Author name: Name suppressed

Date of submission: Tuesday, 1 July 2025

Your submission for this review:
Please find attached Murray Irrigation's submission to IPART on its WAMC Draft Decision. There are two files that constitute our submission: the submission proper; and an Appendix that provides independent advice on contemporary farm affordability. I have also emailed these files to IPART separately, to ensure they are received on time.

Murray Irrigation

IPART Draft Decision on WAMC Price Proposals
MIL Submission to IPART

July 2025

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Submission Addendum

Murray Irrigation Response to Final Decision on WaterNSW Charges[1]

- IPART's Final Decision for WaterNSW differs considerably from what Murray Irrigation was expecting.
- Throughout the determination period, IPART remained consistent in its view that more work needed to be undertaken by WaterNSW regarding justification of its operating and capital expenditure.[2]
- On this basis, setting future charges at CPI until this critical work was done was a reasonable step.
- Murray Irrigation is disappointed IPART has moved away from this without a clear rationale.
- We are very concerned IPART has also moved away from its proposed three-year determination period.
- IPART has clearly demonstrated the obvious need for WaterNSW and WAMC to be subjected to substantive price structure reviews – ideally independently.
- This is the only way customers can be sure:
    - They are being charged for services that are truly efficient.
    - They have direct line-of-sight between the prices they pay and service improvements they can directly experience on the ground.
    - They are not cross-subsidising other beneficiaries of the services being provided.
- Twelve months is not long enough to do this work properly, for either WaterNSW or for WAMC.
- A twelve-month process risks producing unsustainable pricing outcomes for both entities going forward.
- Based on IPART's assessments during this determination, there is also a strong likelihood of stakeholders being placed under unfair pressure to participate in consultation and engagement that is less than ideal.
- Looking ahead to the WaterNSW review, we refer IPART to advice Murray Irrigation has already provided:

  "Murray Irrigation notes that IPART has flagged the need for a broader, fit-for-purpose assessment of WaterNSW to ensure its operations, priorities and service delivery align with customer expectations. It is critical that WaterNSW's structure and strategic direction reflect a clear commitment to delivering value for money and efficient outcomes for customers of this monopoly supplier."[3]
- We encourage this advice to remain a priority as the WaterNSW review goes ahead.
- Content in this submission has been amended where matters are material to IPART's Final Decision.
- The remainder of this submission should be read against the key points raised in this Addendum.

[1] Final-Report-Review-of-prices-for-WaterNSW-Rural-Valleys-from-1-July-2025-June-2025.PDF

[2] Submission_to_IPART_on_Information_Paper_re_WaterNSW_Bulk_Water_Charges_3_June_2025.pdf, p. 5.

[3] Submission_to_IPART_on_Information_Paper_re_WaterNSW_Bulk_Water_Charges_3_June_2025.pdf, p. 5.

Executive Summary

- Murray Irrigation commends IPART for its diligence in reviewing WAMC's recent pricing proposal. We support the Draft Decision of a three-year determination period.
- As covered in Part 6 of our submission, we also recommend that IPART update its demand data to include 2024-25 water take, and update its capital expenditure data to include 2024-25 annual expenditure.
- We support IPART's concerns with the scale and justification of WAMC's proposed price increases.
- Given these concerns, we do not support IPART's proposed price increases of 5% or 10%.
- There is insufficient evidence that these increases reflect cost-efficiency. We do not believe WAMC has made the case that they will improve service delivery, or meet customer engagement expectations.
- In fact, IPART's Draft Decision reduces WAMC's proposed expenditure by over $100 million, which appears to undermine the case for any real price increase at this time.
- In this context, Murray Irrigation suggests CPI-only adjustments are a more appropriate level of increase, particularly given IPART's recent determination for WaterNSW.
- For both entities, we support IPART's finding that independent price structure reviews should go ahead.
- These reviews should commence as soon as possible, run for several years, and closely engage customers.
- In addition, we propose that draft Terms of Reference (ToR) for these reviews are included in IPART's final decision, and that they capture the parameters of a full review of user cost shares.
- In anticipation of the WaterNSW and WAMC reviews going ahead, Murray Irrigation believes IPART's farm affordability analysis would benefit from further fleshing out.
- To assist with this, we have commissioned RMCG to conduct a short, standalone consideration of contemporary farm affordability, which provides better 'fit for purpose' context for our footprint.
- You can find the RMCG report at Appendix 1 to this submission.
- Regulatory oversight is critical for ensuring pricing outcomes are fair, efficient, and reflective of regional realities. Murray Irrigation encourages IPART to maintain this level of scrutiny throughout the remainder of this determination.
- This submission provides responses to each of IPART's questions with direct relevance to our footprint.
- The submission finishes with consideration of other important matters that IPART may wish to take into account as future work is conducted – including the anticipated reviews of WaterNSW and WAMC.
- For detailed information about our business, our footprint, and our customers, please refer to previous submissions we have provided to IPART over the course of this determination process.[4]
- IPART Tribunal members are always encouraged to visit the Murray Valley region to gain first-hand insight into the local context facing our primary producers.

