Hearing Date: 25 October 2023

Question[s] taken on notice

Directed to: DEECA Water & Catchments

Received Date: 27 November 2023

1. **David ETTERSHANK, page 6**

Question Asked to Andrew FENNESSY/Michael JENSZ:
David ETTERSHANK: [...] One of the things we have heard, and I think it is referred to in Judge Pagone's work, is the delay that occurred on the evening of the 13th. They were talking about 2 to 3 hours for that data to be analysed. Is that a Flood Watch delay or is that a delay that is on the basis of the systems that are being used by Melbourne Water, or both?

Michael JENSZ: It is a good question. [...] What I can say is the FloodZoom platform itself then allows you to, once you understand the predicted levels, understand where that maps going forward as well. So there are two tools or two models that are being used at the same time.

Andrew FENNESSY: We are happy to take you through that particular FloodZoom platform as well if that is of any interest.

David ETTERSHANK: That would be great. I guess I would be really interested, perhaps by way of supplementary information, if you could provide us with a bit of an understanding of that time frame. In Judge Pagone's report there are some tables that actually go through the critical time frames. I guess I would be very interested to, perhaps by way of supplementary information, hear from you about how what you are doing fitted with those time delays. [...]

Response:

A key element of the Victorian Floodplain Management Strategy is to build, maintain and support a flood intelligence platform (FloodZoom) that is capable of providing a central source of all Victorian flood behaviour data and intelligence for agencies to access when preparing for and responding to flood events.

FloodZoom is a web-based application for collating data and sharing flood intelligence products between agencies during an incident. It is not a publicly available platform, although feeds into other public facing flood platforms such as Catchment Management Authorities (CMAs) online mapping tools (North Central CMAs 'Flood Eye', Goulburn Broken CMAs

'Community Flood Intelligence Portal', etc), as well as providing free flood mapping.

DEECA is looking to expand the access of flood data to communities across the state through Digital Twin Victoria's platform.

FloodZoom has two key roles:

1. Emergency response – FloodZoom is the authoritative source of flood behaviour data and intelligence for emergency agencies when responding to and monitoring flood events.
2. Planning tool – The Flood Intelligence Platform is also a dedicated business as usual tool, used by CMAs to assess and streamline land use planning proposals in relation to locations which can be subject to flood inundation. Regularly reviewing flood study data in Floodzoom for planning proposals and other flood advice activities ensures that flood studies are checked and validated regularly. Using the data and the Floodzoom platform via the planning tool daily also means CMA based flood analysts become more familiar with the platform as well as ongoing testing and truthing of data, helping them perform their role during emergencies.

During the October 2022 floods FloodZoom played a critical role within the response:

- 350% increase in the VicSES users using the Platform
- 37 modelled flood extents were shared with Emergency Management Victoria (EMV) to be displayed on Emergency Management Common Operating Picture (EMCOP)
- 1,124 updates to the existing flood warnings published by the Bureau were processed and displayed
- 85 critical feedback items or support requests were completed. Requests ranged from simple account creation requests through to more complex technical support activities such as loading temporary river gauges onto the FloodZoom platform.

To date, Melbourne Water's data has not been used operationally in FloodZoom. Melbourne Water have their own flood intelligence platform, which was operational during the October 2022 flood event.

Since the October 2022 flood event Melbourne Water has commenced a process, working with DEECA, to refresh all their flood study data in FloodZoom with the goal of making a subset of this data publicly available via Digital Twin Victoria.

2. **Samantha RATNAM, page 13-4**

Question Asked to Andrew FENNESSY/Michael JENSZ:
The gauges – it is a different question, isn't it? So in some ways you are saying it is not necessary. Although you all have that available on FloodZoom, you are saying it is available and it is being made available to the right authorities, so you would not see it as necessary to make your platforms available. Is that what you are saying – it is duplication?

Andrew FENNESSY**:** [...] When Mike talks about Digital Twin Victoria making more information available, that essentially will then become the forward-facing or the public-facing component of FloodZoom.

Michael JENSZ: I think that will really be for planning purposes as well. So before an event if you wanted to understand your flood risk, that is not just in the planning scheme, which may be a one in 100, as we talk about. You might want to understand your risk at lower events or larger events. You will be able to have access. We sort of have access now. You can go out to a CMA and you can ask about a property, and they will provide that free of charge. In Melbourne Water I think there is a portal you can ask and you can get advice around certain flood areas. What we are trying to do is streamline that and make that available before an event for everyone so you can prepare going forward. We are very, very mindful –
Michael JENSZ: [...] I am happy to take it on notice too in terms of how that plays out going forward as well, to give you that extra information.

