

Mallee Prescribed Wells Area Cost Sharing Arrangement

For stock and domestic bores affected by
irrigation drawdown

Sixth Edition - May 2021



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The Mallee Prescribed Wells Area Cost-Sharing Arrangement for Stock and Domestic Water Users

(Financial support by way of grants for adjustments to stock and domestic water supplies required as a result of groundwater level drawdown, last updated May 2021)

1. Introduction

The development of irrigation in the Mallee Prescribed Wells Area has led to drawdown in some areas. The drawdown can be considerable, particularly during the irrigation season, in the eastern part of the Mallee Prescribed Wells Area where the aquifer is confined. This has affected stock and domestic water users.

Stock and domestic water users may need to make adjustments to maintain adequate yields and lift, such as:

- lowering pumps
- upgrading windmills or pumps
- deepening wells (bores)
- drilling new wells (bores)

Arrangements to share costs between individual licensees and stock and domestic water users can be difficult, particularly in areas with concentrated irrigation. In such cases it is extremely complex to decide which portion of the drawdown can be attributed to which irrigator.

The *Mallee Prescribed Wells Area Cost-Sharing Arrangement for Stock and Domestic Water Supply* (the Cost-Sharing Arrangement) has been developed to provide assistance to stock and domestic water users for the adjustments required. A Cost-Sharing Arrangement has been established with funds obtained from the levy on water allocation in the Mallee Prescribed Wells Area. In that way, all licensees contribute to the costs of adjusting stock and domestic water supplies.

2. What assistance can be provided from the Cost-Sharing Arrangement?

Financial assistance can be obtained for most adjustments needed to maintain adequate yields and lift, where these are reduced as a result of drawdown. The guidelines are based on the original proposal for the cost-sharing arrangements in the Murrayville Groundwater Supply Protection Area, but some adjustments have been made for the particular situation in the Mallee Prescribed Wells Area.

2.1 Pump lowering

If the water levels have dropped to where there is not adequate depth of water over the pump or foot valve, the pump needs to be lowered. A grant from the Cost-Sharing Arrangement can be obtained to meet the full benchmark costs or actual costs of lowering of the pump, whichever is the lesser of the two.

The Cost-Sharing Arrangement does not provide grants for repairs to pumps or windmills if parts are worn out. No payments will be made from the Cost-Sharing Arrangement for burnt out pumps.

Where a new well is drilled and a pump installed in the new well, the Cost-Sharing Arrangement will meet the full benchmark cost or actual cost of lowering the pump from the original level in the old well to the new, lower level in the new well.

2.2 Upgrading pumps/mills

If lowering the pump causes the yields and/or lift to be inadequate, or if a submersible pump has burnt out due to unforeseen drawdown, the Cost-Sharing Arrangement can provide a grant towards the benchmark costs or actual costs for upgrading the pump or mill. If replacing the pump/mill is cheaper than upgrading the existing one, the Cost-Sharing Arrangement will provide a grant towards the benchmark costs of replacement.

The Cost-Sharing Arrangement does not provide grants for the repair or replacement of pumps or windmills if parts are worn out not as a result of unforeseen drawdown.

The benchmark costs for replacement of either a pump or a mill are based on the purchase of an adequate submersible pump, not a windmill, because the investment costs for a windmill are considerably higher. The applicant can still decide to replace an existing mill or pump with a new windmill, but the benchmark costs do not change.

The contribution from the Cost-Sharing Arrangement depends on the age of the pump or mill. The design life of a windmill or pump jack is approximately 50 years with good maintenance. The average design life of a submersible pump is 15 years.

Age of pump	Fund contribution ¹
Less than 3 years	100 %
3 to 6 years	80 %
6 to 9 years	60 %
9 to 12 years	40 %
12 to 15 years	20 %
Over 15 years	10 %

Age of mill	Fund contribution ¹
Less than 10 years	100 %
10 to 20 years	80 %
20 to 30 years	60 %
30 to 40 years	40 %
40 to 50 years	20 %
Over 50 years	10 %

¹ Contribution is a percentage of the **benchmark costs (see Appendix A)** or actual costs, whichever is the lower.

The stock and domestic user meets any costs associated with enhancing the yields beyond the original yields.

2.3 Bore clearing

If clearing is required as part of the process of lowering the pump, the Cost-Sharing Arrangement can provide a grant towards the benchmark costs for clearing. This condition is only applicable to bore clearing that is required below the pump level prior to lowering because corrosion or deposits are not considered an effect of irrigation drawdown. The contribution from the Cost-Sharing Arrangement depends on the age of the bore.

