

# 2023 Annual Report

## Dam Safety Advisory Committee (Victoria)



**Author**

Jim Keary - Chair, Dam Safety Expert Advisory Panel (formerly known as the Dam Safety Advisory Committee)

**Photo credit**

White Swan Reservoir, 2022 – Courtesy of Central Highlands Water

## Summary

The Victorian Dam Safety Advisory Committee (Committee) continued to act as a high-level independent advisory group to assist in servicing the dam safety regulatory needs of the Department of Energy, Environment and Climate Action (Department) during 2023.

The normal Committee activities have occurred, namely engaging with representatives of public dam owners and Licensing Authorities; monitoring trends, key issues and sector performance; supporting training initiatives; and working with the Department on progressing improved safety for local government, Parks Victoria, private dams and the Department's regional dams on Crown land.

The major issues that the Committee dealt with over the past year were:

- Implementing the *Guidance Note on Setbacks near Dams* relating to urbanisation encroaching on existing dams
- Assisting with the strategic response to 26 small dams that failed in the 2022 floods, most of which were unregulated
- Understanding and providing feedback on the issues arising from the floods having to be managed by Goulburn Murray Water
- Developing understanding and communication strategies for adoption of the modern safety philosophy of 'so far as is reasonably practicable' as the guide for dam safety management decisions
- Critiquing and providing input into the Department's Summary Paper used to consult with the industry on the proposed updates to the dam safety framework as well as the discussion documents on the proposed updates to the Department's two documents: *Strategic Framework for Dam Safety Regulation* and *Guidance Note on Dam Safety Decision Principles*
- Monitoring progress on locating the many tens of thousands of dams in Victoria which are becoming more important in times of emergency management
- Continuing proactive focus on the engagement with local government
- Further engagement with water corporations on their application of various quality and asset management systems

An important role of the Committee is to advise the Department in implementing its work program. The Committee's work program, which ended on 30 September 2023, is based on the Department's work program and ad-hoc requests. Satisfactory progress continued to be made by the Department on the advice Committee provided during this reporting period. The Committee also reviews its own performance and views it has complied with all obligations in its Terms of Reference.

Matters of public safety require constant diligence and challenge to issues that arise. Hence, the Committee is committed to pursuing continuous improvements in the dam safety regulatory framework and its application, and responding to the challenges of emergency management and climate change in a progressive and responsible way.

To bring the Committee into line the Department's current approach to Committees, the Dam Safety Advisory Committee will become the Dam Safety Expert Advisory Panel from 1 October 2023.

## **Background**

In October 2011, the Committee was appointed by the Department to provide independent expert input and advice on the regulation of dam safety in Victoria. This was in response to a recommendation from the 2010 *Review of the Victorian Dam Safety Regulatory Framework* (2010 Review) which was endorsed by the Minister for Water in 2011. In September 2014, 2017, and 2020, the Committee's term was extended for further three-year periods. Hence 2023 was the final year in the fourth term of the Committee.

The Committee's Terms of Reference (Attachment 1) and the scope of its' work program for the current three-year period (Attachment 2) are attached.

The Committee is supported in its activities by the Dam Safety and Regulation Team within the Water and Catchments Group of the Department.

The primary purpose of the Committee is to be a source of independent advice to the Department staff responsible for the exercise of statutory functions of dam safety regulation and the development and implementation of sound dam safety management practices by public and private dam owners. The Department emphasises the fundamental principle of the Victorian approach that dam owners are primarily responsible for dam safety.

The Victorian approach to dam safety regulation is to be adaptive to emerging trends and issues relating to dam safety and the Committee plays an important role in appraising and discussing trends and issues with Department staff. Over the past decade, the Committee has acted as a guiding impetus to make sure that the various categories of dam owners (Water Corporations, private owners, Department regions, Parks Victoria, and local government) have made progress on risk assessments and remediation works on their dams to achieve the goal of an appropriate level of dam safety. Different approaches have been adopted to achieve this goal with the different categories of dam owners and the Committee monitors and discusses progress and possible initiatives to overcome challenges when they occur.

## **Committee composition and operation**

This annual report covers the period from 1 October 2022 to 30 September 2023, during which the Committee met online two times and face-to-face twice. One of these meetings included a visit to the White Swan reservoir near Ballarat and engagement with staff from Central Highland Water concerning decisions made for dam safety upgrading works to this important reservoir.

During this period, the Committee was made up of the following members who have extensive experience in dam safety, asset management, business administration, community relations, regulation, and Victorian water industry governance:

- Jim Keary (Chair)
- Bronwen Clark
- Charmaine Quick
- David Watson
- Miles Hutchison

The following provides a summary of specific matters of relevance addressed through the year, but with the past three-year time horizon in mind, give the duration of some key work programs, illustrating the activities and outcomes of the Committee in pursuing its role.

