Hearing Date: 6 December 2023

Question[s] taken on notice

Directed to: Hon Harriet Shing MLC

Received Date: 31 January 2024

1. David ETTERSHANK, page 4-5

David ETTERSHANK: Maybe a couple of quick ones just to kick off. Looking at the Pagone report into Melbourne Water, recommendation 13 referred to basically Melbourne Water undertaking an investigation into how things got so horribly wrong by way of the flood levels for the Rivervue Retirement Village. Melbourne Water indicated in their response to that recommendation that they would have a report out by the end of the year. I am wondering if you have seen that report.

Harriet SHING: We have a lot of work being undertaken at the moment by Melbourne Water and its investigations into Rivervue. This is a site with a really long history of development, of planning and of decision-making, and the matters raised in the recommendation that you have identified relate to Melbourne Water investigating how it came to be satisfied with the reduction of flood levels and finished floor levels at the Rivervue Retirement Village. Melbourne Water is working to complete its investigations by the end of the year, and they also acknowledge that there are some elements of timing that may be outside their control. That is a matter for Melbourne Water and the submissions that they have made, not only to the review by judge Pagone but also I think in in the submission that has been provided to this inquiry. Multiple parties have been involved in this work, and that includes the developer, Melbourne Water, Moonee Valley City Council, VCAT and also Planning Panels Victoria. It is a very intricate issue, as I am sure you will appreciate. There are also really significant technical issues, and they require careful consideration. As I understand it, the investigations are expected to be completed by the end of this year. I have not seen any investigations, because I understand that they are yet to be finalised.

Question Asked:

I guess there are two subsequent questions that follow on from that. One would be: I think the last report that went to Melbourne Water – Justice Pagone's report – sat with the CEO for a month and a half, roughly, before it was released. So I guess the committee would be very keen, given we have obviously got work coming up, to know: will that be released as soon as it is available?

Harriet SHING: I am really happy to take that on notice in terms of the work on Rivervue and on that investigation. As I have made really clear to this committee and in response to members of this committee and in response to questions in Parliament, I have been provided with information as it has been released to the public. So I am really happy to take that on notice perhaps and give you a better sense of what the timing might look like.

Response:

Referred to Melbourne Water for response. Melbourne Water will respond directly to the Committee.

2. Samantha RATNAM, page 11

Question Asked:

...we have had quite significant evidence through this inquiry about questions about reliability of the model. We have had very different views, some of Melbourne Water saying that they believe their modelling was accurate and appropriate, other witnesses suggesting that it was not. Relating to that body of evidence that is before us, recommendation 3 of the independent reviews panel, the Pagone report, states that:

Melbourne Water should ensure that their rating curves, which represent the relationships between river levels and corresponding river flows, extend also to rare and extreme flood events and have been derived using established best-practice.

You might need to take this question on notice, which is absolutely fine. Regarding that recommendation the committee has heard of a major flood on 18 September 1975 on Deep Creek at Darraweit Guim even higher than the May 1974 flood, which is backed up by the rural water corporation blue books flood data records. We understand that the September 1975 flood at Darraweit was similar in magnitude to the October 2022 event. But Melbourne Water's consultant Jacobs rejected the existence of this flood largely on the basis that there was no data available from the relevant gauge for this data. To resolve that inconsistency, are you able to take it on notice to undertake some sort of inquiry? Because this goes to the integrity of the modelling that we are relying on and looking at the role of the government to oversight that.

Harriet SHING: Let me see what I can do by way of providing a response. I am not sure what you mean by 'inquiry', so I do not want to pre-empt or give you the expectation that this will be a far-reaching inquiry of the magnitude that we are dealing with right now.

Samantha RATNAM: Inquiries - make inquiries.

Harriet SHING: Yes. Let me see what I can provide to you. I will take that one on notice.

Response:

Referred to Melbourne Water for response. Melbourne Water will respond directly to the Committee.

