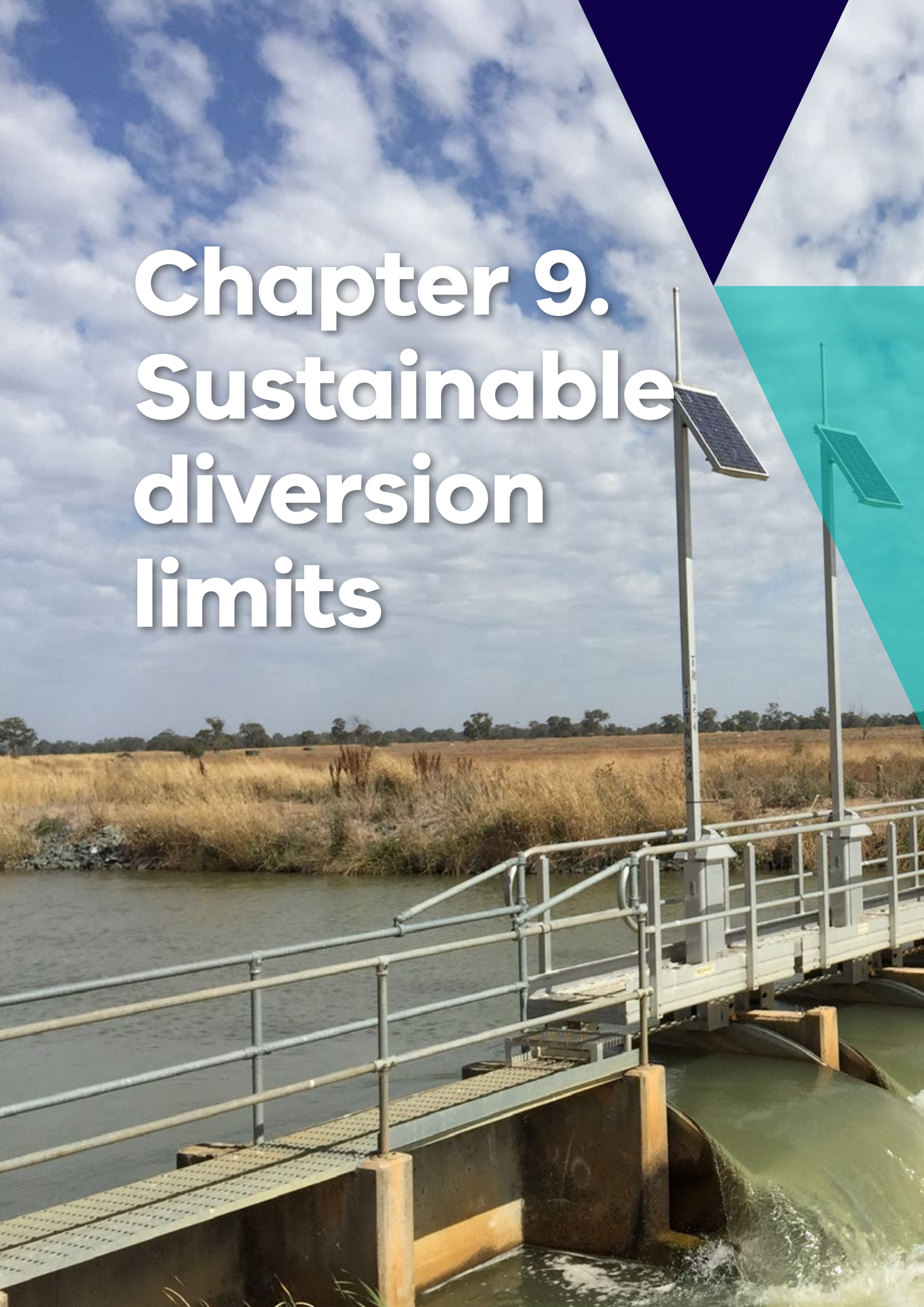
Chapter 9. Sustainable diversion limits



9. Sustainable diversion limits

This Chapter outlines how Victoria will comply with sustainable diversion limits and meet requirements under Part 3 of Chapter 10 of the Basin Plan.

