Queensland
Water Regional Alliance

September 2016

QWRAP OUTCOMES & FUTURE DIRECTIONS

Contents

2 Background

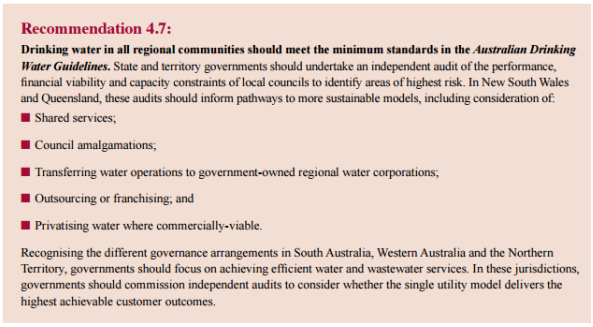
In Queensland urban water and sewerage services (WSS) are provided predominantly by 68 local government WSS providers. Together, Queensland local governments own around $25B in WSS assets that cost more than $1B/year to operate. In parts of South East Queensland, reform in 2008 created two corporatised urban utilities, but in the remainder of the state, councils own, manage and operate WSS.

Figure 1. Governance of WSS providers.

In all other Australian jurisdictions except NSW, WSS are managed by corporatised regional entities, most owned by State or Territory Governments (Fig 1). In 2011, three national reviews recommended similar regionalisation for WSS in Queensland and New South Wales.[i]

Figure 2. Three national reviews called for restructuring the Queensland industry in 2011.

Calls for reform have continued since,[ii] with the most recent being recommendations by Infrastructure Australia in early 2016 (Fig. 3).



Recommendation 4.7:

Drinking water in all regional communities should meet the minimum standards in the *Australian Drinking Water Guidelines.* State and territory governments should undertake an independent audit of the performance, financial viability and capacity constraints of local councils to identify areas of highest risk. In New South Wales and Queensland, these audits should inform pathways to more sustainable models, including consideration of:

- Shared services;
- Council amalgamations;
- Transferring water operations to government-owned regional water corporations;
- Outsourcing or franchising; and
- Privatising water where commercially-viable.

Recognising the different governance arrangements in South Australia, Western Australia and the Northern Territory, governments should focus on achieving efficient water and wastewater services. In these jurisdictions, governments should commission independent audits to consider whether the single utility model delivers the highest achievable customer outcomes.

Figure 3. Call for reform and regionalisation by Infrastructure Australia in 2016.

In 2011, the Queensland Water Regional Alliances Program (QWRAP) was developed as an industry-led initiative to respond to the calls for reform and investigate the alternative institutional models recommended for WSS in regional Queensland. The program receives seed funding from the Queensland Government through the Department of Energy and Water Supply and investment from the Local Government Association of Queensland, Queensland Water Directorate (***qldwater***) and participating councils.

QWRAP has assisted councils in self-selected regions to work together to investigate alternative governance models. Most of the regions have subsequently determined to form regional Alliances and to consider further transitions for WSS. In each region, groups have been established at both managerial and political levels. Within four years, the program encompassed 30 municipalities in five regions representing over 65% of the regional population and over 55% of the area of Queensland.

This report summarises some of the key outcomes to date, identifies key barriers and enablers of success, and outlines future directions for QWRAP.

3 Urban Water Reform

Reform of local government WSS is a worldwide trend. In many countries WSS have been owned and managed by local governments since the 19th century,[iii] but have been undergoing ongoing institutional restructuring with increased intensity originating with 1990s economic reform.[iv]

A QWRAP survey of OECD and G20 countries showed that council ownership remains prevalent but has evolved into regional arrangements in many jurisdictions (Table 1)[v]. Common trends include aggregation of services, corporatisation and increased economic regulation. Despite numerous attempts, full private ownership has seldom been sustainable though private sector participation is almost universal.

Publically-owned, regional corporations were also the prevalent recommendation of the national reviews in 2011. Only the Productivity Commission recognised council ownership as a viable option, and then only after assessment of extrinsic drivers such as:

- climate and rainfall variability and variability of sewage (wet weather) flows,
- geography, geology and topography, and
- network density and length,
- number & distance between discrete networks and their potential for interconnection,
- volumes managed and the area served, and
- asset life cycles of long-lived infrastructure.[vi]

These factors are critical to the efficiency and sustainability of service providers regardless of ownership and governance structures.

Table 1 Institutional models for water and sewerage service providers in OECD and G20 jurisdictions.

Model	Governance	Owner(s)[1]	Management[2]	Jurisdictions in which this model occurs.
Full public ownership and management	LG	Individual LG	LG	India, Indonesia
LG service provider	LG Councillors	Individual LG	LG	**Qld** and NSW regional councils. Argentina, Canada, Czech Republic, Finland, France, Germany, Iceland, India, Indonesia, Italy, Japan, Mexico, New Zealand, Norway, Portugal, Spain, Slovenia, Sweden, & USA. Sewerage services in many countries.
Commercialised LG provider	LG Councillors / Advisory Board		LG	Some **large Qld** and NSW, the Netherlands
LG-owned corporation	Board responsible to council		Corporation.	**Wide Bay Water,** Denmark, Estonia, Japan, Johannesburg, Netherlands, Poland.
Regional council alliance (voluntary)	LG Councillors or Advisory Board	Jointly by 2 or more LG	Management team from LGs.	Lower Macquarie Water Utilities Alliance, Centroc Water Alliance, **CTM Alliance, Outback Alliance, WIM Alliance, WBBROC Alliance** (Qld), Belgium.
Binding Alliance				France, Iceland, USA.
'County Council' (service provision only)	Board of LG Councillors	Two or more LG via a regional entity	County council	Five water county councils in NSW (one also provides sewerage services).
'County Council' (incl. asset ownership)	Board of LG Councillors			Midcoast Water (NSW). Regional Council model in NZ can be similar (e.g. Greater Wellington RC).
Regional Utility (Joint LG ownership)	Board appointed by LGs		Regional Utility	**SEQ entities**, Tas Water, Belgium (Flanders), Denmark, Germany, Gosford-Wyong, Lithuania, Portugal, USA.
Regional Utility (Central government ownership)	Independent Board – usu. reports to Minister(s)	National or State/ Provincial government		China, **Seqwater**, **Gladstone Area Water Board**, India, Italy, Melbourne Water, Victorian Utilities, Sydney Water, Hunter Water, Brazil.
Whole-jurisdiction (Central Gov't)				**ACT, WA, SA**, **NT**, Northern Ireland, Scottish Water, Irish Water.
Primary private ownership	Private entity Board	Private Company	Private Company	England & Wales, Chile, Saudi Arabia (major cities).

