Local Water Utilities Alternative Funding Model

by Plenary

Plenary

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1 Introduction

Thank you for the opportunity to comment on the NSW Productivity Commission's review of alternative funding models for local water utilities.

Plenary is Australia's leading independent, long-term investor, developer and manager of public infrastructure. We have a development portfolio with 81 assets under management with a total value of US$51 billion across Australia, Middle East, North America and Europe.

With over 300 infrastructure specialists in Australia, Plenary prides itself on providing innovative, sustainable solutions for our clients through employing a hands-on philosophy through which it takes responsibility for each stage of a project from design to construction, delivery, and long-term management. The ultimate goal is harnessing private capital to deliver first-class infrastructure on time and on budget that is for the benefit of the wider community.

On every project that we deliver, we are providing new infrastructure for the benefit of the public and partnering with government to provide these assets to the community with the most certainty of delivery, and least risk for government on a value for money basis over the life of the asset.

We note that the Minister for Water has requested the NSW Productivity Commission to investigate funding options to help reduce service risk for local water utilities while ensuring that there are no forced amalgamations and that councils will continue as the owners of their water and sewerage assets.

At Plenary, we believe that we can assist the Commission and the NSW Government through our experience with funding models that utilise concession frameworks to deliver upgrades and refurbishment works across a portfolio of local water utilities, while maintaining public asset ownership and improving the ability of local water utilities to meet the needs of their communities.

Under the approach detailed in this submission, projects could be procured under a single concession for a catchment or region to leverage economies of scale, and support the funding, delivery and maintenance across the whole of the investment lifecycle. By establishing performance incentives to deliver minimum service standards, value for money can be maximised and capital can be efficiently allocated to fund the delivery activities to where it is needed most. Under this approach it will be proven to address cost of living pressures by reducing water charges that can be offset by government funding.

We recognise that the delivery of safe, secure and affordable water services to many parts of regional NSW has been a longstanding challenge, and the existing approaches have not delivered the water and sewerage services to regional NSW that the public should expect. With this in mind, we believe that it is time to explore alternative approaches that can deliver better outcomes, while meeting the Government's policy requirements.

Appendix A has Plenary's Australian portfolio and further information at www.plenary.com

Appendix B provides details of relevant case studies.

2 Our understanding of the industry challenges

Across regional and remote NSW essential water and sewage services are provided by 85 Local Water Utilities (LWU). Each LWU is owned by the Local Council and are subject to its own operational performance characteristics, given the varying number of connections and distribution requirements.

The ability for a LWU to recover its costs through user charges is generally related to its size and location. Of the 85 LWUs, almost 72% are relatively small or very small with less than 10,000 connections, and where water security risks are greatest. These LWUs need to provide drinking water, sewerage services and maintain a larger network of pipelines with only a small population. As such, these LWUs find it challenging to maintain financial sustainability on their existing network and therefore do not have the financial capacity, outside of government grants, to raise any finance on a standalone basis for the capital & maintenance upgrades needed.

This dynamic can be exacerbated by State Government funded support, such as the $1 billion Safe and Secure Water Program. While State support can be critical to providing safe and secure water, funding has been concentrated in larger projects with a smaller number of councils.

The LWU industry also encounters:

- ***Limited economies of scale***: LWUs often do not have the financial resources or organisational capability to improve resilience of water systems and ensure water is secure and sustainable for their customers
- ***Inconsistent water quality***: Resolving health concerns with mitigating the increased risk of water-borne pathogens as 20% of water supply systems are assessed as having high infrastructure related water quality risk
- ***Water charge rates***: Average water charges are almost 30% higher for small, remote LWUs when compared to similar sized LWUs in less remote areas.

These challenges are not shared by all LWUs. The larger LWUs in coastal areas and regional cities generally have much stronger balance sheets due to their large customer base allowing for positive cost recovery.

To that end, we agree with NSW Productivity Commission's guiding view that LWUs need a funding system that is fair, efficient and meets the needs of regional and remote communities, while acknowledging different utilities require different levels of support.

3 Alternative Funding Framework

3.1 Overview

Plenary welcomes the NSW Productivity Commission's investigation into alternative funding models to improve water quality, resilience and sustainability throughout regional and remote NSW. We believe that there are models available through utilising concession based approaches that can address the challenges faced by these LWUs.

Our approach is centred on organising the individual LWUs to collaborate on a coordinated basis. This can be achieved by utilising the existing frameworks, such as the Joint Organisation (JO) framework as provided under the Local Government Amendment (Regional Joint Organisations) Act 2018. This could see the LWUs in a particular water catchment being party to the same Joint Organisation agreement (defined as "LWU Water Catchment" for this paper).

