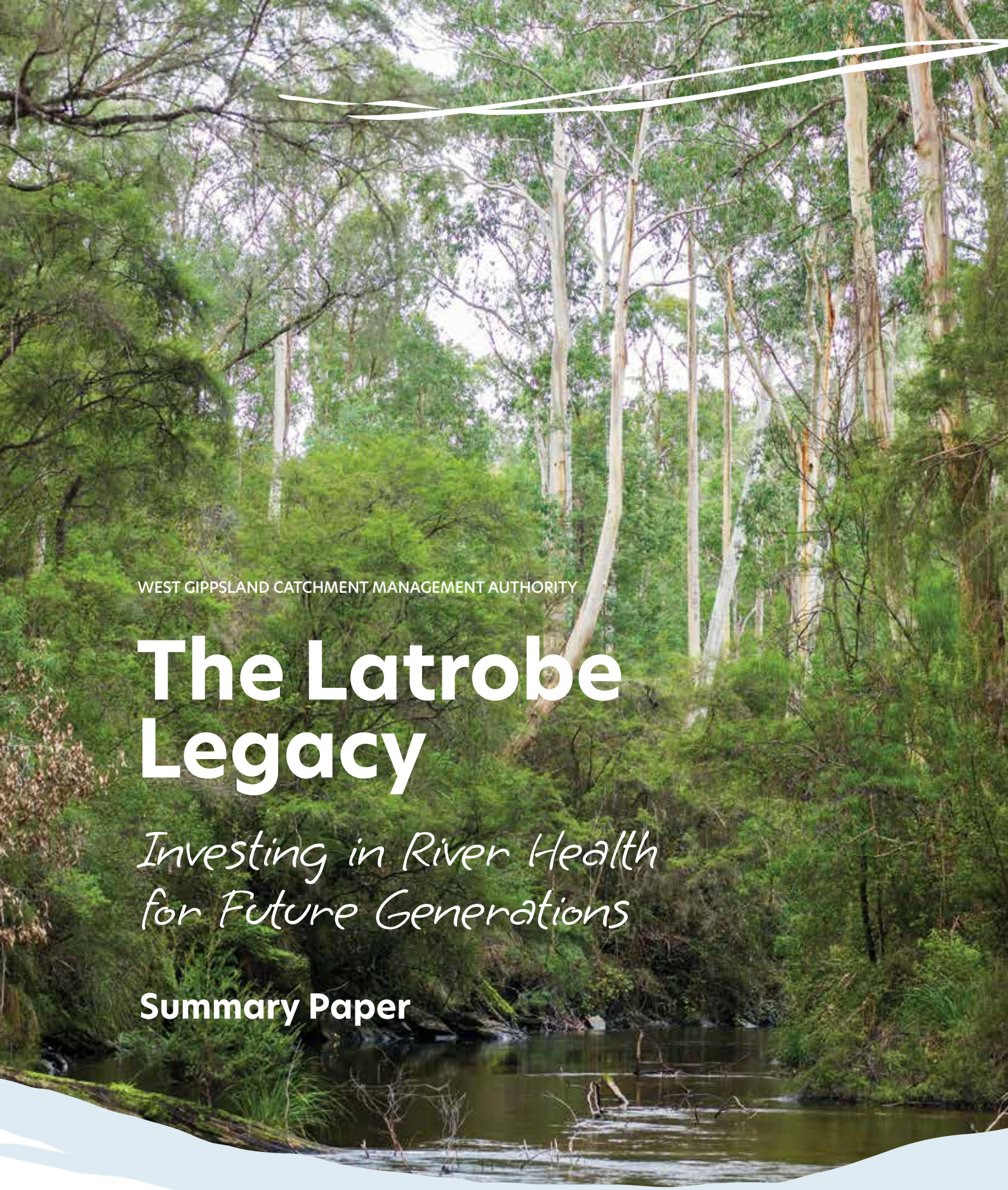


WEST GIPPSLAND CATCHMENT MANAGEMENT AUTHORITY

The Latrobe Legacy

Investing in River Health for Future Generations

Summary Paper

West Gippsland
Catchment Management Authority

A once-in-a-generation opportunity

Water is the life source of Gippsland's landscapes, ecosystems, communities and economy. Nowhere is this more evident than in the Latrobe River (Durt'Yowan) system where it provides water for towns, agriculture, industry, supports recreation and tourism, while supporting ecosystem and cultural values that sustain regional wellbeing.

As the Latrobe Valley transitions to a renewable energy future, the closure and rehabilitation of three large brown coal mines are not only reshaping the region's economy but also how water moves through the landscape, how rivers function, and how communities, industries and ecosystems are sustained.

The diversion of more than 2,200 GL of water to fill mine voids, increasing water demand and climate change will have lasting impacts on rivers, wetlands, floodplains and the Gippsland Lakes. Waterways are not separate from the energy transition, they are central to it.

The transition presents significant risks but also a once-in-a-generation opportunity to transform the Latrobe from a working river into a river that works again. An opportunity to address legacy impacts, restore river processes, recover water for the environment and improve the health of the Latrobe River system. Decisions made during mine rehabilitation, infrastructure planning, and water reallocation will shape the river's future and the region's prosperity for decades to come.