1. Some utilities have minority private ownership. **2**. Many utilities outsource aspects of management. **LG** = Local Government.

4 Queensland services

The dispersed population of Queensland creates an environment where the potential benefits of reform can be difficult to realise. A primary driver of efficiency of a network utility is the density of its connections. High densities mean more customers are served with a smaller total 'footprint' of infrastructure thus reducing costs. Consequently, economies of scale are elusive where density is low and networks are too small and isolated for viable interconnection. Queensland is one of the largest sub-national jurisdictions in the world but has a relatively large population (Table 2). More importantly, the population is widely dispersed: Queensland has the largest number of residents outside major cities and 'inner regional' areas of all Australian jurisdictions (Figure 4).

Table 2. Area and population of the world's largest sub-national jurisdictions.

	Jurisdiction	1000 km²	Pop ('000)
1	Sakha Republic	3,103	958
2	Western Australia	2,646	2,296
3	Krasnoyarsk Krai	2,340	2,828
4	Greenland	2,166	56
5	Nunavut	2,093	33
6	**Queensland**	1,853	**4,516**

The scattered urban population means that service providers maintain over 370 public supplies, some up to 100 km apart, and 88% of which are potable. Two thirds of the potable services supply towns with fewer than 1000 residents. Half service fewer than 500 people.

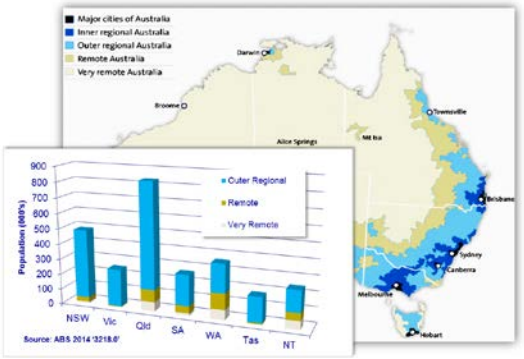


Figure 4. 'Remoteness structure' showing the large population outside major cities and 'inner regional' Queensland.[vii]

Population distribution was a key factor in the historical development of Queensland's water assets. Infrastructure in regional towns was developed over the past 130 years with major investment in the 30 years following WWII (Figure 5). Growth was driven by 100 years of coordinated co-investment by local and state governments which ceased abruptly in 2009. This history has two major ramifications for reform.

First, historical development has resulted in numerous independent water and sewerage schemes with little consistency in assets and processes. Standardisation would result in significant economies but would also be costly in many places because of the large, dispersed and diverse stock of existing assets and processes.

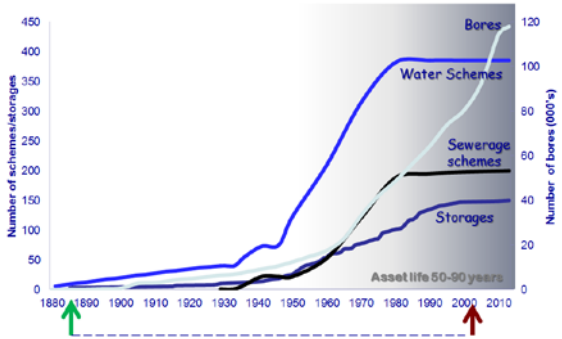


Figure 5. Development of water and sewerage infrastructure. Arrows indicate the period where state and local governments jointly invested in assets.

Second, the timeline of infrastructure establishment means that many water and sewerage assets are nearing the end of their useful lives. The sector is facing this 'infrastructure deficit' at the same time as the withdrawal of coordinated State investment, global economic down-turn and loss of significant industry capacity through retirement of the 'baby boomer' generation.

The structure of the sector and the prevailing economic climate mean that the initial investment required to realise economies of scale is difficult to achieve. Coupled with the increasing pressures on the council-owners of Queensland's WSS, including rising debt, this makes spontaneous regionalisation unlikely regardless of projected economies of scale.

5 Is Reform Necessary?

QWRAP research reviewed reform in Australia and internationally summarising 'drivers' listed by a range of authors (Table 3).[viii] While all were identified in multiple jurisdictions, two were particularly common, namely an increased need for 'efficiency' and for 'capital investment'.

Table 3: Drivers of reform indicated for Qld, Australia and overseas.

Suggested Driver in Qld[ix]	Australian examples[x]	Overseas examples[xi]
Water Security	SEQ	Ireland, Italy, Saudi Arabia
Water Quality	NSW	Ireland, Italy
Regulatory compliance	Qld, NSW	Estonia, Ireland, Lithuania, Saudi Arabia
Efficiency & Financial Sustainability	ACT, Tas, Vic, NSW	Argentina, Auckland, Belgium, Denmark, France, Ireland, Netherlands, Saudi Arabia, UK, Scotland, Spain
Increased capital investment	ACT, SEQ, NSW, Tas, Vic	Belgium, France, Ireland, Italy, Lithuania, Saudi Arabia, Spain, UK, Scotland, USA
Customer service	Tas	Argentina, Estonia, Lithuania, Saudi Arabia, Scotland, USA
Skills shortages	NSW	Ireland
Micro-economic reform	Vic	Brazil, Denmark, Finland, Netherlands, USA
Better planning	NSW, Tas	Auckland, USA

Efficiency of WSS is often questioned particularly where utilities are managed by councils. There is an expectation that large size and commercialisation increases efficiency[xii] but this is not always the case[xiii] and there are clear examples of both efficient and inefficient councils in regional Queensland. There is no doubt that small service providers struggle to achieve efficiencies because of capacity limitations, a small rate base and indivisibility of input factors (e.g. treatment plants). Others fail because of locally high input costs. Despite the significant impacts of extrinsic factors, possibly the most important determinant of efficiency are the quality of management and governance which can evidently be optimised under a range of institutional arrangements. Successful reform should build structures that encourage optimal governance and management in each region.