Age of well	Fund contribution ¹
Less than 10 years	0 %
10 to 20 years	100 %
20 to 30 years	100 %
30 to 40 years	100 %
40 to 50 years	20 %
Over 50 years	0 %

¹ Contribution is a percentage of the **benchmark costs (see Appendix A)** or actual costs, whichever is the lower.

Drilling a new well is preferable over clearing an existing well and applicants are asked to be aware that they can only make one claim (except in the case of pump lowering) under the Cost-Sharing Arrangement. Therefore, if bore clearing is performed and problems still exist, an applicant cannot make another or different claim.

For the purpose of Cost-Sharing Arrangements bore clearing means the clearing or cleaning of corrosion or deposits from within the casing.

2.4 Deepening existing stock and domestic wells

If the water level has dropped, the pump is not operating and the well is not deep enough for the pump to be lowered, and the original casing is in reasonable condition, the well will need to be deepened or replaced. If an existing well is deepened, the stock and domestic user is responsible for the deepening of the well to at least 10 metres into the limestone aquifer. Assistance can be received from the Cost-Sharing Arrangement to cover the benchmark costs or actual costs, whichever is the lower, of any further deepening required. The further deepening has to meet the criteria for minimum depth of wells defined in the *Water Allocation Plan for the Mallee Prescribed Wells Area*. No assistance will be received for deepening wells beyond 122 metres.

2.5 Drilling new stock and domestic wells

If the existing well cannot be deepened and a new well is required, assistance can be received from the Cost-Sharing Arrangement towards the cost of drilling a new well. The Cost-Sharing Arrangement will pay the full benchmark costs or actual cost, whichever is the lower, for drilling beyond 10 metres into the aquifer to the required depth as defined in the *Water Allocation Plan for the Mallee Prescribed Wells Area*. A contribution can also be received towards the cost of drilling a new well up to 10 metres into the aquifer, depending on the age of the well to be replaced. If the well is less than 10 years old, the Cost-Sharing Arrangement will pay the full benchmark costs of establishing the new well up to 10 metres into the aquifer (as well as the full benchmark costs of drilling beyond the 10 metres to the required depth). If the well is more than 50 years old (the design life for the average well), the Cost-Sharing Arrangement will not contribute to the cost of drilling a new well up to 10 metres into the aquifer. The table below outlines the various contributions depending on the age of the well:

Age of Well	Fund contribution ¹ beyond 10 meters into the aquifer	Fund contribution ¹ up to 10 meters into the aquifer
Less than 10 years	100%	100 %
10 to 20 years	100%	80 %
20 to 30 years	100%	60 %
30 to 40 years	100%	40 %
40 to 50 years	100%	20 %
Over 50 years	100%	0 %

¹ Contribution is a percentage of the **benchmark costs (see Appendix A)** or actual costs, whichever is the lower.

The Cost-Sharing Arrangement will provide no assistance for wells that do not meet the minimum depth requirements as set out in the *Water Allocation Plan for the Mallee Prescribed Wells Area*. Neither does the Cost-Sharing Arrangement provide assistance for the establishment of wells beyond a depth of 122 metres.

If existing pumping equipment is considered adequate in capacity for the new bore and can be safely relocated, the Cost-Sharing Arrangement will pay the benchmark costs or actual cost (whichever is lower) to the reasonable costs of lifting and shifting the original pump to the new bore (including both mills and submersible pumps).

The Cost-Sharing Arrangement will provide no assistance for drilling new wells, where the existing well has collapsed due to corrosion. Regional drawdown is not considered to be the cause of corrosion.

2.6 Decommissioning old stock and domestic wells when new wells are established

If a replacement well needs to be established, the old well must be backfilled, to avoid salinisation or pollution of the water resource. As set out in the *Water Allocation Plan for the Mallee Prescribed Wells Area*, the original well must be backfilled in accordance with a permit issued from the Department for Environment and Water pursuant to section 104 (3)(a) of the *Landscape South Australia Act 2019*. A contribution can be received from the Cost-Sharing Arrangement for the full benchmark or actual costs of backfilling the old well, whichever is the lower cost.

