing data and apparent inconsistencies in the data raised a reasonable concern as to the quality of the data captured for the SWIM program. It appears that data collection and quality assessment of the data is seen by all the participating councils as an additional compliance burden. There were no demonstrable benefits (or repercussions) to the council to ensure the data provided was accurate.

The benefits gained from industry benchmarking are reliant on comparable and consistent data. Valid industry benchmarking not only benefits the FNQ service providers, but also other councils in Queensland and Queensland State Government. The issue with the quality of the SWIM data is a significant area for performance improvement.

3.2 Water Supply

3.2.1 Customer Base

To provide a profile of the scheme update, the connected residential and non-residential properties for each participating council in 2011-12 are presented in Table 3.1.

Table 3.1: Connected Properties – Water Supply

Council	Schemes (#)	Connected Residential Properties (2011-12)	Connected Non-Residential Properties (2011-12)	Connected Properties per Capita	Connected Properties per sq Km	% of Properties Connected to a System
Cook	4	802	182	0.22	0.01	35%
Tablelands	18	11,881	882	0.28	0.20	59%
Etheridge	2	230	39	0.29	0.01	31%
Croydon	1	90	40	0.40	0.00	43%
Cassowary	5	9,914	1,944	0.41	2.52	73%
Cairns	13	74,179	4,857	0.49	19.14	93%

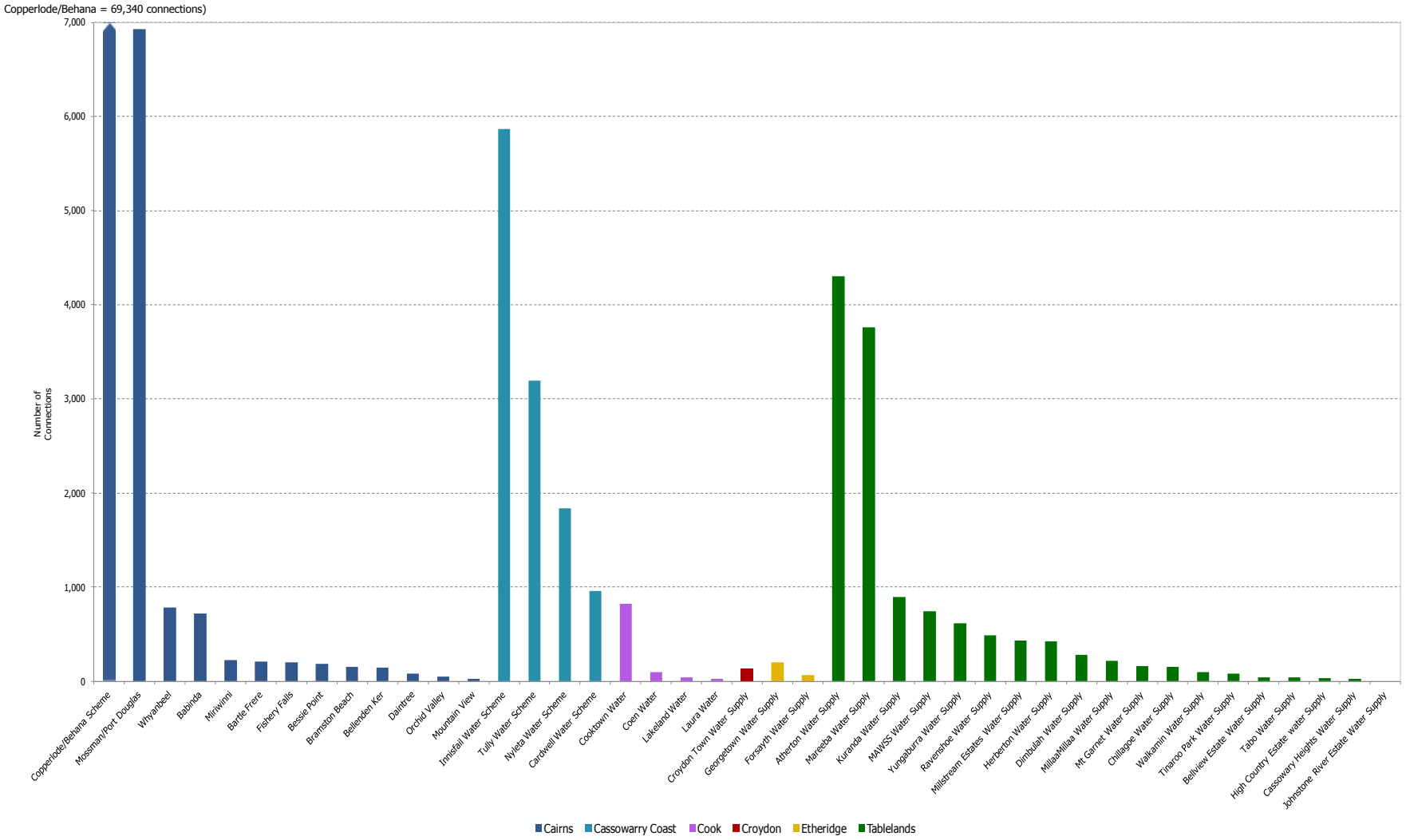
Source: SWIM Database

Key Points to note are:

- Cook Council has four schemes servicing the township population of a large rural/remote area (35% of properties connected, 0.01 connected properties per sq km).
- Etheridge Council, is similar to Cook Council, with 2 schemes servicing small rural population (31% of properties connected, 0.01 connected properties per sq km).
- Croydon Shire features the lowest number of connections per square kilometre, though a relatively high number of connections per capita (0.40) derived from the majority of the township households being connected.
- Tablelands Council has the largest number of schemes (18) servicing the villages and townships dispersed across the region with 59% of the properties connected to a scheme.
- Cassowary Council has a more urban profile population serviced by 5 schemes with 73% of the properties connected to a scheme.
- The Cairns region features an urban profile with the highest percentage of properties connected to a scheme (93%) number and more connections per capita than other participating Councils (19.14).

The following graph outlines the number of connection for each scheme. The largest scheme in the region, the Cairns scheme of Copperlode/Behana has 69,340 connections (which is not fully represented in the figure below).

Figure 3.1: Connections per Scheme – Water Supply



Source: AEC*group*

Opportunities for Economies of Scale from a larger Customer Base:

The demand and capacity of each scheme varies across each local government area, and within each local government area. The customer base profile indicates that within a regional framework, the opportunities for economies of scale by connecting the network and infrastructure assets would not be achieved due to the limited ability to connect the discrete systems. However this does not inhibit the opportunities that could be gained through a bulk purchasing of consumables and supply of support and technical services.

3.2.2 Growth

The following table summarises the annual growth in water supply connections from 2008-09 to 2011-12. This table indicates that some Councils have experienced negative growth in over in the 2009-10 to 2010-11 period. Even though some level of water disconnection is likely, these results provide ***further representation of potentially unreliable results in the SWIM database.***

The growth between 2010-11 and 2011-12, of around 1.3% appears more representative of regional population and dwelling growth as provided in ABS and OESR publications.

Table 3.2: Council Total Water Connections Growth

Council	2008-09	2009-10	% Growth	2010-11	% Growth	2011-12	% Growth
Cairns	80,791	82,591	2.2%	78,683	-4.7%	79,036	0.4%
Cassowary	12,450	13,062	4.9%	11,708	-10.4%	12,554	7.2%
Cook	780	947	21.4%	915	-3.4%	984	7.5%
Croydon	120	121	0.8%	130	7.4%	130	0.0%
Etheridge	286	263	-8.0%	263	0.0%	269	2.3%
Tablelands	11,025	13,086	18.7%	12,696	-3.0%	12,756	0.5%
Total	**105,452**	**110,070**	**4.4%**	**104,395**	**-5.2%**	**105,729**	**1.3%**

Source: SWIM Database

Opportunities for Economies of Scale from Growth:

The region experiences limited growth from greenfield and infill, which are the types of demand that typically put pressures on the network. Instead the region experiences most growth from extending its service areas to existing remote unconnected communities, which often results in the need to provide an unviable level of infrastructure to service and support the small communities.

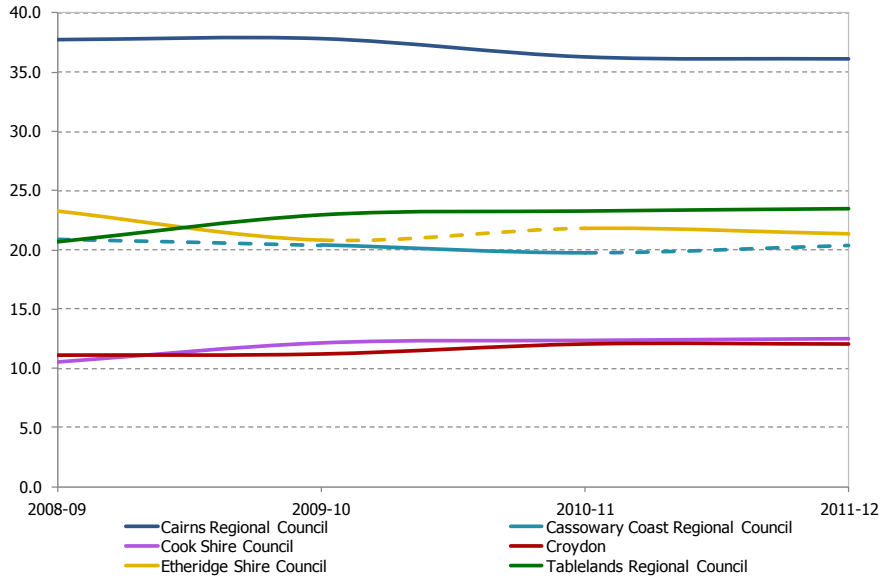
The high cost to service these communities results in the issue of balancing high pricing to recover costs versus social affordability in these small regional communities; and often the service standards for these small regional schemes are not aligned with other larger metropolitan schemes. For example, Tablelands' Chillagoe Water Supply Scheme where bore-sourced (and chlorinated) water has been found to be not treated to a potable level under the *Australian Drinking Water Guidelines*.

A regional approach may provide the opportunity to establish a framework that would address the risk arising from service standards differing substantially across schemes, and provide opportunities for the significant investment that may be needed to deliver consistent levels of service to the region's customers.

3.2.3 Service Density

The density of the scheme is indicated by the properties services per kilometre of main. Benchmark numbers of properties serviced per kilometre of main based on the largest Council scheme is provided in Figure 3.2.

Figure 3.2: Properties Serviced Per Km Main



Note: Dotted lines represent missing data replaced by average response.
Source: SWIM Database

Service density has remained relatively stable within each participating Council's since 2008, with Cook and Etheridge Shires servicing around 12 properties per kilometre of main, Cassowary Coast, Croydon, and Tablelands 20-24, and Cairns Region 36-38 properties.

Opportunities for Efficiencies – Density Intensification:

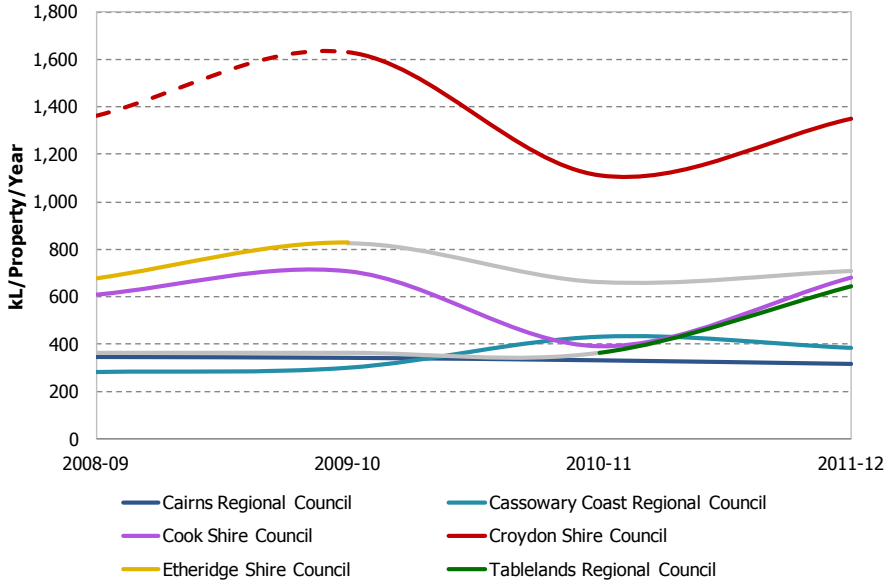
As indicated above in the density of the customer base is not changing, and therefore there is limited opportunities for economies of scale from the condensation of service within an area. However the profile does highlight there are three distinct groupings of density, indicating the potential to identify opportunities for operational efficiencies within the density groups and the possible transference of the efficiencies across the groupings.

3.2.4 Water Usage

The volume of water consumption is provided by the measure of potable water supplier per connection. The volume of water consumed is a reflection of the climatic environment and the promotion of alternative water source (such as the use of rain water) and water saving initiatives (such as grey water recycling).

Potable water supplied per connection are based on the largest council scheme is provided in Figure 3.3. Again, some missing data was prevalent in the SWIM database, which has been supplemented with council estimates. The utilisation of a combination of SWIM and council data should not affect the integrity of results.

Figure 3.3: Potable Water Supplied per Connection



Note: Grey Lines represent missing data replaced with Council estimates. Dotted lines represent missing data replaces with average response.
Source: SWIM Database

Key Points to note are:

- The inland Shires of Croydon and to a lesser extent Etheridge tend to supply higher levels of potable water per connection possibly due to the drier climate.
- The high rainfall coastal regions of Cairns and Cassowary Coast typically supplied lower levels of potable water (350-400 kL per connection).

Opportunities for Efficiencies – Water Usage:

Taking into consideration the impact of rainfall levels (wet year 2010-11), it appears the water consumption remains reasonably static in each local government area. The regional opportunity is to share policies and incentives that manage water consumption to the level of the Cairns and Cassowary levels.

3.2.5 Operating Costs

The operating costs vary with each scheme as outlined in the table below:

Table 3.3: Water Operating Costs by Scheme (2011-12)

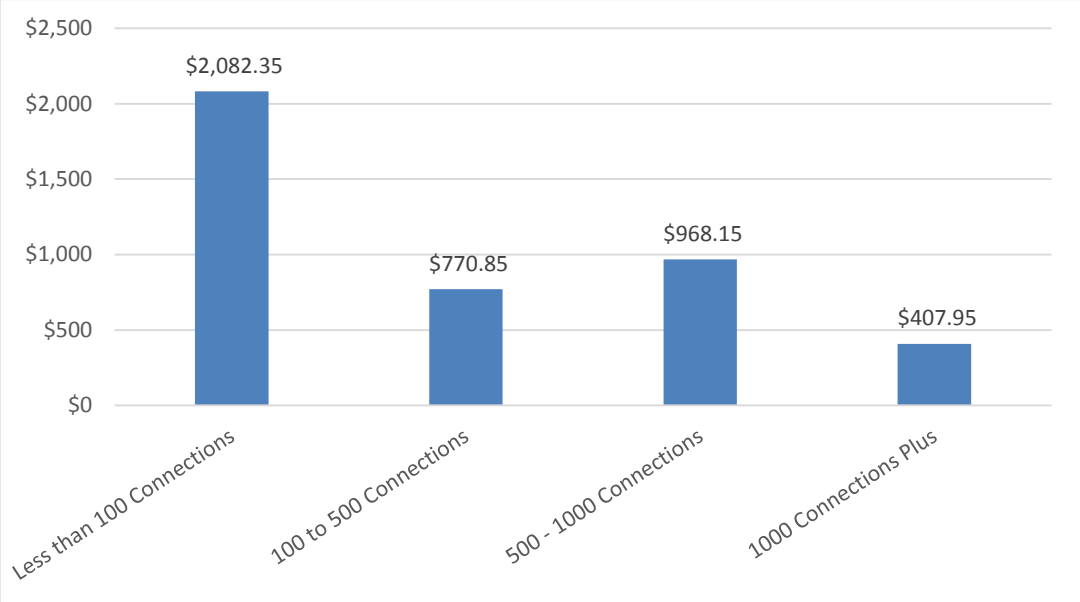
Council	Scheme	2011-12 Operating Costs ($'000)	Number of Connections	Cost per Connection
Cairns	Combined	$24,396	70,728	$345
Cassowary	Combined	$7,929	11,858	$668
Cook*	Cooktown Water	$1,500	826	$1,815
	Coen Water	$313	93	$3,366
	Laura Water	$140	23	$6,087
	Lakeland Water	$83	42	$1,976
Croydon	Croydon Town Water Supply	$161	130	$1,238
Etheridge	Forsayth	$151	66	$2,288
	Georgetown	$148	203	$729
Tablelands	Mareeba Water Supply	$2,507	3,758	$667
	Atherton Water Supply	$2,146	4,300	$499
	Kuranda Water Supply	$688	896	$768
	MAWSS Water Supply	$517	741	$698
	Ravenshoe Water Supply	$414	491	$843
	Herberton Water Supply	$307	423	$726
	Yungaburra Water Supply	$274	614	$446
	Mt Garnet Water Supply	$257	159	$1,616
	Dimbulah Water Supply	$203	278	$730
	Millstream Estates Water Supply	$184	423	435
	MillaaMillaa Water Supply	$174	213	$817
	Tinaroo Park Water Supply	$88	77	$1,143
	High Country Estate water Supply	$64	30	$2,133
	Chillagoe Water Supply	$56	150	$373
	Walkamin Water Supply	$46	94	$489
	Bellview Estate Water Supply	n.a.	43	n.a.
	Cassowary Heights Water Supply	n.a.	22	n.a.
	Tabo Water Supply	n.a.	42	n.a.

Note: *Cook Shire costs based on 2010-11 as estimates for individual schemes were unavailable for 2011-12.
Source: SWIM Database

Key Points to note are:

- Operating costs vary across schemes but tend to decrease with increasing scheme size as shown in the table below which summaries the schemes average operating costs grouped into bands related to the number of connections.

Figure 3.4: Average Operating Costs by Number of Connections



Source: AEC*group*

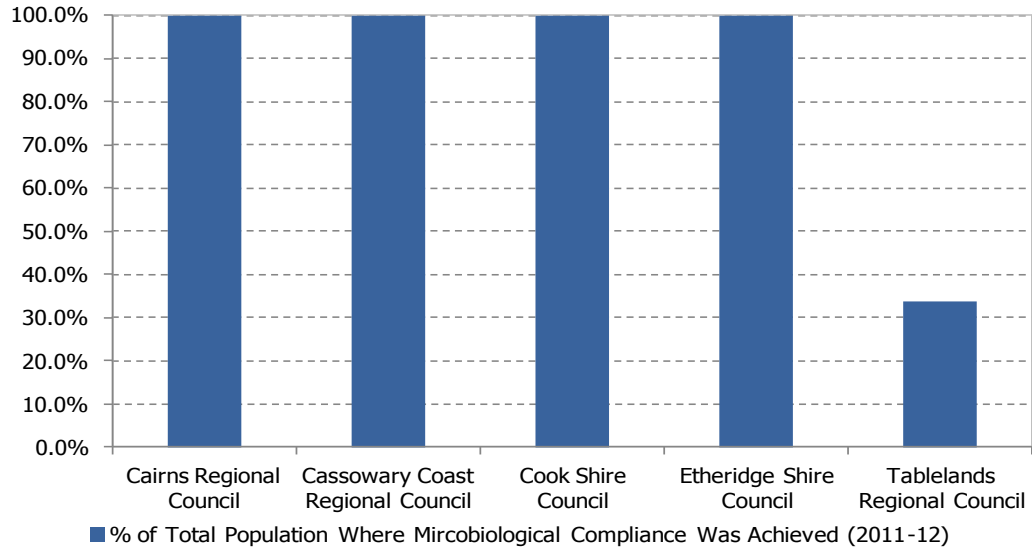
Opportunities for Efficiencies – Operating Costs:

A regional approach would capitalise on the economies of scale gained by larger organisations and schemes typically being able to utilise a lower investment in infrastructure per property (i.e. for maintenance and pumping costs), as well as the benefits of bulk buy contracts, more efficient allocation of staff resources and organisational structure.

3.2.6 Microbiological Compliance

The proportion of properties which achieved microbiological compliance in 2011-12 is provided in Figure 3.5.

Figure 3.5: Proportion of Properties Where Microbiological Compliance Was Achieved



Note: Tablelands have advised the SWIM data was incorrect and they achieved 100% compliance.
Source: SWIM Database

Key Points to note are:

- Tablelands have advised that the SWIM data was incorrect and that they received 100% compliance. All other Council's reported 100% compliance.

Opportunities for Efficiencies - Compliance:

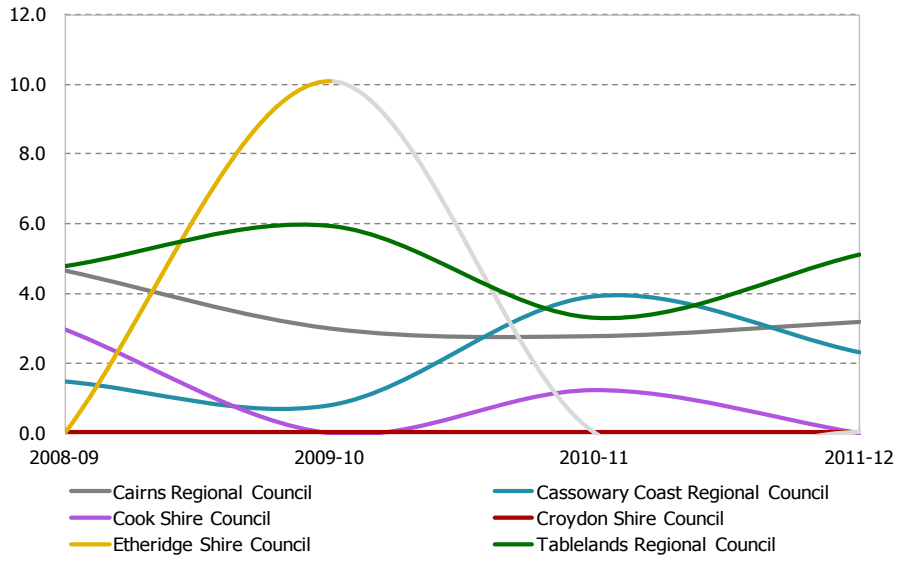
Given the only non-compliant outcome is a performance based issue for a single scheme, it is unlikely that a shift in governance structure will facilitate achieving more optimal outcomes than under the current situation.

However, it should be noted that potential regional opportunities exist to improve future outcomes where a governance structure can be applied that efficiently utilises compliance issues to inform asset management, planning and decision-making processes.

3.2.7 Water Service Complaints

Benchmark water service complaints per 1,000 properties since 2008-09 are illustrated in Figure 3.6.

Figure 3.6: Water Service Complaints per 1,000 Properties



Note: Grey lines represent missing data replaced by Council estimates.
Source: SWIM Database

Key Points to note are:

- Service complaints typically average between 0-5 per 1,000 properties. It is noted that while Etheridge Shire reported 10 complaints per 1,000 properties in 2009-10, there have been no reported service complaints over the last two financial years.

Opportunities for Efficiencies – Customer Management:

Opportunities exist to ensure best practice outcomes where the occurrence of complaints should be proactively analysed and incorporated into asset management and planning processes to improve future service delivery levels. Where complaints are simply recorded for compliance purposes, potential opportunities to improve customer service and system performance are missed.

3.3 Sewerage

The overview summary table of the sewerage schemes (Section2.2) highlights councils utilise a variety of disposal mechanisms, with considerable variation in scheme size both across and within the participating councils. Residents of the Etheridge and Croydon Shires currently maintain their own septic sewerage systems.

3.3.1 Customer Base

Connected properties (residential and non-residential) per capita and per square kilometre for participating Councils are provided in Table 3.4.

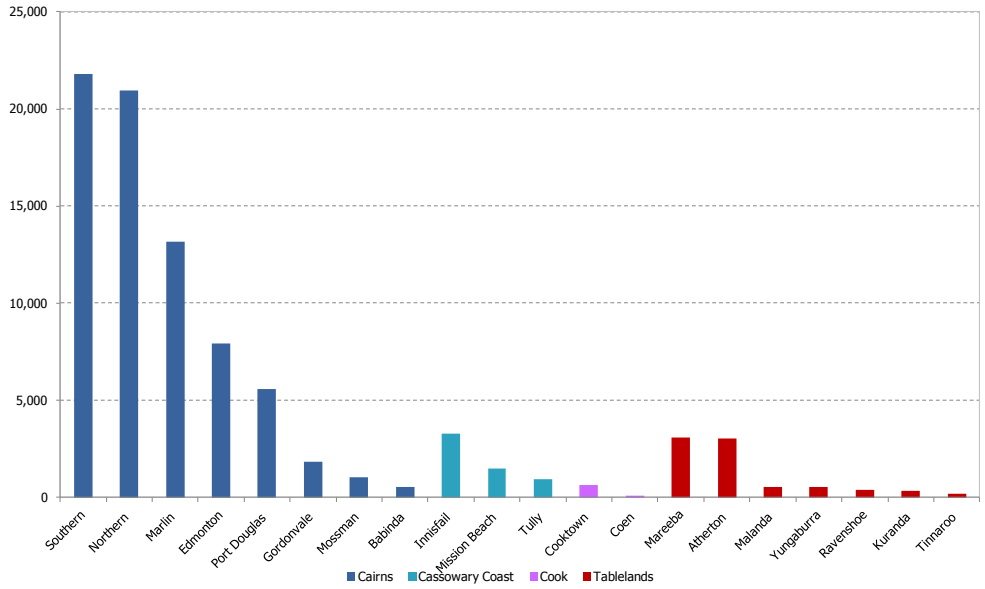
Table 3.4: Connected Properties

Council	Number of Schemes	Connected Residential Properties (2011-12)	Connected Non-Residential Properties (2011-12)	Connected Properties per Capita	Connected Properties per sq Km	% of Properties Connected to a Scheme
Cook	2	587	115	0.16	0.01	26%
Tablelands	7	7,452	639	0.18	0.12	37%
Cassowary Coast	3	5,177	498	0.20	1.21	38%
Cairns	8	69,273	3,559	0.45	17.64	87%

Source: SWIM Database

Figure 3.7 below displays the connections by scheme and Council.

Figure 3.7: Sewerage Connections by Scheme (2011-12)



Source: SWIM Database

Key Points to note are:

- With the exception of the Cairns schemes, the majority of the schemes are small schemes servicing rural townships.
    - Cook, Tablelands, and Cassowary Coast possess similar connected properties per capita, ranging from 0.16-0.20.
    - Cairns Region possess much higher numbers of connected properties both per capita (0.45) and per square kilometre (17.64), consistent with the Cairn's status as Far North Queensland's major regional centre.

Opportunities for Economies of Scale – Customer Base

Similar to the water schemes, the demand and capacity of each scheme varies across each local government area, and within each local government area. As each scheme is a discrete scheme there is limited opportunity for economies of scale by connecting the network and infrastructure assets. However this does not inhibit the opportunities that could be gained through a bulk purchasing of consumables and supply of support and technical services.

3.3.2 Growth

The following table summarises the annual growth in sewerage network connections from 2008-09 to 2011-12. This table indicates that some Councils have experienced negative growth in the 2009-10 to 2010-11 period. The investigation of the basis behind the reason the change in data was not within the scope of this report and the reasons could vary from unreliable results to changes in the basis of the data provided for the SWIM database. Areas of growth (Cook and Tablelands) are reflective of properties connecting to small township schemes.

Table 3.5: Total Sewerage Connections (2008-09 to 2011-12)

Council	2008-09	2009-10	% Growth	2010-11	% Growth	2011-12	% Growth
Cairns	71,040	72,744	2.4%	68,202	-6.2%	72,832	6.8%
Cassowary	7,292	6,857	-6.0%	6,656	-2.9%	5,675	-14.7%
Cook	677	619	-8.6%	695	12.3%	702	1.0%
Tablelands	7,371	7,235	-1.8%	7,566	4.6%	8,091	6.9%
Total	**86,380**	**87,455**	**1.2%**	**83,119**	**-5.0%**	**87,300**	**5.0%**

Source: SWIM Database

Opportunities for Economies of Scale from Growth:

As indicated in relation to the water schemes, the region experiences limited growth, with the majority of scheme growth outside the coast regions relating to the connection of properties to smaller schemes.

A regional approach may provide the opportunity to establish a framework that would address the risk arising from service standards differing substantially across schemes, and provide opportunities for mechanism for the significant investment that may be needed to deliver consistent levels of service to the region's customers.

3.3.3 Operating Costs

The operating costs vary with each scheme as outlined in the table below:

Table 3.6: Sewerage Operating Costs 2011-12 ($'000)

Council	Scheme	Operating Costs 2011-12 ($'000)	Number of Connections	Cost per Connection
Cairns	Combined	$31,807	72,832	$437
Cassowary	Combined	$6,755	5,675	$1,190
Cook*	Combined	$1,564	702	$2,228
Tablelands	Mareeba WWTP	$1,632	3,102	$526
	Atherton WWTP	$1,226	3,042	$403
	Malanda WWTP	$1,003	559	$1,794
	Kuranda WWTP	$590	320	$1,844
	Yungaburra WWTP	$451	518	$871
	Ravenshoe WWTP	$308	383	$804
	Tinnaroo Town WWTP	$199	167	$1,192

Notes: * Data replaced using Council estimates.
Source: SWIM Database

Key Points to note are:

- The costs do not appear to be necessarily related to scheme size. The majority of the schemes have incurred significant costs increases over the three years.
    - Cook Shire features the highest sewerage operating costs per property at $2,300.00 in 2011-12 with costs rising 12.0% since 2009-10.
    - Tablelands' Atherton Scheme features the lowest average sewerage operating costs per property at $403.02 per property in 2011-12, however costs have increased significantly rising 38.4% since 2009-10.
    - Cairns region features the second lowest average sewerage operating costs per property at $436.72 in 2011-12. Cairns' operating costs per property have increased 13.9% since 2009-10.
    - Cassowary Coast operating costs have risen 41.0% since 2009-10 to $1,190.31 in 2011-12.