[4] About Murray Irrigation

1 Determination period

What are your views on the proposed 3-year determination length?

Murray Irrigation supports IPART's Draft Decision in setting a three-year determination period.

A three-year determination for WAMC becomes especially critical in light of IPART's Final Decision for WaterNSW. It enables full IPART focus on WaterNSW for the next year, which will be vital for ensuring effective customer engagement, and the production of sustainable pricing outcomes from 1 July 2026.

A three-year period gives IPART and stakeholders the opportunity to re-evaluate WAMC's efficiency and performance. The Draft Decision reduces WAMC operating expenditure by more than $100 million, with Stantec identifying major concerns regarding the justification for WAMC costs. A period shorter than the originally proposed five years provides for a more timely opportunity to hold WAMC accountable for its future performance.

The Draft Decision will align WAMC's determination period with WaterNSW's rural bulk water period. Given the overlap in customers and context, this provides both WAMC and WaterNSW an opportunity to collaborate to ensure that customer engagement efforts are aligned and that the bill and service impacts can be appropriately presented to customers in advance of the next review. This will help remedy the shortcomings in customer engagement that have been identified by stakeholders and IPART, and enable customers to consider the combined impact of both WaterNSW and WAMC proposals.

We note the proposed review of WaterNSW structures and functions as suggested in the WaterNSW draft decision. A three-year period for WAMC provides the opportunity to implement any recommendations from the WaterNSW review that may have implications on WAMC.

Another benefit of a three-year period is that it removes the overlap between the urban reviews (Sydney and Hunter) and the rural reviews (WaterNSW and WAMC). This provides the opportunity for IPART to focus on rural issues during the rural review without needing to spread itself thin by simultaneously having to respond to urban price proposals.

Murray Irrigation noted in our WaterNSW response that three years may not be long enough to undertake a review of WaterNSW services. If the WaterNSW review is delayed, then we recommend IPART links the WaterNSW period length with the WAMC period length. This may mean that price changes in any fourth year (or fifth year) for WAMC would be set at CPI until IPART can otherwise determine WAMC prices through a formal price review.

2 Reasonableness of price increases

Do the 2.5% & 5% caps on prices strike the right balance between cost recovery & impacts on customers?

Murray Irrigation does not support the proposed 5% per annum price increases relating to water management charges from 2025 to 2028, and does not believe it strikes the right balance between cost recovery and impacts on customers.

Affordability is complex and careful consideration is required

Murray Irrigation notes the affordability analysis undertaken by IPART. While we support IPART in considering the financial viability of farmers, we believe the farm affordability analysis at Appendix C of the Tribunal's paper would benefit from further fleshing out. To assist with this, we have commissioned RMCG to conduct a short, standalone consideration of contemporary farm affordability, which we believe provides a better 'fit for purpose' context for our footprint.

In summary, Murray Irrigation believes that alternative time periods, types of irrigators and definitions of gross/net profit provide further insight that IPART should consider in assessing farm affordability.

RMCG's report is included in Appendix 1 to this submission.

Draft Decision undermines the case for real increases

The Draft Decision identifies $101 million of inefficient WAMC operating expenditure. This reduction of 24% confirms that WAMC has not demonstrated a reliable or efficient cost base, and has not appropriately budgeted or planned expenditure. Furthermore, the significant and sharp uplift in capital expenditure may prove undeliverable. In this context, any increase above CPI cannot be justified.

No improvement in service levels

There has been no evidence presented that customers will receive better or additional services in return for these material price increases. Given the lack of evidence, irrigators and other water users should not be asked to pay more. Aligning the timing of price increases to service improvements would best ensure customer acceptance of price increases. In the interim, IPART should only allow WAMC CPI price increases.

Customer engagement did not support higher increases

The customer engagement process did not provide any support for price increases above CPI. The full impacts of proposed price changes were not clearly presented to customers, and many stakeholders are alarmed about the cumulative impacts of price increases. If WAMC establishes a track record of performance and efficiency, and following a price and service structure review, it is more likely that customers will respect the need for price increases.

Proposed caps will entrench unfairness and inefficiencies

In summary, the proposed caps do not strike the right balance. They risk normalising unjustified and inefficient expenditure and undermining long-term affordability for licence holders.

3 Higher price cap of 10% per annum

What are your views on a potential alternative cap of prices for water management services at 10%?

While Murray Irrigation does not support the proposed 5% and 2.5% price increases, we are concerned by the suggestion that prices could increase even further by 30% over three years.

The Draft Decision notes that "WAMC consulted on annual price caps for its entitlement and access charges of 2.5%, 5% and 10% per year" before proposing 15% increases for large users. As we have highlighted above, the 15% increase is backed up neither by customer engagement nor by efficient cost increases. It is also noted that IPART has identified $101 million in inefficient costs it is proposing to exclude from the revenue requirement.

