

Water Stewardship for Red Meat Processors

Water Stewardship for red meat processors – initiating
community relationships and engagement

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Project Description

The Australian red meat processing industry is a significant consumer of water, primarily used to ensure food safety and hygiene during processing operations. However, at a broader scale, the availability and quality of water in many communities is under stress due to increasing demand, climatic variability, and the environmental degradation of aquatic ecosystems. Water stewardship is defined as the use of water that is socially and culturally equitable, environmentally sustainable, and economically beneficial. It is achieved through a stakeholder-inclusive process that covers both site- and catchment-based actions.

This project explored, for the first time, how water stewardship principles and approaches can establish a framework by which the red meat processing sector can work towards improving resilience and the capacity to adapt to climatic extremes such as floods and droughts.

The output of the project is the production of an Introductory Water Stewardship Guideline for red meat processors set out in an easy-to-follow six-step approach. The guideline provides a method for how to effectively engage with stakeholders to use collective action to tackle shared water challenges, and to progressively expand their water management interest and capacity outside their own site boundaries.

In developing the guideline, this project also included a Literature Review which has additional water stewardship case studies. Consultation was also undertaken with Fletchers International Exports to help 'road test' the guideline.

Project Content

This guideline provides an introduction for Red Meat Processors to Water Stewardship and is based on the framework set out in the [International Water Stewardship Standard \(IWS\)](#)¹ developed by the Alliance for Water Stewardship (AWS)². It focuses on the first part of the standard - *Step 1 Gather and Understand*.

There are six steps presented in this introductory guideline for red meat processors:

- Step 1: Understand direct water use at the site
- Step 2: Understand indirect water use at the site
- Step 3: Understand water risks and opportunities at the site
- Step 4: Understand water management in the catchment
- Step 5: Plan and undertake stakeholder engagement
- Step 6: Look for leading practices.

The information gathered in Steps 1 through 5 may be used as the basis for developing a Water Stewardship Plan if a processor wishes to formalise its approach or communicate its approach to others. A further step may be to gain recognition that its Water Stewardship approach is compliant with the requirements of the IWS Standard – for which having a Water Stewardship Plan is an essential requirement. While it is not essential to do the steps in the above order, it is recommended. Completing Steps 1 through 4 first can help processors to broadly understand what lies ahead and prepare for stakeholder engagement in Step 5, which can be a daunting step for some. However, a processor could, if it feels confident, begin Step 5 at any time. This introductory guideline includes:

¹ Download the International Water Stewardship Standard (IWS) and accompanying guidance material. This guideline does not duplicate guideline material already available from AWS that supports the IWS Standard such as the "AWS-Standard-2.0 Guidance" (53 pages).

² AWS is a global membership collaboration comprising businesses, NGOs, and the public sector.

- **Example layouts:** to assist processors with recording information collected. These contain an example text referencing “*Emerald Meats*” - a fictitious mixed animal processing facility.
- **Case studies** through the document and in the Further Reading section.
- **Linked data sources:** to the main data pages at websites, noting these may change over time.
- **Further Reading:** providing details on aspects of water stewardship as a primer for further research.

Project Outcome

Step 1: Understand direct water use at the site

The intent of this step is to gather information and better understand how water is used directly at the processing site covering:

- water-related infrastructure;
- legislated obligations (licences and requirements);
- flows and the water balance;
- water quality;
- contamination and pollution sources;
- important water-related areas, and;
- water-related financial value.

This information will be used in Step 3 to better understand the water-related risks, challenges, and opportunities at the red meat processing site.

Step 2: Understand indirect water use at the site

The intent of this step is to better understand the quantity of indirect water use and its impact highlighting:

- how much water is embodied in the red meat processing inputs (especially stock);
- levels of water stress in the catchments from which stock are sourced and the associated risks;
- which suppliers contribute significant sources of embodied water, and;
- how a red meat processor may influence the water stewardship approach of its suppliers.

Step 3: Understand risks and opportunities at the site

Water stewardship requires that red meat processors understand the risks and opportunities around water on their site to:

- prioritise and better manage these risks at their site;
- reach out to other landholders looking for better ways of tackling issues and problems;
- understand where the water issues and challenges in their wider catchment are most relevant to them, and;
- more confidently and successfully engage with other catchment stakeholders.

Step 4: Understand water management in the catchment

The intent of this step is to gain high-level understanding of the water-related risks, challenges, and opportunities in the wider catchment outside the processing site. These basic steps are recommended:

- define the water catchment;
- find data sources;
- understand water governance;
- understand catchment water-balance;
- understand catchment water quality;
- identify Important Water-Related Areas, and;
- identify existing and emerging initiatives.