By working together in a JO, LWUs could develop a refurbishment and investment program to be developed across the whole of a catchment, focusing on an efficient delivery pipeline, economies of scale, and minimum service levels over the whole of the life of the assets. There is strong interest from infrastructure investors in partnering with government agencies to deliver these kinds of capital intensive, and long life assets that provides essential services.

Under the concession the JO for the LWU Water Catchment would enter into a partnership with the consortium who would deliver an agreed set of assets and upgrades, and operate and maintain them over a defined period of time with long term alignment. LWUs or the JO would not have to raise the capital themselves, but would contribute regular payments, where the assets are available and operating at the required standards. Further details on the funding arrangements are outlined in Section 3.

Other key features are:

- Ownership of the land and asset resides with the local council, whilst a licence arrangement provides site access to the concession holder for the funding, delivery and long-term maintenance activities
- Transfer of delivery and operating risks from LWUs to a consortium with the expertise to manage these risks efficiently and effectively
- Development of an output based design specification to ensure consistency of water and sewerage services across the LWUs and NSW
- Performance incentives based on minimum service requirements to ensure water quality is delivered
- Innovative capital approaches to fund the refurbishment and rehabilitation at the most efficient cost of capital by leveraging the demand for low risk infrastructure assets by investors, and other forms of sustainable finance
- Maintain operational employment requirements through the concession, where this is a priority for local councils
- Handover regime for the assets at the end of the concession, ensuring they continue to operate for the local community.

These approaches have been used for delivering essential water infrastructure across Australia, including Barwon Water Biosolids (Vic), Sydney Desalination Plant (NSW) and Mundaring WTP (WA).

Importantly we are not advocating for privatisation. Our solution is compliant with NSW Government's policy of no forced amalgamations of local councils and that ownership of LWUs remain with local councils. Furthermore, we have identified ways to strengthen community engagement, foster local employment and drive increased regional economic activity in Section 5.

3.2 Funding Model

There are many alternative funding models available for concession models. Central to our approach is to ensure the funding requirements not only provides scale to attract private capital but also ensures the funding is allocated efficiently to ensure consistent water reliability and quality across NSW. This structure can be adopted alongside State Government grants, as they may be provided as part of the capital structure to mitigate affordability requirements whilst preserving the benefits from the concession approach.

We have outlined two frameworks that best resolve the key challenges currently being faced by LWUs. These options are:

- ***Regulated Model***: Suitable for assets that have ongoing capital expenditure for network expansion or requires a private sector operator for the long-term being 50+ years
- ***DBFOM Model***: Availability-based model with tailored KPIs to deliver value for money outcomes from a technical, commercial and financial standpoint whilst preserving the long-term operational requirements

Table 1 provides a breakdown of the key considerations for each.

	Regulated Model	Concession Model / DBFOM
Revenue Model	Price determinations on a periodic basis	Availability-based revenue with KPI deductions
Gearing	Dependent on regulatory regime adopted but typically 60 - 75%	Gearing up to 90%
Risk Transfer	Medium Ability to transfer operational risk for the asset life & beyond a fixed term Limited long-term fixed price certainty	Strong Fixed price and time contract for the duration of the concession Operational performance aligned through KPI regime
Considerations	Asset specific regimes established (e.g. REZ, Sydney Desal Plant) Amortisation over the component's asset life (e.g. 10 to 40 yrs) Additional regulatory complexity & cost to implement	Capital amortised over the fixed term of 20 to 30yrs Established risk transfer models Better incentivizes for operational performance WoL design to drive lowest cost

Table 1: Funding model summary

3.3 Financing Plan

3.3.1 Financing & payment profile

The financing plan involves innovative capital approaches to fund the delivery activities. This could include accessing lower cost of capital funding pools focused on long term infrastructure investments as well as sustainable finance, where available.

Figure 1, illustrates that under this mode, only once completion has been achieved, and the infrastructure is operating would payments under the concession commence. This means that the JO and LWUs are not assuming the risk for cost overruns or delay to completion. Importantly, an incentive regime would be incorporated where the payments would be reduced if minimum service levels were not met, or the asset was not available.