If IPART was to approve the higher price cap of 10% per annum increases, this would mean approval of the highest level of (unsupported) prices proposed by WAMC. This is counterintuitive, given the $101 million operating cost reduction and other serious issues identified by IPART in its Draft Decision.

Applying a significant price increase across the board is concerning. It is unclear how many costs are attributable to each region – both operating and capital expenditure. If WAMC is seeking to propose higher prices in the regulatory period beginning 2028, it should have a higher degree of scrutiny and be compelled to produce modelling that outlines how costs are incurred within regions and recovered from regions, including the release of detailed financial modelling.

As noted above, there is no demonstrable service level improvement proposed for which customers will be able to experience the direct benefits of higher prices.

4 Performance metrics

What are your views on our proposed performance metrics? Could these be improved?

Murray Irrigation has concerns with WAMC's disaggregated and geographically broad performance metrics. While suitable for general reporting, the current performance measures provide little insight regarding the actual regional performance of WAMC regarding water management.

Outcome 1: Enhanced customer experience. These five measures are all survey-based. However, most of these measures are irrelevant to customers of Murray Irrigation as we provide these services to customers. Feedback from our customers indicates that maximising the availability of water is critical, and customer experience would be best enhanced by WAMC focussing on improving its core water management functions.

Outcome 2: Sustainable and effective water resource management. While we support these measures, it is easier for Murray Irrigation customers to understand the relevance of these statewide targets to their area. All four measures should be disaggregated and reported by water source rather than across the whole state.

Outcome 3: Confidence in water resource management. Murray Irrigation notes that these four measures comprise: two relating to the completion of tasks that should be Business as Usual (BAU), and; two that are survey-related. Measure 3.1 should be updated to be a formal MERI (Monitoring, Evaluation, Reporting and Improvement) plan rather than just a MER plan. This better enables continuous improvement. Measure 3.4 should focus on successful prosecutions for water theft, as this directly reflects WAMC's effectiveness in protecting water resources and recovering water for lawful users. A survey-based measure as proposed is likely to be interpreted by respondents as referring to broader community behaviour rather than just to outcomes that are within WAMC's control.

Outcome 4: Value for money. Murray Irrigation proposes that any dollar-based measures are reported on a disaggregated basis by water source. In addition, we would support the inclusion of capital expenditure as a customer measure. In our opinion, undertaking water management functions with the explicit goal of maximising the volume of water (subject to other water sharing rules) to customers is a key contributor to customer value for money.

5 Price structure review

What are your views on a potential price structure review?

Murray Irrigation supports a thorough price structure and framework review. This is essential to ensure customers only pay for services received without unnecessary cross subsidies. We recommend that IPART undertakes this review. Murray Irrigation retains its position that three-years is needed for this review.

In undertaking a review, we recommend that it be informed by the review of price structures that will be undertaken for WaterNSW. Consistent with best practice engagement principles, informed engagement outcomes are only possible when customers are presented with the full impacts of changes on their bills. This was a shortcoming of WaterNSW and WAMC engagement, where total customer bill impacts were never presented.

The price structure review should also be scoped to include a full review of cost shares. This would provide customer and community confidence that public goods are funded by the public rather than being unfairly passed on to customers through prices. Related to this, the appropriate role of Minimum Annual Charge (MAC) prices should also be considered.

In addition, the review should include performance measures suitable for each service element. By identifying performance measures alongside the identification and prioritisation of services, WAMC will be better placed to be making expenditure decisions with the full knowledge of customer preferences and service objectives.

A review of price structures (including cost shares) should be undertaken as a standalone exercise outside of a price submission. This will give IPART, WAMC and other stakeholders the focus and capacity to devote their full attention to critical issues and ensure that the best possible review is undertaken.

We encourage IPART to consider including a brief draft Terms of Reference (ToR) or scope within its final decision. A written ToR or scope would provide additional encouragement for this review to occur prior to the 2028 determination.

We would welcome the opportunity to contribute to a review that explores these issues.

6 Other matters for IPART consideration

Food and fibre national security

The Murray Valley region plays a critical role in Australia's national food and fibre production, underpinning domestic supply chains and food security. The Federal Government has outlined in its Delivering Ag2030 paper its vision for the Australian agricultural sector to be a $100 billion industry by 2030.

In addition, the incoming Albanese government has committed to the development of a *National Food Security Strategy* during this term (Feeding Australia: Albanese Labor Government's plan to secure our food future). In this regard, the role is becoming even more important given current global uncertainty, including rising tariff barriers and geopolitical instability. Supporting producers of food and fibre in this region is not just a local issue – it is essential for maintaining our national strategic interests.

Food and fibre producers in our region export a proportion of their produce. This contributes to regional and state wealth and supports the prosperity and social security of the nation.

Updating demand to include 2024-25 water take

We note the Draft Decision states that: *"Based on our investigation, we decided to maintain the use of a 20-year historical average to set the water take forecast."* For clarity, we recommend that this be interpreted to include the 20-year historical average up to and including 2024-25, which will be available prior to IPART's final decision. We note this would require minor amendments to table 8.2 and potentially other draft decisions.