Response:

Across Victoria maintenance of around 1000 monitoring sites (rain and river gauges) is co-ordinated on behalf of 56 organisations under Victoria's Regional Water Monitoring Partnerships.

The number or organisations under the partnership can change as members either join or leave. Recently two new partners have joined increasing the number from 54 to 56.

This partnership approach allows data to be collected to a well-defined standard once, but used for multiple business needs, such as allocation management, compliance monitoring, flood warning, water resource assessment and river health management.

The Department of Energy, Environment and Climate Action acts as both a partner and overarching program manager. Other partners include local councils, water corporations and Catchment Management Authorities.

Monitoring sites with telemetry produce a near real time data feed.

DEECA provides the Water Measurement Information System (WMIS) (https://data.water.vic.gov.au/) where the public can find, explore, visualise and download water monitoring data from across Victoria. This data includes:

- Surface water: water level, streamflow (discharge), water quality
- Groundwater: water level, water quality
- Rainfall and weather

On WMIS you will find current data and information for nearly 1000 surface water sites including 220 rainfall sites, and 1,400 groundwater sites. Many sites provide data in near real time, and there is a wealth of historic long-term data available.

The Bureau of Meteorology website http://www.bom.gov.au/vic/flood/rain_river.shtml contains the latest river height data for the flood warning network and details of any of the current warnings for Victoria. The data is explorable by map on the local area and is the best place to find an assessment of river conditions during flood events. This data is also openly available in Digital Twin Victoria https://vic.digitaltwin.terria.io/.

Melbourne Water's gauge data can be accessed at Rainfall and river levels | Melbourne Water.

FloodZoom accesses gauge data feeds from various sources, including WMIS, and provides a secondary access point for registered users.

The flood gauge data displayed in FloodZoom is the same flood data as that on WMIS and the Bureau of Meteorology websites.

DEECA will also expand the access of flood data to communities across the state through Digital Twin Victoria's platform. We know that accessible flood information empowers communities to better plan for potential flood events, reducing the impact on people and property.

The initial set of flood data which will be published in DTV represents data of critical value to the Victorian community in understanding their flood risk and planning accordingly.

The flood mapping that will be published in DTV is modelled and does not indicate actual flooding during a flood emergency, therefore it is not intended for use as an emergency response tool. Users will be directed to the VicEmergency incidents and warnings website for current flood information.

3. **Samantha RATNAM, page 14**

Question Asked to Andrew FENNESSY:
Murrindindi actually said that there was no funding available to restore trails or wetlands, because these are not essential infrastructure apparently. Is DEECA doing any of this type of restoration work, or are you considering it?

Response:

The Victorian Government has committed over $2.1 billion short-term recovery for flood-impacted communities across the state. This allocation includes over $400 million for DEECA to deliver recovery programs addressing impacts on environments and biodiversity, agriculture, public land buildings and infrastructure (including visitor assets), and Aboriginal cultural heritage. DEECA is committed to building back better in recovery, ensuring that communities, infrastructure, and environments are more resilient into the future.

Emergency recovery projects are being delivered in accordance with the responsibilities outlined in the State Emergency Management Plan. DEECA, along with relevant portfolio agencies such as CMAs, Parks Victoria, Alpine Resorts Board, Zoo Victoria and the Victoria Fisheries Authority, as well as delegated public land managers, are overseeing these projects. The initiatives involve repairs to roads, bridges, crossings and culverts, as well as recreation sites and trails.

DEECA is addressing the environmental and biodiversity impacts of the floods with $6.30m in funding across the state. Activities include protecting threatened species and reducing the impact of invasive terrestrial and aquatic animals and weeds in flood-affected wetland areas of Victoria, such as the Kerang Wetlands Ramsar site and the Avoca Marshes. An allocation of $1.53 million supports critical native aquatic species conservation services at the Snobs Creek Hatchery, conserving and breeding vulnerable native aquatic species at risk following the floods.

