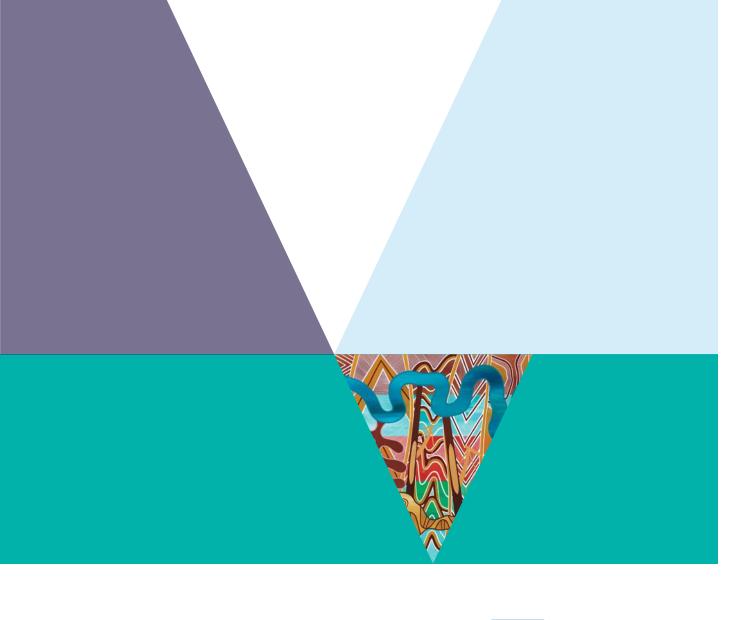
Western Region Sustainable Water Strategy

Progress report on the implementation of actions





Acknowledgment

We acknowledge and respect Victorian Traditional Owners as the original custodians of Victoria's land and waters, their unique ability to care for Country and deep spiritual connection to it. We honour Elders past and present whose knowledge and wisdom has ensured the continuation of culture and traditional practices.

We are committed to genuinely partner, and meaningfully engage, with Victoria's Traditional Owners and Aboriginal communities to support the protection of Country, the maintenance of spiritual and cultural practices and their broader aspirations in the 21st century and beyond.



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1. Introduction

This document describes the Western Region Sustainable Water Strategy (WRSWS): Progress report on the implementation of actions (Progress report). It follows Recommendation 2 of the WRSWS five-yearly assessment report: for DELWP, in partnership with organisations responsible for implementing WRSWS actions, to develop an implementation plan for WRSWS actions. This Progress report aims to support and drive accountability for the implementation of actions and guide the 10-year statutory review of the Strategy, expected to start in 2021.

This Progress report updates actions status since the last reporting (2018). It considers *Water for Victoria* progress (Delivering *Water for Victoria* Progress report), and any additional progress in implementing the outstanding actions. About 71% of the 69 actions are now reported as achieved, with 20 outstanding actions (3 progressing through *Water for Victoria* or the *Murray-Darling Basin Plan* and 17 partly or not yet achieved).

This report should be read in conjunction with the <u>WRSWS</u> and its five-yearly assessment report, available at: https://www.water.vic.gov.au/planning-and-entitlements/sustainable-water-strategies.

1.1 Background

The WRSWS was released in 2011. It included 21 policies and 69 actions to meet the region's water needs and to ensure sustainable management of the region's water resources for the next 50 years.

Water for Victoria released in 2016 required five-yearly assessments of the SWSs, beginning with the Gippsland Region and Western Region SWSs.

The five-yearly assessment of the WRSWS started in 2017 and was conducted by DELWP with consultation with key stakeholders involved in the developing and implementation of the Strategy. The assessment updated catchment inflow data, determined the status of each action, consolidated feedback about the process for development and implementation of the Strategy and made recommendations to support its 10-year statutory review, expected to start 2021. The report was released in October 2018.

Feedback from the five-yearly assessment process indicated that stakeholders supported the process to develop the Strategy as collaborative and well-communicated. However, they also mentioned that the process for implementation, and associated governance, was less transparent, which in some cases may have resulted in missed opportunities for engagement to deliver the best outcomes.

Recommendation 2 of the five-yearly assessment report is for DELWP, in partnership with organisations responsible for implementing WRSWS actions, to develop an implementation plan.

2. Approach

Progress on Sustainable Water Strategies actions are updated each year. A summary is provided in the DELWP Annual Report. The summary of actions on the DELWP SWS website is updated to correspond with the Annual Report.

This Progress report updates the status of each action considering the progress in *Water for Victoria* (Delivering *Water for Victoria* Progress report) and the *Murray-Darling Basin Plan*, and any additional progress in implementing the outstanding actions.

This report confirms that 49 of the 69 actions have been achieved (20 achieved and completed and 29 achieved and ongoing). Three actions are being progressed through *Water for Victoria* or the *Murray-Darling Basin Plan* and 17 actions have been partly or not yet achieved.

A summary of the updated action status will be included in the 2019 DELWP Annual Report and the status and narratives for actions will be updated in the DELWP SWS website.

The approach used to assess actions varied according to the status of the action at the start of the process. A flowchart diagram (**Figure 1**) was used as a tool to make decisions on what was needed by each group of actions.

The updated status of the action presented in this Progress report was used to determine the starting point in the flowchart diagram explained below. For the achieved and ongoing actions, an approach to understand the likelihood that an ongoing action would be discontinued was included (see **Appendix A**).

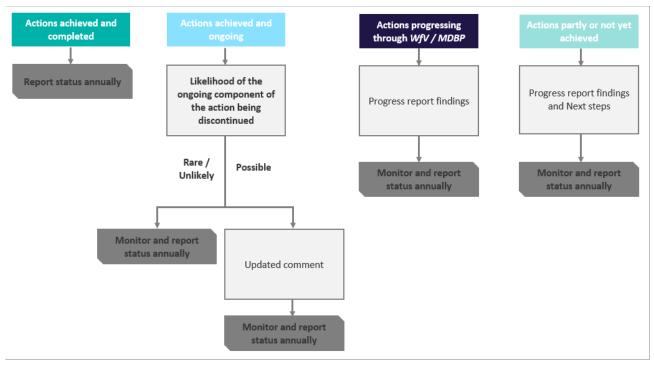


Figure 1: Flowchart diagram for assessing the WRSWS actions

The Progress report was developed by DELWP in collaboration with stakeholders and organisations responsible for delivering outstanding actions. Other organisations and stakeholders involved in the development and implementation of the Strategy were kept informed and updated as the report progressed.

