

Government of Western Australia, Department of Fire and Emergency Services

Kimberley Floods State Recovery and Resilience Plan Mid-term Evaluation: Review of Technical Outcomes

Evaluation Report

Reference: Final Rev2

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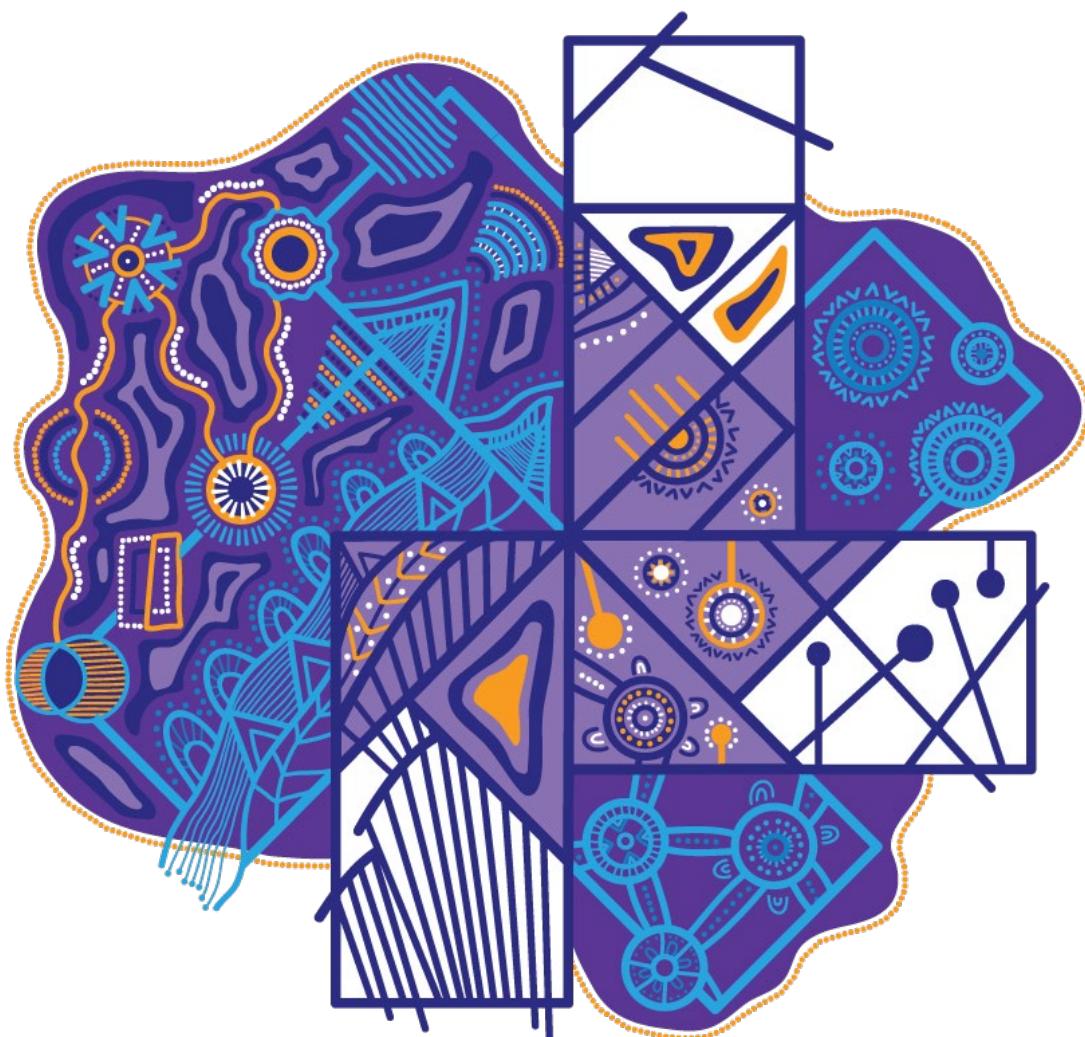
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Acknowledgement of Country

Arup & TSA Riley acknowledges the Traditional Owners across all lands, waters, and skies our firms may reach; we acknowledge their wisdom, resilience, and rich cultural heritage. We pay our respects to the Elders, past and present, and to all Aboriginal and Torres Strait Islander peoples.