9.1 Basin Plan requirements

The aim of the Basin Plan is to better protect the environment through reducing how much water can be taken for consumption, while also promoting the sustainable use of water for communities, agriculture and industries.

To support this, the Basin Plan prescribed sustainable diversion limits (SDLs) as a maximum volume of water that can be taken from Basin resources for consumption. Water taken for the environment is not part of the SDL volumes.

Clause 5.05 of the Basin Plan states:

- *The objective in relation to long-term average sustainable diversion limits is to establish environmentally sustainable limits on the quantities of surface water and groundwater that can be taken for consumptive use from Basin water resources, having regard to social and economic impacts, and in doing so:*
  - *inform environmental water recovery measures, including water purchasing and infrastructure that improves water use efficiency; and*
  - *provide greater certainty for all water users, including in times of drought and low water availability; and*
  - *provide time for water access entitlement holders and communities to transition and adjust to long-term average sustainable diversion limits*

- *The outcomes in relation to the establishment of long-term average sustainable diversion limits are:*
  - *the restoration and protection of water-dependent ecosystems and ecosystem functions in the Murray-Darling Basin; and*
  - *well-informed water recovery measures, including water purchasing and infrastructure, enable a transition to long-term average sustainable diversion limits; and*
  - *greater certainty of access to Basin water resources; and*
  - *water access entitlement holders and communities of the Murray-Darling Basin are better adapted to reduced quantities of available water*

9.2 What are baseline diversion limits (BDLs) and sustainable diversion limits (SDLs)?

9.2.1 Cap reporting framework

The Murray–Darling Basin Ministerial Council introduced the Murray–Darling Basin Cap on surface water diversions in 1995 to protect and enhance the riverine environment and protect the rights of water users. The Cap introduced long-term limits on how much water could be taken from rivers in 24 designated river valleys in the Murray-Darling Basin.

The Cap also introduced a requirement that Basin States had to work out ways to turn the long-term limits into annual cap targets that take account of changes such as the weather conditions and water availability in each year.

Under the Cap, Basin states had to provide data to the Murray–Darling Basin Authority (MDBA) to show how much water was actually taken each year compared to the annual cap targets.

9.2.2 Basin Plan reporting framework

The Basin Plan introduced a new water accounting and compliance framework to replace the Cap. When the Basin Plan was being developed, estimates were made of the volume of water diverted from the Basin under the conditions and level of development that were present in 2009. These volumes, termed BDLs are the long-term average estimates of consumptive water use before the Basin Plan.

SDLs represent a maximum limit of water diverted from the Basin at an environmentally sustainable level.

The considerations for developing SDLs were:

- the baseline diversion limit, as in how much water was being extracted from river or groundwater systems for use at the time of the Basin Plan's development
- the volume of water that could be extracted from river or groundwater systems without serious adverse impacts on the Basin's environmental health
- how much water needed to stay in the Basin's river or groundwater systems so that the environment across the Basin could thrive

The MDBA assessed these considerations and identified that the sustainable level of extraction from all Basin resources was an average of 10,873 gigalitres (GL) of surface water and 3,324 GL of groundwater per year.

This total volume for the Basin was then divided into water resource plan areas for surface water and groundwater. Each Basin State is required to demonstrate how it will limit the volume of water permitted to be taken in a water resource plan area to comply with the SDL.

The water resource plan areas are further broken down into SDL resource units. In Victoria's North and Murray water resource plan area there are seven surface water SDL resource units and four groundwater SDL resource units. Further information on the water resource plan areas and SDL resource units relevant to Victoria's North and Murray Water Resource Plan can be found in **Chapter 4**.

9.2.3 BDLs and SDLs for Victoria's North and Murray Water Resource Plan

Surface water

Using the methods described in **Appendix C**, Victoria has determined the BDLs, SDLs and long-term average permitted take for all surface water forms of take for the combined Victorian Murray water resource plan area as shown in **Table 9-1**, and the combined Northern Victoria water resource plan area as shown in **Table 9-2**. The combined volumes are shown here as they are the volumes that Victoria will determine whether there has been a non-compliance with SDLs. This is because section 6.12(2) of the Basin Plan allows for the Victorian Murray, Kiewa and Ovens SDL resource units to be treated as a single SDL resource unit and also for the Goulburn, Broken, Loddon and Campaspe SDL resource units to be treated as a single SDL resource unit. **Table 3** of **Appendix C** shows the BDLs and SDLs for each SDL resource unit.