3. Progress report findings and next steps

3.1 Updates since the previous reporting

The WRSWS actions are classified as:

- · Achieved and completed: the action has been completed in full
- Achieved and ongoing: the action has been achieved and the strategy's requirements have been met, but ongoing effort is needed to ensure the intended outcome of the action continues to be maintained
- Being progressed through *Water for Victoria* or the *Murray-Darling Basin Plan*: part or all of the action is being undertaken, or is a priority, or its intent is being addressed, through one or other of these plans
- Partly or not yet achieved: the action has been partly achieved or has not yet been achieved

The five-yearly assessment reported actions status in 2018 (Figure 2).

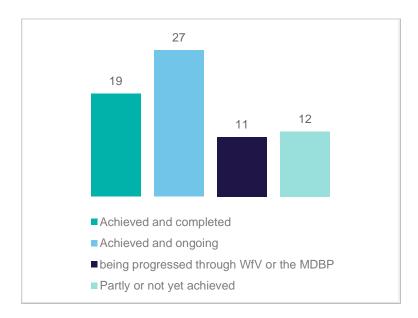


Figure 2: WRSWS actions status 2018

This Progress report updated the status of actions and Figure 3 presents a summary of the updated status, showing that 49 actions are now achieved and there are 20 outstanding actions. Further information about the action status is presented in sections 3.2, 3.3, 3.4 and 3.5.

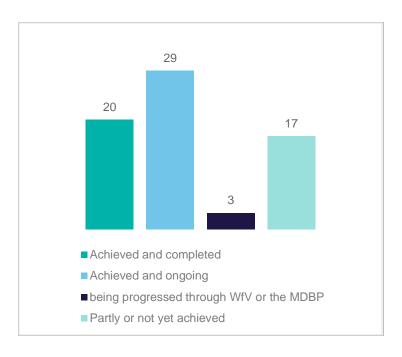


Figure 3: WRSWS actions status 2019

A table with the current status of all WRSWS actions can be found at https://www.water.vic.gov.au/planning-and-entitlements/sws/western.

3.2 Actions achieved and completed

There were 19 WRSWS actions reported as achieved and completed in the five-yearly assessment report. Progress has been made since then, and this Progress report confirms **20** actions as achieved and complete. Table 1 presents the action that is now reported as achieved and completed.

Table 1: Updated WRSWS achieved and completed action

Action #	Action	Five-yearly assessment status	Responsible organisations	Comment
3.10	Harvesting high flows	Progressing through Water for Victoria or the Murray- Darling Basin Plan	DELWP, RWCs, CMAs	This action was to help explore more-adaptive water-extraction options through the extraction of high flows outside the winter-fill period (July – October). The five-yearly assessment linked this action to Water for Victoria action 8.3 Investigate increased flexibility for taking water under winter-fill licences. Water for Victoria action 8.3 is now reported as complete. The Water Plan represents the more recent consideration of this issue and the Progress report supports its findings: Investigation completed and concluded that it would be a highly unreliable source of water. Guidelines are proposed to permit high flow extraction on a case-by-case basis. As a result, this action is now considered Achieved and complete.

3.3 Actions achieved and ongoing

There were 27 WRSWS actions reported as achieved and ongoing in the five-yearly assessment report. Progress has been made since then, and this Progress report confirms **29** actions as achieved and ongoing. Table 2 presents the actions that are now reported as achieved and ongoing.

Table 2: Updated WRSWS achieved and ongoing actions

Action #	Action	Five-yearly assessment status	Responsible organisations	Comment
3.13	Encouraging fit- for-purpose use of alternative water supplies	Progressing through Water for Victoria or the Murray-Darling Basin Plan	DELWP, water corporations	This action focus on exploring the use of fit-for-purpose alternative water supplies to provide benefits to communities and reduce demand on potable water supplies. Shortly after the WRSWS was published, water supply demand strategy guidelines to consider alternative water supply were published and such consideration continues to be a part of water corporations' most recent urban water strategies. Policies for the assessment and approval of local desalination systems and for brine disposal management were released in 2013.
				The Water Plan maintains the use of alternative water supplies to achieve secure water supplies as a priority, and stormwater allocation is being discussed across Victoria in integrated water management (IWM) forums.
				Opportunities are also being assessed through IWM Forums. Wimmera CMA is leading this in the GWM Water region.
				As a result, this action is now considered Achieved and ongoing.

Action #	Action	Five-yearly assessment status	Responsible organisations	Comment
3.15	Staged release of unallocated water	Partly or not yet achieved	RWCs	This action is to provide more water to meet the needs of consumptive users in an environmentally sensitive manner. The staged release of unallocated water has been planned to give consumptive users greater access to the water in a manner informed by a better understanding of the sustainable yield of the relevant water system.
				Unallocated water has been identified in some areas and there are mechanisms in place to release unallocated water. This occurs through tender processes (GWMWater) and the WaterBid platform (SRW), launched in 2015. Auctions have been held for water from the Hopkins and Gellibrand rivers and the Parwan GMA. A tender was used for allocation of groundwater in the West Wimmera GMA.
				Further sales processes are planned in 2019–20 for the unincorporated groundwater resources of the Lower Tertiary Aquifer north of Warrnambool.
				Further water may also become available from the aquifer as a result of additional resource assessments and planning.
				The tender process in the West Wimmera GMA did not allocate all water due to a lack of demand. GWMWater continues to look for alternative ways to release unallocated water.
				As a result, this action is now considered Achieved and ongoing.

This Progress report reinforces the importance to continue achievement of all ongoing actions. It applied an approach to understand the likelihood of discontinuity of ongoing actions (**Appendix A**). From the 29 achieved and ongoing actions:

- **9 actions** were classified as having a "rare" likelihood that the action would be discontinued, with the mechanism to deliver the action linked to a statutory requirement.
- 18 actions were classified as having an "unlikely" likelihood that the action would be discontinued, with an established program and adequate funding in place to deliver the ongoing part of the action.
- 2 actions were classified as having a "possible" likelihood that the action would be discontinued, with the action being delivered through projects with frequent renewal. Comments are included in Table 3 for the actions classified as having a "possible" likelihood to be discontinued.