We extend our acknowledgement to the Bunuba, Gooniyandi, Nyikina Mangala, Walmajarri, Ngarinyin-Wilinggin, Wangkatjunka and Yungngora peoples who experienced direct and indirect impacts from floodwaters in their homes and communities.

We recognise the ongoing journey of healing and reconciliation, and we commit to walking alongside First Nations peoples, to acknowledge their teachings and foster a future of unity and respect.



‘Continuing to Shift to shape an even better world’ original artwork by Tarni O’Shea of Gilimbaa and David Williams of Gilimbaa.

Acronyms

Acronym	Meaning
ACCO	Aboriginal Community Controlled Organisation
BOM	Bureau of Meteorology
DBCA	Department of Biodiversity, Conservation and Attractions
DFES	Department of Fire and Emergency Services
DRFA	Disaster Recovery Funding Arrangements
DoC	Department of Communities
DHW	Department of Housing and Works (formerly part of DoC) ¹
DPIRD	Department of Primary Industries and Regional Development
DPLH	Department of Planning Lands and Heritage
DWER	Department of Water and Environmental Regulation
EPAR	Essential Public Asset Reconstruction
ERS	Emergency Relief and Support (within DoC)
HV	High Voltage
KEQs	Key Evaluation Questions
MRWA	Main Roads Western Australia
NEMA	National Emergency Management Agency
SDWK	Shire of Derby West Kimberley
SES	State Emergency Services
WA	Western Australia

¹ In March 2025, the Western Australian Government announced machinery-of-government changes affecting the Department of Communities (DoC). From 1 July 2025, selected functions of the DoC were transferred to the newly established Department of Housing and Works (DHW), including components responsible for aspects of the Flood Recovery Program. While the programs and activities evaluated in this report were delivered prior to these changes, references to the two departments have been used as appropriate to reflect current government arrangements. Accordingly, references to “DoC” and “DHW” throughout this report reflect the departmental structure in place currently.

1. Executive Summary

1.1 Context and Purpose

In late December 2022, Ex-Tropical Cyclone Ellie caused record flooding across the Kimberley region of Western Australia, with over 1,500 residents directly affected and more than 240 homes severely damaged. Entire communities were displaced, critical transport and utility networks were disrupted, and the scale of recovery required highlighted both the region's vulnerability and the complexity of delivering coordinated disaster response and recovery in remote areas.

In response, the Western Australian Government developed the Kimberley Floods State Recovery and Resilience Plan (the Plan), which sets recovery goals across social, economic, environmental, and infrastructure domains. A range of programs were jointly funded under the Disaster Recovery Funding Arrangements (DRFA), alongside other recovery activities delivered by State agencies.

The Department of Fire and Emergency Services (DFES), as State Recovery Coordinator, commissioned this mid-term technical evaluation to assess how well these programs and activities are meeting their recovery goals. The evaluation scope focusses on the technical outcomes only and does not include the social and economic aspects of recovery, which will be addressed in the final evaluation. This mid-term evaluation covers:

- Eight DRFA-funded programs (valued at over \$300 million), including large-scale works such as the Infrastructure Betterment Program and Community Housing Repair and Rebuild and Repair of Damaged Community Roads Program.
- Additional activities under the Plan, such as technical flood mapping, river monitoring infrastructure repairs, and other environmental works, which were not delivered under a formal DRFA program structure.

The programs and plan activities evaluated are summarised in the table below.

