

We did it our way: Regional collaboration for catchment scale impact by Resilient Rivers South East Queensland

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Key points

- Regional coordination and collaboration through Resilient Rivers South East Queensland enables catchment management beyond fragmented, site-based approaches.
- The South East Queensland Waterways and Wetlands Investment Strategy improves prioritisation, transparency and cross-agency alignment.
- The RRSEQ model provides a practical approach for achieving regional-scale resilience in rapidly growing regions.

Abstract

Resilient Rivers South East Queensland (RRSEQ) is a regionally coordinated catchment management partnership established in response to the severe flooding events of 2011 and 2013, which highlighted the interconnected vulnerabilities of South East Queensland's waterways, communities and economies. Covering eighteen catchments across approximately 22,700 km², the program recognises that meaningful improvements to river health, flood resilience and ecosystem services cannot be achieved through fragmented, localised action alone.

Led by the Council of Mayors (SEQ) in partnership with the Queensland Government, water utilities, catchment organisations, traditional owners and community groups, RRSEQ has evolved from a water quality-focused initiative into a whole-of-system, values-based program. This approach integrates biodiversity, cultural values, social amenity, water and food security, and climate resilience alongside biophysical outcomes. Central to the program is the South East Queensland Waterways and Wetlands Investment Strategy, which provides a transparent governance and investment framework to prioritise actions that protect and enhance ecosystem services at scale.

RRSEQ demonstrates how regional collaboration can unlock more effective investment, align policy and planning, and deliver on ground outcomes across multiple local government areas while supporting community stewardship and First Nations engagement. With more than a decade of delivery and increasing investment through initiatives such as the South East Queensland City Deal, RRSEQ offers a practical model for stream and catchment managers seeking to move beyond project-by-project delivery toward enduring, landscape-scale resilience. This paper reflects on lessons learned, governance innovations and future opportunities for collaborative stream management in rapidly growing regions.

Keywords

Catchment management, governance, resilience, investment strategy, partnerships

Introduction

South East Queensland (SEQ) is one of Australia's fastest-growing regions, with 71 percent of Queensland's population concentrated within 1.3 percent of its land area (DSDILGP, 2023). Shaped by eighteen major catchments draining from the Great Dividing Range to Moreton Bay, the region's waterways and wetlands are central to its environmental health, economic productivity and community wellbeing. These systems have sustained the cultures and livelihoods of First Nations peoples for over

60,000 years and continue to underpin contemporary uses including water supply, recreation, tourism and agriculture.

Extensive modification since European settlement, including land clearing, urbanisation, dredging and industrial activity, has significantly altered these systems (Kemp et al., 2015). Changes to hydrology, increased sediment and nutrient loads, declining biodiversity and reduced ecosystem function have diminished the resilience of SEQ's waterways and the services they provide.

Covering over 22,700 km² and spanning twelve local government areas, SEQ also faces ongoing challenges from fragmented governance across jurisdictions. Historically, waterway management has been delivered through localised policy and planning arrangements, with limited capacity to address cumulative pressures at a catchment scale. The consequences of this approach were exposed during the 2011 and 2013 flood events, when upstream sediment mobilisation nearly shut down the Mt Crosby Water Treatment Plant, highlighting the systemic risks associated with disconnected management.

In response, Resilient Rivers SEQ (RRSEQ) was established to enable coordinated, cross-jurisdictional action across the region's catchments. RRSEQ is led by the Council of Mayors (SEQ) (CoMSEQ), in partnership with the Australian and Queensland governments, local councils, water utilities, catchment organisations, Traditional Owners, and community groups. Since its inception in 2014, the program has evolved from a focus on site-level water quality improvement to a whole-of-system, values-based approach that integrates environmental, social, cultural and economic outcomes. Central to this shift is the South East Queensland Waterways and Wetlands Investment Strategy (SWWIS), which provides a structured framework for governance, prioritisation and investment at a regional scale (CoMSEQ, 2024).

This paper examines the development and implementation of this regional model, with a focus on its governance arrangements and investment framework. It demonstrates how coordinated approaches can overcome fragmentation, enable landscape-scale outcomes, and support more effective allocation of resources. The paper also reflects on key lessons learned and considers the applicability of the RRSEQ model to other rapidly growing regions facing complex catchment management challenges.