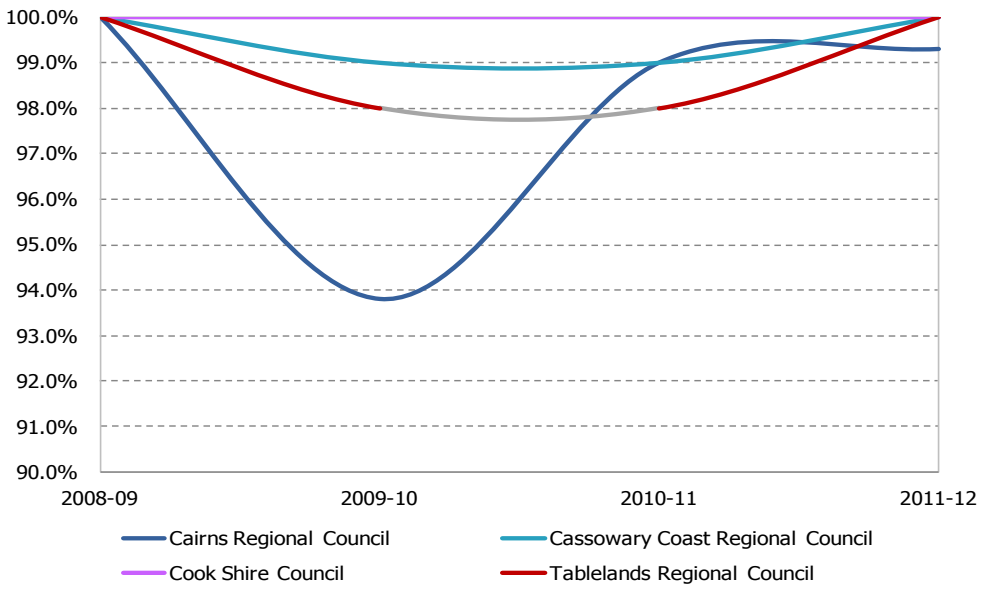
Opportunities for Efficiencies – Operating Costs:

In sewerage schemes the operating costs relate to the type of system and therefore it is expected the costs will vary by system. However a regional approach would capitalise on the economies of scale gained by larger organisations and schemes typically being able to utilise the benefits of bulk buy contracts, more efficient allocation of staff resources and organisational structure.

3.3.4 Sewerage Treatment Compliance

The proportion of treated sewerage that achieved compliance since 2008-09 is provided in Figure 3.8.

Figure 3.8: Percentage of Treated Sewerage Volume that Achieved Compliance



Notes: Benchmarks based on largest scheme. Grey lines represent missing data replaced by Council estimates.
Source: SWIM Database

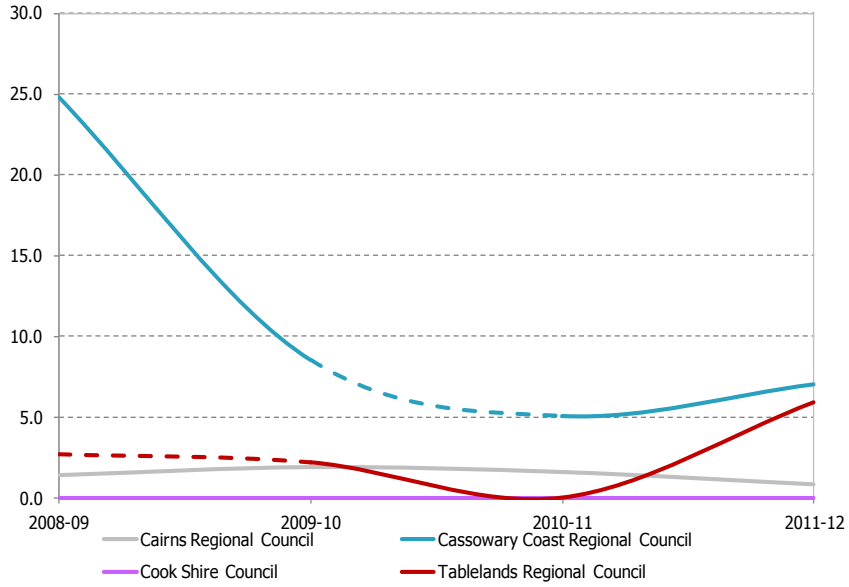
Opportunities for Efficiencies - Compliance:

Council's have typically achieved between 98-100% compliance for the largest scheme. However, a regional approach may facilitate systems to ensure compliance monitoring outcomes are proactively analysed and used to inform asset management, planning and decision-making processes.

3.3.5 Sewerage Service Complaints

Benchmark sewerage service complaints per 1,000 properties since 2008-09 are illustrated in Figure 3.9.

Figure 3.9: Sewerage Complaints (per 1,000 properties)



Notes: Dotted lines represent missing data replaced by smoothed estimates. Grey lines represent missing data replaced by council estimates. Cairns data represents odour complaints only.
Source: SWIM Database

Key Points to note are:

- Cassowary Coast has historically recorded higher complaint levels, however complaints have fallen significantly since 2008-09 and the remaining Council's typically record between 0-5 complaints per 1,000 properties.

Opportunities for Efficiencies – Customer Management

The complaints data alone does not provide detail as to how these complaints arose or were addressed. Ultimately, to ensure best practice outcomes the occurrence of complaints should be proactively analysed and incorporated into asset management and planning processes to improve future service delivery levels. Where complaints are simply recorded for compliance purposes, potential opportunities are missed.

4. Comparative Data - Pricing

This chapter provides a benchmark of the rates and charges across the study area to provide an assessment of the councils' 2012-13 pricing strategies for water and wastewater.

4.1 Current Water and Sewerage Charges

The following table summarises the approach applied for current water supply and sewerage utility charges for each council.

Table 4.1: Current Water Utility Charges – 2012/2013

Council	Water Charges	Sewerage Charges
Cairns	Cairns Regional Council applies a single access charge of $232.80 per residential and commercial property (including vacant allotments). A single tiered consumption charge is levied at $1.05/kL for residential and $1.12/kL for commercial properties. A major consumer of water, FNQ Ports Group is levied a higher consumption charge than standard commercial users in relation to water used for shipping.	Cairns Regional Council applies a fixed access charge of $696.86 for a primary pedestal, with unconnected properties charges $554.80 across all wastewater schemes.
Cook	Cook Sire Council applies a single commercial and residential access charge based on meter size ($450.00 for 20mm residential connection) in addition to a single tier consumption charge currently set at $1.75/kL across the Cooktown, Coen, Lakeland, and Laura schemes.	Cook Shire Council applies per unit access charges according to property type with charges varying across the Cooktown and Coen schemes. In 2012-2013 residential access charges are set at $798.00 for primary pedestals in the Cooktown scheme and $920.00 within the Coen scheme.
Croydon	Croydon Shire Council applies a per unit access charge based on property type ($328.00 residential) and a single tiered consumption charge of $0.70/kL for residential and commercial properties.	
Cassowary	Cassowary Coast Regional Council applies a single access charge based on meter size to properties in the Northern scheme ($435.00 residential) while Southern scheme properties are charged a per unit rate based on property type ($440.00 residential). Northern scheme properties receive a two tiered consumption charge ($0.80 and $1.50 /kL) for usage above and below 500 kL per annum. Southern scheme properties receive an allowance of 50 kL per water unit, with a two tiered excess charge of $0.80 and $1.50 /kL for usage above 50 kL and 100 kL per water unit.	Cassowary Coast Regional Council applies single access residential charges with charges varying across the Innisfail, Mission Beach, and Tully schemes. Non-residential charges are applied per pedestal, washer or urinal, with reduced charges applying for second and subsequent connections.
Etheridge	Etheridge Shire Council applies a per unit access charge based on meter size for both the Georgetown ($404.26 residential) and Forsayth ($692.20 residential) schemes. Two tiered consumption charges are applied to commercial and residential properties for usage above and below 700 kL per annum, with charges varying between the Georgetown ($0.50 and $1.25) and Forsayth ($0.80 and $1.75) schemes.	

Council	Water Charges	Sewerage Charges
Tablelands	Tablelands Regional Council applies a different single standard access charge per property category across eight schemes (also applying to untreated water). Non-standard fixed charges apply to certain property categories based on access units. Tiered consumption charges are applied for residential and commercial properties. Up to three tiers are applied with both tiers and charges varying among schemes	Tablelands Regional Council applies a single $600.00 residential wastewater access charge properties within the Atherton, Tinaroo, and Yungaburra schemes (including vacant and unconnected properties). Non-residential properties are charged per primary and subsequent pedestals. Per unit charges based on residential and non-residential property type are applied to properties in the Kuranda, Myloa, Malanda, Mareeba, and Ravenshoe schemes.

Source: council budget documents 2012-13

- Each council utilises a different approach to deriving access charges, consumption tiers, share of cost recovered from fixed vs. variable components as well as between schemes. Key differences include:
  - Cairns charges standard access and consumption charges across all schemes.
  - Cook and Etheridge utilise a meter size approach for access charges.
  - Tablelands and Cassowary Coast applies different access, consumption and tiers for all its networks.
- The charge for many of the non-metropolitan schemes are higher than the Cairns scheme, which reflects the higher costs to service these communities. However, conversely Cairns applies a standard charge across the whole region which suggests that some level of cross-subsidy may exist with the more efficient metropolitan schemes subsidising the remote schemes.
- In regard to water charges, all councils have adopted an access charge and consumption charge approach. However, the level of application at scheme or local government level varies, for example Tablelands have specific charges for each scheme, whereas Cassowary have a Northern and Southern charge, and Cairns has the same charge applied across all its schemes.

Table 4.2 Number of Schemes and Access Charges

Council	Number of Water Schemes	Number of Access Charges
Cook	4	1
Tablelands	19	8
Etheridge	2	2
Croydon	1	1
Cassowary Coast	4	2
Cairns	13	1

Source: AEC*group*

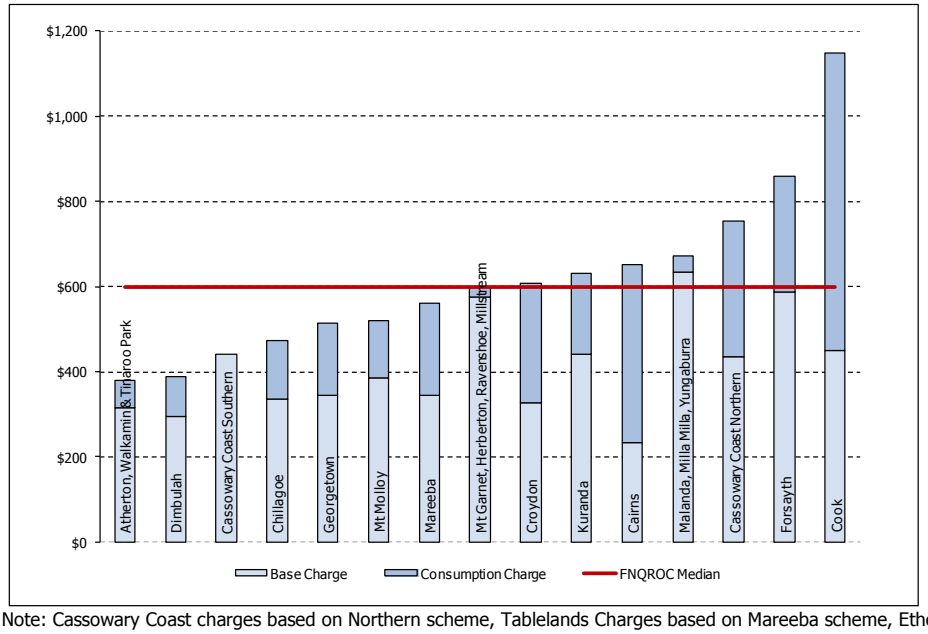
- In general for water consumption charges, larger schemes have a lower base charge and the rural schemes with lower connection numbers have a higher base and consumption charge.

4.2 Comparison of Water and Sewerage Charges across the FNQROC Schemes

4.2.1 Comparison of Water Charges across FNQROC Schemes

The comparison of the 2012-13 water utility charges. 400kL usage (residential dwelling) across participating Council schemes are provided in Figure 4.1 and highlights that individual scheme charges vary significantly both in terms of total charges and the proportion of fixed access and variable usage charges.

Figure 4.1: FNQ ROC Water Scheme Utility Charges 2012-13 (400kL Usage)



Note: Cassowary Coast charges based on Northern scheme, Tablelands Charges based on Mareeba scheme, Etheridge charges based on Forsayth scheme. Dimbulah, Atherton, Walkamin, Tinaroo Park, Chillage, Maareeba, Mt Molloy, Kuranda, Mt Garnet, Herberton, Ravenshoe, Millstream, Malanda, MillaMilla, and Yungaburra are in Tablelands, Georgetown and Forsayth are in Etheridge.
Source: AEC*group*

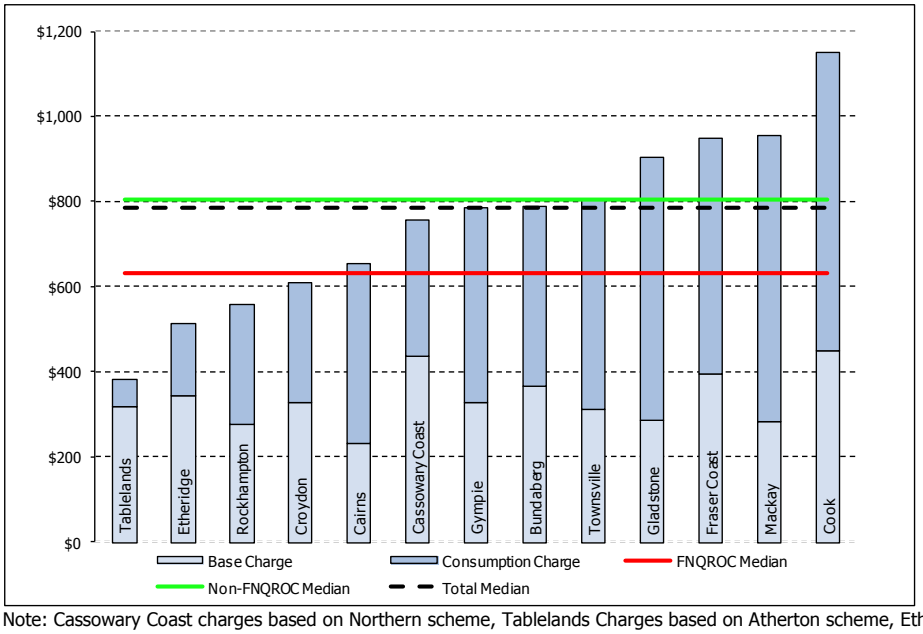
Key points to note are:

- The *Atherton, Walkamin, Tinaroo Park and Dimbulah* schemes currently have the lowest charges, while schemes across the Cook Shire have the highest charges at $1,150.00 based on 400 kL usage.
- The median charge across the FNQROC schemes in 2012-13 was $600.40 based on 400 kL usage. Cairns and Croydon, where a standard charge is applied across council, both levy a charge relatively in line with the median charge. Whereas regions with differing charges for each scheme, such as Tablelands and Etheridge, feature charges both well above and below the median.
- This suggests that any undertaking to regionalise water supply charges through standardised charges will have a more significant impact on remote schemes in Tablelands and Etheridge (with savings likely for ratepayers in Cook, Forsythe scheme and Cassowary Coast Northern schemes).
- Given the wide disparity between schemes, it may also be likely that many of those schemes below the median may not be achieving full cost recovery. Any regionalised undertaking to implement scheme-based full cost pricing across the region is likely to result in significant price increases for Atherton, Walkamin, Tinaroo Park, Dimbulah Cassowary Coast Southern and Chillagoe.

4.2.2 Comparison to Regional Water Supply Benchmarks:

Participating FNQROC council water supply charges have been compared with key North and Central Queensland benchmarks based 400 kL usage (residential dwelling) for 2012-13 are provided in Figure 4.2.

Figure 4.2: Benchmark LGA Water Utility Charges 2012-13 (400 kL Usage)



Note: Cassowary Coast charges based on Northern scheme, Tablelands Charges based on Atherton scheme, Etheridge charges based on Georgetown scheme.
Source: AEC*group*

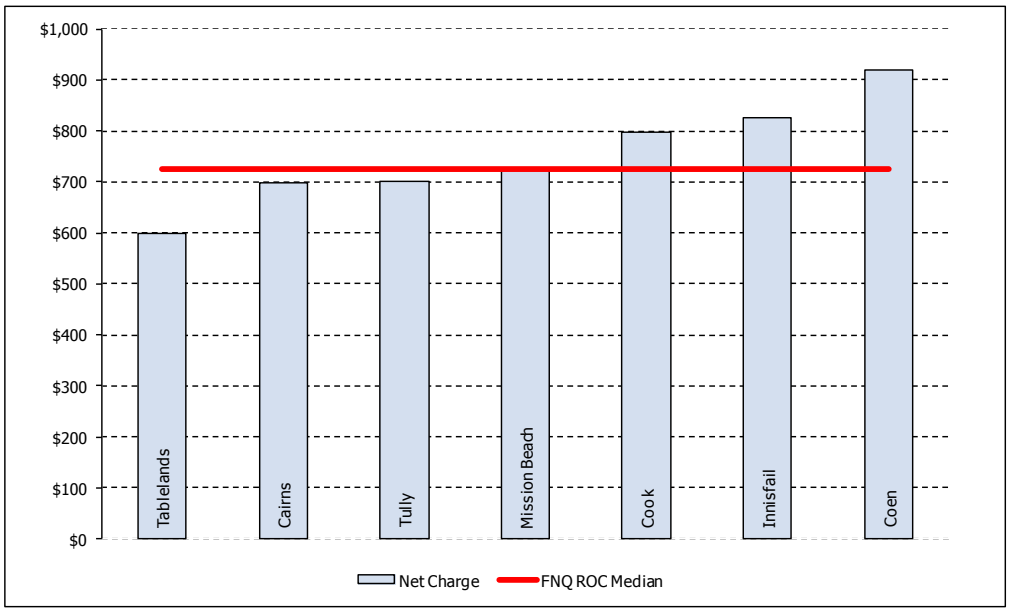
Key points to note are:

- Participating FNQROC councils charge a lower median rate of $630.40 for 400 kL usage compared to the regional benchmark of $785.08.
- Charges in Cook Shire are considerably higher than all benchmarks.
- Most of the regional centres are considered commercial activities under the *National Competition Policy* and have most likely progressed further toward achieving full cost pricing than the smaller FNQ councils.
- Any move towards ensuring full cost pricing (either under the existing council model or through regional collaboration) may have significant impacts on the pricing for the customers of those particular schemes, however (with the exception of Cook) most of the FNQ councils' customers are paying well below the median charge for the region.

4.2.3 Comparison of Sewerage Charges across FNQROC Schemes

Wastewater (residential primary pedestal) charges for 2012-13 across participating FNQROC schemes are provided in Figure 4.3 below.

Figure 4.3: FNQ ROC Benchmark Wastewater Charges (2012-13)



Note: Tully, Mission Beach and Innisfail are Cassowary Coast, Coen is in Cook Shire.
Source: AEC*group*

Key Points to note are:

- Tablelands schemes charge the lowest rates at $600, while Coen scheme features the highest charges at $920. Mission Beach scheme represents the median FNQ wastewater charge at $725.

In regards to wastewater most of the councils apply an access charge dependant on connected/not connected and property type. Tablelands and Cairns apply a single charge across all schemes and Cassowary and Cook apply varying charges per scheme.

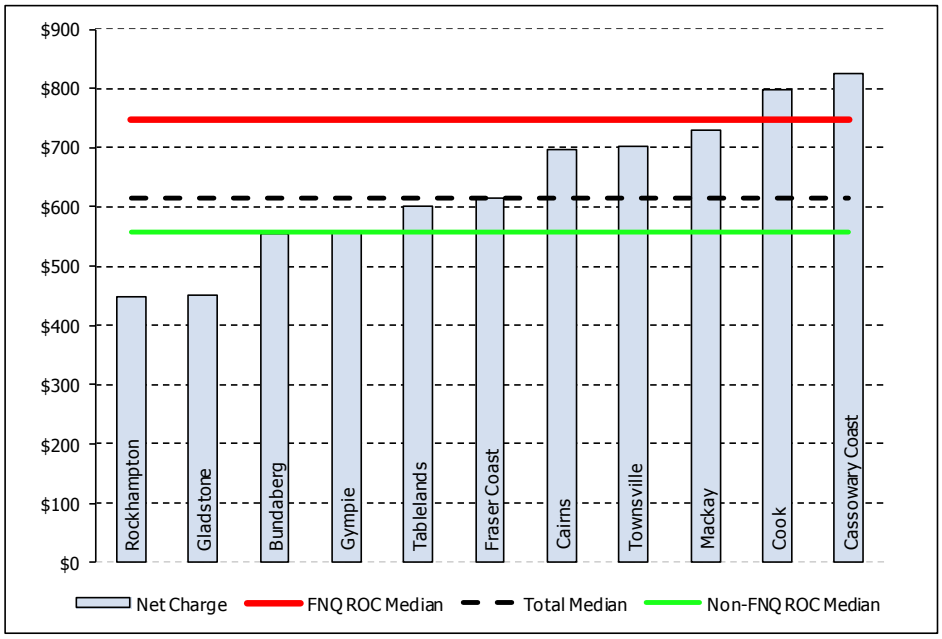
4.2.4 Comparison to Regional Wastewater Benchmarks

Participating FNQROC council wastewater charges have been compared with key North and Central Queensland benchmarks (residential primary pedestal) for 2012-13 and are summarised in Figure 4.4 below.

Key points to note are:

- Compared to benchmark North and Central Queensland regions, participating FNQ Councils featured a higher median wastewater charge of $747.43 compared to $557.69. Cassowary Coast (based on the Innisfail wastewater scheme) featured the highest benchmark cost across all regions at $825 per annum.
- This result for wastewater is the opposite finding to that for water supply (where FNQROC median was actually lower than the regional median.

Figure 4.4: Benchmark Wastewater Utility Charges (2012-13)



Note: Cook Shire based on Cooktown Sewerage Scheme charges, Cassowary Coast based on Innisfail Sewerage System charges.
Source: AEC*group*

4.2.5 Opportunities for Regional Benefit – Pricing Structure

When considering pricing in the context of regional collaboration, the most prevalent price paths would involve either standard regional pricing for all schemes (similar to the current approach by Cairns) or a schemed-based pricing.

A standard price path would result in potential cross subsidies from more cost effective metropolitan schemes such as Cairns to other schemes such as rural/remote schemes. Alternatively, some form of regionally consistent scheme-based approach may result in further significant price increases to those high cost remote/rural schemes which are already among the highest in the region.

Regardless of the pricing strategy applied, the calculation of full cost recovery should be applied to all schemes. A regional approach to this would provide an equitable basis for cost comparison across the region and therefore provide a platform the decision on pricing and cross subsidisation across schemes and by the general rate community.

A key opportunity exists for regional collaboration (regardless of the business model applied) to improve accounting processes and financial analysis tools in order to develop a consistent, equitable and transparent approach to pricing, full cost recovery and incidence of cross-subsidies; which in turn will help inform investment and network expansion decisions as well as for community service obligations (where recognition of unviable schemes is required).

Section 2: Review of Current Water Service Provider Operations

The purpose of the Section 2 Review of the Current Providers Operations was to establish an assessment of the current performance of the local governments cross a series of strategic and delivery areas against a nominated performance level. This provided the platform to identify opportunities for improvement.

5. Assessment of Status Quo Service Delivery

This chapter provides the approach and outcomes of the assessment of the current service delivery of the council's against a best practice standard.

5.1 Introduction

In order to develop a clear understanding of current water and wastewater operations, information requests were sent to representatives of each participating Council asking for key operational information and strategic documentation.

Responses were received back from 5 of the 6 participating councils, with no information provided by Etheridge. As a result, Etheridge has been excluded from analysis in this Section of the review.

Using the information received from the 5 remaining participants, detailed audit documents were developed considering council's current operations relative to their size, scale, available resources. The audit documents were further refined in consultation with key council stakeholders.

The purpose of the audit reports is to identify areas where the information provided indicated that there is a gap between the current operation of the council and industry best practice in relation to the following areas:

Table 5.1: Key Focus Areas for Audit of Local Government Water Service Activities

Key Area	Issue to be Examined
Strategic Direction Planning	Councils Strategic Plan / Corporate Plan Business Plan or Activity Plans for Water Services. Performance Reporting Strategic Asset Management Policy, Strategy and Plans Future Capacity
Governance	Formal Reporting Structure
Structure	Organisational Structure Support Functions Quality Systems Internal Policies and Procedures Staff Training
Delivery Planning	Delivery Planning
Customer Service Standards	Customer Service
Asset Management	Asset Management Plans (by scheme) Service Levels Asset Data and Knowledge Asset Management Processes and Procedures System Operation
Legislative Compliance	Environmental Management Systems / Plans / Strategies Drinking Water Quality Workplace Health and Safety
Human Resources	Workforce Plan Retention and Recruitment Profile of Workforce Job Assessment Workforce Movement Staff Training Programs
Financial Management	Activity Budgeting Financial Sustainability Planned Asset Renewal Pricing National Competition Policy

Source: AEC*group*

In order to rank the significance of any identified gap in the above factors (i.e. resulting from gaps between current service delivery levels and industry best practice), a qualitative scale has been developed. This 'gap scale' is summarised in the table below.

Table 5.2: Qualitative 'Gap Scale' Applied to Identified Audit Gaps

Gap Scale	Best Practice Achieved	Impact on Current Service Delivery Levels	Impact on Future Service Delivery Levels	Interpretation of Risk	Value
No Gap Identified	Yes	None	None	No gap identified as council appears to be operating in line with the industry best practice approach.	0
Negligible	No	None	None	Current approach by council does not meet industry best practice, however this appears have no apparent (or negligible) impact on current service delivery levels and is not likely to impact future service delivery levels.	1
Minor Gap	No	None	May result in impacts to service delivery in future	Current approach by council does not meet industry best practice, but the identified gap appears to have no apparent (or negligible) impact on current levels of service delivery. However a likelihood exists that in future this gap may result in misalignment to corporate direction or affect the efficiency of service delivery.	2
Moderate Gap	No	Impact on current service delivery levels	May continue to impact in the future; but no likely increase in impact	Current approach by council does not meet industry best practice. The identified gap appears to be currently impacting on effective service delivery and will result in misalignment of service delivery with future strategic direction.	3
Major Gap	No	Impact	Likely to increase in impact	Current approach by council does not meet industry best practice. The identified gap appears to be currently impacting on effective service delivery. In the future this gap is likely to increase and significantly affecting the council's ability to adequately deliver services or remain sustainable as a business.	4
Significant Gap	No	Significant impact	Significant impact	The identified gap is significantly affecting the council's ability to adequately deliver current services and/or impacting on the sustainability of Water Supply and Wastewater activities.	5

Source: AEC*group*

In reviewing the audit results, the following needs to be considered:

- Where the council has not provided detail for a particular item, it has been scored as a 'moderate or major risk'.
- The key findings for each section below are a summary of the councils viewed as group and may not necessarily be reflective of the situation within an individual LGA.
- No comprehensive data was provided by Etheridge and therefore has been excluded from the assessment.
- These audit summaries are an analysis of data provided by each council. No independent 'on-site' audit was undertaken, and results are constrained by the level of information provided by each council

The following acronyms have been used in the audit summaries below:

Table 5.3: Acronyms

Acronym	
SAMP	Strategic Asset Management Plan
TMP	Total Management Plan
AMP	Asset Management Plan
NAMS	National Asset Management Strategy
DWQMP	Drinking Water Quality Management Plan
EMS	Environmental Management System
LGA	Local Government Area
IPWEA	Institute of Public Works Engineering Australia
KPI's	Key Performance Indicators
CEO	Chief Executive Officer
PIP	Priority Infrastructure Plan

Source: AEC*group*

5.2 Strategic Direction Planning

Table 5.4: Strategic Direction Planning Review Findings

Factor	Potential Gap	Compliance in Relation to Best Practice		Assessment Outcome
Councils Strategic Plan / Corporate Plan • Strategic Plan references clear objectives related to the provision of water services and links outcomes to the needs of the community.	Level of strategic importance of water service not reflected by identification of the service within Corporate strategies and focus. Poor strategic alignment evidenced by lack of linkage to supporting strategic documents.	Cook Tablelands Croydon Cassowary Cairns	Negligible Minor No Gap No Gap Negligible	All councils have appropriate Corporate/Strategic planning documents however they generally tend to fail to reference to the strategic asset management plans indicating infrastructure is not being strategically considered in the long term planning of council.
Business / Activity Plans for Water Services. • Actions are provided for the water and wastewater services. • Significant capital requirements for the future are identified.	Lack of recognition of ongoing service delivery in operational plans. Low focus on consideration of future infrastructure management if the capital requirements not identified.	Cook Tablelands Croydon Cassowary Cairns	Moderate Moderate Moderate No Gap No Gap	There is lack of connection between the operational plans, asset management plans and service delivery highlighting a risk that service delivery is not strategically planned. The lack of focus on ongoing operational service deliver highlights the lack of consideration of the importance of safe water service delivery for the community.
Performance Reporting • Evidence of reporting for statutory requirements. • Recognition of specific KPI's that are monitored and reported.	Reporting focused on operational outcomes achieved rather than a measurement against a target indicating a lack of improvement framework. TMP/SAMP KPI's reported but no evidence of review of the implications of results.	Cook Tablelands Croydon Cassowary Cairns	Moderate Moderate Moderate Moderate Moderate	KPI reporting appears to be a compliance exercise with little consideration of the outcomes of the data (as evidenced by the SWIM data). Management reporting to council is focused on operational outcomes rather than a measurement against a target indicating a lack of improvement framework.
Strategic Asset Management Policy, Strategy and Plans • Evidence that SAMP documentation is current, and used in the management of the service and asset. • Detailed SAMP or AMP provide an indication of planning and risk management. • Plans should refer to how future capacity will be provided and how infrastructure will be renewed and maintained.	TMP/SAMP documents not current (partially related to lack of direction from State in regard to requirement to have a SAMP). Improvement actions identified in TMP/SAMP's not implemented indicating focus on operational day-to-day delivery.	Cook Tablelands Croydon Cassowary Cairns	Moderate Major Moderate Minor Minor	TMP/SAMP were developed for compliance (2009) and have not been advanced. (Note this is partially related to lack of direction from State in regard to requirement to have a SAMP or TMP). Improvement actions identified in TMP/SAMP's have not been incorporated in to the operational plans. Where improvement plans are being implemented there is poor documentation and reporting of the status of the improvement plans. No evident that significant issues are not being recognised, monitored and addressed.