The volumes determined for take from watercourses that are not regulated rivers (excluding basic rights) in row two of **Table 9-1** and **Table 9-2**, are the volumes of take from unregulated rivers that have been estimated separately from the models, and are instead, based on average actual take data. These volumes have been provided in the interim until a two-year review is completed. The review is explained further in **Appendix C**.

Groundwater

Victoria has not done independent modelling to determine the SDL for the Goulburn-Murray water resource plan area. Instead Victoria has adopted the baseline diversion limit and SDL figures prescribed in the Basin Plan for groundwater.

A summary of the Basin Plan groundwater management units in the Goulburn-Murray groundwater water resource plan area and the relationship with the BDLs and SDLs are shown in **Table 9-3**.

Table 9-1: Long-term average surface water diversion limits in the combined Victorian Murray, Kiewa and Ovens SDL resource units according to the forms of take specified in the Basin Plan

Form of take – surface water	BDL (ML/year)	SDL (ML/year)	Long-term average permitted take (ML/year)
a. Take from regulated rivers (excluding basic rights) and; b. the modelled component of take from a watercourse (excluding basic rights)	1,831,671	BDL minus target recovery as at 30 June of the preceding water year [a]	equals the SDL of the relevant water year (under a repeat of historical climate conditions) [a]
Take from watercourses that are not regulated rivers (excluding take under basic rights) - out of model component	5,500 [b]	5,500 [b]	5,500 [b]
Take under basic rights including: a. Take from regulated rivers under basic rights b. Take from watercourses that are not regulated rivers under basic rights	12,016	12,016	12,016
Total take by runoff dams including:	45,614	45,614	45,614
a. *Take by runoff dams (excluding take under basic rights)*	*21,880*	*21,880*	*21,880*
b. *Take by runoff dams under basic rights*	*23,734*	*23,734*	*23,734*
Take by commercial plantations	63,941	63,941	63,941

a target recovery is a long-term average annual volume and is determined by the volume of local and shared reduction amounts and offsets achieved through the Sustainable Diversion Limit Adjustment Mechanism – see **Appendix C** *for further information*

b these volumes are subject to a two-year review as explained in **Part 3.1.3.2** *and* **Table 6** *of* **Appendix C**

Table 9-2: Long-term average surface water diversion limits in the combined Goulburn, Broken, Campaspe and Loddon SDL resource units according to the forms of take specified in the Basin Plan

Form of take – surface water	BDL (ML/year)	SDL (ML/year)	Long-term average permitted take (ML/year)
a. Take from regulated rivers (excluding basic rights) and; b. the modelled component of take from a watercourse (excluding basic rights)	1,980,556	BDL minus target recovery as at 30 June of the preceding water year [a]	equals the SDL of the relevant water year (under historical climate conditions) [a]
Take from watercourses that are not regulated rivers (excluding take under basic rights) - out of model component	31,000 [b]	31,000 [b]	31,000 [b]
Take under basic rights including: a. Take from regulated rivers under basic rights b. Take from watercourses that are not regulated rivers under basic rights	14,284	14,284	14,284
Total take by runoff dams including:	123,240	123,240	123,240
a. *Take by runoff dams (excluding take under basic rights)*	*61,646*	*61,646*	*61,646*
b. *Take by runoff dams under basic rights*	*61,594*	*61,594*	*61,594*
Take by commercial plantations	44,532	44,532	44,532

a target recovery is a long-term average annual volume and is determined by the volume of local and shared reduction amounts and offsets achieved through the Sustainable Diversion Limit Adjustment Mechanism – see **Appendix C** *for further information*

b these volumes are subject to a two-year review as explained in **Part 3.1.3.2** *and* **Table 6** *of* **Appendix C**

Table 9-3: Groundwater diversion limits in the Goulburn-Murray water resource plan area by SDL resource unit