Program	Budget (\$m)	Status
1. Clean-up Program	\$30m	Mostly Complete
2. Community Housing Repair and Rebuild and Repair of Community Access Roads Programs	\$96.45m	Mostly complete
3. Environment, Heritage, and Cultural Flexible Grants Program	\$4.3m	Partially complete
4. Homeowners Recovery and Resilience Grant	\$1.66m	Partially complete
5. Infrastructure Betterment Program	\$104.9m	Mostly complete
6. National, Conservation and Marine Parks Clean-up Program	\$5.12m	Mostly Complete
7. Temporary Accommodation Phases 1 and 2 Programs	\$ 62.76m	Mostly complete
8. Other technical works carried out under the Kimberley Floods State Recovery and Resilience Plan - Infrastructure and Built Environment Domain	N/A	Complete
9. Other technical works carried out under the Kimberley Floods State Recovery and Resilience Plan - Environment and Heritage Domain	N/A	Mostly complete

The purpose of the evaluation is to provide a transparent, evidence-based assessment of how recovery programs and activities under the Kimberley Floods State Recovery and Resilience Plan have performed to date, identify lessons and immediate considerations for those programs still in delivery, and to inform improvements for future disaster recovery planning.

1.2 Evaluation Approach

This mid-term technical evaluation was undertaken to provide a clear, evidence-based assessment of how recovery programs and activities under the Kimberley Floods State Recovery and Resilience Plan have performed to date. It focused on technical outcomes only and was guided by DFES's Key Evaluation Questions (KEQs).

Evaluation Framework

The evaluation framework combined a program logic approach with a structured scoring system to ensure consistent comparison across programs. The evaluation comprised the following elements:

- **Program Logic** – Developed with DFES, the evaluation logic mapped the funding programs to the goals within the Resilience Plan and intended outcomes across three domains of the Plan: People and Community; Infrastructure and Built Environment; and Environment and Heritage. This informed what data were collected, and which agencies were engaged.
- **Key Evaluation Questions (KEQs)** – 11 KEQs were grouped under five evaluation themes (Governance, Community Engagement, Effectiveness, Efficiency, and Implementation) developed by DFES across all evaluation spheres. Sub-questions were developed for each KEQ to guide document reviews and interviews.
- **Scoring Framework** – Each program was scored from 0–3 against each KEQ, with 3 representing the highest score and the criteria being fully satisfied. Scores were based on evidence triangulated across document review, stakeholder interviews, and site visits. Qualitative insights (e.g., stakeholder sentiment, case studies) were also recorded to add context. A workshop with the evaluation team in July 2025 validated scoring consistency and prioritised key findings for the mid-term report.
- **Consolidated Findings** – Program-level findings were aggregated to identify cross-cutting themes, recurring challenges, and strategic recommendations.

Data Collection and Engagement

Evaluation findings were based on a consolidated data set obtained from document reviews, stakeholder engagement, and site visits as follows:

- **Documents** – Over 100 documents were reviewed, including program plans, completion reports, engineering designs, flood modelling, and quality assurance records (Appendix **Error! Reference source not found.** lists all document / types of documents reviewed).
- **Stakeholder Engagement** – More than 40 stakeholders were involved in semi-structured interviews and focus groups, representing delivery agencies, local government, community representatives, and businesses.
- **Site Visits** – Field inspections were conducted at key infrastructure sites, such as the Fitzroy River Bridge, Temporary Accommodation Units, and flood-affected national parks.

Limitations

While extensive data collection and stakeholder interviews were undertaken, some limitations were encountered. These did not prevent the evaluation from forming a sound understanding of program performance or developing credible findings and recommendations.

- Not all requested documents were received for every program. Where data gaps existed, the evaluation team followed up with agencies and used stakeholder interviews or alternative sources to fill key gaps and triangulate findings.

- Social and economic outcomes are being evaluated separately and will be integrated with technical findings in the final evaluation to provide a complete view of recovery outcomes.
- This mid-term evaluation responds to agreed Key Evaluation Questions (KEQs) but is not a technical audit or compliance review of infrastructure assets.
- Some commentary reflects anecdotal or self-reported input from delivery agencies based on their operational experience. While valuable for understanding implementation, it was not always possible to independently verify this within the limits of the evaluation.
- Some personnel involved during the initial recovery phase had since left their roles. Interviews were conducted with current staff and responses cross-checked against documentation to ensure accuracy.
- Some programs remain in delivery (e.g., Non-Directly Allocated Betterment Works, groundwater bore repairs) and will be reassessed in the final evaluation.