## **Continuing Program of engagement with dam owners**

As part of the Committee mode of operation, relevant representatives and dam owners are included in discussion sessions. This practice promotes more varied discussion and leads to better informed outcomes. Key issues that have benefitted from this approach during the year included:

- Incorporating the principles of the *Guidance Note on Setbacks Near Dams* into planning processes. This document was developed from lessons learned from the Torquay dam incident, where a buffer between the dam wall and new development was considered prudent.
- Assisting with the strategic response to the 20 plus small dams, which were mostly unregulated, that had incidents in the 2022 floods which led to improved programs on education and emergency response for small dam owners. This included evaluating a number of regulatory options, their impacts and effectiveness.
- Developing communication strategies for adoption of the modern safety philosophy of ‘so far as is reasonably practicable’ and the Safety Case approach as the guide for dam safety decisions which are in line with Work Cover and Victorian environmental legislation.
- Continuing proactive focus on engagement with local government on understanding their dam safety risks, challenges and needs, especially for emergency management.
- Further engagement with water corporations on their application of various quality, asset management and decision systems and gaining insight into efficient ways to incorporate them into the dam safety framework.

The Committee also monitors any issues raised by the Victorian Water Industry Dams Working Group which is a specialist group that deals with key issues faced by Water Corporations and Parks Victoria.

## **Regulation of non-Water Corporation Dams**

### ***Local Government Authority Dams***

Since 2010, it has been recognized that the management and regulation of dams operated by Local Government Authorities needed improvement and various initiatives have been undertaken since then to improve this. There is now a far better understanding of the number of dams involved and those posing most risk. Information and training sessions on dam safety and emergency management have

occurred and since 2016, the Department has worked with various Local Government Authorities on gaining funds under a cost sharing arrangement to improve the public safety of six dams. These improvement works have now been almost implemented. However, activities relating to raising awareness of dam safety risks, education on dam safety and emergency response practices, and gaining funding for priority improvements remain ongoing challenges.

The special initiatives that the Department undertook in 2023 that were discussed by the Committee include the development of regulations and guidelines to replace current Ministerial policies for regulating licensed dam.

### ***Department and Parks Victoria Dams***

The Department is continuing to work with its regional partners to improve the Department's knowledge and understanding of its own dams, and secure funding in budget programs for necessary dam safety improvements.

This situation will continue to be monitored and opportunities taken to promote further necessary funding in future budgets.

## **Sector Performance – State-wide Dam Safety Annual Report**

The Committee overviews sector performance via the state-wide Dam Safety Annual Report to assess whether the regulatory framework is providing the desired outcomes for the state and community. The Committee is pleased to see the continued improvement from Water Corporations in both outcomes and better practice.

The Committee provided feedback on the highlights of the Department's 2021-2022 state-wide Dam Safety Annual Report

In 2021-2022, 16 Water Corporations, Parks Victoria and AGL Hydro provided information on 654 dams and 239 flood retarding basins for the report. The key findings were that

- the quality and completeness of the data have improved
- dam owners have improved in all aspects of dam safety management.

The Committee is of the view that the state-wide Dam Safety Annual Report is of significant value in driving continuous improvement, demonstrating the overall status of dam safety management, profiling risks and providing benchmarks and comparative information for each Water Corporation, Parks Victoria and AGL Hydro. The Department's annual reporting process provides assurance that Water Corporations, Parks Victoria and AGL Hydro are aware of their responsibilities and the status of their dams.

The upgrade of the Water Intelligence Portal by the Department over previous years has provided the Department with a database and capability gains. This provides an overview of dam safety without compromising the confidentiality of the information belonging to individual dam owners.

## **Industry Good Practice – Australian National Committee on Large Dams (ANCOLD)**

The Committee supports the Department and the Victorian water industry taking an active role in the affairs of ANCOLD. ANCOLD provides opportunities for Australia’s dam safety regulators in various states to meet and discuss issues of mutual interest and operate cooperatively. This continues to occur formally and informally. These interactions provide insights into regulatory practices of other jurisdictions and the opportunity to share information and advances in dam safety regulation. It also provides an opportunity to assess the effectiveness of Victorian dam safety regulatory practice by comparison with other states. The Department also interacts with international jurisdictions, particularly with the International Commission on Large Dams (ICOLD) in order to keep track on advances in dam safety regulatory practices.

Victoria’s framework for dam safety regulation is largely based around the ‘good practice’ guidelines produced by ANCOLD. The ANCOLD Guidelines were very advanced in terms of risk management practices when they were developed two decades ago but the pace at which these guidelines are updated is slow and even when updated may not reflect appropriate safety aspects from a Victorian perspective. The Department has found it necessary at times to produce its own guiding documents where ANCOLD guidelines do not cover a matter adequately or do not reflect current ‘safety industry’ good practice. The Committee plays a valuable role for the Department in deliberating and implementing these matters.

An illustration of Victoria’s dam safety guidelines progressing beyond the traditional ANCOLD guideline occurred in 2023 with the move for Victoria to adopt the modern safety industry philosophy of ‘so far as is reasonably practicable (SFAIRP)’ as the guide for dam safety decisions rather than the traditional ANCOLD philosophy of ‘as low as is reasonably practicable (ALARP)’. Improvements such as this, which are generally only discussed and understood by a limited number of specialists, are difficult to navigate. The multi-disciplinary membership of the Committee greatly assisted the Department in making the decision to change, and education and communication strategies for adoption.