Table 3: WRSWS achieved and ongoing actions classified as having a "possible" likelihood to be discontinued

Action #	Action	Lead agency	Comment
4.2	Managing short- term variability in groundwater systems	RWCs	This ongoing action set clear rules for water-sharing and improves the management of short-term variability in groundwater systems. Water Supply Protection Area management plans and local management plans have documented management rules across much of the region. Updates to plans have included updates to management rules. Plans are yet to be developed for the Lower Otway Aquifers. Plans will be prepared for this area based on available resources and priorities. Plans will continue to be reviewed as required.
4.10	Establishing secure ongoing funding for future maintenance and renewal of the monitoring network	DELWP	This ongoing action helps to ensure funding for maintaining and renewing Victoria's monitoring network. A formal process was needed to determine an operating and maintenance program that shares costs on a beneficiary-pays basis. Costs are shared between DELWP (funded through the Environment Contribution Levy) and water corporations (funded through fees and charges approved through the Essential Services Commission's pricing determination processes). For groundwater, monitoring costs are covered by a partnership of water corporations, CMAs and DELWP. For surface water monitoring, costs are covered by a partnership of water corporations, CMAs, local governments, the Bureau of Meteorology, the Murray-Darling Basin Authority and DELWP. Funding for monitoring may be under pressure, with an ongoing issue relating to the need for more monitoring versus capacity to pay.
			Since 2011, approximately \$ 2,800,000 has been invested in the Western region into improving asset condition and capacity to capture monitoring data (loggers and telemetry expansion and upgrades) and post flood recovery works and OH&S improvements. This has improved the reliability of the asset performance, introduced data logging and telemetry and reduced the overall cost of the monitoring in some systems.
			The Progress report supports ongoing funding for future maintenance and renewal of the monitoring network.
			Where gaps in the monitoring network are identified, this action supports inclusion of filling gaps as part of the network "renewal".
			The forward works program is now submitted for consideration under routine budgetary processes.

3.4 Actions progressing through Water for Victoria or the Murray-Darling Basin Plan

There were 11 WRSWS actions reported as being progressed through *Water for Victoria* or the *Murray-Darling Basin Plan* in the five-yearly assessment report. Progress has been made since then, and 1 action is now reported as achieved and completed, 1 as achieved and ongoing, and 6 as partly or not yet achieved. This Progress report confirms that 3 actions are still progressing through *Water for Victoria* or the *Murray-Darling Basin Plan*. Progress report findings are included (Table 4).

Table 4: Progress report findings for WRSWS actions progressing through Water for Victoria or the Murray-Darling Basin Plan

Action #	Action	Lead agency	Progress report findings
3.1	Providing more security to section 51 take and use licence holders	Minister for Water, RWCs, CMAs	The five-yearly assessment linked this action to Water for Victoria action 8.2, which is in progress with a revised timeframe. DELWP has commenced a desktop review of the merits of converting licences into water shares and other products.
			When Water for Victoria action 8.2 is reported as completed, the SWS reporting should update the action status incorporating Water for Victoria findings.
3.12	Improving opportunities for water trading in groundwater and unregulated river systems	DELWP, RWCs, DJPR, CMAs	The five-yearly assessment linked this action to Water for Victoria action 9.7, which is in progress and expected to be completed in 2021. DELWP has commenced market effectiveness case studies for selected systems in order to better understand opportunities for improving trade in groundwater and unregulated systems across the state. SRW is working with DELWP on an aquifer-based management framework to enable trading over larger connected systems.
10.4	Development and implementation of the <i>Murray-Darling Basin Plan</i> in the Wimmera and Mallee catchments	DELWP	The five-yearly assessment linked this action to the Murray-Darling Basin Plan: Wimmera-Mallee Water Resource Plans. When the Wimmera-Mallee Water Resource Plan is accredited by the Commonwealth (proposed as June 2019), the SWS reporting will update the action to achieved and completed. The Wimmera Water Resource Plan is to be accredited by June 2019.

3.5 Actions partly or not yet achieved

There were 12 WRSWS actions reported as partly or not yet achieved in the five-yearly assessment report. This Progress report confirms **17** partly or not yet achieved actions. The WRSWS proposed actions to promote sustainable water management and manage plantation forestry water use. The achievement of a number of these actions required amendments to the *Water Act 1989*. The necessary amendments were proposed in the Water Bill 2014, but the Bill did not proceed.

The five-yearly assessment linked some SWS actions — actions 3.2 and 3.3 related to promoting sustainable water management and actions 5.3, 5.4, 5.5 and 5.6 related to the management of intensive forestry industries — with *Water for Victoria* action 8.4 (part b) considering that it addresses similar issues, captures their intent and re-examines the most appropriate mechanism to progress that intent.

Water for Victoria action 8.4 is now reported as complete and now business as usual, with DELWP Annual Water Accounts reporting on significant uses of water.

It is acknowledged that the completion of the Water Plan action represents further progress on these actions but does not represent a full completion of the SWS actions. Therefore, the actions below are now classified as partly or not yet achieved:

- Action 3.2 Improving information about domestic and stock dams
- · Action 3.3 Requiring property owners to register new domestic and stock bores

- Action 5.3 Amend the Water Act 1989 so intensive management areas can be declared to control water intensive land use changes in these areas
- · Action 5.4 Guidelines for rapidly assessing new forestry development proposals
- · Action 5.5 Considering cumulative impacts of land use in decisions about water use
- Action 5.6 Appointing regional committees to assess intensive management areas

Progress report findings and next steps for the 17 partly or not yet achieved actions are proposed (Table 5).

