The Hon Lisa Neville MP  
Minister for Water  
Level 17, 8 Nicholson Street  
East Melbourne VIC  
3002

31st January 2018

Dear Minister

**Goulburn Murray Water Strategic Advisory Panel-Independent Report**

Please find attached the Strategic Advisory Panel's Report reviewing Goulburn Murray Water (GMW).

Consistent with the Terms of Reference issued by you on 27 October 2017, the report sets out the Panel’s detailed assessment of GMW's governance and structure, asset and project management, customer and stakeholder engagement and financial sustainability.

Based on detailed financial analysis over a 50-year period, the Panel has identified that GMW needs to achieve significant annual savings in operating and capital expenditure, particularly in the gravity irrigation business, in addition to those it has already identified to maintain its overall financial sustainability. Increasing prices significantly to address the issue would adversely impact Goulburn Murray Irrigation District (GMID) producers’ competitiveness.

Achieving this level of savings over and above the initiatives and efficiencies that GMW has already identified to 2022 will require GMW go well beyond ‘business as usual’. Indeed, it requires an urgent and significant transformation to GMW’s business and how it operates.

The Panel's report sets out the business transformation activities and initiatives that GMW needs to put in place over the short, medium and long term to achieve long term sustainability. It also recommends that GMW’s current business structure and resources needs to be supplemented by an expert transition and transformation panel to establish short (and long term) capacity building measures to be able to urgently transform the business to meet short term imperatives.

The Panel has made 30 recommendations directed to GMW and a further two recommendations directed to the Department.

Yours sincerely

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Mike Walsh  
Suzanne Ewart  
David Heeps
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1 Introduction

Goulburn Murray Water (GMW) is Australia’s largest rural water corporation and manages Australia’s largest irrigation delivery network known as the Goulburn Murray Irrigation District (GMID) with more than 21,000 individual customers. Both the Victorian and Commonwealth Governments have invested over $2 billion to modernise GMW’s ageing and inefficient infrastructure with a view to reducing water losses to ensure that there is sufficient water availability to support irrigators in Northern Victoria and to meet environmental water savings targets.

However, GMW is facing many significant strategic challenges including:

- climate change is reducing inflows into catchments
- obligations under the National Water Initiative and the Murray Darling Basin Plan codify reductions in the amount of water available for consumption and use
- water trading and water use has resulted in changes to entitlements in the GMID
- the Connections Project, while providing enormous opportunities to improve the efficiency of the GMID, also presents major financial challenges in the short, medium and long term, particularly as the project will reduce GMID’s footprint (and hence revenues) and these ‘gifted’ assets will eventually need to be replaced and
- movements in international commodity prices affecting the agricultural sector.

These various challenges require GMW to be dynamic and adaptable to meet the high performance levels expected from its customers in an efficient and financially sustainable way. This includes developing a sustainable approach to the current GMID footprint for future opportunities and developing a set of ‘GMID footprint investment rules’ to guide decisions that meet financial, stakeholder and community expectations.

Stakeholders would also expect GMW to be a highly strategic and commercially focused business with a sensible and well planned approach to managing any financial challenges. A GMW that is run efficiently and can demonstrate clarity around irrigation system reliability and investment opportunities will inspire more regional confidence with current and potential future customers.

Strong governance and leadership is essential to delivering outcomes. Customers and stakeholders need to be confident that the organisation can deliver efficient, reliable and affordable services well into the future, and take advantage of the $2 Billion Connections Project.

It is essential that with the $2 Billion investment in the Goulburn Murray Irrigation District it can be managed by GMW in a way that provides ongoing affordable services to its customers well into the future.

On 27 October 2017, the Minister for Water announced the establishment of this Strategic Advisory Panel (the Panel) to support GMW to meet the challenges of reduced water availability in the region and a changing customer base.

The focus of this review is to assess GMW’s ability to continue to deliver efficient, affordable and cost effective services to its customers having regard to the modernised irrigation system, reduced water availability and a changing customer base.
This report presents the Panel’s findings and recommendations. It presents the range of initiatives and outcomes that need to be achieved over the short, medium and longer term for GMW to transform its operations and become financially sustainable. The initiatives require GMW to go beyond ‘business as usual’ operations and will represent a ‘step change’ approach.

2 Findings

2.1 Achieving financial sustainability over the short, medium and longer term

In the simplest terms, GMW’s customers want a reliable water supply delivered at an efficient and affordable price. GMW’s fundamental challenge is to find a financially sustainable pathway to finance the costs associated with replacing, maintaining and operating a modernised system in the face of reduced future water availability and the current GMID footprint.

The Panel engaged Marsden Jacob Associates (MJA) to develop a 50-year financial model to assess GMW’s long term financial sustainability and the various business lines that it operates. The Panel considered that it was necessary to develop financial models for GMW’s individual business lines as well as the consolidated business to understand the magnitude of changes that might be required to ensure long term financial sustainability.

2.2 GMW’s overall business

GMW’s overall business is made up of the irrigation business and non-irrigation business which includes bulk water, surface diversions, groundwater and the non-regulated business.