2.7 Changing the water supply of a property

If one or more wells need to be deepened or replaced, the stock and domestic user can decide to change the water supply plan for the property, to increase the efficiency of the water supply. Assistance from the Cost-Sharing Arrangement can be obtained for the benchmark costs of

establishing new wells according to the new water supply plan OR for the benchmark costs of deepening or replacing the existing wells according to points 2.4 and 2.5 above, whichever one is the lowest cost. The applicant will need to provide all details to be able to determine the benchmark costs for both options. Even if a contribution is received for the deepening or replacement of the existing wells, because this was the lowest cost, the contribution can still be used towards the costs of the new water supply plan, which does not necessarily involve the deepening or replacement of the wells for which assistance was received.

3. Eligibility for assistance from Cost-Sharing Arrangement

Support under the guidelines outlined in section 2 may be made available to landholders/lessees:

- I. whose stock and domestic water supply is currently affected by drawdown as a result of the irrigation extractions of water in the Mallee Prescribed Wells Area
- II. whose stock and domestic water supply is likely to be affected in the near future, providing that the Murraylands and Riverland Landscape Board is consulted prior to work being done
- III. who have not received a contribution previously for these adjustments to the stock and domestic water supply from this or any other Cost-Sharing Arrangement
- IV. whose property is outside of the Mallee Prescribed Wells Area but whose stock and domestic water supply is affected by drawdown from extraction within the Mallee Prescribed Wells Area

If the applicant has received financial assistance from an individual irrigator in the past, this will be deducted from a contribution from the Cost-Sharing Arrangement.

The Cost-Sharing Arrangement will only provide assistance once for each well: for example, it is not possible to apply for deepening and/or clearing first and replacement of the well two years later. If a well is affected, it will need to be adjusted to the required depth as defined in the *Water Allocation Plan for the Mallee Prescribed Wells Area*.

However, there is an exception. The lowering of pumps may be required more than once, because it is not desirable to have long lengths of pipe submerged in water for long periods of time. Assistance for the lowering of pumps can therefore be received more than once. Upgrading of pumps and mills on the other hand should only be needed once and will only receive assistance once.

If stock and domestic users find that water levels in their well are approaching a critical level and it is very likely that water levels will drop below the level of the pump in the near future, they can decide to make adjustments to the stock and domestic water supply prior to the problem occurring. The stock and domestic users should report to the Murraylands and Riverland Landscape Board prior to making the adjustments. These adjustments are eligible for contributions from the Cost-Sharing Arrangement if the Murraylands and Riverland Landscape Board has concluded that adjustment is needed.

4. Conditions of assistance

The Murraylands and Riverland Landscape Board shall ensure that the following conditions of assistance are imposed and met:

- a) Applications for funding will be processed in order of receipt. In some cases this can lead to a delay in actual payments, if the assistance applied for exceeds the amount of money allocated to the Cost-Sharing Arrangement for that financial year. The Murraylands and Riverland Landscape Board will inform the applicants when such a delay occurs.
- b) The applicant provides all the information required in the Application Form for the Stock and Domestic Water User (attachment 1)
- c) Deepening or replacement of wells is done by a licensed driller and a well permit is obtained for the works required.
- d) The well driller and/or contractor lowering pumps and upgrading pumps/mills provides all the information required in the Form for the Driller/Contractor (attachment 2).
- e) Applications for adjustments of wells that were replaced previously with assistance from the Cost-Sharing Arrangement will be refused. This needs to be taken into consideration when the applicant decides on the necessary adjustments.
- f) Applications for the upgrading of pumps previously upgraded with assistance from the Cost-Sharing Arrangement will be refused. This needs to be taken into consideration when the applicant decides on the necessary adjustments.
- g) Only the costs, outlined in Appendix A, for adjustments outlined in section 2 are considered for assistance. This excludes costs associated with, for example:
 - maintenance of pumps/mills;
 - maintenance of the well casing;
 - burnt out pumps (where drawdown has not occurred or been observed);
 - deepening or establishment of wells beyond 122 metres or less than the minimum depth required by the water allocation plan;
 - increasing the capacity of a pump/mill
- h) Payments will be made based on the benchmark costs or the actual costs, whichever is the lower.
- i) Applications for adjustments to stock and domestic water supplies are received within 3 months of the adjustments being made.
- j) Applications for adjustments made prior to April 2021 that have not yet been assessed, will be assessed on the "Cost Sharing Arrangement for Stock and Domestic Bores Affected by Irrigation Drawdown" Sixth Edition, April 2021.
- k) Assistance for adjustments to stock and domestic water supplies may be refused if there is a discrepancy between water levels reported by the applicant and water levels measured by the monitoring network or during field inspections by an officer from the Department for Environment and Water or Murraylands and Riverland Landscape Board.
- l) The Murraylands and Riverland Landscape Board will endorse payments from the Cost-Sharing Arrangement, after seeking advice from the Hydrogeologist adviser at the Department for Environment and Water;
- m) The Murraylands and Riverland Landscape Board may seek additional information and verification regarding assistance received previously from individual irrigators or any other

- Cost-Sharing Arrangement if this is deemed necessary;
- n) Guidelines relating to the *Mallee Prescribed Wells Area Cost-Sharing Arrangement for Stock and Domestic Water Supply* may be varied by the Murraylands and Riverland Landscape Board at any time without notice.

