

Water Allocation Plan for the River Murray Prescribed Watercourse River Murray Salinity Zoning



Background

Salt is a natural part of the Murray-Darling Basin (MDB). In the South Australian MDB the groundwater is mostly saline, and in some areas more salty than seawater.

In South Australia this salty groundwater naturally drains into the River Murray where it flows to the only exit point for salt from the entire Murray-Darling Basin – through the Murray Mouth to the Southern Ocean at Goolwa.

Salinity in the river has been exacerbated by the clearance of native vegetation and also through irrigation. Water applied through irrigation results in drainage to the underlying groundwater and this increases the movement of salt into the river. Salinity is an issue that needs to be managed as it can cause damage to:

- irrigated crops resulting in reduced yields;
- equipment and infrastructure thereby reducing their lifespan;
- the environment; and
- the quality of water for drinking supplies.

The River Murray is a highly modified river system supporting a variety of enterprises that are critically important to the state's economy - ongoing management is needed to keep salinity in the River Murray at acceptable levels.

The Murray-Darling Basin Agreement recognises the need for co-operative management of salinity across the basin. Under the Agreement, the basin states have committed to ensuring that actions which increase salinity (e.g. irrigation) are offset by actions which decrease salinity in the River Murray (e.g. salt interception schemes).

What is salinity zoning?

Salinity zoning regulates the amount of water that can be used for irrigation within salinity impact zones, which are set out in the Water Allocation Plan for the River Murray Prescribed Watercourse (the Plan). Salinity zoning includes a set of rules within salinity impact zones for granting and varying site use approvals. Site use approvals provide an authorisation to use water for the purpose of irrigation at a particular site.



Why have changes been made to the salinity zoning provisions in the Plan?

The River Murray Salinity Zoning policy was reviewed in 2017 in response to feedback that businesses needed more flexibility to support irrigation development while still managing salinity. In 2018, amendments were made to the policy to help facilitate new development and make it easier to change to higher water use crops.

The policy was incorporated into the draft Plan and underwent further community consultation in 2018. Feedback received helped to shape the salinity provisions now included in the Plan.

What is included in the Plan?

Section 6.3.1 of the Plan includes updated salinity management provisions for site use approval applications. The new provisions reduce the number of salinity impact zones, facilitate new irrigation development through the provision of 30 and 60-year site use approvals and simplifies the process to change to higher water use crops or to meet mature crop water requirements.

How do the changes affect existing Site Use Approval holders?

The new salinity management provisions in the Plan do not impact on the rights of existing site use approval holders who can continue to use the maximum volume recorded on their site use approval. The ability for water users to exchange permanent site use approval volumes in order to support new irrigation is still available. These approvals are ongoing.

Key Elements of the Salinity Management Provisions

Salinity Impact Zones

The number of salinity impact zones have been simplified from five zones to two zones - a High Salinity Impact Zone and a Low Salinity Impact Zone.

By merging zones the total site use approval volume available in the High Salinity Impact Zone has increased. This allows for easier exchange of site use approval volumes between authorisation holders (see 'Provisions for exchanging site use approval volumes' on the next page for more information).

Provisions for New Irrigation Development

Site use approval volumes already held before the changes to the salinity zoning policy were made (permanent site use approval volumes) can still be exchanged to support new irrigation.

Irrigation development can also be expanded through 30-year site use approvals in the High Salinity Impact Zone, or 60-year site use approvals in the Low Salinity Impact Zone. The volumes approved will expire at the end of the 30 or 60-year terms.

The following conditions apply to 30 and 60-year site use approvals:

- The volume authorised on 30 and 60-year site use approvals can only be used at a location and area highlighted on a map, which forms part of the approval.
- The volume authorised on 30 and 60-year site use approvals cannot be exchanged between authorisation holders.
- The volume approved must not exceed the reasonable irrigation requirements of the proposed crop as specified in Appendix A of the Plan.
- 30 year and 60-year site use approvals may be varied (reduced) by the Minister if 80 percent of the volume approved has not been used for at least one year in the first ten years from the date of approval.

To assist businesses to plan in advance, the authorisation holder will be advised 10 years prior to the expiry date of the likelihood of the site use approval being extended.

Provisions for changing to a higher water use crop or mature crop water requirements

Permanent site use approval volumes can still be exchanged to support changing to a higher water use crop or to accommodate the needs of a maturing crop.

Alternatively, water users can now apply to increase their site use approval volume to allow for conversion of an existing crop area to a higher water use crop or to provide for mature crop water requirements.

The following conditions apply to these site use approvals:

- An existing site use approval must have been in place as of 20 February 2018.
- The volume authorised can only be used at a location and area highlighted on a map which forms part of the approval.
- The volume authorised cannot be exchanged with another authorisation holder, unless the additional volume approved under the new salinity management provisions is surrendered before an application to exchange is made.

Provisions for exchanging site use approval volumes

A site use approval can be varied to either increase or decrease the approved volumetric limit. An 'exchange' of volumes can occur between authorisation holders. This does not apply to 30-year or 60-year approval volumes or volumes approved as part of a mature crop water requirement or for the purpose of a crop type change.

The exchange of volumes can take place as follows:

- Between authorisation holders within the High Salinity Impact Zone
- Between authorisation holders within the Low Salinity Impact Zone
- From authorisation holders within the High Salinity Impact Zone to the Low Salinity Impact Zone.

Exchange cannot occur from the Low to High Salinity Impact Zone, to avoid approval volumes moving to the high zone where salinity impacts are greater.

Review of the salinity management provisions

Salinity management provisions will be reviewed in 2027 or earlier if certain triggers are met. These triggers are outlined in Section 9.2.3 of the Plan and include:

- If there is a high risk in the short term, that annual water use for irrigation will exceed 500 GL within salinity impact zones.
- If the total irrigated area approaches the area of irrigation offset on the Basin Salinity Registers (as at 20 February 2018).
- If South Australia's Basin Salinity Register balance is projected to go into debit prior to 2050.

What happens if the land endorsed on a site use approval is sold, leased or there is a change of lease?

The current site use approval holder is required to notify DEW of the change.

To enable the new owner/occupier to continue to undertake the same activities as the original holder, the site use approval will be varied to reflect the name of the owner or legal occupier.

I want to find out more about....

Site use approvals and the salinity zoning policy, please contact the DEW Berri Office:

T: (08) 8595 2053

E: dewaterlicensingberri@sa.gov.au

Or visit:

www.naturalresources.sa.gov.au/rivermurraywap

River Murray Salinity and Irrigation, please visit:

www.naturalresources.sa.gov.au/rivermurraywap to access a Fact sheet with more detailed information

The Water Allocation Plan for the River Murray Prescribed Watercourse:

T: (08) 8463 6877

E: rmwap.feedback@sa.gov.au

Or visit:

www.naturalresources.sa.gov.au/rivermurraywap