The Panel’s 50-year financial modelling highlighted both the necessary savings required to achieve long term financial sustainability in the overall GMW business and a particular focus on the gravity irrigation business. GMW has made a far greater effort to understand the cost drivers of this business, the gravity irrigation business, which represents just over 50 per cent of GMW’s regulated revenue and approximately 60 per cent of the regulated operational costs. The magnitude of savings required has the most significant impact in this business, particularly considering modernised asset replacement, maintenance and operations. These savings are additional to the amounts that GMW has already identified through its asset initiatives ($474 million) and efficiencies measures ($15.2 million by 2022).
Based on this analysis, the estimated total savings required is as follows:

### TABLE 1: ESTIMATED TOTAL SAVINGS REQUIRED FOR FINANCIAL SUSTAINABILITY

<table>
<thead>
<tr>
<th></th>
<th>Short term (2018 to 2024) $ million</th>
<th>Medium term (2025 to 2040) $ million</th>
<th>Long term (2041 to 2067) $ million</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average annual savings</strong></td>
<td>9.7</td>
<td>18.0</td>
<td>7.6</td>
</tr>
<tr>
<td><strong>Cumulative savings</strong></td>
<td>9.7</td>
<td>27.7</td>
<td>35.3</td>
</tr>
</tbody>
</table>

**Note:** Reflects financial year data. Results based on GMW capital and operating expenditure inputs. The savings identified above are in addition to the $474 million (approx.) initiatives and $15.2 million (approx.) efficiencies that GMW has already planned over 25 years. The additional savings avoid growing and unsustainable debt.

*Source: Marsden Jacob Associates.*

#### 2.3 GMW non-gravity irrigation businesses

The table above shows the overall GMW savings required. MJA also assessed four of GMW’s business lines as being sustainable without increases to prices in real terms namely bulk water, surface diversions, groundwater (after attributing GMW’s efficiencies) and the non-regulated business. These business lines constitute approximately 40 per cent of GMW’s regulated revenue and 32 per cent of the costs. However, it should be noted that the outcome for the non-regulated business may reflect a lack of data on future capital expenditure.

The other regulated non-gravity business lines – pumped irrigation, water districts, fee for service and drainage – account for approximately 9 per cent of the regulated revenue and 11 per cent of costs. These business lines need to significantly reduce operating costs and/or increase prices by around $3.5 million to be sustainable (see Table 2). The $3.5 million is included in the $9.7 million savings required as shown in Table 1.

### TABLE 2: NON-GRAVITY IRRIGATION ESTIMATED SAVINGS REQUIRED BY BUSINESS LINE FOR LONG TERM SUSTAINABILITY

<table>
<thead>
<tr>
<th>Business unit</th>
<th>Additional savings required in FY19/20 $ million</th>
<th>Average annual savings required in FY19/20 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pumped irrigation</td>
<td>0.16</td>
<td>10</td>
</tr>
<tr>
<td>Water districts</td>
<td>2.78</td>
<td>30</td>
</tr>
<tr>
<td>Fee for service</td>
<td>0.29</td>
<td>50</td>
</tr>
<tr>
<td>Drainage</td>
<td>0.23</td>
<td>60</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3.46</td>
<td>29</td>
</tr>
</tbody>
</table>

*Source: Strategic Advisory Panel.*

These operational cost savings are in addition to around $1 million efficiency savings (of the total $15.2 million) that GMW has already identified for these business lines. Achieving these additional average annual savings in 2019/20 means that further savings are not required in the medium and long term to achieve financial sustainability in these business lines.
2.4 GMW gravity irrigation business

MJA assessed the gravity irrigation business as being financially unsustainable assuming constant prices in real terms. Decreasing prices by 5 per cent or 10 per cent would only acerbate the adverse financial position of the gravity irrigation business.

For the gravity irrigation business to be financial sustainable, GMW needs to do one or more of the following:

- achieve significant and sustained reductions in operating, maintenance and overhead costs and capital expenditure
- significantly reduce future capital expenditure, for example, by:
  - adopting a targeted risk based approach to identifying priority works
  - evaluating the opportunity to reduce the gravity irrigation business footprint over time and thereby contracting the number of assets that GMW needs to replace or refurbish in future
  - changing service levels for parts of the system (eg. where usage is low) to regulate or delay the need to replace assets
- increase prices in real terms to offset the increase in capital expenditure arising from ageing infrastructure and reduced revenues arising from the contracting irrigation footprint (leading to a decline in delivery shares and/or service points).

Based on this analysis, the estimated magnitude of the savings required for the gravity irrigation business is as follows.

TABLE 3: ESTIMATED SAVINGS REQUIRED FOR FINANCIAL SUSTAINABILITY OF THE GRAVITY IRRIGATION BUSINESS

<table>
<thead>
<tr>
<th></th>
<th>Short term (2018 to 2024) $ million</th>
<th>Medium term (2025 to 2040) $ million</th>
<th>Long term (2041 to 2067) $ million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average annual savings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating costs</td>
<td>4.8</td>
<td>10.1</td>
<td>2.4</td>
</tr>
<tr>
<td>Capital expenditure</td>
<td>1.4</td>
<td>7.9</td>
<td>5.2</td>
</tr>
<tr>
<td>Cumulative savings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating costs</td>
<td>4.8</td>
<td>14.8</td>
<td>17.3</td>
</tr>
<tr>
<td>Capital expenditure</td>
<td>1.4</td>
<td>9.3</td>
<td>14.5</td>
</tr>
</tbody>
</table>

Note: Reflects financial year data. Results based on GMW capital and operating expenditure inputs. The savings identified above are in addition to the $474 million (approx.) initiatives and $15.2 million (approx.) efficiencies that GMW has already planned over 25 years. The additional savings avoid growing and unsustainable debt.

Source: Strategic Advisory Panel.
Table 3 indicates that GMW will need to achieve significant savings in annual operating and capital expenditure for the gravity irrigation business to be financially viable in future. Increasing prices significantly to address the issue would adversely impact irrigation competitiveness in the GMID.