The applicant can obtain hard copies of the application forms (Attachments 1 & 2) from the Murraylands and Riverland Landscape Board Office or complete the forms digitally (see lodgement instructions on page 19).

5. Definitions

Murraylands and Riverland Landscape Board– The Murraylands and Riverland Landscape Board, who has the responsibility of undertaking activities to protect and enhance the natural resources, within the Murraylands and Riverland landscape management region, in accordance with the *Landscape South Australia Act 2019*

Confined area: The part of the Murray Group limestone aquifer in the Mallee Prescribed Wells Area which is overlain by an impermeable clay layer, resulting in a pressure level in the aquifer. This is generally in the eastern part of the Mallee Prescribed Wells Area.

Cost-Sharing Arrangement: The Mallee Prescribed Wells Area Cost-Sharing Arrangement for Stock and Domestic Water Supply, as outlined in this document, the finances for which are sourced from the levy on water allocations in the Mallee Prescribed Wells Area.

Drawdown: A reduction in water level and/or pressure level in an aquifer as a result of groundwater extractions.

Benchmark costs: The benchmark costs established for lowering pumps, upgrading pumps, deepening wells, plugging wells or drilling new wells, taking into account well dimensions, depth required and depth to watertable and general conditions in the Mallee Prescribed Wells Area, outlined in Appendix A.

Appendix A – Benchmark cost

Benchmark costs – Last updated May 2021

The benchmark costs (excluding GST) have been established on a combination of the previous 2009 benchmark costs and current 2021 quotes from operators in the Mallee Prescribed Wells Area.

Drilling (new wells)	\$130 / metre
Mobilisation costs	\$2.40 / km \$1.20 / km – support vehicle (maximum 150 km)
Lowering Pumps	\$70 / hour (one person) \$130 / hour (two persons) \$18 / m of pipe \$66 per length of pipe rod (for windmills only)
Travel costs	\$1.00 / km (maximum 150 km)
Bore clearing	\$180 / hour
Travel costs	\$1.00 / km (maximum 150 km)
Upgrading/Replacing Pumps	\$70 / hour (one person) \$130 / hour (two persons) 1.5HP/1.1kW pump and starter box: \$ 2170 2.0 HP/1.5kW pump: \$ 2366
Travel costs	\$1.00 / km (maximum 150 km)
Decommissioning (backfilling a well)	\$360 mobilisation costs. \$144 / hour. Removal of pump/mill and filling. \$6 / m for materials
Deepening established wells	\$480 mobilisation costs, removal and placing back of pump/mill \$84 / metre or \$144 / hour

Note:

Please note that these are the costs the Murraylands and Riverland Landscape Board will use to establish the contribution from the Cost-Sharing Arrangement towards the adjustment of a well or a pump. Actual quotes and prices from drillers/contractors may vary from these benchmark costs. It is the responsibility of the individual stock and domestic water user to negotiate a reasonable price. If the actual cost is lower than the benchmark cost, the contribution from the Cost-Sharing Arrangement will be based on the actual cost.

Attachment 1 – Application Form for Stock & Domestic water users

Please Note: We strongly recommend all applicants and contractors discuss the options and criteria for obtaining “Cost-Sharing Arrangements” funding before undertaking adjustments on bores, pumps, or mills for stock and domestic use, with the Murraylands and Riverland Landscape Board

- All sections must be completed for claims to be considered. Write N/A if not applicable.
- Please fill out a separate form for each well or pump

Owner & Property Details	
Title: Mr <input type="checkbox"/> Miss <input type="checkbox"/> Ms <input type="checkbox"/> Mrs <input type="checkbox"/> Dr <input type="checkbox"/> Other <input type="checkbox"/> (please specify):	
Given name/s:	Surname:
Company name and ABN: (if applicable)	
Address:	
	Postcode:
Postal address: (if different from above)	
	Postcode:
Phone:	Mobile:
Email:	