SDL resource unit	Form of take	BDL[1] (ML/year)	SDL[2] (ML/year)	Long-term average permitted take (ML/year)
Goulburn-Murray: Shepparton Irrigation Region	Take from groundwater (excl. basic rights)	244,100	241,490	241,490
	Take from groundwater under basic rights		2,610	2,610
Goulburn-Murray: Highlands	Take from groundwater (excl. basic rights)	38,300	55,590	55,590
	Take from groundwater under basic rights		13,110	13,110
Goulburn-Murray: Sedimentary Plain	Take from groundwater (excl. basic rights)	203,500	211,454	211,454
	Take from groundwater under basic rights		11,546	11,546
Goulburn-Murray: deep	Take from groundwater (excl. basic rights)	0	20,000	20,000
	Take from groundwater under basic rights	0^	0^	0^

1. *estimates from column 3, Schedule 4 of the Basin Plan have been adopted*
2. *estimates from column 4, Schedule 4 of the Basin Plan have been adopted*

^ at the time of setting these estimates there was no take from the Goulburn-Murray: deep SDL resource unit under basic rights, this may be revised in the future

9.3 Complying with SDLs

SDLs come into effect from 1 July 2019 and will replace the Cap compliance reporting. At the end of each water accounting period, actual take is subtracted from the annual permitted take. The difference is recorded as either an annual debit or credit, as outlined in section 6.11 of the Basin Plan.

To remain compliant with SDLs, cumulative debit cannot be equal to or greater than 20 percent of the SDL (section 6.12 of the Basin Plan). The MDBA's role is to assess Basin states' compliance with SDLs and to take appropriate action for any non-compliances.

For the purposes of determining compliance with SDLs, section 6.12(2)(a) of the Basin Plan allows the combined limits for Victorian Murray, Kiewa and Ovens SDL resource units to be treated as a single SDL resource unit. Section 6.12(2)(b) of the Basin Plan also allows the combined limits for Goulburn, Broken, Campaspe and Loddon SDL resource units can be treated as a single SDL resource unit.

Victoria's obligation is to ensure that water taken does not exceed these limits:

- combined Victorian Murray sustainable diversion limit
- combined Northern Victoria sustainable diversion limit
- Goulburn-Murray groundwater sustainable diversion limit

Further information on this process and how MDBA and basin states will respond to non-compliance with SDLs can be found in Sustainable Diversion Limit Reporting and Compliance Framework – Summary (MDBA, 2018).

9.3.1 What is permitted take and actual take?

Permitted take is the maximum quantity of water permitted to be taken by each form of take for consumptive use from the SDL resource unit. The method used to determine permitted take must support compliance with the long-term SDLs.

Actual take is the volume of water taken from the system. This is assessed to make sure it does not exceed permitted take.

One of the key differences between the Cap reporting framework and the requirements under the Basin Plan is that reporting must be done for all forms of take. There are seven different forms of take identified in the Basin Plan:

a. take from a watercourse
b. take from a regulated river
c. take by floodplain harvesting
d. take by runoff dams
e. net take by commercial plantations
f. take from groundwater
g. take under basic rights

All forms of take except take by floodplain harvesting apply to Victoria's North and Murray Water Resource Plan. An explanation of each form of take and the methods for determining annual permitted take and actual take are explained in **Appendix C** (see **Table 6** for surface water and **Table 11** for groundwater). **Table 9-4** provides a summary of how annual permitted take is determined and whether annual actual take is estimated or calculated. For surface water, a form of take may be determined by more than one method. For example, in the Victorian Murray, Ovens and Kiewa SDL resource units, take from a watercourse includes take from a regulated river and take from unregulated rivers. This has been determined in part by using hydrological

models, and, a small proportion is determined outside of the model using long-term average data.

For take under basic rights, the method estimates take from both a regulated river and unregulated rivers.