Achieving this level of savings over and above the initiatives and efficiencies that GMW has already identified to 2022 will require GMW go beyond ‘business as usual’ and to significantly transform and focus its delivery, as this Panel recommends.

To achieve financial sustainability, the Panel recommends the following in the gravity irrigation business:

**Short term – 2018 to 2024**

MJA’s analysis suggests that from 2019/20 GMW needs to find an additional 10 per cent of efficiencies above those that it has already identified through its Asset Initiatives and Efficiencies measures and incorporated in the Revised Base Case scenario. The 10 per cent efficiency saving would also need to apply to the capital expenditure program. This amount would be necessary to maintain the current debt level at around $50 million by 2023/24 so there are no impacts on customer prices.

The short term savings required is estimated at $1.4 million in capital and $4.8 million in total operating costs (operations, maintenance and overheads). Achieving further capital savings would reduce the estimated operating cost savings required over both the medium and long term.

However, increasing debt levels from 2020/21 arising from increased estimated capital expenditure would require GMW to achieve further efficiencies (and/or price increases) from 2024/25 onwards.

**Medium term – 2025 to 2040**

MJA’s analysis suggests that GMW needs to achieve further savings of around 15 per cent in 2024/25 and an additional 5 per cent in 2029/30 to be sustainable over the medium term. The estimated savings amount to an additional average annual savings of around $7.9 million in capital expenditure and $10.1 million in operating expenditure on top of the 10 per cent savings assumed for 2019/20.

The required efficiency savings could be reduced by increasing prices in real terms. For example, an increase of around 0.75 per cent per year in real prices over the five-year period from 2024/25 to 2029/30 would negate the need for the 5 per cent savings in 2029/30.

**Long term – 2041 to 2067**

GMW’s long term financial sustainability is significantly influenced by the theoretical replacement of its meter fleet over the assumed five-year period commencing 2041/42. However, this concentration of capital replacement is highly unlikely because:

- the replacement profile would occur over an extended period with meters being replaced on a risk basis, eg. low use meters may not need to be replaced as quickly as design life parameters suggest
- the cost of meters may drop because of technology and/or meters being replaced with cheaper versions, especially on low use sites and
• the number of meters needing to be replaced declines because farmers exit irrigation and/or rationalise on-farm layouts through property amalgamations. GMW could also change the structure of its tariffs to place greater emphasis on connection points (meters) as the basis for recovering fixed costs rather than relying on delivery shares under the current tariff structure.

Notwithstanding, MJA’s modelling suggests that the gravity irrigation business would achieve financial sustainability in the long term (2041 to 2067) if it:

• identified an additional 5 per cent efficiencies in operating and capital expenditures in 2039/40 in the gravity irrigation business and

• also increased prices by 1 per cent per year over the 10-year period 2029/30 to 2038/39.

The estimated savings amount to an additional average annual savings of around $5.2 million in capital expenditure and $2.4 million in operating expenditure.

Figure 4 indicates the sustainable outcome that can be achieved from efficiency savings and price increases on the gravity irrigation business.

FIGURE 4: LONG TERM – IMPACT OF EFFICIENCY SAVINGS AND PRICE INCREASES ON GRAVITY IRRIGATION DEBT

Source: Marsden Jacob Associates.

Non-regulated businesses and commercial activity
The Panel does not consider that GMW’s non-regulated business and commercial activity delivers a risk return commensurate with the commercial risk it carries. Until GMW identifies separate funding sources or additional revenue to support the losses made from non-commercial activities in the non-regulated space, it needs to consider the non-regulated business in totality to ensure that irrigation customers are not subsidising the non-regulated business.

GMW should review its non-regulated services and commercial activity with a view to considering whether it remains appropriate to continue to deliver these services or alternatively to divest them. Any review should be based on business cases developed for all activities and services, assessment of the financial implications, risks and alternative delivery options associated with these services.
The Panel notes that commercial activities provide GMW with negligible opportunities to improve its ongoing revenue requirements compared to the need to focus on core business savings to make it financially sustainable.

Analysis of meter usage and channel data

MJA’s analysis of meter usage and channel data identified that 80 per cent of channels delivered less than 500 ML during the 2017 irrigation season and accounted for only 18 per cent of total deliveries in 2017. Indeed, 34 per cent of channels delivered less than 50 ML with a further 13 per cent delivering between 51 and 100 ML during the season.

In contrast, 20 per cent of channels delivered 500 ML or more during the season. These 20 per cent of channels accounted for around 82 per cent of total deliveries in 2017.

The results for delivery shares were similar:

- 43 per cent of channels held less than 2 delivery shares per channel and accounted for only 4 per cent of the total number of delivery shares in the GMID in 2017
- 69 per cent of channels held less than 8 delivery shares per channel and accounted for around 21 per cent of the total number of delivery shares in the GMID and
- around 10 per cent of channels accounted for approximately 64 per cent of the total number of delivery shares.

These stark distributions highlight a number of points:

- First, the rationale for refurbishing under-utilised assets is unclear. There are significant opportunities to adopt a risk based asset management approach whereby heavily utilised assets are given priority over under-utilised assets when works are deemed necessary.
- Second, there is potential to reduce the irrigation footprint by negotiating with landholders on under-utilised channels. There is also scope to agree varying service levels whereby landholders on under-utilised channels receive a lower level of service, eg. lowering pool heights within channels to reduce maintenance expenditure and/or delay or negate the need to replace or refurbish and
- Third, the relatively high number of channels with a low number of delivery shares means that rationalising these channels (ie. decommissioning or providing a lower level of service at a lower price) will not have a major impact on revenues. Moreover, the cost of exit fees would also not be excessive. To evaluate the possibility of reducing cost pressures on pricing, the merits of decommissioning channels needs to be assessed on a cost benefit basis by comparing the upfront expenditure of decommissioning with the future revenue and operating and capital expenditure profiles.

