

Unlocking multiple benefits of Crown water frontages in Victoria

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Key points

- Victoria, along with Ontario in Canada, is unusual amongst democratic societies in having strips of public land permanently reserved along waterways.
- Most of these 30,000 kms of Crown water frontages have been absorbed into adjacent private land under grazing licences.
- These licences mean that Crown water frontages do not provide the full range of public and environmental values that they could.
- The approaching end of a 35-year aggregate licence term in 2029 creates a timely policy window for review and reform.
- What is required is, first, mechanisms that allow long lengths of Crown water frontage to be managed by various entities (e.g. environment groups, water authorities).
- Second, reform that enables these entities to invest in riparian restoration, carbon sequestration and biodiversity outcomes while supporting landholder participation.
- Victorian water utilities are a credible foundation investor group because of legislated net zero obligations and growing demand for locally supplied offsets.
- The opportunity to ‘bundle’ riparian benefits could be useful in other states that do not have public riparian areas.

Abstract

Crown water frontages comprise approximately 30,000 km of public land adjoining waterways in Victoria and represent a significant public asset. Managed predominantly through agricultural grazing licences under the Land Act 1958, current arrangements generate limited public return and have not arrested long-term declines in riparian condition. The problem is not simply that grazing occurs on public land. The problem is that the licence model provides too little incentive or mechanism to invest in long-term riparian improvement. This paper examines the policy, economic and environmental limitations of existing Crown water frontage licensing and identifies opportunities for reform to better align management with contemporary environmental and social objectives.

Drawing on legislative analysis, policy review and market trends, the paper shows how current licensing arrangements constrain investment in riparian restoration and limit delivery of ecosystem services, including water quality protection, biodiversity conservation, flood mitigation and carbon sequestration. With a statutory aggregate licence term of up to 35 years concluding in 2029 for licences first issued in 1994, a window exists to reconsider Crown water frontage management.

The paper explores opportunities to unlock co-investment in these riparian areas using environmental markets, particularly carbon and biodiversity markets. Victorian water utilities are identified as a key investor group, given legislated emissions-reduction obligations and reliance on land-based offsets. Crown water frontages offer a publicly owned land base capable of delivering benefits, provided enabling policy and governance settings are established. Reform could reverse riparian degradation and deliver improved outcomes for waterways, communities and Traditional Owners. The idea of ‘bundling’ benefits could be useful for managing riparian areas beyond Victoria.

Keywords

Crown water frontages, riparian management, environmental markets, carbon offsets, biodiversity, water utilities, policy reform, Victoria

Introduction

It is now well recognised that revegetating and protecting riparian areas is central to waterway management. In most of Australia the riparian area is privately owned meaning that any public investment in riparian areas has to be negotiated with the adjoining landholder. Having the support of the adjoining landholder leads to more sustainable management, but having a strip of public land along waterways can simplify management and should allow management of long reaches of stream. In most states of Australia, the riverbed is public land, but seldom the riparian area (although most states provide for some planning control over riparian land). Victoria is an exception having permanently reserved public (Crown) land along most named waterways, extending at least 20 metres back from the top-of-bank². The Index of Stream Condition network in the state covers about 33,000 kms of the larger streams, and it is estimated that about half of this stream length has Crown water frontages (i.e. about 30,000 kms of frontages but on only one side of the stream) (DELWP, 2015), representing about 18% of the State's total water frontage length. About 22,000 kms of the Crown water frontages (3/4 of the total) are in cleared catchments. Historically, Crown water frontages have been made available to adjoining landholders for agricultural use under licences issued pursuant to the Land Act 1958, with 9,000 licences. In practice only grazing is permitted as a landuse under these licences, but the licence means that the adjoining landholder does not need to fence the land out, and it provides access to the stream for stock-watering. While these arrangements have supported local agricultural access, they have not consistently delivered broader public objectives for riparian condition, biodiversity, water quality and recreation. At the same time, riparian lands are increasingly recognised as strategic assets for climate adaptation, carbon sequestration and ecological connectivity.

This paper draws on a recent policy report prepared for Vic Catchments (Natural Capital and Climate [NCC], 2025) to examine whether current licensing arrangements remain fit for purpose, and to identify a practical reform pathway that could unlock co-investment in riparian restoration. The paper argues that the approaching end of the 35-year aggregate licence term for licences, that were first issued in 1994, creates an opportunity. This deadline could allow managers to shift Crown water frontage management from a predominantly grazing-based model to one centred on environmental stewardship and public value. Particular attention is given to the role of carbon and biodiversity markets, and to Victorian water utilities as potential early investors in projects that generate multiple benefits.

