Response by Gladstone Area Water Board – Attachment 1

Overview

Gladstone Area Water Board (GAWB) welcomes the review by the Queensland Competition Authority (QCA) of its approach to climate change related expenditure and the opportunity to respond to its Discussion Paper. As the QCA has recognised, the risks presented by climate change pose a number of significant challenges for organisations such as GAWB, including those within the context of its regulatory framework. Further, the timing, nature and scope of the potential impacts of climate change remain highly uncertain.

Community expectations of a proactive, rather than reactive, approach to addressing climate change continue to grow. A range of policy initiatives are being developed and implemented by the Commonwealth and State governments and these will continue to evolve through time.

GAWB has a Climate Change Strategy which aligns with the Queensland Government's Climate Change Policy and reflects what GAWB considers is necessary and appropriate to meet community and customer expectations. This also reflects the increasing expectations for Boards of all organisations – in the public and private sectors – to address climate change issues.

Overall, the climate change space is quickly evolving and changing. This extends from changes in future policy direction through to additional reporting and compliance obligations and requirements. As a result, it is consuming additional organisational time and resources. By way of example, there is the potential that our reporting obligations could extend to Scope 3 emissions at some time in the future, necessitating data collection from customers and suppliers. This will materially increase our workload and resourcing requirements.

We consider that climate change related expenditure cannot be assessed for regulatory purposes in the same way as other expenditures based on the typical prudency and efficiency criteria applied by the QCA. It requires a fundamentally different approach, recognising that the risks associated with climate change, as well as the responses that may need to be implemented to address those risks, are inherently uncertain in what is a rapidly changing and evolving environment.

In the first instance, the regulatory approval of costs associated with climate change should not be predicated on a need to demonstrate a mandatory obligation. The regulatory framework needs to complement – rather than drive – the strategy that each regulated business considers is appropriate, having regard to its business and operating environment. This extends to having regard to the (growing) expectations of the wider community as well as the responsibilities of Boards as part of good corporate governance. In other words, the onus should not be on the business to have to demonstrate a mandatory target or external pressures from customers or other stakeholders.

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Consideration could also be given to developing principles that can be applied when assessing expenditure related to climate change. This should have regard to the business's Board-approved climate change strategies and policies, as well as its assessment of the risks, consequences and costs of inaction (recognising that this is inherently uncertain). As with any proactive response to future risk, ex post reviews of expenditure need to consider whether the investment decision made by the business was appropriate having regard to the information available at the time, rather than with the benefit of hindsight.

Our response is structured based on the questions posed by the QCA in its Discussion Paper, where relevant.

The climate action problem

Q1. To what extent are the risks of more frequent or severe extreme weather events already impacting the businesses of regulated entities? Please provide evidence where available and appropriate.

Impacts on water supply, network assets and operations

Climate change poses a range of risks to water sector infrastructure, employees and the services we provide to our customers and the Gladstone community. The main anticipated direct impacts of climate change include:

- Less rainfall, runoff and catchment yield leading to reduced water availability in Lake Awoonga. This could result in water restrictions. It may also lead to reduced waterway health.
- More intense rainfall events leading to damage to the catchment and reduced waterway health. Assets can also be damaged from flooding, coastal inundation or increased turbidity in the water.
- Harsher bushfire weather, increasing the risk of significantly reduced water availability and raw water quality due to ash and chemical contamination, as well as reduced catchment yield for many years as trees regenerate. Bushfires can also cause asset damage.
- Increased average temperatures and drier conditions leading to asset degradation, increased acidity of soils and decreased service reliability. Warmer conditions can also lead to greater demand for water and increased vulnerability of field staff.
- More extreme weather events may lead to extended periods of electricity and communications system disruptions, or disruptions to transport and other supplies such as generator fuel and chemicals. These disruptions could lead to an inability to manage assets, decreased service reliability and impact the safety and wellbeing of field staff.

One of the key challenges in managing these impacts is balancing proactive management of these risks, such as the planning and building of infrastructure to higher (more resilient) standards, with reactive responses, such as increased maintenance from premature asset degradation and the repair of damaged infrastructure following a major weather event.