Well Details			
Location of affected well. (If available please attach a copy of the well permit for the existing well)			
Certificate of title	Vol: Folio:		
Section/Allotment No:		Hundred:	
Age of well:		Well number - existing well:	

Mill/Pump Details	
Age of mill:	
Age of submersible pump:	
Average yield before well was affected (in litres/second or gallons/hour):	
Average lift before well was affected (in metres)	

Previous financial assistance	
<p>Have you ever received financial assistance for the adjustment of this well, from this Cost Sharing Arrangement, any other Cost-Sharing Arrangement or individual irrigators?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>	
<p>If yes, please attach written evidence of the assistance received and complete the sections below:</p>	
Assistance received from:	
Amount:	
Nature of adjustments made:	

Adjustment details

Description of adjustment for which assistance is sought:

- Pump Lowering Pump/Mill Upgrading Bore Clearing Bore Deepening
 Bore Replacement Decommissioning old stock and domestic wells (when new wells established)
 Change of water supply plan

- Please attach a completed **“Form for contractor/driller”** for the adjustments carried out (on page 15)
- Please attach a copy of invoice and proof of payment for the well adjustments for the well adjustment in question.
- In the case of a change of a water supply plan, please provide quotes for adjustments needed for existing wells and details of new wells to be established as part of the new water supply plan.

Additional comments/information

Signed by the applicant:

Signature: _____ **Date:** _____

Attachment 2 – Form for contractor/driller

- All sections must be completed for claims to be considered. Write N/A if not applicable.
- Please fill out a separate form for each well or pump

Contractor/Driller details			
Contractor/driller:			
Postal address:			
<table border="1" style="width: 100%;"> <tr> <td style="width: 80%;"></td> <td style="width: 20%;">Postcode:</td> </tr> </table>			Postcode:
	Postcode:		
Contact Name:			
Phone:	Mobile:		
Drillers permit number:			

Prior adjustment details	
Well situation prior to adjustment:	
Well number:	
Well depth:	
Depth to water table:	
(Estimated) age of well:	
Depth of casing:	
Pump situation prior to adjustment:	
Depth of pump:	
(Estimated) age of pump:	
(Estimated) current lift (metres):	
(Estimated) current yield (litres/sec) or (gallons/hour)	

Post adjustment details	
1. Drilling a new well:	
Well number:	
Depth of new bore:	
Depth to water table:	
Depth up to 10 metres into limestone (m):	
Depth beyond 10 metres into limestone (m):	
Length of cased section (m):	
Length of open section (m):	
Kilometres travelled:	

2. Deepening an existing well:	
Total new depth of bore (m):	
Additional depth up to 10 metres into the limestone (m):	
Additional depth beyond 10 metres into the limestone (m):	
Additional length of cased section (m):	
Additional length of open section (m):	
Hours worked:	

3. Decommissioning (backfilling an old well):	
Depth of well:	
Hours worked:	

4. Lowering a pump:	
New Depth of pump (m):	
Yield rate (Litres/sec) or (gallons/hour):	
Hours worked:	
Kilometres travelled:	

5. Bore clearing	
Depth of obstruction (m):	
Hours worked:	
Kilometres travelled:	

6. Upgrading a pump	
Capacity of new pump (in HP):	
Yield rate (Litres/sec) or (gallons/hour):	
Cost of new pump:	
Hours worked:	
Kilometres travelled:	

Was the upgrade required to maintain yield and lift?

Yes No

If a new well has been drilled, please ensure that well construction information, a water sample and the location of the new well are provided to the Department for Environment and Water within 4 weeks of the well being drilled.

Additional comments/information

Signed by the applicant:

Signature: _____ **Date:** _____

Lodgement instructions

Email:

Applications can be sent via email to mrlandscape.water@sa.gov.au

Posting:

Please mark all envelopes '**Mallee Cost-Sharing Application**'

Attn: Water Planning and Assessment Officer

Mallee Cost-Sharing Application

Murraylands and Riverland Landscape Board

110A Mannum Road

Murray Bridge SA 5253

In person at one of the following Landscape Board office locations:

Berri

2 Wade Street, Berri, SA, 5343

Ph: 08 8580 1800

Murray Bridge

110A Mannum Road, Murray Bridge, SA, 5253

Ph: 08 8532 9100

More information

www.landscape.sa.gov.au/mr/water/water-allocation-plans/mallee

Murraylands and Riverland Landscape Board offices:

Berri

PO Box 1374

2 Wade Street

Berri SA 5343

08 8580 1800

Murray Bridge

PO Box 2343

110A Mannum Road

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