Source: AEC*group*

Table 5.5: Strategic Direction Planning Review Findings

Factor/Best Practice Approach	Cook	Tablelands	Croydon	Cassowary	Cairns	Gap Assessment in Relation to Compliance to Best Practice
Councils Strategic Plan/Corporate Plan • Strategic Plan references clear objectives related to the provision of water services and links outcomes to the needs of the community.	Clear strategic objectives for water and waste water outlined in the Corporate Plan. No reference to TMP or SAMP.	Corporate Plan lists high level strategies for assets but no clear identification of water and wastewater asset and related strategies. No reference to SAMP/TMP.	Corporate Plan identifies water supply. Clear linkage to TMP for Water Services.	Clear identification of Water and Waste Water in Corporate Plan. Reference to the TMP.	Clear strategic direction provided in Corporate Plan for high level strategies. No reference to SAMP.	Failure to reference to the strategic asset management plans indicating infrastructure is not being strategically considered in the long term planning of Council.
	Outcome: Negligible **Score: 1**	**Outcome: Minor** **Score: 2**	**Outcome: No Gap** **Score: 0**	**Outcome: No Gap** **Score: 0**	**Outcome: Negligible** **Score: 1**	
Business Plan/Operational Plan • Actions are provided for the water and wastewater services. • Significant capital requirements for the future are identified.	No outline of ongoing service provision. Significant capital projects identified in Operational Plan.	No outline of ongoing service provision. Operational Plan outlines major projects with specific outcomes and performance measures.	No separate annual Operational Plan is produced by Council.	Operational Plan includes activities, budgets and performance measures. Major capital projects are identified.	Operational Plan provides operating initiatives, service outputs and performance measures for water and wastewater services.	Lack of connection between the operational plans, asset management plans and service delivery highlighting a risk that service delivery is not strategically planned. Lack of focus on ongoing operational service deliver highlights the lack of consideration of the importance of safe water service delivery for the community.
	Outcome: Moderate **Score: 3**	**Outcome: Moderate** **Score: 3**	**Outcome: Moderate** **Score: 3**	**Outcome: No Gap** **Score: 0**	**Outcome: No Gap** **Score: 0**	
Performance Reporting • Evidence of reporting for statutory requirements. • Recognition of specific KPI's that are monitored and reported.	Quarterly Performance reporting to council. No specific KPI in Operational Plan or Management Plan. Quarterly reporting focused on data but no analysis in relation to achievement against targets.	Quarterly reporting to Council including KPIs and capital programs. Monthly management report is operationally focused.	KPIs are outlined in TMP but do not appear to be reported to Council on regular basis. Monthly management reporting is operationally focused.	Compliance with regulatory reporting requirements. Quarterly reporting is operationally focused on budget delivery. No reporting on KPI's in TMP.	Key performance reporting on annual basis. Monthly management reporting focuses on operational activity.	KPI reporting appears to be a compliance exercise with little consideration of the outcomes of the data (as evidenced by the SWIM data). Management reporting to Council is focused on compliance and capital project delivery rather an improvement framework.
	Outcome: Moderate **Score: 3**	**Outcome: Moderate** **Score: 3**	**Outcome: Moderate** **Score: 3**	**Outcome: Moderate** **Score: 3**	**Outcome: Moderate** **Score: 3**	

Factor/Best Practice Approach	Cook	Tablelands	Croydon	Cassowary	Cairns	Gap Assessment in Relation to Compliance to Best Practice
Strategic Asset Management Policy, Strategy and Plans • Evidence that SAMP documentation is current, and used in the management of the service and asset. • Detailed SAMP or AMP provide an indication of planning and risk management. • Plans should refer to how future capacity will be provided and how infrastructure will be renewed and maintained.	Comprehensive TMP/SAMP - includes assessment of current situation and improvement plans. Currency of TMP (was prepared in 2009). Policy and Strategy in place. Although improvement plan is being implemented, there has been no status update incorporated into the TMP.	SAMPs have been replaced by AMP based on corporate standard applied to all assets classes. These are in early draft form for Water and Sewerage. Policy and Strategy in place.	TMP/SAMP (2009) comprehensive document with improvement plan. Policy and Strategy in place (2009). The status of the actions in the TMP improvement plan has not been updated.	SAMP (2009) comprehensive document with improvement plan. Policy and Strategy in place (2009). Replaced by Asset Management Portfolio (2012) which includes AMP, service level framework, PIP and capital works programs for each asset class. No progress reported on the implementation of the Asset Management Improvement plan.	Comprehensive TMP (2008-2011) developed for assets based on NAMS framework. Note SAMP has been replaced by AMP's. Policy and Strategy in place. No evidence of continual update of the TMP.	TMP/SAMP were developed for compliance (2009) and have not been advanced resulting a lack of strategic outcomes for asset management. (Note this is partially related to lack of direction from State in regard to requirement to have a SAMP or TMP). Improvement actions identified in TMP/SAMP's have not been incorporated in to the operational plans. Where improvement plans are being implemented there is poor documentation and reporting of the status of the improvement plans.
	Outcome: Moderate **Score: 3**	**Outcome: Major** **Score: 4**	**Outcome: Moderate** **Score: 3**	**Outcome: Minor** **Score: 2**	**Outcome: Minor** **Score: 2**	

Source: AEC*group*

5.3 Governance and Structure

Table 5.6: Governance and Structure Review Findings

Factor	Potential Gap	Compliance in Relation to Best Practice		Assessment Outcome
Formal Reporting Structure • Evidence of formal reporting to council on strategic level (Council or subcommittee level). • Activities identified as business unit / cost centre within structure.	Formal line of reporting not reflective of strategic importance of the assets.	Cook Tablelands Croydon Cassowary Cairns	Minor Minor Minor Minor Minor	All councils provide formal reporting to the governance body (council). However the majority of the reporting focuses on current performance and project delivery with no specific agenda for the consideration of future strategic issues. This highlights risk that significant strategic issues are not being identified in advance of solutions being proposed.
Organisational Structure • Appropriate level of reporting to senior management. • Clear staff structure to support delivery of service. • Identification of operations plus support functions, asset management functions. • Clear allocation of roles between staff resources and contract resources.	Activity not recognised as significant function within council structure.	Cook Tablelands Croydon Cassowary Cairns	No Gap No Gap No Gap No Gap Moderate	The structures in each of the LGA's were well documented with the exception of Cairns which was undergoing a restructure at the time of the review. Overall a lack of documentation and understanding of the basis for corporate charges.
Support Functions • Support provided by council, allocated on appropriate cost basis.	Insufficient access to support functions to promote efficient and effective service delivery.	Cook Tablelands Croydon Cassowary Cairns	Minor Negligible Negligible Negligible Minor	All LGA's identified sufficient support services in place. However at the time of the review, Cairns was changing the organisational structure and this appeared to be providing a high level of uncertainty in relation to future support services.
Quality Systems • Appropriate quality systems in place to support operations. • Risk assessment is undertaken.	Non alignment of activity QMS with corporate QMS.	Cook Tablelands Croydon Cassowary Cairns	Moderate Minor No Gap Negligible Negligible	Quality systems were generally limited to the EMS and DWQMP.
Internal Policies and Procedures • Existence of documentation to support operations and reduce risk.	Lack of current, relevant and complete document, leading risk of system and operational failure.	Cook Tablelands Croydon Cassowary Cairns	Minor Moderate Minor Major Minor	Although the majority of the councils have documented procedures, the currency of the documents is questionable with the majority of the documents not having been reviewed in the last two years. Furthermore the location of the documents tended to be unstructured, with no central document management approach used to collate the documents. This creates a several risks. Firstly, it is possible that the correct reactive responses will not be deployed in a time of crisis or system failure and secondly, particularly in small teams, there is a high probability that knowledge of the system will be lost if experienced staff exit from the organisation.

Source: AEC*group*

Table 5.7: Governance and Structure Review Findings

Factor/Best Practice Approach	Cook	Tablelands	Croydon	Cassowary	Cairns	Gap Assessment in Relation to Compliance to Best Practice
Formal Reporting Structure • Evidence of formal reporting to Council at strategic level (Council or subcommittee level). • Activities identified as business unit / cost centre within structure.	Formal reporting on quarterly basis to council.	Formal reporting on quarterly basis to council.	Formal reporting to council on a monthly basis.	Performance reporting forms part of directorate reporting suite.	Formal reporting process evidenced with monthly branch level reports to CEO and quarterly reporting to the Council.	All Councils provide formal reporting to the governance body (Council). The majority of the reporting focuses on current performance and project delivery with no specific agenda for the consideration of future strategic issues.
	Outcome: Minor **Score: 2**	**Outcome: Minor** **Score: 2**	**Outcome: Minor** **Score: 2**	**Outcome: Minor** **Score: 2**	**Outcome: Minor** **Score: 2**	
Organisational Structure • Appropriate level of reporting to senior management. • Clear staff structure to support delivery of service. • Identification of operations plus support functions, asset management functions. • Clear allocation of roles between staff resources and contract resources.	Cost centre reporting to Director Engineering Services.	Business Unit reporting to General Manager Infrastructure and Maintenance Service.	Function (0.5 FTE) incorporated within another role. Reports to Deputy CEO.	Water cost centre reporting to Director Works.	Business Unit reporting to CEO. Organisational structure divided into operations, support functions, infrastructure support, and strategic functions. Organisation was undergoing review at time of study and this appeared to generate some concerns and lack of communication across functions.	The structures in each of the LGA's were well documented with the exception of Cairns which was undergoing a restructure at the time of the review.
	Outcome: No Gap **Score: 0**	**Outcome: No Gap** **Score: 0**	**Outcome: No Gap** **Score: 0**	**Outcome: No Gap** **Score: 0**	**Outcome: Moderate** **Score: 3**	
Support Functions • Support provided by council, allocated on appropriate cost basis.	Support functions provided by Council. Lack of documentation of corporate charging for support services.	Support functions provided by Council or from within Business Unit and allocated via overhead charge. No documentation provided on basis of allocation.	Support functions provided by council. Overhead not allocated due to small size of activity.	Support systems provide by Council and charged by corporate overhead. No documentation provided on basis of allocation.	Support systems provide by Council and from within Business Unit. Level of uncertainty on basis of future service delivery. Charged by corporate overhead but no documentation provided.	All LGA's identified sufficient support services in place. However at the time of the review, Cairns was changing the organisational structure and this appeared to be providing a high level of uncertainty in relation to future support services. Overall a lack of documentation and understanding of the basis for corporate charges.
	Outcome: Minor **Score: 2**	**Outcome: Negligible** **Score: 1**	**Outcome: Negligible** **Score: 1**	**Outcome: Negligible** **Score: 1**	**Outcome: Minor** **Score: 2**	

Factor/Best Practice Approach	Cook	Tablelands	Croydon	Cassowary	Cairns	Gap Assessment in Relation to Compliance to Best Practice
Quality Systems • Appropriate quality systems in place to support operations. • Risk assessment is undertaken.	No corporate quality management system.	Quality management of systems as per EMS and DWQMP. EMS is in early draft format.	Corporate QMS.	Quality management as per the DWQMP.	Quality management of systems as per EMS and DWQMP.	Quality systems were generally limited to the EMS and DWQMP.
	Outcome: Moderate **Score: 3**	**Outcome: Minor** **Score: 2**	**Outcome: No Gap** **Score: 0**	**Outcome: Negligible** **Score: 1**	**Outcome: Negligible** **Score: 1**	
Internal Policies and Procedures • Existence of documentation to support operations and reduce risk.	Procedures and supporting documentation contained within AMP. No evidence of review of procedures.	Procedures are documented but not collated in one location. No evidence of review of procedures.	Procedure Manual of operational procedures kept at sites. No evidence of review of procedures.	Lack of documented operating procedures. Some procedures captured with DWQMP	Detailed procedure manual in place. No evidence of review of procedures.	Although the majority of the Councils have documented procedures, the currency of the documents is questionable with the majority of the documents not having been reviewed in the last two years. Furthermore the location of the documents tended to be unstructured, with no central document management approach used to collate the documents. This creates a several risks. Firstly, it is possible that the correct reactive responses will not be deployed in a time of crisis or system failure and secondly, particularly in small teams, there is a high probability that knowledge of the system will be lost if experienced staff exit from the organisation.
	Outcome: Minor **Score: 2**	**Outcome: Moderate** **Score: 3**	**Outcome: Minor** **Score: 2**	**Outcome: Major** **Score 4**	**Outcome: Minor** **Score: 2**	

Source: AEC*group*

5.4 Delivery Planning (supply and demand planning)

Table 5.8: Delivery Planning Review Findings

Factor	Potential Gap	Compliance in Relation to Best Practice	Assessment Outcome
Delivery Planning • Demand planning is based on robust planning forecasts for growth by town/area (for next ten years). • Planning for future service delivery evidenced by scheme reviews. • Outcomes of planning documents incorporated into operational plans and service delivery.	Future capacity issues to service demand not considered.	Cook Moderate Tablelands Minor Croydon Negligible Cassowary Minor Cairns Negligible	The majority of the councils have sufficient demand analysis frameworks based on Priority Infrastructure Plans and specific scheme or catchment reports. The process for the identification of future capacity and infrastructure challenges and the subsequent provision of solution options to council varies across the councils. Based on the information provided, it is evident that in some instances significant strategic issues are not identified or resolved in advance of the capacity constraints impacting the community. This is particularly of concern considering the long lead time required for water and wastewater solutions to be approved and implemented.

Source: AEC*group*

Table 5.9: Delivery Planning Review Findings

Factor/Best Practice Approach	Cook	Tablelands	Croydon	Cassowary	Cairns	Gap Assessment in Relation to Compliance to Best Practice
Delivery Planning • Demand planning is based on robust planning forecasts for growth by town/area (for next ten years). • Planning for future service delivery evidenced by scheme reviews. • Future infrastructure requirements assessed and long term capital plans in place. • Outcomes of planning documents incorporated into operational plans and service delivery.	TMP infrastructure works based on Planning Scheme 2007 however no evidence of updating of planning estimates. Forecast demand included in TMP to assess future infrastructure requirements.	Atherton PIP used for population estimates. PIP does not define the impact on infrastructure requirements. Specific scheme modelling (Mareeba and Yungaaburra) undertaken by external consultants to provide long term capital requirements.	No detailed growth plan. Summary of future expected Shire included in the Community Plan. TMP includes demand analysis for future service requirements.	PIP population modelling used for modelling of impact on water and wastewater infrastructure. Resource modelling provided externally and being revised 2012.	Detailed planning undertaken by scheme as per Scheme Reviews. Plans used to inform future requirements. Limited evidence of overall future growth framework. Limited information on future review requirements.	The majority of the Councils have sufficient demand analysis frameworks based on Priority Infrastructure Plans and specific scheme or catchment reports. The process for the identification of future capacity and infrastructure challenges and the subsequent provision of solution options to Council varies across the councils. It is evident that in some instances significant strategic issues are not identified or resolved in advance of the capacity constraints impacting the community. This is particularly of concern considering the long lead time required for water and wastewater solutions to be approved and implemented.
	Outcome: Moderate **Score: 3**	**Outcome: Minor** **Score: 2**	**Outcome: Negligible** **Score: 1**	**Outcome: Minor** **Score: 2**	**Outcome: Negligible** **Score: 1**	

Source: AEC*group*

5.5 Customer Service

Table 5.10: Customer Service Standards Review Findings

Factor	Potential Gap	Compliance in Relation to Best Practice	Assessment Outcome
Customer Service • Customer surveys to identify area of concern. • Customer complaint information is captured and analysed to identify problem areas.	Misalignment of customer service requirements with delivery of service.	Cook Moderate Tablelands No Gap Croydon Minor Cassowary Negligible Cairns Moderate	Only Tablelands Regional Council has included specific water and wastewater questions in the customer/community survey. Although most of the councils capture the customer complaints/requests, there is limited analysis undertaken to determine the driver for the complaints or requests. The lack of feedback into the strategic asset management frameworks results in councils not utilising the information captured to assess asset performance and identify key operational improvement opportunities.

Source: AEC*group*

Table 5.11: Customer Service Standards Review Findings

Factor/Best Practice Approach	Cook	Tablelands	Croydon	Cassowary	Cairns	Gap Assessment in Relation to Compliance to Best Practice
Customer Service • Customer surveys to identify area of concern. • Customer complaint information is captured and analysed to identify problem areas.	No customer survey. No details of complaints provided.	Customer survey specifically asked questions about water and wastewater services. Customer responses captured and analysed.	No customer survey.	No customer surveys undertaken. Customer requests are captured and monitored.	No water service survey undertaken. Customer complaints are not analysis to identify areas of concern.	Misalignment of customer service requirements with delivery of service.
	Outcome: Moderate **Score: 3**	**Outcome: No Gap** **Score: 0**	**Outcome: Minor** **Score: 2**	**Outcome: Negligible** **Score: 1**	**Outcome: Moderate** **Score: 3**	

Source: AEC*group*

5.6 Asset Management

Table 5.12: Asset Management Review Findings

Factor	Potential Gap	Compliance in Relation to Best Practice	Assessment Outcome
Asset Management Plans (by scheme) • Asset management plans are core strategic documents. • Asset maintenance, asset renewal and replacement strategies are defined in AMP and drive the annual operational plan and budget.	AMP not used in the development of the long term and annual work programs.	Cook Minor Tablelands Major Croydon Minor Cassowary Moderate Cairns Negligible	Water service providers are asset intensive industries and the management of assets is critical. Strategic asset management is the systematic and coordinated activities and practices of an organisation to optimally and sustainability deliver on its objectives through the cost-effective lifecycle management of assets. It is apparent that the majority of councils manage the water and wastewater infrastructure with a technical operational focus on the daily delivery of services within the legislative compliance boundaries. The majority of the documents have not been revised since the original production of the document. Asset management plans should be "living" documents and updated annually with not only financial and budget information but also with revised information in regard to asset profile and performance. Maintenance activities are centred on the ongoing running of the plant with some routine maintenance activity scheduled in the work programs. Little linkage between the asset management plans and the activities undertaken by staff. Limited proactive maintenance undertaken.
Service Levels • Levels of service for technical and customer service levels defined. • Method for reporting on delivery against service levels is established. • Performance against service levels is used to improve operational activity focus and prioritise renewal and replacement capital programs.	Poor performance assessment and review due to lack of definition of service standards.	Cook Moderate Tablelands Moderate Croydon Moderate Cassowary Moderate Cairns Moderate	Technical service levels are well defined and service level performance is reported on an annual basis. However the implications from the performance of the assets against the service standards is not captured and used to inform the AMPs.
Asset Data and Knowledge • Asset data is maintained in a system or register and updated appropriately. • Linkage with other core information databases i.e. financial database. • Asset information, i.e. condition, is updated as assets are inspected.	Lack of knowledge of assets condition and performance limit optimisation of renewal and replacement programs.	Cook Moderate Tablelands Minor Croydon Minor Cassowary Moderate Cairns Negligible	All the councils except Cairns Regional Council have limited knowledge about the assets, which prevents council from developing information planned schedules for maintenance and renewal.

Factor	Potential Gap	Compliance in Relation to Best Practice		Assessment Outcome
Asset Management Processes and Procedures Processes and procedures are: • documented; • collated in one location/system; and • Are reviewed on regular basis to ensure currency.	Lack of current, relevant and complete document, leading risk of system and operational failure. .	Cook Tablelands Croydon Cassowary Cairns	Negligible Moderate No Gap Moderate Negligible	There is poor documentation management in some of the councils. It appears while operational procedures and processes are well documented they are not captured within councils' corporate knowledge systems generating high levels of risk of the loss of corporate knowledge.

Source: AEC*group*

Table 5.13: Asset Management Review Findings

Factor/Best Practice Approach	Cook	Tablelands	Croydon	Cassowary	Cairns	Gap Assessment in Relation to Compliance to Best Practice
Asset Management Plans • Asset management plans are core strategic documents • Asset maintenance, renewal and replacement strategies are defined in AMP and drive the annual operational plan and budget.	Comprehensive TMP (2009) but not updated. Operations and maintenance sections reviewed as part of annual budget review. Operational activity based on mix of reactive and programmed work approach.	Draft Wastewater AMP (2012) and Water Infrastructure AMP (2012) developed in IPEWA format. In early draft format therefore no basis for which to drive annual programs. Operational activity based on reactive approach.	Comprehensive TMP (2009) with improvement plan. Although improvement plan is being implemented, the status of the actions has not been revised in the document. Operational activity based on reactive needs.	AMP for both water and wastewater assets. Improvement plans have not being implemented. Operational activity is reactive based determined by assessment of staff.	Comprehensive AMP in NAMS format. Asset improvement plan reviewed each year and updated for status. Annual maintenance plan developed from AMP and asset performance assessment but moderated to meet budget constraints.	It is apparent that the majority of councils manage the water and wastewater infrastructure with a technical operational focus on the daily delivery of services within the legislative compliance boundaries. The majority of the Asset Management documents have not been revised since the original production of the document. Maintenance activities are centred on the ongoing running of the plant with some routine maintenance activity scheduled in the work programs. Little linkage between the asset management plans and the activities undertaken by staff. Limited proactive maintenance undertaken.
	Outcome: Minor **Score: 2**	**Outcome: Major** **Score: 4**	**Outcome: Minor** **Score: 2**	**Outcome: Moderate** **Score: 3**	**Outcome: Negligible** **Score: 1**	

Factor/Best Practice Approach	Cook	Tablelands	Croydon	Cassowary	Cairns	Gap Assessment in Relation to Compliance to Best Practice
Service Levels • Levels of service for technical and customer service levels defined. • Method for reporting on delivery against service levels is established. • Performance against service levels is used to improve operational activity focus and prioritise renewal and replacement capital programs.	Service levels outlined in Customer Service Standards (2013). Reporting on service standards yet to be undertaken.	Council has a customer service standard (2013). No evidence of results being incorporated into asset management planning.	Detailed service standards outlined in Customer Service Standards (2008). Reporting on Service Standards provided in Annual Report. No evidence of results being incorporated into asset management planning.	AMPs include level of service. Performance is reported annually to regulator. No evidence of results being incorporated into asset management planning.	Levels of service outlined in AMPs and in Customer Service Standards. Performance is reported via Council Annual Report. No evidence of results being incorporated into asset management planning.	Technical service levels are well defined and service level performance is reported on an annual basis. However the implications from the performance of the assets against the service standards is not captured and used to inform the AMPs.
	Outcome: Moderate **Score: 3**	**Outcome: Moderate** **Score: 3**	**Outcome: Moderate** **Score: 3**	**Outcome: Moderate** **Score: 3**	**Outcome: Moderate** **Score: 3**	
Asset Data and Knowledge • Asset data is maintained in a system or register and updated appropriately. • Linkage with other core information databases i.e. financial database. • Asset information, i.e. condition, is updated as assets are inspected.	Asset register provides limited information on asset dimensions. No condition or performance information is captured.	Assets are captured in asset management system **(GIS)**. Condition information is being progressively updated **into GIS**.	Asset register contained in spreadsheet – satisfactory solution for volume of assets. Asset information is updated as inspected however process has not always been completed.	Assets recorded in asset register but limited asset dimension information is captured. New corporate system being implemented will provide this functionality. Condition information collected as identified.	Comprehensive asset management system. Asset data is captured from inspection and updated into system. Revaluations scheduled and include condition assessment. System being transferred to link to GIS.	Lack of knowledge about the assets, which prevents Council from developing information planned schedules for maintenance and renewal. Poor linkage with GIS and spatial systems/layers. Lack of data capture about assets from inspection opportunities.
	Outcome: Moderate **Score: 3**	**Outcome: Minor** **Score: 2**	**Outcome: Minor** **Score: 2**	**Outcome: Moderate** **Score: 3**	**Outcome: Negligible** **Score: 1**	
Asset Management Processes and Procedures Processes and procedures are: • Documented; • collated in one location/system; and • are reviewed on regular basis to ensure currency.	Detailed procedures and processes incorporated into TMP. Limited evidence of updating of documentation.	Documentation of processes and procedures underway (noted as improvement action).	Documented procedures located on sites. Evidence of manuals updated in 2011.	Operational and maintenance procedures still being developed.	Comprehensive procedure documentation including workflow diagrams. Limited evidence of updating of documentation.	There is poor documentation management in some of the Councils. It appears while operational procedures and processes are well documented they are not captured within Councils corporate knowledge systems generating high levels of risk of the loss of corporate knowledge.
	Outcome: Negligible **Score: 1**	**Outcome: Moderate** **Score: 3**	**Outcome: No Gap** **Score: 0**	**Outcome: Moderate** **Score: 3**	**Outcome: Negligible** **Score: 1**	

Source: AEC*group*

5.7 Legislative Compliance

Table 5.14: Legislative Compliance Review Findings

Factor	Potential Gap	Compliance in Relation to Best Practice	Assessment Outcome
Environmental Management Systems / Plans / Strategies • Level of compliance with legislative requirements. • KPIs are measured and reported. • Council has strategy for responding to environment breaches and develops and implements remedial actions.	EMS functions as compliance requirement rather than improvement plan for environmental management.	Cook Moderate Tablelands Minor Croydon No Gap Cassowary Major Cairns Minor	As with the Asset Management Plans, the major risk appears that the plans are used to meet a compliance framework. The KPI reporting has little connection to the operational asset management and service delivery.
Drinking Water Quality Management System • Status and implementation of plan. • KPIs are measured and reported. • Council has strategy for responding to environment breaches and develops and implements remedial actions.	EMS functions as compliance requirement rather than improvement plan for water quality.	Cook Minor Tablelands Minor Croydon Minor Cassowary No Gap Cairns No Gap	
WH&S Systems and Practices • Risk management approach to employee safety. • Compliance with *WH&S systems and practices and systems.*	Safety management functions as compliance requirement rather than improvement plan for operational activity.	Cook No Gap Tablelands No Gap Croydon No Gap Cassowary No Gap Cairns Moderate	Councils have good Safe Plans in place with evidence safety improvements.

Source: AEC*group*

Table 5.15: Legislative Compliance Review Findings

Factor/Best Practice Approach	Cook	Tablelands	Croydon	Cassowary	Cairns	Gap Assessment in Relation to Compliance to Best Practice
Environmental Management Systems/Plans/Strategies • Level of compliance with legislative requirements • KPIs are measured and reported. • Council has strategy for responding to environment breaches and develops and implements remedial actions.	EMS incorporated in TMP. KPI's reporting on annual basis to regulator. No information provided on remedial actions.	EMS is currently being redeveloped in accordance with legislative requirements. KPI's reporting on annual basis to regulator. Evidence of actions taken to address major breeches (Mareeba).	EMS incorporated in TMP. KPI's reporting on annual basis to regulator. Evidence of remedial actions identified and implemented (repairs to system).	No EMS in place. Annual reporting to regulator with remedial actions outlined.	Draft EMS. KPI's reporting on annual basis to regulator. Evidence of remedial actions identified and implemented.	Plans are prepared to meet compliance requirements. KPI reporting has little connection to the operational asset management and service delivery.
	Outcome: Moderate **Score: 3**	**Outcome: Minor** **Score: 2**	**Outcome: No Gap** **Score: 0**	**Outcome: Major** **Score: 4**	**Outcome: Minor** **Score: 2**	
Drinking Water Quality Management Plan • Status and implementation of plan. • KPIs are measured and reported. • Council has strategy for responding to environment breaches and develops and implements remedial actions.	DWQMP being prepared in accordance with legislative requirement. KPI's reporting on annual basis to regulator. No information provided on remedial actions.	DWQMP prepared externally. Monitoring and auditing undertaken in-house and KPI's reporting on annual basis to regulator. No information provided on remedial actions.	DWQMP being prepared in accordance with legislative requirement. KPI's reporting on annual basis to regulator. No information provided on remedial actions.	DWQMP adopted. KPI's reporting on annual basis to regulator. Water quality issues and remedial actions taken reported to regulator.	DWQMP in place. KPI's reporting on annual basis to regulator. Monthly monitoring and reporting to Council.	Plans are prepared to meet compliance requirements. KPI reporting has little connection to the operational asset management and service delivery
	Outcome: Minor **Score: 2**	**Outcome: Minor** **Score: 2**	**Outcome: Minor** **Score: 2**	**Outcome: No Gap** **Score: 0**	**Outcome: No Gap** **Score: 0**	
WH&S Systems and Practices • Risk management approach to employee safety. • Compliance with *WH&S systems and practices and systems.*	Safety management system in place (Safe Plan). WH&S check list in place.	Safety management system in place. (Safe Plan2). Evidence of system improving safety outcomes.	Safety management system in place. (May 2012). Evidence of monitoring and reporting of outcomes.	Safety management system in place (Safe Plan).	No data was provided.	Councils have good Safe Plans in place with evidence safety improvements.
	Outcome: No Gap **Score: 0**	**Outcome: No Gap** **Score: 0**	**Outcome: No Gap** **Score: 0**	**Outcome: No Gap** **Score: 0**	**Outcome: Moderate** **Score: 3**	

Source: AEC*group*

5.8 Human Resources

Table 5.16: Human Resources Review Findings

Factor	Potential Gap	Compliance in Relation to Best Practice	Assessment Outcome
Workforce Plan • Workforce plan to manage resource requirements and respond to external workforce factors.	Lack of strategic consideration of resources.	Cook Moderate Tablelands Moderate Croydon Minor Cassowary Moderate Cairns No Gap	All of the councils except Cairns lack a strategic Workforce Plan to give a corporate focus on the major resource of council - its people.
Retention and Recruitment • Policies of attracting staff to council. • Policies in place that support retention i.e. flexible work hours, location consideration etc.	Short term focus on service delivery without consideration of wider social and economic factors.	Cook Moderate Tablelands No Gap Croydon Moderate Cassowary Moderate Cairns Minor	The attraction and retention of staff is a significant issue for all councils, particularly in areas where other market sectors such as the resource sector compete for the same staff skill set.
Profile of Workforce • Profile of workforce assessed. • Strategies in place to manage future impact of workforce changes.	Lack of strategic consideration of resources.	Cook Moderate Tablelands Moderate Croydon Negligible Cassowary Moderate Cairns Moderate	Although the councils have an understanding of the profile of their workforce, there is little evidence of strategies for forward planning for the changes in the workforce and potential future resource requirements.
Workforce Movement • Assessment of staff movement at activity level. • Comparative analysis of units to organisational performance.	Lack of consideration skills required to support efficient and effective service delivery.	Cook Moderate Tablelands Minor Croydon Minor Cassowary Major Cairns Minor	Movement in the workforce appears to be accepted as a non-controllable function, with no strategic consideration of potential loss of knowledge risks or opportunities for staff to promote retention.
Job Assessment • Job/role sizing or assessment undertaken on regular basis. • Job/role sizing based on skills of role and comparative across the organisation.	n/a	Cook Moderate Tablelands Moderate Croydon Moderate Cassowary Minor Cairns No Gap	Position descriptions are generally only reviewed to address a recruitment requirement, and even then there is no consideration of the changing size or shape of the role in regard to the changing asset infrastructure management.
Staff Training Programs • Training programs support staff skill requirements.	Lack of consideration skills required to support efficient and effective service delivery.	Cook Negligible Tablelands No Gap Croydon Negligible Cassowary Moderate Cairns Negligible	Programs such as Tablelands Regional Council's apprenticeship program should be explored along with options for sharing technical resources between the councils.

