

Dam Covers Information Pack

**Unlocking the potential of
sustainable water management**



DAM COVERS INFORMATION PACK: TABLE OF CONTENTS

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THE PROBLEM

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Protecting Water...Australia's Most Precious Resource

It is estimated that there are in excess of 2.8 million uncovered bodies of water (dams) in Australia. Assuming the average daily loss of water (due to evaporation) in uncovered bodies of water is 7-10mm, this equates to 29.4 billion litres per day.

Less rainfall and increased evaporation from warming climates have put stress on Australia's water supplies and prices. Water is a precious resource, therefore efficient management of this invaluable asset is crucial for so many industries, such as agriculture, mining, government, construction and more.

The impact of evaporation can be felt Australia-wide, as illustrated below:

- **Northern Australia (Tropical Regions)**

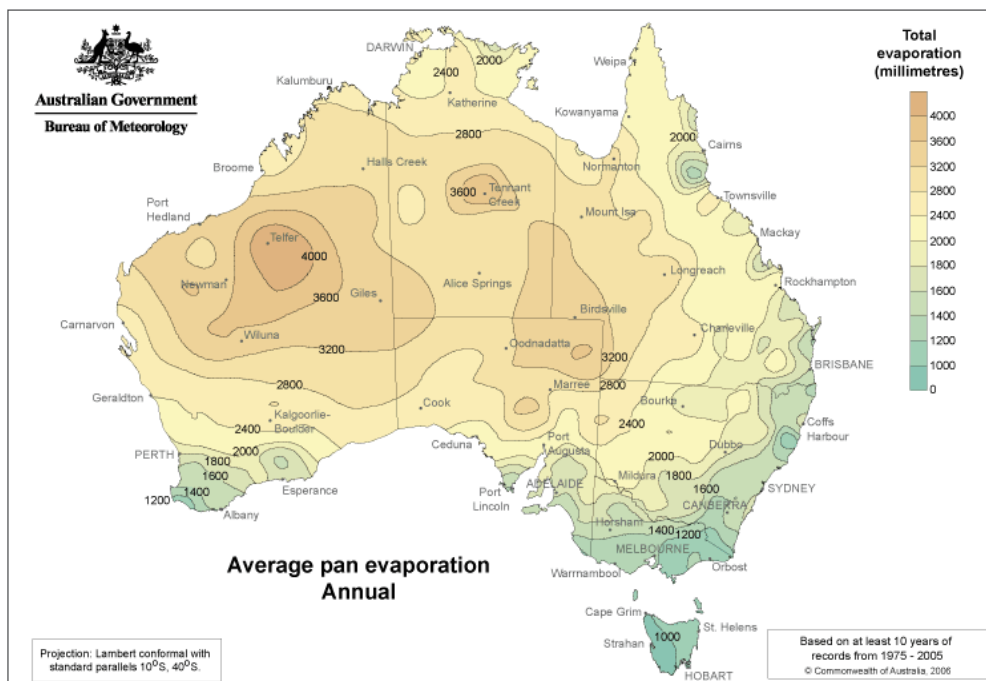
In the tropical regions of northern Australia, where temperatures are generally high and humidity levels can be significant, the evaporation rates tend to be higher. Open dams in this region may experience evaporation rates ranging from 10-15 mm per sqm per day or more during the dry season.

- **Southern Australia (Temperate Regions)**

In the temperate regions of southern Australia, the evaporation rates are typically lower due to cooler temperatures and lower humidity levels compared to the north. Open dams in this region may have evaporation rates ranging from 4-8 mm per sqm per day during drier periods.

- **Inland Australia (Arid and Semi-Arid Regions)**

In the arid and semi-arid regions of central and western Australia, evaporation rates can be exceptionally high due to hot temperatures, low humidity, and strong winds. Open dams in these regions may experience evaporation rates exceeding 15 millimeters per day or more, especially during the summer months.





THE SOLUTION: DAM COVERS

THE SOLUTION: DAM COVERS

What is a Dam Cover?

A “dam cover” typically refers to a protective barrier or structure used to cover or seal a dam. Daisy Dam Covers are an Australian Made floating dam cover that is made in modules to easily deploy and secure into an island, allowing water to flow in.

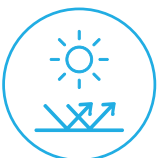
Why use a Dam Cover?

To best answer this question, we have used the findings of our dam covers in these responses.

Daisy Dam Covers stop water evaporation by 99.98% (where the cover is on the water). Generally, Daisy recommends using the Dam Cover across most of the dam surface area (at low water level) and securing in place, not covering all of the dam so that water can still flow in without flooding the cover, debris inflow is uninhibited, livestock can still access the water as well as allowing rain to drain off the cover and into the dam.

With the specially formulated white top for reflection and opaque black underside the Daisy Dam Covers stop evaporation and light entering the dam where the covers are in place, reducing algae and saving water.