3. Rikkie-Lee TYRRELL, page 17

Question Asked:

Prior to the BOM's heavy rainfall prediction in late September 2022, what were the storage capacities in Hume, Eppalock, Dartmouth and Eildon?

Response:

DEECA response:

Storage name	Storage capacity at Full Supply Level (ML) ¹	Storage volume (ML) data as at 14:00 1 Sep 2022¹	Storage % full¹	Storage volume (ML) data as at 14:00 30 Sep 2022¹	Storage % full¹
Lake Hume	3,005,157	2,984,248	99.3	2,892,084	96.2
Lake Dartmouth	3,856,232	3,826,718	99.2	3,891,309	100.92
Lake Eildon	3,334,158	3,170,850	95.1	3,296,895	98.9
Lake Eppalock	304,651	195,974	64.3	305,171	100.22

¹All data sourced from GMW's website, which provides daily updates of storage level and volume.

4. Samantha RATNAM, page 12

² Volumes above 100% indicate that the storage was surcharging. Surcharging means that the storage is temporarily holding more water than full supply level and for Lake Dartmouth and Lake Eppalock it means the dam is spilling.

Samantha RATNAM: Minister, residents whose homes were flooded by the Maribyrnong were told several days after wading through the floodwaters that they had been classified as black water due to sewage and heavy metals and anything which had been touched by them should be thrown away. Others were told that the risk was minimal. Can you explain, Minister, the inconsistent information given to residents and what the government is doing to ensure that these inconsistencies are resolved for future events?

Harriet SHING: I am not across the detail of the example you have referred to on either hypoxic black water or contamination. We do need to make sure that public health and safety are at the heart of absolutely everything that we do. Where there may have been notifications, where there were boil water notices or notifications for people not to enter floodwaters – and noone should ever enter floodwaters – they were based in information around testing that may vary from place to place within the same catchment.

Samantha RATNAM: Are you looking into the inconsistencies, is my question, for future events?

Harriet SHING: Sorry, I would not necessarily accept they are inconsistencies if they occurred in different parts of the affected area.

Question Asked:

That is what we understand – that is what we have been told. That is what was being told by residents, that there were inconsistent messages, and I am wondering whether the government is looking into why those inconsistencies occurred and what can be done in future to prevent them.

Response:

Referred to Victoria State Emergency Service (VicSES) as responsible agency for warnings for response. See also question 6. VicSES will respond directly to the Committee.

Additional Questions

5. Samantha RATNAM

Question Asked:

Recommendation 3 of the independent review's panel report states that "Melbourne Water should ensure that their ratings tables, which represent the relationships between river levels and corresponding river flows, extend also to rare and extreme flood events and have been derived using established best practice".

The committee has heard of a major flood on 18 Sep 1975 on Deep Creek at Darraweit Guim, even higher there than the May 1974 flood, which is backed up by Rural Water Corporation (RWC) "Blue Books" flood data records. We understand that the Sep 1975 flood at Darraweit was similar in magnitude to the Oct 2022 flood, but Melbourne Water's consultant Jacobs rejected the existence of this flood, largely on the basis "there is no data available from the relevant (MW 230100A) gauge for this data".

Can the Minister help resolve this inconsistency by locating the hard copy station file records for the Deep Creek at Darraweit Guim gauge back to 1975 and other other survey information or flood photos they may have on file and report back with their findings about whether a major flood did in fact occur at Darraweit Guim on 18 Sep 1975?

Can the Minister respond to why this inconsistency exists?

Response:

Referred to Melbourne Water for response. Melbourne Water will respond directly to the Committee.

6. Samantha RATNAM

Question Asked:

Residents whose homes were flooded by the Maribyrnong were told, several days after wading through the flood waters, that they had been classified as black water due to sewage and heavy metals, and anything which had been touched by them should be thrown away. Others were told that the risk was minimal. Can you explain the inconsistent information given to some residents? What can the government due to ensure timely and consistent information next time there is a flood?

Response:

Referred to VicSES for response. See also question 4. VicSES will respond directly to the Committee.