Source: AEC*group*

Table 5.17: Human Resources Review Findings

Factor/Best Practice Approach	Cook	Tablelands	Croydon	Cassowary	Cairns	Gap Assessment in Relation to Compliance to Best Practice
Workforce Plan • Workforce plan to manage resource requirements and respond to external workforce factors.	No formal Workforce Plan provided.	No Workforce Plan provided.	Workforce Plan is being prepared.	No formal Workforce Plan.	Workforce Plan in place.	All of the Councils except Cairns lack a strategic Workforce Plan to give a corporate focus on the major resource of council - its people.
	Outcome: Moderate **Score: 3**	**Outcome: Moderate** **Score: 3**	**Outcome: Minor** **Score: 2**	**Outcome: Moderate** **Score: 3**	**Outcome: No Gap** **Score: 0**	
Retention and Recruitment • Policies of attracting staff to Council. • Policies in place that support retention i.e. flexible work hours, location consideration etc.	No specific strategies.	Strategy for attraction of young staff (apprentices) in water/sewerage area.	No specific strategies.	No formal policies for attraction and retention of staff.	Specific attraction and retention policies for general staff.	The attraction and retention of staff is a significant issue for all Councils, particularly in areas where other market sectors such as the resource sector compete for the same staff skill set.
	Outcome: Moderate **Score: 3**	**Outcome: No Gap** **Score: 0**	**Outcome: Moderate** **Score: 3**	**Outcome: Moderate** **Score: 3**	**Outcome: Minor** **Score: 2**	
Profile of workforce • Profile of workforce assessed. • Strategies in place to manage future impact of workforce changes.	Profile of workforce at divisional level. Risk factor 45% of workforce older than 48 years, 7% of worker with > 20 years service. No strategies in place to address risk factor.	Profile of organisation by indoor/outdoor workforce. Risk factor 32% of outdoor workers older than 55 years age, 30% outdoor workers have more than 10 years service. No strategies in place to address risk factor.	N/A as only 0.5 FTE.	Profile provided at whole organisation level. Key risk factors 60% of workforce older than 45 years and 26% workforce is older than 56 years, 35% of staff have > 10 years service. No strategies in place to address risk factors.	Profile at whole of organisation level. Risk factor 45% workforce over 45 years of age. 29 staff with > 20 years of service in water and waste division.	Although the Councils have an understanding of the profile of their workforce, there is little evidence of strategies for forward planning for the changes in the workforce and potential future resource requirements.
	Outcome: Moderate **Score: 3**	**Outcome: Moderate** **Score: 3**	**Outcome: Negligible** **Score: 1**	**Outcome: Moderate** **Score: 3**	**Outcome: Moderate** **Score: 3**	

Factor/Best Practice Approach	Cook	Tablelands	Croydon	Cassowary	Cairns	Gap Assessment in Relation to Compliance to Best Practice
Workforce movement • Assessment of staff movement at activity level. • Comparative analysis of units to organisational performance.	Average 14-27%. Noted difficulty in filling vacancies.	11.96% turnover rate for 2012 across Council. Analysis and understanding of workforce movement.	Recent staff turnover.	Data on staff turnover not available.	Average of last four years 13%. Analysis and understanding of workforce movement.	Movement in the workforce appears to be accepted as a non-controllable function, with no strategic consideration of potential loss of knowledge risks or opportunities for staff to promote retention.
	Outcome: Moderate Score: 3	**Outcome: Minor Score: 2**	**Outcome: Minor Score: 2**	**Outcome: Major Score: 4**	**Outcome: Minor Score: 2**	
Job Assessment • Job/role sizing or assessment undertaken on regular basis. • Job/role sizing based on skills of role and comparative across the organisation.	No job sizing detail provided.	No job sizing undertaken.	No job sizing undertaken.	Job sizing is undertaken on reactive basis as vacancies occur.	Job sizing undertaken by external consultant.	Position descriptions are generally only reviewed to address a recruitment requirement, and even then there is no consideration of the changing size or shape of the role in regard to the changing asset infrastructure management.
	Outcome: Moderate Score: 3	**Outcome: Moderate Score: 3**	**Outcome: Moderate Score: 3**	**Outcome: Minor Score: 2**	**Outcome: No Gap Score: 0**	
Staff Training Programs • Training programs support staff skill requirements.	External training program in place. No evidence of internal development program.	External training program in place. Apprenticeship program in place.	External training program in place. No evidence of internal development program.	Data on staff training program not available.	External training program in place. No evidence of internal development program.	Programs such as Tablelands Regional Council's apprenticeship program should be explored along with options for sharing technical resources between the Councils.
	Outcome: Negligible Score: 1	**Outcome: No Gap Score: 0**	**Outcome: Negligible Score: 1**	**Outcome: Moderate Score: 3**	**Outcome: Negligible Score: 1**	

Source: AEC*group*

5.9 Financial Management

Table 5.18: Financial Management Review Findings

Factor	Potential Gap	Compliance in Relation to Best Practice		Assessment Outcome
Activity Budgeting • Financial Budgets prepared and reported on at activity level. • Full costs including depreciation and interest costs applied at activity level.	Management of financial resources does not identity and prompt action for abnormal activity.	Cook Tablelands Croydon Cassowary Cairns	Minor Minor Minor Minor Minor	All the councils provide monthly reporting at cost centre level to support management of the operations.
Financial Sustainability • Long term financial forecasts produced at business unit level. • Impact of new infrastructure on financial ratios considered. • Long term capital planning (10 years) • Borrowings for assets assigned to cost centres to ensure interest cost is recovered.	Insufficient consideration of long term financial sustainability to ensure asset renewal.	Cook Tablelands Croydon Cassowary Cairns	Minor Moderate Minor Minor Negligible	Long term financial planning is provided by either council's own model or the QTC financial model. However the exercise appears to be a finance driven requirement with little connection to either the asset management plans or to the future growth and capacity demand modelling.
Planned Asset Renewal • Depreciation calculated on revaluated assets. • Depreciation funded into reserve for renewal.	Insufficient consideration of life cycle costs of assets.	Cook Tablelands Croydon Cassowary Cairns	Moderate Moderate Minor Moderate Moderate	It appears that the implications of future capital programs on operational costs, maintenance requirements and depreciation expense is not considered in detail in the long term financial models. This implies that the long term financial forecasting accuracy may be weak.
Current Pricing Structure • Pricing structured based on full cost pricing approach. • Implications from a single LGA pricing strategy identified. • Pricing decision based on supporting pricing models and charges calculation.	Insufficient consideration pricing strategy to provide for long term financial sustainability.	Cook Tablelands Croydon Cassowary Cairns	Minor Major Moderate Minor Moderate	The lack of developed pricing models (based on robust long term financial models) is a significant risk. The lack of a long term pricing path creates the risk of intergeneration inequity with the lack of provision for system renewal and upgrades.
National Competition Policy • The appropriate level of commercial focus is being applied in relation to size of business activity • Correct treatment of the Competitive Neutrality principles	No compliance with legislative requirements regarding competitive business activity.	Cook Tablelands Croydon Cassowary Cairns	No Gap No Gap No Gap No Gap No Gap	All the council are compliant with the NCP requirements.

Source: AEC*group*

Table 5.19: Financial Performance Review Findings

Factor/Best Practice Approach	Cook	Tablelands	Croydon	Cassowary	Cairns	Gap Assessment in Relation to Compliance to Best Practice
Activity Budgeting • Financial Budgets prepared and reported on at activity level • Full costs including depreciation and interest costs applied at activity level	Budgets prepared and reported on monthly basis at cost centre level. Limited evidence of management review and proactive actions to address budget variances.	Budgets prepared and reported on monthly at cost centre level. Limited evidence of management review and proactive actions to address budget variances. Long term forecasts provided at cost centre level.	Budgets prepared and reported on monthly at cost centre level. Budgets include operational costs and capital costs. Limited evidence of management review and proactive actions to address budget variances.	Budgets prepared at cost centre level and reported on monthly basis at cost centre level. Limited evidence of management review and proactive actions to address budget variances.	Budgets prepared and reported on monthly basis at cost centre level. Limited evidence of management review and proactive actions to address budget variances.	All the Councils provide monthly reporting at cost centre level to support management of the operations. However there was limited evidence of proactive analysis and action to manage budget variances.
	Outcome: Minor **Score: 2**	**Outcome: Minor** **Score: 2**	**Outcome: Minor** **Score: 2**	**Outcome: Minor** **Score: 2**	**Outcome: Minor** **Score: 2**	
Financial Sustainability • Long term financial forecasts produced at business unit level • Impact of new infrastructure on financial ratios considered • Long term capital planning (10 years) • Borrowings for assets assigned to cost centres to ensure interest cost is recovered	QTC model used for long term financial plan and includes long term capital works program. No evidence of linkage to AMP's or growth forecast. Debt for water treatment and sewerage scheme identified with balance owing and maturity dates.	Comprehensive LTFP includes long term capital program. No evidence of linkage to AMP's or growth forecast. No details of specific loans provided.	QTC model used for long term financial plan and includes long term capital works program. No evidence of linkage to AMP's or growth forecast. Council has no debt.	FCP model used for long term financial forecasts. No evidence of linkage to AMP's or growth forecast. Specific loan funding for recent upgrades (approximately $6 million) identified.	Detailed LTFP modeling. Capital program and funding sources included debt allocated to business activity level.	Long term financial planning is provided by either councils own model or the QTC financial model. However the exercise appears to be a finance driven requirement with little connection to either the asset management plans or to the future growth and capacity demand modeling.
	Outcome: Minor **Score: 2**	**Outcome: Moderate** **Score: 3**	**Outcome: Minor** **Score: 2**	**Outcome: Minor** **Score: 2**	**Outcome: Negligible** **Score: 1**	
Planned Asset Renewal • Depreciation calculated on revaluated assets • Depreciation funded into reserve for renewal	No information provided and therefore cannot be assessed.	No information provided and therefore cannot be assessed.	Depreciation is calculated and allocated to cost centre but is not recovered through water charges.	Significant impacts on depreciation expected with recent upgrades to Innisfail WTP and STP; however impact has not been incorporated into financial models.	No details provided therefore cannot assess.	It appears that the implications of future capital programs on operational costs, maintenance requirements and depreciation expense is not considered in detail in the long term financial models. This implies that the long term financial forecasting accuracy may be weak.
	Outcome: Moderate **Score: 3**	**Outcome: Moderate** **Score: 3**	**Outcome: Minor** **Score: 2**	**Outcome: Moderate** **Score: 3**	**Outcome: Moderate** **Score: 3**	

Factor/Best Practice Approach	Cook	Tablelands	Croydon	Cassowary	Cairns	Gap Assessment in Relation to Compliance to Best Practice
Current Pricing Structure • Pricing structured based on full cost pricing approach. • Implications from a single LGA pricing strategy identified. • Pricing decision based on supporting pricing models and charges calculation.	Detailed assessment of impact of 2 part tariff considered prior to adoption of current pricing path. Pricing model in development stage.	Pricing is based on historical pricing for water. Introduction of consolidated sewerage charge based on analysis of schemes. No formal pricing modeling in place.	Analysis of pricing structure undertaken in development of TMP. Council working towards full cost pricing. No detailed pricing model required (single scheme).	Current pricing strategy is separate charges for North and South but Councils moving to aligning charging structures. Pricing path is below cost recovery level particular in the Southern water and wastewater schemes.	Water and wastewater pricing is a single price structure across region. No details provided in relation of implications for pricing cross subsidisation. Water and Wastewater pricing and sustainability Model is still being developed.	The lack of developed pricing models (based on robust long term financial models) is a significant risk. The lack of a long term pricing path creates the risk of intergeneration inequity with the lack of provision for system renewal and upgrades.
	Outcome: Minor **Score: 2**	**Outcome: Major** **Score: 4**	**Outcome: Moderate** **Score: 3**	**Outcome: Minor** **Score: 2**	**Outcome: Moderate** **Score: 3**	
National Competition Policy • The appropriate level of commercial focus is being applied in relation to size of business activity. • Correct treatment of the Competitive Neutrality principles.	Activity is not identified as business activity. Appropriate treatment is being applied.	Activity is not identified as business activity. Appropriate treatment is being applied.	Activity is not identified as business activity. Appropriate treatment is being applied.	NCP not currently required due to size of business. Full cost pricing is being applied for pricing modelling.	Appropriate treatment for Type 1 business is being applied.	All the council are compliant with the NCP requirements.
	Outcome: No Gap **Score: 0**	**Outcome: No Gap** **Score: 0**	**Outcome: No Gap** **Score: 0**	**Outcome: No Gap** **Score: 0**	**Outcome: No Gap** **Score: 0**	

Source: AEC*group*

5.10 Summary of Review Findings

The overall summary is listed below. However, it should be noted that the aggregate result is not reflective of the individual Councils.

Table 5.20: Combined Rating Assessment

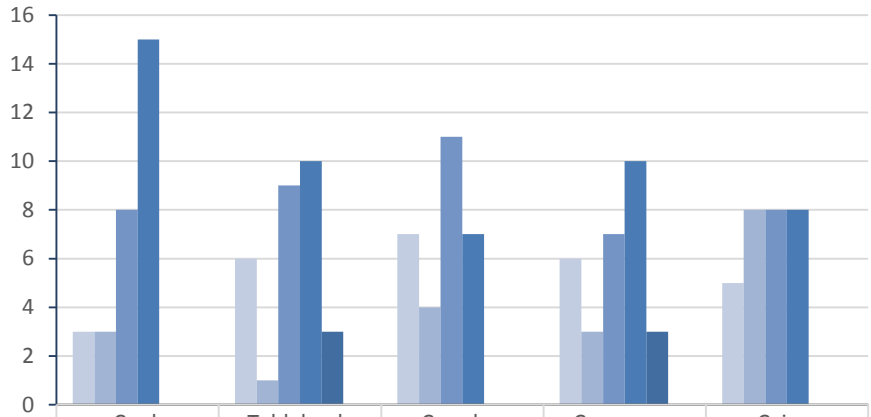
Key Area	Issue to be Examined	Total	Cook	Tablelands	Croydon	Cassowary	Cairns
Strategic Direction Planning	Councils Strategic Plan / Corporate Plan	4	Negligible	Minor	No Gap	No Gap	Negligible
	Business Plan/Operational Plan	6	Moderate	Moderate	Moderate	No Gap	No Gap
	Performance Reporting	15	Moderate	Moderate	Moderate	Moderate	Moderate
	Strategic Asset Management	14	Moderate	Major	Moderate	Minor	Minor
	Score		10	12	9	5	6
Governance and Structure	Formal Reporting Structure	10	Minor	Minor	Minor	Minor	Minor
	Organisational Structure	3	No Gap	No Gap	No Gap	No Gap	Moderate
	Support Functions	7	Minor	Negligible	Negligible	Negligible	Minor
	Quality Systems	7	Moderate	Minor	No Gap	Negligible	Negligible
	Internal Policies and Procedures	13	Minor	Moderate	Minor	Major	Minor
	Score		9	8	5	8	10
Delivery Planning	Delivery Planning	9	Moderate	Minor	Negligible	Minor	Negligible
	Score		3	2	1	2	1
Customer Service Standards	Customer Service	9	Moderate	No Gap	Minor	Negligible	Moderate
	Score		3	0	2	1	3
Asset Management	Asset Management Plans (by scheme)	12	Minor	Major	Minor	Moderate	Negligible
	Service Levels	15	Moderate	Moderate	Moderate	Moderate	Moderate
	Asset Data and Knowledge	11	Moderate	Minor	Minor	Moderate	Negligible
	Asset Management Processes and Procedures	8	Negligible	Moderate	No Gap	Moderate	Negligible
	Score		9	12	7	12	6
Legislative Compliance	Environmental Management Systems / Plans / Strategies	11	Moderate	Minor	No Gap	Major	Minor
	Drinking Water Quality	6	Minor	Minor	Minor	No Gap	No Gap
	Workplace Health and Safety	3	No Gap	No Gap	No Gap	No Gap	Moderate
	Score		5	4	2	4	5

Key Area	Issue to be Examined	Total	Cook	Tablelands	Croydon	Cassowary	Cairns
Human Resources	Workforce Plan	11	Moderate	Moderate	Minor	Moderate	No Gap
	Retention and Recruitment	11	Moderate	No Gap	Moderate	Moderate	Minor
	Profile of Workforce	13	Moderate	Moderate	Negligible	Moderate	Moderate
	Workforce Movement	13	Moderate	Minor	Minor	Major	Minor
	Job Assessment	11	Moderate	Moderate	Moderate	Minor	No Gap
	Staff Training Programs	6	Negligible	No Gap	Negligible	Moderate	Negligible
	Score		16	11	12	18	8
Financial Management	Activity Budgeting	10	Minor	Minor	Minor	Minor	Minor
	Financial Sustainability	10	Minor	Moderate	Minor	Minor	Negligible
	Planned Asset Renewal	14	Moderate	Moderate	Minor	Moderate	Moderate
	Pricing	14	Minor	Major	Moderate	Minor	Moderate
	National Competition Policy	0	No Gap	No Gap	No Gap	No Gap	No Gap
	Score		9	12	9	9	9
Score			64	61	47	59	48
Average across total 29 factors			2.2	2.1	1.6	2.0	1.6

Source: AEC*group*

The gap assessment has identified that the councils at each end of the size scale, Croydon and Cairns, have the least gaps or negligible gaps in regard to achieving best practices.

Figure 5.1: Score by Council



	Cook	Tablelands	Croydon	Cassowary	Cairns
No Gap	3	6	7	6	5
Negligible	3	1	4	3	8
Minor	8	9	11	7	8
Moderate	15	10	7	10	8
Major	0	3	0	3	0
Significant	0	0	0	0	0

Source: AEC*group*

The gap assessment has identified that the councils at each end of the size scale, Croydon and Cairns, are performing the best of the participating councils in regard to achieving best practices. This does not mean these councils are achieving best practice, simply that less gaps are prevalent in the key aspects of their service delivery as compared to Cassowary, Cook and Croydon.

Croydon has a small single scheme, which even through is only resourced via a part time resource, is managed in an effective manner, meeting the service requirements of the community. Long term planning and strategies were evidenced.

Cairns, with the largest schemes and the largest number of serviced properties, is well resourced and uses both internal and external technical knowledge to support not only the scheme management but also the strategic future planning such as demand planning. It was noted that Cairns provides informal support and assistance to many of the other councils in the region.

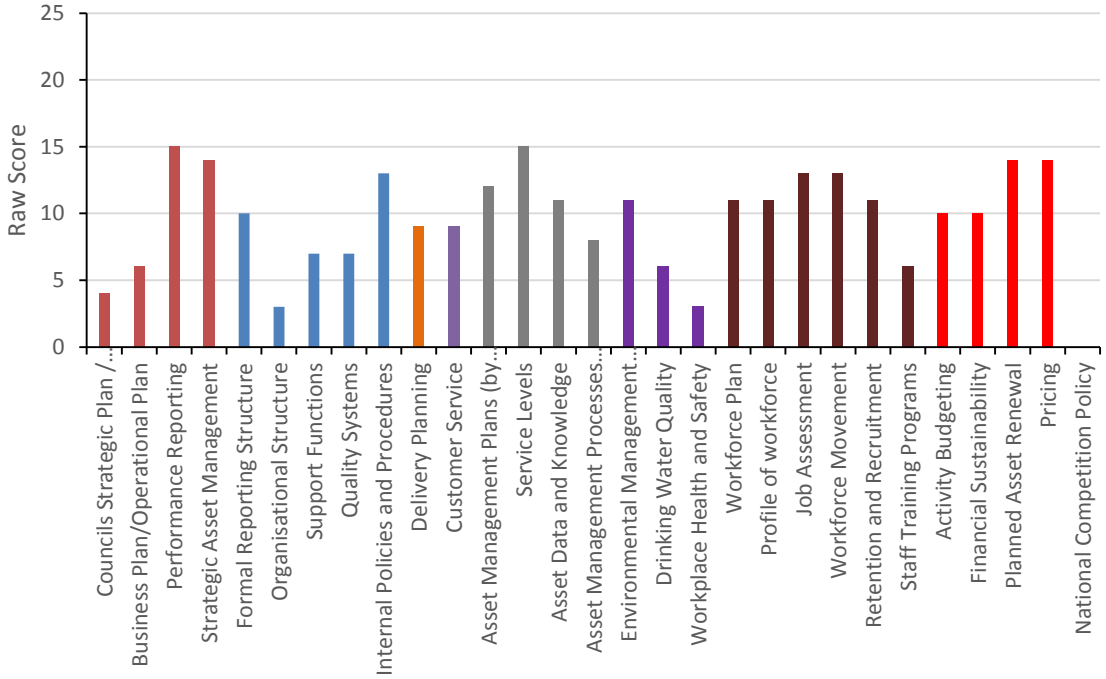
The councils of Tablelands, Cook and Cassowary Coast have multiple independent schemes varying in size. The challenge of strategically managing this wide range of schemes, combined with the constraints of finite budget resources and lack of clarity on transitional arrangements by State requirements for SAMPs/AMPs, appears to be impacting on these councils achieving best practice in the areas of strategic direction, asset management (in particular knowledge management) and also in getting value from legislative plans (which appear to be purely compliance driven documents as opposed to tools for business improvement). These councils are also challenged with being regions that are experiencing no (or declining) growth which is impacting on many aspects of human resourcing.

The following table summaries the scores achieved as total by the five councils to identify compliance with best practice across the strategic areas. The score below is a sum of the five individual council scores and in each instance can consist of of a mixture of any of the 5 scores (0= no gap, 1= negligible gap, 2 = minor gap, 3 = moderate gap, 4 = major gap and 5 = significant gap).

- Scores between 1 to 5 indicate the majority of the councils had a minor less gap.
- Scores between 5 to 10 indicate the councils had at negligible through to minor gaps.

- Scores between 10 to 15 indicate at least three councils scored moderate or above gaps.
- Scores between 15 to 25 indicate moderate and significant gaps.

Figure 5.2: Likelihood of Governance Model Facilitating Change



Source: AEC*group*

The graph highlights only four strategic areas where the councils are achieving close to best practice standards.

- Strategic Plans/Corporate Plans;
- Organisational structure;
- Workplace health and safety, staff training; and
- Meeting national competition requirements are being performed well across the region.

The eight areas where the most opportunities for improvements lie are:

- Performance Reporting;
- Strategic Asset Management;
- Internal Policies and Procedures;
- Asset Management;
- Service Levels;
- Job Assessment;
- Strategies for Workforce Movements;
- Planned Asset Renewal; and
- Pricing.

This assessment is consistent with other sector assessments such as the Local Government Financial Sustainability Review[8] and the industry sector reviews which all indicate the key challenges and risks facing local government relate to the management of infrastructure, resourcing of workforce and the financial sustainability and affordability for communities.

[8] Factors Impacting Local Government Financial Sustainability: A Council Segment Approach

Section 3: Review of Governance Arrangements

The purpose of the Section 3 Review of the Business Models was to take the opportunities for improvement identified in the Section 2 assessment the likelihood of the status quo and alternative business models facilitating the improvement opportunities.

6. Service Delivery Assessment of Alternative Business Models

This chapter evaluates the possible benefits of each alternative business model (when compared with the status quo), in terms of improved strategic outcomes, efficiency in service delivery and potential cost efficiencies through the achievement of economies of scale and scope.

The benefit assessment is based on an evaluation as to whether the structural change generates an outcome that improves the current performance in relation to the best practice criteria. It is a qualitative assessment based on the opportunities related to improved strategic outcomes, efficiency in service delivery and capacity utilisation.

6.1 Models Assessed

As identified in the previous section, the Q-WRAP paper identified two alliance organisation structures and two corporate structures for consideration (as compared to the status quo of current council owned and operated structure). Given the wide degree of variation available in institutional arrangements (particularly involving alliance and county council models), this assessment has refined the definition of institutional arrangements to derive 3 preferred options for the region (in addition to the status quo) to enable appropriate assessment of the impact to the region's water services. These are:

1. **Regional Collaboration Model:** This arrangement is comparable to the alliance models identified and assessed by Q-WRAP (structures 4 and 5 in Table 1.1: Properties of Institutional Arrangements Identified by Q-WRAP above). It further expands on the current arrangement with FNQROC. This model presents an alliance between the participants to achieve agreed targets. All service delivery, governance and asset ownership would still be fully retained by each council. Outcomes and targets (e.g. such as a four year program) would be set to address key governance, asset planning, resourcing shortfalls; with outcomes being improved and consistent service delivery for the region. Resourcing for projects coming from the contribution of either staff or budget funding. A key risk associated with this model is the voluntary nature of most water service alliance structures, and a lack of commitment to outcomes and reliance on annual budget allocation of each participating council may risk such voluntary arrangements not being able to derive optimal benefits. Ideally, consideration should be given to ensure that participation is enforceable and mandatory (such as the alliance arrangement identified in Section 1.4).
2. **Service Delivery Model:** This arrangement can fall under an alliance or county council definitions prescribed by Q-WRAP (structures 5 or 6 in Table 1.1: Properties of Institutional Arrangements Identified by Q-WRAP above). Under this service delivery model, a service delivery business will be created that provides water supply services to Council. Services can include (but are not limited to) operations, laboratory, maintenance and renewal programs, asset management planning, infrastructure planning and delivery, reporting tools and legislative compliance/monitoring. All asset ownership, governance responsibility, finance and price setting would be retained by councils. However, the service delivery entity would be contracted to deliver regionally consistent outputs at agreed service levels to target best practice regional outcomes. The business structure for this option can be either:
    a. Owned and operated as a commercial business by one of the larger FNQROC councils (such as Cairns);
    b. A separate entity (either corporate or alliance) jointly formed by a small number of key councils; or
    c. A separate entity jointly formed by all councils.
3. **Corporate Ownership Model:** This arrangement is comparable to the corporate models identified and assessed by Q-WRAP (structures 8 or 9 in Table 1.1: Properties of Institutional Arrangements Identified by Q-WRAP above). This organisational structure is based on the separation of not only service delivery, but also on the transfer of all aspects of governance and management, and asset ownership to a separate

incorporated entity. All assets, debt and other balance sheet instruments are transferred to this entity. As a result, the councils will retain no ownership of assets or control over day-to-day operations. Ownership will be based on shareholdings (either Local or State Government) with all aspects of operations governed by a board (either through representation from participating councils or by independently appointed board members). This assessment assumes that shareholding, whether Local or State Government, will not impact on the ability of the entity to achieve service delivery targets.

Table 6.2 summarises the key functionality aspects, benefits and risks associated with each structure.

6.2 Assessment of Benefits of Governance Models

The assessment identifies the gap as per the assessment in Stage 2 and then considers if the proposed governance model will promote a change which will address the gap. This assessment of the potential for change is based on two factors:

- The assumptions used in the forming of the premise of governance model. To provide clarity, a discussion on the premise used in the analysis has been included, as with all discussions it is possible to provide alterative views of the assessment.
- The definition of the likelihood of the change occurring. Likelihood is the possibility that an event will occur and the following scale has been adopted based on the principles outline in the paper "Risk Assessment in Practice" by Deloitte & Touche LLP (October 2012).

