# Independent Review -**Customer Information Incident – Community Report** Nous Group for Greater Western Water 30 July 2025



**Nous Group** acknowledges Aboriginal and Torres Strait Islander peoples as the First Australians and the Traditional Custodians of Country throughout Australia. We pay our respect to Elders past and present, who maintain their culture, Country and spiritual connection to the land, sea and community.

This artwork was developed by Marcus Lee Design to reflect Nous Group's Reconciliation Action Plan and our aspirations for respectful and productive engagement with Aboriginal and Torres Strait Islander peoples and communities

#### Disclaimer:

Nous Group (Nous) has prepared this report for the benefit of Greater Western Water (the Client).

The report should not be used or relied on for any purpose other than as an expression of the conclusions and recommendations of Nous to the Client as to the matters within the scope of the report (Permitted Purpose). Nous and its officers and employees expressly disclaim any liability: (i) to any person other than the Client, and (ii) to the Client if the report is used or relied on for any purpose other than the Permitted Purpose..

Nous has prepared the report with care and diligence. The conclusions and recommendations given by Nous in the report are given in good faith and in the reasonable belief that they are correct and not misleading. The report has been prepared by Nous based on information provided by the Client and by other persons. Nous has relied on that information and has not independently verified or audited that information. For further detail regarding the scope of the report, refer to page 3.

© Nous Group

#### **Contents**

For	eword from the Lead Reviewer	1
1	What this Review is about	2
2	Key events and dates in the Incident	5
3	What the billing system project involved and what went wrong	6
4	How customers were affected	8
5	Review Theme One: Preparation	12
6	Review Theme Two: Response	17
7	Review Theme Three: Customer and stakeholder engagement	23
8	Conclusion	27

#### **Foreword from the Lead Reviewer**

In February 2025, the Board of Greater Western Water (GWW) engaged Nous Group to do an independent review of how GWW responded to problems for customers caused by its launch of a new billing system in May 2024. The Review was supported by expert advisers, including consumer advocacy representative Joseph Nunweek from Westjustice and Nous principals Stephen Petris and Dr John Bradstock Chow.

The project to launch the new billing system included replacing and merging two billing systems and two customer self-serve portals; connecting the new System with other existing systems; and transferring data for over 900,000 customer accounts.

When the System launched in May 2024 it did not work as designed. Problems came up across all major services and customer segments. Information statements, bills and responses to applications by developers were delayed and sometimes inaccurate. Customers could not access the self-serve portal. GWW had difficulty updating customer details, leading to possible privacy breaches as bills were sent to the wrong people.

Many customers faced multiple problems at the same time, such as receiving a late bill, an incorrect bill, a bill twice the value of their usual bill, and a bill with an unclear due date. This all created further frustration and confusion. Some customers may have experienced extra problems, such as concession discounts not being applied correctly, apartment owners being billed for the entire building, or customers being billed for the water usage of a property they no longer lived in.

These issues were made worse by slow communication from GWW and difficulty contacting the call centre. For many, the impact extended beyond just receiving a large, late bill.

Complaints made to the Energy and Water Ombudsman Victoria include reports of financial stress, confusion, frustration and distress. For example, customers said that "this has put us under serious financial strain through no fault of our own", "this is very stressful", and it has "caused unnecessary stress and inconvenience to us".

Customers from immigrant or culturally and linguistically diverse backgrounds likely faced bigger impacts, as many did not know where to find help or support.

I note that some system issues, including problems with billing, continue to affect some customers today, and that GWW is working on fixing these issues.

I want to acknowledge the impact this incident had on customers through no fault of their own. Customers had a reasonable expectation that a system upgrade like this one would be managed well. The complaints and customer data we reviewed showed that these expectations were not met. I hope that this Review helps GWW and the sector to learn from this, so that an event like this does not happen again.

Dr Claire Noone, Lead Reviewer

Clair Noone

#### 1 What this Review is about

This report presents Nous' Review of how Greater Western Water (GWW) responded to issues with its new billing and information management system (the System) launched in May 2024. We call the problems that resulted 'the Incident'. In this section we explain the focus and goals of the Review, as well as the framework that guided the approach to the Review.

The Review only looks at events up to February 2025, when the Review started. So, the customer impacts described do not look at any impacts on customers after February 2025. The Review notes that some system issues, including problems with billing, continue to affect some customers today, and that GWW is working on fixing these issues.

## 1.1 Greater Western Water is a Victorian water company that implemented a new billing system in 2024

GWW is a public water service provider. It provides water and recycled water, sewerage and trade waste services to over 596,000 homes and 47,000 businesses. It operates across 3,700 square kilometres, stretching from Melbourne's Central Business District to Bacchus Marsh and the Macedon Ranges.

GWW launched a new billing system on 29 May 2024. The System had issues with customer and developer billing. It also had issues processing information statements, changes of ownership and tenancy, and applications by property developers. This had an ongoing impact on customers.

## 1.2 This Review explores how GWW prepared for and responded to the issues caused by the new billing system

In December 2024, the former Minister for Water asked GWW to organise an independent review to assess how GWW responded to the Incident and to suggest ways to improve practices across the water sector.

The Review focused on GWW's preparation for launching the system and managing any problems that might occur after the launch; its response to the problems that did occur; and its customer and stakeholder engagement during the Incident. It studied what GWW did before the System went live on 29 May 2024 up to February 2025, when the Review started.

This Review did <u>not</u> review:

- how well the System was designed and delivered (GWW has commissioned a separate review on this topic)
- the technical design and delivery of the System and the technical problems that caused the Incident, like data migration or system integration
- the overall financial health of GWW.

What went Timeline Customer Preparation Response Engagement Conclusio

## 1.3 The Review considered preparation, response, and customer and stakeholder engagement

The Review was structured using three themes: preparation, response, and customer and stakeholder engagement. The themes are summarised in Table 1 and explored in sections 5 to 7.