Increased Capital Investment is one of the most quoted reasons for reform of water and sewerage sectors internationally and in Australia. Under-investment in infrastructure is a criticism often levelled at local government. In Queensland it is typically the case that the small rate base in many communities makes capital investment (and sometimes even operations and maintenance) unaffordable without cross-subsidisation. Public utilities notoriously struggle to justify investment in assets distant from public attention (e.g. underground networks and the future capacity of supplies). This problem has been underscored in Queensland by the abrupt withdrawal of coordinated state government investment in water and sewerage infrastructure in 2009 leaving small councils increasingly unable to refurbish ageing infrastructure.

Privatisation to increase efficiency and private investment
Full private ownership of WSS (as opposed to partnership with the private sector which is an essential feature of public WSS around the world) has been trialled in some jurisdictions in the hope of improving efficiency and increasing capital investment. Unfortunately these aims have seldom been achieved (with notable exceptions such as England Wales and Chile[xiv]) and an extensive literature comparing public and private utilities has found no clear 'winner'.[xv] In many cases the failure of privatisation has not been caused by the model itself but rather the inflated expectations of its power to overcome fundamental short-falls within the existing sector. Underlying issues, particularly the level of customer investment required to match expected levels of service, must be resolved prior to adopting alternative models based on theoretical benefits.

Notably, despite repeated calls to review the benefits of private WSS in Australia[xvi] none of the formal reviews in 2011 recommended this model despite all calling for greater investment and improved efficiencies. In short, reform involving a broader investment base is necessary, but privatisation is not widely considered to be a sustainable solution for Queensland.

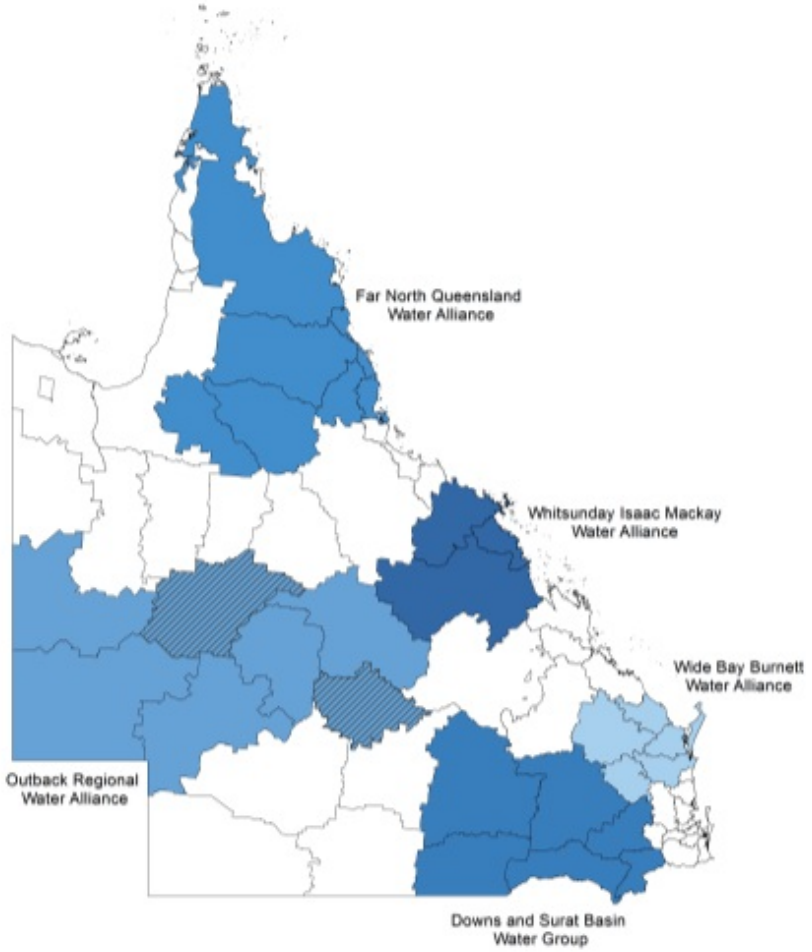
6 QWRAP Regionalisation

QWRAP was created to assist councils to explore alternative regional approaches taking into account the different drivers and extrinsic factors impacting each area. To date, the program has developed regional collaboration in five regions across the state (Figure 6). Each region commenced at a different time and has followed a different path towards regionalisation based on local needs and circumstances. A key benefit has been initiating meaningful discussion and cooperation on water and sewerage at both political and managerial levels in each of the 30 participating councils.

In each area, QWRAP has progressed along two concurrent paths. The first seeks immediate, no-regrets projects that demonstrate the benefits of regional collaboration. All regions have derived demonstrable savings and customer service benefits from cooperative projects with a common advantage being focussed strategic management and planning.

The second path investigates potential benefits and costs of regional institutional change. Groups consider alternative models ranging from informal alliances to regional corporatised entities. Following these investigations, three of the four initial QWRAP regions have developed a formal regional alliance and one is close to forming one. Further, only one of the Alliances (the Outback Regional Alliance) has discarded the idea of progressing beyond the alliance model (because the costs would outweigh the benefits in this large but sparsely populated region). Three groups have determined against a single entity in the short-term, primarily because of the differential costs and benefits across their communities, but are continuing to consider possible pathways to broader reform. A fifth region (Downs and Surat Basin Area) has only recently joined QWRAP and is commencing investigations. All regions have acknowledged the potential benefits of regionalisation and are working towards balancing these against the significant short-term costs and risks of reform.