DEECA has provided support to Victoria's water sector to address immediate safety risks and hazards associated with the floods. Water Corporations and Catchment Management Authorities have been provided with $22.05 million in funding to deliver urgent works, repairing critical water infrastructure and protect waterways and catchments from further degradation. Locally, Goulburn Valley Water and Goulburn Broken Catchment Management Authority received $4.00 million and $0.50 million, respectively, to date. Works include the restoration of riparian fencing, weed control, bank stabilisation, revegetation and debris removal.

Longer-term restoration of waterways and catchments damaged by the flood event is critical to support local community, economic and

environmental recovery. DEECA is continuing to support Victoria's water sector in recovering from the flood event, with $20.54 million recently provided to continue this work, including in the Goulburn Broken CMA region.

Within the Murrindindi local government area, DEECA has completed $2million of repairs to flood-damaged public land roads, including Black Range Road, Ginters Road, Big River to Enochs Point, Snobs Road, and Falls Road Bridge. Additionally, repairs have been made to visitor assets and infrastructure, including tree and debris clearing of Tanglefoot Trail and Cicada Track. An additional $0.50 million has been allocated to complete works in 2023-24, covering Eildon Warby Road, Rouches Road, Snowy Road and Tweed Spur Road, Black Range Road and the resurfacing of Barnwell Plains Road.

Parks Victoria has completed repairs to approximately 6 kilometres of Little River Road in Cathedral Ranges State Park, as well as repairing 400 metres of Tweed Spur track and clearing fallen trees from walking tracks throughout the park. Additionally, grading and gravelling works has been completed on a 200 metre section of Jerusalem Creek Track in Lake Eildon National Park.

These road and trail works ensure that public land is safe and accessible for staff, community members and visitors, which is critical for regional economies.

DEECA has also supported voluntary committees of management (appointed under Section 14 of the *Crown Land Reserves Act 1978*) to restore valued community facilities on Crown land reserves with $11.80 million distributed to 125 voluntary committees of management across Victoria. Grants totalling $314,077 have been provided to support flood restoration at Molesworth Recreation Reserve, Toolangi Recreation Reserve, and Yea Racecourse and Recreation Reserve. Works include road repairs, hazardous tree treatment, camp kitchen fit out, landscaping and the installation of fencing, signs and bollards.

In addition, eligible flood-impacted councils may access the $35.00 million Council Flood Support Fund to support local recovery needs from the floods. This program, administered by Local Government Victoria, provides grants for the immediate clean-up of council owned and managed public land, such as debris removal from parks, reserves and community assets, minor repairs to infrastructure owned or managed by council and community engagement in flood recovery efforts. This is in addition to the funding claimable under other State or Federal Government funding packages, such as through the federal Disaster Recovery Funding Arrangements, which supports the clean-up of essential public assets.

4. **Melina BATH, page 15-6**

Question Asked to Andrew FENNESSY:
You mentioned after-action reviews, and you mentioned that there were local governments, CMAs and VicPol. Could you please provide to the committee, because we need to understand, what dates they were on, who was invited to attend, who attended and any minutes from those meetings, with actions? That is my first request. Are you able to do that?

Response:

VicSES, as the control agency for floods, requested Department of Energy, Environment and Climate Action's (DEECA) Water and Catchments Group (WCG) and other agencies to activate on 16 October 2022 through state control arrangements.

The DEECA Water team were active in the State Control Centre (SCC) for 40 days providing control and support roles such as Deputy State Response Controller – Water, Water Services Specialist, Senior Advisor and Executive Officer. While the water team was activated, 24 staff contributed to a total of 191 shifts.

After any major flood event it is standard practise to conduct an After-Action Review (AAR), to aid continuous improvements within the department.

Between January and July 2023 (the dates are provided in Appendix 1 – Workshop Dates below), DEECA Water and Catchments Group undertook two rounds of AARs which included 29 stakeholder workshops across the following 13 policy/operational areas:

- Control and support arrangements - Water Emergency Operational Response
- Storage Managers' Actions
- Waterway Management
- Levee Policy
- Dam Safety
- Asset Management
- Sustainable Irrigation Program
- Flood Intelligence
- River Gauges

- Victorian Floodplain Management Strategy
- Blackwater and Fish Deaths (including learnings from a separate AAR facilitated by Emergency Management Victoria)
- Blue Green Algae
- Residual Water

The sessions involved over 150 individual attendees across over 30 agencies including (WCG DEECA, water corporations, CMAs, local councils, VicSES, Victoria Police, Parks Victoria and Victorian Fisheries Authority).