Table 1 | Review Framework

Key question:	What lessons can be learned from the way GWW handled the customer information incident and how can these lessons help the industry improve its practices?
Theme One – Preparation: How ready was GWW to launch the System and manage any potential problems?	<ul> <li>5.1 Governance: Did GWW set up the right teams to support System launch and oversee potential incident management?</li> <li>5.2 Planning: Did GWW plan well for System launch and potential incident management?</li> <li>5.3 Capacity and capability: Did GWW have the right people and technical knowledge in place for System launch and potential incident management?</li> </ul>
Theme Two – Response: How well did GWW respond to the Incident?	<ul> <li>6.1 Governance: How well were incident management structures used to oversee the response to the Incident?</li> <li>6.2 Escalation: Did GWW make sure that the response to the Incident was managed by the right people at the right time?</li> <li>6.3 Resources: Did GWW have enough people with technical knowledge and availability to respond well to the Incident?</li> <li>6.4 Information management: How well did GWW collect, share and use information to respond to the Incident?</li> </ul>
Theme Three – Customer and stakeholder engagement: How well did GWW support customers and other important groups?	<ul> <li>7.1 Communication tools: Did GWW have the right tools in place to proactively communicate with customers, government and regulators?</li> <li>7.2 Customer and stakeholder engagement: How well did GWW communicate with customers, government and regulators?</li> <li>7.3 Customer support and prioritisation: How well did GWW prioritise and support all affected customers?</li> </ul>

#### 1.4 Limitations

The Review was carried out between February and July 2025. The Review team reviewed hundreds of documents and data from GWW, regulators and others. The Review team did not check the accuracy of the information and documents it was given for this report.

The Review team spoke to GWW staff and other stakeholders. The Review team did not speak to customers directly. Instead, it reviewed customer complaints made to GWW and the Energy and Water Ombudsman Victoria, and information that members of the community proactively shared. It also worked with consumer advocacy representative Joseph Nunweek. The Review team did not check the accuracy of the customer complaints that informed this report. The customer impacts mentioned in this report may not cover all impacts that customers experienced.

#### 2 Key events and dates in the Incident

This section provides a timeline of the Incident. Figure 1 summarises some of the planning activities that GWW delivered before launch, as well as the actions that GWW took to respond to the issues that arose after launch. The Review considers the preparation phase as the period leading up to System launch on 29 May 2024, and the response phase as the period after launch and up to February 2025, when the Review started.

Figure 1 | Timeline of the Incident

#### Preparation phase Water companies merged (1 July 2021) City West Water and Western Water merge to form Greater Western Water. **Project plan approved** (February 2022) Final version of project plan is approved. System tested (January to April 2024) GWW conducted four 'dress rehearsals' to test how ready the organisation was to transition to the new System. System rolled out (24-28 May 2024) GWW and the third-party Billing System Integrator roll out the new System. The decision to fully transition to the new System occurs on 28 May. Response phase System launched (29 May 2024) GWW fully transitions to the new System. Hypercare occurs (29 May-24 June 2024) Planned additional resources are introduced to support handover of the new System to BAU owners. Incident Management Team established (28 June 2024) Incident Management Team mobilised to oversee the operational response to the Information Statements issue. Crisis Management Team established (24 July 2024) Crisis Management team mobilised to oversee the response to the Incident as the range and scale of System issues grows. Customers notified (August 2024) GWW begins notifying customers that they would soon receive a late bill covering the previous four months. Return to Service Plan developed (9 September 2024) Return to Service Plan developed to support return to pre-launch service levels. Bills delivered (October 2024) GWW makes an organisation-wide effort to deliver bills covering the previous four months. Incident Management Team demobilised (November 2024) Incident Management Team demobilised as System performance begins returning to prelaunch service levels. Crisis Management Team demobilised (February 2025) Crisis Management Team demobilised. The responsibility for overseeing ongoing billing issues

is handed over to the billing oversight team.

# 3 What the billing system project involved and what went wrong

In this section we describe how the project grew over time, the factors that affected it and the problems that happened when the System launched. How the problems affected customers and stakeholders is described in more detail in section 4.

#### 3.1 The project grew over time as GWW's needs changed

The former City West Water started the project in 2019, when it began planning to replace its billing system. The project was paused because City West Water merged with Western Water to become Greater Western Water in July 2021. By the time the final project plan was updated and approved in February 2022, the project had grown to include:

- **Billing**: Replacement and merger of City West Water and Western Water's billing systems into a single, new system.
- **Customer portal**: Replacement and merger of the customer self-serve portals into a single, new portal.
- **Billing System Integrator**: Use of an external company to support the design, planning and launch of the System, including post-launch support.

The project grew again, to improve the way the system connected with other GWW and third-party systems, increase data security, deal with technical challenges related to data, and to improve the customer and employee experience. The final project plan was updated to reflect these changes. The need for these connections was partly caused by the interconnectedness of the legacy systems that were being replaced. However, the Billing System Integrator's responsibility did not include connecting the System with internal GWW systems. This was managed by GWW.

#### 3.2 A range of factors made the project more difficult

Launching the System was a large and complex project that was affected by several internal and external factors, which provide important context to the Incident.

Internal factors included:

- Western Water and City West Water merger: The 2021 merger introduced the complexity of
  merging two billing systems into a single new system; not just replacing one billing and
  collections system with another. Merging the two datasets was a big and complex process.
- Expanding project size, budget, and timeline: As mentioned, the size of the project grew significantly during the preparation phase. This increased the project's budget and timeline, which put pressure on the project delivery team to launch the System quickly and without further costs.

External complicating factors included:

roduction wrong Timeline impact Preparation Response Engagement Conclusio

• Less time to back-bill: On 1 March 2023, a new version of the Water Industry Standard was launched.<sup>1</sup> It reduced the time a water corporation has to recover undercharged bills from twelve months to four months, after informing customers that they had been undercharged. This meant that GWW would have less time to bill customers if there were problems with the System after launch. Water businesses largely opposed this change when the Essential Services Commission was developing the Water Industry Standard, arguing it was impractical due to the sector's standard practice of billing quarterly and in arrears. Most Australian states allow backbilling for periods of nine or 12 months.

New pricing changes:<sup>2</sup> During the project, GWW worked with the Essential Services
 Commission to get approval for the new maximum prices for the period from 1 July 2024 to 30
 June 2028. There were also changes to the pricing structures themselves, meaning that from 1
 July 2024 some customer groups were charged using a different structure, not just charged
 different prices. The new System had to adjust to these changes, which made customer billing
 more complex.

## 3.3 The new System faced difficulties automating processes and connecting with other systems

GWW tried to implement a piece of technology with many advanced features. It was replacing and merging two billing systems and customer self-serve portals, connecting with various GWW and third-party systems, and migrating hundreds of thousands of customer accounts and records.

At launch, the new System did not operate as designed. In particular:

- 1. Process automation did not work as expected, which required time-consuming manual workarounds to deliver GWW's services (for example bills, information statements).
- 2. System connections did not work as expected. The new System faced difficulties accessing customer and other important data from GWW and third-party systems.

<sup>1</sup> Essential Services Commission, Water Industry Standard – Urban Customer Service, 27 September 2022. [Link]

<sup>&</sup>lt;sup>2</sup> Essential Services Commission, Greater Western Water final decision – 2024 Water Price Review, 18 June 2024.