Table 5: Progress report findings and next steps for WRSWS actions partly or not yet achieved

Action #	Action	Lead agency	Five-yearly assessment comment	Progress report Findings	Next steps	Timeframe
5.3	Amend the Water Act 1989 so intensive management areas can be declared to control water intensive land use changes in these areas	DELWP	Act 1989 to enable the Minister for Water to declare and manage an area according to the process explained in the WRSWS. To better manage the impact of land use change on water resources, the WRSWS proposed a process to declare intensive management areas, based on the intensity of water stress, the significance of water-dependent values and the potential for land use changes to affect these values. Intensive management areas would have specific rules and management actions to ensure the integrity of high-value water systems are maintained. Amendments to the Act to declare intensive management areas were proposed in the Water Bill 2014, but the Bill did not proceed through parliament. Water for Victoria action 8.4 recognised the	Drivers for large-scale forestry have changed since 2011. In the 10 years prior to the development of the SWS, the area of commercial hardwood plantations in Victoria doubled. Since then, the Victorian 'State of the forests' five yearly report (2018) confirms that plantation areas have gradually decreased. No new plantation areas have been established since the 2012-13 financial	the state-wide approach to manage the impact of plantations on water availability, update the information and incorporate changes in circumstances since the Strategy was released, such as the shift in drivers influencing land use change, as well as other relevant plans and policies.	June 2021
5.4	Guidelines for rapidly assessing new forestry development proposals	DELWP, RWCs		Water for Victoria recognises that large-scale changes in land use could affect water availability by intercepting water that would otherwise reach streams and aquifers. This can affect the water resource, entitlement holders and the environment. It changed the focus the SWS proposed and focused on better recording and reporting of emerging significant uses of water. For commercial plantation forestry, this reflected the reduced		
5.5	Considering cumulative impacts of land use in decisions about water use	DELWP, RWCs				

Action #	Action	Lead agency	Five-yearly assessment comment	Progress report Findings	Next steps	Timeframe
5.6	Appointing regional committees to assess intensive management areas	DELWP	changes and proposes an approach to gain better information about the impacts of changes in land use on water resources. This work will inform the review of the WRSWS about the risks to water resources and whether action is required to mitigate them.	development compared to that expected when the Strategy was developed. However, there is a recent interest in expanding plantation forestry for production purposes and for offsetting greenhouse gas emissions. The Victorian Government pledged \$110 million in the 2017-18 budget to assist with plantation development in the Latrobe Valley, with the first areas to be planted in 2019. In 2018, the Australian Government announced funding of \$20 million between 2018 and 2022, to underpin growth in Australia's renewable timber and wood-fibre industry. South West Victoria was chosen as one of the four pilot Regional Forestry Hubs. The Commonwealth also offers financial support for a number of activities that seek to reduce greenhouse gas emissions through the Climate Solutions Fund. Some commercial plantations, revegetation and farm forestry activities may be eligible. The Progress report highlights the importance to have a process in place to manage adverse water resources impacts from land use change.		

Action #	Action	Lead agency	Five-yearly assessment comment	Progress report Findings	Next steps	Timeframe
3.2	Improving information about domestic and stock dams	Minister for Water, DELWP, RWCs	This action was to improve knowledge of farm dams to enhance understanding of overall water harvesting within a catchment. The Water Bill 2014 proposed amendments to do this, but it did not proceed through parliament. Regulations requiring registration of new and modified farm dams in rural residential areas were revoked in 2017 after a review found they did not achieve their purpose and were an unreasonable burden on dam owners. Water for Victoria committed to recording and reporting on all emerging, significant uses of water including investigating a reasonable-use limit for domestic and stock rights under Section 8 of the Water Act.	Water for Victoria action 8.4 Better record and report on emerging significant uses of water (a) reinforced the importance to investigate the need to introduce reasonable use limit for domestic and stock rights under section 8 of the Water Act 1989.	The need to increase the information on domestic and stock dams and bores and ways to do this will be reassessed in consideration of the reasonable use for domestic and stock. DELWP will consult with stakeholders and community about options to progress this action.	June 2020
			The investigation concluded that a reasonable-use limit on water use for domestic and stock could not be implemented nor be effective without a change to the <i>Water Act 1989</i> to give the Minister the ability to set a limit. Further stakeholder consultation is needed to determine what domestic and stock use poses a risk, what is a reasonable-use limit and whether it is the most effective method to manage the growth in domestic and stock water use. Water for Victoria action 8.4 maintains this as a priority.			

Action #	Action	Lead agency	Five-yearly assessment comment	Progress report Findings	Next steps	Timeframe
3.3	Requiring property owners to register new domestic and stock bores	Minister for Water, DELWP, RWCs	This action was to improve knowledge about the use of bores for stock and domestic purposes. The Water Bill 2014 proposed amendments to do this, but it did not proceed through parliament. Water for Victoria commits to improved monitoring and reporting on significant uses of water through the Victorian Water Accounts. Water for Victoria action 8.4 maintains this as a priority	Water for Victoria action 8.4 Better record and report on emerging significant uses of water (a) reinforced the importance to investigate the need to introduce reasonable use limit for domestic and stock rights under section 8 of the Water Act 1989. The Progress report reinforces that registering domestic and stock bores is important for improving accountability for the volume of water taken for domestic and stock purposes and important for an equity perspective (fairness in access to water resources).	The need to increase the information on domestic and stock dams and bores and ways to do this will be reassessed in consideration of the reasonable use for domestic and stock. DELWP will consult with stakeholders and community about options to progress this action.	June 2020
3.14	Balanced approach to managing unallocated water on unregulated rivers	DELWP, RWCs	This action is to provide an approach to managing unallocated water on unregulated rivers and streams, which balances the needs of consumptive users and the environment. The Victorian winter-fill Sustainable Diversion Limits have been updated and are applied when assessing applications for new surface water licences and transfers.	The Progress report considers that this action is progressing. The 2010 order applies to (<u>PCV</u> orders): Thomson, Latrobe, Bunyip, Yarra, Maribyrnong, Werribee, Moorabool, Barwon, Otway Coast River Basins	DELWP plans to update the 2010 PCV Surface Water Order.	December 2019
7.1	Revised caps on the amount of unallocated surface water available for winter- fill diversions in Otways catchments	DELWP, SRW, CMAs	This action is to revise the caps on the amount of unallocated surface water available for winter-fill diversions. About 3.5 GL of unallocated water in the Otway catchments is available for winter-fill diversion under the existing sustainable diversion limit. This water has not been allocated in the Otway catchment because there has been insufficient demand. The PCV Surface Water Order 2010 will be updated to reflect these changes. The amount of water available for new entitlements in the Otways catchments is to be reviewed as part of the WRSWS review process.	The Progress report considers that this action is progressing. The 2010 order applies to (PCV orders): Thomson, Latrobe, Bunyip, Yarra, Maribyrnong, Werribee, Moorabool, Barwon, Otway Coast River Basins	DELWP plans to update the 2010 PCV Surface Water Order.	December 2019