2.5 Transforming GMW into a modern business

Achieving the level of savings identified in this report, in addition to the initiatives and savings that GMW has already identified, will require a significant transformation to GMW’s business. The change requires GMW to move beyond ‘business as usual’ with a concerted and urgent ‘step change’ effort in the way it operates.

The sense of urgency, effort and improvements made to transform and reset the Connections Project provides a template and guide for the wider changes needed in GMW.
In addition, GMW faces a range of other challenges including:

- adapting to external factors and uncertainties (such as climate change etc.)
- changing characteristics of the GMID footprint
- improving business practices and efficiency needs to support financial objectives (eg. improved asset management, capital delivery performance, smarter technology etc.)
- addressing governance and internal process issues
- improving leadership and management capability (capacity building)
- improving regional confidence in GMW and
- operating on a more commercial basis.

These varied challenges require GMW to be dynamic and adaptable to meet the high performance levels expected by its customers in an efficient and financially sustainable way.

While irrigation modernisation has provided enormous opportunities to improve GMID efficiencies, it also presents major financial challenges in the short, medium and long term, particularly as these gifted assets will need to be replaced.

GMW is not currently well placed to respond to the changing environment or financial challenges. There is an urgent need to transform the business to ensure that GMW meets performance requirements, including customer and community, financial sustainability and managing an efficient and compliant business.

Figure 5 summarises the challenges facing GMW, and the solutions recommended by the Panel in this report.

Transforming the business to a high functioning and commercially focused organisation requires a sensible and well planned approach, noting that there are certain business imperatives and financial drivers that will determine the rate of change that is possible.

Based on GMW’s history, delivery track record and current expertise in the business, the Panel recommends that GMW’s current business structure and resources needs to be supplemented by an expert transition and transformation panel to establish short (and long term) capacity building measures to be able to urgently transform the business to meet short term imperatives.
The Panel’s strategic financial modelling work has identified short, medium and long term financial challenges that drive the implementation timelines for transforming to ensure long term sustainability:

- short term (2020 – 2024)
- medium term (2025 – 2040)
- long term (2041 – 2067)

Figure 6 shows the outcomes to be achieved in the business to achieve an efficient and dynamic organisation over the short, medium and long term.
Achieving these outcomes will require a focused and committed team to embed the necessary business and cultural changes, leadership, resources and structure.

Over the short and long term, GMW needs to have a business model that is adaptable and nimble to meet customer expectations and service standards. To ensure that GMW’s service delivery is cost effective for customers, there is an urgent need to structurally and culturally transform GMW’s business into a more dynamic and commercial entity. The effort required goes well beyond GMW’s current business as usual capacity and capabilities.

To achieve what is required, the Panel recommends that business transition and transformation activities occur in line with the key stages set out in Figure 7. This shows that activities need to commence no later than 1 March 2018 to manage and oversee the work required to meet the first short term financial milestone of January 2020.

Source: Strategic Advisory Panel.
GMW’s transformation should align with the completion of the Connections Project to optimize the benefits of a modernised irrigation system.

Driving the transformation – through leadership and better governance

To drive the transformation, the Panel recommends that GMW form lead project teams to assist in creating a vision for the future and, integrate and communicate transformation throughout the organisation.

Governance changes need to occur at the highest level to free up the business to deliver its services in a more efficient and nimble way including by:

- rationalising and repurposing the current abundance of committees to enable the transformed business to focus appropriately on decision making, control and outcomes and
- the Managing Director focusing on the role of providing leadership and support for the change and transformation programme.

The transformation needs to be driven by a focused and experienced team. GMW needs to establish a dedicated Transformation Manager as the ‘change agent’ to lead the transformation within the business, and employ a Chief Operating Officer (COO) to focus internally on delivering the transformation by the end of 2020 and beyond.

It will also be important for GMW to identify leaders and champions of transformation teams amongst employees, supporting the Transformation Manager and COO, within all business units to deliver the work programs required to achieve enduring change and continually communicate and promote transformational activities.

Supporting the transformation with expert advice

A critical element supporting the delivery of the transformation plan is to establish a Transformation Panel to focus and drive the necessary structural and cultural change in the business. A Transformation Panel will ensure that GMW is supported with specialist advice to transition and transform the business.

To avoid delay in commencing the transformation, it is recommended that a Transition Panel be established as soon as possible (by February/March 2018). It will translate the findings and recommendations of this report into GMW and draft a preliminary transformation delivery plan. It will also establish transformation project teams, conduct Connections Project lessons learnt workshops, plan for the GMW business unit restructure, and plan for commencement of the irrigation asset review work (eg. channel by channel assessments).

GMW’s revised organisational structure

Developing a more efficient and commercially focused business requires a revised business structure. Figure 8 sets out the recommended pre, post and ongoing business unit restructure.

GMW will need to establish a new business structure that enables business expenditure to be fully transparent and includes a clear set of performance requirements. Structural changes will provide an opportunity to drive change and focus in GMW, such as splitting core (regulated) and non-core (non-regulated) into separate business units. Separating out business units into four distinct areas (with shared support services) will allow GMW to better measure operational performance and target efficiency gains. Ultimately, progressively integrating the transformation
within GMW will be essential to achieving enduring success, with the work of the project teams becoming ‘business as usual’ by 2020.