Updating capital expenditure to include 2024-25 actual expenditure

Given the delay of this final decision to after 30 June, IPART can now require WAMC to report audited final capital expenditure. It would be expected that a well-functioning business is able to achieve its proposed capital levels. If WAMC is significantly short of its 2024-25 proposed expenditure, this would provide strong evidence that it does not yet have the capital management processes in place to support the proposed sharp uplift in capital expenditure.

Cost allocation for NRAR

Murray Irrigation supports reasonable and cost-effective efforts to reduce water theft. As a company operating on cooperative principles, we efficiently undertake this activity every day to protect the needs and interests of customers who are complying with their legal requirements.

The Draft Decision approves the WAMC proposal for the cost driver for the Natural Resources Access Regulator's (NRAR) costs (activity W08-03) to be licence numbers, but this does not represent the actual notion of "impactor pays" that WAMC claims in Attachment F of its 2024 submission. Cooperatives like Murray Irrigation undertake surveillance and monitoring activities that would otherwise be done by NRAR. Additionally, through licence fees, Murray Irrigation pays the actual costs for independent, audited calibration of its offtake flows (i.e. its two key high-volume metering points) and provides real time communications from its off-take meters to NSW water agencies. Amendment of the cost driver to be activity based (such as the number of prosecutions or inspections) would more accurately ensure that NRAR costs are borne by those whose actions caused the need in the first place.

In the WAMC submission, it is stated that *"… NRAR's compliance helped secure $65.8 million in government revenue from water sales for the 2021–22 fiscal year."* As water users are ultimately paying for the functions of WAMC, it is not clear how this additional revenue has been used to lower prices for the water users that have funded this water recovery. It is not apparent how demand has been increased in response to NRAR's claimed successes.

Beyond the 2025 determination period, as compliance culture becomes embedded within the sector, we expect improved compliance enabling NRAR to transition to a maintenance role that utilises targeted and risk-based approaches requiring fewer resources. Murray Irrigation recalls that the 2021 IPART draft decision noted:

> *"However, we recognise in the short term NRAR needs to incur costs above those of an organisation with a mature compliance function, and the NSW Government should fund these costs."*

MDBA Costs

Murray Irrigation supports basing Murray-Darling Basin Authority (MDBA) costs on the costs approved in the previous determination period. We encourage IPART to leave no stone unturned in the future analysis and evaluation of the prudency and efficiency of these costs.

We believe that a comprehensive systems and process review is warranted in relation to the MDBA component of charges. There is a persistent and unacceptable lack of transparency surrounding how these charges from a range of state and Commonwealth agencies are developed, allocated and explained to customers. Despite being a significant cost component, the rationale for these charges remains opaque, and customers are provided limited opportunity to interrogate or understand the methodology behind them.

Given the material impact of MDBA charges on overall pricing in the Murray and throughout NSW, it is both reasonable and necessary that these charges be subject to the same level of scrutiny, governance and independent review as other aspects of WAMC charges. This includes adopting a rigorous, evidence-based approach to cost allocation, with clear documentation and stakeholder engagement to ensure legitimacy and trust in the process.

If IPART is unable to determine whether MDBA costs are prudent and efficient, we support IPART limiting this pass-through to customer prices, and keeping increases to no greater than CPI.

Irrigation Corporation Discounts

Murray Irrigation undertakes many functions locally, such as billing, metering and compliance, that WAMC delivers centrally elsewhere in NSW. Irrigation Corporation Discounts (ICDs) apply to WaterNSW services in recognition of the significant service delivery undertaken by Murray Irrigation and other cooperatives.

However, no equivalent to ICDs exists for WAMC charges. Establishing an ICD-equivalent regime would ensure that our customers are not charged twice for services already efficiently provided by us. This would promote cost-reflectivity and improve fairness.

Encourage ex-post reviews going forwards

Where WAMC has not met its performance standards or expenditure benchmarks, IPART should initiate a formal ex-post review process. These reviews should assess the causes of underperformance, identify lessons learned and recommend corrective actions. Embedding this approach will improve accountability and continuous improvement across WAMC and the broader sector.

This is particularly important given the significant uplift in capital expenditure proposed for the next regulatory period. It is not apparent that WAMC can consistently achieve this level of capital expenditure deliverability through the 2025-2028 period.

WACC differential

Murray Irrigation notes the draft post-tax real WACC[5] of 3.4%. This is higher than Hunter Water's WACC of 3.3%. We encourage IPART to apply regional equity by using the same WACC parameters for all NSW water utilities and avoiding a situation where regional users are paying more for debt than Sydney customers.

Financial incentive schemes

It is clear from the regulatory period just ended that the three financial incentive mechanisms designed to reward efficiency, innovation and customer value should be mandated for inclusion in future pricing proposals by WAMC. These schemes are essential to align WAMC outcomes with customer and community expectations.