Investing in river health is, therefore, both an environmental necessity and a smart economic choice, helping avoid escalating future costs of declining waterway condition, reduced water security, biodiversity loss and water quality impacts.

Ultimately, this is about the legacy we leave for future generations. It is about ensuring that the benefits of the energy transition extend beyond the rehabilitation of mine sites to the restoration and long-term health of the waterways, wetlands and communities that define Gippsland.



Action is needed now

Without intervention the health and resilience of the Latrobe River system and Gippsland Lakes will continue to decline, leading to:

- Water resource stress and loss of ecologically important flows
- Salinity intrusion and declining estuary condition
- Declining condition of internationally significant wetlands
- Reduced native fish spawning, migration and recruitment
- Long-term loss of freshwater-dependent habitat and biodiversity
- Declining riparian vegetation and habitat quality
- Altered geomorphology, riverbank erosion and land-use conflicts
- Declining water quality

These challenges are individually concerning, but collectively catastrophic as they fundamentally change the cultural, social, environment and economic fabric that make Gippsland unique; a landscape with over 60,000 years of cultural heritage, a vibrant region to live, work and play, an agricultural food bowl for the nation, an environment renowned and loved for its diverse landscapes.

CASE STUDY

Water Reconnection Brings Grayling Back to the Latrobe

In 2015, Australian grayling were recorded spawning in the Latrobe River for the first time. This nationally vulnerable species relies on precise flow cues and clean gravel bed; conditions that had been largely absent due to historic river straightening, habitat loss and accelerated erosion.

Targeted environmental water releases delivered in autumn 2015 provided the spawning trigger the species needed, while the recent reconnection of a 1.2 kilometre meander restored slower-flowing habitat and exposed gravel beds essential for egg deposition. This moment was the culmination of more than a decade of river rehabilitation guided by the West Gippsland CMA, including bank stabilisation, revegetation, and meander reinstatement.

The discovery of grayling eggs confirmed that environmental flows and physical habitat restoration work together to rebuild ecological function. It demonstrated that vulnerable native fish can return when flow cues, habitat complexity and connectivity are restored. The outcome stands as a landmark example of environmental water driving measurable, high value ecological recovery in the Latrobe system.



What does the Latrobe River system need?

The Latrobe Legacy sets clear long-term goals, measurable objectives and a comprehensive suite of management options. Three key learnings emerged throughout the strategy development:

1. **The River system needs more water.** Without safeguarding existing flows and addressing the large environmental water deficit, the health of the system will decline over the long-term. This means locking in opportunities that will emerge throughout the transition and post-mine rehabilitation.

2. **Constraints to environmental water delivery, such as physical barriers, access issues or limits on how water can be released need to be addressed** to maximise the value of the environmental water reserve. Further work is being progressed by the WGCMA to identify and prioritise key constraints, mostly relating to the inundation of floodplains on private land.

3. There is an enormous backlog of **river, wetland and floodplain initiatives that require investment to be scaled up** over the short and long-term. The WGCMA has a 25-year history of successfully implementing river, wetland and floodplain restoration projects. But business as usual funding is inadequate to meet the scale of the challenge. Investment needs to be accelerated to build the system resilience required for the River to survive the impending challenges.



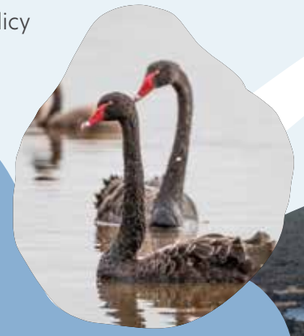
Water quality improvement programs such as agricultural best management practices, wetlands on drains and riparian and gully erosion programs.

Improving fish passage in the mid-Latrobe River and Tyers River by removing redundant infrstructure or establishment of fish ladders.

Geomorphic restoration including erosion management and meander reinstatements to re-establish natural flow paths of the river.

Addressing operating constraints to allow the delivery of environmental flow recommendations. Management options include landholder agreements, incentives and policy instruments.

Upgrading watering infrastructure for the Lower Latrobe wetlands including a new inlet structure for Sale Common from the Thomson River.



Floodplain wetland restoration to restore the natural ecological functions and biodiversity.





Recovering more water for the environment to address flow stress, support native fish migration and breeding, improve instream and riparian habitat and wetland watering.

Native fish stocking including key species such as Australian bass and Estuary perch. Also supported by Carp control programs.

Waterway restoration and protection including restoring habitat along the river and floodplain, controlling weeds, fencing waterways, planting native vegetation, creating biolinks throughout the catchment.

Implementing The Latrobe Legacy

Implementation will occur across three broad phases that have been pragmatically aligned with proposed mine rehabilitation timeframes.