The risks associated with the changing climate need to be incorporated into our planning, project design and asset management activities, recognising that the future requirements of the network could be quite different from what they are today.

The above risks have or may impact our expenditure in a number of ways. For example:

- The costs associated with emergency response, such as repairing damaged infrastructure after a flood. Depending on the nature and extent of the damage and its impact on our ability to deliver water supply that meets required standards, this could necessitate an intense and rapid program of work.
- Extreme weather events can place further pressures on key supply chains, which can impact the availability and cost of inputs and resources. Further, particularly in a regional area, the prices of these inputs and resources can be 'bid up' when there are competing demands and tight supply following an extreme event. This can also be challenging to accommodate in standard procurement frameworks and where the priority is restoring services as quickly as possible.
- Additional treatment costs, which can result from a flood, bushfire or during drought conditions.
- Increased expenditure for assets that are being adversely impacted by climate events, including bringing forward the need for capital expenditure and/or increased maintenance.
- Increased frequency of fish kill events due to climate change, resulting in additional costs in monitoring, reporting, testing and responding to these events being incurred.
- Increased costs for land management activities such as pest and weed control, as well as erosion and sediment control.
- Increased costs of drought. As the water level in Awoonga Dam drops, exposing more land, additional fencing to keep cattle out of those areas needs to be constructed.

Managing GHG emissions

The other key dimension is the management and reporting of emissions, as well as the actions that businesses are implementing to reduce emissions. As is the case with other water network businesses, the majority of GAWB's GHG emissions result from the consumption of electricity related to the supply of water i.e. pumping.

In the first instance, we are observing a significant increase in external reporting obligations and requirements, such as annual GHG emissions reporting and emissions dashboard reporting. This is expected to continue to evolve and change. For example, currently GAWB

is only required to report Scope 1 and 2 emissions. It is expected that this may be expanded to include Scope 3 emissions at some point in the future, however the timing of this remains highly uncertain. This would create significant additional workload for GAWB.

There is also an increasing expectation from customers, regulators and stakeholders that relevant plans, information and reports will be able to be provided on a routine basis (as part of business-as-usual). This is effectively an expansion of GAWB's historical business requirements and necessitates investment in systems and resources, including the enabling of necessary data capture for ongoing monitoring and reporting. This can also require us to collect information from external contractors, which can be challenging if they do not routinely collect and report information of this nature.

GAWB is committed to reducing carbon emissions and responding to climate change risk and has developed a Climate Change Framework, which includes a Climate Change Policy, Strategy and Action Plan. This includes a commitment that at a minimum, we will voluntarily reduce our carbon emissions in line with Queensland Government targets.

Emissions reduction can be achieved through a combination of direct measures (such as the installation of solar PV), which involves capital investment, as well as indirect actions (such as the purchase of offsets) that will result in us incurring additional operating expenditures. As there is considerable uncertainty associated with these actions, including changing technology, our strategy and initiatives will continue to develop and evolve over time.

This can also require specialist expertise (via external and internal resources) to implement and manage the organisation's strategy

Q2. Is there evidence to suggest that regulated entities are facing difficulties in accessing insurance for their assets or accessing insurance at reasonable cost? Is self-insurance thereby becoming a more prudent option for these businesses?

Yes, we are experiencing challenges in terms of both the availability and cost of insurance. As information regarding our insurance arrangements is commercially sensitive, we would be happy to discuss this further with the QCA on a commercial-in-confidence basis.

We expect that the conditions in the insurance market could also see businesses having to review their approach to cover. There are a number of options here, including using captive insurance, where the organisation creates a more formal arrangement for protecting against its own unique business risks. Such programs can be costly to establish and implement. Captive insurance is effectively a form of self-insurance however there are other ways that a business can self-insure. This also may not be a feasible alternative for some businesses.

As with other responses to the challenges presented by climate change, as well as other risks, the most appropriate insurance approach for each organisation depends on its individual circumstances and risk profile. For regulated businesses, it is important that the regulatory framework complements, rather than drives, this choice of approach.