#### 4 How customers were affected

This section summarises the impacts of the Incident on customers.

## 4.1 The Incident affected many customer segments, as GWW depended on the new System to deliver bills and other services

The System issues that happened after launch affected customers in a variety of ways. Table 2 summarises how these issues affected customers and provides relevant quotes from complaints made by GWW customers.

Table 2 | Summary of impacts on customers

Issue	Customer impact
Category:	Water billing customers
Delayed billing	The System could not create bills automatically, which caused delays. Between July and November 2024, more than 480,000 water billing customers got their bills late. This was over three-quarters of GWW's water billing customers. These delays made some customers confused and, in some cases, led to financial stress about the amount and timing of their future bills.  "We've had no previous payment issues, but this situation has caused"
	financial stress."
Combined billing	Automation issues made it difficult for GWW to bill customers on time. To recover the charges that had not been billed, GWW decided to combine two billing cycles and charge customers for both at once. These combined bills were sent out in October 2024 and were due in February 2025. Since the bills included more charges than usual, some customers were shocked by how much they owed.  "This has put us under serious financial strain through no fault of our own."
Confusing bill due dates	After customers got a combined bill, some received a new bill that included charges from the combined bill period and more recent usage, but with a later deadline. This confused some people because they thought the date on the new bill was the due date for both bills. In reality, the combined bill was still due in February 2025. This misunderstanding caused stress for some customers who worried about late fees. Others paid both the original combined bill and total amount due listed in the new bill – this meant they accidently paid the value of the combined bill twice.

Issue	Customer impact
	"We've been dealing with an extremely frustrating billing mess. After months of no bills, we suddenly received one in October 2024 Before we could pay that another bill came in December."
Failure to apply concessions	Due to problems with bringing data into the System and sending combined bills, GWW did not correctly add concession discounts to some customers' bills. Out of 90,000 accounts that were eligible for concessions, over 11,000 did not get discounts for bills sent before October 2024. Also, more than 18,000 concession customers were charged too much in the combined bills which were sent in October 2024, as noted above. These mistakes caused financial disadvantage, confusion and stress for vulnerable customers.  "Now we get a bill for over \$1,000 with no concession this is very stressful."
Inaccurate billing of apartment complexes	A system problem caused GWW to incorrectly divide charges for some people living in apartment buildings. In some cases, customers were charged for the entire building instead of just their share. GWW found that 9,872 customer accounts might have been billed the wrong portion of their building's total usage. This could have caused financial stress and confusion for some affected customers.  "Each unit in our building is [being] charged an absurdly high amount of \$1,500 for sewerage charges, whereas this amount actually should stand for the charge of the entire building."
Suspension of direct debit services	As part of the system update, GWW changed how their bills looked. For customers who use full direct debit, their bills did not show the date when the money would be taken. Some customers also had the wrong amounts taken from their accounts. Because of this, GWW decided to temporarily pause direct debit payments. Some customers said they were not told about this pause, so they did not know they were building up unpaid bills. Others who noticed the pause were not sure if they should pay their bill manually and risk paying it twice, or wait and risk building up debt. "I continue to receive bills that state a direct debit amount will be taken on a specific day and they have not been taken. My bills continue to just increase with balances carried forward, I am hesitant to pay online as I don't want to be charged twice if a direct debit then gets taken."
Problems with the customer self-serve portal	Customers said the new self-serve portal was hard to use. They had problems with system errors, updating their details and understanding account summaries. This caused stress and frustration, and many people could not manage their accounts properly.

Issue	Customer impact
	"When I log into my account, it says that there was an error with issuing the bill and I cannot view it. I contacted customer service again and have been told that the issue will take up to 10 days to be fixed and I cannot see my bill."
Delayed Change of Ownership and Change of Tenancy applications	Problems during data transfer caused some customer information to be copied incorrectly into the new system. There were also issues with handling applications for changing property ownership or tenancy. Because of this, details in the System were sometimes out of date, which stopped new residents from getting their water bills and sometimes led to former residents being billed for new residents' water usage. These mistakes caused a lot of stress and confusion for customers, leaving many unsure about their payments and worried about having their water service interrupted.  "In November last year, our managing agent requested that all bills be sent directly to them. This request doesn't seem to have been actioned by GWW It was requested again in February and remains un-actioned."
Privacy breaches	Problems with processing Change of Ownership and Change of Tenancy forms caused resident information to be outdated. This meant some bills went to the wrong people, leading to privacy breaches, such as exposing names, addresses, and contact details. In June 2024, issues with BPAY service addresses not matching delivery addresses also caused bills and letters to be sent to the wrong people. GWW later asked BPAY customers to confirm their addresses before sending more BPAY bills.  This situation increased the risk of identity theft. People affected by domestic and family violence faced greater risks, as their private contact details could be exposed to perpetrators, especially if they had previously had joined accounts.  Privacy problems can happen during regular operations and may involve more than one customer. However, the number of problems caused by the new System was higher than usual. GWW has been working with the Office of the Victorian Information Commissioner to report these issues

Category:	Other customers
Delayed and inaccurate	An information statement is a document that shows important information about a property, such as council rates and charges, and water and sewerage services. There were major delays in handling

and find solutions.

Issue	Customer impact
information statements	information statement applications. In addition, some statements were either wrong or incomplete, leaving out important details like property addresses or water usage estimates, and some included incorrect plans. These delays and mistakes caused problems for property transactions and created financial and legal risks for conveyancers and their clients.
Delayed information services and application processing for developers	Some services for property developers were delayed, including getting asset information and sewer details, and other applications sent to GWW. This made it hard for developers to move forward with their projects. While the services were quickly restored, there were problems with billing for these services.
Delayed sundry customer billing	GWW provides water and services to various customers, including government agencies, water carters and development companies. Problems with the new System caused billing issues for many of these customers. This has been mostly fixed: as of February 2025 only one customer has not been billed.

Some customers faced several of the problems mentioned above at once. For example, they might have received late bills that were higher than expected, with mistakes in applying concessions and unclear payment deadlines. These problems were made worse by slow communication from GWW and challenges reaching the call centre. For many, the impact was more than just receiving a large, late bill.

Vulnerable customers may have been hit harder by these issues. This includes people from immigrant or culturally and linguistically diverse backgrounds, those who need help managing their bills, or those going through major life changes like family violence or income loss.

Customers affected by the Incident had trouble getting accurate information about their accounts. The online portal did not work and there was initially no way to get information in person.

In response to these issues, many customers called the GWW call centre. This caused a big increase in calls to the call centre, which made it harder for call centre staff to answer customers' questions quickly. Wait times increased and many customers gave up before their calls were answered. Many customers also called the Energy and Water Ombudsman Victoria to make complaints about the impact of the Incident on them and how hard it was to contact GWW.