Program evolution and strategic drivers

RRSEQ was launched through the *South East Queensland Resilient Rivers Initiative Regional Strategy 2015-2025* (CoMSEQ, 2015), which provided a coordinated framework for improving waterway health across the region and enabled the delivery of more than \$8.3 million in priority works. While the initiative initially focused on site-level water quality improvement projects, it demonstrated how coordinated and targeted investment can deliver tangible on-ground outcomes, and additional funding enabled the opportunity to broaden this approach to address system-wide challenges at a regional scale.

RRSEQ has evolved into a whole-of-system, values-based approach that recognises waterways as interconnected social, cultural, environmental and economic assets. This shift reflects an increased understanding that effective catchment management requires integration across scales, sectors and jurisdictions, and cannot be achieved through isolated interventions alone. The program now explicitly considers biodiversity, cultural values, social amenity, water and food security, and climate resilience alongside biophysical outcomes, aligning with the Whole-of-System, Values-Based Framework (DETSI, 2022).

The expansion of RRSEQ has been strongly influenced by broader regional drivers, particularly the SEQ City Deal, which represents a partnership between the Australian Government, Queensland Government and CoMSEQ, and includes a \$40 million investment in RRSEQ through to 2028. This investment has enabled the development and implementation of larger-scale initiatives and strengthened the program's capacity to deliver consistent outcomes across catchments.

Governance and investment framework

The SWWIS provides the framework through which RRSEQ delivers coordinated, regional catchment management (CoMSEQ, 2024). It aligns regional objectives with project-level delivery, shifting investment from isolated interventions to strategically aligned actions across catchments. The SWWIS was developed through a structured planning and engagement process, including consultation with government agencies, councils, utilities and community representatives, alongside a review of existing catchment plans and policies. This was complemented by culturally appropriate engagement with First Nations stakeholders and a series of workshops to define the program vision, objectives and governance arrangements.

RRSEQ governance is structured across the Resilient Rivers Taskforce (RRT), Portfolio Control Group (PCG), and Sub-Regional Working Groups (SRWG), supported by a Program Management Office (PMO) (Figure 1). RRT provides strategic direction and decision-making, PCG oversees investment and prioritisation, SRWG coordinates delivery across catchments, and the PMO supports implementation and program management. This model supports alignment between regional policy, planning and investment decisions while enabling the delivery of locally appropriate interventions.

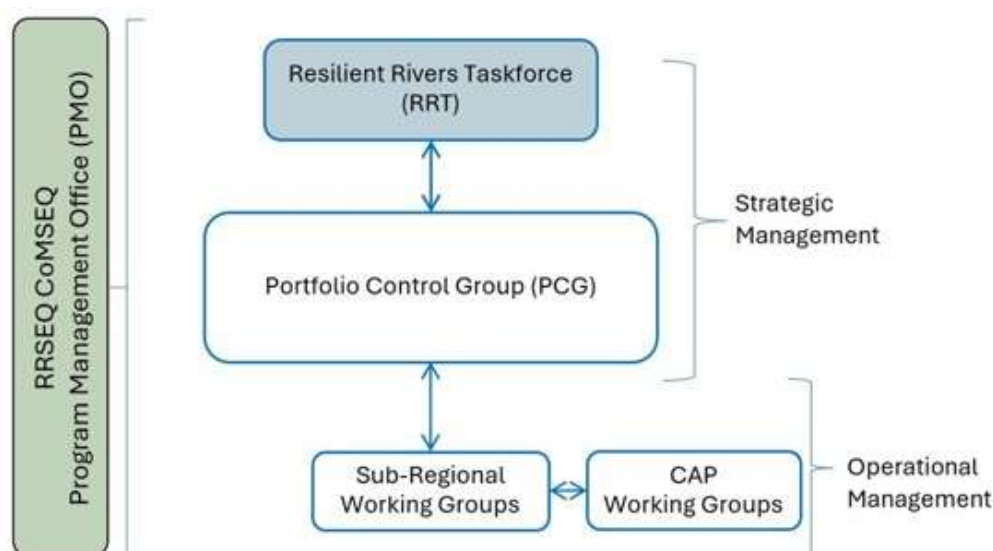


Figure 1 RRSEQ governance group structure

The governance groups guide investment decisions by initially confirming alignment with the six strategic focus areas of the SWWIS (CoMSEQ, 2024). Projects are then prioritised based on a Multi-Criteria Analysis (MCA) to assess environmental, social, economic and delivery outcomes (Figure 2). This approach allows projects of diverse scopes and objectives to be compared consistently, and ensures investment is directed to projects with the greatest overall benefit. The integration of governance and investment has improved coordination across agencies, reduced duplication and enabled a shift toward larger, more integrated projects delivered across catchments.