Action #	Action	Lead agency	Five-yearly assessment comment	Progress report Findings	Next steps	Timeframe
8.1	Revised caps on the amount of unallocated surface water available for winter- fill diversions in the South-west Coast	DELWP, SRW, GHCMA	This action is to revise the caps on the amount of unallocated surface water available for winter-fill diversions. About 5 GL of unallocated water in the south-west catchments has been made available for winter-fill diversion. This water has been allocated but the PCV Surface Water Order 2010 will be updated to reflect these changes. The amount of water available for new entitlements in the South-west Coast is to be reviewed as part of the WRSWS review process.	The Progress report considers that this action is progressing. The 2010 order applies to (PCV orders): Thomson, Latrobe, Bunyip, Yarra, Maribyrnong, Werribee, Moorabool, Barwon, Otway Coast River Basins	DELWP plans to update the 2010 PCV Surface Water Order.	December 2019
3.9	Streamlining the approval of section 67 storage construction licences	Minister for Water, DELWP, RWCs, CMAs	This action is to provide guidance and clarity for section 67 storage construction licence applicants and assessing authorities. At the time the WRSWS was published, applicants for section 67 works licences had to undertake various investigations and environmental assessments, which were often burdensome. DELWP is currently progressing options for providing improved guidance to RWCs about the assessment required for licence applications and to improve the application process.	The Progress report confirms that this action is progressing.	DELWP will publish guidance to RWCs about the assessment required for licence applications and to improve the application process.	September 2019

3.5 Developing local RWCs. This action is to document existing The Progress report confirms that this action Progress LMPs June 2021 DELWP management plans management rules into local management is progressing on a priority basis and as based on available for unregulated plans (LMPs), to provide transparent water resourcing is available. Priority is given to resources and surface water and management. The action is well-progressed areas where there is significant water priorities. groundwater and ongoing. LMPs are to be developed in regulation and significant water management DELWP — in line with DELWP guidelines, which were issues. Plans for these areas have been systems partnership with key released in May 2014, and be publicly completed. Where there is significant water stakeholders - will available on rural water corporations' regulation but there are few management revisit the Victorian websites. For this assessment, an LMP is issues are prioritised next. Most of these groundwater considered complete when the existing rules areas have been completed. Where there is management are documented and published on the rural limited water demand and subsequently framework. The water corporation's website. If the rural water limited management issues, these areas are outcomes of this corporation responsible for developing an not considered a priority and are unlikely to process will be LMP considers the existing rules sufficient be completed. This includes areas in updated in the next and effective, only documentation is GWMW area such as the Mallee and Lake monitoring and required. Therefore, many of the unregulated Corangamite and the Millicent coast in SRW reporting cycle surface water and groundwater LMPs are area. (2020).documentation of existing rules only. LMPs Newlingrook LMP is documented in established for surface water in the Western Appendix 7 and Paaratte LMP is Region include for the Otway Coast, documented in Appendix 8 of the Hopkins Hopkins, Portland Coast, Avoca River, Corangamite catchment statement. Glenelg and Wimmera-Avon. Lake Corangamite, Mallee, Millicent Coast and Hopkins will be investigated in the future. Also, LMPs were to be developed for groundwater systems. The Hopkins-Corangamite Groundwater Catchment Statement includes the local management plan for the Colongulac, Glenormiston and Gellibrand GMAs. The West Wimmera GMA has replaced the areas of Balrootan, Kaniva TCSA, Goroke, Little Desert and Nhill. These areas are now covered by the West Wimmera Groundwater Management Strategy 2011. The action also includes reviewing some existing rules. Examples where this has occurred are the Heywood, Hawkesdale, Portland, Nullawarre and Yangery WSPAs (all in the South West Limestone LMP). Rules for Paaratte and Newlingrook are not yet completed.

Action #	Action	Lead agency	Five-yearly assessment comment	Progress report Findings	Next steps	Timeframe
4.4	Facilitating groundwater trading	RWCs	The action is to facilitate groundwater trading. The WRSWS noted that developing groundwater trading could benefit users and the region by moving water across the system. However, incomplete statutory management plans for WSPAs and the region's many small management areas were also identified as barriers to trading. To achieve the action, water corporations revised groundwater management unit boundaries, finalised statutory management plans or undeclared WSPAs that were no longer required and developed local management plans. A 2018 report Effectiveness of Victoria's Water Markets identified the main requirements for further development of groundwater markets are the need to set caps, allocation of available water, refinement of management area boundaries and education of licence holders. Progress on this action will be enhanced with the completion of actions 3.5 and 3.15.	The Progress report confirms that this action is progressing on a priority basis and as resourcing is available. Priority is given to areas where there is significant water regulation and significant water management issues. Plans for these areas have been completed. Where there is significant water regulation but there are few management issues are prioritised next. Most of these areas have been completed. Where there is limited water demand and subsequently limited management issues, these areas are not considered a priority and are unlikely to be completed. This includes areas in GWMW area such as the Mallee and Lake Corangamite and the Millicent coast in SRW area. Newlingrook LMP is documented in Appendix 7 and Paaratte LMP is documented in Appendix 8 of the Hopkins Corangamite catchment statement.	Progress LMPs based on available resources and priorities. DELWP — in partnership with key stakeholders — will revisit the Victorian groundwater management framework. The outcomes of this process will be updated in the next monitoring and reporting cycle (2020).	June 2021

Action #	Action	Lead agency	Five-yearly assessment comment	Progress report Findings	Next steps	Timeframe
4.5	Developing groundwater trade between South Australia and Victoria	DELWP	This action is to facilitate groundwater trading opportunities between Victoria and South Australia. Many border areas overlie aquifers that extend into both states. While Victorian legislation already allows for interstate groundwater trade, the ability to trade is constrained by the incompatibility of entitlements between the states, the lack of a combined trading zone with a set permissible consumptive volume and the lack of an interstate agreement on how to account for interstate trade. Barriers to interstate trade are being addressed as a part of a review of the border groundwaters agreement. The Border Groundwaters Agreement Review Committee is considering these issues for interstate trade as a part of a review of the agreement.	The Progress report confirms that this action is progressing.	Release groundwater trading arrangements for South Australia and Victoria.	Prior to the 10-year Statutory review of the Strategy, expected to start in 2021