#### **5** Review Theme One: Preparation

This section summarises the Review's findings and recommendations related to GWW's preparation for launching the system and managing any problems that might occur after the launch

Table 3 | Preparation summary table

Key question	Sub-questions
Theme One: Preparation: How ready was GWW to launch the System and manage any potential problems?	<ul> <li>5.1 Governance: Did GWW set up the right teams and rules to support System launch and oversee potential incident management?</li> <li>5.2 Planning: Did GWW plan well for System launch and potential incident management?</li> <li>5.3 Capacity and capability: Did GWW have the right people and technical knowledge in place for System launch and potential incident management?</li> </ul>

## 5.1 Governance: Project governance structures were clear in all project periods

#### Before the System went live, there was strong governance in place to guide decisions.

GWW set up the Project Delivery Team to implement the new System. This team was overseen by a Project Steering Committee. As the launch got closer, a Deployment Governance Committee was created under the Project Steering Committee. The Deployment Governance Committee made important decisions in the lead-up to launch, including the crucial decision about whether to fully transition to the new System or roll back to the old system. Outside experts were also brought in to give advice. The Board got this advice, and regular updates, to keep track of the project.

## Work streams were well set up to prepare for launch, but the way the project was designed made it harder for the streams to work together.

Project governance was affected by the late realisation that the System would need many important connections with other GWW and external systems. Five work streams worked on connecting the System to other systems, but they were not formally part of the project even though their work was important for the System to work properly. Staff from GWW and the third-party Billing System Integrator said it was hard to share information between project and non-project work streams and to see what the non-project work streams were doing.

## Governance for the rollout of the System was clear. Some work streams were given new roles and a control room was set up to support critical activities.

The way the project was managed stayed mostly the same during the rollout, with two exceptions. First, GWW set up a control room, called the Duty Management Team, to provide support during the five-day rollout period. Secondly, the number of workstreams was reduced from 19 to 15 and

the role of the workstreams changed to better support the rollout's goals. The Deployment Governance Committee met every day during the rollout week to keep track of progress and help decide whether to transition to the new System.

## Governance for the Hypercare period was set up well, with a backup team ready to help the regular business teams take over responsibility for the new system.

Two weeks before launch, a Hypercare plan was created to explain how the Project Delivery Team would hand over the new System to GWW's regular business teams. The Review's billing system expert thought the plan was appropriate. The Hypercare period was planned to last four weeks, with new software updates released twice a week. The existing governance structure helped teams make decisions and work well together during this time. It also made sure there were clear steps to follow if problems came up after the launch.

'Hypercare' refers to the planned support period immediately after launch, when extra people were brought on to help the Project Delivery Team hand over ownership of the new System to business-as-usual technology teams. Hypercare was the four weeks between 29 May and 24 June 2024.

#### Emergency management plans were clear and ready to help manage any problems.

GWW already had strong and well-practiced emergency management plans and systems, and it felt confident it could apply them if there were any problems with the new System. The emergency management structures were based on an existing Emergency Management Plan, which followed the key ideas in the State Emergency Management Plan and the Australasian Inter-Service Incident Management System (AIIMS). GWW had a lot of experience using these structures to deal with emergencies like burst water pipes, but other teams like IT did not have much experience with them.

#### Nous' recommendations

- 1. Choose a main System Integrator who will be responsible for overseeing the whole project, and make sure they have the skills and authority to coordinate all the work streams.
- 2. Keep the project governance in place after launch for at least one full cycle (for example a billing cycle) and gradually hand over the system to the regular teams.

## 5.2 Planning: The planning and testing of the System were not detailed enough to match the risks involved in rolling it out

The System was tested before launch, but the way the testing was done did not fully show how the System would work in real life.

Alongside the testing, four practice runs were done before launch, but their usefulness was limited for a few reasons. First, the testing and practice runs did not fully test how the System would work with connected systems or automation from start to finish. Secondly, the System's performance

was tracked during each practice run, but the quality of the data was not looked at closely enough. Finally, the user testing mostly focused on billing and did not properly test other services.

## A detailed framework was used to check if the System was ready to launch, but its usefulness was limited by the quality of the information used and the choice to lower the seriousness of known defects.

In January 2024, GWW created a 'Proceed Framework' that set clear criteria to help decide whether to fully transition to the new System. This framework was not as effective as it could have been for three reasons. First, the connected systems were not tested enough but were still marked as ready. Secondly, testing for information statements only checked whether the System could create them, not whether the information in them was correct. Finally, some known system problems were marked as less serious because there were plans to fix them during the Hypercare period. This increased the risk of issues at launch and made the post-launch support period more difficult.

## The Board kept track of the project's progress and risks before the launch and felt confident that the known risks could be handled after the launch.

In the lead-up to launch, the Board received information from the Project Steering Committee and external experts. There were some concerns about the number of known problems with the System that would need to be fixed after launch. The experts offered some recommendations to lower the risk of launch, and the Project Steering Committee created a plan to implement those recommendations. Given that the Project Steering Committee had a clear plan and the Board was not shown any critical risks, it was reasonable for the Board to think that the risks of launching the new System were adequately managed.

# Processes were in place to assess and track risks, but some identified risks were not fully addressed or planned for before launch. This made it harder for GWW to manage the Incident effectively.

GWW created plans and tools to identify and reduce risks. These gave decision-makers a clear understanding of individual risks and how to manage them, as well as a clear view of the overall risk level of the project. GWW also prepared for more manual work and customer support during the launch. However, it did not plan for extra staff in case there was more manual work than expected or if new problems appeared. Better planning for these situations could have helped GWW respond faster to issues after launch.

## After launch, GWW did not have a realistic plan to roll back to the old system. It chose a 'fix on fail' approach instead, which limited their options to respond to issues.

GWW chose to launch the new System all at once for all customer groups, business areas and teams. When the System launched, it was not possible to roll back to the old system. This led to a 'fix on fail' approach, where GWW had to fix problems as they happened. Project Team members said rolling back to the old system was not possible for three reasons: the new System was deeply connected to many other systems; the old system did not include the new pricing for 2024/25; and the old system's databases would have needed constant updates to stay ready for rollback.

The business continuity plan identified the biggest risks to important business activities, but it did not always include backup solutions for those activities.

The Project Team looked at possible risks to the business from launching the new System. Each team created its own business continuity plan, but the level of detail of these varied. A special group called the 'Tiger Team', made up of eight experts, was formed to help different teams work together on planning and managing risks. However, the Billing and Customer Information subplan, which was the most important for the Incident, was not finished.

