

Catchment Stewardship in Victoria – Building on the legacy.

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Key Points

- A contemporary catchment stewardship framework has been developed for Victoria to respond to threats that continue to impact on catchment condition.
- Catchment stewardship involves both individual and collective efforts in managing catchments to generate intergenerational benefits for the environment, people, and place.
- The active management of natural resources and support for Traditional Owners and Aboriginal people to heal and care for Country are key focus areas that drive the delivery of better catchment stewardship in Victoria.

Abstract

The condition of Victoria's catchments has declined since European settlement with most indicators for natural resource management themes remaining in moderate to poor condition with neutral or concerning trends over time. This is a direct result of two hundred years of development, land clearing, increased invasive pests, changed land use and management. These threats continue to impact on catchment condition.

Victoria's response to the decline in catchment condition includes strengthening catchment stewardship. Clear drivers for adopting this approach include the need to simultaneously address multiple environmental issues, such as dryland salinity, extensive habitat loss, declining soil and water quality, and shape enriching and sustainable relationships between people and the natural environment.

This paper describes recent work by thought leaders and practitioners (including Traditional Owner representatives, academics and policy and program leads) to create a current framework of catchment stewardship. The framework defines catchment stewardship, its principles and outcomes. Case studies are provided to demonstrate this integrative approach that enriches and sustains relationships between people and the environment in which they live, work, and recreate.

This work found that catchment stewardship involves both individual and collective efforts in managing catchments to create intergenerational benefits (i.e. current and future generations) for the environment, people, and place. The key focus areas that drive the delivery of better catchment stewardship include:

- Active management of natural resources to build resilience and protect or enhance their condition.
- Supporting Traditional Owners and Aboriginal people to heal and care for Country.

Keywords

Catchment Stewardship.

Natural Resource Management.

Delivery of better catchment stewardship.

Introduction

This paper describes recent work on contemporary catchment stewardship in Victoria. This work was a collaboration between the Department of Energy, Environment and Climate Action (DEECA), Melbourne Water and Victorian Catchment Management Authorities (CMA). It builds on previous integrated catchment

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management (ICM) policy and projects and aims to create a clearer description of the unique features of catchment stewardship that make it so important for future catchment management.

While improved ecological outcomes are the main objective of most stewardship projects, catchment stewardship occurs where ‘people’ and ‘place’ intersect. It can begin with individual actions on a small scale (i.e. household or property) and improved community and Traditional Owner capacity; and builds to collective action with catchment scale outcomes when there are shared objectives at ‘place’ which are captured through collaboration in developing a shared vision and a long-term plan.

Contemporary catchment stewardship builds on the existing ICM framework, the approach used across natural resource management (NRM) in Victoria. This framework provides support through legislation, institutions (Catchment Management Authorities), and investment (e.g. Our Catchments, Our Communities Program). It also lays the foundation for a stronger more accountable stewardship framework for both government and partners as they move into new cycles of investment and evaluation.

The project included a review of current Australian and international literature on catchment stewardship theory and practice and stakeholder consultation (via 6 interviews and a workshop with practitioners, Traditional Owner representatives, academics and policy and program leads). The outcomes of the project are presented in this paper and will inform an improved catchment stewardship framework for Victoria.

Why do we need Catchment Stewardship?

The condition of Victoria's catchments has declined since European settlement. Many indicators (water, land, biodiversity, community and ICM) used to measure catchment health show catchments are remaining in moderate to poor condition with neutral or concerning trends over time. This is a direct result of two hundred years of development, land clearing, unsustainable farming practices and increased invasive pests. Many of these threats continue to impact on catchment condition.

Population and demographic shifts influence the capacity of communities to respond to these challenges, and climate change related impacts, particularly extreme weather events, that are becoming more evident. This puts even more pressure on the health of our catchments and the communities that live in them.

Victoria's response to the decline of catchment condition is to strengthen catchment stewardship. There are clear drivers for adopting this approach; firstly, the need to simultaneously address multiple environmental issues such as dryland salinity, extensive habitat loss, declining soil and water quality and more recently, the need to reduce greenhouse gas emissions associated with agriculture. Secondly, stewardship has been recognised as a valuable, integrative, concept for shaping enriching and sustainable relationships between humans and the natural environment (Bennett et al, 2018).

What is catchment stewardship?

Catchment stewardship involves both individual and collective efforts in managing catchments to generate intergenerational benefits for the environment, people, and place (Department of Energy, Environment and Climate Action, 2024).