Action #	Action	Lead agency	Five-yearly assessment comment	Progress report Findings	Next steps	Timeframe
5.1	Statewide recording of water use by land use changes	DELWP	This action is to improve understanding about the impact of land use changes on water use and the capability to estimate and report on these interactions. New technologies (such as satellite imagery and remote-sensing) are improving our understanding of how changes in land use affect water resources, and the importance of this understanding is increasingly recognised. In 2011–12, the National Water Commission funded the (then) Department of Sustainability and Environment (DSE) to prepare the groundwork to regularly estimate and report on water use by land use. This work included estimates of evapotranspiration, which is a key water use in vegetated landscapes. DSE contracted consultants to provide the tools and guidance to make evapotranspiration estimates, and they are now made annually using Victorian Land Use Information System land use data. However, water use estimates are only reported at a whole-of-basin scale, and they are not broken down by land use category or land use change. DELWP is now working to report water use by basin and land use category in future Victorian Water Accounts.	While land use and vegetation cover will influence evapotranspiration, climatic conditions have a larger impact on changes in evapotranspiration. Given this, the estimates of evapotranspiration in the Victorian Water Accounts will continue to use climatic information as the basis for annual reporting of evapotranspiration. Since 2011, drivers for land use change across Victoria, particularly relating to the development of plantation forestry, have changed. Plantation areas across Victoria have been generally steady for the past decade. Changes in land use will be tracked using available information, such as the 5-yearly State of the Forests report, which reports the area of plantation forest across the State. Estimates of evapotranspiration will incorporate land use changes on a 10-yearly basis. This timing aligns with the commitment to review the net take from plantation forestry in Victoria's WRPs under the Basin Plan. More frequent updates may be undertaken if significant land use changes are identified in the intervening period.	DELWP to estimate evapotranspiration in the Victorian Water Accounts based on annual climatic conditions. Land use changes will be incorporated periodically, to align with other reporting obligations, such as the 10-year review of the Basin Plan.	Annually for climatic conditions, and periodically for changes in land use.

Action #	Action	Lead agency	Five-yearly assessment comment	Progress report Findings	Next steps	Timeframe
7.3	Improving environmental flows in the Gellibrand River	CCMA, WW, SRW, DELWP	This action is working towards improving environmental flows in the Gellibrand River. Wannon Water, DELWP and the Corangamite CMA are implementing the action through the Gellibrand Summer Flows Improvement Project. The results of several completed investigations are available on Wannon Water's website, and investigations into improving flows in the river are continuing. The Gellibrand River has high environmental values, and it is a major source of water for urban communities and agriculture. Low flows in summer, particularly in dry years, put the river's ecological values at risk. Since the WRSWS was developed, there has been increased community concern about acid sulfate soils. A groundwater substitution option at the South Otway Pump site has been shown as unlikely to be viable, given the risk of its environmental impact and the yield and quality of the groundwater. Wannon Water, in partnership with Corangamite CMA, has updated its cost estimates for all the augmentation options using information it gained when investigating the groundwater substitution option and revisiting its options analysis. Other augmentation options were also investigated (such as building an offstream, winter-fill storage or extracting groundwater from the Curdievale borefield). The report will be publicly available soon. Wannon Water has established a stakeholder reference group to provide an opportunity for the community to contribute and so improve the project's outcomes.	The Progress report confirms that this action is progressing.	Project Control Group will work with partners (CCMA, WW, SRW, DELWP) to resolve how a business case for preferred augmentations can be completed.	June 2020

Action #	Action	Lead agency	Five-yearly assessment comment	Progress report Findings	Next steps	Timeframe
8.3	Preserving cultural values of Lake Condah	DELWP, SRW	This action is working towards preserving the cultural values of Lake Condah. Lake Condah is an important cultural site for the Gunditimara people and restoring the lake has been a goal since 2002. In 2010, a weir was built to improve flows to the lake and counteract historical draining. This action formalises watersharing arrangements between Lake Condah and other water users. The local management plan does not specify the relationship between the Lake Condah restoration project and other water users: the restoration plan relies on using and protecting winter flows, whereas annual licence holders in the system most likely access summer flows due to the storage requirement for winter flows.	The Progress report confirms that this action is progressing. The Lake Condah bypass channel and weir were completed in 2010 resulting in the partial restoration of the former lake water level regime and partial re-activation of flow through the aquaculture system. The structure has a gate with capacity to regulate flows, although this has not occurred to date and it has operated as a "fixed structure" to divert higher winter flows into Lake Condah. Operation to date has not required management rules. Gunditj Mirring, as the land managers are seeking some guidance to pro - actively manage the Lake's water levels. The development of a basic set of weir operational rules will greatly assist in the management of Lake Condah. Development of the weir operational rules first requires establishment of a set of prioritised objectives for lake management. The Glenelg Hopkins CMA and Gunditj Mirring will establish lake management objectives by December 2019. Southern Rural Water will be engaged in the establishment of the lake management objectives and the development of the basic weir operational rules.	As part of the assessment of the completion of actions for next year, determine if the basic operational rules for Lake Condah have been developed and how they are captured in a planning document.	December 2019

Action #	Action	Lead agency	Five-yearly assessment comment	Progress report Findings	Next steps	Timeframe
9.2	Restoring Lake Corangamite	CCMA, DELWP	Lake Corangamite is the largest permanent lake in Australia and was listed under the Ramsar Convention in 1982. In the 1950s, the Woady Yaloak Diversion scheme was built to transfer water from the lake to the Barwon River to alleviate flooding on adjacent freehold land. The scheme reduced flooding issues as intended but it also led to more-frequent low water levels in the lake and increased the lake's salinity, particularly during the Millennium Drought. To date, the Cundare Barrage outlet has been enlarged and lowered, and the drainage scheme assets have been maintained at a low operational level. Community concern about increased flood risk has slowed the process for amending the operating rules. Lake Corangamite is unlikely to be fully restored to its pre-1950s condition, but the action will continue to improve its condition. In 2022 Corangamite CMA plans to review the operation and continuation of the Woady Yaloak Diversion Scheme, after analysing the environmental impact of the system's operation and predicted and observed climate patterns.	The Progress report confirms this action is progressing.	Corangamite CMA to review the operation and continuation of the Woady Yaloak Diversion Scheme.	2022

4. What's next?

DELWP will continue monitoring the actions and reporting annually the updated status of the actions in its Annual Report and in the DELWP SWS website.