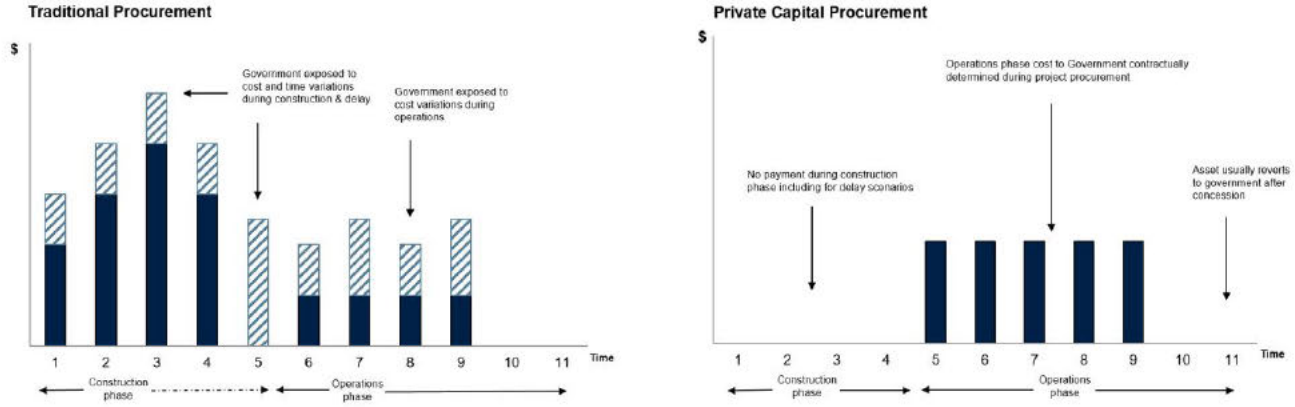

Figure 1: Capital payment profiles

The revenue payment profile will depend on the funding model deployed, being either the Regulated Model or DBFOM Model. However, consistent with both approaches is the government / local council retains the volume and demand risk for usage.

Under the DBFOM Model, at the end of the concession the asset is returned back to the LWU to operate into the future. The handover regime provides value to the LWUs as there are contractual obligations on the concession operator to ensure the asset is returned in good condition for its remaining asset life.

3.3.2 Consumer Water Charges

We understand that currently local councils set their own water bills based on the costs they face and the levels of service their communities expect. This results in those areas of NSW that are the most socio-economically disadvantaged to shoulder a higher burden when it comes to water services, as there are fewer users to share the cost allocation with.

How the government decides to proceed harmonising water charges throughout NSW whether in full or part is a policy decision for government. However, the best way to keep water bills as low as possible is to leverage the economies of scale, expertise and innovation available to support LWUs in providing water services to their customers at the standards they should expect. With our alternative funding framework the Government has this flexibility to deploy its preferred approach.

Given the concession is not taking demand risk, the payment stream could be structured either as:

- 100% of payments from the JO being received by the concession operator then the local water utilities retain responsibility for invoicing users and receiving payment, or
- The concession operator could manage the invoicing and receipt of payments from end-users with the Government providing any gap funding support for the fixed availability payments.

Finally, there is the potential to assume an element of commercial or demand risk by the preferred concession holder. As there are commercial markets for the by-products generated by sewage treatment plants such as biogas, fertilizer or brine. The LWU would benefit from these commercial markets, which in turn lowers the overall costs to the LWU and JO. Plenary has experience in this area with the Barwon Water BioSolids project in Victoria.

4 Minimum Service Levels

We agree with the NSW Productivity Commission objective that a balance needs to be found between the desired minimum service levels and the costs of achieving them. The incentive framework should be structured to target the essential elements of water and sewage services. Key performance metrics are:

- ***Water quality:*** refers to both safety from a health perspective and aesthetics for taste
- ***Water security:*** refers to the infrastructure safeguarding water access
- ***Environmental impacts***: refers to the treatment requirements to monitor against environmental impacts through water collection and sewage processing
- ***Service reliability***: refers to the performance of the network in terms of the management of assets and the level of service provided to customers.

We suggest a clear quantifiable approach to minimum service levels. This enables the operator to price a solution that avoids excessive risk premiums that would otherwise arise from subjectively assessed minimum service levels. The measurable incentive approach has proven to be successful in the market, where customer satisfaction surveys are carried out on Plenary's:

- [redacted]

[redacted]

From a monitoring perspective, there needs to be a clear separation of roles and responsibilities to give an independent assessment of performance against the minimum service levels. During operations there are contractual obligations for the concession holder to monitor and report on its achievement towards the minimum service levels. This is typically achieved through monitoring devices to provide the necessary data to substantiate and validate the assessment. Given that, our recommendation is that the minimum standards need to be quantifiable and measurable.

5 Investing in local communities

5.1 Local Employment

Fundamental to our approach is nurturing job creation for local employment. Given the LWUs have an existing workforce any approach would need to support the existing workforce for the long-term. As any investment activity not only should go to promote employment activity but also guarantee employee retention.