### **Supporting Dam Safety Awareness, Training and Development**

The Committee acknowledges the shortage of technical/ engineering skills in the industry. This is an ongoing concern and a potential risk for the industry. The Committee will continue to monitor, discuss and advise the Department on this accordingly.

The Department has for many years run training programs covering:

- Professional development for the directors and executives of water corporations; and
- Industry training courses and emergency exercises.

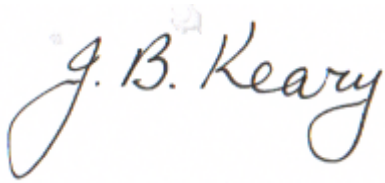
The Committee encourages continuity of these programs especially after the election of new directors.

## **Effectiveness of the Dam Safety Advisory Committee: 2023**

The primary test of effectiveness of the Committee is the extent to which it meets its obligation to be a source of independent and informed advice to the Department. In conjunction with the Department, the Committee has reviewed its activities during the 2023 reporting period against its Terms of Reference, progress on the work program, and feedback from engagement with dam owners. It concluded that it has complied with these objectives and received feedback on its contributions to the efforts of the Department in dam safety management and regulation.

The Committee continues to add value to the Department and its small but effective group of staff committed to dam safety regulation. Matters of public safety require constant diligence and challenge to issues that arise, and the Committee is committed to pursuing continuous improvement in the dam safety regulatory framework and its application. The upcoming challenges of increased uncertainty and risk due to climate change and need for improved emergency response practices will require special ongoing attention.

The Committee continues to monitor and discuss the feedback from initiatives and regulatory/guidance documents released by the Department.

A handwritten signature in black ink that reads "J. B. Keary". The signature is written in a cursive style with a large, looping initial "J".

**Jim Keary**

Chair, Dam Safety Expert Advisory Panel

November 2023



# Dam Safety Advisory Committee

## *Terms of Reference*

### 1. Introduction

The purpose of the Dam Safety Advisory Committee (the Committee) is to provide independent expert input and advice to the Department of Environment, Land, Water and Planning (the Department) on the regulation of dam safety in Victoria, including the development of policies, procedures and guidelines. The Committee is currently subject to the general direction of the Executive Director, Partnerships and Sector Performance (PSP) in the Water and Catchments Group of the Department.

### 2. Overview

The underlying principle of dam safety regulation in Victoria is that ultimate responsibility rests with the dam owner through exercise and demonstration of due diligence. The *Water Act 1989* establishes owner liability for dam safety but also provides significant powers to the responsible Minister to intervene and give directions concerning both public and private dam safety.

The Department assists the Minister for Water in the regulation of dam safety, undertaking the main regulatory role for public dam safety. Regulatory tasks for private dam safety are largely delegated by the Minister to five licensing authorities, with the Department providing policy support.

The Department established the Committee in 2011 in response to a recommendation from a review of the Victorian dam safety regulatory framework in 2010.

### 3. Activities and Outcomes

- a) The Committee will not exercise any dam safety statutory functions or responsibilities, or assume any decision-making capacity about either the regulation of dam safety, or about the management and operation of any dam.
- b) The Committee's role is confined to providing advice to the Department. The decision to act on the Committee's advice will remain the prerogative of the Department.
- c) The Committee will provide ongoing advice, guidance and assistance for the continual improvement of the Department's strategies, policies and regulatory approach to dam safety.
- d) The Department may seek advice from the Committee on matters relating to the management and operation of individual dams, including during emergency situations.
- e) Other activities to be undertaken by the Committee may include site visits and stakeholder consultation in conjunction with Department.
- f) The Committee may suggest that the Department seek specialist Departmental or external advice where it determines that additional technical, policy or legal clarity is required in reviewing various proposals and issues.
- g) The Committee will be required to produce an annual report.
- h) The appointment of external contractors does not form part of the Committee's Terms of Reference.

#### **4. Committee Membership**

The Committee will consist of up to six invited members, including the Chair, appointed by the Department on the basis of their individual specialist and technical skills, experience and knowledge of dam safety management, business and economics, regulation, asset and risk management and/or the governance of the water industry. Committee membership will include a water corporation member nominated by VicWater.

All Committee members will serve as individual experts in their specific areas of expertise, not as representatives of their employer or other organisations. However, the advice provided by the Committee will be on a collective basis to the Department.

#### **5. Resignation from Office**

A member may resign from office in writing addressed to the Executive Director, PSP.

#### **6. Termination from Office**

The Department may, without cause or notice, terminate the tenure of a member at any time.

#### **7. Duration**

The Committee will be an ongoing advisory body. Appointments will be made for a term of up to three years. Members must be prepared to commit their time and effort for a minimum period of twelve months.

#### **8. Vacancies**

The office of a member becomes vacant if a:

- a) member completes the three-year period of appointment;
- b) member resigns;
- c) member's tenure is terminated; or
- d) member becomes incapable of performing his/her duties.

The Department may decide to reappoint a member following the completion of the three-year appointment period.

Upon a vacancy occurring in the office of a member, the vacancy may be filled in accordance with these Terms of Reference.