This Progress report will guide future monitoring and reporting on the WRSWS actions.

4.1 Future review of the Strategy

The 10-year statutory review of the Strategy will commence in 2021. It will be informed by the Long-term water resource assessment due in 2019 and the implementation of the Murray-Darling Basin Plan in Victoria.

The 10-year statutory review of the Strategy could be brought forward depending on the Long-term water resources assessment findings, which can also trigger a review of a SWS.

The review of the Strategy will revisit the outstanding actions to consider if the actions are still appropriate and relevant and discuss the need to amend or discontinue actions. The review of the Strategy comprises a similar process to the making of a SWS, including the appointment of a consultative committee to provide strategic guidance and advice about the process and community consultation on a draft report.

Table 6: What the review of the WRSWS is expected to deliver (according to the WRSWS)

Action #	What the review of the Strategy is expected to deliver
Further review of Victoria's domestic and stock management arrangements	The release of the draft <i>Murray-Darling Basin Plan</i> was delayed from late 2010 to late 2011. At this stage, it appears that Victoria's current domestic and stock management arrangements will adequately meet the needs of the Basin Plan. Therefore, the proposed review can be postponed until the next review of sustainable water strategies in 10 years. However, if detailed consideration of the draft and final <i>Murray-Darling Basin Plan</i> reveal the need for refinement to Victoria's domestic and stock management arrangements, any potential changes will be the subject of extensive public consultation as part of the process to implement and comply with the <i>Murray-Darling Basin Plan</i> by 2019.
Action 3.2 Improving information about domestic and stock dams	The review of the Strategy should analyse the data from significant uses of water and review of 'reasonable' domestic and stock water use.
Action 3.3 Requiring property owners to register new domestic and stock bores	The review of the Strategy should analyse the data from significant uses of water to re-assess and review the risks to Victoria's water resources.
Action 3.4 Monitoring and tracking water use outside the entitlement framework	This information will be used to inform the review of this Strategy in 10 years, which will assess the need for more active management of water use outside the entitlement framework.
Policy 3.7 Principles for managing unallocated water	A more sustainable, 'no regrets' approach would be to make some of the water available now and reassess whether more should be made available as part of the review of this Strategy in 10 years.
Action 3.14 Balanced approach to managing unallocated water on unregulated rivers	Review the precautionary caps taking into account an assessment of demand when this Strategy is reviewed in 10 years.
Policy 5.1 State-wide approach for managing water impacts of land use change	The need to regulate other land use changes can be considered in future reviews of sustainable water strategies, using evidence from monitoring and further research.
Action 7.1 Revised caps on the amount of unallocated surface water available for winter-fill diversions in Otways catchments	The amount of water available for new entitlements in the Otways will be reviewed as part of the review of this Strategy in 10 years.
Action 8.1 Revised caps on the amount of unallocated surface	The amounts of water available for new entitlements in the South-west Coast will be reviewed as part of the review of this Strategy in 10 years.

water available for winter-fill diversions in the South-west Coast

Appendix A Approach for assessing achieved and ongoing actions

The continued achievement of ongoing actions is an important component of the Strategy implementation. Where an action is dependent on the ongoing component to give full effect to the action, maintaining the ongoing action is an important part of its completion. For example, actions that are completed, such as establishing a monitoring network, may require ongoing funding to undertake monitoring for the full effect of the action to be achieved. Likewise, where guidance is developed, the regular review and updating of the guidance contributes to its ongoing effectiveness.

In assessing the ongoing actions, it was important to understand the likelihood that an ongoing action would be discontinued. The likelihood of the ongoing component of the action being discontinued was ranked as "rare", "unlikely" or "possible" (Table A1). The criteria used was:

- If the mechanism to deliver the action is linked to a statutory requirement, the likelihood the action would be discontinued was classified as "rare".
- If an established program and adequate ongoing funding are in place to deliver the action, the likelihood the action would be discontinued was classified as "unlikely".
- If the ongoing part of the action did not have clear funding, delivery method or was part of a project that required frequent renewal, the likelihood the action would be discontinued was classified as "possible".

Additional narrative was included in Table 3 for all actions classified as "possible". These actions will be revisited annually as part of the update of actions included in DELWP Annual Report and DELWP SWS website.

 Table A1: Assessment of likelihood of discontinuity of WRSWS ongoing actions

# WRSWS Action	WRSWS Action name	Mechanism to deliver the action	Likelihood approach	Likelihood category
3.4	Monitoring and tracking water use outside the entitlement framework	Government supports ongoing monitoring and reporting on water use outside the entitlement framework. <i>Water for Victoria</i> action 8.4 reported as complete and now BAU. Annual Water Accounts report on significant uses of water. Victorian Water Register has information on water-use licences and works licence.	DELWP continuous water assessment program and publication of information on the availability and use of water by publishing the annual Victorian Water Accounts.	Unlikely
3.7	Improving information-sharing about climate variability and risks	Government supports ongoing water and climate research. <i>Water for Victoria</i> actions 2.2 and 2.3, DELWP current programs on climate change, and links available on DELWP website.	Government supporting program (Victoria's Climate Change Framework).	Unlikely
3.8	Promoting water conservation and efficiency	Government supports water efficiency programs. Water for Victoria action 5.3 reported as in progress. Water conservation and efficiency measures part of the Urban Water Strategies and the development of reasonable domestic and domestic stock use guideline.	Statutory requirement: Water Industry Act 1994 / Government supporting program ('Target your water use' Program).	Unlikely
3.11	Extending the reticulated supply network	Principles embedded in decision making. Water for Victoria actions 4.1 and 4.2 reported as complete and now BAU. According to the Water Industry Act 1994, the Minister for Water may make and issue statements of obligations to water corporations. The Statement of Obligation 2010 requires water corporations to develop Urban Water Strategies and consider options and trigger points for augmentations. The Victoria's Water GRID Partnership also identify options and triggers for augmentations.	Statutory requirement: Water Act 1989 / Government supporting program (Water GRID Partnership).	Unlikely
3.13	Encouraging fit-for-purpose use of alternative water supplies	Urban water strategies and integrated water management forums. Water for Victoria actions 5.1 and 5.8.	Statutory requirement: Water Act 1989 and IWM Program.	Unlikely
3.15	Staged release of unallocated water	WaterBid platform.	Platform in place to continue delivery of the action.	Unlikely
3.18	Facilitating integrated water planning	IWM Forums and plans. Water for Victoria action 5.8.	Government supporting program (IWM Framework for Victoria).	Unlikely
3.19	Promoting sustainable water management on dryland farms	Agriculture Victoria continue to publish guidance in their website: http://agriculture.vic.gov.au/agriculture/farm-management/soil-and-water/water/farm-water-solutions, including an Online Farm Water Calculator platform.	Government supporting platform to keep farmers informed.	Unlikely