Q3. Most organisations, including regulated entities, now have detailed climate change strategies and planning documents in place. To what extent are these strategies a response to government policies, and to what extent are they externally driven (e.g. in response to financing requirements or shareholder activism)? Do these external drivers put pressure on businesses to exceed the minimum requirements of government policies?

As noted above, climate change is an ever-evolving space, including what constitutes "the minimum requirements of government policies". Further, the expectations of stakeholders, customers and the wider community similarly continue to evolve. GAWB expects that its own industrial customers will also be subject to varying pressures in terms of their own climate change policies and initiatives, including mandatory and voluntary requirements.

Our Climate Change Strategy is driven by both the need to comply with current Queensland Government policy, along with what we consider is expected of us by the wider community.

Effectiveness of existing regulatory frameworks

Q5. Do the QCA's existing regulatory frameworks create appropriate incentives for regulated entities to efficiently manage risks associated with climate change? If not, how might the frameworks be improved in this regard?

Key theme: uncertainty

As the QCA acknowledges in its Discussion Paper, there is considerable uncertainty as to the likelihood of climate change events. This similarly extends to the nature, frequency, scope and impact of these events. The QCA recognises the consequent "uncertainty around the need to undertake both adaptation and mitigation expenditures".[1]

In terms of adaptation expenditure, this uncertainty requires the application of judgement by the business in balancing the trade-off between proactive initiatives (such as upgrading infrastructure to be more resilient) and reactive responses. This judgement may need to be made based on inherently uncertain forecasts and probabilities of climate-related events, as well as circumstances prevailing at the time, including the policy and legislative environment, along with financial and economic drivers.

Noting that GAWB's regulatory period currently spans five years – and its expenditure forecasts for that period will be reviewed and assessed prior to that – the circumstances impacting decisions in relation to both capital and operating expenditure could be subject to material change over this timeframe.

[1] Queensland Competition Authority (2022). Discussion Paper: Approach to Climate Change Related Expenditure, p.24

Further, in terms of (necessarily reactive) operating expenditure associated with actions such as emergency response, the priority is restoring services as quickly and effectively as possible, at a time where the business may be competing for scarce resources. This may necessitate a flexible procurement framework where the key trade-off is cost.

Decisions regarding mitigation expenditure are also subject to uncertainties, including the organisation's future carbon emissions as well as the impact of direct action measures in reducing those emissions. This uncertainty extends to matters such as the evolution of technology. The availability and cost of indirect mechanisms to mitigate emissions, including the use of offsets, is also difficult to forecast given this is a new and developing market.

A further category of expenditure relates to reporting and compliance. While all compliance-related obligations can be subject to change, in our experience obligations associated with the environment and climate change are evolving more rapidly

Implications for incentives

In GAWB's opinion, the current regulatory framework presumes a comparatively mature business operating in a stable environment – it does not deal well with uncertainty. In particular, when some of the key parameter inputs are subject to uncertainty and judgment must be applied, different parties could each form a different view having regard to the same (or similar) information.

In our experience, investment decisions remain vulnerable to the QCA (and/or its consultant) forming an alternative view as to what might be seen as prudent and efficient, especially when applying the benefit of hindsight (e.g. in an ex post review of capital expenditure). This can adversely impact our incentives to commit to uncertain expenditures if the regulatory risk is seen as too high.

For investments that are designed to improve resilience against future climate-related events, we see a material risk of concerns around over-investment or 'gold-plating'. This could arise because of differences in views (i.e. between GAWB and the QCA and/or its consultant) on a number of matters, such as the risk assessment underpinning the investment decision, as well as the timing and/or scope of that investment. For the reasons outlined above, assessing our exposure to future climate-related events is impossible to predict with any certainty and could prove contentious in demonstrating the prudency and efficiency of a capital project.

The review and approval of climate change related expenditure therefore requires a fundamentally different approach to the traditional prudency and efficiency lens applied by regulators.

Businesses need flexibility so that they can adapt their program of initiatives within the regulatory framework. It also needs to be able to accommodate increases in resourcing requirements (internal and/or external). Further, what might be an optimal approach for one business may not work for another.