Step 5: Plan and undertake stakeholder engagement

The intent of stakeholder engagement is to understand relevant stakeholders, their water-related challenges, and the red meat processor’s ability to influence and improve the catchment water management by collective action with

these stakeholders at its own site and potentially beyond in the catchment. This introductory guideline recommends a red meat processor take the following steps:

- identify the stakeholders;
- identify stakeholders' interests and challenges;
- assess stakeholders' level of influence and interest;
- assess the stakeholders' level of engagement and commitment;
- identify shared challenges, and;
- develop a stakeholder engagement plan

Case Studies

Inghams Chicken Murarrie site achieves world-class water stewardship

The Alliance for Water Stewardship (AWS) awarded Platinum certification to Ingham's Murarrie (QLD) Primary Processing Plant in 2021, achieving the highest level in the International Water Stewardship Standard. The plant achieved this by identifying its water impacts, challenges, and sphere of influence in the catchment where they operate. By doing this, the site engages with key stakeholders and understands the water-related risks and opportunities that are available.

In 2021, "the plant has rejuvenated six of the site's ponds that now hold 60 million litres of water and provide a fantastic habitat for the local wildlife, the volume of the on-site wastewater treatment plant's sludge has reduced, and the site's water consumption has reduced by one-third over the last three years. In addition, the site has reduced its trade waste to almost zero and has more projects planned to further reduce its water impact."

Inghams Sustainability Report for 2021 describes the projects and initiatives that have led to water stewardship certification.³

Positive engagement with regulators

The Renmark Irrigation Trust is Australia's oldest irrigation trust and the first irrigation scheme in the world to achieve Gold Level certification with AWS. The Trust delivers water through 140 kms of pipelines to over 600 irrigators at 98% efficiency, which is well above the Australian average.

Initial engagement through the water stewardship process involved working with Nature Foundation SA and local government to deliver environmental water to Johnson's Waterhole. The water hole has now been transformed into a thriving wetland supporting a huge range of biodiversity. Based on the success of the Johnson's Waterhole project, a partnership agreement was drawn up between an irrigation scheme and the Commonwealth Environmental Water Holder (CEWH) in relation to planning and managing the transfer, delivery and monitoring of Commonwealth environmental water to wetland and floodplain sites in the Renmark region.⁴

Tourism operators have reported that environmental watering has underpinned development by providing confidence to invest in tourism businesses. Now local businesses and Renmark-Paringa Council are also implementing water stewardship with the Council being the first local government in the world to be recognised for its leadership in sustainable water management through International Water Stewardship Standard certification— see Renmark Paringa Council Water Stewardship Plan.⁵

³ Inghams Sustainability Report 2021 - ingham.com.au/wp-content/uploads/2022/03/2021_Inghams_Group_Limited_Sustainability_Report.pdf

⁴ Australian Government, Department of Climate Change, Energy, the Environment and Water, Partnership arrangements on the use of Commonwealth environmental water, www.dcceew.gov.au/water/cewo/publications/agreements-use-commonwealth-environmental-water

⁵ Renmark Paringa Council, Water Stewardship Plan, www.renmarkparinga.sa.gov.au/__data/assets/pdf_file/0033/1078773/RPC-Water-Stewardship-Plan.pdf

Step 6: Look for leading practices

Leading practices (or best practices) can take the form of guidelines, ethics, or ideas that represent the most efficient or best course of action in a given business situation. Regulators, government, non-government organisations, or industry associations may establish leading practices. This introductory guideline suggests looking for examples of water stewardship, particularly leading practice within the catchment for water governance, water balance, water quality, and maintaining important water-related areas. There may be good models to emulate, and it may help red meat processors to understand past and current initiatives and programs within the catchment.

Benefit for Industry

Water stewardship for red meat processors starts with good management of water used directly at the site level and understanding the risks and challenges faced there. The next step is to better understand and manage water that is used indirectly across the red meat processor's supply chain. Processors must then understand their place within the catchment - its water-related impacts, risks, and opportunities, and, importantly, challenges that are shared within their catchment. The introductory guideline outlines six steps that places a processor in a position, if it so wishes, to:

- look for opportunities to improve water stewardship at their site;
- reach out among adjacent landholders with similar issues for solutions to challenges;
- work with catchment stakeholders on initiatives at larger scales;
- engage in water stewardship more widely across the catchment, and;
- develop a Water Stewardship Plan for their site.