Table 9-4: Summary of how take is determined

Form of take	Method	
	Permitted take	Actual take
Surface water		
Take from a regulated river (excluding basic rights)	Determined using a water resource plan model with the modelled diversions scaled to match the BDL minus recovery included in the model and adjusted for environmental recovery and trade	Calculated using usage data on the Victorian Water Register
Take from a regulated river under basic rights and take from a watercourse under basic rights	Determined based on best available hydrological model information	Estimated based on best available hydrological model information
Take from a watercourse (excluding basic rights): (a) modelled component (b) out of model component	(a) Determined using a water resource plan model, adjusted for environmental recovery, trade, and offsets. (b) Determined as the long-term average take*	(a) Calculated using usage data on the Victorian Water Register (b) estimated as the long-term average take*
Take by runoff dams (excluding basic rights)	Determined based on entitlement data on the Victorian Water Register	Calculated based on entitlement data on the Victorian Water Register
Take by runoff dams under basic rights	Determined based on best available hydrological model information	Estimated based on best available hydrological model information
Net take by commercial plantations	Determined using the SoilFlux model	Estimated using the SoilFlux model
Groundwater		
Take from groundwater (excluding basic rights)	Determined by the relevant SDL	Calculated and estimated using entitlement data on the Victorian Water Register
Take from groundwater (basic rights)	Determined based on best available water user information	Estimated based on best available water user information

interim method subject to a two-year review, see* **Appendix C *for further information*

9.3.2 Annual determinations of permitted take

Under section 10.10 of the Basin Plan, Victoria's North and Murray Water Resource Plan is required to set out the method for determining permitted take for each form of take in each water resource plan area. Section 10.12 of the Basin Plan outlines the matters that must be taken into account when developing the method.

Section 6.10 of the Basin Plan specifies that permitted take is the maximum quantity of water allowed to be taken by each form of take for consumptive use from the SDL resource unit in each water accounting period.

Victoria's approach is:

- for surface water
  - permitted take from regulated rivers (excluding basic rights) and the modelled component of take from a watercourse (excluding basic rights) assumes utilisation rates of allocated volumes as limited by State water management law as at 30 June 2009,
  - permitted take from watercourses (excluding basic rights) out of model component and the actual take is equal to long-term average take until this method is reviewed (see **Appendix C**, **Section 3.1.3.2**)
  - for all other forms of take permitted take equates to the sustainable diversion limit; and
- for groundwater, permitted take equates to the sustainable diversion limit for each groundwater SDL resource unit

Actual take is the water diverted or taken by water users from the resource or system to be stored or used (see **Chapter 15** for more information on measuring actual take).

9.3.2.1 Surface water

The determination of permitted take in the Northern Victoria water resource plan area and the Victorian Murray water resource plan area varies depending on the form of take. These methods are based on the best available information for the relevant form of take and are set out in **Table 6** of **Appendix C**.

The Victorian Water Register provides the most accurate and up-to-date information regarding water taken by entitlement holders in Victoria. It records the volume of water the entitlement holder is permitted to take during an accounting period and the volume of water actually taken against the entitlement (see **Chapter 15**).

Where the volume of take is estimated, the estimates are based on the best available data and latest models available. For example, the best available data includes the most recent aerial photographs for farm dams and the latest models available for determining commercial plantation interception. For more information on the best available information for each method, see **Table 6** of **Appendix C**.

9.3.2.2 Groundwater

The determination of permitted take in the Goulburn-Murray water resource plan area varies depending on the form of take. **Table 11** of **Appendix C** outlines the methods used for determining permitted take for each form of take in the Goulburn-Murray water resource plan area.

These methods are based on the best available information for the relevant form of take. The Victorian Water Register provides the most accurate and up-to-date information regarding water taken by entitlement holders in Victoria. It records the volume of water the entitlement holder is permitted to take during an accounting period and the volume of water actually taken against the entitlement.

Where the volume of take is estimated, the estimates are based on the best available data. For example, the best available data includes bore construction information for domestic and stock use of groundwater.

For more information on the best available information for each method, see the Methods Report at **Table 11** of **Appendix C**.

9.3.2.3 Accounting for water availability

Section 10.10(2) of the Basin Plan requires the method be applied after the end of the relevant water accounting period, having regard to the water resources available during that period.

In respect of take from a regulated river excluding basic rights and the modelled component for take from a watercourse (excluding basic rights), the impact of water availability is managed in practice on a monthly basis throughout the accounting period. Water available during the period is accounted for in the models used in the method for determining permitted take. The models are updated at the end of the water accounting period, based on seasonal conditions in the preceding period and the same allocation rules as detailed in **Section 3.3** of the Methods Report (see **Appendix C**).