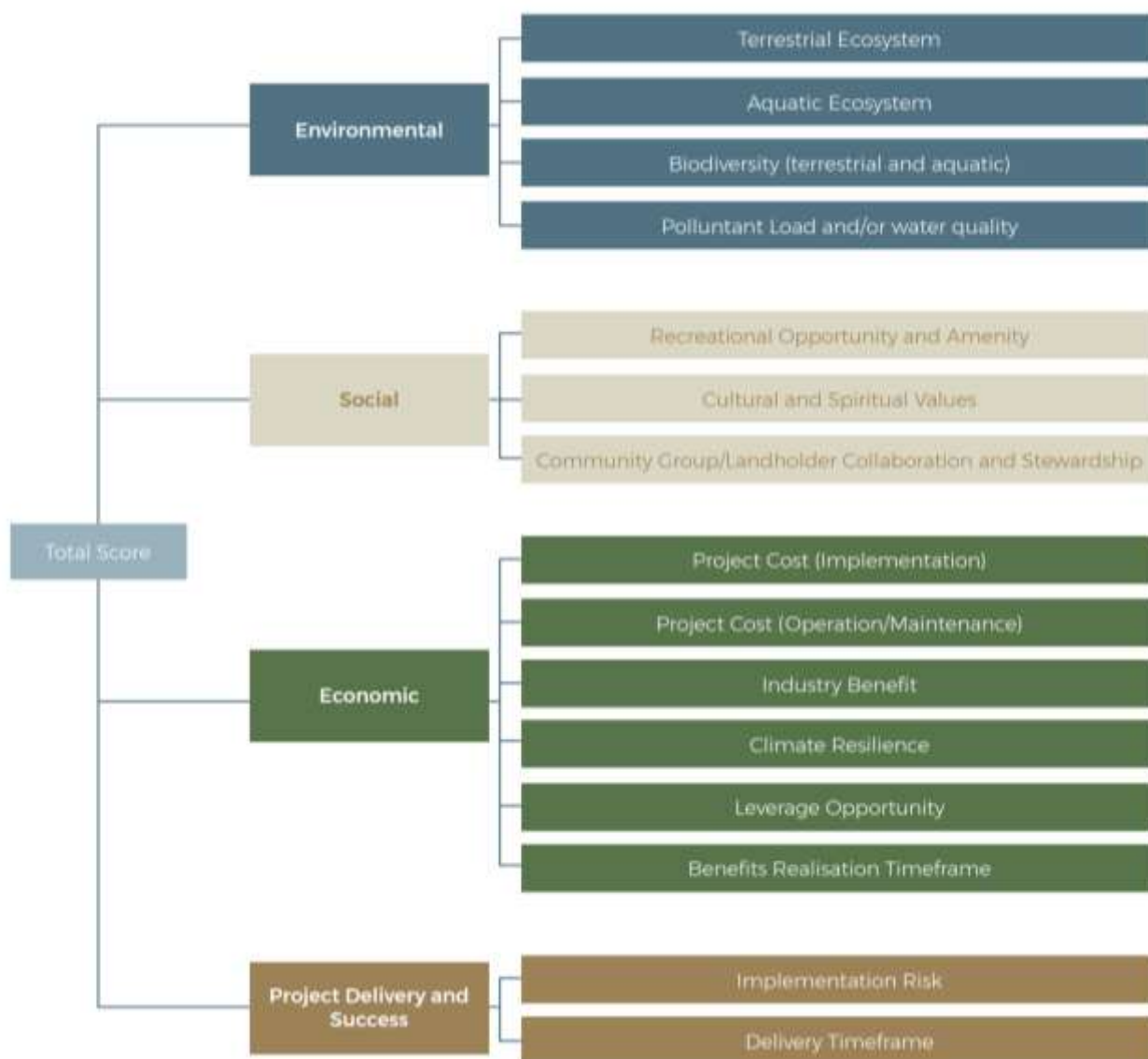


Figure 2 Criteria included in the Multi-Criteria Analysis (MCA) for project investment decision-making

Key initiatives and outcomes

Catchment Action Plans

Catchment Action Plans (CAPs) will provide the primary link between the SWWIS and on-ground delivery. They identify priority actions across whole catchments, allowing investment to be directed toward locations and interventions with the greatest overall impact. CAPs bring together existing data, local knowledge and regional priorities into a single planning framework, supporting consistency in how projects are identified and developed across SEQ. They also align with broader policy and planning processes, enabling catchment management to be integrated with land use planning, infrastructure investment and environmental programs.