Figure 6: Five regions are participating voluntarily in QWRAP and have agreed to consider alternative regional arrangements for managing water and sewerage across their areas. QWRAP groups represent more than 50% of Queensland's area and nearly two thirds of the population outside of SEQ.



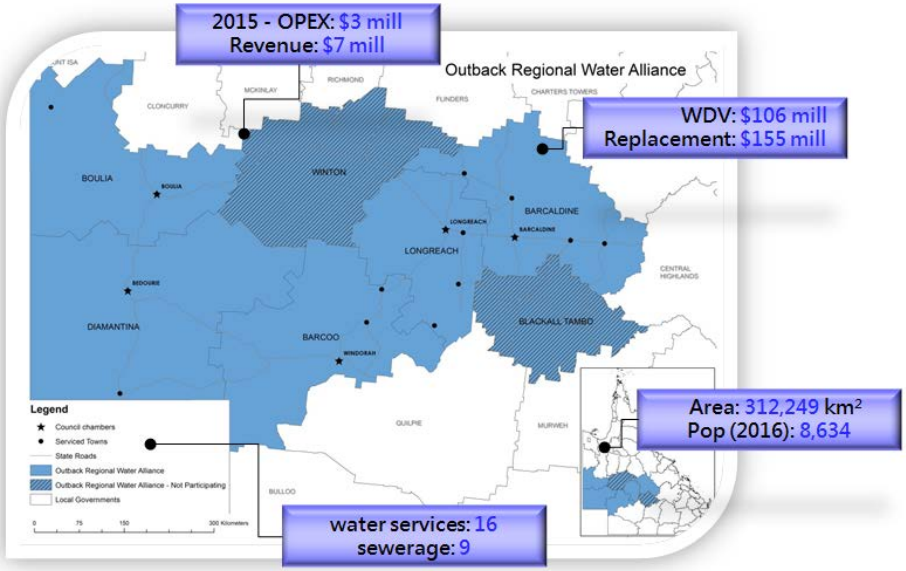
7 Outback Regional Water Alliance

The first QWRAP group (commencing in 2011) was built on the strong existing relationships of the Remote Area Planning and Development Board in western Queensland. This was also the first region to form a Water Alliance and is the most mature of the QWRAP groups.

The Outback Regional Water Alliance (ORWA) was formed in 2014 under a constitution overseen by the Mayors and CEOs of each council. The QWRAP investigation stage showed that, with an area larger than that of Victoria but with less than 1% of Queensland's regional population, costs of forming a regional entity far outweigh the projected benefits. In the ORWA model, each council contributes to the costs of a regional coordinator (with additional QWRAP funding) to review and align regional needs and manage joint activities.

Collaborative projects and strategic planning are overseen by a Technical Steering Group with representatives from each council, the regional coordinator and also LGAQ, ***qldwater*** and DEWS. Many projects have been undertaken (Table 4) and additional projects are underway. At present more work is being scoped based on strategic priorities. QWRAP funding contributes to activities that bring the regional partners together to facilitate joint action, communication and strategic planning (rather than funding operations or capital).

The benefits of regional projects are assessed at all stages. All have provided financial savings and reduced the need for external funding. Recent examples include alignment of DWQMP requirements with immediate savings in excess of $30,000, and a recent reservoir cleaning project that saved $60,000. This level of financial benefit is typical of all the projects pursued. While the full community benefits are difficult to value, improvements to service levels, extended asset life, improved safety and reduction of future costs significantly exceed direct financial savings further increasing the positive return on investment.



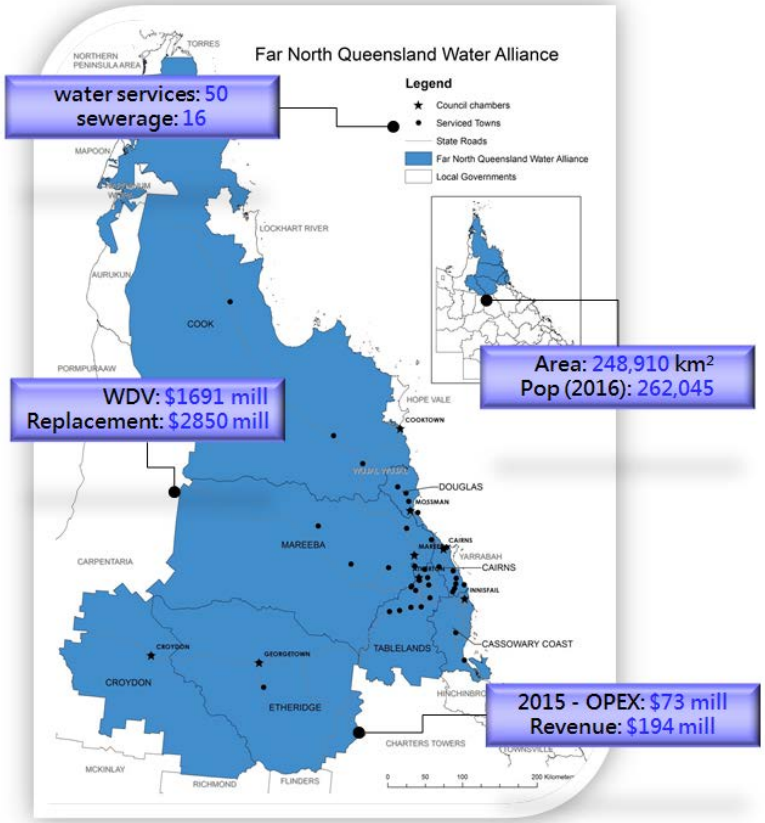
With one third the revenue of the smallest regional water corporation in Victoria, the ORWA region is too small to create a sustainable water corporation. Remoteness and size means that some of the small isolated communities will never be financially sustainable. However, with ongoing savings and strategic planning through the ORWA, this region is on track to maximise efficient and effective management of available resources with a process that is affordable for the councils and their communities.