FIGURE 8: PROPOSED BUSINESS TRANSFORMATION STRUCTURE

GMW Review – Business Transformation Structure
Pre Business Unit Restructure

March – June 2018

GMW Review – Business Transformation Structure
Post Business Unit Restructure

July 2018 – December 2019
GMW should assess the non-regulated and commercial activities business based upon risk based principles and business cases with a full suite of financial forecasts of these activities. It should use these assessments to decide upon the future of these assets and services with a view to either divesting if feasible or seeking alternative funding sources.

To be successful, the GMW board will also need to assess whether it has the right leadership in place and information flows across the business to deliver the required business transformation.

The Minister’s Letter of Expectations should be updated to reflect the transformation outcomes outlined in this report.

A detailed implementation plan and regular reporting will focus delivery

Figure 9 provides a summary transformation implementation timeline (through 2018 and 2019).
During the implementation phase, the Transition and Transformation Panels should report progress to the GMW board monthly and the Minister as required.

### 2.6 Governance and decision making

Given the enormity of the business transformation task, GMW needs to enhance its leadership if it is to change the business over the next couple of years to meet customer requirements in a modernised irrigation system and play its role in the community over the short, medium and long term. The Panel’s view is that GMW will need to fully understand and support the need to urgently change the business, develop a vision that it can clearly communicate, build an experienced team and a strategic framework to deliver the transformation required.

GMW has experienced significant board and management changes – with five Managing Directors and two interim Managing Directors over a ten-year period. It has essentially lost an entire layer of senior executives with substantial skills and experience and many changes to the board membership. While staff are fatigued by change, employee numbers have not reduced significantly during the period.

With the transformation process there is an opportunity for GMW to put a clear, consistent strategic framework in place by which directors can evaluate performance, compliance and hold management accountable. The Annual Report, Corporate Plan and Strategic Plan should contain consistent strategic initiatives, so directors can to do their job and other stakeholders can understand what GMW is trying to achieve. The board’s effectiveness can be enhanced by improved content and structure of management reports and papers it receives particularly if they are complete and well-articulated.
The Panel believes that transformation provides the opportunity for GMW to demonstrate a sense of urgency around the need for change on either imminent or longer term strategic issues.

For GMW to institute the necessary transformation and change, the board must firstly recognise and agree the need for change and respond in a manner that encourages management to perform to a high standard. The board should articulate its vision to management and support them by providing feedback and role modelling. This will help create a culture where strong leadership is valued.

The business transformation also requires a culture of discipline: disciplined people, disciplined thought and disciplined action – rather than being overly process driven with excessive controls and slow decision making. The board’s expectations should reflect the sense of urgency that is required to achieve the necessary GMW transformation.

The governance structure moving forward should reflect an understanding of the board’s key role. Measures that should be put in place include not having executives attend entire board meetings. This would avoid the board vacillating between being a board of managers and a board of directors – as clearly it cannot do both.

In a changing business, the relationship between the board and management should be clear. GMW should review the vast number of committees in place (which directors sit on) as many of these are operational in nature and should report to the board. This change would avoid creating a workload for GMW’s directors that is not commensurate with contemporary good corporate governance. GMW should also review each of the committees to ensure that they have clear objectives and accountabilities, through charters or Terms of Reference. It should ensure that the outcomes and recommendations of these committees, together with their minutes, are reported to the board.

As part of transforming the business, GMW’s decision making should become more agile. While the board has delegated authority for certain decisions to management, this process is being usurped, for example, using the Project Approval Committee (PAC) which overrides delegated authorities. GMW should review its decision making processes to eliminate additional processes that slow decision making and are inconsistent with delegated authorities.

2.7 Strategic planning and monitoring

Moving forward, GMW’s strategic planning framework will need to clearly articulate its goals, actions and the resources required to execute the actions. This will ensure that outcomes and key deliverables can be measured.

As part of the transformation, the outcomes stated by GMW in its strategic plan and corporate plan should be aligned. Outcomes should be supported by SMART (specific, measurable, attributable, relevant and time bound) measures or indicators. This will provide the board with the ability to assess progress in achieving outcomes.

The Strategic Plan and Corporate Plan documents should be made consistent and updated to reflect future efficiency and other initiatives. While they currently focus on short to medium term, GMW also needs to have a corporate document that sets out the timeframes for delivery of longer term initiatives.

To improve GMW’s monthly reporting to the board, format and content is recommended to be less complex and provide sufficient detail on the status of actions taken and how they contribute
to the achievement of outcomes. The reporting will need appropriate performance indicators and measures (as outlined above) so the board is not overly focused on delivery of initiatives rather than outcomes.

GMW’s board will need to give high priority to defining and monitoring the successful delivery of strategic priorities. GMW needs to redefine, focus and align its strategic and corporate framework and reporting and to reflect the transformation objectives and outcomes specified in this report.

The corporate planning framework should be supported by SMART indicators that will enable the board to assess progress with transformation outcomes monthly. This needs to be supported by a clear implementation plan and timetable for all its Strategic Plan initiatives which includes realistic but challenging delivery times.

As part of the formation of individual business units and transformation project work, GMW should review the operation of all its business functions – including finance, IT, risk, human resources, legal, billing, technical services – in terms of staffing, output, reporting and value add to the business. It should also review its non-core activities, including the fledgling commercial activity, given its additional cost and diversion of management time and attention. The review should include developing overarching principles that would determine initially if assessments of any commercial opportunities proceed and risk assessed business plans and Profit & Loss accounts applying SMART principles to each activity. This review should ultimately determine whether GMW continues to undertake those activities or alternatively divests them by the end of 2019.