A principles-based approach to stewarding the landscape is being adopted (rather than a prescribed program of work). Figure 1 describes the guiding principles that shape catchment stewardship in Victoria (Department of Energy, Environment and Climate Action, 2024).

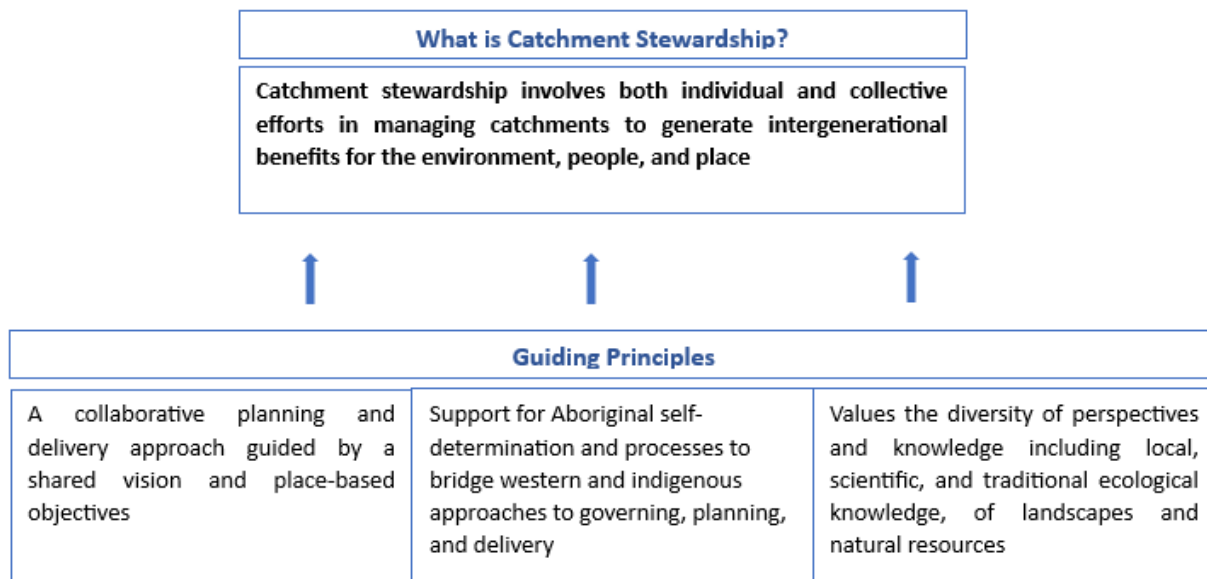


Figure 1. Catchment stewardship – a principles-based approach where people connect to place.

These principles underpin two key focus areas that drive the delivery of better catchment stewardship in Victoria:

- Active management of natural resources to build resilience and protect or enhance their condition.
- Support for Traditional Owners and Aboriginal people to heal and care for Country.

How is Catchment Stewardship delivered?

Catchment stewardship recognises the interconnectedness of water, land, biodiversity, and communities within a catchment, therefore, requiring a holistic management approach. It provides the foundation to build capacity and contribute to greater system resilience.

The strong interaction between good ICM and catchment stewardship is represented in Figure 2 (Department of Energy, Environment and Climate Action, 2021 and 2024). It highlights the value of understanding the holistic, interconnectedness of natural resource systems to be able to properly connect people, place, Traditional Owners and Country, and thematic outcomes from current Victorian NRM policy.

In Victoria, the range of tools that are used to deliver better stewardship through an integrated approach for the management of landscapes and catchments are:

- **Partnerships** – Enable planning, coordination and delivery of NRM, cultural, and social landscape scale outcomes.
- **Building capacity** – Community awareness, knowledge, skills and networks to act as stewards.
- **Proactive preparedness** – Adaptive decision-making for natural disaster risk reduction and climate change adaptation.
- **Policies and governance** – Support achieving catchment stewardship outcomes.
- **Monitoring and evaluation** – Demonstrate outcomes, adaptive management, and evidence-based decision-making.

The inner circle in Figure 2 points to the crucial importance of improving stewardship through direct collaboration in a place, the role of bridging western and indigenous approaches, and the value of diverse perspectives and knowledge. This leads to healing and caring for Country and more healthy and resilient catchments.



Figure 2. Catchment Stewardship and Integrated Catchment Management concept diagram.

What does success look like?