Reduction in value of water entitlements

Murray Irrigation reiterates our previously stated concerns regarding the potential for a decline in the value of water entitlements because of higher annual charges. Any material increase in water access and usage prices could significantly impact the net value obtained from water allocations, and hence reduce the market value of entitlements. This has significant implications for irrigators, investors and the long-term sustainability of the region's agricultural economy. These impacts need to be acknowledged and factored into future decision-making, and we continue to encourage IPART to explore the extent to which this issue could materialise.

[5] Weighted Average Cost of Capital

RMCG

Farm business affordability

Murray Irrigation Limited

June 2025

1 Introduction

OVERVIEW

In the recent Independent Pricing and Regulatory Tribunal (IPART, 2025) Draft Report on Water Administration Ministerial Corporation (WAMC) charges, Appendix C assesses whether irrigated farm businesses in New South Wales can absorb the proposed increases. The appendix uses farm-level gross margin data and historical averages to evaluate financial resilience across sectors such as dairy, horticulture and broadacre cropping.

While the technical framework is broadly sound, several key assumptions in the analysis deserve closer examination. Specifically, the report's reliance on gross margins as the main financial indicator, its use of averages (without sensitivity analysis) and its assumption that farm operations remain static (in terms of management) each present risks of overstating and simplifying a farms' ability to absorb new costs. These issues are further complicated by the challenging economic environment in which irrigation-dependent farms operate, characterised by declining terms of trade, variable production and increasing bulk water costs.

This critique contends that average gross margins, while seemingly adequate theoretically, do not capture the volatility, risk and structural pressures that shape real-world decisions on Australian farms, and may overstate affordability. Relying solely on this analysis for water pricing reforms may lead to unaffordable price rises and unintentionally reduce regional economic activity, hinder long-term investment in irrigation infrastructure, or accelerate farmer exits. A more robust affordability assessment is recommended to reflect real-world dynamics.

2 Limitations of gross margins as a financial indicator

Appendix C uses gross margins (revenue minus variable costs) as the primary measure of farm business viability. While this metric is useful for comparing enterprises with similar cost structures, it is inappropriate for assessing a business's profitability. Gross margins exclude significant costs such as permanent labour (paid and unpaid), administration, capital expenditure and depreciation, fixed costs (such as rates and fixed water charges) and interest. These omissions are particularly significant in capital- and labour-intensive sectors that exist within the irrigated agricultural sector of NSW.

To illustrate the limitations of using gross margins as a measure of farm viability, Figure 1 compares average gross margins and profit margins before tax across a range of Australian industries between 2015-16 and 2021-22. The data reveal that while gross margins in agriculture appear strong on paper, the translation into actual profit is disproportionately low when compared to other industries. For instance, NSW agriculture recorded an average gross margin of approximately 59% (of revenue) over this time period, yet only a 7.5% profit margin before tax and a spread of 52 percentage points. This pattern is not unique to agriculture but is especially pronounced in it. The chart highlights why gross margin alone is an inadequate proxy for assessing a farm's capacity to absorb new fixed charges, such as the proposed WAMC increases.