#### **9. Remuneration**

External Committee members will be remunerated for attendance at meetings, site visits, review and input to reports and documents and for the provision of any other advice requested by the Department within the scope of these Terms of Reference.

The Department will reimburse Committee members for travelling and personal expenses to be paid at the rates that apply to employees of the Department. In regard to this, receipted personal expenses will be reimbursed.

## **10. Role and responsibilities of the Chair**

The duties of the Chair will include:

- a) ensure timely completion of required tasks by the Committee;
- b) stimulate the Committee by generating ideas and encouraging discussion;
- c) facilitate majority position or consensus of the Committee members on key issues;
- d) liaise with the Department secretariat to seek specialist Departmental or external advice where the Committee determines that additional investigations or policy or legal clarity is required;
- e) liaise with the Department out of session, as required; and
- f) prepare the annual report, with input from Committee members, at the end of each calendar year for the period ending 30 September of that year for submission to the Executive Director, PSP, by no later than 31 March of the following year. The report should include a:
  - summary of the operations of the Committee;
  - summary of the results of its major deliberations and advice; and
  - review of the Committee's effectiveness.

The Chair may appoint a Deputy to fulfil the Chair's role when he or she is not reasonably able to do so.

## **11. Operations**

The Department will provide secretariat and other operational support to the Committee. Key arrangements will be as follows:

- a) **Activities:** The Department will prepare a forward program of activities in collaboration with the Chair, for the Committee's deliberations, recognising that this list will be regularly updated.
- b) **Meeting schedule:** The Committee is expected to meet up to four times a year. Additional meetings may be held where the Committee Chair or the Department deems necessary. From time to time field trips may be organised involving all day attendance. All meetings will be scheduled in advance and members will be given adequate notice. A schedule of meetings and events will be maintained by the Department secretariat for the information of members. Members are expected to attend a minimum of 75% of meetings.
- c) **Meeting procedures:** Agendas for the Committee meetings shall be prepared by the Department in consultation with the Chair. The agenda and any supporting agenda papers will be distributed at least five working days prior to each meeting.

The Chair will manage each meeting and determine the pace and length of deliberations on agenda items. The Chair will seek to ensure that every member has adequate opportunity to participate in the discussions on each item. A majority of the members of the Committee will constitute a quorum.

- d) **Meeting minutes:** The Department secretariat is responsible for ensuring that minutes are kept for all meetings and distributed to Committee members before they are formally adopted at the next meeting.

## **12. Intellectual Property**

All information and findings generated through discussions at the Dam Safety Advisory Committee meetings will remain the intellectual property of the Department. The Department may approve the external use of this information by members of the Advisory Committee.

### 13. Conflict of Interest

A person is deemed to have a direct interest in a matter when he or she has rights/titles/duties, liabilities connected with the matter, whether present or future, ascertained or potential.

A member with a direct interest in a matter must refrain from providing direct advice to the Department on that matter, but may contribute his or her knowledge and skills to the Committee discussion, with the consent of the Committee and the Chair of the Committee.

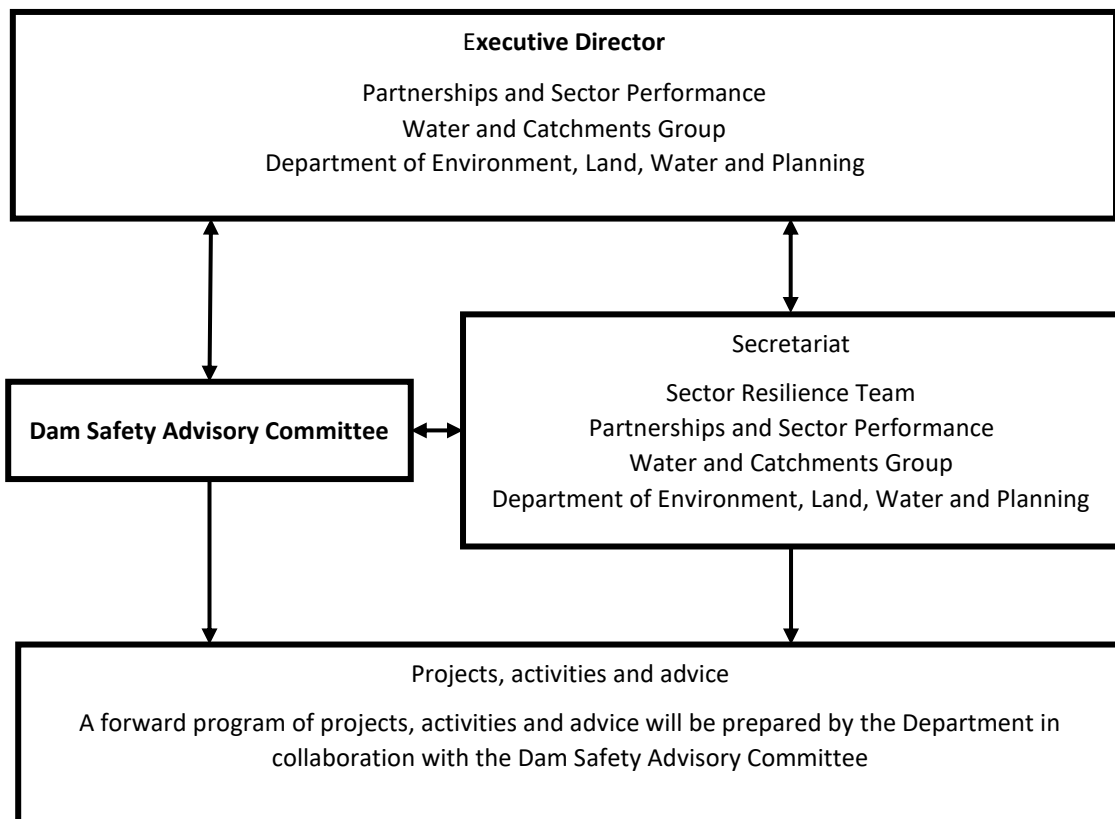
In keeping with the Committee’s principle of full disclosure, members are advised to take a precautionary approach to any real or potential conflict of interest in the performance of their duties and to inform the Project Manager of any circumstances which may be deemed to be of concern.