### 2.8 GMW’s asset management approach

GMW’s asset management practices need to be cost effective and fit for purpose to meet expected service levels, particularly given the challenges it faces with a rising capital expenditure and maintenance profile in the short to long term.

GMW describes its approach to asset management as “an integrated approach to achieve GMW’s fundamental commitments and its strategic directions by, optimising whole of life cost and managing risk”\footnote{GMW, Information provided to Strategic Advisory Panel, Capital Investment and Asset Management, TATDOC-#4501479-v1, p.1.}. It states that its approach to capital and operating expenditure will be prudent, prioritised and driven by risk, regulatory and customer service objectives.

While the above objectives and approaches are important and to be encouraged, the Panel does not consider that GMW’s asset management performance and delivery strategy is meeting GMW’s fundamental commitments. Further, it does not align with future requirements to meet efficient, affordable and cost effective services to customers.

GMW’s asset management falls short in several areas. For example, it has not:

- managed assets in a totally integrated fashion aligned with its Fundamental Commitments, Strategic Directions and the intent of the Blueprint. There are areas within GMW’s 2013 Blueprint that have been not actioned
• fully anticipated and adapted to how newly modernised assets will impact on its operations. While planning is underway, the Panel believes that this work should be more advanced

• managed assets efficiently to reduce unnecessary expenditure, thereby contributing to higher prices and

• achieved a clear balance between prioritising works based on asset criticality, minimising whole of life asset cost, and providing a consistent and affordable service to customers.

While GMW has proposed actions to address asset management issues, there are numerous key areas where GMW’s asset management approach does not meet the Asset Management Accountability Framework which is the standard that the Department of Treasury and Finance expects Victorian departments and agencies to meet in managing assets. Of the 40 areas covered and assessed in 2017, GMW complies with only eight, it partially complies with 24 and does not comply with eight. Material omissions include:

• failing to document asset management functions for appropriately resourced qualified/skilled staff

• the capital management maintenance strategy does not include the Connections Project

• the ISO 55000 framework is not yet in place

• position descriptions for senior managers do not fully document accountabilities and responsibilities across all stages of the asset lifecycle

• asset management planning does not include asset lifecycle decision making documentation consistent with best practice

• the asset management system does not include a schedule of planned reviews for asset across all asset classes

• the overall corporate and strategic planning framework does not incorporate performance monitoring

• asset performance evaluation does not evaluate the risks that assets present to the business, and data about performance and utilisation of assets and

• there are no monitoring and preventative action processes in place to proactively identify potential asset performance failures and options for preventive action on civil assets other than gates.

GMW’s asset management practices must be able to support it to be more agile and efficient within the changing environment that it operates. The Panel supports a number of GMW’s initiatives to reduce asset management expenditure, however it does not consider that the current asset management practices are consistent with best practice. This needs to be addressed urgently so that any tariff review considers the most cost effective and efficient asset management approach.

GMW relies too heavily on a top down approach to asset management. Best practice suggests that GMW should adopt a risk based asset management approach that is bottom up (like the Connections Project’s approach). This will enable decision making about future operating, maintenance and renewal expenditure to be informed by factors such as asset utilisation, risks
associated with absence of service, service level requirements, soil conditions and water use type at the individual channel level.

The asset management risk maturity model depicted in Figure 10 shows the steps to move from a top down approach to bottom up and risk intelligent approach.

**FIGURE 10:** PROPOSED GMW ASSET MANAGEMENT MATURITY OVER TIME

The Infrastructure and Assets business area needs to be transformed to ensure that it is able to provide value for money and cost effective service delivery. Transforming this area will support the objective of providing services at the lowest possible cost and at the most appropriate service levels for customers.

There are also opportunities to follow the principles of the Connections Project asset analysis methodology to maximise value for money in service delivery and maintenance and to support ongoing cost reductions for customers.

### 2.9 GMW’s capital project delivery

GMW’s current capital project management approach needs to be more efficient and effective at providing the best service to the organisation and ultimately customers.

An independent review commissioned in 2017 by GMW on its capital investment framework highlighted 27 improvement opportunities across a range of themes. A review of Connections Project lessons learnt also revealed 49 areas that could provide significant opportunities to improve GMW’s asset management practices.

The Panel identified areas where GMW’s capital project management approach is deficient:

- PRINCE2 methodology and process documents add inordinate amount of paperwork and delay approvals, thereby potentially limiting actual capital delivery. This observation is supported by feedback that the Panel received through stakeholder interviews, who referred to an overly onerous process.
• The capital approval process does not differentiate between projects of differing risk and instead adopts a one process fits all approach.

• A substantial number of GMW’s projects appear to be in the irrigation business and are lower risk and repetitive such as channel remediation, structure and culvert replacement.

GMW needs to improve its capital project management approach. It should review its latest asset management performance against the benchmark ISO 55000 standard and AMAF assessment framework. It should also review and consolidate the improvement opportunities identified in the Capital Investment Framework Review and from the Connections Project. It should use these insights to develop a detailed implementation plan to address any systemic and ongoing issues. The plan should identify clear timeframes and staff accountabilities and assign an overall project leader with full authority to deliver.

GMW should also develop a plan to address the potential reduction in GMID’s footprint over the next 50 years due to changing environmental, market and cost challenges.

2.10 Engaging with customers and stakeholders

GMW has many customers and stakeholders, diverse in interests and geographically widespread. These customers have one thing in common: they want efficient, affordable, cost effective and reliable water supplies.

While GMW has consulted extensively with customers and stakeholders, this has not occurred within a strategic framework. GMW needs to undertake a considerable body of work to enhance its engagement with customers and stakeholders on issues that affect their business and services.