GWW's planning and response to the Incident might have been better if it had looked more closely at how different risks were connected, thought more about risks to the whole organisation, and considered worst-case scenarios.

GWW staff said that most of the business continuity planning looked at risks from each team's point of view, instead of thinking about the whole business. Because of this, the plans mostly focused on individual risks and how they would affect each team. This meant there was not enough planning for a large-scale problem where many risks happen at once and affect several teams and processes. If GWW had used 'worst case scenario' thinking in its planning and decision-making, it might have been better prepared to handle a major incident.

#### Nous' recommendations

- 3. Plan for risks thoroughly, thinking about how they connect and affect the whole business, and work with all teams to understand and handle risks properly across the organisation.
- 4. Carefully manage any changes to big ongoing IT projects, paying close attention to new dependencies, integration needs and risks that might add up.
- 5. Focus on testing processes from start to finish, including all connected systems. At least one test should use a full dataset to check how well the system performs and keeps data accurate.
- 6. Make sure business continuity plans have backup options to do all critical business activities, including planning for situations where automated systems might stop working.
- 7. Have a rollback option in case key business tasks cannot be done with other methods. If rolling back is not possible, make testing and readiness checks very strict before launching.
- 5.3 Capacity and capability: Extra help was planned for the postlaunch period, but staff did not have enough technical skills, and the planned support period was too short

Extra support was planned for the Hypercare period, but the plan did not allow enough time to fix System issues and transfer ownership of the System to regular business teams.

GWW planned to have extra support ready to help launch the System and get ready to take on 'ownership' of running the system day-to-day. However, there were not enough people to provide support and the Hypercare period was too short to allow a smooth handover. Choosing to run Hypercare for just one month instead of three did not give enough time for the GWW team to fully learn how to use and manage the new System.

GWW planned to bring in extra staff to help with the expected rise in call centre calls and the need for more manual work.

As part of backup planning, GWW planned to bring in extra staff to handle more calls and manual work. This included 12 call centre staff to manage the expected rise in customer calls and five staff to manually process information statements because of known system issues. However, the number of extra staff it planned to bring in assumed a best-case-scenario. GWW also did not bring in any extra staff before launch to help with manual billing tasks.

# Call centre staff were trained before and after launch, but the training was not as effective as it could have been because of issues with the trainers, training materials and training systems.

Call centre staff were trained in February and March 2024. There was also training after launch, including refresher sessions. Staff consulted during this Review thought that the training was good but the switch from training to operating the new System as business-as-usual was too sudden and the quality of the trainers was inconsistent. Some call centre staff used a training version of the new System. However, this version did not include some important external services because they were still being worked on. As a result, the training did not fully show how the System would work for users from start to finish.

#### Training and handover from the Project Team to GWW was affected by poor timing.

GWW's technology team, which took ownership of the System after launch, also received training. However, GWW staff said that many handover documents and training sessions were only delivered during the Hypercare period. Best practice in the industry is to involve the technology team before the launch so that staff can learn the System and work closely with the Project Team to build their skills and knowledge. The delays in providing training made it less effective.

#### Nous' recommendations

- 8. Offer formal technology certifications and hands-on training for IT staff at least three to six months before the System launches.
- 9. Include the staff who will manage the new System in the Project Team before launch to help them build skills and support a smooth handover, and support them with ongoing training.
- 10. Use scenario analysis and time-based estimates tested with operational staff to help plan for backup staff.

#### 6 Review Theme Two: Response

This section summarises the Review's findings and recommendations on GWW's response to the Incident.

Table 4 | Delivery and response summary table

Key question	Sub-questions
Theme Two: Response: How well did GWW respond to the Incident?	<ul> <li>6.1 Governance: How well were incident management structures used to oversee the response to the Incident?</li> <li>6.2 Escalation: Did GWW make sure that the response to the Incident was managed by the right people at the right time?</li> <li>6.3 Resources: Did GWW have enough people with technical knowledge and availability to respond well to the Incident?</li> <li>6.4 Information management: How well did GWW collect, share and use information to respond to the Incident?</li> </ul>

## 6.1 Governance: Incident management structures worked well overall, but changing staff often made decisions slower

GWW used industry standard incident management structures to manage the Incident, which is trusted and commonly used in the industry.

GWW used the Australasian Inter-Service Incident Management System (AIIMS) decision-making and management structures, which match the State Emergency Management Plan and are often used by other water companies. GWW set up two teams: an Incident Management Team (IMT) and a Crisis Management Team (CMT). The IMT handled the day-to-day response, while the CMT gave high-level guidance and made strategic decisions. Using AIIMS helped GWW manage a complex situation with a reliable and flexible structure.

At first, it was unclear who was responsible for what between the Crisis Management Team and the Incident Management Team. This confusion happened because their goals were similar and some people were working in both teams.

At first, it was not clear what the CMT and IMT were each supposed to do. The IMT was meant to focus on hands-on tasks, while the CMT was supposed to look at the bigger picture. But in reality, the IMT often had to make strategic decisions too, which took time away from managing the Incident directly. This confusion got worse because some staff were working in both teams. GWW fixed these issues by setting short-term goals for the IMT and making each person's role clearer.

## GWW's incident management roles changed during the Incident to meet the needs of different stakeholders.

As the Incident went on, GWW changed and updated key roles in the IMT to meet new needs. At first, the Public Information Officer handled external communications. Later, a Crisis

Communications Manager was added to help manage communication with stakeholders. Later in the Incident response, GWW created two Emergency Management Liaison Officer roles, one for liaison with regulators and one with government. These roles helped organise external communication.

## Clear handovers helped share information between Incident Controllers but decisions took longer to make because the same people were not used again.

GWW used a rotating system for IMT staff, which is common in emergency management. This approach helped manage workload and prevent burnout, but some stakeholders said it made decision-making slower and less consistent. At first, Incident Controllers changed every two weeks, which was too often and made it hard to keep things moving smoothly. Rotations were later extended to four weeks. The problem was made worse because different people were used each time, instead of choosing from a regular group. This made it harder for Incident Controllers to build up their knowledge of the situation and understand the technical issues and fixes as the Incident went on.

#### Nous' recommendations

- 11. Clearly define the roles of the Incident Management Team and Crisis Management Team and make sure each team has enough resources to properly carry out its specific tasks.
- 12. Rotate Incident Controllers in a way that supports consistent decision-making, avoids disruption to operations and supports staff wellbeing.
- 13. For high-risk and/or prolonged incidents, consider designating an executive to be a single point of accountability and oversee the entire incident response and recovery.