Daisy Dam Covers are also great for use on any water source including turkey nest dams and water tanks. They can reduce algae and clear slime out of water tanks. The total sun blockout of the Daisy Dam Cover material means that you will not only stop evaporation, but also reducing (or even stopping in some cases) the growth of algae.



Total sunblock



Stop algae growth



Save Water



Australian made



Stop evaporation



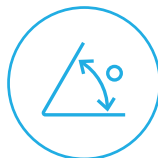
Save Water



Livestock can still access water with covers in use



Floating covers allow water to flow in



Made to any size/configuration



Easy to install



Wind-skirting prevents lifting from the wind



THE BENEFITS OF DAM COVERS



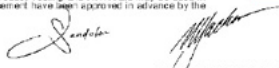
THE BENEFITS OF DAM COVERS

The benefits of Dam Covers are numerous and compelling. Outside of being 100% Australian Made and from at least 30% recycled material, there are three main benefits of Dam Covers that we have included

Benefit 1 – Dam Covers Stop 99.98% Of Water Evaporation

First and foremost, dam covers provide an effective solution to prevent evaporation, which is a significant cause of water loss. **By covering your dams, you can significantly reduce evaporation rates**, ensuring that your stored water remains preserved for longer periods and maximizing your water supply.

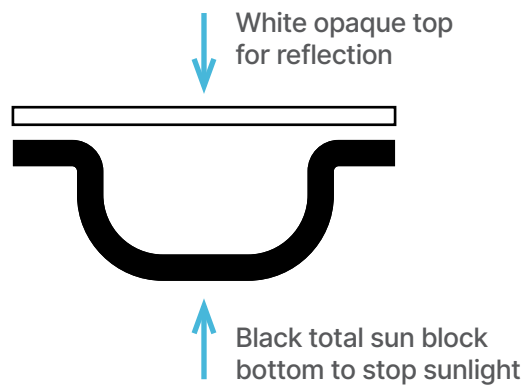
Dam Covers are subject to compliance and rigorous product testing

AWTA PRODUCT TESTING	
Australian Wool Testing Authority Ltd - trading as AWTA Product Testing A.B.N. 43 006 014 106 1st Floor, 191 Racecourse Road, Flemington, Victoria 3031 P.O. Box 240, North Melbourne, Victoria 3051 Phone (03) 9371 2400 Fax (03) 9371 2469	
TEST REPORT	
CLIENT : DAISY POOL COVERS	TEST NUMBER : 7-567401-NW
SAMPLE DESCRIPTION	Client's Ref: "Ultradome" Nominal composition: Polyethylene Nominal thickness: 500um
ASTM E96-2005 WATER METHOD TEMP: 20+/-2degC RELATIVE HUMIDITY: 65+/-3%	Water Vapour Transmission - Water Method Permeance Specimen 1 1.08 E-08 g/Pa.m2.s 2 1.09 E-08 3 1.11 E-08 Mean 1.09 E-08 Water vapour transmission 0.04 g/hr.m2 86mm diameter petri dish used Hot melt glue sealant used Fabric tested with back toward water Control open water vessel 38.6 g/hr.m2 Note: 99.9% water retained after 530 hours
175462 1	(END OF REPORT) PAGE 1
<small>© Australian Wool Testing Authority Ltd Copyright - All Rights Reserved</small>	 The Laboratory is accredited by the National Association of Testing Authorities, Australia, for: -Chemical Testing of Textiles & Related Products Accreditation No. 583 -Mechanical Testing of Textiles & Related Products Accreditation No. 583 -Heat & Temperature Measurement Accreditation No. 1355
<small>02041106</small>	  APPROVED SIGNATORY REBECCA J. JACKSON (R.26.2186A) MANAGING DIRECTOR

BENEFIT #2 – Dam Covers Improves Water Quality

Moreover, dam covers offer crucial protection against external contaminants. They help to shield your water resources from the ingress of pollutants, debris, and foreign matter, ensuring the quality and purity of the stored water. Stopping sunlight entering the water reduces even stops algae growth. The further benefit is with less algae in the water, any water infrastructure including pumps, piping and valves last longer without the blockages and extra pressure of algae buildup

This is of paramount importance for industries that rely on a pristine water supply, such as agriculture, construction, government aquaculture and much more.



BENEFIT #3 – Dam Covers Promote Sustainable Water Use

Furthermore, dam covers provide a range of environmental benefits. By reducing water evaporation, you contribute to water conservation, thereby promoting sustainable water usage. The preserved water can also support the local ecosystem, sustaining habitats for flora and fauna.

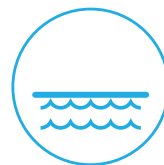
Additionally, the reduction in algae leads to better water quality. By lowering algae levels, there is less water infrastructure and water pump maintenance.