Policy and management context

The modern Crown water frontage framework in Victoria reflects a long evolution in public land and waterway governance. An 1881 Order in Council permanently reserved Crown-owned land along about 280 of Victoria's named (i.e. larger) waterways for public purposes. The widths varied; many frontages were approximately one chain, or about 20 metres, while the Victorian side of the Murray had a three-chain reserve measured from the ordinary winter level. The main reason for the reservation was to maintain public access to water for stock. By the late twentieth century, policy reform (Land Conservation Council, 1991) had increasingly recognised that public riparian land should serve multiple functions, including conservation of native flora and fauna, erosion protection, flood passage, cultural heritage protection and public recreation (DELWP, 2017a), with stock access only permitted where compatible with those values. The Crown Lands Acts (Amendment) Act 1994 enabled agricultural licences to be granted to adjoining landholders for an aggregate period of up to 35 years. In

² The land was reserved in the 19th Century and was usually a chain in width. It can be much wider where there is an additional strip of unreserved Crown land. New Zealand also has a 'Queens Chain' reserved along rivers and coasts, but interestingly, it is seldom a chain (20m) wide, it is usually 3 to 10 metres.

practice, the 35 years was broken into seven five-year terms, creating a recurring administrative cycle while preserving an apparent legislative cap on the overall duration of the arrangement.

Why the current model is under strain

Three issues now make the current model increasingly difficult to justify. First, licence fees are low relative to the administrative effort required to manage the system and are not structured to reflect the public value of the asset (ABARES, 2025). A review in 2008 concluded that the land was worth 20 to 30 times the licence fee to adjacent landholders, including benefits from access to water and avoiding fence costs (The Public Land Consultancy, 2008). Second, where licensed land continues to be managed primarily for grazing, the condition of many riparian areas continues to decline, diminishing ecosystem services that benefit downstream communities and the wider economy. Third, current arrangements offer no practical pathway for third parties such as water utilities, philanthropic organisations or private investors to directly manage public riparian land, fund restoration and share in environmental outcomes on.

A time-bound window for reform

If the 35-year aggregate term is interpreted as originally intended, 2029 marks the point at which licences first granted in 1994 reach the end of their allowable duration. This creates a natural decision point for government. Whether reform occurs through a targeted review, a broader investigation process or administrative redesign, the period before 2029 provides a practical window to assess how Crown water frontages can better contribute to contemporary policy objectives in biodiversity, climate response, public access and regional resilience.

A complicating factor is an alternative interpretation of the current licence arrangement. This alternate view is that the repeated issue of new licences, every five years, may not constitute a renewal in aggregate. If that interpretation prevailed, the original policy intent of time-limited agricultural access to public riparian land may not be fully realised. Regardless of the legal interpretation, the existence of ambiguity itself supports the case for strategic review and clarification.

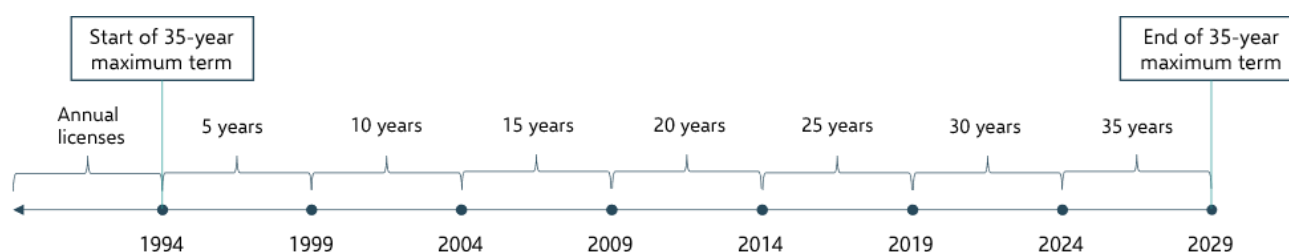


Figure 1 Conceptual transition from legacy licence arrangements to a co-investment and stewardship model for Crown water frontages

Ecosystem service value and missed opportunities

Riparian lands provide a broad suite of public values and ecosystem services (DEECA, 2025). These include water purification, erosion control, flood mitigation, carbon sequestration, biodiversity maintenance, recreation, cultural values and amenity. When healthy, riparian corridors can also improve landscape connectivity and help buffer waterways from diffuse pollution and stock impacts. However, these benefits are not realised where licensed Crown water frontages are managed for grazing and water access and incorporated into the adjacent private land (The Public Land Consultancy, 2008).

Table 1 Summary of key ecosystem services and reform implications for Crown water frontages

Service category	Examples	Implications for reform
Provisioning	Stock water access, shelter, apiary and related rural productivity benefits	Production values should be recognised but rebalanced within a broader public-interest framework for stewardship and multiple benefits.
Regulating	Water quality protection, erosion control, flood attenuation, carbon sequestration	These public benefits provide the strongest rationale for enabling third-party investment and performance-based management settings.
Cultural and social	Traditional Owner values, recreation, scenic amenity and community access	Future arrangements should better protect public access, recognise cultural values and support co-design with Traditional Owners and regional communities.