Table 4: Selected joint activities of the ORWA.

- Joint reservoir cleaning across the region.
- Regional management of KPI reporting.
- Joint water main air scouring.
- Regional investigation of water disinfection.
- DWQMP review.
- Regional framework for asset management.
- Determination of non-mandatory operational KPI reporting.

8 Far North Queensland Regional Organisation of Councils

The FNQROC region commenced in 2012 and has a very large area with most of the 50 serviced communities clustered near the coast. A key challenge for this region is the number of councils involved. When the QWRAP investigations commenced, six councils participated (Cairns, Cassowary, Cook, Croydon, Etheridge and Tablelands), but 'de-amalgamations' in 2014 impeded collaboration in the region and created two new members (Douglas and Mareeba councils).



Despite these issues, the region successfully completed a significant review of all water and sewerage services and an initial investigation of potential regional institutional arrangements. The review highlighted the benefits of a regional council-controlled entity encompassing the larger of the FNQROC members. The councils agreed the immediate costs of such a change and the inequities for smaller communities prohibited pursuing this option and instead decided:

- alternative business models to manage assets and to address the infrastructure renewal gap, be considered in the medium term (3 years) and,

in the interim the group would focus on:

- strategic asset management,
- regional demand and supply assessment,
- legislative requirements (e.g. DWQMS and EMS), and
- full-cost pricing.

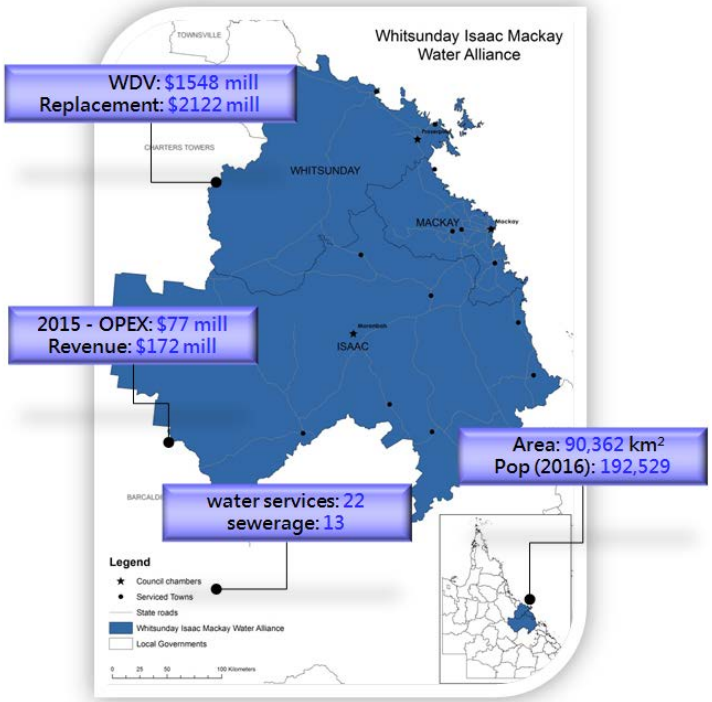
A number of projects have been completed successfully within these broad areas of investigation (Table 5) and the group has focussed on options that can provide immediate benefits to all participating councils. The group is currently forming a regional Alliance, and is formalising collaboration through a new Terms of Reference and has funded a part time regional coordinator. The group has also broadened its scope with two aboriginal councils (Wujal Wujal and Yarrabah) now included in the group discussions.

Table 5: Selected joint activities to date.

- Workshop on automatic metering.
- Alignment of DWQMPs.
- Joint training (regional hub model).
- Biosolids management review and establishment of sub-committee.
- Joint procurement of water pumps.

9 Whitsunday-Isaac-Mackay Water Alliance

With only three councils, 22 serviced communities and supported by strong local leadership, this region has progressed fastest of all of the QWRAP regions forming a Water Alliance within little over a year of commencing investigations in 2013. The initial investigations of the group considered four alternatives, namely 'independent operation' (status quo), 'cooperation', 'formal alliance' and a 'council controlled entity'. Given the risk profile, anticipated benefits and opportunity to align the water services businesses across the region, the establishment of a Formal Alliance was considered to offer the most immediate benefits. The Alliance also provides a platform to further consider developing regional water services.



The Alliance has proceeded with a number of regional projects (Table 6) with a key aim being sharing information and technologies across the three councils to establish common ground. A good example was a review of automated metering which saw the technology that has been championed by Mackay trialled in the other two councils. Data is being collated centrally and made available to all councils online. This is the first case of neighbouring councils jointly managing data and collaborating on metering technologies in Queensland. A similar project saw the three councils share laboratory services and develop an existing system managed by Mackay to provide analytical results in real time through the web.

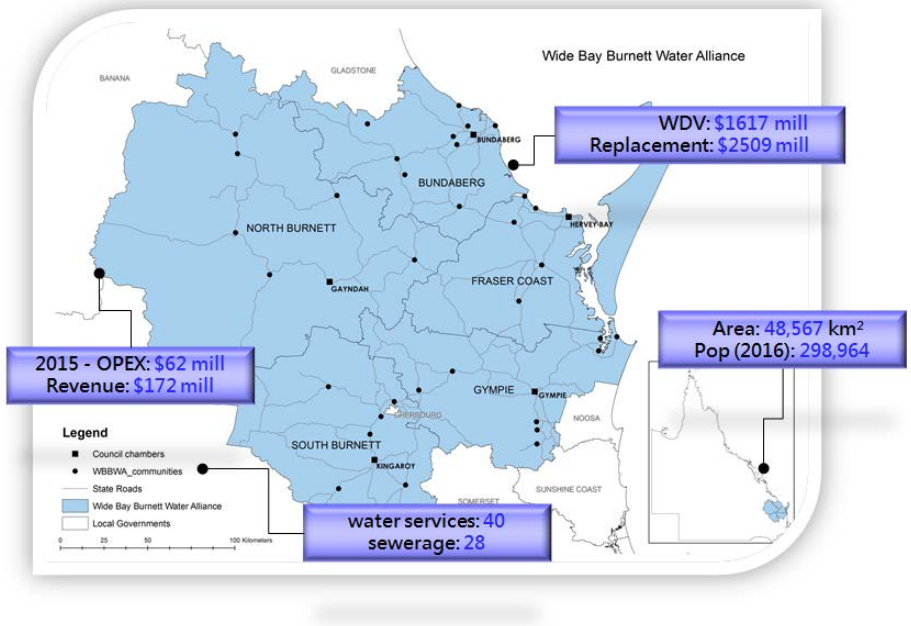
Table 6: Selected joint activities to date.