Stop evaporation
99.98%



Wind-skiing prevents lifting from the wind



Floating covers allow water to flow in



CASE STUDY

REALISING THE POTENTIAL OF DAISY DAM COVERS

The Client

Major infrastructure consortium, MELconnx is responsible for the construction of major rail line infrastructure as well as the building of new train stations.

The Brief

The rail link construction was tasked with reducing construction water by >15%, MELconnx engaged Daisy Dam Covers to make a bespoke cover for Turkey's nests as no suitable solution existed on the market.

The Solution

Daisy Dam Covers made 1 trial dam cover for Dulwich, which consisted of 5 modules. The total dam cover size was 655m² (26.4m x 25m)

Trial Deliverables

- The Daisy Dam Cover was a highly effective solution, stopping water loss via evaporation. January to October 2022 evaporation water savings equated to 606,409L (after adding back rainfall) using BOM evaporation data.
- Low-cost solution
- Efficient + hassle-free installation
- Rapid deployment
- Unintended benefit delivered with improved water quality resulting in less pump maintenance.

Additional Benefits

- Daisy Dam Covers longevity. Daisy Dam Covers are made to last at least 20 years.
- Daisy Dam Covers are 100% Australian made
- Daisy Dam Covers are made from 30% Recycled Material
- Modular solution means Daisy Dam Covers are easy to deploy, remove, store or reused on the next jobs
- Being a locally made bespoke product, they can be made to fit any dam, they are easily added on to or subtracted from to suit individual needs of current or future projects

Successful Trial Leads To More Dam Covers

- Due to the success of the trial dam, the client ordered 3 more Daisy Dam Covers to be deployed on the railway construction project



Beechboro
29m x 29m



Gnangarra North
50m x 37m



Gnangarra
29m x 29m

- **Total 4,182m² Daisy Dam Covers**
 - **saving 99.98% evaporation**
 - **using BOM evaporation data**
 - **saved 5,923,873L water**

Supporting Information

- Melconnex Annual sustainability report (extract):
 - Water Water reduction targets 15% reduction in water use in construction and operational phases compared to a base case footprint - Target tracking - (Initiatives identified) Target Achieved (section 9)
- Key impacts and achievements this year include:
- Base Case submitted to Infrastructure Sustainability Council and verified.
- The Significant Decision Making framework, inclusive of a Multi Criteria Analysis, which has been successful in securing a number of innovations and “firsts” in WA or Australia for the Project
 - First floating construction dam cover installed at Dulwich site to significantly reduce water loss through evaporation expected to save 4,089,988 L of groundwater. In addition, the water covers block light into the dam and reduce algae build up which gets sucked into pumps and causes maintenance headaches and replacement of equipment.
 - Sustainability Opportunities and Innovations are tracked monthly on the R&O and Innovations Project register to monitor and follow up on all Sustainability options and ideas put forward for the Project.
 - Achievement with Daisy Dam Covers Showcase - Water Saving Initiative: Construction Dam Cover
 - Recognised at the ISC WA Symposium
 - Endorsed by the Australian Railway Association endorsement



WHY CHOOSE DAISY DAM COVERS?

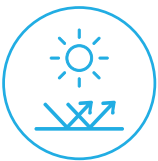
AUSTRALIA'S FAVOURITE FOR 40 YEARS

Established in 1983, Daisy Pool Covers and Rollers is a family owned, Australian company that has earned the right through quality and service to be not only the market leader nationally, but more importantly, our Daisy Experts are Australia's favourite. Daisy commercial division been making large modular covers for commercial swimming pools for 40 years

With over 1,300,000 pools in Australia and growing, the demand for our pool covers has never been stronger. As a market leader, we continue to look for market opportunities that further cement our position.

Daisy Dam Covers Has You Covered

Daisy Dam Covers represent a breakthrough solution that unlocks the true potential of water management. Our Dam Covers are like no other in market. It's modular design makes it easy to transport, install and remove. But the technology behind Daisy Dam Covers is truly unique, delivering optimum water preservation & improved quality while significantly reducing evaporation loss.



Total sunblock



Stop algae growth



Save Water



Australian made



Stop evaporation



Save Water



Livestock can still access water with covers in use



Floating covers allow water to flow in



Made to any size/configuration



Easy to install



Wind-skirting prevents lifting from the wind



GET IN TOUCH

GET IN TOUCH: LET'S UNLOCK THE POWER OF DAM COVERS TOGETHER

At Daisy Dam Covers, we specialise in designing and implementing simple yet state-of-the-art dam covers tailored to your specific needs. Our team of experts will work closely with you to analyse your requirements, design customised solutions, and ensure seamless manufacture and delivery for **easy installation**. We are committed to delivering exceptional quality, reliability, and customer satisfaction.

To learn more about how dam covers can revolutionise your water management practices, please feel free to contact our team at Daisy Dam Covers. We would be delighted to advise and provide you with further insights into the unparalleled advantages of dam covers.

Contact Details:

Call 1300 55 18 11 or complete the contact form [online](#)