How to allow joint management?

In some cases, it is best for a Crown water frontage to be managed by the adjacent landholder under a grazing or riparian management licence. But in other cases, it would be better to allow long lengths of frontage to be managed by a third party, such as a community group, a CMA, or a Water Authority. While there are several mechanisms to allow this, they are not as simple as you might think. For a start, there is a very real difference between permanently reserved Crown water frontage and unreserved Crown land. We won't go into the complexities of this here, but adjoining landholders may have licenses over both. Some options to allow management of long sections of Crown water frontage under the Crown Land (Reserves) Act follow:

- Under section 14 of the *Crown Land (Reserves) Act 1978*, the Minister can appoint a committee of management for land that has been temporarily or permanently reserved. A committee can consist of individuals, a council, Melbourne Water, a metropolitan water corporation, a statutory public body, an eligible not-for-profit company, or a combination of these. Note this does not apply to unreserved Crown land, and a survey might be required to identify the boundary between the Crown Water frontage and the unreserved Crown land.
- Section 18 of the *Crown Land (Reserves) Act* provides for reserved land to be placed under the control and management of: public agencies (e.g. Parks Vic, water authorities, Melbourne Water) Section 18B allows the DEECA Secretary, with ministerial approval, to enter into a management agreement with **any person**.
- Section 18B of the *Crown Land (Reserves) Act* allows the DEECA Secretary, with ministerial approval, to enter into a management agreement with **any person** concerning all or part of reserved Crown land for a specified reason. "Any person" is broad enough to potentially include, for example, an environmental organisation, a water corporation, or a Traditional Owner corporation.

We conclude that these, and other mechanisms, allow long sections of Crown water frontages to be managed by a variety of organisations. There is great potential to foster joint management of river frontages but the process for doing so is convoluted and expensive. If consolidated management was achieved, organisations could pay for ongoing management via a few approaches that we now describe.

Environmental markets and co-investment pathways

At least 60,000 ha of Crown water frontage may be potentially available for improved environmental management, assuming a conservative width of 20 m³ across the licensed frontage network. This creates an unusual strategic asset: publicly owned land, distributed along waterways, that could host restoration activities aligned with carbon abatement, biodiversity improvement and waterway health objectives. At present environmental improvements to frontages are typically funded by grants to landholders, secured with agreements with Catchment Management Authorities. What is missing are mechanisms that allow water corporations and environmental organisations to manage these lands for multiple values, but also a mechanism to generate a consistent funding stream to maintain that management. Several environmental market instruments could be used, and we now consider the opportunities and barriers to using them for Crown water frontages.

Carbon markets are the most immediate opportunity. Australian climate policy now combines emissions reduction obligations, carbon accounting frameworks and offset mechanisms that are likely to increase long-term demand for land-based abatement (Carbon Market Institute, 2024). In Victoria, water corporations are particularly relevant because they are subject to legislated net zero pathways under their Statement of Obligations (Emissions Reduction) (Minister for Water, 2022). For these entities, locally supplied offsets and self-generated projects can play a role alongside operational decarbonisation measures such as energy efficiency, renewable power, fleet electrification and bioenergy.

The appeal of Crown water frontages lies not only in carbon storage potential, but in the ability to deliver multiple benefits from the same investment. Native revegetation and riparian restoration can improve habitat quality, reduce erosion, support water quality outcomes and strengthen ecological connectivity. This aligns with the growing policy emphasis on co-benefits in both carbon and biodiversity frameworks (DEWLP, 2017b), and with the emerging national architecture under the Nature Repair Act 2023. The Nature Repair market, driven by biodiversity certificates, is very new, and details are being worked through. It provides a potential mechanism for collective improvement of Crown water frontages in Victoria. The following is based on a reading of information on the DCCEEW website⁴. Under the Nature Repair Market, a revegetation project can be undertaken on Crown land provided the proponent has the legal right or consent to carry it out. An individual Crown water frontage may be only a few hectares. The required ecological surveys, project plan, permanent monitoring plots, reporting and independent audit could cost more than the market value of a biodiversity certificate generated from one small frontage. Therefore, the most workable model would probably involve DEECA or a CMA coordinating projects across many frontages, rather than individual farmers registering small projects themselves.