There are proven models that allow retention of local employment, and the incoming operator provides the necessary training to upskill the workforce for the systems and process to be deployed.

5.2 Local Contractors

The delivery activities of this scale will require local contractors to be involved in the refurbishment works and maintenance activities. The approach undertaken to engage with the local contractor market should be on the decision of each consortia. As this will allow the most efficient allocation of resources, and ultimately provide the best value for money solution.

For example, Plenary for its Western Road Upgrades project implemented a commercial structure that engaged with 5 significant allied subcontractors. Each subcontractor had extensive civil experience delivering these projects but didn't have the financial capacity to support private finance on a standalone basis. To ensure bankability requirements were met, our lead D&C Contractor provided a solution and was supported by these subcontractors throughout the RFP Period to develop the proposal, and then were a key part of the success in delivering the works.

5.3 Local Content

The requirement for local content is increasingly becoming a driving factor for successful procurements. This is where the client mandates certain requirements to address this concern. Key criteria are:

- Sourcing a minimum portion of local materials
- Providing employment for a minimum level of traineeships and apprenticeships
- Supporting indigenous populations with minimum employment participation

Plenary has experience in contracting under these local content arrangements. With each development we seek to establish strategic partnerships to connect communities to opportunities.

We would welcome any mandated drivers to promote local engagement in any procurement.

6 Next Steps

Plenary would welcome the opportunity to discuss alternative funding approaches further with the NSW Productivity Commission. We are confident that there will be significant interest from institutional and financial capital markets to address NSW's water requirements. Ultimately, we believe there is significant potential to improve the capacity and capability of LWUs by utilising a concession framework and deliver the water services required.

Please feel free to contact us should you have any further questions.

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[redacted]	

Appendix A – Plenary's Australian Portfolio

Operational Under Construction

ADF Single Leap 1
Nationwide

ADF Single LEAP 2
Nationwide

AgriBio Centre for AgriBiosciences
Melbourne, Victoria

Barwon Water Biosolids Management
Geelong, Victoria

Casey Hospital
Berwick, Victoria

Footscray Hospital
Melbourne, Victoria

Gold Coast Light Rail
Queensland

Health Translation Hub
Sydney, New South Wales

High Capacity Metro Trains
Melbourne, Victoria

Melbourne Convention and Exhibition Centre
Melbourne, Victoria

Nyaal Banyul Geelong Convention and Event Centre
Geelong, Victoria

Queensland Schools Project
Queensland

Sydney Metro
Sydney, New South Wales

Sydney Metro – Western Sydney Airport SSTOM
Sydney, New South Wales

South Australian Police and Courts
Regional South Australia

Toowoomba Bypass
Toowoomba, Queensland

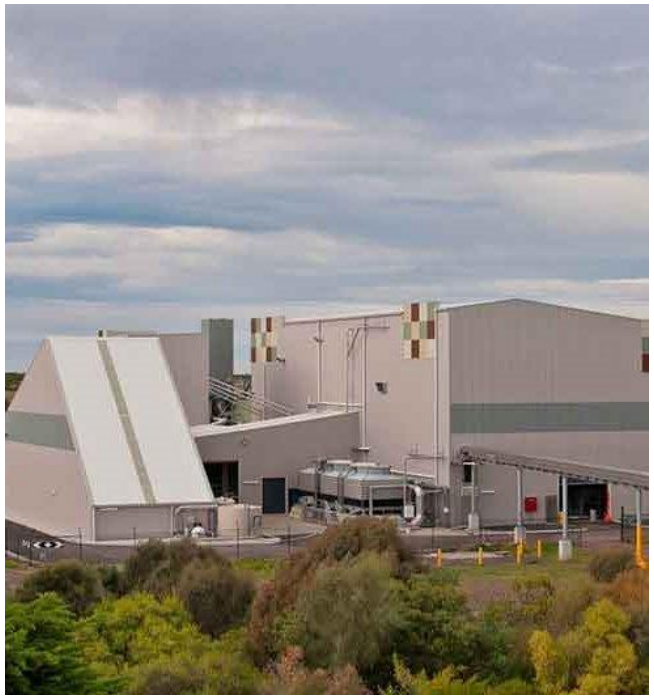
Victorian Comprehensive Cancer Centre
Melbourne, Victoria

Western Roads Upgrade
Melbourne, Victoria

Appendix B - Relevant Case Studies

Barwon Water Biosolids Management

Victoria, Australia



Overview

Plenary Environment is operating this fully enclosed thermal drying facility for treating Barwon Water's biosolids; a by-product of the treatment of wastewater and sewage.