For take from watercourses that are not regulated rivers (excluding take under basic rights) the interim method is based on long-term diversions until a review of the method is completed (see **Appendix C**, **Section 3.1.3.2**). Annual actual take in this circumstance reflects any measures that respond to water availability as outlined in **Section 7.2.2.5** or water shortages during extreme dry periods as outlined in **Chapter 10**.

There are no mechanisms to allocate or restrict take on an annual basis for all other forms of take. The estimates are based on long-term averages and the permitted take method does not account for water availability on an annual basis.

9.3.3 Ensuring actual take does not exceed permitted take

Chapter 6 of this report explains the rules that govern the volume of water that can be taken from Victoria's North and Murray water systems. As discussed in **Chapter 6**, certainty of entitlements is fundamental to Victoria's water management framework.

This certainty is provided in two distinct ways:

- limiting the ability to take and use water to those with express authorisation
- requiring the allocation of water in a system to be subject to considerations of the impact on other users, including the environment

The method for determining permitted take outlined in **Appendix C** for take from a regulated river (excluding basic rights) and the modelled component of take from a watercourse (excluding basic rights) incorporates the rules used in making seasonal determinations. Seasonal determinations allocate water to entitlement holders based on water availability, which is subject to climatic variability.

For all other forms of surface water take the current level authorised for consumptive use aligns with the sustainable diversion limit.

For groundwater the current level of entitlements is below the SDL. The management of allocation or actual take underneath the primary entitlement only occurs to respond to water availability in accordance with the methods identified in **Appendix C**.

Managing access to water to make sure that actual take does not exceed permitted take is essentially done through limiting the authorisation to take water. As outlined above in **Chapter 6**,

the Minister authorises the take and use of water through entitlements issued under the Victorian Water Act.

These entitlements are subject to terms and conditions which include:

- the maximum volume that may be taken
- the time, place and rate at which water may be taken
- limitations on the take under the maximum volume by way of allocations or restrictions imposed to respond to water availability during the accounting period

The rules relating to allocations or restrictions are included in the methods for determining permitted take. The issuing of entitlements, amendment of entitlements and exercise of powers to restrict authorisations during the accounting period are a core component of the power of the Minister, or his or her delegates, to authorise the take and use of water.

To make sure that authorisations to take water under the Victorian Water Act do not cause actual take to exceed permitted take, the Minister, and his or her delegates, are subject to the following obligations in relation to the issue of new entitlements or determining allocation or restrictions on existing entitlements in the Northern Victoria water resource plan area.

Basin Plan s10.11(1)

1. From 1 July 2019:
   a. the Minister must not amend or issue new entitlements to take water or apply restrictions to entitlements; and
   b. an appointed water corporation must not make an allocation to entitlement holders in a declared system under section 64GB of the *Water Act 1989* (Vic)

   in respect of authorising take from a water resource in Victoria's North and Murray water resource plan area, if to do so would cause actual take to exceed permitted take for the relevant SDL resource unit.
2. The Department must monitor annual actual take against annual permitted take to determine whether on an annual basis, or for groundwater SDL resource units from 30 June 2028 an average basis, annual actual take is exceeding annual permitted take.
3. For surface water SDL resource units, and groundwater SDL resource units up to 30 June 2028, if the Department identifies the cumulative balance of the difference between actual take and permitted take exceeds the sustainable diversion limits in the amount of 15% or more of the relevant sustainable diversion limit the Department must investigate the cause of the exceedance for the relevant SDL resource unit.
4. For groundwater SDL resource units after 30 June 2028, if the Department identifies the average annual take over the 10-year period ending with that water accounting period exceeds the average annual permitted take over the 10-year period, the Department must investigate the case of the exceedance for the relevant SDL resource unit.
5. If it is determined that authorisation to take water needs to be adjusted to support meeting sustainable diversion limits:
   a. the Minister must determine whether restrictions must be applied to take and use licences; or
   b. the appointed water corporation must determine whether adjustments must be made to future allocations under section 33AC of the *Water Act 1989* (Vic)in

consultation with entitlement holders as per the requirements under the *Water Act 1989* (Vic).