### 14. Confidentiality

Committee members will be required to sign a confidentiality agreement.

The deliberations of the Committee must be treated confidentially in order to provide a forum for frank and fearless advice and debate. Members must not discuss any deliberations of the Committee or circulate any meeting agendas, minutes, papers or other materials publicly without the prior consent of the Department.

### 15. Reporting Arrangements and Organisational Chart



## Forward Program of Activities for the Victorian Dam Safety Advisory Committee (01/10/20 to 30/09/23)

Derived from the Terms of Reference of the **Committee whose role is confined to providing (dam safety) advice to the Department of Environment Land Water and Planning - DELWP** (i.e., has no statutory functions or responsibilities or assumes any decision-making capacity or has any involvement in the appointment of external contractors) and

- may include amongst other advice provided:
  - advice on matters (raised by DELWP) relating to the management and operation of individual dams, including during emergency situations
  - site visits and stakeholder consultation in conjunction with DEWLP (and resulting advice to the DELWP)
  - suggestion that DELWP seek specialist Departmental or external advice where it determines that additional technical, policy or legal clarity is required in reviewing various proposals and issues
- will include:
  - providing ongoing advice, guidance and assistance for the continual improvement of the DELWP's strategies, policies and regulatory approach to dam safety
  - producing an annual report covering:
    - summary of the operations of the Committee
    - summary of the results of its major deliberations and advice
    - review of the Committee's effectiveness.

The above infers the Committee's Forward Program of Activities is driven by three **ADVICE AREAS**:

- **ADVICE AREA 1 - continual improvement of DELWP's dam safety strategies, policies and regulatory framework and overall dam safety management and performance.** (This activity also includes:
  - issues arising from DELWP's works program and implementation of dam safety regulatory responsibilities (including Licencing Authorities responsibilities)
  - assisting DELWP with understanding and guiding good dam safety management by dam owners
  - issues and influences arising from external dam safety and other safety directions and guidelines and the need to be involved e.g., ANCOLD Guidelines)
- **ADVICE AREA 2 - specific dam safety issues raised by DELWP** (This activity involves spontaneous / very specific issues the Department would like advice on, arising from time to time, such as management and operation of individual dams, including during emergency situations)
- **ADVICE AREA 3 - governance requirements of the Committee** (This activity involves the effectiveness of the Committee in advising DELWP, the Annual Report production) and review of the Terms of Reference and Forward Program of Activities

In each of the four Advice Areas there are two general type of activities:

- **PROJECT BASED** where activities tend to vary across the Committees three year term and depending on the of the stage of project may be able to be described in more detail when the initial **Forward Program of Activities** is prepared or will need to be initially general and revised as the project progresses
- **ONGOING** with general activities usually the same each year (majority of the activities), but generally not able to be described in more detail until DELWP in collaboration / consultation with the Committee Chair have identified the specifics of the activity needing advice to be handled at each Committee meeting or out of session.

The Terms of Reference of the Committee recognises the need to regularly update the **Forward Program of Activities** (i.e., provided more detail on what is to be advised upon). The process adopted by DELWP and the Chair of the Committee to provide this in more detail, is through preparing the agenda for each Committee meeting or specific out of session information and not updating the initial **Forward Program of Activities** unless a project based activity has significantly changed.