1.3 Key Insights and Recommendations

Overall, the technical mid-term evaluation found that the recovery programs and activities under the Kimberley Floods State Recovery and Resilience Plan are performing well, with most programs meeting or exceeding their technical recovery objectives. Despite the significant logistical and resource challenges of operating in remote Kimberley conditions, the evaluation confirmed that recovery works have been largely well-governed, delivered effectively, and positively received by communities. This evaluation recognises the success of the technical delivery and positive infrastructure outcomes that have been achieved, within budgets and tight timeframes and under challenging delivery conditions.

While the evaluation confirms the success of many technical delivery outcomes, it also highlights that these achievements often relied on significant effort by agency personnel and teams working beyond their typical remit, frequently without additional or dedicated recovery resources. This reliance on goodwill and discretionary effort, while commendable, is not a sustainable model for future events. The evaluation indicates that, in several instances, recovery delivery came with hidden costs to agencies, including financial strain, staff workload pressures, and tension in community relationships. Without adjustments to current funding, resourcing, and governance arrangements, there may be reduced willingness or capacity for agencies to undertake similar delivery responsibilities in future large-scale recovery events.

Agencies have provided honest and constructive feedback that has highlighted consistency in experience and desired change across programs. These insights have been translated into practical recommendations within the main body of the report. The following strategic recommendations summarise the common system-level changes identified through the evaluation:

- **Clarify roles and responsibilities:** Establish expected roles and responsibilities for key agencies in event recovery at a policy level, so time is not lost negotiating these arrangements on a per-event basis.
- **Fund dedicated recovery resources:** Allocate funding for the appointment and upskilling of dedicated event-recovery personnel within delivery agencies, aligned to their defined roles. Relying on existing staff to manage recovery on top of business-as-usual responsibilities risks undermining standard service delivery and impacting staff wellbeing and retention.
- **Enable access to pre-approved funding:** Introduce a process allowing delivery agencies to hold and access pre-approved recovery funding during an event recovery phase, reducing delays and administrative burden associated with case-by-case approvals. This approach should not increase financial risk to the State — overall funding limits and accountability measures would remain in place, with only the timing and location of fund access adjusted to enable faster recovery.
- **Streamline claims processes:** Rationalise the DRFA funding claims process by transitioning toward a more practical, outcomes-based approach. The current process is widely viewed as administratively onerous, requiring documentation at a level of granularity that offers limited value and imposes unintended burdens, particularly in remote and Indigenous communities. For example, the requirement for three quotes in areas with only one service provider has forced some agencies to act against their own local or Indigenous procurement policies.

These recommendations are presented to ensure that delivery success is appropriately balanced with system improvements needed. While the technical recovery outcomes are commendable, many of the challenges experienced — particularly those affecting agency capacity, staff wellbeing, and administrative efficiency — are not visible in the built infrastructure but continue to have impacts well beyond physical project completion. Addressing these systemic issues is critical to sustaining future recovery capability.

Overall Performance

- **Strong Performance in Large Programs** – Large programs, which we define as high-investment and structured programs over \$10 million, such as the Infrastructure Betterment Program and Community Housing Program consistently performed well on governance, effectiveness, and efficiency, benefiting from clear delivery models, strong inter-agency coordination, and higher levels of resourcing and political visibility.
- **Strong to Moderate Performance in Smaller Programs** – Small programs, which we define as lower-investment in more targeted areas less than \$10 million, such as the Environment & Heritage Domain Program performed well but with mixed results, reflecting limited resources, ad hoc governance arrangements, or ongoing projects.
- **Community Engagement Varied** – Cultural responsiveness and workforce participation were strong in programs like the National Parks Clean-up and Fitzroy Bridge Betterment Works, but sustained or diverse community engagement was less consistent in smaller programs. It is noted that there are other programs which focus on this aspect, but these fall outside the scope of the Technical Evaluation, for example the Aboriginal and Local Business Participation in Recovery Program. Generally, programs supported by local, on-ground community engagement also performed stronger than those where program support was provided remotely, or with only intermittent local in-person engagement
- **Status of Programs** – Most programs are complete or well progressed. Ongoing activities include the Environment, Heritage, and Cultural Flexible Grants Program, Non-Directly Allocated Betterment Works and some technical resilience works (e.g., groundwater bore remediation), which may be assessed in subsequent evaluations.