We suspect that the most promising model would be a CMA-led project, authorised by DEECA, covering a connected group of grazed Crown water frontages and adjoining private riparian land, with licensees contracted to undertake long-term management. That model would treat the certificate as an investment in a publicly owned riparian corridor, while compensating adjoining landholders for fencing, lost production, and continuing management. It would also produce a larger and more marketable biodiversity outcome than scattered certificates attached to individual licences. The Nature Repair Market allows a biodiversity planting project to be “stacked” with a carbon project where the separate requirements of both schemes are met. Future ‘methods’ developed under the Nature Repair Act could be more appropriate for Crown water frontages, but overall, Crown water frontages represent an

³ Many studies have demonstrated that different riparian widths are required to achieve different benefits, and that these widths vary through the catchment. Here we propose to take advantage of the maximum width available with the Crown water frontage network, which is usually 20m.

⁴ <https://www.dcceew.gov.au/environment/environmental-markets/nature-repair-market/methods-for-the-nature-repair-market>

excellent opportunity to apply the new biodiversity certificate approach under the Nature Repair market, and we encourage DCEEW to facilitate this process with CMAs.

Table 2 Indicative roles in a Crown water frontage co-investment model

Function	Potential lead	Key considerations
Project ownership	Victorian Government or approved proponent	Requires clarity on tenure, eligible interest-holder consent, permanence obligations and how project rights are granted over Crown land.
Investment	Water utilities, private firms, philanthropy	Investment case improves where projects generate multiple benefits and offset costs compare favourably with market purchases. Biodiversity credits could be another way to fund these programs.
Delivery and stewardship	CMAs, adjoining landholders, delivery partners	Landholder participation will be critical and may require stewardship payments, transitional support and carefully designed licence conditions.
Monitoring and reporting	CMAs, government, specialist providers	Robust monitoring is needed to verify carbon, biodiversity and waterway outcomes, and to maintain investor confidence.

A practical reform pathway

A practical reform process should begin with a government-led strategic review of Crown water frontage tenure, licensing purpose and desired public outcomes. Such a review would test whether existing agricultural licences remain appropriate, clarify the significance of the 2029 timing issue, and identify where alternative arrangements such as stewardship licences, riparian management agreements or project-right mechanisms could better support restoration. The process should include structured consultation with Traditional Owners, landholders, CMAs, water utilities and relevant State agencies.

Second, government should establish a pilot framework for third-party co-investment on selected Crown water frontages. Initial pilots could focus on locations where riparian restoration would deliver strong water quality, biodiversity and carbon benefits, and where adjacent landholders are supportive. Pilots would help test commercial structures, stewardship incentives, project governance and monitoring arrangements before broader rollout. Critically, the pilots would demonstrate how joint management under the Crown Land (Reserves) Act could be used to allow various organisations to manage long sections of Crown water frontage. This framework could include biodiversity credits under the Nature Repair Act as a mechanism.

Third, reform should explicitly recognise the role of CMAs as regional coordinators and trusted delivery partners. CMAs are already positioned between landholders, government, water corporations and communities, and could assist with site prioritisation, project packaging, partnership development and outcome monitoring. Reform should also recognise the interests of adjoining landholders, not as passive recipients of changed rules, but as active participants whose cooperation is essential to long-term success.

Finally, the reform agenda should avoid treating carbon as the sole objective. The strongest justification for change is the capacity to create enduring public value across multiple objectives: healthier waterways, more resilient landscapes, improved habitat condition, stronger cultural and recreational outcomes, and a more efficient use of public land. A reform model that supports these wider benefits is more likely to attract sustained political, institutional and financial support. Again, biodiversity credits must be included as a mechanism.

Conclusions

Crown water frontages are an extensive public asset that is currently managed through arrangements that no longer appear well aligned with Victoria's contemporary environmental, social and economic objectives. The coming 2029 milestone provides a clear opportunity to review the purpose, structure and outcomes of existing licences and to reposition Crown water frontage management around stewardship and public value. The case for reform is strengthened by the growing demand for land-based carbon and biodiversity outcomes, and by the emergence of investor groups such as Victorian water utilities that have both a strategic need and a policy mandate to support such outcomes.

The central proposition of this paper is not that Crown water frontages should simply become another environmental market commodity. Rather, reform should create a framework in which public ownership, landholder participation, regional coordination and third-party investment can work together to restore riparian condition and expand the ecosystem services these landscapes provide. Critical to achieving this is (a) allowing groups and entities to manage long sections of Crown water frontage along rivers and (b) exploring funding mechanisms that provide continuous funding to manage these critical slivers of land. That funding can be supported by the ecosystem functions that the riparian lands provide including carbon, flood mitigation, and biodiversity. If designed carefully, the principles outlined here could help Victoria convert an under-performing land tenure system into a platform for long-term environmental repair and shared community benefit. Arrangements established in Victoria could become a model for riparian zone management across Australia.

Acknowledgements

This paper is based on work prepared for Vic Catchments. The authors acknowledge the contribution of the underlying report authors and the policy discussions that informed its preparation.

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