Table 6.1: Evaluation Matrix

Likelihood	Possibility of Occurrence of Event
Almost Certain	Almost 90% or greater chance of occurrence over life of project
Likely	65% to 90% chance of occurrence over life of the project
Possible	35% up to 65% chance of occurrence over life of the project
Unlikely	10% to 35% chance of occurrence over life of the project
Rare	<10% chance of occurrence over life of project

Source: Risk Assessment in Practice

Table 6.2: Arrangements under Consideration

Factor	Regional Collaboration Model	Service Delivery Model	Corporate Entity Model
SUMMARY of MODEL	A collaborative alliance to achieve agreed targets, such as standardized Asset Management, strategic planning, shared resources etc.	A contract-based alliance model where a service delivery business is created by one or more participants to deliver services (such as maintenance, resourcing, asset management etc) and ultimate ownership of assets, governance and direction is retained by each council.	The creation of a completely separate regional water authority, where all aspects of operations, assets, governance and planning are transferred to the new entity (in exchange for equity shareholdings; or other exchange mechanism if a State-owned corporation is established).
Entity	• Current council business structure retained, with a steering committee formed within FNQROC. • Dedicated staff resource/s required to run joint programs. • Contractual agreement or memorandum of understanding should be established. • Reliant on annual funding being provided by each Council.	Various structures can be applied, including: • Business Activity for one Council; or • Joint Venture; or • Corporate Entity. The identity could be an external third party provider.	• Corporate Entity.
Participation	• Ideally all FNQ councils would be required to maximise outcomes; however some benefits may still occur through collaboration of at least 5 of the regional councils.	• Commencement with at least 2 councils.	• Ideally all FNQ councils would be required to maximise outcomes; however some benefits may still occur through collaboration of at least 3 of the **regional** councils.
Roles	• Participant (Council). • Regional coordinator and support staff (Alliance).	• Purchaser (Council). • Contractor (Alliance).	• Shareholder (council); or no role for council if a State corporate entity is established. • –Regional Water Utility (Corporate Entity).
Governance	• Councils retain governance control of water services.	• Councils retain governance control of water services. • Governance of the service delivery alliance will be determined by level of participation, with board comprised of councillors, council executive and/or staff as well as an FNQROC representative.	• Independent governance board to be created which may comprise of , industry specialists, FNQ council representatives or State representatives.
Asset Ownership	• Retained by Council.	• Retained by Council.	• Assets divested to corporate entity.
Operation of activities	• Resource sharing initiatives • Standard regional processes, procedures, plans, reports and other templates. • Peer reviews.	• Delivery of agreed services as agreed under contract with each council.	• All aspects of business.
Pricing	• Pricing will continue to be set by each Council.	• Pricing will continue to be set by each Council.	• Pricing will be set by the corporate entity.

Factor	Regional Collaboration Model	Service Delivery Model	Corporate Entity Model
Impact to other Council operations	• Negligible.	• Potential for corporate services (such as planning, asset management, infrastructure delivery, billing, customer service / complaint resolution, emergency management or HR Plans) to be undertaken by service delivery alliance instead of council.	• Corporate Overhead allocations may increase for other council service units as water/wastewater overhead share is redistributed; however some level of savings are likely as workload and resources are transferred to corporate water entity.
Impact on Council financial sustainability	• Collaboration alliance funding investment by councils should ultimately return long term operational savings and provide more certainty for long term financial planning. • Council retains assets and liabilities.	• Commitment to a contract. • Service provider should deliver long term operational savings. • Council retains assets and liabilities.	• If councils' assets are converted to a shareholding then a return on investment is provided to Council. • If assets are transferred to the State, the impact on sustainability for council will be dependent on the transfer arrangement.

Source: AEC*group*

6.3 Detailed Assessment Results

Table 6.3: Impact Assessment - Strategic Direction Planning

Factor	Gap	Assessment			
		Status Quo	**Regional Collaboration Model**	**Service Delivery Model**	**Corporate Entity**
Council Strategic Plan / Corporate Plan	**GAP:** Fail to reference to the strategic asset management plans indicating infrastructure is not being strategically considered in the long term planning of council. **ASSESSMENT OF CURRENT PRACTICE:** Cook Negligible Tablelands Minor Croydon No Gap Cassowary No Gap Cairns Negligible **REQUIRED CHANGE:** Strategic Plan references clear objectives related to the provision of water services and links outcomes to the needs of the community.	**Unlikely**	**Rare**	**Rare**	**Almost Certain**
		The LG's already have Strategic and Corporate Planning frameworks in place. Although the plans are required to be renewed on a regular basis, there is no prescribed format for content. Unlike New Zealand where the plans are audited, there is no requirement in Queensland for the plans to be integrated with other core council frameworks such as Asset Management Plans or Growth Plans. Notwithstanding that that Councils may, as part of an overall improvement plan, progress towards integration of strategic frameworks, there is currently no external driver to promote a change to current practice.	The production of the Strategic Plan and Corporate Plan is a process that is undertaken within each Council as the documents have to reflect both the local community and how each council operates to meet the community needs. Therefore it is unlikely that a regional collaboration model would become involved in the process of the development of the Strategic Plans and Corporate Plans. This does not preclude the possibility of the consideration of the development of a consistent template, process or engagement approach for the region.	The service delivery model will be focused on service delivery as defined within a contractual agreement. There is no relationship to the Councils Strategic or Corporate Plan. The content of the contractual arrangement should be an outcome of Councils assessment of what is required to deliver on the goals and strategies identified within their Strategic and Corporate frameworks. Therefore the requirement to define the performance outcomes in the contract (based on what is required to delivery on the strategies) will have a downstream benefit of strengthening the linkage between delivery and strategy.	The creation of a new entity will require the development of a strategic framework for the entity which would include a Strategic Plan/ Corporate Plan and supporting plans such as Asset Management Plan. This will ensure integration of strategy within the new entity. However, based on the level of independence of the entity from the shareholders (councils) the resultant strategy and plans may not necessary be in alignment with the community or councils aspirations. For example the entity may focus on full cost recovery yet council's aspirations may be for safe affordable water supply. These goals may result in a disparate outcome in terms of pricing for the consumers.

Factor	Gap	Assessment			
		Status Quo	**Regional Collaboration Model**	**Service Delivery Model**	**Corporate Entity**
Business Plan or Activity Plans for Water Services	**GAP:** Lack of connection between the operational plans, asset management plans. Lack of focus on ongoing operational service deliver highlights the lack of consideration of the importance of safe water service delivery for the community. **ASSESSMENT OF CURRENT PRACTICE:** Cook Moderate Tablelands Moderate Croydon Moderate Cassowary No Gap Cairns No Gap **REQUIRED CHANGE:** Business Plan in nominated format that provides linkage between Strategic Plan and AMP.	**Unlikely**	**Rare**	**Possible**	**Almost Certain**
		Each council has a different approach in relation to the development and use of business plans. In some councils business plans are detailed operational plans for each activity, in other councils the direction from the business is derived from the corporate plan and/or budget process. Currently there is no prescribed requirement for the development of business plans. Therefore other than internal improvement processes such as Business Excellence Framework, there is no driver to change the current practices of council.	The production of the Business Plans are a process that is undertaken within each Council to reflect the management approach of the Executive. The regional collaboration model would may promote a regional approach to business improvement and business planning, however, the implementation of the program would be at each council level and it is expected to be tailor to fit with the council management and culture.	The service delivery model will be focused on service delivery as defined within a contractual agreement. It would be expected that the service delivery entity would function within a business planning framework but this would not necessary result in a clear linkage between the operational activities and the asset management plans. If the development and management of the assets management plans was also devolved to the service delivery entity, this would create a stronger linkage.	The creation of a new entity will require the development business planning framework and as such should be built from the informing information such as the asset management plans. The development of the business plan may be constrained by the challenge of assimilating the existing information and asset management plans into new framework.

Factor	Gap	Assessment			
		Status Quo	**Regional Collaboration Model**	**Service Delivery Model**	**Corporate Entity**
Performance Reporting	**GAP:** KPI is a compliance exercise with little consideration of the outcomes. **ASSESSMENT OF CURRENT PRACTICE:** Cook Moderate Tablelands Moderate Croydon Moderate Cassowary Moderate Cairns Moderate **REQUIRED CHANGE:** Reporting framework for KPI's that measures achievement towards strategic and operational outcomes and drives operational improvements.	**Unlikely**	**Possible**	**Almost Certain**	**Almost Certain**
		Each council has a performance report framework in place. The gap relates not to the process of reporting but strategic quality of the information reported and the subsequent actions arising from the information. The improvement of strategic KPI reporting would require a change program for both the informer (staff) and the recipient (Council). Currently there is no driver for a change other than internal improvement processes which tend to focus on process than that strategic intent and understanding.	The regional collaboration model would may promote a template to improve report and provide the vehicle for training programs for both staff and councilors. However, to aid the delivery strategic KIP reporting, councils would need to allocate resources to implement processes to ensure the collection and validation of the right information.	KPI reporting will form a core component of the contract in terms of assessing the performance of the service delivery entity. The reporting requirements should cover both operational output measures (such as volume, time etc.) and performance outcome measures such as resolution outcomes.	KPI reporting be an essential tool to identify opportunities for identifying poor performance and potential efficiency improvements. Change will occur if the organisation is measured and rewarded for the achievement both output performance such as operating cost per connection, and for outcome performance such as customer satisfaction.

Factor	Gap	Assessment			
		Status Quo	**Regional Collaboration Model**	**Service Delivery Model**	**Corporate Entity**
Strategic Asset Management Policy, Strategy and Plans	**GAP:** TMP/SAMP are not current nor are being used to plan the asset management operational, maintenance and renewal activity. **ASSESSMENT OF CURRENT PRACTICE:** Cook Moderate Tablelands Moderate Croydon Moderate Cassowary Moderate Cairns No Gap **REQUIRED CHANGE:** TMP/SAMP documentation is current, and used in the management of the service and asset.	**Likely**	**Likely**	**Possible**	**Almost Certain**
		The local government sector is transitioning towards the standard NAMS framework. The current lack of direction on compliance requirements for water assets (clarification of the SAMP/TMP/AMP requirement) and the lack of a prescribed format, has resulted in some councils delaying the transition. The significant investment by both staff (and external assistance) to develop a comprehensive AMP is also a limiting factor.	FNQROC already has a regional asset management program which should facilitate improved asset management by the provision of shared templates and resources. Further opportunities for shared programs of both knowledge and resources would build on the current program.	The service delivery model will be focused on service delivery as defined within a contractual agreement. If the development and management of the asset management plans was also devolved to the service delivery entity, this would create a stronger linkage.	The asset management plan will be a core document for the new entity to manage operational activity and provide the framework for future planning. The development of a comprehensive of asset management plan may be constrained by the requirement to consolidate and merge a number of individual council documents.

Source: AEC*group*

Table 6.4: Impact Assessment – Governance and Structure

Factor	Gap	Assessment			
		Status Quo	**Regional Collaboration Model**	**Service Delivery Model**	**Corporate Entity**
Formal Reporting Structure	**GAP:** Reporting to governance body focuses on current performance and project delivery with no specific agenda for the consideration of future strategic issues. **ASSESSMENT OF CURRENT PRACTICE:** Cook Minor Tablelands Minor Croydon Minor Cassowary Minor Cairns Minor **REQUIRED CHANGE:** Reporting of business to informed and engaged stakeholders on both strategic outcomes and operational performance.	**Unlikely**	**Rare**	**Rare**	**Almost Certain**
		Each council has a reporting framework in place. The gap relates not to the process of reporting but strategic and governance engagement of the key stakeholders. Currently there is no driver for a change in the depth of engagement of the governance stakeholders.	Governance structures are determined by each individual council. Therefore it is unlikely that a regional collaboration model would become involved in the governance and strategic reporting processes of council.	Reporting and will be focused on delivery to contract requirements. The relationship between the service delivery entity and each council will be a purchaser/provider relationship.	The new entity will report to a formally appointed Board of Directors.

Factor	Gap	Assessment			
		Status Quo	**Regional Collaboration Model**	**Service Delivery Model**	**Corporate Entity**
Organisational Structure	**GAP:** The structures in each of the LGA's were well documented. **ASSESSMENT OF CURRENT PRACTICE:** Cook No Gap Tablelands No Gap Croydon No Gap Cassowary No Gap Cairns Minor **REQUIRED CHANGE:** Defined structure with adequate levels of management.	**Likely**	**Unlikely**	**Possible**	**Almost Certain**
		Notwithstanding the de-amalgamation of some of the FNQROC councils, it current organisation structures will be maintained.	This model does not require any structural change but will require additional definition of structure and organisational relationships in regard to cross-organisational and region projects.	The council structure will need to be redefined to accommodate the transfer of function to the service delivery entity. The relationship between the delivery services provide and council staff will need to be defined.	Creation of new entity will include the definition of the organisational structure and levels of management.

Factor	Gap	Assessment			
		Status Quo	**Regional Collaboration Model**	**Service Delivery Model**	**Corporate Entity**
Support Functions	**GAP:** Sufficient support services in place. **ASSESSMENT OF CURRENT PRACTICE:** Cook No Gap Tablelands No Gap Croydon No Gap Cassowary No Gap Cairns Minor **REQUIRED CHANGE:** Corporate support functions in line with organisational needs and charged at on appropriate cost basis.	**Possible**	**Rare**	**Possible**	**Almost Certain**
		Existing support functions in place and assessed as adequate although not necessary charged on a full cost recovery basis. There is no driver for change (other than council de-amalgamation).	It is unlikely that the regional collaboration model would extended to providing the delivery of support functions beyond the improvement in processes and possible regional purchasing of support functions to achieve economies of scale.	Service delivery model may extend to the delivery some support functions such as billing. The arrangement for the cost of such services would be defined in the contract.	Support functions will be provided by corporate entity. The single provision of service across the wider area should provide for economies of scale.

Factor	Gap	Assessment			
		Status Quo	**Regional Collaboration Model**	**Service Delivery Model**	**Corporate Entity**
Quality Systems	**GAP:** Quality systems were generally limited to the EMS and DWQMP. **ASSESSMENT OF CURRENT PRACTICE:** Cook Minor Tablelands Minor Croydon No Gap Cassowary Minor Cairns Minor **REQUIRED CHANGE:** Appropriate quality systems in place to support operations. Risk assessment is undertaken.	**Likely**	**Possible**	**Unlikely**	**Almost Certain**
		EMS and DWQMS provide overall compliance framework that each Council must comply with. The quality of the plans and the embedment of the plans into the operational practices is managed by each council.	The regional collaboration model could facilitate the development of the EMS and DWQMS frameworks through regional programs and training.	The service delivery model will be focused on service delivery as defined within a contractual agreement which should include delivery and monitoring as defined. The development of the EMS and DWQMS would remain within council function as they will form the basis for the contract delivery and performance measures.	EMS and DWQMS will be core compliance requirements for the new entity. The development of the plans may be constrained by the requirement to consolidate and merge a number of individual council documents.

Factor	Gap	Assessment			
		Status Quo	**Regional Collaboration Model**	**Service Delivery Model**	**Corporate Entity**
Internal Policies and Procedures	**GAP:** Currency of the documents and availability of documents. **ASSESSMENT OF CURRENT PRACTICE:** Cook Moderate Tablelands Moderate Croydon Minor Cassowary Significant Cairns Minor **REQUIRED CHANGE:** Knowledge management system to capture processes and procedures and ensure currency of the documents	**Unlikely**	**Possible**	**Possible**	**Almost Certain**
		Each council has a current process in place for documentation. Currently there is no driver for a change other than internal improvement processes.	The regional collaboration model could facilitate knowledge management frameworks through regional programs however the outcome will be reliant on each council adopting the framework, and committing resources to ensure currency of documentation.	The service delivery entity will be focused on efficient service delivery across a number of schemes/networks. Current and complete documentation is central to achieve both efficiencies and risk management. The contract should specify the requirements in relation to documentation.	The new entity will be focused on the achievement of operational efficiency. Documented and consistent processes will assist in delivering operational improvements and efficiency gains.

Source: AEC*group*

Table 6.5: Impact Assessment – Delivery Planning

Factor	Gap	Assessment			
		Status Quo	**Regional Collaboration Model**	**Service Delivery Model**	**Corporate Entity**
Delivery Planning	**GAP:** Demand analysis frameworks based on Priority Infrastructure Plans and specific scheme or catchment reports to identify future capacity and infrastructure requirements. **ASSESSMENT OF CURRENT PRACTICE:** Cook No Gap Tablelands Minor Croydon No Gap Cassowary Minor Cairns No Gap **REQUIRED CHANGE:** Demand planning is based on robust planning forecasts for growth by town/area (for next ten years) Outcomes of planning documents incorporated into operational plans and service delivery.	**Possible**	**Likely**	**Rare**	**Almost Certain**
		Financial sustainability pressure will require councils to improve their long term financial planning based on supported projections of future demand from catchment and regional growth plans.	The regional collaboration model should provide regional analysis of catchment and growth plans. The preparation of regional studies could provide significant economies of scale and standardisation of the information. This information could be available to each council to be applied to the local environment.	The future planning of services will remain with councils rather than be driven by service delivery alliance.	The new entity will have a regional focus and the projection of future changes in the region will be critical for the future infrastructure requirements and long term planning.

Source: AEC*group*

Table 6.6: Impact Assessment – Customer Service

Factor	Gap	Assessment			
		Status Quo	**Regional Collaboration Model**	**Service Delivery Model**	**Corporate Entity**
Customer Service	**GAP:** Lack of capture of customer complaints/requests and lack of feedback into the strategic asset management frameworks. **ASSESSMENT OF CURRENT PRACTICE:** Cook Minor Tablelands No Gap Croydon Minor Cassowary Minor Cairns Minor **REQUIRED CHANGE:** Customer complaint information is captured and analysed to identify problem areas.	**Unlikely**	**Unlikely**	**Likely**	**Almost Certain**
		Each council has a current process in place capturing customer requests and feedback. Currently there is no driver for a change to improve utilisation of the information within he asset management framework.	FNQROC has a customer service standard program in place. This could be extended to a possible customer service response framework across the region. However it is unlikely that the regional collaboration entity would become involved in the delivery of customer services.	The service delivery entity will require access to the information generated by customer requests and complaints to address issues of service delivery. This in itself will drive a change for improved and efficient processes to capture and share the information.	The new entity will be focused on the achievement of operational efficiency which will require the ability to capture information about poor performing assets and service issues. Change will occur if the organisation is rewarded for the achievement of improvements and efficiency gains.

Source: AEC*group*

Table 6.7: Impact Assessment – Asset Management

Factor	Gap	Assessment			
		Status Quo	**Regional Collaboration Model**	**Service Delivery Model**	**Corporate Entity**
Asset Management Plans	**GAP:** Councils managing the water and wastewater infrastructure with a technical operational focus on the daily delivery of services. Maintenance and renewal programs have not been derived from asset management. **ASSESSMENT OF CURRENT PRACTICE:** Cook – No Gap Tablelands – Moderate Croydon – Minor Cassowary – Moderate Cairns – No Gap **REQUIRED CHANGE:** Asset maintenance, asset renewal and replacement strategies are defined in AMP and drive the annual operational plan and budget	**Unlikely**	**Unlikely**	**Possbile**	**Likely**
		Local governments are transitioning towards the standard NAMS framework. However the development of an asset management plan document will not necessary drive change to imbed an asset management approach in each council.	FNQROC already has a regional asset management program. However the provision of template will not necessary drive change in the implementation of asset management in each council.	The development of the asset management plan will remain the responsibility of council. However the outcomes of the asset management plan should form the basis for the service delivery specified in the contract therefore creating a strong linkage.	The asset management plan will be a core document for the new entity to manage operational activity and provide the framework for future planning. The implementation of asset management practices may be constrained by the varying approaches and cultures at each of the facility sites.

Factor	Gap	Assessment			
Service Levels	**GAP:** Technical service levels are well defined reported but are not captured and used to inform the AMPs. **ASSESSMENT OF CURRENT PRACTICE:** Cook Minor Tablelands Minor Croydon Minor Cassowary Minor Cairns Minor **REQUIRED CHANGE:** Definition of standard levels of service for technical and customer service levels	**Status Quo**	**Regional Collaboration Model**	**Service Delivery Model**	**Corporate Entity**
		Likely	**Possible**	**Possible**	**Possible**
		Council are performing services to the current service levels (which are mixture of technical and inherent customer standards). An enabling event (positive or negative) would have to occur to change service current service levels. The documentation of the service levels should be developed as part of the development of the asset management plans.	The service levels are determine in relation to each community and scheme. Improvements in the documentation of service levels could be facilitated by the development of a regional set of service standards.	Service levels will be defined by council to determine services standards defined in the contracts.	The entity will need to define service standards across the region. However, the development and implementation regional service standards will be constrained by the requirement to collate service standards and address variations in service standards between communities.

Factor	Gap	4.4			
		Status Quo	**Regional Collaboration Model**	**Service Delivery Model**	**Corporate Entity**
Asset Data and Knowledge	**GAP:** Lack of knowledge about the assets. Limited linkage of operational information to asset condition and asset data. **ASSESSMENT OF CURRENT PRACTICE:** Cook Moderate Tablelands Minor Croydon Minor Cassowary Moderate Cairns No Gap **REQUIRED CHANGE:** Asset data updated appropriately and asset information condition is updated as assets are inspected Asset Management System that captures all details of assets including condition plus processes that ensure information about assets is captured.	**Unlikely**	**Possible**	**Possible**	**Likely**
		Councils processes in place to capturing and recording asset information and data reliant to their asset management systems. There is no driver for change until more refined information is required to f the enhancement of the asset management plans. The cost to improve or upgrade systems may be a significant inhibitor.	The capture of asset data is an operational function that would not be delivered by a regional collaboration entity. However the opportunity for economies of scale from the purchase of bulk contracts for data capture or systems could facilitate an improvement in the data captured.	Any requirements for the service delivery provider to capture and provide asset data to councils or to maintain asset data would need to be defined in the contract. It would be efficient for the service provider who has the interaction with the assets to capture and the record the asset data.	New organisation would require a system to manage assets. A data from existing systems would have to audited for quality and completeness as it is transitioned to a new system. New or revised process would need to be established to capture ongoing asset data and information.

Factor	Gap	Assessment			
		Status Quo	**Regional Collaboration Model**	**Service Delivery Model**	**Corporate Entity**
Asset Processes and Procedures	**GAP:** There is poor documentation management and lack of currency of documentation. **ASSESSMENT OF CURRENT PRACTICE:** Cook No Gap Tablelands Moderate Croydon No Gap Cassowary Moderate Cairns No Gap **REQUIRED CHANGE:** Knowledge management system to capture processes and procedures and ensure currency of the documents.	**Unlikely**	**Possible**	**Possible**	**Likely**
		Each council has a current process in place for documentation. Currently there is no driver for a change other than internal improvement processes.	The regional collaboration model could facilitate knowledge management frameworks through regional programs however the outcome will be reliant on each council adopting the framework, and committing resources to ensure currency of documentation.	The service delivery entity will be focused on efficient service delivery across a number of schemes/networks. Current and complete documentation is central to achieve both efficiencies and risk management. The contract should specify the requirements in relation to documentation	The new entity will be focused on the achievement of operational efficiency. Documented and consistent processes will assist in delivering operational improvements and efficiency gains.

Source: AEC*group*

Table 6.8: Impact Assessment – Legislative Compliance

Factor	Gap	Assessment			
		Status Quo	**Regional Collaboration Model**	**Service Delivery Model**	**Corporate Entity**
Environmental Management systems/ plans/ strategies Drinking water quality standards	**GAP:** Plans are compliance requirement with little connection of the plan requirements to the operational asset management and service delivery. **ASSESSMENT OF CURRENT PRACTICE:** Cook Moderate Tablelands Minor Croydon No Gap Cassowary Significant Cairns Minor **REQUIRED CHANGE:** Compliant EMS and DWQMS used to inform management of water facilities and infrastructure	**Likely**	**Likely**	**Almost Certain**	**Almost Certain**
		The EMS and DWQMS provide overall framework that each Council must comply with.	Based on a program to assist councils with the development and implementation of EMS and DWQMS frameworks.	EMS and DWQMS will provide the core framework for service delivery.	EMS and DWQMS will provide the core framework.

Factor	Gap	Assessment			
		Status Quo	**Regional Collaboration Model**	**Service Delivery Model**	**Corporate Entity**
Workplace Health and Safety	**GAP:** Councils have good Safe Plans in place with evidence safety improvements **ASSESSMENT OF CURRENT PRACTICE:** Cook No Gap Tablelands No Gap Croydon No Gap Cassowary No Gap Cairns n/a **REQUIRED CHANGE:** Safe Plan work management system	**Almost Certain**	**Likely**	**Likely**	**Almost Certain**
		All councils already have a Safe Plan in place.	Regional programs to review and update Sae Plans would ensure currently of the current systems.	Workplace Health and Safety will be controlled by the delivery entity in relation to their employees. However, the existence of a SafePlan may be key pre-requisition requirement for the contract.	The new entity would be required to put in place a SafePlan work management system (likely through the adoption of the current systems). This will ensure efficient and safe work practices and potential reduce costs related to employment and insurance.

Source: AEC*group*

Table 6.9: Impact Assessment – Human Resources

Factor	Gap	Assessment			
		Status Quo	**Regional Collaboration Model**	**Service Delivery Model**	**Corporate Entity**
Workforce Plan and knowledge and understanding of workforce: • Profile of workforce • Job Assessment • Workforce Movement	**GAP:** All of the councils except Cairns lack a strategic Workforce Plan to give a corporate focus on the major resource of council - its people. **ASSESSMENT OF CURRENT PRACTICE:** Cook Moderate Tablelands Moderate Croydon Minor Cassowary Moderate Cairns No Gap **REQUIRED CHANGE:** Workforce plan to manage resource requirements and respond to external workforce factors. Workforce Plan to support management of human resources.	**Possible**	**Possible**	**Unlikely**	**Almost Certain**
		There no requirement to have a workforce plan in place nor is there a prescribe format or content for Workforce Plans in Queensland. Notwithstanding that that Councils may, as part of an overall improvement plan, progress towards the development of workforce plans.	The production of a Workforce Plan is a process that is undertaken within each Council as the document has to reflect on the workforce of the council. Therefore it is unlikely that a regional collaboration model would become involved in the process of the development of the Workforce Plans. This does not preclude the possibility of the consideration of the development of a consistent template or process for the region.	The service delivery model will be focused on service delivery as defined within a contractual agreement. There is no relationship to the Councils Workforce Plan.	The creation of a new entity will require the development of a strategic framework for the entity which would include a Workforce.

Factor	Gap	Assessment			
		Status Quo	**Regional Collaboration Model**	**Service Delivery Model**	**Corporate Entity**
Retention and Recruitment	**GAP:** Issue of attraction and retention of staff **ASSESSMENT OF CURRENT PRACTICE:** Cook Moderate Tablelands No Gap Croydon Moderate Cassowary Moderate Cairns No Gap **REQUIRED CHANGE:** Strategies in place to attract and retain staff at operational and management levels	**Unlikely**	**Almost Certain**	**Rare**	**Almost Certain**
		Each council has a current process in place for retention and recruitment. The external labour force influences that impact on the ability to attract and retain qualified operational and professional staff is the main driver for change. However Councils may be constrained by resource availability to develop and implement strategies.	Regional program to attract and retain staff would provide economies of scale and scope across the region.	Recruitment and retention strategies of the service delivery entity will be controlled by the delivery entity.	The creation of a new entity will require the development of workforce strategies which would include a workforce plan. The larger entity would provide additional opportunities to share and develop staff.

Factor	Gap	Assessment			
		Status Quo	**Regional Collaboration Model**	**Service Delivery Model**	**Corporate Entity**
Staff Training Programs	**GAP:** Technical training program and development programs in place **ASSESSMENT OF CURRENT PRACTICE:** Cook No Gap Tablelands No Gap Croydon No Gap Cassowary Moderate Cairns No Gap **REQUIRED CHANGE:** Training programs in place to support the development of qualifications relevant to the position	**Likely**	**Almost Certain**	**Possible**	**Possible**
		Each council has a current technical training and development programs in place. The external labour force influences that impact on the ability to attract and retain qualified operational and professional staff is the main driver for change.	Regional program for training and development would provide economies of scale and scope across the region.	Training and development strategies of the service delivery entity will be controlled by the delivery entity.	The creation of a new entity will require the development of workforce strategies which would include a training and development programs. The larger entity would provide additional opportunities economies of scale in the delivery of training opportunities.

Source: AEC*group*

Table 6.10: Impact Assessment –Financial Management

Factor	Gap	Assessment			
		Status Quo	**Regional Collaboration Model**	**Service Delivery Model**	**Corporate Entity**
Activity Budgeting	**GAP:** Lack of analysis of budget variances and proactive management strategies deployed to manage future expenditure and revenue **ASSESSMENT OF CURRENT PRACTICE:** Cook Minor Tablelands Minor Croydon Minor Cassowary Minor Cairns Minor **REQUIRED CHANGE:** Financial Budgets prepared and reported on at activity level Full costs including depreciation and interest costs applied at activity level	**Possible**	**Possible**	**Rare**	**Possible**
		Each council has a current process in place for budget management. The increasing financial sustainability pressures may drive internal improvements in process and content within Councils.	Activity budget management is process undertaken by the managers and council executive. The regional collaboration entity may facilitate improved financial management through the provision of regional training and mentoring opportunities.	The management of detailed budget expenditure will be undertaken by the service delivery entity. Council will be required to monitor the payment of the contract.	The new entity will require managers to be accountable for budgets. The level of competency of budget management will be dependent on the skill and knowledge of both staff and executive

Factor	Gap	Assessment			
		Status Quo	**Regional Collaboration Model**	**Service Delivery Model**	**Corporate Entity**
Financial Sustainability	**GAP:** Long Term Financial Planning not based on Asset Management Plans for renewal and replacement or future growth plans for new infrastructure requirements **ASSESSMENT OF CURRENT PRACTICE:** Cook Minor Tablelands Moderate Croydon Minor Cassowary Minor Cairns Negligible **REQUIRED CHANGE:** Long term financial forecasts produced at business unit level based requirements identified in the asset management plan and growth plans.	**Likely**	**Unlikely**	**Unlikely**	**Almost Certain**
		Financial sustainability pressure will require councils to improve their long term financial planning. However the quality of the long term financial plans will be dependent on the quality of the AMP financial forecasts and infrastructure development forecasts. Budget and funding constraints may limit councils ability to deliver the long term financial plans.	Long term financial planning is a council process and will remain a council process.	Long term financial planning is a council process and will remain a council process	The new entity will be require to produce a long term financial plan. The quality of the long term financial plan will be dependent on the quality of the AMP financial forecasts and infrastructure development forecasts.