Performance by Evaluation Theme

The evaluation themes provide a structured view of performance across all programs:

- **Governance** – Generally strong, especially in high-investment programs where alliance or structured delivery models supported clear roles, evidence-based design, and rapid decision-making, however these did have to be established within the recovery timeframes. Some programs faced challenges with DRFA documentation requirements and asset ownership clarity.
- **Community Engagement** – Engagement was strongest where cultural sensitivity and workforce participation were intentionally embedded (e.g., Fitzroy Bridge Alliance, Derby Hostel). However, smaller programs often relied on informal networks, limiting input from less-connected groups.
- **Effectiveness** – Recovery objectives were largely achieved, with critical infrastructure restored ahead of schedule and betterment works improving resilience to future floods.
- **Efficiency** – Larger programs delivered works quickly, supported by accelerated procurement and alliance structures. Smaller programs faced delays due to limited contractor availability, complex approval processes, or wet-season constraints.
- **Implementation** – Quality control and compliance with technical standards were generally strong. MRWA-led programs demonstrated effective feedback loops, but learning processes were less consistent elsewhere.

Performance by Program

The following table summarises the program-level scores, providing an at-a-glance view of performance against the five evaluation themes. For further information on the scoring methodology, refer to Section 3 of the report.

Program	Status	Governance	Community engagement	Effectiveness	Efficiency	Implementation
Clean-up Program	Mostly Complete	2- Partially satisfied	3- Fully satisfied	3- Fully satisfied	0-N/A	2- Partially satisfied
Community Housing Repair and Rebuild and Repair of Community Access Roads Programs	Mostly complete	3- Fully satisfied	3- Fully satisfied	3- Fully satisfied	3- Fully satisfied	2- Partially satisfied
Environment, Heritage, and Cultural Flexible Grants Program	Partially complete	2- Partially satisfied	1-Not Met*	2- Partially satisfied	2- Partially satisfied	0-N/A
Homeowners Recovery and Resilience Grant	Partially complete	3- Fully satisfied	2- Partially satisfied	2- Partially satisfied	1-Not Met*	2- Partially satisfied
Infrastructure Betterment Program	Mostly complete	3- Fully satisfied	2- Partially satisfied	3- Fully satisfied	3- Fully satisfied	3- Fully satisfied
National, Conservation and Marine Parks Clean-up Program	Mostly Complete	3- Fully satisfied				
Temporary Accommodation Phases 1 and 2 Programs	Mostly complete	3- Fully satisfied				
Other technical activities and initiatives carried out under the State Recovery and Resilience Plan: Infrastructure and Built Environment Domain	Complete	2- Partially satisfied	2- Partially satisfied	3- Fully satisfied	2- Partially satisfied	2- Partially satisfied
Other technical activities and initiatives carried out under the State Recovery and Resilience Plan: Environment and Heritage Domain	Mostly complete	2- Partially satisfied	2- Partially satisfied	2- Partially satisfied	0-N/A	2- Partially satisfied

* - denotes the program was ongoing at the time of the evaluation so there is some potential for improved project outcomes and thereby alteration to the scoring in the final evaluation.

Key insights and Recommendations

The mid-term evaluation suggests that the recovery effort has generally performed well, with larger, well-structured programs delivering the strongest outcomes. There do remain opportunities for improvement and key insights and forward-looking recommendations are summarised below.

Key Insights

- Strong Performance in High-Investment Programs** – Structured delivery models enabled rapid mobilisation, clear governance, and effective inter-agency coordination. This enabled delivery ahead of schedule, with significant positive impact on the local community and economy.
- Mixed Results in Smaller Programs** – Limited resources, ad hoc governance, and incomplete data (e.g., flood modelling) constrained performance. However, targeted community partnerships (e.g., National Parks Clean-up) achieved strong local outcomes despite smaller budgets.
- Community Benefits Beyond Engagement** – Local workforce participation and culturally sensitive delivery generated good local support for projects and subsequent social benefits, but these were mostly short-term, with limited ability to sustain local employment or to translate benefits to longer-term economic development, noting there are separate Programs being delivered which focus on this, but fall

outside the scope of this Technical Evaluation. In some cases, gaps in responsibility hindered outcomes – for example, unresolved management of unsealed community access roads within communities continues to affect resident mobility and access.