Agencies and DEECA units invited to one or more workshop are provided in Appendix 2 .

The workshops were posed around three key questions being;

- What went well?
- What did not go so well?
- With the benefit of hindsight, what could we do better next time?

The final report is to be finalised and key learnings captured will be used to drive continual improvements in our flood response responsibilities within the Department. To ensure that participants were not individualised during the process only agencies were identified, and no minutes were taken, just workshop notes by the facilitators as standard practice to prepare the report.

DEECA Water and Catchment after-action review report is still being finalised. The report is due for completion in December 2023/January 2024. A copy of the report will be provided to the Committee once complete.

Appendix 1 – Workshop Dates

Date	**Workshop**
	DEECA Water Emergency Operational Response (Round 1)
30/01/2023	Deputy Response Controller Water
31/01/2023	Water Catchment Group Senior Leadership Team
01/02/2023	Water Cell Senior Advisors and Executive Officers
03/02/2023	Water Service Specialists and Water Duty Officers
06/02/2023	Dam Safety Team
08/02/2023	Floodplain Management Team
09/02/2023	Water Communications Team

10/02/2023	Energy Cell
13/02/2023	DEECA State Agency Commanders
16/02/2023	Government Departments and Agencies
20/02/2023	Water Corporations
22/02/2023	Catchment Management Authorities
27/02/2023	Catchment Management Authorities
28/02/2023	DEECA Regional Controllers and Incident Controllers
28/02/2023	State Response Controllers
14/03/2023	VicSES Regional Staff
	AAR (Round 2)
31/05/2023	Storage Managers' Actions
31/05/2023	Waterway Management
01/06/2023	Levee Policy
02/06/2023	Dam Safety
02/06/2023	Asset Management
06/06/2023	Sustainable Irrigation Program
13/06/2023	Flood Intelligence
13/06/2023	River Gauges
14/06/2023	Floodplain Management Strategy
15/06/2023	Blackwater and Fish Deaths
16/06/2023	Blue Green Algae
21/06/2023	Residual Water
28/06/2023	Levee Policy with VicSES

Appendix 2 – Workshop Participants

Agency
Agriculture Victoria
Bureau of Meteorology
Goulburn Broken Catchment Management Authority
North East Catchment Management Authority

North Central Catchment Management Authority
Mallee Catchment Management Authority
Wimmera Catchment Management Authority
Corangamite Catchment Management Authority
ALS Global (Consultancy)
WaterTech (Consultancy)
Hydrology and Risk Consulting Pty Ltd (Consultancy)
Country Fire Authority (CFA)
Department of Energy, Environment and Climate Action (DEECA) • *Floodplain Management* • *Water Emergency Management* • *Water Monitoring and Data* • *Risk Resilience and Climate Change* • *Rural Water Policy* • *Sustainable Irrigation Program* • *Operational Policy and Preparedness* • *Waterway Programs* • *Regional (Adrian Martins)* • *Bulk Entitlements and Systems* • *Hydrology and Climate Science* • *Waterway Health* • *Loddon Mallee Natural Environmental Programs* • *Port Phillip Fire and Emergency Preparedness* • *Hume Fire and Emergency Preparedness* • *Loddon Mallee Fire and Emergency Preparedness* • *Public Land and Waterways Covid-19* • *Dam Safety and Regulation* • *Water and Catchments Group Senior Leadership team* • *Deputy Response Controllers (Water)* • *Water Service Specialists and Water Duty Officers* • *State Agency Commanders* • *Regional controllers and Incident Controllers* • *Water Communications* • *Water Intelligence Unit (Water Cell)* • *Energy Intelligence Unit (Energy Cell)*
Department of Health and Human Services

Department of Transport and Planning
Emergency Management Victoria
Environment Protection Authority Victoria
Campaspe Shire Council
Gannawarra Shire Council
Mildura City Council
Parks Victoria
Taungurung Land and Waters Council
Victorian Environmental Water Holder
Victorian Fisheries Authority
Victoria Police
VicSES
VicWater
Barwon Water
Central Highlands Water
Coliban Water
East Gippsland Water
Goulburn Murray Water
Goulburn Valley Water
Grampians Wimmera Mallee Water
Greater Western Water
Lower Murray Water
Melbourne Water
North East Water
South East Water
South Gippsland Water
Southern Rural Water
Wannon Water
Westernport Water
Yarra Valley Water
Other (Multiple emergency service agencies - State Response Controllers)

*red indicates where agency/organisation were invited but did not attend the workshop

5. **Melina BATH, page 17**

   Question Asked to Michael JENSZ:
   You are able to, and there were federal and state funds, significant funds. That may be insufficient. Is that still available to your knowledge? Is that held still?