The Plenary solution involves the beneficial use of these treated biosolids. Currently pelletised biosolids are dispatched from the facility to more than 30 broad acre cropping and pasture farms across Central and Western Victoria.

The facility treats Barwon Water's biosolids to T1 Grade; the highest treatment grade under EPA standards.

KEY STATISTICS	
CLIENT:	Barwon Water
FINANCIAL CLOSE:	30 August 2007
COMPLETION DATE:	September 2012
VALUE:	A$77.6 million
DESIGN, CONSTRUCTION, OPERATIONS AND MAINTENANCE CONTRACTOR:	Trility
BENEFICIAL USE PROVIDER:	Feri-Tech
CONTRACT TERMS:	Design, build, finance, maintain and operate for 20 years

Western Roads Upgrade

Victoria, Australia

Overview

The Western Roads Upgrade project is Victoria's largest single investment in arterial roads to date.

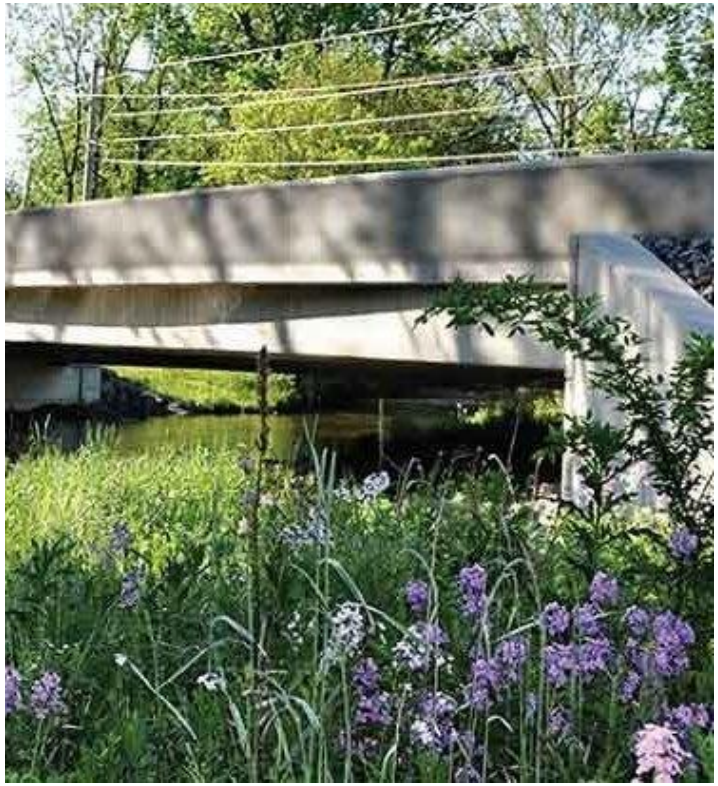
It includes eight high-priority road upgrades, road widenings, intersection upgrades, almost 30 kilometres of duplicated road and more than 260 kilometres of road rehabilitation and maintenance for 20 years across Melbourne's west.

The Netflow consortium is contracted by the Victorian Government to design, build, finance and maintain the project for 23 years.

KEY STATISTICS	
CLIENT:	Victorian Government
FINANCIAL CLOSE:	December 2017
COMPLETION DATE:	March 2021
VALUE:	A$1.8billion
SERVICE PROVIDER:	Ventia
CONTRACTOR:	WBHO Infrastructure
DESIGN TEAM:	Amey, KBR and pitt&sherry
CONTRACT TERMS:	Design, build, finance and maintain for 23 years
AWARDS:	Global Financial Structure of the Year, PPP 2019 Global PPP of the Year Awards

Pennsylvania Rapid Bridge Replacement

Pennsylvania, United States of America



Overview

Plenary Group is the project sponsor, financial arranger, and 80% equity investor for the Pennsylvania Rapid Bridge Replacement; the first public private partnership to bundle multiple bridges in a single procurement in the U.S. and Plenary's third U.S. project to close.

The project will see the accelerated replacement of 558 geographically dispersed and structurally deficient bridges across Pennsylvania.

Construction began in the summer of 2015 with a scheduled Substantial Project Completion expected in 2018.

KEY STATISTICS	
CLIENT:	Pennsylvania Department of Transportation
FINANCIAL CLOSE:	March 2015
COMPLETION DATE:	2018
VALUE:	US$1.12 billion
DESIGN BUILD:	Walsh Construction Company, Granit Construction Company
ENGINEER:	HDR Engineering
OPERATIONS AND MAINTENANCE:	Walsh Infrastructure Management, LLC
CONTRACT TERMS:	28 years, Design- Build- Finance- Maintain