Advise Areas	Victorian Dam Safety Advisory Committee Forward Program of Activities		
	2020/21	2021/2022	2022/2023
<b>ADVICE AREA 1</b> <b>DELWP Dam Safety Strategies, Policies &amp; Regulatory Framework &amp; Overall Dam Safety Management and Performance</b>	<p><b>Provide advice to the Department of Environment, Land, Water and Planning (DELWP) on:</b></p> <p><b>PROJECT BASED</b>  <b>Risk Assessment and Upgrade Assistance Program for Small Dams</b></p> <ul style="list-style-type: none"> <li>continue to review outcomes of LGA dam risk assessment and implementation of upgrades</li> <li>discussion on incorporation of other small dams including owned by DEWLP and in private ownership</li> </ul> <p><b>Review of ANCOLD’s Risk Assessment Draft Guideline Update</b></p> <ul style="list-style-type: none"> <li>watching brief on the direction taken when guideline published</li> <li>potential further consideration by DELWP on the issue of SFAIRP versus ALARP as proposed in ANCOLD new guideline</li> </ul> <p><b>Review of Victoria’s Dam Safety Regulatory Framework (2019/20)</b></p> <ul style="list-style-type: none"> <li>opportunities, issues and actions arising from DELWP work program (including need to reprioritise) and progressive implementation of the priority improvements from review (potentially required next two or three years to complete) and listed below: <ul style="list-style-type: none"> <li><i>promote good record keeping and archiving by dam owners - ( Opportunity No. 2)</i></li> <li><i>improve effectiveness of dam owner information and education - (Opportunity No. 4)</i></li> </ul> </li> </ul>	<p><b>Provide advice to DELWP on:</b></p> <p><b>PROJECT BASED</b>  <b>Risk Assessment and Upgrade Assistance Program for Small Dams</b></p> <ul style="list-style-type: none"> <li>continue to review outcomes of LGA dam risk assessment and implementation of upgrades</li> <li>resolve how incorporation of other small dams including owned by DEWLP and in private ownership will be addressed</li> </ul> <p><b>Review of ANCOLD’s Risk Assessment Draft Guideline Update</b></p> <ul style="list-style-type: none"> <li>resolve and implement appropriate action on the issue of SFAIRP versus ALARP as proposed in ANCOLD new guideline and any other issue arising out of the published guideline</li> </ul> <p><b>Review of Victoria’s Dam Safety Regulatory Framework (2019/20)</b></p> <ul style="list-style-type: none"> <li>opportunities, issues and actions arising from DELWP work program (including need to reprioritise) and progressive implementation of the priority improvements from review listed in the previous year</li> <li>consider the next set of priorities as listed below and whether any should be included, brought forward / changed:</li> </ul>	<p><b>Provide advice to DELWP on:</b></p> <p><b>PROJECT BASED</b>  <b>Risk Assessment and Upgrade Assistance Program for Small Dams</b></p> <ul style="list-style-type: none"> <li>continue to review outcomes of LGA dam risk assessment and implementation of upgrades and how other small dams are being addressed</li> </ul> <p><b>Review of ANCOLD’s Risk Assessment Draft Guideline Update</b></p> <ul style="list-style-type: none"> <li>review outcomes of any changes undertaken in Victoria arising out of the published guideline</li> </ul> <p><b>Review of Victoria’s Dam Safety Regulatory Framework (2019/20)</b></p> <ul style="list-style-type: none"> <li>opportunities, issues and actions arising from DELWP work program (including need to reprioritise) and progressive implementation of the priority improvements from review as revised</li> <li>review all priorities including any outstanding actions not listed in years 1 and 2 and identified in the review, and update accordingly</li> </ul>

- *improve regulation of public dams owned by LGAs and DELWP - ( Opportunity No. 31)*
  - *improve regulation of private dams - ( Opportunity No.'s 21, 22, 23, 24, 26 & 27)*
  - *resourcing: Ensuring appropriate regulator capacity/user pays (Opportunity No. 5)*
- (For more details refer attachment A – Victoria’s Dam Safety Regulatory Review 2019/20 – Final Decision Matrix based on options identified in Consultant’s Final Report)

**Surveys and Benchmarking**

- input into DELWP’s stakeholder survey of its regulatory role and review outcome

**ONGOING**

- dam safety regulatory frameworks, policies and practices, in particular:
  - input and advice on identified trends e.g., recent international review
  - continue to monitor dam safety regulatory issues in other national and international jurisdictions including directions and outcomes of the National Regulators Forum
  - continue to discuss how Victoria can appropriately contribute and effectively influence the development and review of ANCOLD guidelines and other relevant bodies
  - provide input into the regulatory approach to be taken when updated/new guidelines by ANCOLD significantly affect dam safety status in Victoria

- *develop consolidated register of regulated dams and their consequence class (and make this available publicly) - (Opportunity No . 3)*
  - *risk informed random audits of public dams - (Opportunity No. 16)*
- (For more details refer attachment A – Victoria’s Dam Safety Regulatory Review 2019/20 – Final Decision Matrix based on options identified in Consultant’s Final Report)

**Surveys and Benchmarking**

- input into the second benchmarking study or audit of dam safety systems, plans and processes with water corporations

**ONGOING**

- dam safety regulatory frameworks, policies and practices, in particular:
  - input and advice on identified trends e.g., recent international review
  - continue to monitor dam safety regulatory issues in other national and international jurisdictions including directions and outcomes of the National Regulators Forum
  - continue to discuss how Victoria can appropriately contribute and effectively influence the development and review of ANCOLD guidelines & other relevant bodies
  - provide input into the regulatory approach to be taken when updated/new guidelines by ANCOLD significantly affect dam safety status in Victoria

**Surveys and Benchmarking**

- analyse outcomes of the second benchmarking study or audit of dam safety systems, plans and processes with water corporations