   Response:

   In reference to the Seymour flood mitigation project:

   The Victorian coalition government committed $1.6 million towards construction of the Seymour flood mitigation project as a pre-election commitment in 2010. The estimated construction costs are in the region of $13 million.

   Since 2011, Mitchell Shire Council has received a combined federal and Victorian government total of $1.506 million to prepare and finalise designs for the levee, including consultation and engagement with the Seymour community.

   The commitment of $1.6 million towards construction was made under the Regional Growth Fund managed by Regional Development Victoria. The Regional Growth Fund is no longer available.

   DEECA will continue to support Council to identify and target suitable funds sources, including the federal government's Disaster Ready Fund if the community decides to proceed.

6. **Melina BATH, page 18**

   Question Asked to Andrew FENNESSY:
   One quick question: can you please explain to the Committee the proposal that is being put to Pental Island – you may need to take it on notice – landholders regarding the future funding and management of their levees?

   Response:

   Response provided by North Central Catchment Management Authority:

   The Pental Island levee scheme is unique from most other rural levees as it was formally established via legislation of the day and had a history of management by the Pental Island River Management Board, using funds raised from landowners, dating back to the 1950s. The scheme was

transferred to North Central CMA upon its establishment in 1997, however the ability for the CMA to obtain funding from the benefiting landowners was abolished shortly after the transfer. Consequently, North Central CMA has not collected any funds since and therefore has not been able to undertake any routine maintenance works.

The current engagement project being undertaken by North Central CMA with Pental Island landowners is to discuss contemporary management options for flood mitigation infrastructure which align with the policies of the 2016 Victorian Floodplain Management Strategy. This work is in the early information-gathering stages and no formal proposal has been put to that community to date. The work is being undertaken collaboratively, with a community and stakeholder steering committee, to investigate and assess the options for that specific community given their preferred level of service and willingness to pay.

7. **Rikkie-Lee TYRRELL, page 20**

Question Asked to Jesse ROSE:
Just to make your life even more charming, I am going to give you a bit of homework. May I please request on notice a list of who is responsible for each dam and the person or persons responsible for mitigating the flows?

Response:

Management of water storages: roles and responsibilities

- Section 122ZK of the *Water Act 1989* allows the Minister for Water to appoint an Authority (a water corporation) as a storage manager for storages in a water system. The Minister does not appoint an individual as a storage manager. A list of storage managers for Victorian storages is provided in Table 1. Storage managers are appointed for large, regulated water systems which supply multiple entitlement holders.
- Storage Manager functions are set out in section 122ZL(1) of the Act, and obligations are conferred on the Storage Manager under bulk entitlements[1]. The bulk entitlements set out how the Storage Manager must manage the system to harvest water and supply this water to entitlement holders.
- When undertaking its primary functions and obligations, the Storage Manger must have regard to the matters set out in section 122ZL of the Act, such as protecting the reliability and quality of water supply, and developing and implementing strategies to mitigate flooding where possible. However, it cannot act in relation to these discretionary matters in a way that would be in opposition to its primary functions and obligations.

[1] Bulk entitlements - Water Register

Table 1 Summary of appointed storage managers for Victorian storages with links to relevant documents outlining storage management procedures and protocols