PHASE 1

Accelerate

(2026-2030)

Focus on progressing priority actions, enabling works and build on existing momentum:

- Complete key infrastructure upgrades (Lower Latrobe Wetlands)
- Progress priority water recovery commitments
- Identify and address critical constraints to environmental flows
- Establish governance, partnerships and monitoring systems
- Develop detailed business cases for high-priority action



PHASE 2

Scale and integrate

(2030-2045)

Expand delivery and integrate actions across the system to achieve broader outcomes:

- Scale up riparian and floodplain restoration
- Implement priority geomorphic interventions
- Expand environmental water delivery and optimisation
- Integrate water recovery outcomes into operational regimes



PHASE 3

Consolidate & secure

(2045-2065)

Embed and maintain outcomes while adapting management to ensure long-term resilience of the system:

- Lock in post-mine rehabilitation water recovery opportunities
- Maintain the benefits and outcomes achieved
- Adapt management in response to changes in climate and hydrology
- Respond to emerging risks (e.g. salinity thresholds, new water users)
- Ensure long term resilience of the river system



Implementation will require a collective partnership effort. The WGCMA prides itself on its partnership work with Traditional Owners, community groups, landholders, industry and Government agencies and all proposed actions will be delivered in line with these partnership principles.

How much will the strategy cost to deliver?

Delivery of the strategy will require significant and sustained investment over several decades. Funding will need to be progressively secured from a range of sources, including government programs, broader water sector investment, mine rehabilitation and transition-related funding opportunities, offsets, infrastructure investment and existing WGCMA programs.

This budget should be treated as a starting point for priority investment needs. The full scale and cost of action required is far greater than the priorities listed here. Multiple large scale projects are yet to be costed and no costs have been attributed to water recovery for the environment. Priorities and associated costs will continue to be updated and refined as information improves over time.

***Table 1. Indicative program budget for each implementation phase (all costs are in 2026* dollars).**

Theme	Project	Estimate $
Phase 1 - Accelerate (2026-2030)		
Priority projects	McArdle's Gap inlet structure for Sale Common	$2m
	Improving fish passage in the Tyers River	$4m
	Addressing constraints to environmental water delivery	$15m[1]
Ongoing catchment initiatives	Ecological restoration - eg. riparian, floodplain and wetland restoration projects	$1m/yr
	Geomorphic restoration - eg. meanders, bank erosion projects	$0.5m/yr
	Water quality improvement - eg. agricultural BMPS	$0.5m/yr
Foundational activities	Eg. Policy, R&D, MERI	$0.5m/yr
SUB-TOTAL		**$33.5m**
Phase 2 - Scale and Integrate (2030-2045)		
Ongoing catchment initiatives	Ecological restoration - eg. riparian, floodplain and wetland restoration projects	$2m/yr
	Geomorphic restoration - eg. meanders, bank erosion projects	$1m/yr
	Water quality improvement - eg. agricultural BMPS	$1m/yr
Foundational activities	Eg. Policy, R&D, MERI	$0.5m/yr
SUB-TOTAL		**$67.5m**
Phase 3 - Consolidate and secure (2045-2065)		
Priority projects	Improving fish passage in the mid-Latrobe (Yallourn and Narracan)	Uncosted
	Addressing constraints to environmental water delivery (Moondarra & Blue Rock)	Uncosted
	Moe Drain water quality improvement project	Uncosted
Ongoing catchment initiatives	Ecological restoration - eg. riparian, floodplain and wetland restoration projects	$1m/yr
	Geomorphic restoration - eg. meanders, bank erosion projects	$0.5m/yr
	Water quality improvement - eg. agricultural BMPS	$0.5m/yr
Foundational activities	Eg. Policy, R&D, MERI	$0.5m/yr
SUB-TOTAL		**$50m**
GRAND TOTAL		**$151m**

[1] *Estimate for 'addressing constraints to environmental water delivery' is the subject of a current study due to be completed in late 2026.*

All costings are in 2026 dollars, do not count for inflation and are on-top-of standard operating budgets for the WGCMA (or relevant delivery partners). All projects are subject to individual site assessment, feasibility, design and costings at the time of implementation.



CASE STUDY

Restoring rivers locals love: Sandbanks Reserve

Sandbanks Reserve is an urban recreation space on the banks of the Latrobe River (Durt'Yowan) on Gunaikurnai Country. Adjoining what were once floodplain woodlands, this section of the river is highly modified and more of a working river than a place to relax. But with a little TLC and recent restoration works it has become a hidden gem where the river reveals its true character.

Along the river's banks, West Gippsland CMA has worked with Latrobe City Council, Gunaikurnai Land and Waters Aboriginal Corporation and Latrobe Landcare Network to rehabilitate the riparian corridor including the removal of mature willows, weed control and revegetation of the riverbanks.

Upgrading walking tracks and facilities complemented the habitat restoration with remnant gums standing sentinel to the mighty habitat that was once there and is being brought back again.

Restoring the river has brought the local community back to enjoy picnics, fishing, canoeing, bike riding and walking. Other curious locals have also made an appearance with West Gippsland CMA recording evidence of platypus through environmental DNA testing.

Contact

If you would like further information including the full report please go to www.wgcma.vic.gov.au/latrobe

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We acknowledge and pay our respects to the Traditional Owners of this Country, the Gunaikurnai and to their rich culture and spiritual connection to Country.