# WRSWS Action	WRSWS Action name	Mechanism to deliver the action	Likelihood approach	Likelihood category
3.20	Using consumptive water en route	The VEWH annual seasonal watering plan consider alternative water supply options such as use of consumptive water en route or augmenting natural flows in the criteria for prioritising environmental watering actions.	Statutory requirement: Water Act 1989.	Rare
3.21	Managing riparian land	Regional waterway management strategies (2014 to 2022), Regional Riparian Action Plan (2015-16 to 2019-20), and Victorian Waterway Management Strategy (until 2021).	Statutory requirement: Water Act 1989.	Rare
3.22	Changing environmental management objectives	The first LTWRA has commenced in August 2018 and is due in 2019. LTWRA can trigger SWSs reviews.	Statutory requirement: Water Act 1989.	Rare
3.23	Considering water impacts when undertaking planned burning and other bushfire control measures	Consideration of risks to water quality and quantity on planned burns / Joint Fuel Management Program / Integrated Forest Ecosystem Research Program.	Government supported program - high level commitment to continue to update guidance for planned burns and fire management. Internal guidance for planning and conducting planned burns.	Unlikely
3.24	Developing capacity for Aboriginal involvement in water management	Government supports through Water for Victoria action 6.4 - reported as in progress.	Government supporting program (Aboriginal Water Program).	Unlikely
4.2	Managing short-term variability in groundwater systems	Short term management of variability through planning processes (LMP's, WSPA plans) which include review periods enabling updates as required.	Supported by government, but no program in place.	Possible
4.6	Strategic groundwater resource assessments	Government supports ongoing strategic groundwater resource assessments, <i>Water for Victoria</i> action 8.11 Improve water resource information to support planning and decisions. Current programs include assessment of groundwater resources, data stocktake/inventory, data gaps research, Statewide groundwater and climate studies, Statewide groundwater and surface water interaction studies.	Statutory requirement: Section 22(1)(a) of the Water Act 1989 / Agreements in place to continue statewide surface water and groundwater monitoring networks.	Rare
4.8	Auctioning water where groundwater systems have additional capacity	Mechanism in place (tender processes and WaterBid), resource assessments ongoing, release of water as identified and market requires.	RWC driven, based on availability of existing water and demand for that water. Program in place.	Unlikely
4.10	Establishing secure, ongoing funding for future maintenance and renewal of the monitoring network	Government established a partnership model for funding monitoring, reflecting a "user pays" principle. The forward works	Supported by government with a partnership arrangement but no program in place.	Possible

# WRSWS Action	WRSWS Action name	Mechanism to deliver the action	Likelihood approach	Likelihood category
		program is now submitted for consideration under routine budgetary processes.		
4.12	Emerging technologies	There are regulatory and administrative procedures in place to ensure that emerging technologies appropriately consider impacts on groundwater.	Procedures in place to continue delivery of the action.	Unlikely
5.7	Reviewing implications of the Murray-Darling Basin Plan for managing the water impacts of land use change	Wimmera-Mallee Water Resources Plan and associated risk assessment. Further requirements may come out of the MDB Plan review commending in 2024.	WRP outlines how the <i>Murray-Darling Basin Plan</i> requirements are met through Victorian legislation.	Unlikely
6.2	Collaborating to improve efficiency	Bulk entitlements operation reviews.	Periodic review of bulk entitlements operations. Program in place.	Unlikely
6.3	Sale of the growth water	Information provided on GWMWater Annual Report and in the GWMWater Urban & Rural Water Strategy.	Everything is in place to continue delivery.	Unlikely
6.4	Improving the efficiency of operating the supply system	GWMWater monitors headworks losses and reports them on the Storage Manager website. Operational plans are developed annually and include considerations for managing headworks losses.	Procedures in place to continue delivery of the action.	Unlikely
6.7	Sharing any additional water savings in the supply system	Additional water savings managed in line with WRSWS.	Demand driven. Everything is in place to continue delivery.	Unlikely
6.8	Managing the Wimmera-Glenelg environmental entitlement	VEWH holds and manages the entitlement. VEWH seasonal watering plan.	Statutory requirement: Water Act 1989.	Rare
7.4	Investing in integrated catchment management to improve Otway waterways	CMAs regional catchment strategies and waterway management strategies.	Statutory requirement: Catchment and Land Protection Act 1994, Water Act 1989.	Rare
8.5	Investing in integrated catchment management to improve Southwest waterways	CMAs regional catchment strategies and waterway management strategies.	Statutory requirement: Catchment and Land Protection Act 1994, Water Act 1989.	Rare
9.3	Investing in integrated catchment management to improve Western District waterways	CMAs regional catchment strategies and waterway management strategies.	Statutory requirement: Catchment and Land Protection Act 1994, Water Act 1989.	Rare

# WRSWS Action	WRSWS Action name	Mechanism to deliver the action	Likelihood approach	Likelihood category
10.3	Investing in integrated catchment management to improve waterways	CMAs regional catchment strategies and waterway management strategies.	Statutory requirement: Catchment and Land Protection Act 1994, Water Act 1989.	Rare
10.5	Protecting flows in the Millicent Coast Basin	Moratorium on issuing new surface water entitlements in the basin.	Moratorium in place.	Unlikely