## 6.2 Escalation: Response escalation was slowed down by unclear trigger points and incomplete information

It was hard for decision-makers to know when to escalate and de-escalate the Incident response because the trigger points for those actions were unclear.

GWW's escalation guide included four levels of incidents. It showed who to contact, who could declare each level, and what to do next, but it did not include clear triggers to help staff know when each level was reached. The guide followed the State Emergency Management Plan, which gives broad descriptions for each incident level. That may not have been the best approach for this planned IT project. A more detailed set of triggers would have been more helpful.

Because GWW did not actively track key measures, it was hard to see System issues and fixes. This made it hard for decision-makers to know when to escalate or de-escalate.

Escalation was also slowed down because information was not available quickly. Right after launch, GWW did not track key metrics that could have shown how widespread the Incident was. GWW staff also said the Billing System Integrator did not report helpful data that would have made the size of the problem clearer. Instead, GWW leaders learned about the Incident over time as

information was brought to them. This may have affected how they chose to use their incident response resources.

## The Incident Management Team was demobilised even though some important metrics were not consistently met.

On 20 November 2024, the Executive Leadership Team decided to shut down the Incident Management Team (IMT) on the advice of the Incident Controller. GWW moved from the incident management phase to a recovery and transition phase. The decision was based on the view that most GWW services were back to normal, except for Changes of Ownership and Changes of Tenancy. Some services were already being handled by business-as-usual teams or were about to be. However, there were still risks. Some key metrics had not fully returned to normal or had only met the target once, raising concerns about whether business-as-usual teams were fully ready to take over.

#### The Board escalated its requests for information as the Incident got worse.

The Board requested regular updates to understand how the Incident response and recovery were progressing and to monitor risks to the organisation. At first, updates were given through monthly reports and verbal briefings. As the Incident grew, the Board received more information, including a dashboard showing progress on the return to service plan. Looking back, there were other actions the Board could have taken when System issues continued to affect services:

- The Board could have hired an outside expert to help with the fixes and review the technical problems with the System, recovery plans, risks, and progress, and to give advice on improving the response.
- It could have asked for a regularly updated dashboard with more detailed data, especially showing trends in system performance and fix progress over time instead of just snapshots of the current situation.
- It could have chosen one executive to be fully responsible for managing the entire Incident response.

#### Nous' recommendations

- 14. Track important business performance measures for all key functions and set clear triggers to decide when to escalate or de-escalate incident response efforts, as well as when to involve government stakeholders, regulators, and other important stakeholders.
- 15. When implementing big projects, the Executive Team should actively use the Board's knowledge and experience. Before starting, the Board and Executive Team should agree on performance measures to report in a live dashboard after launch, the thresholds that would require the Board to step in during an incident and the actions the Board would take.

# 6.3 Resources: During the Incident, GWW staff worked hard to support the response by providing extra help. However, more resources and technical expertise would have been useful

The Incident Management Team and the Crisis Management Team could have worked better if they had more technical experts involved.

The IMT, and to some extent the CMT, had trouble dealing with the technical parts of the Incident because they did not have much experience or technical knowledge about billing systems. Some GWW staff said that, looking back, it would have helped to include technical experts in these teams to speed up understanding and decision-making. In September 2024, a technology specialist joined the IMT for four weeks and played an active role. This person helped create a plan to fix the System, meet service goals and set priorities, which supported the return to service plan that was shared with government stakeholders.

## Some teams that were important to the response were not properly trained in incident management.

Because of the type of Incident, some GWW teams that do not usually handle emergencies, like Customer Experience and Finance, had to play a big role in the response. These teams were not trained in emergency procedures, so they did not know how to work with the IMT or contribute to its processes. This meant GWW missed a chance to use its experts in the Incident management, and it made it harder for the IMT to lead a full organisation-wide response.

## During Hypercare, business as usual teams did not get enough training to fully take over the new System.

After the System launched, GWW's technology team was supposed to take over ownership of the System. However, they did not get enough training before launch and the Billing System Integrator was late in providing handover documents. This made it important for the Billing System Integrator to train GWW's technology team during Hypercare. However, the Billing System Integrator was still busy managing the System, so training the technology team was not a top priority. As a result, GWW staff said they had to rely heavily on the Billing System Integrator to fix System issues and did not have the knowledge to test the fixes themselves.

## GWW staff stepped up to handle the extra demand for services, putting pressure on them to deal with new challenges while still doing their regular work.

Before the launch, GWW staff were under pressure to meet tight deadlines for the System rollout. Once the Incident began, many teams did not have enough people to handle the extra work. Things became even more stressful when the focus shifted to billing, which needed help from across the organisation to manage the risk to customers, finances and GWW's reputation. GWW focused on protecting staff wellbeing. It created a dashboard to track physical and mental health risks and gave staff access to mental health services.

During Hypercare, GWW planned a Stabilisation Program because progress on fixing System issues was slow and the Incident was affecting staff.

GWW planned the Stabilisation Program during Hypercare when they realised that the System problems would not be fixed quickly. The goal was to fix major issues, keep all connected systems running smoothly, and make sure users could complete tasks from start to finish. The Stabilisation Program had three parts:

- Systems support: continued Hypercare support, sorting and fixing incidents.
- Systems readiness: making applications more stable.
- **Property information**: work on fixing system and data problems to make sure property details were accurate and met pre-launch service levels.

#### GWW added more people to certain teams to reduce the impact on customers.

Before the launch, GWW brought in more staff to get ready for a rise in call centre activity and extra work handling information statements. As the workload grew, GWW added extra people from outside the organisation. The manual operations team got 60 temporary staff through an agency. The call centre also got more support through outsourcing. By November 2024, 58 full-time staff were added, followed by 30 more in March 2025 and another 60 in April 2025. The complaints team also grew, with 16 more full-time staff. These extra staff helped keep service quality steady, made onboarding faster and improved efficiency.

Mutual aid staff were helpful after they were trained, but because there were so few of them and they did not have technical knowledge of GWW's System the process did not work as well as it could have.

Mutual aid is a system where a water utility in Victoria can ask the Victorian Government for extra help. The Government then checks the request and asks other water utilities in Victoria to provide the needed staff. GWW asked for 19 people through mutual aid but only three were sent. The three staff were helpful after they joined, but the number was too low to meet GWW's needs. The mutual aid process did not work as well as hoped because the staff did not have technical knowledge of GWW's System, there were not enough of them, and they were needed for a long time.