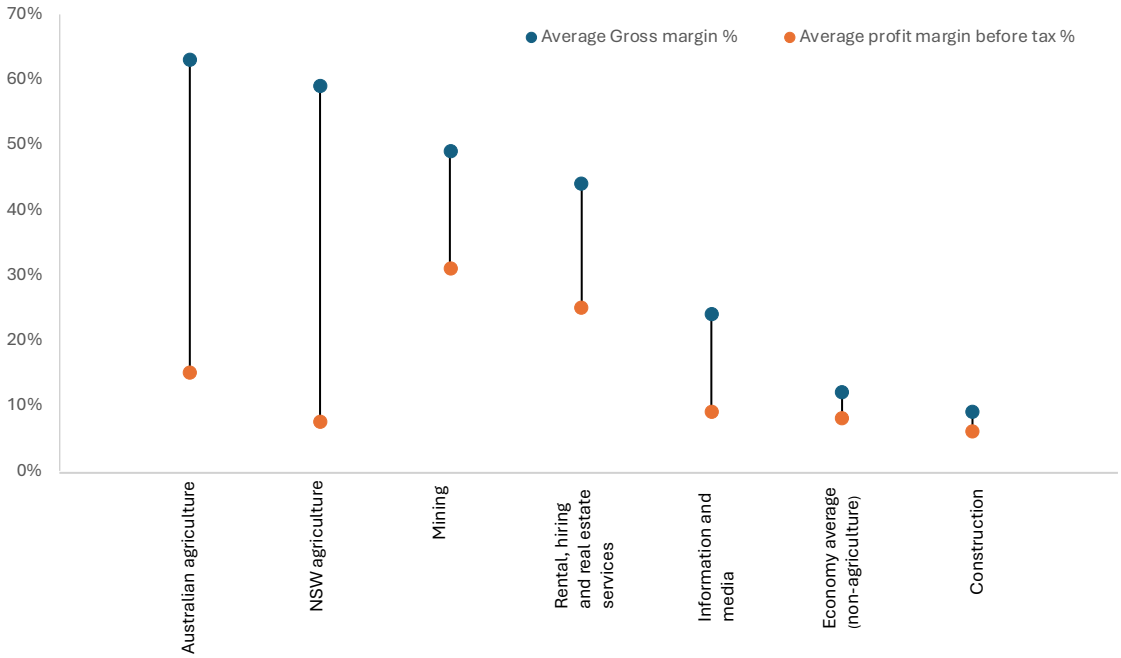


Figure 1: Spread between average gross margin and profit margin by industry in Australia from 2015/16 to 21/22. Source: Adapted from Deloitte Access Economics (2024) analysis of Farm Data Portal (ABARES) and Business Indicators, Australia (ABS)

There are several examples within the literature that outline the limitations of gross margins. As noted by Malcolm *et al.* (Malcolm, Makeham & Wright, 2005), a gross margin does not represent profit because it does not account for fixed and overhead costs, and can lead to an overstatement of a farm's financial resilience. This includes situations where a farm may report a positive gross margin but still operate at a financial loss. In

Attachment 30 as authored by Deloitte, WaterNSW (2024a) notes that “even if gross margins are strong, other costs can still put a business under financial strain.”

Industry resources reinforce this perspective. GRDC (2025) note that “gross margins should never be used as the sole information to assess the cost of production,” while SAGIT (2024) emphasises the need to interpret gross margins alongside broader profit indicators such as net cash profit, return on assets, and debt-service ratios.

Gross margins are helpful (and designed) for enterprise comparisons but they are only a partial indicator of financial viability. An approach that includes fixed costs and capital servicing is necessary to properly evaluate whether a farm business can absorb additional charges like the proposed WAMC increases or other cost increases.

3 Misleading effect of the average

Appendix C relies on five-year average data (2017-2022) to assess financial performance, smoothing out short-term fluctuations. However, this approach can obscure the volatility that defines Australian agriculture. The defined period includes several strong seasons, particularly 2020-21 and 2021-22, when favourable weather and high commodity prices contributed to high farm incomes. These years are not necessarily representative of typical conditions in NSW.

Recent farm income data demonstrates the risks of relying on historical averages to assess current affordability in agriculture. While Appendix C draws on five-year averages to evaluate farm resilience, this masks the sharp downturn experienced in more recent seasons. According to ABARES (2024), farm cash incomes have fallen significantly across major sectors (Table 1). Specialist cropping farms saw a 58% drop in income between 2022 and 2024, while beef cattle farm incomes fell by 81%, and mixed farm incomes decreased by 66%. These figures reveal how quickly financial conditions can deteriorate in Australian agriculture (often impacted by factors beyond the farm gate) and highlight the importance of considering favourable and adverse years when assessing a farm’s capacity to absorb new costs.

Table 1: Farm cash income NSW 2022-2024 Source: Farm Data Portal (ABARES)

FARM TYPE	CASH INCOME 2022	CASH INCOME 2024	CHANGE
Beef	$148,960	$28,000	-81%
Cropping	$1,185,000	$498,000	-58%
Mixed	$488,920	$164,000	-66%

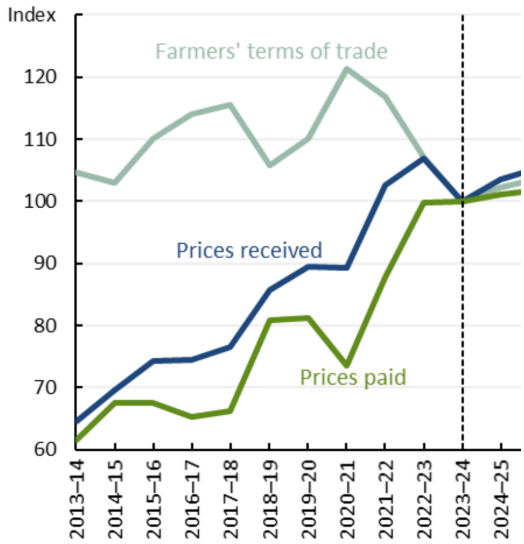
More broadly, Australian agriculture is characterised by high seasonal and market variability. As many farmers will attest, a typical decade often includes two good years, two poor years, and the remainder hovering around the average. Crucially, it is the tough years marked by drought, price collapses or disease outbreaks that truly test a farm’s financial resilience. These events often have structural and lasting impacts on business viability.

The modelling in Appendix C assumes that average gross margins are a reasonable proxy for farm profitability, but this could be improved by analysing what happens in below-average years when liquidity is tight and margins are negative. While using averages can simplify analysis, it risks obscuring downside risks that are often the decisive factor in farm business longevity. Any meaningful affordability assessment should consider the full range of seasonal outcomes not just a smoothed average that potentially underrepresents volatility.