Catchment coordinators

A defining feature of the RRSEQ model is the use of catchment coordinators embedded within local governments to facilitate cross-institutional collaboration and community engagement. Six dedicated catchment coordinators work across the region, with some roles sitting across multiple councils, improving project delivery and coordination across jurisdictions, landholders and governance systems.

On-ground implementation

RRSEQ supports the delivery of coordinated works across priority reaches and sub-catchments, including bank stabilisation, riparian planting, wetland rehabilitation and removal of barriers to connectivity (RRSEQ, 2025) (Figure 3). These works are planned and implemented across multiple sites within a catchment to address sediment sources, restore habitat and improve connectivity in a more systematic way than isolated projects.

Notably, RRSEQ has implemented the first coordinated regional environmental DNA (eDNA) monitoring program in SEQ in collaboration with Wildlife Queensland, providing a complementary tool for assessing biodiversity response at scale (Figure 4). eDNA sampling is used to detect the presence of key aquatic species across multiple sites, offering a cost-effective method for monitoring where traditional survey approaches are limited by access, time or detectability.

RRSEQ has supported targeted capability building across the region, including training in fluvial geomorphology to improve understanding of river processes and inform on-ground decision-making, alongside one of the largest fish passage workshops delivered in Queensland in recent history (Figure 5 strengthening practitioner knowledge of connectivity requirements and design considerations for aquatic ecosystems.



Figure 3 Community planting day at Shorelands Drive Reserve, Withcott in collaboration with Lockyer Valley Regional Council, Queensland Trust for Nature and Withcott Scouts for the Bunyas to Border project



Figure 4 Noosa and Sunshine Coast Council officers and the Kabi Kabi Land and Sea Rangers supporting eDNA surveys



Figure 5 Attendees of a 2-day Fish Passage & Waterway Barrier Works workshop, the largest delivered in Queensland in recent years

Lessons learned and applicability to other regions

The delivery of RRSEQ highlights that effective catchment management at scale depends as much on governance and coordination as on physical interventions. A key lesson is that regional governance structures, supported by clearly defined roles and decision-making processes, are essential to align priorities across jurisdictions and sustain long-term delivery. The integration of governance with a structured investment framework has improved transparency and consistency in decision-making. Early agreement on values, criteria and priorities is critical to ensure tools such as MCA can be applied effectively in a multi-stakeholder context. This approach also strengthens alignment with policy and planning processes, enabling catchment management to be integrated with broader regional initiatives and funding programs.

Experience from implementation shows that translating regional strategy into on-ground outcomes requires dedicated coordination at the local level. Embedded roles, such as catchment coordinators, play a critical role in facilitating collaboration between agencies, landholders and delivery partners, and in maintaining continuity across projects and funding cycles. The program also demonstrates that achieving regional-scale outcomes requires sustained investment over time. Short-term funding limits the ability to address cumulative impacts, while longer-term commitments enable larger, more integrated projects and more consistent outcomes across catchments.

The RRSEQ model is applicable to other rapidly growing regions facing complex catchment management challenges, particularly where governance, funding and delivery responsibilities are distributed across multiple organisations. The combination of regional coordination, transparent investment processes and locally embedded delivery mechanisms provides a practical framework for moving beyond project-based approaches toward more integrated, region-scale management.

Conclusions

RRSEQ demonstrates how regional coordination can improve stream and catchment management in complex, rapidly growing regions. By aligning governance, investment and delivery through the SWWIS, the program has enabled more strategic prioritisation, reduced fragmentation and supported delivery at a scale consistent with catchment processes. The integration of a values-based approach with a transparent investment framework has strengthened multi-outcome delivery and improved alignment with policy and funding priorities. While challenges remain in sustaining coordination and long-term investment, the RRSEQ model provides a practical, transferable approach for moving beyond project-based delivery toward coordinated, regional-scale management capable of delivering enduring outcomes.

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