Storage Manager appointment	Appointed Storage Manager	Managing Director of Water Corporation	Water storage name	Most relevant bulk entitlement
Macalister Irrigation District Headworks System Storage Manager- SRW for the Macalister System	Southern Rural Water	Cameron FitzGerald	Lake Glenmaggie	Bulk Entitlement (Thomson-Macalister - Southern Rural Water) Conversion Order 2001
Latrobe Headworks System Storage Manager - SRW for the Latrobe System	Southern Rural Water	Cameron FitzGerald	Blue Rock Reservoir Lake Narracan Yallourn Weir	Bulk Entitlement (Latrobe - Southern Rural) Conversion Order 1996
Werribee Headworks System Storage Operator - SRW - Werribee 2005[2]	Southern Rural Water	Cameron FitzGerald	Pykes Creek Reservoir Lake Merrimu Melton Reservoir	Bulk Entitlement (Werribee System - Irrigation) Conversion Order 1997
Maribyrnong System Storage Operator - SRW - Maribyrnong 2005[2]	Southern Rural Water	Cameron FitzGerald	Rosslynne Reservoir	Bulk Entitlement (Maribyrnong - Southern Rural Water) Conversion Order 2000
Coliban Headworks System Storage Manager - CW - Coliban 2005	Coliban Water	Damian Wells	Fernhill Reservoir No. 1 Fernhill Reservoir No. 2 Upper Coliban Reservoir Lauriston Reservoir	Bulk Entitlement (Campaspe System - Coliban Water) Conversion Order 1999

			Malmsbury Reservoir Caledonia Reservoir	
Willaura Headworks System Storage Manager Appointment GWMWater Willaura January 2022	Grampians Wimmera Mallee Water	Mark Williams	Weirs on Stoney Creek and Mount William Creek (upper Wimmera Basin) Weirs on Masons Creek (Hopkins basin)	Bulk Entitlement (Willaura, Elmhurst and Buangor Systems - GWMWater) Conversion Order 2012
Wimmera-Mallee System Headworks Storage Manager – GWMW for the Wimmera Mallee System Headworks	Grampians Wimmera Mallee Water	Mark Williams	Lake Bellfield Lake Fyans Lake Lonsdale Moora Moora Reservoir Rocklands Reservoir Taylors Lake Toolondo Reservoir Lake Wartook	Bulk Entitlement (Wimmera and Glenelg Rivers – GWMWater) Order 2010
Bullarook System Storage Manager – G-MW for the Bullarook System	Goulburn-Murray Water	Charmaine Quick	Newlyn Reservoir Hepburn Lagoon	Bulk Entitlement (Bullarook System – Goulburn Murray Water) Conversion Order 2009
Goulburn System Storage Manager - G-MW for the Goulburn System	Goulburn-Murray Water	Charmaine Quick	Lake Eildon Waranga Basin	Bulk Entitlement (Eildon-Goulburn Weir) Conversion Order 1995

Lake Eppalock Headworks System (Campaspe System) Storage Operator - G-MW - Eppalock 2005[2]	Goulburn-Murray Water	Charmaine Quick	Lake Eppalock	Bulk Entitlement (Campaspe System - Goulburn-Murray Water) Conversion Order 2000
Loddon Headworks System Storage Operator - G-MW - Loddon 2005[2]	Goulburn-Murray Water	Charmaine Quick	Cairn Curran Reservoir Tullaroop Reservoir Laanecoorie Reservoir	Bulk Entitlement (Loddon System - Goulburn-Murray Water) Conversion Order 2005
Broken System Resource Manager & Storage Operator - GMW - Broken 2004[2]	Goulburn-Murray Water	Charmaine Quick	Lake Nillahcootie	Bulk Entitlement (Broken System - Goulburn-Murray Water) Conversion Order 2004
Ovens System Resource Manager & Storage Operator - G-MW - Ovens 2004[2]	Goulburn-Murray Water	Charmaine Quick	Lake William Hovell Lake Buffalo	Bulk Entitlement (Ovens System - Goulburn-Murray Water) Conversion Order 2004
No Storage Manager appointment for River Murray storages – MDBA manages the storages	No appointment for Murray – MDBA manages the storages	Andrew McConville (Chief Executive)	Dartmouth Dam Hume Dam	NA

[2] Note this appointment was made before the Water Act was amended to introduce the current Storage Manager legislation, once the new legislation was introduced in 2006 any appointment made under the previous legislation for Storage Operators was automatically vested into the new legislation.

Melbourne Headworks System Storage Manager - MW for the Melbourne Headworks System **Further, section 171B of the Water Act outlines additional functions of Melbourne Water**	Melbourne Water	Nerina Di Lorenzo	Thomson Reservoir Upper Yarra Reservoir Tarago Reservor Maroondah Reservoir O'Shannassy Reservoir Sugarloaf Reservoir Silvan Reservoir Greenvale Reservoir Cardinia Reservoir Toorourrong Reservoir Yan Yean Reservoir Greenvale Reservoir Tarago Reservoir	Bulk Entitlement (Silver & Wallaby Creeks - Melbourne Water) Order 2014 Bulk Entitlement (Tarago and Bunyip Rivers - Melbourne Water) Order 2014 Bulk Entitlement (Thomson River - Melbourne Water) Order 2014h Bulk Entitlement (Yarra River - Melbourne Water) Order 2014

8. **Gaelle BROAD, page 22-3**

   Question Asked to Michael JENSZ:
   Was there any work on levees in that round? What sort of things did you cover in that (*resilience grant*) program?