- Joint laboratory services.
- Sharing automated meter data and technologies.
- Review of options for joint biosolids management.
- Joint Operators Forum
- Review shared water supply arrangements at border communities (commenced).
- Sharing standard procedures, design standards (commenced)
- Regional risk assessment and asset Maintenance readiness review.

Each of the councils are on ambitious paths to build their individual WSS, and so a key aim is to align and standardise processes and risk management frameworks. This work is being facilitated through a technical steering group which meets regularly to review current work and plan future projects. The group is facilitated by the Whitsunday, Isaac, Mackay Regional Organisation of Councils which has appointed a part-time regional coordinator to oversee QWRAP collaboration.

10 Wide Bay Burnett Water Alliance

Wide Bay and Burnett Regional Organisation of Councils (WBBROC) formed a QWRAP region in 2013 incorporating Bundaberg, Fraser Coast, Gympie, North Burnett, and South Burnett Regional Councils. This led to the group forming a regional alliance in 2015.



The QWRAP investigation reviewed four models: 1) status quo plus collaboration, 2) option 1 with a capital advisory board, 3) regulated price-setting corporation and 4) commercialised entity. This showed a regional entity provided net benefit only at the cost of increased rates to many communities. However, continued collaboration demonstrably benefited all communities, particularly if the group introduced a capital review process. The region agreed to form a Regional Alliance to investigate options for capital review and external funding support for small communities that would make regionalisation more equitable.

Joint activities to date (Table 7) include external analysis of priority projects. For example, a joint sewer relining contract was estimated to save up to $180,000 and 0.5 FTE per year. This project is currently underway. Specialist sub-groups are also undertaking activities to develop regional SCADA standards, joint approaches to environmental management and to build capacity across the region. The group recently appointed a part-time regional coordinator.

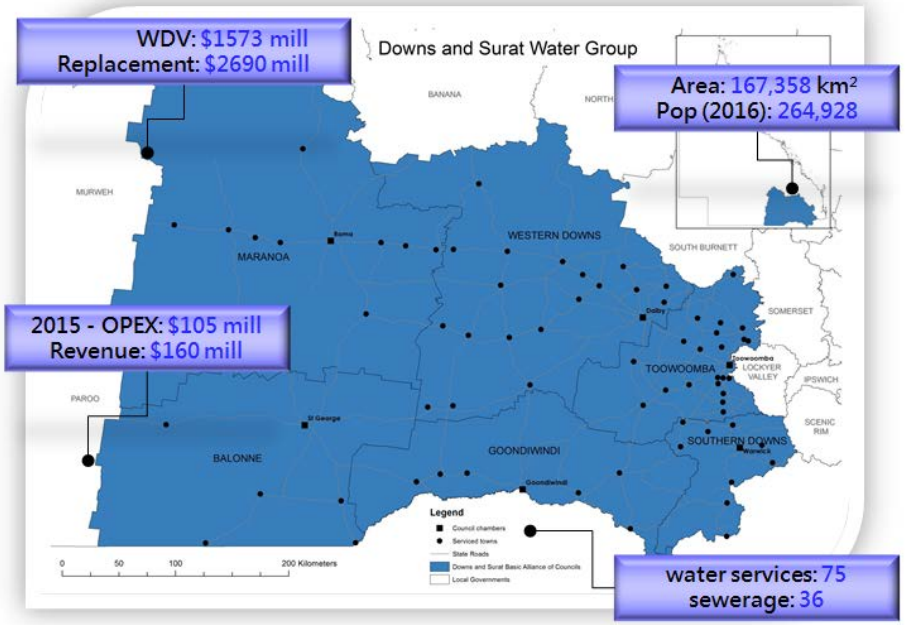
Table 7: Selected joint activities to date.

- External review of priority joint projects
- QTC modelling of pricing
- Financial review of 4 models
- Review Capital Advisory Board model
- Joint sewer Relining Program
- Regional skills development
- SCADA standardisation (ongoing)
- Joint approaches for environmental management (commenced)

Each of the participating councils service small isolated communities where a small rate base and lack of scale and density economies make full cost pricing unaffordable. Stretching already sparse resources across a larger region spreads costs inequitably across each participating council that are not recoverable solely through gains in efficiency. Equitable regionalisation may only be possible if infrastructure in these small communities can be brought to a consistent standard.

11 Downs and Surat Basin Region

The most recent of the QWRAP regions commenced discussions in late 2015 and includes Balonne, Goondiwindi, Maranoa, Southern Downs, Toowoomba and Western Downs Councils. A formal decision on the direction of the program in the region was delayed by local government elections in early 2016, but was confirmed in the middle of the year. The group has developed initial cooperative projects and a draft Terms of Reference to scope further council investigation and consideration of regional approaches.



This region was strongly affected by council amalgamations in 2008 with all but one council (Balonne) involved in mergers. The other five councils are the product of amalgamation of 24 previous local governments (Maranoa-5, Western Downs-6, Southern Downs-2, Toowoomba-8 and Goondiwindi-3), the highest of any region in the state. Building regional approaches is thus familiar to the councils but there is a natural degree of fatigue amongst staff and councillors.