4 Declining terms of trade

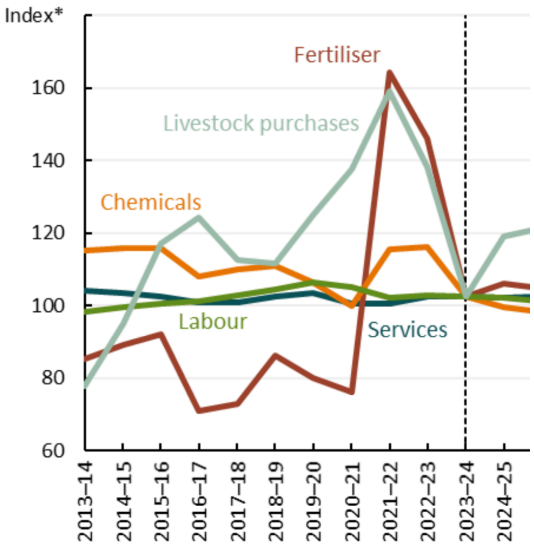
Australian farm businesses have long faced structural economic pressures, most notably a persistent decline in the terms of trade, where input costs rise faster than commodity prices. This dynamic, often referred to as the “cost-price squeeze,” has intensified in recent years.

Since 2022, a combination of global supply disruptions and domestic labour shortages resulted in sharp increases in the cost of key farm inputs such as fertiliser, fuel, and wages. For example, in 2021-22, ABARES reported that farm input costs rose by 16%, while the terms of trade declined by approximately 6% (ABARES, 2022). Escalating costs reduce the buffer available to absorb additional fixed charges.



Note: To the right of the dotted line represents estimates and forecasts. Index 2023–24 = 100.
Source: ABARES; ABS

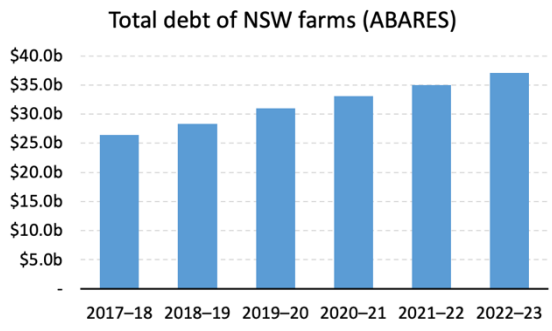
Figure 2: Farmers’ terms of trade



Note: 2024–25 Australian dollars. Index 2023–24 = 100. Data to the right of dotted line indicate estimates and forecasts.
Source: ABARES; ABS

Figure 3: Real average annual selected input prices, Australia

As seen in Figure 2, rising costs can erode profit margins even during years of high commodity prices. Pannell (2005) describes the situation as farmers “swimming against that current” of rising costs to maintain existing profit levels. Figure 3 shows how various input prices fluctuated with some significant increases in recent years.



Many costs excluded from gross margin calculations such as capital expenditure (and by extension depreciation) and interest have been rising rapidly in recent years. Figure 4 shows how NSW farms are increasingly reliant on debt and their capacity to service this is critical to business viability. Topp and Ryder (2024) report sustained growth in farm sector borrowing with aggregate lending increasing by 6% in 2023, following rises of 9% in 2022, 6% in 2021, and 6% in 2020. Farm debt is 40% higher in 2023 than it was in 2018, with higher interest rates also affecting farm affordability.

Figure 4: Total debt of NSW farms

The analysis presented in Appendix C does not account for these underlying financial pressures and the structural cost squeeze that continues to shape farm profitability across much of the sector.

5 Static modelling ignores real-world decisions

Appendix C appears to assume that irrigated farm production systems remain static, with output levels and water usage unchanged despite the likely rise in input costs. However, farmers adapt their production systems in response to financial pressure and sensitivity analysis on key inputs is important.

During low allocation years, when water is scarce or expensive, irrigators often reduce production, fallow land, switch to dryland alternatives or sell temporary water allocations to preserve cash flow. Adaptive management means that while gross margin per hectare in tight years may remain positive, the total gross margin will be reduced as the total hectares irrigated are reduced. However, in most cases the fixed costs that need to be covered do not change. This can place significant strain on cash flow during poor years, and a seemingly healthy gross margin can mask underlying financial stress if fixed costs are high and economies of scale are lost.

Volatility in the irrigation sector is influenced by highly variable water availability and the growing pressures associated with climate change. As shown in Figure 2, annual water use in the Murray–Darling Basin has fluctuated dramatically over the past 20 years from peaks of around 7,000 GL in some seasons to lows of approximately 1,000 GL. This level of variability highlights the uncertainty around water availability and makes long-term planning extremely difficult.

