The Ripple Effect:

Livestock Water Quality

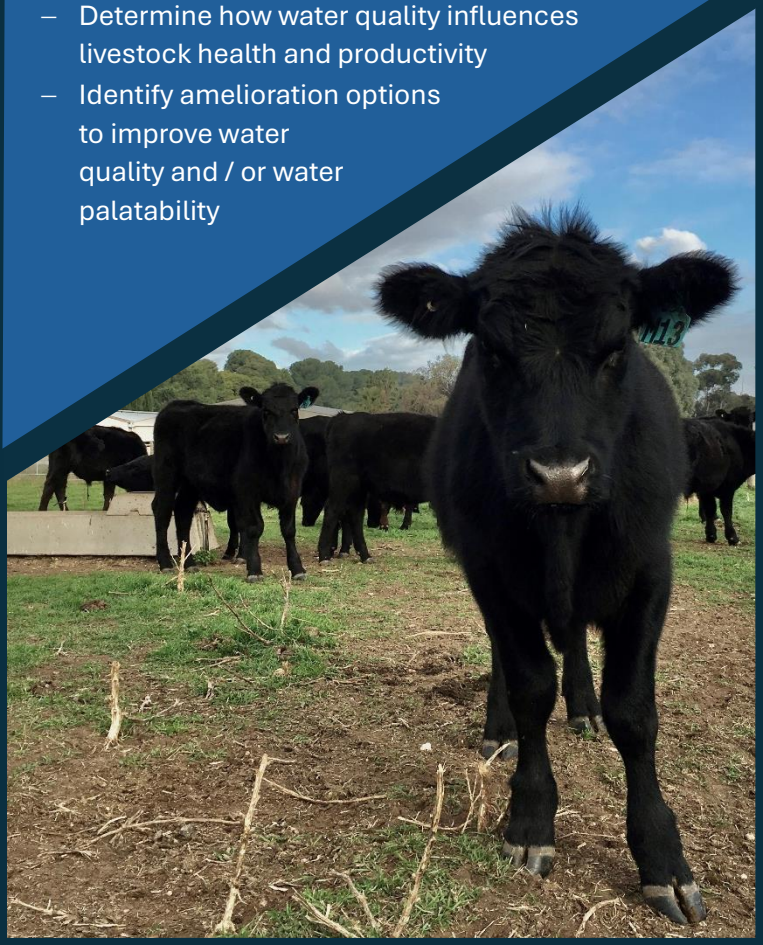
As part of a larger, **Natural Heritage Trust funded** project lead by The Grower Group Alliance a team from the University of Adelaide is investigating changes in livestock water quality.

This broader project aims to drive the adoption of innovations in water security and quality, biodiversity and emissions reduction to protect natural resources, drive productivity and profitability.

Previous work has shown that livestock drinking water contaminated by faeces and urine or high in salts or minerals and cause a decrease in water consumption and animal weight gain.

The **livestock section** of the project **aims to**:

- Identify changes in the quality of livestock water over seasons
- Identify when and where poor water quality occurs
- Determine how water quality influences livestock health and productivity
- Identify amelioration options to improve water quality and / or water palatability



Want to get involved?

We are looking for producers who **run either cattle or sheep** and who have at least one of the following livestock watering options on farm:

- Direct from dams
- Dam water direct to trough
- Bore water direct to trough

There are multiple opportunities to be involved.

1. Water sampling across 12 months.
2. Water sampling with regular animal weight and health measures recorded.

For more information or to get involved contact
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What would your involvement require?

To identify the quality of water on your property we would need you to:

- Collect a water sample from your water source (dam or bore) in the first week of each month.
- Fill out an animal record sheet with outcomes since the previous water sample was taken.
- Post sample to laboratory (all items supplied)
- Repeat each month for 12 months.

The water quality testing undertaken will measure a variety of water characteristics including pH, salinity, alkalinity, macro elements and trace elements. You will be given full access to the results of your farm including a short final report showing how elements changed over the year.

Where poor water quality is identified there is the opportunity to implement amelioration options and monitor water quality for an additional year. These amelioration options could include:

- Fencing off and revegetating dam and piping water to trough
- Water aeration or purification
- Targeted supplementation

Example animal record sheet: information in relation to the outcomes of the previous month.

		Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb
	Date water sample taken									
From previous month	***Sudden Death (#)***									
	Diarrhoea/faecal staining (% mob)									
	Abortion/Stillbirth (#)									
	Weight loss / poor growth (% herd)									
	Supplementation given (what was it)									
	Preg scanning result (if done)									

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