Another striking feature of the region is the large number of small communities with 75 water and 36 sewerage services. Maintaining these schemes which often service very small communities is a difficult task complicated by constantly improving standards and expectations. Commonalities among some of the small schemes may yield economies of scale despite the lack of density.

The joint activities initially planned by the group include building a stronger region-wide relationship with the DEWS regulator by renegotiating requirements for Drinking Water Quality Management Plans and mandatory performance reporting. Joint skills development is being considered and the group is developing a program for determining whether planned maintenance and upgrade programs across the region can be further optimised through joint approaches.

Table 8: Selected joint activities planned.

- Aligning DWQMP reporting and auditing requirements.
- Water security and demand management.
- Collaboration on maintenance/ upgrade programs (reservoir cleaning)
- Joint skills development.
- Sharing large emergency generators.
- Regional issues performance benchmarking.

The group is also investigating water security and demand management which is a common problem for or Queensland service providers. With the majority of the state currently gripped by drought which recurs regularly, waters security is a persistent challenge. Participants are exploring and sharing knowledge and experience on water efficiency measures for the benefit of neighbouring councils and for other regions.

12 Common characteristics of successful water sector reform

There is no agreed optimal structure or size for urban service providers despite significant discussion in the literature and strong opinions on all sides. The significant influence and context-specific nature of extrinsic factors (see Section 3) makes generalisations difficult but commonly: privatisation is unsuccessful while aggregation, corporatisation and increased outsourcing to the private sector provide long-term benefits[xvii].

Regionalisation through horizontal aggregation of services is a common trend across OECD and G20 countries, and has occurred through joint outsourcing, selection of models to maximise economies of scale, amalgamation and/or collaboration among neighbouring local governments. The aims are generally to "overcome indivisibilities in factor inputs, avoid the costs of a lack of capacity, and gain access to economies in the fixed costs of production including purchasing, marketing and administration (including human resources and information technology)".[xviii] In Queensland, aggregation has occurred through council amalgamations and the forced transfer of services in the south east in 2008. However, five SEQ entities were dissolved within four years and in regional Queensland concurrent de-amalgamations of councils has sometimes been perceived as evidence against the benefits of aggregation.

Regionalisation almost always co-occurs with commercialisation or corporatisation. Internationally this is practically universal for state and national utilities and is also common for council owners (e.g. in Denmark, Estonia, Flanders, Italy, Japan, Lithuania, the Netherlands, Poland, SEQ, Spain, Tasmania and the US).[xix] Corporatisation at a regional scale is said to allow clarification of objectives and transparency by distancing management from political decision making, selecting optimal governance structures, and attracting specialised leadership, management and human resources. In contrast, Queensland's Local Government Reform Commission in 2007 favoured alliances reiterating concerns of an earlier Electoral and Administrative Review Commission for "any system that removed accountability away from local government to an unelected board or committee".[xx]

Such concerns are common often under suspicion that "formation of public enterprises can be considered an intermediate phase on the way towards the probable ultimate outcome of New Public Management: the privatisation of most publically owned utilities".[xxi] In many jurisdictions this has resulted in mandatory local government oversight by expertise-based corporate boards. For example, in Denmark regional corporations were mandated in 2009 with council ownership. Similarly in Italy corporatisation (with mixed public and private ownership) was mandated in 1994, but community dissatisfaction led to a referendum in 2011 with the result that corporatised entities must be publically owned and 'not-for-profit'.[xxii] In Australia, council owned regional authorities were created in Tasmania in 2007 and in south east Queensland in 2008. However, Queensland's single local government water corporation (Wide Bay Water) was recently re-integrated into the Fraser Coast Regional Council.

Another common feature in many stable jurisdictions, regardless of institutional model, is broad-based economic regulation. Good regulation of WSS has been argued to (1) ensure consistent services in spite of variability in size and structure of service providers, (2) balance independence and industry knowledge, (3) balance competing regulatory and customer externalities (4) provide an appropriate environment for effective private sector participation and (5) maintain effective and efficient performance monitoring for benchmarking.[xxiii] The regulatory framework across Queensland has changed dramatically over the past decade and is still maturing. The importance of better regulation has been acknowledged nationally but must be carefully implemented to ensure appropriate industry knowledge and avoid excessive costs.[xxiv]

13 Regionalisation in Queensland

QWRAP has demonstrated benefits of cooperation in all trial regions. However, these have come with the expense of initial transaction costs of building trust and governance oversight. Each of the groups were ultimately able to demonstrate that economies of scale are possible even where communities are too numerous and isolated to be physically interconnected.

A tacit rationale for regionalisation of WSS is to incorporate small communities within a larger domain to allow cross-subsidisation and spread risk of services that are not self-sustainable.[xxv] Unfortunately, costs to sustain small isolated WSS remain high regardless of the model adopted and can exceed the value of even the most optimistic projections of efficiency improvements from economies of scale. Un-planned regionalisation merely transfers costs to neighbouring communities which may themselves be marginally sustainable. Equally troubling are detrimental impacts to individual councils' sustainability when WSS services are transfer to a regional entity.

Historically, Queensland's regional communities developed for over 100 years through coordinated, joint capital investment by state and local government, but this system ceased in 2009. Since then councils have struggled to adjust to a model of local self-sufficiency and smaller communities will never breach this threshold. Many depend on temporary subsidy programs created by successive state governments but towns that lack capacity or political profile rely on ageing infrastructure that increasingly fails to meet modern standards. Convincing councils with these challenges to co-invest in their neighbours' infrastructure is even more difficult.

QWRAP has allowed councils to have consider regionalisation to engender greater cooperation. This has provided the opportunity to pursue a common aim of identifying, and where possible, realising the benefits of economies of scale while avoiding the risks and costs. Regionalisation is an important but only partial solution for unsustainable communities and it is clear that the large and dispersed urban population can be sustained only through joint local and state government cooperation and investment.