#### Nous' recommendations

- 16. Make sure staff are trained in incident response, including those not usually involved in emergency management.
- 17. Bring in independent technical experts during an incident to give advice to the organisation and system integrators to understand and respond to system issues.
- 18. The Victorian Government should consider the benefits of using a mutual aid expression of interest and sending mutual aid requests to other sectors (for example energy utilities) if technical knowledge about water is not required.

troduction What went Customer Preparation Response Engagement Conclusion

# 6.4 Information management: GWW set up systems to handle information after problems were found, but inefficient internal communication made it hard to deal with the Incident

After decision-makers learned about problems with the System, GWW set up ways to track and report important numbers.

As mentioned earlier, decision-makers were not keeping track of the key metrics needed to identify issues with the System early. Once problems were found, both the Incident Management Team (IMT) and the Crisis Management Team (CMT) collected and analysed the right data to help guide their decisions. GWW also worked with the Billing System Integrator to get daily reports on its progress in fixing the System issues. The data they gathered and shared helped show how big the problem was and what kind of issues they were dealing with, which made it easier to plan the right response.

## Inefficient communication between decision-makers and operational teams made it harder to respond to the Incident.

Some communication channels were set up between decision-makers and operational teams to help everyone stay informed and make better decisions. However, many frontline teams said it was hard to get timely updates from the IMT, and they felt the IMT did not fully understand how serious the problems were. It was also hard for information to flow back to the IMT. Incident Controllers said some staff did not want to report problems to the IMT. They often did not hear about new issues from the Project Delivery Team quickly, and some ongoing problems were not reported for weeks.

#### Nous' recommendations

19. Create clear two-way communication channels between the Incident Management Team and other teams. Make sure the information shared is easy to understand and relevant for teams outside the project.

# 7 Review Theme Three: Customer and stakeholder engagement

This section summarises the Review's findings and recommendations related to customer and stakeholder engagement.

Table 5 | Customer and stakeholder engagement summary table

Key question	Sub-questions
Theme Three: Customer and stakeholder engagement: How well did GWW support customers and other important groups?	<ul> <li>7.1 Communication tools: Did GWW have the right tools in place to proactively communicate with customers, government and regulators?</li> <li>7.2 Customer and stakeholder engagement: How well did GWW communicate with customers, government and regulators?</li> <li>7.3 Customer support and prioritisation: How well did GWW prioritise and support all affected customers?</li> </ul>

# 7.1 Communication tools: High-quality communication strategies were planned but not carried out due to limited resources, unclear approvals and limited access to information

GWW created two communication plans, but they were only partly carried out. This made GWW's communications with customers less clear and efficient.

GWW created a detailed Communication Playbook to guide messaging during the launch, but it was not used because roles were not clearly defined and the Hypercare team thought it was not needed. In September 2024, the Communications Team made a new plan, but a big increase in incoming messages stretched their resources too thin, so the second plan was also only partly used. Because neither plan was fully carried out, GWW missed chances to give customers clear, quick and accurate updates.

## The process for approving outgoing messages was slow because some staff were not sure who had the authority to approve.

GWW's outgoing messages were delayed because staff did not fully understand how the approval process worked or who was responsible for approval. Staff told the Review that while the rules for approving communications were clearly written down, not everyone knew about or used them. This confusion may have led staff to think the process was not clear. This slowed down communication with customers.

GWW's communication efforts were held back because other parts of the organisation did not always share clear or timely information. This meant many customers were not kept informed.

As mentioned earlier, inefficient communication between the IMT and operational teams made it hard for the Communications and Customer Experience Teams to see what was going wrong with the System, how it was affecting customers and how GWW was fixing it. Because of this, the information given to customers was sometimes late or even wrong. Staff told the Review they did not always have enough information or trust that it was accurate, which made them hesitate to send updates to customers. Inefficient flow of information also made it hard for the Customer Experience Team to answer customer questions, since they did not have the details they needed.

#### Nous' recommendations

 Create and follow a detailed communications strategy, including efficient and clear communication approval processes.

# 7.2 Customer and stakeholder engagement: GWW used various communication tools, but they were limited by system issues, choice of channels and unstructured stakeholder management

GWW did not always use the communication tools or channels that matched what customers needed. This led to more people using high-contact options like phone calls, which increased the pressure on those services.

GWW had several tools and channels to communicate with customers, but they did not use them in ways that matched what customers needed. GWW chose not to use SMS and was slow to use other options like emails, letters, media and social media. Because of this, these lower-contact channels did not help much in answering customer questions. As a result, some customers reached out for information that could have been shared earlier through updates.

Self-service tools like the online portal and the call centre's automated phone system did not work well either. Customers had trouble using the portal, and the automated phone system did not reduce the workload for call centre staff. Because these tools did not work well, there was more pressure on one-on-one services like the call centre.

## GWW made some changes to handle the growing number of calls, but staff did not have enough training or support. This made it hard for them to keep up.

GWW expected more calls than usual, so it hired and trained 12 extra call centre staff before launch. Even with these extra workers, the call centre could not handle the number of incoming calls, so GWW hired 58 more full-time staff in October and November 2024. GWW also made changes to improve customer access, like staying open longer, adding more phone lines, and creating a dedicated phone line for conveyancers. Still, the number of calls was too high for staff to manage. Some staff struggled because they did not have enough training or experience.

Engagement

At first, GWW did not manage communication with government stakeholders as well as it could have, but things got better over time as GWW set up a more organised way to share updates.

Before launching the System, GWW gave briefings to the Department of Energy, Environment and Climate Action, the Essential Services Commission ESC and the Energy and Water Ombudsman Victoria, including briefing about the risks and how it planned to manage them. These three groups told the Review that GWW did not communicate as often or as proactively as they wanted, and that this made it hard for them to fully understand how serious the Incident was or how GWW was working to fix it. As the Incident progressed, they asked GWW to increase its communication with them. GWW responded by creating two Emergency Management Liaison Officer roles, one for liaison with regulators and one with government stakeholders. GWW also set up regular meetings and reporting routines to keep everyone updated. These changes helped GWW to work better with the three groups and to meet their expectations more closely.

#### Nous' recommendations

- 21. Make sure information is clear and shared on time so customers know what is happening, how to get help if they need it, and what the organisation is doing to fix the system issues.
- 22. Use a variety of channels to communicate with customers, like emails, text messages and social media, to reach customers in the ways they prefer and to avoid the need for customers to search for information.
- 23. Make plans to work with important external stakeholders before launching big new systems.
- 7.3 Customer support and prioritisation: GWW provided help to customers, but its support was less effective because it did not fully understand the different types of customers it had

GWW gave some customers extra help and offered special support to those who said they were having financial difficulties. But the support was not as effective as it could have been because GWW did not fully understand the different types of customers and their needs.