In terms of operating expenditure, there is an increasing move to the application of base-step-trend, rather than bottom-up category-based forecasts. There is a question as to how expenditure related to climate change fits within that context. As a starting point, it could be less likely that revealed base year expenditure will remain indicative of future expenditure on managing the issues and risks associated with climate change in future years.

This could necessitate assessment as a step change, having regard to the above considerations in assessing prudency and efficiency. Alternatively, this category could be excised from the base-step-trend assessment, although this may not be seen as sufficiently material within the context of total operating expenditure to warrant this.

In the case of expenditure related to climate change, this is largely about responses to future risk. This requires a very different approach to assessing expenditures on activities that can be planned and implemented with more certainty, and where we may be able to place more reliance on historical evidence and experience.

Regardless of how this will be treated, while a business still clearly needs to substantiate any new or increased sources of expenditure, there are two main issues. First, it will be inherently more challenging for a business to reliably forecast these costs and there is a lack of historical precedent to provide guidance. Second, the business needs sufficient flexibility to be able to adapt and respond to changing needs and priorities over the regulatory period.

This may also need to work in combination with other regulatory mechanisms addressing uncertain expenditures.

Q6. Are existing mechanisms in the QCA's regulatory frameworks for dealing with newly arising expenditure requirements (e.g. pass-through mechanisms, review events and draft amending access undertaking (DAAU) processes) sufficient to deal with climate change related expenditure? If not, how might these mechanisms need to be amended?

While mechanisms such as cost-pass throughs and review events are intended to address unanticipated operating expenditures, they will not necessarily be sufficient to manage the uncertain costs and risks associated with expenditure related to climate change. Two of the key mechanisms that have been applied by the QCA – and typically subject to materiality thresholds or triggers - are:

- cost-pass throughs e.g. to address additional compliance obligations, including reporting requirements; and
- review events, for example to address additional costs incurred due to an emergency response.

There are a number of issues associated with the utilisation of these mechanisms in the context of climate-related expenditures.

1. They tend to be subject to a materiality threshold. This might be easier to do for major one-off events (e.g. in response to a flood), however they may be more difficult to demonstrate if the increases in costs are cumulative over time. In other words, what

initially might be seen as relatively small increments in expenditure that could be absorbed by the business if they continue (i.e. increase on a cumulative basis, both across the business and/or through time), they may become more material, especially over the course of a regulatory period.

2. The scope of costs that may be permitted under the mechanism could be difficult to define. There could also be debates as to the extent to which costs are beyond the control of the business.

3. At least initially, the costs will have to be borne by the business, with uncertainty as to if (and when) it will be able to recover these costs via prices. This has a direct financial impact on the business.

4. The time, resources and costs associated with any mid-period price reviews could be substantial, not only for the regulated business but also the QCA. These costs are ultimately borne by GAWB's customers.

5. The prospect of mid-period price adjustments can reduce price certainty and predictability for customers.

We note there are other mechanisms such as the contingent project mechanism applied in electricity network regulation. This approach relates to capital, rather than operating, expenditure. This approach is primarily applied where there is uncertainty as to the requirement, timing and/or cost of a project and provides scope for a revenue determination to be re-opened during the regulatory period. This in turn is linked to the occurrence of a specified trigger event.

This type of mechanism will not fully address the issues raised above. Decisions regarding investments to improve future resilience cannot be linked to a specific trigger event – it is more about the application of reasonable judgement having regard to the future risks and consequences of climate change. It is differences in the assessment of this risk – which is also likely to change through time – that leaves the business vulnerable to concerns regarding gold-plating or over-investment after that investment is made (either more immediately or in the longer term).

This highlights the need for an appropriate balance between the approval of ex ante allowances for uncertain expenditure and ex post mechanisms. Further, what might constitute an appropriate balance between these will vary between businesses and industries.

Regardless of the mechanism/s applied, there would be benefit in the QCA providing some guidance as to how it would be applied, including a set of principles or criteria to provide the business with greater certainty as to how this might be assessed. This could enable more confidence as to how expenditure will be treated before it is incurred.