5. References to sections of the *Water Act 1989* (Vic) do not have the effect of importing the sections referenced into the accredited material but are included for reference only.

"appointed water corporation" means a water corporation appointed under section 64GA of the *Water Act 1989* (Vic);

Note 1: The response to section 10.08(2) of the Basin Plan, requiring the holder of a water access right to comply with the conditions specified in the water access right instrument supports the above obligation to ensure, as far as practical that actual take does not exceed annual permitted take.

Note 2: The response to section 10.13 of Basin Plan in respect of other forms of take.

<<end of accredited text for s10.11(1) of the Basin Plan>>

This obligation is included in Victoria's North and Murray Water Resource Plan to provide assurance that no new entitlement will be issued, and no entitlement will be amended in the water resource plan area if that would result in authorised take in Victoria exceeding the permitted take and therefore cause Victoria to exceed the SDLs.

The obligation requires that the exercise of powers to adjust authorisations to respond to water availability must consider the impact on permitted take. The above obligation is enforceable under the Commonwealth Water Act by the MDBA.

9.3.4 Non-compliance with SDLs

Actual take is unlikely to exceed permitted take from a regulated river (excluding basic rights) in the long-term unless there is growth in use (i.e. an increase in the rate of utilisation of allocations across the combined SDL resource units). In such a case, corrective actions will be investigated as outlined in **Appendix C**, **Table 8**, Item (g). The corrective action will be informed by the reason the SDL was exceeded. For this reason, Victoria will not pre-emptively propose corrective actions to be included in Victoria's North and Murray Water Resource Plan to address SDL non-compliance.

9.4 Limits on certain forms of take

Section 10.13(1) of the Basin Plan states that a water resource plan must require that the long-term annual average quantity of water that can be taken from a surface water SDL resource unit for consumptive use by:

- take under basic rights
- take by runoff dams
- net take by commercial plantations

does not exceed the level specified in column 2 of Schedule 3 of the Basin Plan for the form of take.

Basin Plan s10.13(1)

1. For the purposes of responses to Part 3 of Chapter 10 of the Basin Plan in Victoria's North and Murray Water Resource Plan the relevant SDL resource units are the:
   a. combined Victorian Murray SDL Resource Unit which includes Victorian Murray, Kiewa and Ovens;
   b. combined Northern Victoria SDL Resource Unit which includes, Goulburn, Broken, Campaspe and Loddon.

2. The long term annual average quantity of water in the:
   a. combined Victorian Murray SDL Resource Unit that can be taken for consumptive use for the forms of take listed at section 10.13(1) of the Basin Plan is the level specified in items 17-19 of Column 2 of Schedule 3 to the Basin Plan;
   b. combined Northern Victoria SDL Resource Unit that can be taken for consumptive use for the forms of take listed at section 10.13(1) of the Basin Plan is the level specified in items 20-23 of Column 2 of Schedule 3 to the Basin Plan.

This is the level of take at a specified point in time and is represented by the estimated volume of the baseline diversion limit identified in **Table 3** of **Appendix C** to Victoria's North and Murray Comprehensive Report for that form of take from Combined Victorian Murray and Combined Northern Victoria SDL resource units.

3. Annual actual take under Victoria's North and Murray Water Resource Plan is limited by the volume of annual permitted take determined by the method specified in response to section 10.10(1) of the Basin Plan for the following forms of take:
   a. take under basic rights; or
   b. take by runoff dams; or
   c. net take by commercial plantations.

4. The requirement for section 10.13(1) of the Basin Plan is met by the response to sections 10.08(2), 10.10(1) and 10.11(1) of the Basin Plan.
5. The Department will monitor actual take for the above specified forms of take and where the actual take increases above permitted take the application of section 10.13(2) of the Basin Plan to Victoria's North and Murray Water Resource Plan will be assessed by the Department and an amendment to the Plan will be pursued if necessary.

Note 1: Volume for permitted take is identified in **Table 9** (Victorian Murray water resource plan area) and **Table 10** (Northern Victoria water resource plan area) of **Appendix C** to Victoria's North and Murray Comprehensive Report. The methods for determining the volume of annual permitted take is identified in **Table 6** of **Appendix C** to Victoria's North and Murray Comprehensive Report. The Table further identifies the modelling related to determining permitted and actual take will be reviewed as follows:

   a. take under basic rights every 5 years;
   b. take by runoff dams every 10 years;
   c. take by commercial plantations every 10 years subject to any significant changes in the industry in which case a review would occur earlier.

