Recommendation 1: *That the Government require relevant agencies to provide detailed reports to the community in a timely manner (in real time where possible) on the causes of significant environmental events such as hypoxic blackwater.*

The Government **supports** this recommendation, and will investigate how DELWP, CMAs, water corporations and the VEWH can best work together to collate information about the causes of significant water quality events, and provide explanations to the community in a timely manner.

The Government's framework for waterway management, including community reporting, is based on adaptive management and continuous learning and improvement. Decision-making and communication processes are regularly updated to reflect lessons learned from previous experiences.

Victoria's State Emergency Response Plan outlines the Government's framework for managing events that endanger life or property, or in some cases, toxic environmental events. While this would not typically include blackwater events, it is possible that they could come within the definition of an emergency due to harm or potential harm to the environment. Regardless of whether or not a major hypoxic blackwater event falls within the definition of an emergency, some processes in the plan may be usefully emulated in managing such events, especially in cases where recreational values are significantly disrupted. These processes include reviews and debriefs post-incident – potentially involving representatives of relevant community groups – and consideration of whether a community forum may be valuable.

Recommendation 2: *That the Government expand plans to increase the amount of monitoring of the outcomes achieved with environmental watering actions so that a continuous learning and improvement approach can be adopted. This should include both environmental outcomes and the social and economic impacts on local communities and irrigators*.

Government **supports** an increase in monitoring, in order to better report on the outcomes achieved with environmental water. This is consistent with the principle of continuous improvement, which drives Victoria's framework for environmental water management.

Under *Water for Victoria*, the Government has outlined its commitment to expanding its current monitoring plans. Through Action 3.6, Victoria will better monitor and report on the benefits of environmental watering. Government will increase monitoring and reporting back to communities on progress towards expected environmental outcomes from environmental watering, with a focus on digital reporting.

Also under *Water for Victoria*: (i) the Victorian Environmental Water Holder (VEWH), will report annually on where environmental watering has achieved shared benefits; and (ii) the Commissioner for Environmental Sustainability will report on the outcomes of environmental watering in Victoria as part of its five-yearly State of the Environment Report, and recommend ways to improve future public reporting.

Government similarly **agrees** that any potential impacts of environmental water recovery and use should be properly understood, and Victoria has long prioritised its understanding of these issues, particularly within the Murray-Darling Basin. Supplementing this, within priority waterways identified under *Water for Victoria*, Government is also exploring new ways of measuring progress towards

achieving economic, cultural and social outcomes. These measures are already in development and underway, with work in some waterways already completed.

Recommendation 3: *That the Government allocate additional funds to install monitoring equipment to provide real-time data about water flows and dissolved oxygen and carbon levels in Victorian rivers and wetlands.*

The Government **supports** this recommendation **in principle**. However, any new infrastructure spending will be subject to standard state budgetary processes, and in this case, an assessment of practicality and value for money to reduce blackwater risk.

Real-time monitoring of water flows already occurs in most rivers across Victoria. Conversely, in wetlands, this monitoring is generally not in place; water is often flowing into wetlands through an undefined channel which would make accurate flow monitoring difficult, though not impossible. This may be able to be investigated, especially in wetlands with regulators and relatively controlled flow.

Government has recently signed a new five-year contract for water quality monitoring, which has created the ability to transition approximately 450 surface water quality monitoring sites into a real-time system. Information will be recorded every 15 minutes and uploaded every hour, and can be set up with an alarm system so that relevant authorities can be alerted if values rise above a specified trigger. Approximately 60 of these sites include dissolved oxygen.

Using current technology there is no proven way to remotely measure carbon in real-time. Dissolved organic carbon is measured at some of Victoria's monthly water quality monitoring sites, however this requires a laboratory test which is not instantaneous, and would not be an efficient way to detect a blackwater event.

Additional targeted dissolved oxygen and carbon monitoring is likely to be possible, but the efficacy of these mitigating blackwater risk should be thoroughly investigated prior to committing investment.

Recommendation 4: *That the Government continue efforts to improve community understanding of environmental watering programs and their impacts, including through both improved reporting and personal engagement between water managers and local communities.*

and

Recommendation 5: *That the Government and water managers continue to explore further opportunities to incorporate community input into decisions about environmental water.*

Government **supports** continued efforts to improve community understanding of environmental watering programs, and **agrees** with the need to explore further opportunities to incorporate community input into decision-making.

Under Action 3.6 of *Water for Victoria*, Government intends to expand current monitoring. In particular, Government will increase its reporting back to communities on progress towards environmental watering outcomes, with a focus on digital reporting.

Current initiatives are also in place to improve the effectiveness of water markets, by increasing public information on water market activity, especially in terms of how much water environmental water holders hold, use and trade. A range of new information of this type has recently been made available on the Victorian Water Register.

Victoria is also taking steps to improve the opportunities that communities have to directly input into environmental water use decision-making.

For example, proposed legislation is currently under consideration by state Parliament that will amend the *Water Act 1989* (Vic) to strengthen the consideration of social, recreational and cultural values in a number of key water planning documents (i.e. regional waterway strategies and sustainable water strategies). Under the proposed legislation, the VEWH, Catchment Management Authorities (CMAs) and water corporations would also be required to consider social and recreational opportunities in undertaking their functions.

Under *Water for Victoria*, Government has also committed to more formally recognise the values that water has for Traditional Owners and Aboriginal Victorians. In particular, Aboriginal participation in the state's various water planning and management frameworks will be supported through 'consultative structures that address the rights and interests of Victoria's Traditional Owners' (p. 97).

In addition, under Action 3.8 of *Water for Victoria* (p. 57), Government will further strengthen its support for community partnerships and citizen science by:

- over four years, supporting Landcare, Waterwatch, EstuaryWatch and other citizen science initiatives to address local waterway priorities; and
- investing approximately $1 million in partnerships between CMAs and recreational anglers to deliver riparian improvement works in areas of local priority for anglers.