- **Integration of Local Knowledge into Investment Prioritisation** – Community feedback highlighted the need to better integrate local knowledge into investment decisions.
- **Administrative and Data Gaps** – The DRFA claims process was identified as a major administrative burden, delaying reimbursements for agencies, community groups, and businesses – in some instances for several years. The standardised DRFA process does not suit all program types; for example, the requirements were not well aligned with the flexible delivery model of the Environment, Heritage, and Cultural Flexible Grants Program. Additionally, many agencies lacked up-to-date baseline asset or condition data, complicating compliance and slowing decision-making.
- **Opportunities for Long-Term Resilience** – While resilience was improved through government-led infrastructure upgrades, there remain system-wide opportunities to embed resilience more fully. Flood modelling used for land-use planning remains outdated in many areas, and mechanisms for knowledge sharing between agencies are limited. Uptake of betterment funding by homeowners was reportedly low, due to financial barriers. Many community members also reported receiving little or no warning ahead of the flood, pointing to the need for improved early warning systems and communication strategies, particularly in remote areas.

Recommendations

Immediate Considerations for Ongoing Programs

- Increase support to manage effective processing and close out of existing claims.
- Upskill delivery agencies (in-person learning sessions, online webinars delivered by DFES etc.) on how to fill out and complete reimbursement claims.
- Share the results of this evaluation and other lessons learned with agencies involved with ongoing programs.

Priorities for the Final Evaluation (2026)

- Address evidence gaps through targeted document reviews and follow-up interviews, particularly for programs still in progress.
- Confirm if and how mid-term recommendations have influenced ongoing works.
- Triangulate insights across technical, social, and economic spheres to validate findings.

Strategic Recommendations for Future Recoveries

- Establish clear roles and responsibilities at a policy level for agency response and recovery functions, so that time is not lost negotiating responsibilities on a per-event basis.
- Create a centralised data-sharing platform with the necessary authorisations to enable access to asset information across agencies and support coordinated decision-making during recovery.
- Adopt structured delivery models for large-scale works, building on the demonstrated success of the Fitzroy Bridge Alliance.
- Enhance engagement with local community groups by:
 - Appointing a Community Recovery Officer and/or Cultural Navigator early in the recovery process.
 - Establishing a local business hub to centralise procurement and coordinate constrained resources within remote or disaster-affected areas.

- Supporting Local Emergency Management Committee between events, through local Councils, to embed lessons learned, improve preparedness, and assist with coordination for future response and recovery activities—particularly in high-risk communities.
- Improve coordination and perceived consistency in smaller programs by bundling related initiatives where feasible, embedding targeted engagement strategies, or improving communication of program intent and structure. This would help smaller programs benefit from the efficiencies and strategic clarity observed in larger projects and reduce the impression of ad hoc delivery.
- Streamline DRFA/NEMA processes by providing standardised templates, early guidance, and transitioning to a more outcomes-based approach to claims documentation, thereby reducing administrative burden.
- Tailor claims processes to program scale and complexity, recognising that requirements for a government-led infrastructure project may not be appropriate for smaller community-run initiatives.
- Enable delivery agencies to manage pre-approved budgets to reduce delays in recovery caused by approvals, particularly in early-stage activities such as clean-up and temporary accommodation.
- Develop a pre-agreed cross-agency framework that outlines lead and support roles for key recovery functions such as infrastructure, housing, and data coordination, to support faster more coordinated recovery.
- Invest in systems readiness, including regularly updated asset registers, pre-qualified contractor panels, and surge procurement mechanisms to improve mobilisation capacity.
- Position recovery as a vehicle for long-term development, embedding workforce participation, skills development, and regional economic opportunities into recovery program design.

Next Steps

- Progress of ongoing works – DFES and agencies to consider mid-term recommendations as activities continue through 2025.
- Completion of final evaluation – scheduled for 2027, providing a consolidated assessment of all programs, including remaining works and integrated social, economic, and technical findings.