Following is a range of outcomes that can be used to define the success of catchment stewardship. Catchment stewardship projects directly contribute to one or more of these outcomes. These outcomes together describe the vision for catchment stewardship in Victoria:

- **Empowered Aboriginal custodianship** – Improved Aboriginal self-determination embedding their voices in planning and on-ground actions.

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- **Community empowerment** – Communities are connected, capable, empowered, and self-directed to act independently as leaders in catchment stewardship.
- **Multiple benefits for the environment, people, and place** – Including environmental, cultural, and social benefits.
- **Intergenerational equity** – Catchment stewardship protects natural values for future generations.
- **Protected achievements** – Catchment stewardship extends and protects the legacy of past projects and investments through a commitment to ongoing maintenance and enhancement.
- **Raised standards** – Stewardship raises expectations over time and equips the community to support progress (and not slip backwards).
- **Resilient communities and landscapes** – Catchment stewardship improves community and landscape resilience to climate change, natural disasters and/or extreme events.

Conclusions

The contemporary catchment stewardship framework in Victoria has been developed by the DEECA, thought leaders, policy and program leads, Traditional Owner representatives, academics, and a literature review of theory and practice.

The framework states that catchment stewardship involves both individual and collective efforts in managing catchments to generate intergenerational benefits for the environment, people, and place. Catchment stewardship recognises that people and places are connected.

Collective planning and delivery, support for Aboriginal self-determination and indigenous approaches, and valuing different perspectives and knowledge were described as guiding principles. Also, two key focus areas that drive the delivery of better catchment stewardship in Victoria are active natural resource management and support for Traditional Owners to heal and care for Country.

Catchment Stewardship provides a range of tools that are used to deliver better stewardship through an integrated approach for the management of landscapes and catchments. It protects and enhances catchment values and responds to the decline in condition and the threats that continue to impact on catchment condition.

Case studies

The following case studies highlight successful catchment stewardship projects. They represent unique combinations of the key characteristics of catchment stewardship projects – namely collaborative planning and management, valuing diverse perspectives and knowledge, supporting aboriginal self-determination and bridging between western and indigenous approaches. All projects are funded by the Victorian Government's Our Catchments, Our Communities Program.

Case Study 1 – Management of Natural Resources

The Glenelg Hopkins catchment is home to more than 7,600 wetlands which provide habitat to a wide variety of plants, birds, and other threatened species. Wetland loss, through drainage for agriculture, has long been an issue across the area, and declining rainfall due to climate change is placing additional pressure on these important wetland systems.

Through the project titled 'Looking after Country – valuing wetlands in the productive Greater Grampians (Gariwerd) landscape' the Glenelg Hopkins CMA has collaborated with individuals, groups, and partners. Together, through their individual and collective efforts they are undertaking wetland

restoration and protection activities to generate intergenerational benefits for the environment, people, and place.

By collaborating with Traditional Owners (Eastern Maar, Wadawurrung and Gunditj Mirring peoples) the project has sought to improve local-community cultural awareness through events such as the Lake Bolac Eel Festival and supported the incorporation of Traditional knowledge and language into wetland management.

Nine landholders who manage twenty-one wetlands across 174 hectares have also partnered with the CMA to improve wetland management through protection, changed land management, flora and fauna assessments or capacity building activities. Four additional land managers are trialling precision agriculture tools to reduce the impacts of cropping on wetlands.

Landcare groups across the region have also partnered with the CMA and landholders to drive improved wetland stewardship through the project, with twelve Landcare groups and their members involved in activities such as rabbit control around wetlands and planning for landscape climate resilience.

Case Study 2 – Bridging Western and Indigenous Approaches

Supporting self-determination sits at the heart of the *‘Taking Care of Country’* project that has been facilitated by the Goulburn Broken CMA. From the outset, the CMA sought to work with Yorta Yorta Nation Aboriginal Corporation and Taungurung Land and Waters Council to co-design the project and support the delivery of Traditional Owner priorities identified in their Elder endorsed Country Plans.

Through multiple CMA and Traditional Owner discussions, three priority areas for action were identified: Reedy Lake Wildlife Reserve for the Taungurung people, and the sand hills at Gemmill’s Swamp Nature Conservation Reserve and the Goulburn River for the Yorta Yorta people.