Factor	Gap	Assessment			
		Status Quo	**Regional Collaboration Model**	**Service Delivery Model**	**Corporate Entity**
Planned Asset Renewal	**GAP:** Operational activity and long term asset renewal not based on asset management plans. **ASSESSMENT OF CURRENT PRACTICE:** Cook Moderate Tablelands Moderate Croydon Minor Cassowary Moderate Cairns Moderate **REQUIRED CHANGE:** Renewal plan based on the requirements identified in the asset management plan	**Possible**	**Rare**	**Rare**	**Possible**
		Financial sustainability pressure will require councils to improve their long term financial planning based asset renewal and future asset requirements. However budget and funding constraints may limit the ability to deliver renewals at the level identified in the AMP's	The planning of renewal expenditure is part of councils budgeting process and will remain a council process.	The planning of renewal expenditure is part of the council's budget and will remain a council process. The delivery contract will specify the level of renewals to be delivered by the service delivery entity.	The new entity will be able to plan for renewals once a regional AMP is developed. It is likely the renewal program will be influenced by the alignment of asset provision and service standards across the region, possibly limiting the ability to delivery renewals as per the AMP.

Factor	Gap	Assessment			
		Status Quo	**Regional Collaboration Model**	**Service Delivery Model**	**Corporate Entity**
Current Pricing Structure	**GAP:** Lack of pricing strategy **ASSESSMENT OF CURRENT PRACTICE:** Cook Minor Tablelands Major Croydon Moderate Cassowary Minor Cairns Moderate **REQUIRED CHANGE:** Pricing structured based on full cost pricing approach Strategic consideration of implications of regional and local pricing	**Likely**	**Rare**	**Rare**	**Almost Certain**
		Increasing focus on financial sustainability will require council to continue to develop costing and pricing strategies based on full cost pricing.	The determination of pricing strategy is the responsibility of each individual council and would not be devolved to a regional collaboration entity.	The determination of pricing strategy is the responsibility of each individual council and would not be devolved to a service delivery entity	The development of a regional pricing strategy (but not necessary regional charges) will be a core requirement for the new entity. There will be a number implications arising from the development of a pricing strategy including the implications of full cost pricing and regional subsidisation.

Factor	Gap	Assessment			
		Status Quo	**Regional Collaboration Model**	**Service Delivery Model**	**Corporate Entity**
National Competition Policy	**GAP:** No gap identified as all councils comply with requirements **ASSESSMENT OF CURRENT PRACTICE:** Cook No Gap Tablelands No Gap Croydon No Gap Cassowary No Gap Cairns No Gap **REQUIRED CHANGE:** Compliance with National Competition Policy	**Almost Certain**	**Rare**	**Unlikely**	**Likely**
		No change required	The compliance with National Competition Policy is the responsibility of each individual council and would not be devolved to a regional collaboration entity.	The compliance with National Competition Policy is the responsibility of each individual council and would not be devolved to a service delivery entity.	The compliance with National Competition Policy is the responsibility of the entity. There will be a number implications arising from compliance, particularly in regard to full cost pricing.

Source: AEC*group*

6.4 Key Findings of Service Delivery Assessment

The following table summarises the assessment of the impact of each governance structure addressing the performance gaps.

Table 6.11: Summary of Impact Assessment of a Move to Alternative Business Models

Key Area	Issue	Status Quo	Regional Collaboration	Service Delivery	Corporate Entity
Strategic Direction Planning	Councils Strategic Plan / Corporate Plan	Unlikely	Rare	Rare	Almost Certain
	Business Plan/Operational Plan	Unlikely	Rare	Possible	Almost Certain
	Performance Reporting	Unlikely	Possible	Almost Certain	Almost Certain
	Strategic Asset Management	Likely	Likely	Possible	Almost Certain
Governance and Structure	Formal Reporting Structure	Unlikely	Rare	Rare	Almost Certain
	Organisational Structure	Likely	Unlikely	Possible	Almost Certain
	Support Functions	Possible	Rare	Possible	Almost Certain
	Quality Systems	Likely	Possible	Unlikely	Almost Certain
	Internal Policies and Procedures	Unlikely	Possible	Possible	Almost Certain
Delivery Planning	Delivery Planning	Possible	Likely	Rare	Almost Certain
Customer Service Standards	Customer Service	Unlikely	Unlikely	Likely	Almost Certain
Asset Management	Asset Management Plans (by scheme)	Unlikely	Unlikely	Possible	Likely
	Service Levels	Likely	Possible	Possible	Possible
	Asset Data and Knowledge	Unlikely	Possible	Possible	Likely
	Asset Management Processes and Procedures	Unlikely	Possible	Possible	Likely
Legislative Compliance	Environmental Management Systems / Plans / Strategies Drinking Water Quality	Likely	Likely	Almost Certain	Almost Certain
	Workplace Health and Safety	Almost Certain	Likely	Likely	Almost Certain
Human Resources	Workforce Plan; Profile of workforce; Job Assessment; Workforce Movement	Possible	Possible	Unlikely	Almost Certain
	Retention and Recruitment	Unlikely	Almost Certain	Rare	Almost Certain
	Staff Training Programs	Likely	Almost Certain	Possible	Possible
Financial Management	Activity Budgeting	Possible	Possible	Rare	Possible
	Financial Sustainability	Likely	Unlikely	Unlikely	Almost Certain
	Planned Asset Renewal	Possible	Rare	Rare	Possible
	Pricing	Likely	Rare	Rare	Almost Certain
	National Competition Policy	Almost Certain	Rare	Unlikely	Likely

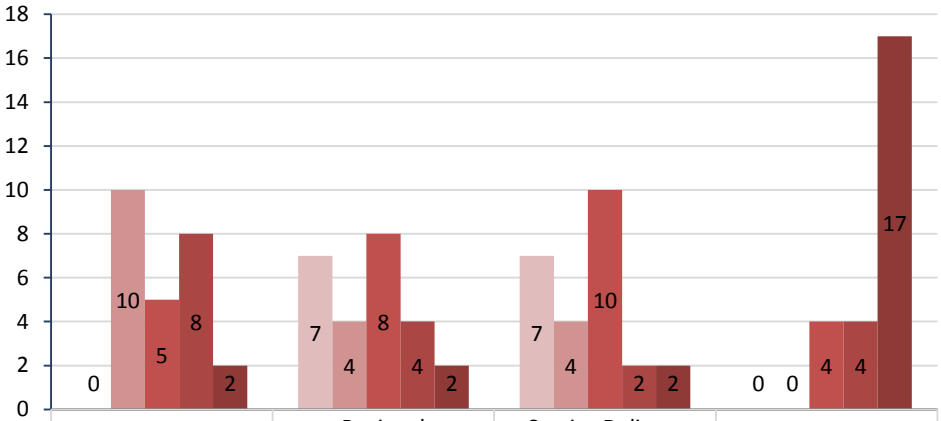
Source: AEC*group*

Table 6.12: Summary of Rating

Score/Model	Status Quo	Regional Collaboration Model	Service Delivery Model	Corporate Entity
Rare	0	7	7	0
Unlikely	10	4	4	0
Possible	5	8	10	4
Likely	8	4	2	4
Almost Certain	2	2	2	17
Total	**25**	**25**	**25**	**25**

Source: AEC*group*

Figure 6.1: Likelihood of Governance Model Facilitating Change



	Status Quo	Regional Collaboration Model	Service Delivery Model	Corporate Entity
Rare	0	7	7	0
Unlikely	10	4	4	0
Possible	5	8	10	4
Likely	8	4	2	4
Almost Certain	2	2	2	17

Source: AEC*group*

It is apparent from the above analysis that from a review of the 25 key factors, that the Corporation Entity Model would provide a likelihood of change to address the identified gaps between current performance and best practice.

As the Corporate Entity Model is proposed as a "new" organisation, it will have the opportunity to be establish from commencement best practice as the base line for strategy, structure and processes. The Service Delivery Model and the Regional Collaboration Model will facilitate change in over half the instances, indicating both these models would facilitate an improvement.

However, to the impact of the benefit of change should be considered not just a quantum but refined to consider the likelihood of the governance model promoting change in the areas that have been identified with the largest "gap", that is the areas where the change would have the most positive benefit.

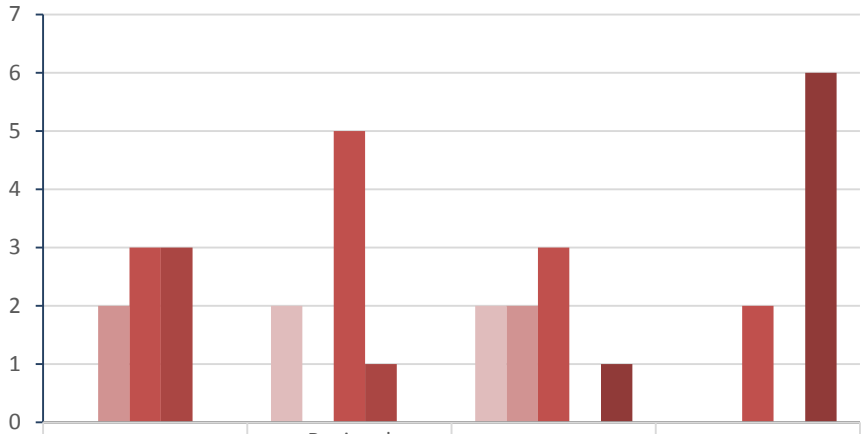
Considering the eight areas identified in section 6.4 Key Findings of Service Delivery Assessment:

- Performance Reporting.
- Strategic Asset Management.
- Internal Policies and Procedures.
- Asset Management.

- Service Levels.
- Job Assessment.
- Strategies for Workforce Movements.
- Planned Asset Renewal.
- Pricing.

The following graph outlines which governance model will have the most likelihood of change.

Figure 6.2: Likelihood of Change in Lowest Performance Areas



	Status Quo	Regional Collaboration Model	Service Delivery Model	Corporate Entity
Rare	0	2	2	0
Unlikely	2	0	2	0
Possible	3	5	3	2
Likely	3	1	0	0
Almost Certain	0	0	1	6

Source: AEC*group*

As expected the Corporate Entity Model would promote the greatest likelihood of change. This structure involves a significant departure from the current structure. The physical process to restructure and amalgamate services between councils into a regional corporate entity will involve significant risks and changeover process to both the corporation and each council

The Status Quo Model is the next option that will provide the most likely improvement (3 instances) and possible improvement (3 instances). However, it should be noted that one of the main constraints for change in an organisation is the limitation of resources to promote change and the desire for change to occur. Ultimately the promotion of change will be dependent on the councils (and Executives) focus areas, budget constraints and other externalities (such as State legislation).

The Regional Collaboration Model is the third provides the greatest possible opportunities (5 instances). The rating of possible is a reflection of that the Regional Collaboration Model can provide the framework for change but it is still reliant on each of the individual council's implementation of the frameworks.

The Service Delivery Model provided the least impact in the areas identified.

7. Financial Assessment of Alternative Business Models

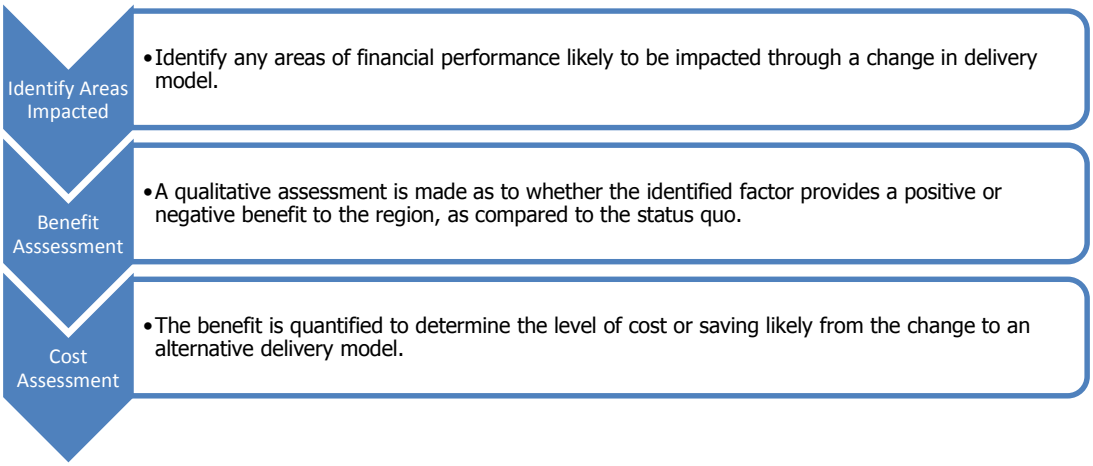
This section evaluates the possible financial impact (both costs and benefits) of each alternative business model (when compared with the status quo).

The financial assessment examines the possible factors affecting operating costs and revenues, their impact under each of the identified business models and a possible financial outcome. This assessment has been undertaken on the basis of impact to the region from the move to a new delivery model for water and sewerage services.

It should be noted that this assessment represents an indicative outcome based on the governance structures identified in this report, and actual outcomes may differ to these estimates.

The financial assessment consists of the following stages:

Figure 7.1: Financial Assessment Process

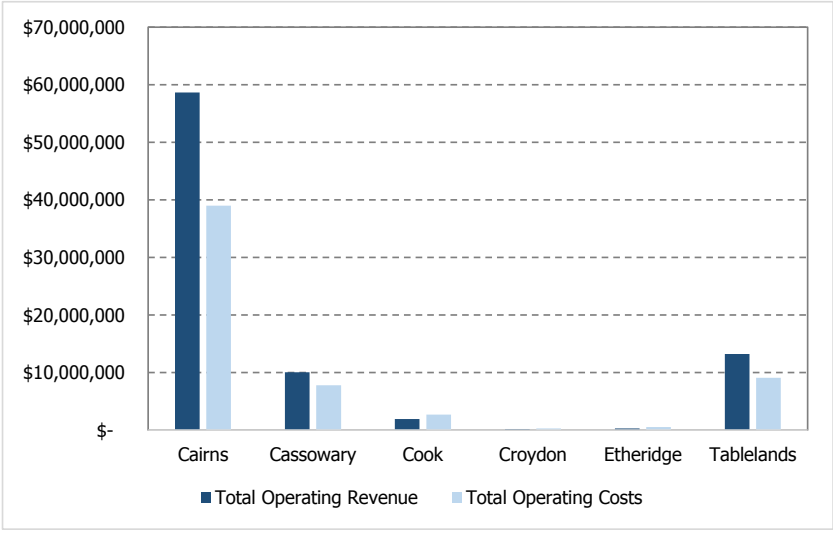


Source: AEC*group*

7.1 Current Financial Performance

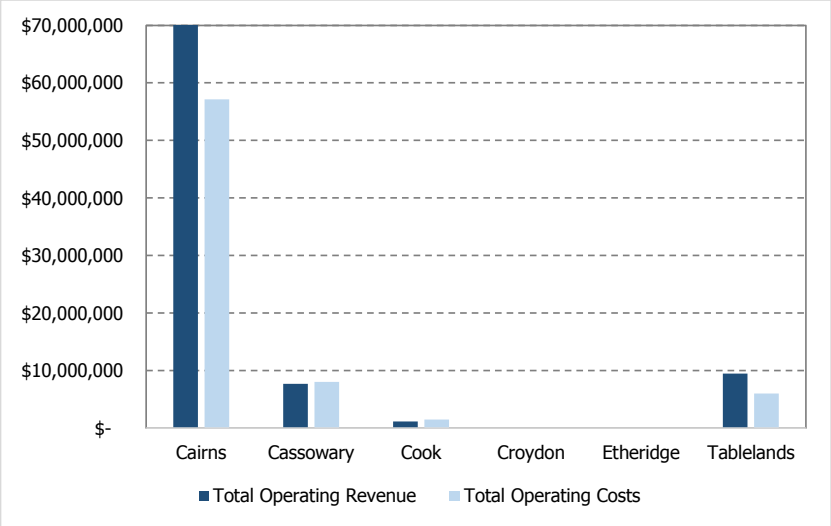
The graphs below summarise the operating position (excluding tax and dividends) of each of the selected water and sewerage activities.

Figure 7.2: Operating Position of Water Supply Activities – 2013/14 Budget



Source: AEC*group*

Figure 7.3: Operating Position of Sewerage Activities – 2013/14 Budget



Source: AEC*group*

The above graphs reveal that only the largest service providers, being Cairns, Tablelands and Cassowary Coast currently generate adequate revenue to achieve an operating surplus. These service providers are large enough to be considered commercial activities under National Competition Policy guidelines and are required to progress towards full cost pricing for water and sewerage charges. However, each of these service providers is at a different stage in progression toward full cost pricing, evidenced by Cairns/Tablelands paying a dividend in the 2013/14 while Cassowary Coast is only marginally recovering costs across both water and sewerage activities.

The smaller authorities of Cook, Corydon and Etheridge are not bound by National Competition Policy guidelines and are not currently generating a surplus for their activities. Any move towards full cost pricing will have significant impacts to these regions' ratepayers.

7.2 Identification and Assessment of Financial Impact

The following table identifies the financial benefit and cost to the region that may occur from a new delivery model for water and sewerage activities.

The Status Quo Model has been excluded from the assessment on the assumption that costs and revenues will not change for this delivery model option.

Table 7.1: Impact and Cost Assessment from a Shift to Alternative Business Models

Factor	Account Types	Regional Collaboration Model	Service Delivery Model	Corporate Entity
Transition	Consultants Wages & Salaries	No transition arrangements are required for the existing council activities. A regional collaboration arrangement will need to be established, preferably as an extension to the current FNQROC arrangements with a special purpose arrangement to ensure that commitment is binding for all members. A minimal amount of legal and other establishment costs are expected,	The transition to a service delivery entity will involve the establishment of a comprehensive service provider contract. Consideration will need to be given to levels of service, standardisation of processes, staff resourcing, etc. Given the restricted activities transferred to a service delivery entity, the transition cost is expected to be much lower than that expected under a corporate entity, at between 15- 25% of a corporate entity's transition costs.	The creation of a new corporate entity will incur significant upfront establishment costs. These costs will not only relate to the amalgamation process, but all to the development of a single set of policies, procedures, systems and processes for the region. This review process provides the opportunity to review all aspects of service delivery from the outset to operate under best practice service delivery conditions. The cost of transition will primarily relate to the larger councils of Cairns, Tablelands and Cassowary coast. The inclusion of the smaller service providers (i.e. Cook, Croydon and Etheridge) will have minimal impact on the transition arrangements. The upfront transition cost is estimated to be $5 million.
	Cost (Financial Assessment)	**Upfront Cost - $50,000**	**Upfront Cost – $1 million**	**Upfront Cost – $5 million**
Governance	Management Costs	A regional collaboration model would be governed through the establishment of a committee through the existing FNQROC arrangement. As a result, no governance costs or savings are anticipated under a regional collaboration model.	A contract review and performance monitoring function will need to be setup to ensure the service delivery entity delivers required outcomes. This will need to be jointly funded by each council. This monitoring function will comprise a contract manager and external consultants as required.	A corporate entity will require the establishment of a board of directors to fulfill the governance function. This board may be comprised of industry and business experts as well as community and council representatives A board of at least 5 directors will be required, costing $60,000 per director plus expenses.
	Cost (Financial Assessment)	**Cost - $0**	**Cost - $150,000**	**Cost - $400,000**

Factor	Account Types	Regional Collaboration Model	Service Delivery Model	Corporate Entity
Operation	Management Wages Administration Wages	The regional collaboration model will require new staff resources to function as an extension to FNQRPC. It is envisaged 3 technical / project management professionals will be required ($100,000 salary per annum) plus one administration resource ($50,000). A further $50,000 will be required for expenses (vehicle, office expenses, etc).	Existing resources will be transferred to the new entity to fulfill operating functions. As a result, no financial impact to operations is expected under the Service Delivery Model.	Existing resources will be transferred to the new entity to fulfill operating functions. As a result, no financial impact to operations is expected under the Service Delivery Model.
	Cost (Financial Assessment)	**Cost - $400,000**	**Cost - $0**	**Cost - $0**
Programs	Wages and Salaries Consultants	In order to address the service delivery outcomes identified in Section 7, special programs will need to be undertaken by the regional collaboration alliance. These will be resourced through external consultants, with direction and assistance from staff as required. It is anticipated that the delivery model will have the capacity to undertake one major project and two smaller projects each financial year, costing $250,000 per annum.	The primary function of the service delivery model is to provide a contractor vehicle to operate and maintain the network. Any improvements required to policies, procedures and strategies to deliver these services at best practice will be addressed as part of the transition. As a result, no costs or benefits have been assessed for programs under this delivery model.	The process of transition to a new corporate entity will involve the redevelopment of all policies, procedures and strategies in line with best practice. As a result, it is anticipated that there will be minimal requirement to invest additional funds to consolidate and improve policies, procedures and processes on an annual basis. The impact under a corporate entity model is nil.
	Cost (Financial Assessment)	**Cost - $250,000**	**Cost $0**	**Cost $0**
Bulk Purchasing Arrangements	Materials Chemicals Electricity Insurance Telecommunications Monitoring Laboratory Security Staff Training Plant Hire Contracts Consultants	Regional collaboration may provide the opportunity to derive further bulk purchasing discounts above the existing benefits derived under FNQROC arrangements. The level of benefit is ultimately dependent on the level of collaboration, but is not expected to exceed a further 2% in savings on all external purchases.	Any impact will be dependent on the level of participation, services contracted and number of staff transitioning to the new service delivery entity. However, it is likely that a service delivery model will at least provide savings to purchases for operating and maintenance functions of at least 2%.	The merging of all services under a single corporatised entity will provide the greatest leverage with all suppliers to provide discounted bulk purchasing contracts. As a result, a 5% savings on all external purchases has been assessed.
	Cost (Financial Assessment)	**Saving – $618,554**	**Saving – $479,226**	**Saving – $1,546,385**

Factor	Account Types	Regional Collaboration Model	Service Delivery Model	Corporate Entity
Human Resources	All Wages	No change is likely to occur to standardize pay rates as enterprise bargaining is unique to each council. In addition, no savings are likely from efficient allocation of resources between councils. Benefits may occur from programs to improve staff training, position descriptions and other retention programs; but these are unlikely to impact on the cost of service provision.	It is expected that the creation of a contract arrangement to deliver operating or maintenance functions may result in some increase to wages costs as pay rates are aligned in the service delivery entity. This cost is anticipated to be no more than 1% of operating and maintenance staff wages. In addition, the establishment of a region wide service delivery entity will provide the opportunity to share resources and streamline service delivery across regions. This will provide savings in the region of 5%. It also needs to be considered that a high possibility exists of staff redundancy to operating and maintenance staff under this model as services merge. The upfront financial impact, which is likely to be borne by each council, is ultimately dependent on the number of redundancies and redundancy arrangement applied. To recognise this possible redundancy cost, a cost of 5% of operating and maintenance wages is recognised.	The transition to a single entity will give rise to a requirement to ensure pay equity for staff working in similar roles (which currently differ between councils). It is likely this will mean in increase to match the highest paying council's rates. This cost is anticipated to be no more than 1% of all wages. In addition, the establishment of a region wide corporate entity will provide the opportunity to share resources and streamline service delivery across regions. This will provide savings in the region of 5% to all salaries and wages costs. However, it should be noted that some risk exists of staff redundancy under this model as services merge. It also needs to be considered that a high possibility exists of staff redundancy to operating and maintenance staff under this model as services merge. The upfront financial impact, which is likely to be borne by each council, is ultimately dependent on the number of redundancies and redundancy arrangement applied. To recognise this possible redundancy cost, a cost of 5% of all wages and salaries expense is recognised.
	Cost (Financial Assessment)	**Cost - $0**	**Cost (Wage Alignment) – $209,057** **Saving (Efficiencies) - $1,045,286** **Net Saving - $836,229** **Possible Upfront Redundancy Cost (Council) - $1,045,286**	**Cost (Wage Alignment) – $319,575** **Saving (Efficiencies) - $1,597,875** **Net Saving - $1,278,300** **Possible Upfront Redundancy Cost (Council) - $1,597,875**

Factor	Account Types	Regional Collaboration Model	Service Delivery Model	Corporate Entity
Corporate Support	Corporate Overheads	No impact under is anticipated this delivery model as corporate support continues to be provided by each Council.	No impact is anticipated under this delivery model as corporate support continues to be provided by each Council.	A corporate entity will cease to use the councils' corporate support service and will establish its own internal corporate services. It is envisaged that the transition will provide opportunity for the corporate entity to deliver a more streamlined level of internal corporate support with a 10% saving anticipated from the $10m currently budgeted for corporate support. However from a council perspective, even though $10m allocation of support services will be transferred to the corporate entity, it is unlikely that the councils will be able to achieve a $10m in savings to corporate support costs. This is due to the nature of corporate service functions, where many costs are fixed or reliant on minimum service level to function. This means that some costs formerly allocated to water and sewerage, will need to be redistributed to other council services. It is anticipated that the councils will only achieve a 70% saving from $10m transferred to the corporate entity. However, over in the longer term it is anticipated that full savings may be achievable through natural staff attrition and service reviews.
	Cost (Financial Assessment)	**Cost - $0**	**Cost - $0**	**Corporate Entity saving - $1 million Council Cost - $3.0 million (offset through 10% savings achieved per annum)**
Other Cost Efficiencies	Other Expenses Internal Charges Plant Hire Community Programs	Improved collaboration is anticipated to provide improved service delivery but it is unlikely to yield efficiencies and savings in terms of the amount of resources required to deliver services.	Improved collaboration is anticipated to provide improved service delivery but it is unlikely to yield efficiencies in the amount of resource required to deliver services.	The merging of all services within a single corporate entity provides the opportunity to review processes and structure to deliver optimal outcomes. This may provide opportunity to deliver some aspects the business more efficiently. This saving is anticipated to be no more than 1% of other expenses.
	Cost (Financial Assessment)	**Saving - $0**	**Saving - $0**	**Saving – $114,318**

Factor	Account Types	Regional Collaboration Model	Service Delivery Model	Corporate Entity
Asset Management	Depreciation Expense	A regional standardized approach to asset management (life, condition, renewal programs) will have a material impact on financial performance due to the councils' funding of depreciation charges. However, the value of cost/(saving) will be dependent on the adopted approach and cannot be quantified at this stage.	No impact under this delivery model as each council continues to apply current asset management processes	A regional standardized approach to asset management (life, condition, renewal programs) will have a material impact on financial performance due to the corporate entity's funding of depreciation charges. However, the value of cost/(saving) will be dependent on the adopted approach and cannot be quantified at this stage.
	Cost (Financial Assessment)	**Cost – not quantified**	**Cost - not quantified**	**Cost - not quantified**
Regional Approach to Pricing	Rates Revenue Dividend and Tax	In terms of a regional approach to pricing, a Regional collaboration programs may deliver improved consistency in the structure of rating charges, but no requirement for change exists under this delivery model for standard values for charges or for each individual Council to further progress towards full cost pricing. In particular, this means there is no driver for the smaller service providers (Cook, Croydon and Etheridge) to increase rates to generate an operating surplus.	No change is likely under this model as councils will continue with current rating structures.	A corporate entity's pricing structure will be strictly driven by National Competition Policy and full cost pricing requirements. The financial impact cannot be quantified at this point as it will be dependent on the adopted pricing approach by the corporate entity (i.e. standard regional pricing, scheme based, etc.). However, it should be noted that the impact to some regions from a corporate entity applying regional pricing will be significant, given some schemes are already generating a surplus and others are operating at a loss.
	Cost (Financial Assessment)	**Cost - $0**	**Cost - $0**	**Cost – not quantified**
Investment Decisions	Interest Revenue Finance Costs	The regional collaboration would not change the available investment and debt mechanisms utilised by councils as these are arrangements unique to each council.	The service delivery model would not change the available investment and debt mechanisms utilised by councils as these are arrangements unique to each council.	A corporate entity may benefit from better investment/debt rates as well as from greater access to debt for future funding. It is anticipated benefit equivalent to 1% decrease in debt rates may occur. However, no change is expected from existing debt arrangements; and these will continue on existing rates until expiry.
	Cost (Financial Assessment)	**Cost - $0**	**Cost – $0**	**Cost – $0**
Sourcing of External Funding	Operating Grants & Subsidies Capital Grants & Subsidies	Regional collaboration may provide better leverage to access capital grants and subsidies as a result of developing a regional framework and stronger consistent regional business case For funding. The benefit has not been quantified.	No change from status quo.	A corporate Entity may provide better leverage to access capital grants and subsidies as a result of developing a regional framework and stronger consistent regional business case For funding. The benefit has not been quantified
	Cost (Financial Assessment)	**Benefit – not quantified**	**Cost – $0**	**Benefit – not quantified**

Source: AEC*group*

7.3 Summary of Financial Impacts

The following tables summarise the costs and benefits from the provision of an alternative business models for water and sewerage services to the region. In assessing this cost/(benefit), the following assumptions have been applied:

- The impact to water and sewerage services has been assessed, followed by impact to councils and the combined impact to the region.
- The current service delivery model is excluded as this represents the baseline status quo and the analysis assumes that costs and revenues will change relative to this baseline.
- Impacts have also been separated into upfront costs and ongoing costs.
- In order to equitably compare outcomes for each delivery model, all costs need to be considered in terms of annual impact. Transition and redundancy represent significant upfront costs and it is uncertain at this stage how they would be funded (e.g. State Government grants, contributions from participating councils or debt). Consequently, a 10 year minimum recovery period has been prescribed.