**ONGOING**

- dam safety regulatory frameworks, policies and practices, in particular:
  - input and advice on identified trends e.g., recent international review
  - continue to monitor dam safety regulatory issues in other national and international jurisdictions including directions and outcomes of the National Regulators Forum
  - continue to discuss how Victoria can appropriately contribute and effectively influence the development and review of ANCOLD guidelines & other relevant bodies
  - provide input into the regulatory approach to be taken when updated/new guidelines by ANCOLD significantly affect dam safety status in Victoria

	<ul style="list-style-type: none"> <li>• <u>dam safety management and performance</u> (including associated programs and issues faced by various dam owners including water corporations, Parks Victoria, local government authorities, DELWP, and private dam owners and by Licensing Authorities) identified through: <ul style="list-style-type: none"> <li>○ state-wide trends, as highlighted by DELWP, from its annual dam safety reports on water corporation dams and licensed dams</li> <li>○ a minimum of three dam owners scheduled to present their respective dam safety programs and/or issues to the Committee during this period</li> <li>○ potential to further enhance engaging the community on dam safety</li> <li>○ appropriate site visits or stakeholder consultation undertaken in conjunction with DELWP</li> <li>○ continue to consider further improving consistency of dam safety reporting and performance measures for all dam owners across the State</li> </ul> </li>   <li>• <u>Dam safety guidance on:</u> <ul style="list-style-type: none"> <li>○ potential and ongoing initiatives, reviewed reports and operational issues</li> <li>○ DELWP guidance documents, as requiring review and upgrade</li> <li>○ new developments in dam safety, including asset and risk management, technology enhancements and emerging trends in natural events or improved data and assessments or business and legal aspects</li> <li>○ emergency management including: <ul style="list-style-type: none"> <li>- discussion on updates on emergency management reforms and relevant</li> </ul> </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <u>dam safety management and performance</u> (including associated programs and issues faced by various dam owners including water corporations, Parks Victoria, local government authorities, DELWP, and private dam owners and by Licensing Authorities) identified through: <ul style="list-style-type: none"> <li>○ state-wide trends, as highlighted by DELWP, from its annual dam safety reports on water corporation dams and licensed dams</li> <li>○ a minimum of three dam owners scheduled to present their respective dam safety programs and/or issues to the Committee during this period</li> <li>○ potential to further enhance engaging the community on dam safety</li> <li>○ appropriate site visits or stakeholder consultation undertaken in conjunction with DELWP</li> <li>○ further improving consistency of dam safety reporting and performance measures for all dam owners across the State</li> </ul> </li>   <li>• <u>Dam safety guidance on:</u> <ul style="list-style-type: none"> <li>○ potential and ongoing initiatives, reviewed reports and operational issues</li> <li>○ DELWP guidance documents, as requiring review and upgrade and in particular review and update the <i>Guidance Note on Dam Safety Principles</i></li> <li>○ new developments in dam safety, including asset and risk management, technology enhancements and emerging trends in natural events or improved data and assessments or business and legal aspects</li> <li>○ emergency management including:</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <u>dam safety management and performance</u> (including associated programs and issues faced by various dam owners including water corporations, Parks Victoria, local government authorities, DELWP, and private dam owners and by Licensing Authorities) identified through: <ul style="list-style-type: none"> <li>○ state-wide trends, as highlighted by DELWP, from its annual dam safety reports on water corporation dams and licensed dams</li> <li>○ a minimum of three dam owners scheduled to present their respective dam safety programs and/or issues to the Committee during this period</li> <li>○ potential to further enhance engaging the community on dam safety</li> <li>○ appropriate site visits or stakeholder consultation undertaken in conjunction with DELWP</li> <li>○ continued further improving consistency of dam safety reporting and performance measures for all dam owners across the State</li> </ul> </li>   <li>• <u>Dam safety guidance on:</u> <ul style="list-style-type: none"> <li>○ potential and ongoing initiatives, reviewed reports and operational issues</li> <li>○ DELWP guidance documents, as requiring review and upgrade and in particular review and update the <i>Guidance Note on Dam Safety Principles</i></li> <li>○ new developments in dam safety, including asset and risk management, technology enhancements and emerging trends in natural events or improved data and assessments or business and legal aspects</li> <li>○ emergency management including:</li> </ul> </li> </ul>
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	<p>amendments to the <i>Emergency Management Act 2013</i> and other relevant legislation/regulatory instruments</p> <ul style="list-style-type: none"> <li>- discussion on updates of other dam safety protocols, plans and processes and outcomes of relevant incidents in relation to lessons learnt</li> </ul> <ul style="list-style-type: none"> <li>• <u>Dam safety skills and resources</u> in particular: <ul style="list-style-type: none"> <li>○ industry related dam safety matters as raised by dam owners (e.g. skills gaps and training) or related to peak bodies, such as ANCOLD, WSAA and Vic Water</li> <li>○ continue to promote need to ensure availability of skilled resources across water corporations for dam safety</li> <li>○ continue to provide support for and input to industry training courses and workshops on dam safety management and emergency management and accreditation</li> <li>○ processes to build awareness of dam safety matters with water corporation boards and executives, in particular continue to promote ANCOLD’s course on dam safety and corporate risk management</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- discussion on updates on emergency management reforms and relevant amendments to the <i>Emergency Management Act 2013</i> and other relevant legislation/regulatory instruments</li> <li>- discussion on updates of other dam safety protocols, plans and processes and outcomes of relevant incidents in relation to lessons learnt</li> </ul> <ul style="list-style-type: none"> <li>• <u>Dam safety skills and resources</u> in particular: <ul style="list-style-type: none"> <li>○ industry related dam safety matters as raised by dam owners (e.g. skills gaps and training) or related to peak bodies, such as ANCOLD, WSAA and Vic Water</li> <li>○ continue to promote need to ensure availability of skilled resources across water corporations for dam safety</li> <li>○ continue to provide support for and input to industry training courses and workshops on dam safety management and emergency management and accreditation</li> <li>○ processes to build awareness of dam safety matters with water corporation boards and executives, in particular continue to promote ANCOLD’s course on dam safety and corporate risk management</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- discussion on updates on emergency management reforms and relevant amendments to the <i>Emergency Management Act 2013</i> and other relevant legislation/regulatory instruments</li> <li>- discussion on updates of other dam safety protocols, plans and processes and outcomes of relevant incidents in relation to lessons learnt</li> </ul> <ul style="list-style-type: none"> <li>• <u>Dam safety skills and resources</u> in particular: <ul style="list-style-type: none"> <li>○ industry related dam safety matters as raised by dam owners (e.g. skills gaps and training) or related to peak bodies, such as ANCOLD, WSAA and Vic Water</li> <li>○ continue to promote need to ensure availability of skilled resources across water corporations for dam safety</li> <li>○ continue to provide support for and input to industry training courses and workshops on dam safety management and emergency management and accreditation</li> <li>○ processes to build awareness of dam safety matters with water corporation boards and executives, in particular continue to promote ANCOLD’s course on dam safety and corporate risk management</li> </ul> </li> </ul>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">ADVICE AREA 2 Specific Dam Safety Issues Raised by DELWP</p>	<p><i>Provide advice to DELWP on:</i></p> <p><b>PROJECT BASED</b> <b>Development Close to Dams</b></p> <ul style="list-style-type: none"> <li>• advise on potential approach to addressing future development close to dams, triggered by the emergency dam incident in late 2020 at Torquay Vic.</li> </ul>	<p><i>Provide advice to DELWP on:</i></p> <p><b>PROJECT BASED</b> <b>Development Close to Dams</b></p> <ul style="list-style-type: none"> <li>▪ review outcome of approach and discuss any next steps considered required</li> </ul>	<p><i>Provide advice to DELWP on:</i></p> <p><b>PROJECT BASED</b></p>