Customer surveys suggested that GMW must become a more effective and genuine listener, follow up and act on what customers say and engage in more face to face communications. They also found that customers on modernised systems are understandably more satisfied with water supply and access.

GMW’s transformation program will be critical to ensuring that customers realise the benefits of affordable and reliably delivered water.

GMW should design a customer and stakeholder engagement program to improve the trust and respect of its customers and stakeholders by:

• communicating the need, process and outcomes of transformation particularly as it relates to customer services and prices

• listening to customers and stakeholders about their needs and develop shared values including future footprint rules that attract and retain investment

• eliciting preferences for policies, processes and programs

• informing customers and stakeholders about what is to occur and when and

• communicating and inform customers and the community of investment opportunities to enhance regional development.
GMW needs to develop partnerships based on a shared understanding of the pressures influencing production in Northern Victoria. GMW needs to listen and understand to what is important to its customers and work together to achieve sustainable solutions. While GMW cannot influence world commodity prices, it can transform its business operations so that water is affordable and reliable.

GMW should actively partner with its customers to create opportunities to increase irrigated agriculture production in Northern Victoria over the next 50 years. To this end, GMW should develop policies and economic tools for deciding when and where to attract new customers across the GMID. It should publish a Statement of Opportunities to provide potential customers with valuable feasibility information relating to land. It may be prudent for GMW to make decisions about retaining excess capacity in the short term to keep open real options for future development flexibility.

There also appear to be opportunities for GMW to consult with customers about their willingness to reduce the extent of any price increases by accepting a lower service levels. GMW should reflect the outcomes of this consultation in its September 2019 pricing submission for the 2020 regulatory period.

GMW has many Water Services Committees and other customer committees in place. GMW should review the Terms of Reference, membership and outcomes of the WSCs to enhance their contribution to GMW and to ensure that they better reflect the customer and community base. The Terms of Reference of its other customer committees should appropriately acknowledge their roles (and individual consultations), sectional interests and contribution to GMW’s water operations.

GMW should also review its Customer Charter to ensure that it:

- correctly reports its two service standards (flow rate and supply level) and reviews these standards annually
- enables WSC’s to consider information and reviews of its performance against service targets and
- reflects its customer segmentation.

2.11 Developing regional confidence

There appears to be some confusion regarding what role GMW should play in regional development. In recent forums, GMW has discussed its ideas about developing commercial activities, for example, solar farms and caravan park joint ownership, and international infrastructure development projects. The Panel recommends that these activities be reviewed as part of GMW’s transformation program.

The Panel believes that the greatest contribution that GMW can make to regional development is to focus on delivering its core business efficiently to provide an affordable and reliable water service to its customers, thereby attracting and retaining businesses in the GMID. This view is supported by GMW’s customers and the community.

Figure 11 illustrates how a transformed GMW can promote regional confidence.
FIGURE 11: GMW’S ROLE IN PROMOTING REGIONAL CONFIDENCE

Transformed GMW

- Strong Core Business's
- Financially sustainable
- Flexible, adaptable and commercially focused business
- Financial reporting transparency

Source: Strategic Advisory Panel.
3 Recommendations

The Panel has made 30 recommendations directed to Goulburn Murray Water (GMW) and a further two recommendations directed to the Department of Environment, Land, Water and Planning (DELWP).

The recommendations to GMW are as follows:

Recommendations to improve GMW’s financial sustainability

1. In the short term (2018 to 2024), identify and achieve a further 10 per cent efficiency in both operating and capital expenditure across its regulated core businesses of gravity irrigation and 29 per cent in the pumped irrigation, drainage, water districts and fee for service businesses from 2019/20.
   - The short term savings required is estimated at $1.4 million in capital expenditure and $8.3 million in total operating expenditure (operations, maintenance and overheads). If more capital savings are achievable, then the estimated operating cost savings could be reduced accordingly. This also applies for the medium and long term estimates.
   - In the gravity irrigation business, this is equivalent to an average annual saving of $1.4 million in capital expenditure and $4.8 million in total operating expenditure (labour, operations, maintenance and overheads). These amounts are additional to the share of the efficiencies that GMW has already identified through its asset initiatives ($474 million) and efficiencies measures ($15.2 million by 2022) and incorporated in the revised base case scenario.
   - In the non-gravity irrigation (pumped irrigation, drainage, water districts and fee for service) businesses, this amount is equivalent to average annual savings of $3.5 million in operating expenditure, in addition to the efficiency measures already incorporated into the revised base case.

2. In the medium term (2025 to 2040), identify and achieve further efficiencies in the gravity irrigation business of around 15 per cent in 2024/25, and additional efficiencies of 5 per cent in 2029/30:
   - This amounts to additional average annual savings of around $7.9 million in capital expenditure and $10.1 million in operating expenditure on top of the 10 per cent savings assumed for 2019/20.
   - In addition, GMW should consider whether it may be appropriate to moderate the magnitude of savings required in 2029/30 by increasing prices in real terms by 0.75 per cent over the five-year period from 2024/25 to 2029/30.

3. In the long term (2041 to 2067), identify additional 5 per cent efficiencies in operating and capital expenditures in 2039/40 in the gravity irrigation business, and apply these with a 1 per cent per annum price increase over the 10-year period 2029/30 to 2038/39. The estimated savings amount to an additional average annual savings of around $5.2 million in capital expenditure and $2.4 million in operating expenditure.