These principles should recognise that at each regulatory review, a business may be seeking approval for a 'package' of expenditure – involving both capital and operating expenditure – in response to the inherently uncertain future risks associated with climate change. This in turn needs to provide the business with some flexibility in adapting these responses over the

course of the regulatory period. In other words, the QCA is largely reviewing a risk management strategy, rather than a certain program of initiatives. To the extent that this is subsequently subject to ex post review (e.g. in the case of capital expenditure), actions should also be assessed based on the information available at the time of undertaking the expenditure, rather than with the benefit of hindsight.

Q7. The QCA's standard approach to assessing the prudency and efficiency of capital expenditure claims by regulated entities involves applying frameworks that assess scope, standard and cost. Are these existing frameworks suitable for assessing climate change related expenditures? And do they provide the right incentives for entities to appropriately have regard to climate change considerations—and alternative ways of achieving the desired objectives—when undertaking expenditure? If not, how should they be enhanced?

For example, in considering the prudency of capital expenditure, is there a trade-off between efficiency and least cost, and robustness and resilience? If so, how can these trade-offs be managed?

Q8. Are processes in the regulatory frameworks that are designed to provide regulated entities with a degree of certainty to make investment decisions (e.g. provisions that allow for preapproval of the scope of projects or customer vote mechanisms) sufficiently flexible to enable climate change related investments to proceed where appropriate?

As these questions are closely related, we have addressed them in combination.

As outlined above, we are concerned that the QCA's existing approach to assessing the prudency and efficiency of capital projects will not readily accommodate investments to improve resilience, particularly given the uncertainty associated with the risk profile of future climate events (in terms of likelihood, frequency, duration and impact).

The focus in assessing climate-related capital expenditure should be whether the decision to invest is consistent with the actions of a business acting prudently and efficiently, having regard to the relevant information and circumstances at the time the decision is made. This includes demonstrating that the investment is consistent with the business's climate change strategy and risk appetite. It should be the role of the business, rather than the QCA (or its consultant), to assess the risk of future climate-related events to its network.

Corporate and regulatory insights

Q9. How should differences between regulated entities' willingness to supply and customers' willingness to pay for adaptation and/or mitigation expenditure be reconciled? What if the willingness to pay differs among customers or groups of customers? In considering these matters, how should potential externalities be assessed? This includes positive externalities that may accrue to the broader community from increased mitigation activities.

Assessments of customer willingness to pay are fraught with difficulty, including differences between actual and stated preferences. As the QCA highlights, this willingness to pay could vary between customers or groups of customers. GAWB considers that this is particularly likely for an issue such as climate change, which continues to be the subject of debate.

More importantly, climate change is an externality problem. This means that parties who bear the costs of events resulting from climate change, as well as benefit from investment in initiatives to reduce emissions, extend beyond a service provider's direct customer base. These externalities therefore need to be a core consideration that frames the approach to the issue, rather than an additional consideration. As the beneficiaries of actions in response to climate change extend beyond a service provider's direct customer base to the wider community, the question of who should pay (and how) is likely to remain contentious.

Q.11. How do organisations consider different types of mitigation expenditures? How do they decide between alternative options (e.g. direct mitigation versus purchase of offsets) and justify those decisions? What lessons can be learned for the QCA's regulatory processes?

Alternative mitigation strategies need to be considered within the context of the organisation's business, operations and environment, as well as its climate change strategy and policies. What is appropriate for one business may not be appropriate for another. For example, while direct mitigation may naturally be the higher priority:

- organisations will differ in terms of what actions they can take to directly reduce their emissions;
- the costs and benefits of these actions can be uncertain; and
- they take time to develop and implement.

Strategies such as the purchase of offsets can be a flexible and effective way of immediately reducing an organisation's net climate emissions. They can also be used as 'residual' after accounting for reductions achieved through direct action. However, carbon markets are also at a relatively early stage of development and will continue to grow and evolve with time.

Some combination of strategies is therefore likely to be required, and the profile of this could vary through time (e.g. the use of offsets could reduce in the longer term after investments have been made in direct action initiatives and the benefits of this are more established). However, this cannot be a 'one size fits all' approach and needs to be assessed for each business on a case-by-case basis. Further, the regulatory approach needs to enable the

business to retain sufficient flexibility to adapt its approach over the course of a regulatory period.