7. Samantha RATNAM

Question Asked:

A number of petrol stations were flooded. Does this create a pollution risk?

Response:

DEECA Response:

As with any natural disaster, flooding can increase the level of risk to humans and the environment of many businesses, including petrol stations.

As required by the general environmental duty under Victoria's *Environment Protection Act 2017*, all businesses must manage the specific risks of their operations so far as reasonably practicable.

To support petrol station operators to understand how they can meet the general environmental duty and better manage their risks, particularly risks from leaking underground petrol stores, the Environment Protection Authority provides a range of free guidance and programs. With these resources, petrol stations in Victoria will be better placed to withstand the impacts of an unexpected event such as a flood.

8. Samantha RATNAM

Question Asked:

Many of the homes flooded in October had been flooded before, often multiple times. Do we need voluntary acquisition to help people get off floodplains?

Response:

Referred to Emergency Recovery Victoria (ERV) for response. ERV will respond directly to the Committee.

9. Samantha RATNAM

Question Asked:

Minister, you mentioned the flood study work that the state government assists local councils with undertaking. We have had many Councils calling for some statewide coordination of the flood plain overlay process to ensure that there is consistency across the state and timeliness given each overlay can take years for a Council to complete and may not adequately address or account for neighbouring LGA. Will the state government play a stronger role to coordinate the statewide flood plain overlay process? Or move towards state wide flood plain overlays so that communities can be better prepared via land use planning for future extreme climate events?

Response:

DEECA Response:

The Victorian Floodplain Management Strategy (VFMS) articulates the need for flood studies to help communities understand and manage their risk. Flood studies are prioritised at the catchment/regional level via Regional Floodplain Management Strategies and led by local councils with technical support from Catchment Management Authorities (CMA) or Melbourne Water, as appropriate.

Flood studies are completed by hydrologists and flood mapping experts. They consider historic and future floods and often take up to three years to deliver. Sophisticated computer models are built to represent local conditions. Extensive engagement with local communities and emergency responders is undertaken to capture local knowledge. Anecdotal and historical empirical information about flood extents, flood depths, and flood velocities for different sized floods is built into the models so they are considered credible by local communities.

In the Port Phillip and Westernport regions studies in larger catchments are usually managed by Melbourne Water and LGAs, whereas studies in smaller catchments are usually led by LGAs.

Policy 11a of the Victorian Floodplain Management Strategy says that, unless there are compelling reasons to the contrary, all new flood studies must have the following outputs:

- draft Planning Scheme Amendments
- preferred elements for a Total Flood Warning System
- preferred options for flood mitigation measures
- drafts of the relevant components of the Municipal Flood Emergency Plan.

Flood studies are typically overseen by a working group including technical experts from government departments such as CMA's, BoM, DEECA and the local council. Working groups review all aspects of the study during its development. Flood studies are peer reviewed towards the end of their development. Regional Floodplain Management Strategies and their implementation committees (LGA's, VICSES and CMA's) prioritise future reviews of studies.

DEECA is providing further investment into flood studies. This includes up to \$10million over five years to fully fund approximately 32 priority studies based on known priorities listed in Regional Floodplain Management Strategies. Rochester Flood Management Plan being conducted by Campaspe Shire Council and supported by North Central CMA is currently funded.

Note that the Department of Transport and Planning (DTP), as the responsible department, are providing a separate response to address the statewide floodplain overlay process.

10. Samantha RATNAM

Question Asked:

Will the state government implement point 223 from the Maribyrnong River Flood Review Independent Report?

Response:

DEECA response:

The Maribyrnong River Flood Review Independent Report and its recommendations are directed at Melbourne Water who have published their response online.

DEECA is committed to continuous improvement in floodplain management across the water sector and will continue to work with water corporations and CMAs, this includes the consideration of recommendations that arise through various reviews and inquires, including the Parliamentary Inquiry's final report.

We will listen to the needs of community and learn from every new flood event. DEECA will continue to work with other departments and emergency services to support a whole of government approach, preparedness, response and recovery to such events.