A staged approach to regionalisation is common in other jurisdictions and allows groups to aggregate the numerous small marginal benefits of cooperation while avoiding risks. A natural evolution would see cooperation followed by alliances leading to regional entities. Each stage requires a period of reflection where participants consider the benefits accrued and the likely future costs and determine whether to continue the process (Fig 8). These decision points are likely to be common points of failure when participants question their contribution to region-wide benefits which may not be equitable. Many of the QWRAP groups are at Decision Point 2, having considered a regional council controlled entity (CCE) and found that it presents too great a risk or cost for some of the participating councils. Further effort is needed to demonstrate that net regional benefits can be shared equitably among all participants.

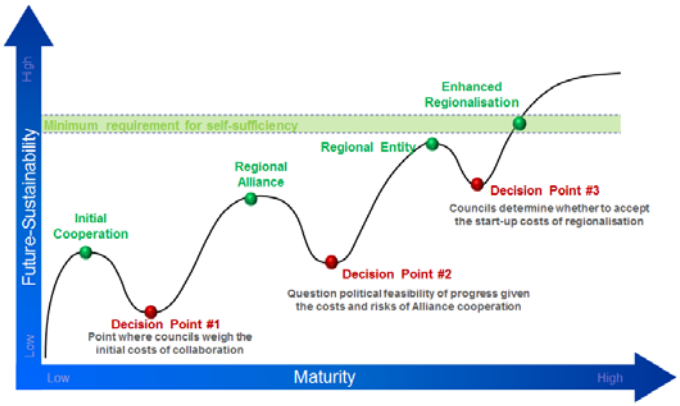


Figure 8. Conceptual illustration of common evolution of regionalisation showing decision points where individual participants are most likely to withdraw because of inequitable sharing of costs and benefits.

14 Future directions for QWRAP

A stepwise process reflecting the evolution of regionalisation in other jurisdictions has been adopted by QWRAP. This approach is the most likely to provide ongoing benefits to all participating councils and their communities. QWRAP effectively addresses problems of reform by promoting necessary change while balancing competing costs and risks to each council. This follows a well-established path in Europe where "the first step in the reforms introduced to the municipal model is often to organise joint boards of neighbouring municipalities to facilitate a fair distribution of the investment burdens […and...] is quite frequent in Germany, the Netherlands, Belgium, Italy, Switzerland and, in particular France".[xxvi]

The trajectory of WSS change and the looming infrastructure deficit indicate WSS reform is inevitable in regional Queensland. However, in the absence of a single compelling reason to regionalise, spontaneous reform is unlikely. Instead, reform efforts must justify and enable the decision by individual councils to move towards more efficient models of regional delivery. This is facilitated through immediate benefits accruing to councils (including leveraging other state investment, savings on priority works, access to support for regional coordination) and improved ability to respond the following drivers.

1. Ever-increasing financial constraints (and removal of subsidies) leaving councils to find more efficient ways to provide services.
2. Management and replacement of ageing infrastructure which is cost-prohibitive for individual councils (especially in small communities with a limited rates base) but more affordable for councils working together.
3. Skills shortages and the retirement of existing staff requiring broad-based strategies to sustain and build regional workforces and skills.
4. Local government resolve for meaningful input in any future reform of water and sewerage governance.
5. Regional leadership demonstrably enhancing negotiating power with regulators, policy-makers (e.g. DEWS and DEHP) and politicians.
6. Material savings (e.g. through economies of scale) achieved in all regions participating in QWRAP.
7. Numerous regional projects resulting in improvements to customer service, safety and reliability of water supply services.
8. Variable climate highlighting the need to improve water security facilitated through regional customer messaging.
9. Growing regional strengths and specialised skills that cannot be attained by councils working alone.
10. Regulatory performance reporting increasing social and political pressure to improve services and increase transparency.

The future trajectory of QWRAP includes strategies for strengthening participating councils ability to meet these challenges and continue a no-regrets participation in collaborative management of water and sewerage services while also considering further regionalisation. This approach is sustainable at the regional level but additionally provides a range of additional benefits for the Queensland Government as follows.

- Self-directed movement towards best practice through shared experiences and optimising costs.
- Improved performance and governance resulting in reduced need for regulatory intervention.
- Support for Queensland Government aims and objectives (e.g. State Infrastructure Plan and Water Strategy).
- Improved transparency about safe, secure, and sustainable services to underpin economic development and regional investment.
- More efficient and frequent communication across Queensland's many serviced communities.
- Critical mass of support for small regional councils responding to emerging issues and customer needs.
- Translation of learnings and skills from well-developed areas of Queensland to regions that lack capacity.
- Leveraging funding and support (e.g. from LGAQ, ***qldwater*** and participating councils) towards no-regrets regional cooperation.
- QWRAP provides clear evidence of the Government's support for regional communities in a fiscally constrained climate.

The future focus of QWRAP includes attracting additional regions into the program while facilitating the further development of existing regions by building on the above benefits. In particular QWRAP seeks to encourage greater consideration of regional Council Controlled Entities that incorporate oversight of infrastructure planning and expenditure because optimising capital investment generates the greatest long-term return for local communities and the state. Future QWRAP development will also build on the following themes.

- A viable and readily available mechanism for more equitable distribution of State and Federal funding for water and sewerage infrastructure.
- Promotion of PPPs in regional Qld on terms negotiated by councils with an increased focus on private funding.
- Preparations to improve the readiness for reform and avoid waste seen by hasty change in other jurisdictions (e.g. SEQ).

In short, QWRAP will continue to build on the strengths developed through the program to date, namely a collaborative approach among all parties (local governments, LGAQ, ***qldwater*** and the Queensland Government) to jointly address current and emerging issues common to all water and sewerage service providers. The success of the program has been ensured through developing genuine participation by all parties at political, senior management and operational levels and building on existing skills and learning from other jurisdictions. Such a collaborative approach is the only mechanism that can successfully engender significant change and regionalisation of services while avoiding the excesses and problems so commonly associated with reactionary industry reform.

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