	<p><b>ONGOING</b></p> <ul style="list-style-type: none"> <li>• <u>Specific Advice</u> <ul style="list-style-type: none"> <li>○ provide advice when requested by DELWP on any specific dam safety issue or incident which may arise from time to time</li> <li>○ review the issue and its outcome in respect to potential influence on ADVICE AREAS 1 and 2</li> </ul> </li> </ul>	<p><b>ONGOING</b></p> <ul style="list-style-type: none"> <li>• <u>Specific Advice</u> <ul style="list-style-type: none"> <li>○ provide advice when requested by DELWP on any specific dam safety issue or incident which may arise from time to time</li> <li>○ review the issue and its outcome in respect to potential influence on ADVICE AREAS 1 and 2</li> </ul> </li> </ul>	<p><b>ONGOING</b></p> <ul style="list-style-type: none"> <li>• <u>Specific Advice</u> <ul style="list-style-type: none"> <li>○ provide advice when requested by DELWP on any specific dam safety issue or incident which may arise from time to time</li> <li>○ review the issue and its outcome in respect to potential influence on ADVICE AREAS 1 and 2</li> </ul> </li> </ul>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>ADVICE AREA 3</b> Governance of Committee</p>	<p><i>Undertake Committee's governance involving:</i></p> <p><b>PROJECT BASED</b></p> <p><b>Review of the Committee's effectiveness</b></p> <ul style="list-style-type: none"> <li>• consider and implement any improvements identified including review of the Terms of Reference and Forward Program of Activities</li> </ul> <p><b>ONGOING</b></p> <ul style="list-style-type: none"> <li>▪ Produce and review an annual report</li> </ul>	<p><b>PROJECT BASED</b></p> <p><b>Review of the Committee's effectiveness</b></p> <ul style="list-style-type: none"> <li>▪ continue with the approach implemented in the first year the term of the Committee</li> </ul> <p><b>ONGOING</b></p> <ul style="list-style-type: none"> <li>▪ Produce and review an annual report</li> </ul>	<p><b>PROJECT BASED</b></p> <p><b>Review of the Committee's effectiveness</b></p> <ul style="list-style-type: none"> <li>• continue with the approach implemented in the first year the term of the Committee but identify any issues which have arisen</li> <li>▪ Have discussions with DELWP on the next three-year term of the Dam Safety Advisory Committee</li> </ul> <p><b>ONGOING</b></p> <ul style="list-style-type: none"> <li>▪ Produce and review an annual report</li> </ul>