The following table summarises the financial impact to water and sewerage activities.

Table 7.2: Financial Impact from Alternative Business Models – Water and Wastewater

Item	Regional Collaboration Model	Service Delivery Model	Corporate Entity
Upfront Cost/(Benefit)			
Transition Costs	**$50,000**	**$1,000,000**	**$5,000,000**
Ongoing Cost/(Benefit)			
Governance	$0	$150,000	$400,000
Operation	$400,000	$0	$0
Programs	$250,000	$0	$0
Bulk Purchasing Arrangements	-$618,554	-$479,226	-$1,546,385
Human Resources	$0	-$836,229	-$1,278,300
Corporate Support	$0	$0	-$1,000,000
Other Cost Efficiencies	$0	$0	-$114,318
Asset Management	Not Quantified	Not Quantified	Not Quantified
Pricing	$0	$0	Not Quantified
Investment Decisions	$0	$0	$0
External Funding	$0	$0	$0
Total Ongoing Cost/(Benefit)	**$31,446**	**-$1,165,455**	**-$3,539,003**
Annualised Cost/(Benefit)	**$36,446**	**-$1,065,455**	**-$3,039,003**

Source: AEC*group*

The following table summarises the financial impact to councils.

Table 7.3: Financial Impact from Alternative Business Models – Councils

Item	Regional Collaboration Model	Service Delivery Model	Corporate Entity
Upfront Cost/(Benefit)			
Possible Staff Redundancy Cost	**$0**	**$1,045,286**	**$1,597,875**
Ongoing Cost/(Benefit)			
Inefficient Transfer of Corporate Support (unfunded & redistributed)	$0	$0	$3,000,000
Annual Reduction in Corporate Support Inefficiencies	$0	$0	-$300,000
Total Ongoing Cost/(Benefit)	**$0**	**$0**	**$2,700,00**
Annualised Cost/(Benefit)	**$0**	**$104,529**	**$2,859,788**

Source: AEC*group*

Key Points:

- **Regional Collaboration**: This governance model provides the lowest upfront cost, and is the only delivery model not incurring an ongoing saving. A regional collaboration model will resolve service delivery gaps and improve performance against best practice as programs are implemented; but these will not necessarily result in cost savings. There is no impact to councils assessed.
- **Service Delivery:** A service delivery entity results in water and wastewater activities incurring an ongoing saving and a substantial upfront cost. This is due to a service delivery model achieving some volume based savings and efficiencies, but will result in minimal improvement of service delivery to achieve best practice. Council will also incur an upfront cost from possible operating and maintenance staff redundancies;
- **Corporate Entity:** A corporate entity has the highest upfront cost and will achieve the highest savings for water and sewerage activities. This will be achieved through significant volume based savings and efficiencies; as well focus on best practice service delivery upfront as part of the transition. This model also impacts councils through possible staff redundancy costs and an inefficient transfer of corporate support functions (which may be regained over time).

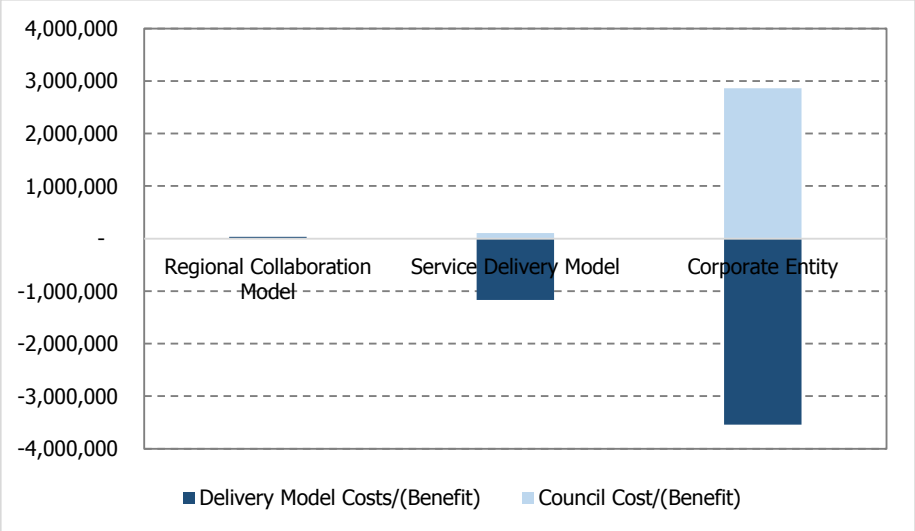
The annualised net cost/(benefit) to water services, council and the region from each proposed alternative business model is summarised in the table and chart below.

Table 7.4: Annualised Regional Financial Impact from Alternative Business Models

Item	Regional Collaboration Model	Service Delivery Model	Corporate Entity
Water and Wastewater Activities	$36,446	-$1,065,455	-$3,039,003
Councils	$0	$104,529	$2,859,788
Total Region Impact Cost/(Benefit)	**$36,446**	**-$960,926**	**-$179,215**

Source: AEC*group*

Figure 7.4: Annualised Regional Financial Impact from Alternative Business Models



Source: AEC*group*

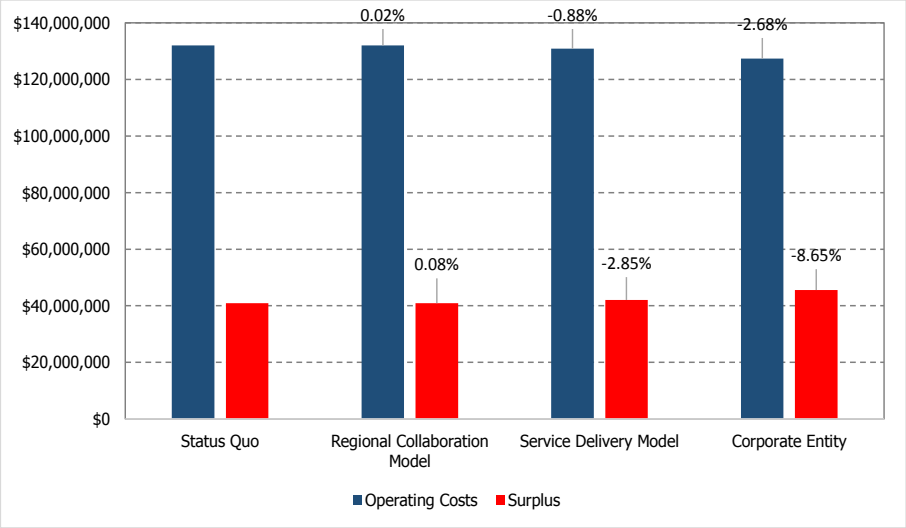
Key Points:

- The above table and chart shows that the Corporate Entity Model has the highest annualised saving for water and sewerage service delivery, but this is offset by the cost incurred by councils (through inefficient transfer of corporate services and possible redundancy). Therefore, from a total regional perspective, the service delivery model provides the largest saving.

To provide context on these outcomes, the following graph summarises the projected operating costs and operating surplus (excluding dividend and tax) from the region's Status Quo Model operation of water and sewerage services as well as from each alternative

delivery models. The impact that total cost/benefit has on operating costs and surplus displayed as a data label (as a percentage of cost/surplus).

Figure 7.5: Operating Costs and Surplus under each Business Model (cost/benefit provided as percentage)



Note: Excludes the impact to councils
Source: AEC*group*

Key Points:

- From a water service provision perspective (excluding impact to council services), the above graphs shows that a Corporate Entity Model provides the greatest saving; with a 2.68% saving to operating costs and an increase to the operating surplus of water and sewerage services by 8.65%.

7.4 Regional Financial Impact Considerations

The cost benefit outcomes reveal that both the Service Delivery and Corporate Entity models will provide financial benefits to the region; with a Regional Collaboration Model resulting in cost increases. Given that the Service Delivery and Regional Collaboration models do not represent any change to ownership, governance and pricing, this saving (cost) is likely to be passed directly onto ratepayers.

However, the Corporate Entity Model will result in a significant shift in ownership, governance and pricing requirements. This presents a significant financial risk for the councils and ratepayers in the region.

A corporate entity will be bound by National Competition Policy requirements to achieve full cost pricing. This means that any benefits and savings may not be passed on through price reductions to water and sewerage levies; and instead be passed onto shareholders as a return on investment. Under a council-owned corporate entity, this saving would form part of an increased dividend and be used to fund other council activities; with some possibility of indirect savings then passed onto ratepayers through the general rate. However, if a State-owned corporate entity is established, no savings will be passed onto the region's ratepayers as any savings and increased dividend would go to the Queensland Government.

It also is uncertain what price path a corporate entity's governing board of directors may adopt for the region, but the 2 key approaches to cost recovery are:

- **Standard Region-Wide Approach:** This approach would result in minimal impacts to pricing for the smaller unprofitable councils (Cook, Croydon and Etheridge), but would mean that the ratepayers in Cairns and Tablelands (which are generating a surplus) would effectively subsidise the provision of water to these smaller councils.
- **Scheme Based Approach:** Under this approach, each council's water and sewerage charges would be progressed toward full cost recovery. This would have negligible

impact for Cairns and Tablelands, but all smaller councils would incur significant increases to water and sewerage charges (Cassowary Coast to a lesser extent; for sewerage activities).

Under a council-owned corporate entity, the adopted approach to shareholding and dividend share may pose a significant risk to the larger councils of Cairns, Cassowary (water component only) and Tablelands who are already pricing to achieve a surplus. Depending on the approach, dividend entitlements for Cairns, Cassowary and Tablelands could be eroded under a corporate entity.

The most common approaches to allocating a return on investment to shareholders is through an equity share, a revenue share or surplus share approach. The following table provides the contribution each council would provide a corporate entity in terms of operating revenue, surplus and equity (written down value of non-current assets applied).

Table 7.5: Share of Revenue, Surplus and Non-Current Assets

Item	Cairns	Cassowary	Cook	Croydon	Etheridge	Tablelands
Surplus Share	77.5%	4.5%	0.0%	0.0%	0.0%	18.0%
Revenue Share	74.6%	10.3%	1.8%	0.1%	0.2%	13.1%
Equity Share	74.2%	11.2%	3.9%	0.9%	0.3%	9.5%

Source: AEC*group*

Key Points:

- **Surplus Share:** Under the current delivery model, each council decides on how the water service's surplus is allocated (i.e. reinvested into capital, held in reserves for future use, or paid as dividend). So the revenue share represents current outcomes under status quo;
- **Revenue Share:** This approach will erode return on investment for Cairns and Tablelands given that, even though the smaller councils are operating at a loss, their contribution to revenue is now recognised. Cassowary, which is currently operating at a loss for sewerage services will also increase entitlements.
- **Equity Share:** This approach may further erode return on investment availability for Tablelands given the more efficient investment in infrastructure needed to service its revenue base compared to the smaller councils.

It should also be noted that a State water corporation will not pass any return on investment to councils, as all shareholding will be held by the State.

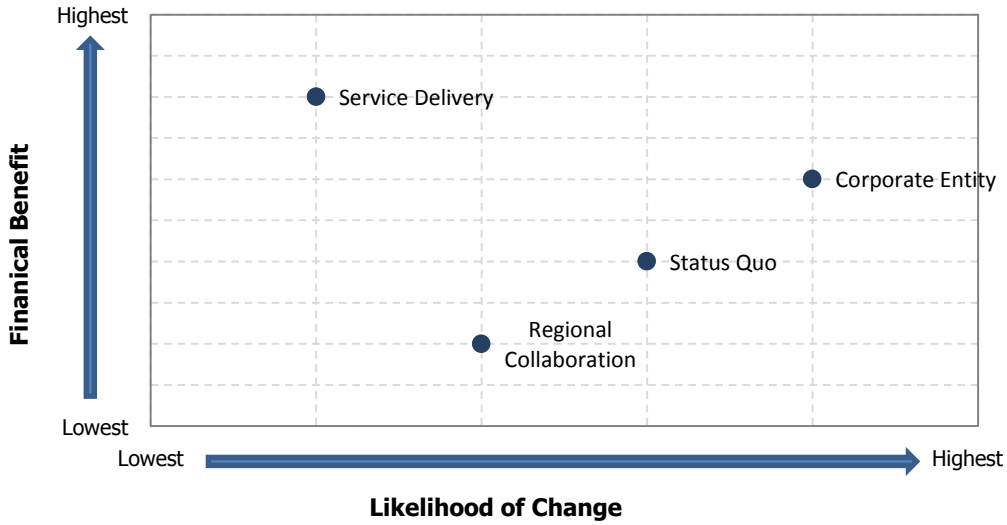
8. Business Model Recommendations

This chapter, based on the findings in the previous sections, provide a recommendation in regard to which of the four business and governance model will promote the greatest likelihood of change and financial benefit.

8.1 Overall Outcome

The assessment has revealed that the **Corporate Entity Model** would promote the greatest likelihood of change and provide an ongoing financial benefit.

Figure 8.1: Assessment Outcome



Source: AEC*group*

This outcomes is based on the premise that the new entity would be created based on a best practice model and therefore would be able to drive economies of scale and operational efficiencies. To achieve this outcome, the new entity would need to have the independence to be able to make appropriate business decisions rather than be constrained by current structures and business frameworks. For example the new entity would determine the required level of resourcing and the remuneration framework, and then proceed to establish the workforce. This may create a negative burden on the existing councils if they are required to redeploy existing staff that are not selected for the new identity. Similarly the new entity would select and implement corporate support structures and systems resulting in inherent redundancy in systems and resources within councils. These factors have been included with in the assessment.

The **Service Delivery Model** is based on efficient operational service delivery resulting in significant potential savings while incorporating some improvement towards best practice. Similar to the Corporate Entity model, the adoption of a Service Delivery approach may result in some inherent redundancy in systems and resources within councils.

The **Regional Collaboration Model** will promote improved progression towards best practice however this may not necessary provide quantifiable cost savings. The implementation of improved practices, and the potential efficiency gains from these will be unique to each council resulting from a combination of their program adoption rate and the quantum of improvement the program facilitates.

The **Status Quo Model** will likely continue to provide some improvements in practices driven by a combination legislative requirements and benefits being driven by the current FNQROC programs. Again progression will be limited by each council's capacity to resource and implement program changes.

The Q-WRAP Scoping Paper also showed that a corporate structure would provide the greatest net benefits. The key issues of governance and planning, human resources and

asset management were identified by Q-WRAP as being most likely to benefit from a corporate structure. This is broadly comparable to this assessment, which identified strategic planning and direction, legislative compliance and human resources as the key beneficial areas from a corporate structure.

8.2 Impact of Other Factors on Corporate Entity Model

In considering a recommendation for most appropriate governance structure for the region's water service providers, other external factors also have to be considered and managed. The most relevant issues for the FNQROC are:

Existing Alliance structure:

Far North councils already have a strong functioning regional organisation in place (FNQROC) which has historically proven to be an effective platform for delivering beneficial outcomes, such as improvements to service delivery (Asset Management program) and produced economies of scale (joint purchasing program).

Issue: The alliance structure would be limited to supporting other council activities and may disappear under the Corporate Entity model or become part a sub set of the Corporate Entity.

Other Queensland Water Service Structures:

The Corporatisation of water services providers has only occurred in a small number of cases in Queensland, with Wide Bay Water being the only regional corporatised Queensland water retail entity. Recent studies and media releases indicate that this sole example of a regional water services corporation has not achieved their original structure review's forecasted economies of scale, and Fraser Coast Regional Council is now considering de-corporatisation for Wide Bay Water. The creation of corporate regional water services in South-East Queensland has resulted in a more complex governance and regulatory environment with the region still to resolve ongoing issues such as pricing.

Issue: There may be resistance to a corporate model based on the past examples in Queensland.

De-amalgamations:

Following referendums in March 2013, both Cairns and Tablelands Councils are in the process of de-amalgamations for their regions. The creation of a corporate water services entity during the de-amalgamation and re-establishment period for these councils this is likely create high levels of risks and significant strain on service delivery for these respective councils.

Issue: Councils will not make any decisions until the de-amalgamated councils are operational.

Social Impacts (Community Perception):

For these regional communities, particularly where a network scheme may service as little as 500 properties, the creation of a corporate entity may impact the community perception of the service, council and the community's ownership of its direction.

Issue: Strong local community opposition in regional communities to Corporate Entity.

Social Impacts (Affordability):

A corporate water services entity may be large enough to trigger higher levels of conformity to the National Competition Policy, with a possible push towards full cost pricing across all schemes in the short-to-medium term. The result is that prices may increase to a point that impacts on affordability for ratepayers in smaller regional communities (where previously it was acknowledged that these schemes were not viable and provided for the community benefit).

Issue: Significant increases in prices for regional communities.

The following table provide an assessment of impact of these factors based a risk-based approach, adapted from the Australian/New Zealand Standard for risk management (Standards Australia, 2009) as outline in Appendix E.

Table 8.1: Assessment of Risk Factors

Issue	Likelihood	Consequence	Risk	Rationale	Mitigation Option
The alliance structure would be limited to supporting other council activities and may disappear under the Corporate Entity model or become part a sub set of the Corporate Entity.	Very high	High Adverse Impact	Very High	The regional alliance benefits will not be available to any councils that remain outside the corporate structure. There may be areas of duplication or conflict between the Corporate Entity and the alliance programs.	Corporate Entity is mandated to include all councils and required to partner with FNROC.
There may be resistance to a corporate model based on the past examples in Queensland.	Moderate	High Adverse Impact	High	The amalgamation and subsequent de-amalgamation of the SEQ water entities and impacts of the consumers has been extensively debated in the media	The resistance could be mitigated by the communication and community consultation undertaken to support the establishment of the Corporate Entity.
Councils will not make any decisions until the de-amalgamated councils are operational.	Very High	Very Adverse Impact	Very High	The decision and option for progression of a change in governance model will be delayed and the drivers for the change may alter over time.	No mitigation strategy
Strong local community opposition in regional communities to Corporate Entity.	Moderate	Moderate Adverse Imapct	Mediu m	The benefits of each governance model varies of each local government.	The resistance could be mitigated by the communication and community consultation undertaken to support the establishment of the Corporate Entity. Councils with limited activity could opt to not be part of the Corporate Entity.
Significant increases in prices for regional communities.	Very High	High Adverse Impact	Very High	The transition to full cost pricing may require the recognition of community subsidisation. The burden for this would need to be borne by the wider community.	Clear pricing policies which identify subsidisation.

Source: AEC*group*

Overall these factors provide a very high risk to the adoption of the Corporate Entity as the governance model. However, all the risks can be mitigated and appropriate mitigation strategies would need to be developed.

8.3 Recommended Governance Structure

Based on the above assessment it is recommended that in the long term, a Corporate Entity structure is the appropriate governance model.

The composition of the Corporate Entity Model should consist of those councils where the water and sewerage activity are a significant activity and therefore Croydon and Etheridge should be excluded from the structure.

In determining the equity structure of a corporate entity, especially in a council shareholding model, it is essential the basis for the allocation of shares is determined on a valid and consistent base. This study has identified a number of areas where the current information basis and processes are insufficient to provide the information that will facilitate an efficient transition. The four key areas that should be are:

- Strategic Asset Management.
- Regional Demand/Supply.
- Legislative Compliance.
- Full Cost Pricing.

8.3.1 Strategic Asset Management

Asset management plans provides the overarching framework for the management of the infrastructure to provide a defined level of service in a sustainable manner. Essential information extracted from the asset management plans such as value of asset base and the condition of the assets are required to determine a comparable value across the regional infrastructure. Other information such as renewal profile and depreciation basis are essential information for the new entity to determine the level of resources required to delivery an efficient operation. As one of the major cost elements, depreciation is a critical factor in the development of full cost pricing. A consistent depreciation framework is required to ensure the depreciation calculation used across the region is equitable.

It is recommended that:

- An agreed SAMP framework is agreed defining the approach to be applied across the region.
- Asset Management Plans are developed in line with the NAMS framework.

8.3.2 Regional Demand and Supply Assessment

One of the core premise of the Corporate Entity Model is the ability to gain efficiencies through the creation of a wider (but not necessary interlined) network across the region. The benefits from this can only be derived once an understanding of how the capacity and supply across the region is aligned to the demand.

The councils have undertaken demand studies for specific communities, and a regional water supply strategy[9] has been developed.

It is recommended that:

- The recommendations from the Far North Queensland Regional Water Supply Strategy are implemented as a regional program.

8.3.3 Legislative Requirements

The legislative requirements of the DWQMS and EMS provide the frameworks for the quality service delivery. The DWQMS:

- Gives details of the infrastructure of the registered service.
- Assesses the hazards and hazardous events that may affect water quality.

[9] Far North Queensland Regional Water Supply Strategy, Department of Environment and Resource Management, March 2010.

- Undertakes a risk assessment and documents the process for managing these risks;
- Outline day-to-day operational requirements, including:
  - How mandatory criteria will be monitored.
  - How operational and verification monitoring will be conducted.
  - Reporting arrangements to ensure safe water.

Currently the councils across the region are at varying levels of implementation of these frameworks. Although each council may have a different level of response, the provision of this information should form one of the key decision basis for the determination of the composition of the corporate entity.

It is recommended that:

- DWQMS and EMS are developed and implemented before the corporate entity is established.

8.3.4 Full Cost Pricing

To understand the full implications of the cost and funding of schemes across the region, particularly in terms of cross subsidisation, a full cost pricing assessment on each scheme is required.

This will provide the transparency of the financial sustainability of each scheme and allow identification of the issues of cross subsidisation between rural, remote and urban schemes.

It is recommended that:

- A full cost pricing framework is agreed defining the approach to be applied across the region.
- Full cost pricing assessment are undertaken for each scheme.

8.4 Recommendations for Regulatory/Policy Environment

In order for the water services industry in Far North Queensland to optimise performance and service delivery, it is essential that it exists in 'smart' regulatory environment which focuses on:

- Establishing leadership and governance.
- Reducing the existing stock of regulation.
- Streamlining and making business appropriate compliance and reporting requirements.
- Improving the quality of new regulation.
- Improving the water industry-government interface.

This review identified 2 key issues that appear to affect the region's ability to operate in a 'smart' regulatory environment:

- Firstly, this assessment revealed that the SWIM data appears to lack quality assurance and is viewed purely as a compliance exercise by council. The current program which is underway to streamline the SWIM data requirements into one format and one data set will be welcomed by councils. However, councils themselves have a responsibility to ensure the quality of the data provided, as there are potential future benefits from having a reliable regional information base.
- Secondly, the lack of direction in regard to the replacement of the SAMP with AMPs has resulted in some councils delaying the process of reviewing, replacing or updating their asset plans; given they are relucent to invest in new strategic documents that may ultimately need to be changed or modified.

8.5 Transition Plan

It is not practical to outline a detailed transition plan until there is resolution of the future governance structure.

However based on the above recommendations, it is envisaged that the region would require a lead period of at least three years to prepare for the transition to a Corporate Governance Model.

The following provides an outline of a high level transition plan:

Table 8.2: High Level Transition Plan

Action	Timeframe	Lead Agency
Outline of Proposed Corporate Structure developed	March 2014	Qldwater
Risk Management Plan Developed	March 2014	Qldwater
Briefing paper developed	March 2014	Qldwater
Resolution of consideration of governance structure	June 2014 (in consideration of the current de-amalgamation process)	Qldwater
Community Consultation	July 2014 – Sept 2014	Councils/Qldwater
Regional Water Supply Strategy recommendations implemented	Ongoing	Each Council
Implementation of DWQMS and EMS	June 2014	Each Council
Full Cost Pricing Assessment	June 2014	FNQROC
Strategic Asset Management	December 2014	FNQROC
Detailed Implications Assessment undertaken on each Council	October 2014 – November 2014	Qldwater
Council decision on Governance Structure	December 2014	Councils
Implementation of transition Plan	January 2015 – June 2016	Qldwater
New Entity	July 2017	

Source: AEC*group*

In the interim, the FNQROC should continue to promote and lead programs for the region. In particular, an expansion of the current ROC programme to include additional support for standardisation via the use of templates, joint programs of work across the region such as the Asset Management Plan and a strong use of regional knowledge via the use of joint recruitment and training programs. These activities would provide an outcome that offers immediate benefits without the cost of structure change.

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Appendix A: Audit Reports

Attached as separate documents

- Cook Shire Council Audit Report.
- Tablelands Regional Council Audit Report.
- Croydon Shire Council Audit Report.
- Cassowary Coast Regional Council Report.
- Cairns Regional Council Audit.

Appendix B: Water and Wastewater Utility Charges 2012-13

Water Utility Charges

Table B.1: 2012-13 Tablelands Region Water Utility Charges

Scheme	Access Charge	Consumption Charge	Notes
Atherton, Walkamin & Tinaroo Park	Residential: $316.10 Home Occupation: $160.30 Small Business / Metered Common Properties: $316.10 Commercial: $608.60	0-400kL = $0.16/kL 401-1,000kL = $0.46/kL >1,000kL = $0.72/kL	• The first tier threshold is an annual equivalent, with the consumption charge calculation based on a first tier threshold allowance of 200kL per six months • Vacant land able to be connected to the water supply is charged at $316.10 per annum
Malanda, Milla Milla, Yungaburra	Residential: $633.10 Small Business / Not Connected / Metered Common Properties: $315.90 Commercial (Light Industry): $633.10 Other Business / Industrial / Others: $1,273.40 Large Business: $3,438,10 Major Consumer: $16,206.70	0-500kL = $0.10/kL 501-2,500kL = $0.42/kL >2,500kL = $0.98/kL	• The first tier threshold is an annual equivalent, with the consumption charge calculation based on a first tier threshold allowance of 250kL per six months • Vacant land able to be connected to the water supply is charged at $315.90 per annum
Mt Garnet, Herberton, Ravenshoe, Millstream	Residential: $576.40 Small Business: $368.10 Commercial (Light Industry): $576.40 Other Business / Industrial / Other: $966.50 Large Business: $2,373.10 Major Consumer: $4,830.70	0-900kL = $0.06/kL 901-2,800kL = $0.41/kL >2,800kL = $1.16/kL	• The first tier threshold is an annual equivalent, with the consumption charge calculation based on a first tier threshold allowance of 450kL per six months • Vacant land able to be connected to the water supply is charged at $368.10 per annum
Chillagoe	Residential: $336.80 Industrial Water: $3,740.20	0-400kL =$0.34/kL >400kL = $1.09/kL	• The first tier threshold is an annual equivalent, with the consumption charge calculation based on a first tier threshold allowance of 200kL per six months • Vacant land able to be connected to the water supply is charged at $336.80 per annum
Dimbulah	Residential: $296.30 Industrial Water: $3,740.20	0-645kL = $0.23/kL >645kL = $0.81/kL	• The first tier threshold is an annual equivalent, with the consumption charge calculation based on a first tier threshold allowance of 322.5kL per six months • Vacant land able to be connected to the water supply is charged at $296.30 per annum
Mareeba	Residential: $344.90 Industrial Water: $3,740.20	0-550kL = $0.54/kL >550kL = $1.10/kL	• The first tier threshold is an annual equivalent, with the consumption charge calculation based on a first tier threshold allowance of 275kL per six months • Vacant land able to be connected to the water supply is charged at $344.90 per annum

Scheme	Access Charge	Consumption Charge	Notes
Kuranda	Residential: $422.50 Industrial Water: $3,740.20	0-300kL = $0.34/kL >300kL = $0.87/kL	• The first tier threshold is an annual equivalent, with the consumption charge calculation based on a first tier threshold allowance of 150kL per six months • Vacant land able to be connected to the water supply is charged at $422.50 per annum
Mt Molloy	Residential: $385.50 Industrial Water: $3,740.20	500kL = $0.34/kL >500kL = $1.10/kL	• The first tier threshold is an annual equivalent, with the consumption charge calculation based on a first tier threshold allowance of 250kL per six months • Vacant land able to be connected to the water supply is charged at $385.50 per annum
Untreated Water	Residential : $344.90 Non-Residential: $344.90	0-3,000kL = $0.08/kL >3,000kL = $0.37/kL	• The first tier threshold is an annual equivalent, with the consumption charge calculation based on a first tier threshold allowance of 1,500kL per six months

Source: Tablelands Regional Council Budget 2012-13

Table B.2: Cook Shire Water Utility Charges 2012-13

Scheme	Access Charge	Consumption Charge	Notes
Cook Shire	Residential: $450.00 Commercial: $450.00	$1.75/kL	• Vacant land able to be connected to the water supply is charged at $700.00 per annum

Source: Cook Shire Council Budget 2012-13

Table B.3: Etheridge Shire Water Utility Charges 2012-12

Scheme	Access Charge	Consumption Charge	Notes
Georgetown	Residential: $404.26	0-700kL = 0.50/kL >700kL = $1.25/kL	• Vacant land able to be connected to the water supply is charged at $202.14 per annum
Forsayth	Residential: $692.20	0-700kL = 0.80/kL >700kL = $1.75/kL	• Vacant land able to be connected to the water supply is charged at $346.10 per annum

Source: Etheridge Shire Council Budget 2012-13

Table B.4: Cassowary Coast Water Utility charges 2012-13

Scheme	Access Charge	Consumption Charge	Notes
Northern	Residential: $435.00	0-500kL = 0.80/kL >500kL = $1.50/kL	• The first tier threshold is an annual equivalent, with the consumption charge calculation based on a first tier threshold allowance of 250kL per six months • Vacant land able to be connected to the water supply is charged at $435.00 per annum
Southern	Residential: $440*	0-500kL = nil 501-1,000kL = $0.80 >1,000kL = $1.50/kL	• The first tier threshold is an annual equivalent, with the consumption charge calculation based on a first tier threshold allowance of 250kL per six months • Vacant land able to be connected to the water supply is charged at $440.00 per annum