4. GMW should confirm the savings targets by undertaking further modelling work in 2018 once it has validated the capital and maintenance cost inputs.
Recommendations to transform GMW’s business

5. Adopt the GMW transformation implementation plan.

6. Establish a Transformation Panel to focus and drive the necessary structural and cultural change in the business, and to ensure that GMW is supported with specialist advice to transition and transform the business.

7. To avoid delay in commencing the transformation, establish a dedicated Transition Panel by February/March 2018. The Transition Panel will translate the findings and recommendations of this report into GMW and draft a preliminary transformation delivery plan. It will also set up transformation project teams, conduct Connections Project lessons learnt workshops, plan for the GMW business unit restructure, and commence planning for the irrigation asset review work (eg. channel by channel assessments).

8. Form lead project teams to assist in creating a vision for the future and, integrate and communicate transformation throughout the organisation.

9. Establish a Transformation Manager as the ‘change agent’ to lead the transformation within the business until December 2019.

10. Employ a Chief Operating Officer to initially focus on delivering the transformation plan with the Managing Director.

11. Establish a new business structure (individual business units) to successfully deliver GMW’s services reliably to customers at efficient prices over the short, medium and long term.

Recommendations to improve GMW’s asset management

12. In the context of the transformation activities, including channel by channel assessments, review latest asset management performance against the benchmark ISO 55000 standard and Asset Management Accountability Framework requirements, and use this to develop a comprehensive action plan to address any systemic and ongoing issues.

13. Undertake a full review of Connections Project’s activities to identify opportunities to improve GMW’s asset management practices, including conducting workshops.

14. Develop a plan to address the potential reduction in GMID’s footprint over the next 50 years due to changing environmental, market and cost challenges.

15. Review and consolidate the improvement opportunities identified in the Capital Investment Framework review and the Connections Project lessons learnt review.

16. After reviewing the Connections Project lessons learnt, develop a detailed implementation plan that assigns clear timeframes and staff accountabilities to deliver all activities, including assigning an overall project leader with full authority to deliver.
Recommendations to improve the way GMW engages with its customers and stakeholders

17. Design a customer and stakeholder engagement program to improve trust and respect of GMW’s customers and stakeholders by:
   • communicating the need, process and outcomes of the transformation particularly as it relates to the services and prices to customers
   • listening to customers and stakeholders about their needs and develop shared values including future footprint rules which will attract and retain investment
   • eliciting preferences for policies, processes and programs
   • informing customers and stakeholders about what is to occur and when and
   • communicating and inform customers and the community of investment opportunities to enhance regional development.

18. Review the Water Services Committees’ and Customer Committees’ Terms of Reference, membership and outcomes to enhance their contribution to GMW and ensure that they better reflect the customer and community base and transformation requirements.

19. Develop policies and economic tools for deciding when and where to attract new customers across the GMID. This should include GMW should publishing a Statement of Opportunities which would provide potential customers with valuable feasibility information relating to land.

20. Consult with customers about their willingness to reduce the extent of any price increases by accepting a different level of service, and reflect the outcomes of this consultation in its September 2019 pricing submission for the 2020 regulatory period. This would include adopting the Connections Project bottom-up processes and principles approach of channel inspections and information on individual’s future business intentions to assist in reconciling local and whole of GMID outcomes.

21. Review its Customer Charter to ensure that it:
   • correctly reports its two service standards (flow rate and supply level) and reviews these standards annually
   • enables WSC’s to consider information and reviews of its performance against service targets and
   • reflects its customer segmentation

Recommendations to improve how GMW delivers

22. Develop a reporting framework that is consistent and accurate across the organisation to ensure informed decision making. This needs to include key performance indicators (KPI’s), timeframes and strategic initiatives that align with GMW’s strategy and transformation. The reporting framework should not be outsourced to large consulting firms if they do not fully understand the business.

23. Ensure that the board has the necessary directives in place to ensure the Managing Director can provide necessary leadership, strategic direction, communication and the resources required to ensure business transformation is successful and enduring.
24. Review all committees to ensure that they are effective, necessary and consistent with a transformed GMW. Each committee should have clear objectives and accountabilities, through well focused charters or terms of reference and report their outcomes, recommendations and minutes to the board.

25. Review its board attendance to ensure that it is a meeting of directors and not management. Management should not attend board meetings except to deliver and discuss their specific papers.

26. Review the quality and coverage of board papers to ensure that they properly inform the board and assist them in their decision making. The Managing Director should be able to understand and respond with enough detail on papers presented to the board.

27. Review performance reporting arrangements to ensure that they are clearly aligned to strategic and corporate planning documents, and are informative about the evidence or reasons for any assessment of performance.

28. Review decision making processes to eliminate additional processes that slow decision making and are inconsistent with delegated authorities.

29. Review the operation of all its business functions including finance (eg. separate regulatory and non-regulatory business unit reporting, borrowings profile), IT (eg. the Enterprise Information Management system), risk, human resources, legal, billing, technical services. The review should include staffing, output, reporting and value add to the business.

30. Review its non-core activities, including the fledgling commercial activity, given its additional cost and diversion of management time and attention. The review should include developing overarching principles that would determine initially if assessments of any commercial opportunities proceed, and risk assessed business plans and Profit & Loss accounts applying SMART principles (specific, measurable, attributable, relevant and time-bound) to each activity. These measures would determine whether those activities continue within GMW or could be divested by the end of 2019.

Recommendations to the Department of Environment, Land, Water and Planning
The Panel directs the following recommendations to the Department of Environment, Land, Water and Planning:

1. The Minister’s Letter of Expectations should be updated to reflect the transformation outcomes as outlined in this report.

2. The current DELWP delivery share review should have regard to the Panel’s recommendations related to delivery shares as set out in this report.