Together the CMA and the Traditional Owner groups have sought to bridge differences in their respective approaches to planning and delivery. Slowing planning processes to a pace that enables trust and working relationships to be built, prioritising Traditional Owner interests in the works program, providing resources to support Traditional Owner works crew delivery and seeking Traditional Owner guidance for on-ground activities and preferred monitoring approaches.

Progress is being made to support the Traditional Owner groups to heal and care for Country at the sites they have determined to be a priority, generating intergenerational benefits for the environment, people, and place.

Taungurung have made significant progress at Reedy Lake Wildlife Reserve including cultural heritage surveys, weed control, revegetation, fauna surveys and flood level monitoring, which have all contributed to cultural learning in the field for the works teams. Progress has also been achieved between Yorta Yorta and Shepparton City Council on a shared works program currently being implemented at the Gemmill’s Swamp Nature Conservation Reserve sand hills.

Case Study 3 – Diversity of Perspectives and Knowledge

North Central CMA, Coliban Water and Dja Dja Wurrung Clans Aboriginal Corporation have joined forces to deliver ‘*A Healthy Coliban Catchment*’. The project aims to ensure a safe and secure water supply, improved waterway, and biodiversity health and to protect the cultural history of the Upper Coliban catchment.

Guided by the vision and actions documented in the collaboratively developed 2018 Upper Coliban Integrated Catchment Management Plan, the project is working with local councils, community groups, Traditional Owners, landholders, and communities on individual and collective catchment management actions to achieve intergenerational benefits for environment, people and place.

A Technical Working Group with representatives from North Central CMA, Coliban Water and Dja Dja Wurrung guide the project providing technical and cultural information, whilst a Community Reference Group contributes a diversity of perspectives and local knowledge.

Meetings, joint field days, Board tours, Landcare and local government collaborations, Aboriginal waterway assessments, On-Country ‘Wartaka’ (meaning ‘meeting with purpose’) and the employment of Djaara staff to support the project have also helped to foster shared learning and knowledge exchange about the landscape and enable the successful delivery of on-ground achievements.

Case Study 4 – Collaborative Planning and Delivery

The Lower Kiewa River in North East Victoria sits at the nexus of an area of significant urban growth, high-value agricultural land and important natural environments. The area hosts a vibrant community of Landcare and agricultural groups, land managers and government agencies who are committed to actively managing the landscape and Traditional Owners devoted to healing and caring for Country. Despite the alignment of their mission, these groups often operated independently, which presented an opportunity for collaborative planning and delivery.

In 2022, the North East CMA commenced a project to build strategic partnerships at place and empower the Lower Kiewa community to care for the catchment together. Using a Project Steering Group of community and agency representatives, Traditional Owner meetings and engagement with the broader community (through an online survey, drop-in sessions, and interactive maps), an understanding of community aspirations, places of importance and priorities for stewardship action in the Lower Kiewa were identified.

A shared vision of ‘*A healthier and more resilient Lower Kiewa catchment achieved through active cultural, land, water and biodiversity stewardship and effective partnerships working across public and private land*’ and agreed delivery priorities were documented through a Lower Kiewa Stewardship Action Plan. Leveraging this shared plan and improved partnerships, the community, agencies, and Traditional Owners are now working together to benefit the environment, place and people of the Lower Kiewa and build the resilience of the landscape for future generations.

Case Study 5 – It takes a village to care for a catchment.

The Powlett River/Kugerungmome* Catchment ICM Project takes a ‘whole of catchment’ approach to improve the strategic and collaborative management of this beautiful and important catchment. The collaborative approach has built the capacity, connection and cultural competency of the partners and the strategic management of land, water and biodiversity across the catchment.

The 50,800 hectares area is largely used for dairy and beef production and supplies water for urban (three townships) and domestic consumption and agriculture. It is also part of the Bunurong Land Council Aboriginal Corporation (BLCAC) Registered Area and is an important landscape for the Bunurong people.

Underpinned by a collaborative approach, 15 community, industry and government partners were engaged in the development of a Discussion Paper and the associated Strategic Directions Statement (that describes a 20-year vision for the Powlett River Catchment), and a three-year Powlett ICM implementation plan.

The partnership approach has opened up and created new ways to work. It has allowed partners to work out how best to share delivery of the on-ground activities – based on their capacity and skills at the time. An important part of this process has been the sharing of knowledge and on-country cultural learning with the BLCAC.

**Bunurong Land Council Aboriginal Corporation granted permission to use the dual name for this project, with Kugerungmome the Bunurong people’s traditional name for the Powlett River catchment.*

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