Note: *Based on 10 units of allocation at a rate of $44 per unit which includes 50kL of water per unit
Source: Cassowary Coast Regional Council Budget 2012-13

Table B.5 Cairns Region Water Utility Charges 2012-13

Scheme	Access Charge	Consumption Charge	Notes
Cairns Region	Potable: $232.80 Recycled: $57.10	Residential Usage Charge: 1.05/kL Commercial Usage Charge: $1.12/kL	• Vacant land able to be connected to the water supply is charged at $232.80 per annum

Source: Cairns Regional Council Budget 2012-13

Table B.6: Croydon Shire Water Utility Charges 2012-13

Scheme	Access Charge	Consumption Charge	Notes
Croydon Region	Residential: $328.00	$0.70/kL	• Vacant land able to be connected to the water supply is charged at $164.00 per annum

Source: Croydon Shire Council Budget 2012-13

Table B.7: Tablelands Wastewater Utility Charges

Location	Type of Premises	Sewerage Charge
Atherton and Atherton Industrial Estate (Tolga) Sewerage	Residential: Primary pedestal Additional pedestals	 $600.00 $0.00
	Vacant land (per parcel)	$480.00
	Premises not connected (per parcel)	$480.00
	Non-Residential: Primary pedestal Additional Pedestals	 $600.00 $600.00
Tinaroo Sewerage	Residential: Primary pedestal Additional pedestals	 $600.00 $0.00
	Vacant land (per parcel)	$480.00
	Non-Residential: Primary pedestal Additional pedestals	 $600.00 $600.00
Yungaburra Sewerage	Residential: Primary pedestal Additional pedestals	 $600.00 $0.00
	Vacant land (per parcel)	$480.00
	Non-Residential: Primary pedestal Additional Pedestals	 $600.00 $480.00
Kuranda and Myola Sewerage	Residential: Primary pedestal Additional pedestals	 $600.04 $0.00
	Vacant land (per parcel)	$514.32
	Premises not connected	$514.32
Malanda Sewerage	Residential: Primary pedestal Additional pedestals	 $600.00 $0.00
	Vacant land (per parcel)	$315.00
	Premises not connected	$315.00
Mareeba Sewerage	Residential: Primary pedestal Additional pedestals	 $600.00 $0.00
	Vacant land (per parcel)	$480.00
	Premises not connected	$480.00
Ravenshoe Sewerage	Residential: Primary pedestal Additional pedestals	 $600.00 $0.00
	Vacant land (per parcel)	$315.00
	Premises not connected	$315.00

Source: Tablelands Regional Council Budget 2012-13

Table B.8: Cassowary Coast Wastewater Utility Charges

Scheme	Type of Premises	Charge
Innisfail	Single unit residences and each unit within a multiple unit complex: Primary pedestal Additional pedestals	 $825.00 $0.00
	Vacant land	$660.00
	All other buildings including premises not connected: Primary Pedestal Additional Pedestals	 $825.00 $660.00
Mission Beach	Single unit residences and each unit within a multiple unit complex: Primary pedestal Additional pedestals	 $725.00 $0.00
	Vacant land	$580.00
	All other buildings including premises not connected: Primary Pedestal Additional Pedestals	 $725.00 $580.00
Tully	Single unit residences and each unit within a multiple unit complex: Primary pedestal Additional pedestals	 $700.00 $0.00
	Vacant land	$560.00
	All other buildings including premises not connected: Primary Pedestal Additional Pedestals	 $700.00 $560.00

: Cassowary Coast Regional Council Budget 2012-13
Note: Based on residential single unit residences and each unit within a multiple unit complex

Table B.9: Cook Shire Wastewater Utility Charges 2012-13

Scheme	Type of Premises	Charge
Cooktown	Primary pedestal	$798.00
	Additional pedestals	$0.00
	Vacant land	$798.00
Coen	Primary pedestal	$920.00
	Additional pedestals	$0.00
	Vacant land	$920.00

Source: Cook Shire Council Budget 2012/13

Table B.10: Cairns Wastewater Utility Charges (2012-13)

Scheme	Type of Premises	Charge
Cairns Region	Primary pedestal	$696.86
	Additional pedestals	$0.00
	Vacant land	$554.80
	Commercial Charge (Per Water Closet)	$596.20

Source: Cairns Regional Council Budget 2012-13

Appendix C: Background Literature

National Water Initiative

In recent years, the prolonged drought across Australia and subsequent acknowledgement of the impacts of climate change on water availability has resulted in the drive for further water reforms across the nation. A National Water Initiative agreed to by governments across Australia has been designed to achieve a more cohesive national approach to the way Australia manages, measures, plans for, prices, and trades water.

The overall objective of the National Water Initiative is to achieve a nationally compatible market, regulatory and planning system of managing surface and groundwater resources for rural and urban use that optimises economic, social and environmental outcomes.

The National Water Initiative agreement includes outcomes and commitments to specific actions across eight inter-related elements of water management:

- Water access entitlements and planning.
- Water markets and trading.
- Best practice water pricing.
- Integrated management of water for environmental and other public benefit outcomes.
- Water resource accounting.
- Urban water reform.
- Knowledge and capacity building.
- Community partnerships and adjustment.

Productivity Commission Public Inquiry into Australia's Urban Water Sector (April, 2011)

The Australian Government's Productivity Commission undertook an inquiry into the urban water sector. The intention of the inquiry was to identify opportunities for efficiency gains in the structural, institutional, regulatory and other arrangements that govern the urban water sector across the nation.

A number of recommendations were released by the Productivity Commission contained in its final report released in August 2011. Of particular relevance to regional local governments in the draft report are the following key recommendations:

Table C.8: Productivity Commission Recommendations

Recommendation	Description
Chapter 6 – Pricing of Water and Wastewater	
Recommendation 6.2	All new single and multi-unit dwellings should have separate water meters installed. The case for retro-fitting existing single and multi-unit dwellings with separate metering technology should be assessed by utilities.
Recommendation 6.3	Utilities should charge tenants directly for all water charges, both fixed and volumetric, where water is separately metered. Where this does not already occur, State and Territory Governments might need to put in place transitional arrangements to ensure that savings to landlords are passed through to tenants.
Recommendation 6.4	Where metering is in place, charges should include a volumetric component using a two-part tariff. Greater choice in tariff offerings should be available to water consumers. This would allow consumers to express their preferences on security of supply and price stability.
Chapter 7 – Non Price Demand Management	
Recommendation 7.1	The prescribed use of water restrictions should be the exception, limited to emergencies and of short duration. Utilities, not governments, should make decisions on when to prescribe restrictions, subject to supply obligations set out in utility governance charters.
Chapter 13 – Reform in Regional Areas	
Recommendation 13.2	The governments of New South Wales and Queensland should consider the merits of aggregation of regional water utilities, case by case, based on:

Recommendation	Description
	• Identification of the affected utilities • Preferring grouping of utilities, in consultation with Local Governments, affected communities and other parties • The relative merits of alternative organisational structures, including the county council and public corporation models Where the expected benefits of horizontal aggregation do not outweigh the costs, governments should consider the case for establishing regional alliances.
Recommendation 13.4	If State and Territory Governments choose to subsidise the provision of water supply and wastewater services in regional areas, the relative merits of alternative supply options for these customers (including moving to a system of self-supply) should be considered. The case for providing financial incentives for reform, and assistance for affected local councils should be determined by State and Territory Governments. If assistance is provided, it should be transitory and limited to impacts resulting directly from reform implementation

Source: Productivity Commission (2011)

Recent Structural Reforms in South-East Queensland

There have been considerable structural reforms in the SEQ region. Ownership and control of bulk water assets have been removed from local government with the Queensland Government now accountable for regional water supply security in SEQ and bulk water assets now in the hands of state-owned water entities.

Institutional reform has also been applied to the water and sewerage retail and distribution network, whereby two regional distribution and retail entities now own the water and sewerage reticulation pipes, reservoirs, pumps etc (i.e. all non bulk transport assets) and sewerage treatment plants, as well having ongoing responsibility for billing, customer information and customer service aspects. The two entities are wholly owned by the SEQ local governments, effective from 1 July 2010, and have been structured as follows:

- Queensland Urban Utilities (Brisbane, Scenic Rim, Ipswich, Somerset, Lockyer Valley).
- Unitywater (Sunshine Coast, Moreton Bay).

A third entity, Allconnex Water, was initially established that included the distribution and retail assets of Gold Coast, Logan and Redland Councils. In April 2011, the Queensland Government announced that Councils in SEQ with equity shares in the three distribution and retail entities were no longer required to participate in the new entity arrangements, with councils able to take back responsibility for water and sewerage services should they so desire (effectively allowing the new entities to be disbanded). As a result Gold Coast City Council opted to take back control of its water and wastewater activities, with Allconnex subsequently being disbanded following the decision by Logan and Redlands to also resume control of water and wastewater service provision in their respective regions.

New legislation was also enacted (the *South-East Queensland Water (Distribution and Retail Restructuring) and Natural Resources Provisions Act 2009*) to govern the operation of the new SEQ entities. Although Allconnex Water has since been disestablished, the water and wastewater business of Gold Coast, Logan and Redland still must comply with the legislative provisions contained in the Act.

The Queensland Government also capped retail water price increases in SEQ at inflation for the 2011/12 and 2012/13 financial years. The price capping does not apply however to bulk water costs charges passed through by the State Government to the two distribution and retail entities and three Council business activities.

Recent Structural Reforms Across Australia

There have been ongoing reforms to the water sector nationally over the past 15 years, with the number of water suppliers falling and the size of water suppliers increasing. State or Territory Government Corporations have generally been established in metropolitan areas, although additional significant reforms in both Tasmania and regional New South Wales appear to be focused around local government-owned corporations.

In Tasmania, water and sewerage services have been consolidated into three council-owned regional water and sewerage corporations (Northern, Southern and North-Western) and a fourth Common Services corporation to provide services to each of the three regional corporations. Each corporation has expert boards selected on the basis of their technical

and professional expertise and experience. An economic regulator independently set prices, sets minimum customer service standards and monitor the performance of the businesses. Each council owns an equal number of shares in the regional corporations with rights to differ only with respect to the payment of dividends. Legislation ensures the new businesses cannot be privatised.

In New South Wales, State-owned water corporations have been responsible for supply to metropolitan areas for quite some time, but a recent review into the appropriate institutional arrangements for supply to regional and country areas has been completed. The outcomes of the review include aggregating the 106 current local water utilities into 32 regional groups, with three organisational structure options under consideration:

- Binding alliance (for planning and technical functions).
- Council-owned regional water corporation.
- Status quo for some large general purpose councils and county councils.

The "binding alliance" and "status quo" options allow councils to retain ownership and management of water supply and sewerage assets and to continue providing customer services. The "council-owned regional water corporation" option involves the transfer of water supply and sewerage assets, related staff and service delivery responsibilities from councils to the corporation. Councils that are the beneficiaries of the corporation's services would be the only shareholders of the corporation. Local water utility prices must also be approved by an independent body. Submissions in relation to the independent inquiry report and subsequent recommendations were sought by the NSW State Government before any final announcements were made regarding final business structures. It was expected that the NSW State Government would release its response to the recommendations of the review sometime in 2010. To date no response has been released.

Queensland Water Regional Alliances Program (Q-WRAP) Scoping Paper (June, 2012)

Q-WRAP, developed in response to criticism of the Queensland urban water sector contained in recent national reviews, is an initiative to investigate a range of matters including institutional models for urban water services in regional Queensland.

The national reviews have confirmed that urban water service providers in Queensland are facing significant and increasing challenges in the provision of sustainable water supply and wastewater services.

The Q-WRAP program has received seed funding for two years from the State Government and is developing co-investment from Councils in three pilot regions. A scoping paper has been developed for the program that focuses on:

- The rationale (drivers) for considering alternative industry arrangements for the regional urban water industry.
- An overview of potential models for the sector.
- Assessment of state wide factors impacting alternative models.

The following outcomes were evident from the scoping paper:

Table C.2: Q-WRAP Scoping Paper Outcomes

Focus	Outcomes
Drivers for considering different institutional arrangements	• Obvious that not one single model of cooperation or approach will be beneficial across all regions and communities • Key issues and challenges driving the need for change include: WATER SECURITY o Residential water use in Queensland is significantly higher than national averages o Beyond efficiency measures, waters security issues must be managed through infrastructure investment, with regional or state level planning the most efficient and effective method DRINKING WATER QUALITY o Drinking water quality concern has been a driver for institutional change in other jurisdictions (i.e. Tasmania). o Queensland data suggests that compliance with microbiological guidelines is good though not universal o Regardless of institutional model, disease outbreaks are the responsibility of local water supply managers REGULATORY COMPLIANCE o Regulatory requirements have increased markedly since 2000 with a heavy emphasis on statutory planning o Too early to determine if institutional arrangements are a factor in small service providers struggling with regulatory compliance requirements o Financial sustainability questions regarding cross subsidisation between communities, funding of infrastructure maintenance and replacement, and level of service standards transcend institutional arrangement arguments SKILLS SHORTAGES o Attracting and retaining appropriately skilled water and wastewater staff is becoming increasingly difficult due to a relatively small, widely dispersed industry competing with higher paying industries o Institutional change will not address practical problems associated with the ability to implement regional skill sharing arrangements EFFICIENCY o There is no current method to determine the efficiency of the current industry due to the lack of formal benchmarking or performance assessments o Information for comparative competition is restricted to DLG statistical reports, although information flow is improving steadily through reports produced by the state wide water information management system (SWIM) o Assessments of economies of scale from aggregation of water utilities must take into account the impacts of distance and remoteness although evidence exists for advantages to be realised with respect to seeking a critical mass in strategic management OTHER o Other factors such as climate change, demographic shifts, and better planning have been raised as pressures potentially requiring institutional reform o It is not clear which models will be best placed to deal with other factors to ensure resilience in the water sector
Potential alternative models	• Twelve potential models were analysed regarding their appropriateness for Queensland regions o Council owned and operated o Council owned and operated (arms length commercialisation) o Individual Council owned corporation o Regional alliance o Mandatory (binding) regional alliance o County Council (with service provision only) o County Council (including asset ownership) o Joint Council owned regional corporation or statutory authority o State owned regional water authority o Single state wide agency o Government owned with significant outsourcing o Privatised water utility

Focus	Outcomes
Alternative model assessment	• Assessment of each models relevance was restricted to a high level analysis against broad assessment criteria • Criteria included improved service and customer focus, public health and environmental accountability, Council and community sustainability, best practice governance, optimised management and planning, sustainable staff, asset planning and management, improved regional planning and reduction of transaction costs • Models assessed included Status Quo (small and large Councils), Regional Alliances (collaborations and a separate entity), Council owned regional water corporations and State owned regional water corporations • The three regional utility models scored similarly and ranked highest on most criteria (although these models ranked lower for customer focus reflecting the centralisation of management away from communities serviced)

Source: Scoping paper – Parameters of the Review program and Institutional Models (LGAQ and QWater, 2011)

Infrastructure Australia Review of Regional Water Quality and Security (October, 2010)

This study was commissioned by Infrastructure Australia in order to review the compliance and performance of smaller regional water utilities across Australia.

The study analysed the infrastructure and services of a sample of regional towns servicing between 2,000 and 15,000 residents with a reticulated water supply. Key outcomes and recommendations of the report aimed at addressing the systemic and institutional constraints to providing high quality and secure water supply to regional areas is provided in Table C.3.

Table C.3: Infrastructure Australia Review of Regional Water Quality and Security Outcomes

Focus	Outcomes
Review Findings	• Less than full cost recovery is a common feature of water utilities servicing regional areas contributing to poor water security and safety • Insufficient and declining ratepayer base to support the capital cost of infrastructure in many regional areas • Absence of the necessary skills, experience and knowledge of urban water delivery in many regional communities • Catchment-based water sharing plans are currently the most effective approach to sharing water resources between user groups and the environment • Cross subsidisation via the postage stamp method is applied by virtually all major urban water utilities. This solution is unfavoured by larger communities which ultimately pay more for water to ensure neighbouring towns are adequately serviced

Recommendations	• Move to more cost reflective water pricing
	• Implement a nationally consistent Best Practice Management Framework for all regional water utilities
	• Mandate compliance with Australian Drinking Water Guidelines through legislation and/or regulation
	• Develop a nationally consistent trade qualification for operating and maintaining water systems
	• Governance arrangements for water utilities in NSW and Queensland to move to a catchment basis. Benefits would include:
	  ○ Larger, regionally significant utilities would be more likely to attract highly skilled water staff
	  ○ A relatively larger customer base allowing utilities to fund capital works with a smaller impact on individual residential water bills
	  ○ Utilities would be large enough to justify oversight by existing independent pricing regulators
	• Transfer governance model from Local Government to Government-owned Regional Water Corporations

Source: AECOM (2011)

National Water Commision Urban Water in Australia: Future Directions (April, 2011)

This report was commissioned by the NWC in response to concerns raised in the NWC 2007 and 2009 biennial reports over the performance of the urban water sector in implementing the reforms of the National Water Initiative. The report aimed to review the current state of the urban water sector and to provide clear guidance on the need for and direction of urban water reforms across Australia.

The key findings of the report are provided in the table below:

Table C.4: Urban Water in Australia Key Outcomes

Focus	Outcomes
Current Sector Performance	• Current urban water sector is poorly equipped to meet future industry security and quality challenges, identified issues include: ○ Consumers are subjected to monopoly pricing with very limited competition ○ Ad hoc restrictions and other non-price demand management systems implemented throughout the drought created significant economic, social, and environmental costs ○ Poor capacity and resourcing or rural and regional service providers to meet increased water security and quality requirements ○ Poorly defined institutional roles for planning and investment and political motivations have lead to poor infrastructure investment decisions ○ Lack of transparency and customer engagement in establishing service levels ○ Inefficient and inconsistent regulation of water quality and environmental outcomes
Urban water reform recommendations	• Further reforms are clearly required nationally in order to address key contemporary challenges such as climate change, rapid population growth, rising costs, and aging infrastructure • Undertake reforms in regional, rural, and remote areas to ensure that there is sufficient (organisational, financial, technical and managerial) capacity to meet service delivery requirements and protect public health and the environment • Full implementation of independent economic regulation across Australia is needed to protect customers from monopoly pricing, promote efficient investment, and ensure service standards • Governments to ensure that service providers, regulators and other parties have clear objectives and accountabilities • Deliver a greater voice for customers regarding tariff choices, and standard of service / pricing trade-offs • Governments and regulators should use pricing to promote economic efficiency and more accurately reflect the value of water • Governments should encourage supply and demand-side measures, without direct and ad hoc government intervention • Governments, regulators and service providers should increase market-oriented options to promote efficiency and innovation • Governments and regulators should better embed mandatory benefit-cost analysis and community engagement in the regulation of public health and the environment to ensure that obligations are cost-effective and reflect community expectations • Governments and service providers should clarify the roles and responsibilities of service providers and other organisations in contributing to more liveable communities

Source: National Water Commission (2011)

Qldwater Comments on the Productivity Commision Australia's Urban Water Sector with Relevence to the Queensland Water Industry (2011)

This report was compiled in response to the Productivity Commission's 2011 Australia's Urban Water Sector Draft Report by the Queensland Water Directorate (*qldwater*). While broadly supporting the Productivity Commission's recommendations, the response highlights several key areas of relevance to regional Queensland summarised in the table below.

Table C.5: Qldwater response to Productivity Commission Inquiry Outcomes

Focus	Outcomes
Horizontal aggregation of regional water service provision	• Potential scale benefits for through aggregation, including: ○ Scale economies arising though: ▪ Shared resources (including skilled labour, administrative functions, and corporate services) ▪ Scale in procurement, administration and training ▪ Greater potential to access debt capital to fund infrastructure works • Potential risks and costs, including: ○ Loss of scale economies across local government functions ○ Loss of jobs in regional areas due to centralisation of operations ○ Potential loss of focus on the needs of individual communities ○ Potential for significant cross-subsidisation between aggregated councils • The potential for scale economies through aggregation may be moderate in regional areas where the distance between schemes is significant

Focus	Outcomes

	• Many of the viability challenges created by the small size and remoteness of many regional communities are unlikely to be solved through amalgamation
	• Impractical to assess indigenous community services on the same metrics as non-indigenous communities, due to intrinsic differences, including:
	  ○ Often there is no water rates in indigenous communities with bulk funding provided from State and Federal sources without allocation of funds to water and wastewater services
	  ○ Acute difficulties sourcing skilled labour in remote indigenous communities
	  ○ A lack of price signals for water, compounded by cultural perceptions in some communities of water as a free resource

Source: Qldwater (2011)

Queensland Department of Energy and Water Supply 30 year Water Strategy Discussion Paper (2012)

This discussion paper was released in late 2012 for a three month public consultation period which will serve to inform Queensland's 30 Year Water Supply Strategy to be released in 2013. The aim of the paper is to generate discussion on:

- The Current position of the Queensland Water Sector.
- Desired future directions.
- Actions to be taken to achieve the water vision.

Key areas and current recommendations considered in the discussion paper are summarised in the table below.

Table C.6: Queensland 30 year Water Strategy Discussion Paper Outcomes

Area of Focus	Key Outcomes
Key Current Issues	• Reliance on climate dependent supplies • Seasonal shortages in some areas • Limited use of alternative supplies (stormwater, recycled water, desalination etc) • Complex institutional/regulatory frameworks with multiple departments • Difficulty attracting and retaining the skilled workforce needed to comply with increased regulations • Prevalence of two-part pricing structures which often discourage water conservation

Water business sustainability	• Small and medium service providers find that the size of their organisation affects their capacity to deliver services, due to:
	  ○ Low revenue base and difficulty in investing in people and solutions
	  ○ Difficulty attracting and retaining staff
	  ○ Difficulty responding to regulatory obligations, increases in cost of water and community expectations

Future Recommendations	• A move to integrated planning and investment at a whole of catchment level to reduce the burden on individual service providers • Consideration of regional alliances and shared infrastructures through Q-Wrap • Regulatory framework which encourages innovation • Move from heavy reliance on fixed access charge funding to encourage water conservation • Greater water industry recognition

Source: Queensland Department of Energy and Water Supply (2012)

Report of the Independent Inquiry into Secure and Sustainable Urban Water Supply and Sewerage Services for Non-Metropolitan NSW (2008)

This inquiry was undertaken throughout 2008 in order to build upon the agenda of the National Water Initiative by providing recommendations to reform the provision of water supply and sewerage services to non-metropolitan NSW.

The key findings and recommendations of the inquiry are provided in the table below:

Table C.7: Report of the Independent Inquiry into Secure and Sustainable Urban Water Supply and Sewerage Services for Non-Metropolitan NSW Outcomes

Area of Focus	Key Outcomes
Key Current Issues	• Poor economic and compliance performance by smaller local water utilities, reasons for poor performance include: ○ Difficulties in attracting and retaining skilled staff - many areas of NSW unable to attract skilled staff owing to declining populations and the associated reduction in the provision of community services ○ Lack of effective regulatory incentives and sanctions to achieve a high level of compliance with standards and guidelines and to encourage innovation ○ An absence of functional separation – water supply and sewerage are two of many functions performed by councils and compete with other functions for attention and resources ○ A lack of commercial focus – the multifunctional structure of councils may tend to inhibit the establishment of commercially focused business units
Recommendations	• Consolidate the 105 local water utilities into 32 groups based on: ○ Catchment boundaries ○ Existing alliances ○ Stakeholder submissions ○ Location of significant regional centres • Water utility groups to consider three potential organisational structures: ○ Binding alliance ○ Council-owned regional water corporation ○ Status quo for larger operations • Regulation of local water utilities operations and pricing to be strengthened, with all utilities required to implement all relevant plans, guidelines, and standards • Review and streamline regulatory roles undertaken by State Government agencies

Source: NSW Government (2008)

Draft North West Queensland Regional Water Supply Strategy (2012)

The draft North West Queensland Regional Water Supply Strategy was released for public consultation on 23 January 2012. The draft Strategy was prepared in order to present solutions to meet North West Queensland's urban, rural and industrial water needs over the next 50 years. Key points arising from the draft Strategy include:

- Comparatively high urban water usage in North West averaging 700-800 litres/property/day due to a range of factors including:
  - Hot, dry climate increasing urban water demand.
  - Additional water required for dust control.
  - Additional water utilised to facilitate household vegetable growing due to a lack of reliable commercial supply in many regions.
- Non-revenue water (leakage, takings from unmetered connections, illegal connections, and metering inaccuracies) accounts for 23.7% of water used in North West Queensland. The strategy estimates that moves towards best practice could reduce non-revenue water by up to half.
- The low population, remoteness, and low levels of infrastructure represent key challenges for the North West's urban water and rural sectors.
- Future North West Queensland mining water needs are difficult to predict due to the volatile nature of the industry.
- There exists sufficient available water supply to meet medium-term demand from all sectors;

The draft NWQRWSS seeks to optimise the use of available supplies to meet future water needs before developing new supplies. The strategy adopts the following principles in order to achieve this:

- Efficient use of urban water to be promoted through demand management measures, managing system losses, recycling water and alternative sources such as rainwater tanks.
- The highest value and best use of rural water to be facilitated through trading entitlements and water use efficiency improvements.
- Where demands cannot be met through the above measures, and where unallocated water supplies are available, additional water supply sources will be developed that are environmentally, socially and economically acceptable.

The North West Queensland Regional Water Supply Strategy is currently under review following the consultation period. Consultation with Department of Energy and Water Supply indicates that the final strategy due for release in 2013 will incorporate a number of key changes, including:

- Updates to available water after the finalisation of the Department of Natural Resource Management unallocated water process.
- Consideration of the implications of the potential lifting of the uranium mining ban.
- Updated forecasts for the agricultural industry driven Inclusion of additional infrastructure options / solutions that have come to light from recent works by DEWS, DSITIA, CSIRO and NQIAS.
- Consideration of the changes in the resources industry outlook on demand projections.

Appendix D: Q-WRAP Scoping Paper Assessment Outcomes

The Q-WRAP Scoping Paper undertook a high level assessment against a list of specific criteria derived from the principles and objectives articulated in national and Queensland urban water service reviews, providing a ranking of the strengths and weaknesses of each model in relation to the criteria.

The outcomes of this assessment are summarised below.

Table D.1: Q-WRAP Assessment of Strengths and Weaknesses of each Governance Model

	Ranking			
Criteria	**Status Quo (Council Owned)**	**Regional Alliance (collaboration)**	**Regional Alliance (separate entity)**	**Regional Corporation (council owned)**
Improved Customer-focus and Service levels	2	1	2	2
Public Health and Environmental accountability	2	2	2	2
Ongoing Council and Community Sustainability	3	2	2	2
Best Practice Governance	2	3	2	1
Optimised Management and Planning	2	2	2	1
Sustainable Staff and Asset Management and Planning	3	2	2	1
Improved Articulation with Regional Planning	3	2	1	1
Reduction of Transaction Costs	2	3	2	1

Ranking Scale:
1=extremely likely to be satisfied by model
2=organisational model may have adverse impacts in some situations that can be addressed through some form of mitigation strategy
3=where an issue with the model may prevent if form meeting the criterion
Source: Q-WRAP Scoping Paper, June 2012

Appendix E: Risk Based Assessment Framework

Risk-based impact assessment frameworks are well recognised as an appropriate approach for assessing economic, social and environmental impacts.

A risk-based approach, adapted from the Australian/New Zealand Standard for risk management (Standards Australia, 2009), is used for the impact assessment. The framework identifies and ranks risks into relevant levels (very low, low, medium, high and very high) to inform key issues and impacts for avoidance, mitigation and management measures.

The assessment examines the likelihood of an effect occurring, and the potential consequences (i.e., a measure of severity/ magnitude of effect) should the effect occur. Table G.1 contains the descriptors used to classify the likelihood and consequence.

Table G.1. Descriptors Used to Classify Likelihood and Consequence

Descriptor	Description
Likelihood	
Very high	Is expected to occur
High	Will probably occur
Moderate	Might occur
Low	Unlikely to occur
Very Low	May occur in exceptional circumstances
Consequence	
Very high	• **Adverse Impact**: Extreme permanent loss of human, social, financial or built capital/wellbeing, with anticipated major public outrage • **Beneficial Impact**: Significant permanent enhancement of human, social, financial or built capital/wellbeing
High	• **Adverse Impact**: Substantial loss of human, social, financial or built capital/wellbeing, will attract public concern • **Beneficial Impact**: Substantial enhancement of human, social, financial or built capital/wellbeing
Moderate	• **Adverse Impact**: Moderate and noticeable loss of human, social, financial or built capital/wellbeing • **Beneficial Impact**: Moderate enhancement of human, social, financial or built capital/wellbeing
Low	• **Adverse Impact**: Small but noticeable loss of human, social, financial or built capital/wellbeing, can be easily rehabilitated • **Beneficial Impact**: Small enhancement of human, social, financial or built capital/wellbeing
Very Low	• **Adverse Impact**: Negligible loss of human, social, financial or built capital/wellbeing • **Beneficial Impact**: Negligible enhancement of human, social, financial or built capital/wellbeing

Source: Adapted from Standards Australia (2009).

The level of risk associated with each potential impact was then determined by combining likelihood and consequence using the matrix in Table G.2.

Table G.2. Risk Evaluation Matrix

Likelihood	Consequences				
	Very Low	Low	Moderate	High	Very High
Very High	Medium	Medium	High	Very High	Very High
High	Low	Medium	Medium	High	Very High
Moderate	Low	Low	Medium	High	High
Low	Very Low	Low	Low	Medium	High
Very Low	Very Low	Very Low	Low	Medium	Medium

Source: Adapted from Standards Australia (2009).

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