   Michael JENSZ [...] Last year we did a review of the mitigation actions that have been addressed across the regional strategies just to see, with the mitigation ones: is there a broad spread of activities across the state, or how is it tracking? I am happy to provide that report as well and show you to give a sense of if there are any gaping holes.

   Response:

   Provided as an attachment - Flood investment analysis Stage 2 report (2023)

9. **David ETTERSHANK, page 25**

   Question Asked to Andrew FENNESSY:
   You have said that you are doing an after-action review, and that will be out in December. I am very keen to see that, so I am just putting that as a question on notice.

   Response:

   DEECA Water and Catchment after-action review report is still being finalised. The report is due for completion in December 2023/January 2024. A copy of the report will be provided to the Committee once complete.

10. **Additional Question on Notice for DEECA**

    Question Asked:
    To prevent mould and other related issues, flood-damaged homes require swift stripping. However, it took several days for the exemption to the landfill levee to be granted, delaying the disposal of waste from these properties. What steps will be taken to expedite this process in the future?

    Response:

    Allocated to Climate Action and Circular Economy Division, RECAFP, DEECA

    The former Department of Environment, Land, Water and Planning (DELWP) briefed the Minister for Environment on Sunday the 16th of October following the widespread flooding events of the 13th and 14th of October 2022 on recovery support needs for disposal of flood waste including consideration of a waste levy waiver for flood waste.

The Minister immediately approved a Waste Levy Waiver under the *Environment Protection Act 2017* for flood waste in specified local government areas on the 16th of October 2022. This decision was gazetted the next business day on the 17th of October 2022.

On the 17th of October 2022, the Victorian Government announced a suite of waste related recovery supports for flood-affected local government areas including the waste levy waiver and the separate decision that the Victorian government would cover the gate fees associated with flood waste disposal through a Gate Fee Rebate Scheme. These two measures ensured that from the 17th of October all flood waste could be disposed of at landfill free of charge.

Arrangements were also put in place to ensure that border communities could access equivalent support for disposal even if their disposal occurred in New South Wales.

This initiative complemented the Street Debris Removal Program implemented by Emergency Recovery Victoria. This program enabled the removal of flood affected waste from properties which was then collected and disposed by Emergency Recovery Victoria.

Support was initially implemented until the 31st of December 2022, this was extended based on need until the 30th of June 2023.

Due to the complex and protracted state-wide nature of the 2022 flooding, arrangements were put in place to ensure that newly impacted local government areas were promptly identified and progressed for waste levy waiver approval. This involved closely engaging with the team involved in Disaster Recovery Funding Arrangements (DRFA) to ensure that once a local government was approved for DRFA in relation to the flooding event, that a parallel approval for waste levy waiver had also been progressed.

The learnings from this event are being embedded into the approach to future similar large scale emergency events through streamlined triggers and approvals pathways which should result in faster decision-making during emergency events in the future.

Background

All landfills have two types of fees that are combined to set the price to dispose of waste at a landfill: the waste levy (previously known as the landfill levy) and the gate fee.

The waste levy is set by the Victorian Government and is designed to incentivise alternatives to landfilling, such as recycling. The gate fee is set

by the landfill operator and covers the operational costs of the landfill as well as the future remediation costs.

The current landfill levies are $125.90 per tonne for municipal and industrial waste at prescribed municipal (metropolitan Melbourne) premises. In regional and rural Victoria, the prices are $62.95 per tonne for municipal waste and $110.79 per tonne for industrial waste.

The *Environment Protection Act 2017* allows that the Minister for Environment may waive the requirement to pay the waste levy for the purpose of the disposal of waste generated from a temporary emergency, or the temporary relief of a public nuisance or a community hardship. The waste levy waiver cannot exceed 120 days and must be published in the Government Gazette.

Waste levy waivers are not provided for every emergency event and are assessed by the Minister on a case-by-case basis.