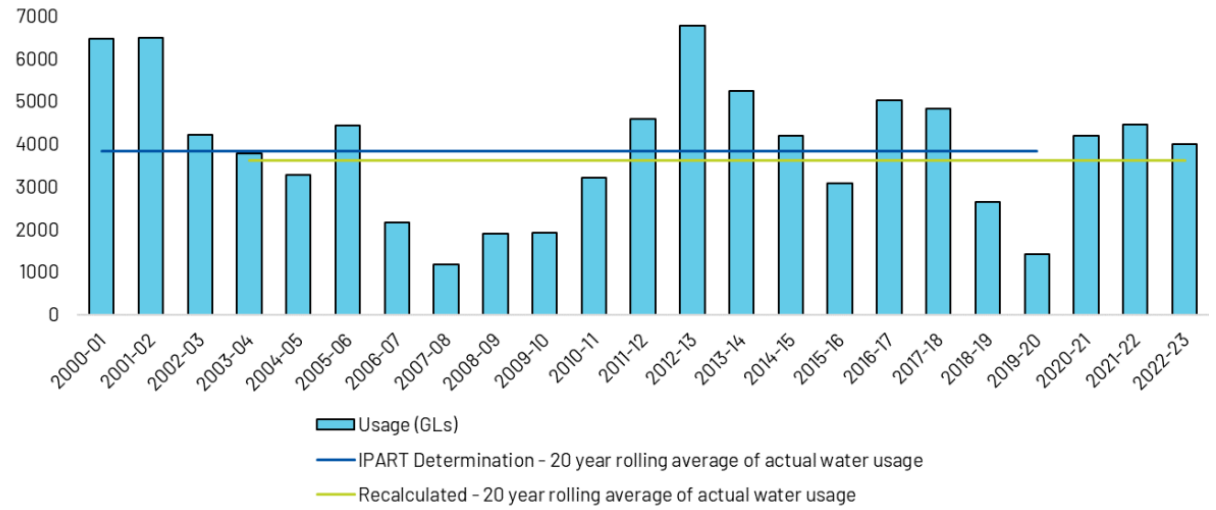


Figure 5: 20 year rolling average of actual water use - Murray Darling Basin Valleys. Source: WaterNSW, 2024b.

Farmers are sensitive to long-term cost trends and will adjust their behaviour in response to higher water prices. Farmers may choose to scale back production or exit the industry if water prices rise beyond critical viability thresholds (Zuo *et al*., 2015). Appendix C appears to assume that output levels remain constant even as rising costs could affect profitability and viability. This static modelling approach may overestimate the capacity of gross income to absorb fixed charges, particularly if higher water prices lead to changes in production decisions.

Affordability analysis should allow for dynamic farm responses to both seasonal and structural cost pressures, or at least qualify these responses through sensitivity analysis.

6 Cumulative and compounding financial pressures

While Appendix C examines the affordability of WAMC increases in isolation, irrigated farm businesses experience these changes as part of a much broader and compounding set of financial pressures. The proposed charges may appear modest when viewed alone. However, they are being introduced into an environment where multiple costs are rising simultaneously.

For example, in the Murray Valley, WaterNSW has proposed and continues to argue for significant price increases on both fixed and variable charges. IPART has endorsed real price increases materially above inflation for 2025-26. These cost increases are cumulative (not isolated) and come at a time when many irrigators are also facing higher input prices and debt servicing costs. Farm businesses often operate on narrow margins and costs are not absorbed in isolation. Each new fee adds to an already constrained system. The cumulative effect of these proposed charges and other impacts risk pushing some businesses to or beyond the threshold of viability. Affordability analysis could be enhanced by considering the full economic environment, not just the incremental cost under review.

7 Conclusion: a case for caution and broader evaluation

Appendix C of IPART's Draft Report presents a technically sound assessment of average farm-level gross margins under limited assumptions, suggesting that most irrigated farm businesses can absorb proposed price increases. However, this conclusion is based on a narrow view of farm viability that does not fully reflect the financial realities of the full range of businesses that are engaged in irrigated agriculture throughout New South Wales.

The analysis in Appendix C relies heavily on gross margin data aligned with the WaterNSW 2024 price submission Attachment 30 (WaterNSW, 2024a). However, as discussed in this document using gross margins alone excludes significant fixed costs such as labour, depreciation and financing and therefore is not a reliable measure of a business's ability to absorb new costs. While IPART's draft report notes that data limitations preclude a fully detailed analysis, the inclusion of such caveats does not, on its own, justify the use of simplified, average-based modelling as a stand-alone measure of affordability. Analysis could be enhanced by assessing the farm-level impact using representative case studies and farm-specific modelling (Sinnet *et al*, 2019).

The aim of this report is to show that IPART's findings should be interpreted with caution. The assumption that irrigated farm businesses in NSW can absorb these new charges may not hold under more realistic, risk-sensitive scenarios. A more robust assessment would account for full farm costs, income volatility, adaptive behaviours and cumulative financial burdens. All of these, if included in the analysis, are expected to significantly decrease the portrayed affordability of the proposed costs and would help inform decisions that ensure pricing increases do not unintentionally undermine the long-term viability of the irrigation sector.

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