Note 2: The relevant responses identified in (3) above relate to:

   a. section 10.08(2) of the Basin Plan which requires holders of a water access right to comply with the conditions of that right;

b. section 10.10(1) of the Basin Plan which sets out the method for determining permitted take limits for the relevant forms of take in the Northern Victoria water resource plan area;
c. section 10.11(1) of the Basin Plan which ensures that actual take does not exceed permitted take.

<<end of accredited text for s10.13(1) of the Basin Plan>>

This obligation is a Commonwealth obligation under the accredited Victoria's North and Murray Water Resource Plan and is enforceable under the Commonwealth Water Act.

Victorian legislation does not regulate take under domestic and stock rights, take by commercial plantations or take by runoff dams under domestic and stock rights. Access to water for domestic and stock purposes is limited by the scope of that right under section 8 of the Victorian Water Act (see **Section 7.2.1.1**).

Victoria does manage a portion of runoff dams through licences. Where a runoff dam collects water for purposes other than domestic and stock use under section 8 of the Victorian Water Act, a licence is required for the use of that dam to take water from the system.

9.4.1 Take under basic rights

Information is not available on expected future growth in take under a domestic and stock right. Any estimate of future trends for this form of take must be based on future climate projections.

The climate throughout all areas in northern Victoria is likely to become drier with decreased surface runoff. Streamflow in waterways is expected to become less reliable. In this climate, take under domestic and stock rights extracted directly from waterways is most unlikely to increase. Reliability concerns will make direct surface water extraction a less desirable option. Overall, no significant growth in this form of take is expected in future.

Traditional Owner rights to take water under section 8A where the Traditional Owners have a natural resource agreement under the *Traditional Owner Settlement Act 2010* are outlined in more detail in **Chapter 7** of the Comprehensive Report. At the time of making this report there are no circumstances of Traditional Owner groups exercising this right in the Northern Victoria water resource plan area. However, this may change as a result of the implementation of the Aboriginal Water policy outlined in *Water for Victoria*.

9.4.2 Take by runoff dams

The overall number of runoff dams is expected to increase at a low rate throughout the water resource plan area.

However, it is expected there will be small pockets where the number of runoff dams will increase at a higher rate. This could be due to a range of factors, such as peri-urban development or changes in agricultural practices. These pockets are expected to be small and localised and will have no impact on the overall low rate of growth across the water resource plan area. This is discussed in **Section 11.4.1.3** in more detail.

Licensed runoff dams will not increase as the Minister will not issue new licences in circumstances where it will cause the relevant sustainable diversion limit to be exceeded. The Victorian Water Act and commitments under the Basin Plan limit the ability of the Minister to issue new entitlements, as outlined in **Chapter 7**.

9.4.3 Net take by commercial plantations

Changes in the extent of plantations within Victoria's North and Murray water resource plan area will be determined using information that is provided on an annual basis by the managers and owners of large plantation estates for bushfire and emergency management purposes.

This information will be reviewed every 10 years, subject to any significant changes in the industry which would cause a review to occur earlier, as described in **Section 11.3.2** and **Section 11.3.3**.

9.5 Improved certainty in estimating and measuring take

Further work is being undertaken by Victoria to improve certainty in estimating and measuring take. **Chapter 11** of this report, discusses the need for an improved hydrological understanding of runoff dams. Victoria will review the impacts of runoff dams and the risks they pose to water resources as part of:

- the Northern Region Sustainable Water Strategy outlined in the Victorian Water Act
- the Long-Term Water Resource Assessment outlined in the Victorian Water Act
- Action 8.4 of *Water for Victoria* (DELWP, 2016), which commits to better monitoring and reporting on the effects of emerging water uses on other uses in the Victorian Water Accounts and investigate the introduction of reasonable use limits on take for domestic and stock purposes

See **Chapter 15** for how Victoria will improve the proportion of take that is measured in Victoria's North and Murray water resource plan areas.