GWW gave some financial help to customers, including rebates and support for concession card holders, and bill waivers for people affected by domestic and family violence. In December 2024, it also introduced a \$50 goodwill payment that call centre staff could offer to customers facing financial hardship. More support was available depending on the customer's personal situation.

However, there were chances to do more. Customers from culturally and linguistically diverse communities could have been better supported with translation and interpreting services. However, GWW did not include culturally and linguistically diverse customers in its customer profiles, so it could not easily identify who could have used these services. GWW also had opportunities to offer more non-financial support, like tailored communication (for example plain language, translated, accessible), financial planning tools, mental health resources and referrals to services for vulnerable groups.

Introduction What went Customer Preparation Response Engagement Conclusion

#### Nous' recommendations

- 24. Build customer-focused approaches into project planning and delivery, and incident management.
- 25. Use customer feedback to focus on key customer groups and offer personalised support to those impacted, particularly vulnerable groups like the culturally and linguistically diverse community and people affected by domestic and family violence.

#### 8 Conclusion

The Review was carried out between February and July 2025. The Review team reviewed hundreds of documents and data from GWW, regulators and others. It also spoke to GWW staff and other stakeholders. The Review team would like to thank all the stakeholders who offered their time and perspectives for this Review, including members of the community who reached out to GWW, regulators and the Victorian Government to share their experiences. The Review team considered this information in the process of creating the findings and recommendations.

The Review team would also like to thank those at GWW for their time, effort and support to develop the Review. The Review team acknowledges GWW's openness and transparency in supporting the Review.

The Review team acknowledges the changes that GWW has made since the Review started in response to early recommendations by the Review. Since March 2025, GWW has been providing customers with additional support options, including:

- customer care days where customers can bring their bills and have their questions answered
- bookable in-person support sessions offered twice a week at GWW's Sunbury and Footscray offices
- reach-out days specifically for asylum seekers and culturally and linguistically diverse communities
- free community education presentations to adult learning centres, migrant centres and community groups as part of GWW's education program
- translated bill explainers provided where requested in the most common language groups across the GWW service area.

During the Review, Nous also provided some near-term recommendations to GWW. GWW implemented these recommendations quickly to help fix the issues and manage the impact of the problems.

#### GWW has:

- appointed a single, accountable Executive Lead to oversee the program to fix the System
- improved the way staff work together to fix System issues
- developed a proactive communications approach to better explain to the community what happened, what is being done, and what customers can expect from GWW.

These actions match GWW's stated commitment to "take full responsibility for the challenges caused by the system changeover" and to "learn and improve from this incident to prevent similar issues in the future." Further information about the billing incident and GWW's response to the Review can be found on its website: <a href="https://www.gww.com.au/">https://www.gww.com.au/</a>

ntroduction What went Customer Preparation Response Engagement Conclusion

The System issues affected all GWW services and customer groups and caused financial stress, frustration, confusion and distress for many. The Review team hopes that learnings from this Review will help improve practices across the sector to avoid similar incidents occurring again.

Table 6 below summarises the recommendations in this report, to help GWW and other water utilities learn the lessons from this Incident and improve their practices.

Table 6 | Summary of recommendations

Table 6   Summary of recommendations		
Theme	Recommendations	
Theme One – Preparation	<ol> <li>Choose a main System Integrator who will be responsible for overseeing the whole project, and make sure they have the skills and authority to coordinate all the work streams.</li> <li>Keep the project governance in place after launch for at least one full cycle (for example a billing cycle) and gradually hand over the system to the</li> </ol>	
	regular teams.	
	3. Plan for risks thoroughly, thinking about how they connect and affect the whole business, and work with all teams to understand and handle risks properly across the organisation.	
	4. Carefully manage any changes to big ongoing IT projects, paying close attention to new dependencies, integration needs and risks that might add up.	
	5. Focus on testing processes from start to finish, including all connected systems. At least one test should use a full dataset to check how well the system performs and keeps data accurate.	
	6. Make sure business continuity plans have backup options to do all critical business activities, including planning for situations where automated systems might stop working.	
	7. Have a rollback option in case key business tasks cannot be done with other methods. If rolling back is not possible, make testing and readiness checks very strict before launching.	
	8. Offer formal technology certifications and hands-on training for IT staff at least three to six months before the System launches.	
	9. Include the staff who will manage the new System in the Project Team before launch to help them build skills and support a smooth handover, and support them with ongoing training.	
	10.Use scenario analysis and time-based estimates tested with operational staff to help plan for backup staff.	
Theme Two – Response	11.Clearly define the roles of the Incident Management Team and Crisis Management Team and make sure each team has enough resources to properly carry out their specific tasks.	

ntroduction What went Timeline Customer Preparation Response Engagement Conclusion

Theme	Recommendations
	12.Rotate Incident Controllers in a way that supports consistent decision-making, avoids disruption to operations and supports staff wellbeing.
	13. For high-risk and/or prolonged incidents, consider designating an executive to be a single point of accountability and oversee the entire incident response and recovery.
	14.Track important business performance measures for all key functions and set clear triggers to decide when to escalate or de-escalate incident response efforts, as well as when to involve government stakeholders, regulators and other important stakeholders.
	15. When implementing big projects, the Executive Team should actively use the Board's knowledge and experience. Before starting, the Board and Executive Team should agree on performance measures to report in a live dashboard after launch, the thresholds that would require the Board to step in during an incident and the actions the Board would take.
	16. Make sure staff are trained in incident response, including those not usually involved in emergency management.
	17.Bring in independent technical experts during an incident to give advice to the organisation and system integrators to understand and respond to system issues.
	18. The Victorian Government should consider the benefits of using a mutual aid expression of interest and sending mutual aid requests to other sectors (for example energy utilities) if technical knowledge about water is not required.
	19.Create clear two-way communication channels between the Incident Management Team and other teams. Make sure the information shared is easy to understand and relevant for teams outside the project.
Theme Three  – Customer	20.Create and follow a detailed communications strategy, including efficient and clear communication approval processes.
and stakeholder engagement	21. Make sure information is clear and shared on time so customers know what is happening, how to get help if they need it, and what the organisation is doing to fix the system issues.
	22.Use a variety of channels to communicate with customers, like emails, text messages and social media, to reach customers in the ways they prefer and to avoid the need for customers to search for information.
	23. Make plans to work with important external stakeholders before launching big, new systems.
	24.Build customer-focused approaches into project planning and delivery, and incident management.

Theme	Recommendations
	25.Use customer feedback to focus on key customer groups and offer personalised support to those impacted, particularly vulnerable groups like the culturally and linguistically diverse community and people affected by domestic and family violence.