



FINAL REPORT

Richmond River Governance and Funding Framework

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Executive summary

The NSW government in collaboration with local councils and key stakeholder organisations of the Richmond River Catchment in NSW have completed a process to identify, scope and develop a preferred governance and funding framework for delivering improved river health outcomes.

This process has been run as an independent study by Alluvium Consulting Australia (Alluvium) and Natural Capital Economics NCE), working in collaboration with local government, the Department of Planning, Industry and Environment (DPIE) and stakeholder groups.

The study was jointly funded by the NSW Office of Environment and Heritage's Coastal and Estuaries Grants Program and the local governments of Ballina Shire, Lismore City, Richmond Valley, Byron Shire, Kyogle and by Rous County Council.

Towards future governance

Over recent decades multiple partnership projects have been delivered across the Richmond River Catchment by councils, state agencies, industry and community groups. A foundation of good-will, existing relationships and capacity building now provides a strong platform for the future.

The development of a new governance arrangement has been affirmed as a priority action in multiple past plans and strategies, and across stakeholder groups. The new framework will assist to co-ordinate projects, avoid duplication and mitigate the ongoing degradation of the river system, and improve environmental, economic, and social opportunities for current and future generations.

The purpose of the current study was to identify effective and suitable governance and funding options that will assist local and state government organisations to work together more efficiently to increase investment in natural resource management to improve the health of the Richmond River and its catchment.

The desired governance framework is:

'A framework that facilitates the alignment of authority and accountability, relationships, formal and informal systems and processes, and resources and funding, to ensure the values of the Richmond River catchment are protected and enhanced.

A framework that will encompass attributes of authority, accountability, stewardship, leadership, coordination, collaboration, and direction'.

The review process

The development of options for future governance in the Richmond River catchment drew on multiple lines of inquiry. This included the following elements as documented in this report:

- An understanding of the Richmond River catchment context (stakeholders, values, pressures, governance context, successes and challenges, and opportunities for the future) (Sections 1, 3 and 4 and 7 of this document)
- An appreciation of governance theory – definition and attributes of effective frameworks (Section 5)
- A review of national and international experiences on governance and funding arrangements for NRM generally (Section 5 and Appendix A)

- A focused stakeholder engagement process to confirm historical context, catchment values and principles and desired attributes and indicators of an efficient future governance framework (Sections 2, 3, 7 and 8)

This engagement process include workshops (four) and interviews with representatives of shire Councils, Rous County Council, North Coast Local Land Services, Traditional Owners, industry and community groups.

- An appreciation of the theory on efficient investment and funding, and the broad spectrum of funding options and priority sources for the Richmond River catchment (Section 6 and 9)
- The consultant project team’s previous experience with governance in NRM settings, including a range of example case studies (Appendix A)
- Additional internal discussions and interviews across State and Local Government stakeholders (conducted by DPIE) to refine details in the governance options.

Throughout the review process there was strong agreement across stakeholders in relation to the values and drivers for change in the Richmond River catchment, and the principles for future governance.

Framework options

Six different options for future governance of the Richmond River catchment were developed for consideration. These are (as defined in Section 10 of this document):

- Richmond River Catchment First Australians Partnership
- Richmond River Collaborative Partnership
- Richmond River Councils Partnership
- Expanded Rous County Council
- Richmond River Coordinator
- Department of Planning, Industry and Environment Lead –
 - Marine Estate Management Authority (MEMA) led by Environment, Energy and Science (EES)
 - OR Local Land Services (LLS) lead.

Frameworks were evaluated through both qualitative and semi-quantitative approaches based on evaluation criteria developed in collaboration with stakeholders.

The preferred frameworks were a Richmond River Coordinator (interim role), moving to a Collaborative Partnership model, or alternatively a NSW government agency lead (LLS or MEMA).

Recommended pathway

Based on the combined results of the governance review process, two possible transition pathways towards a more effective governance of the Richmond River are proposed:

1. Recommended pathway: State Government appoint a Richmond River Coordinator, hosted by the newly formed Department of Planning Industry and Environment, who works with stakeholders to create an independent Collaborative Partnership
2. Alternative pathway: A Richmond River Coordinator works with a NSW agency lead to improve its capacity in delivering agreed outcomes for the Richmond River. Agency options include the North Coast LLS or MEMA (led by EES).

The recommended pathway is an opportunity to create a new, inspiring, and genuinely collaborative model for the governance of the Richmond River catchment and estuary. Strong stakeholder support underpins this recommendation.

Suitable and sustainable funding and financing mechanisms have been identified to facilitate increased investment and measurable change in the health of the Richmond River. This report provides a proposal to the NSW government to support the recommended framework, on behalf of local government, relevant state agencies and other key stakeholders.



Richmond River at Ballina: Source <https://nswlhd.health.nsw.gov.au/>

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1 Introduction

1.1 Context

The Richmond River catchment is located in far north-east New South Wales (NSW) (Figure 1), bordered by the Tweed and Brunswick River catchment to the north, and the Clarence River catchment to the south. The Richmond River catchment area is approximately 6,850 km² (the sixth largest in NSW), with an extensive floodplain zone (approximately 1,000 km²) and large floodplain to catchment ratio.

The catchment is the traditional home to the Bundjalung Nation, including the Widjabul/Wia-Bal, Ngayngbul, Arakwal, Ngandawal, Minjungbul, Bandjalang, and Githabul peoples. Europeans first explored the region in 1828 and cedar getters began to arrive in 1842 to settle in the area. The catchment today is highly valued by the community, supporting local economies in agriculture, commerce, tourism and recreation.

The River, with its associated catchment, wetlands and waterways, supports a rich biodiversity and a range of important environmental functions. The Richmond catchment is part of a biodiversity 'hotspot' supporting World Heritage rainforest as well as a number of Endangered Ecological Communities and many Threatened Species.

The early exploitation of cedar and then white settlement on fertile soils has changed both the landscape and the river itself, although the river continues to perform a range of important environmental functions and is a support to local industry, most importantly agricultural production.

The natural characteristics of the Richmond River catchment, such as the large floodplain to catchment ratio, extensive former wetland areas and fertile but steep topography are elements that can exacerbate the impact of human pressures over time.

Historic broad-scale land clearing and floodplain drainage, exposure of acid sulfate soils, floodplain wetlands, surface and groundwater use and extraction contribute to significantly changed flow regimes, creek morphology and nutrient loads. These factors contribute to the degradation of the waterway and the occurrence of undesirable events such as poor water quality episodes (including periods of very low dissolved oxygen and subsequent fish kills). Continuing land use change within the catchment, increasing population and the impacts of global climate change will also contribute to these management challenges.

In recent years there have been several recommendations to enhance governance arrangements in the Richmond River catchment, to boost investment and the implementation of actions required to improve catchment health.

This report documents the approach and outcomes from a five-month process undertaken in collaboration with the NSW government, local councils of the Richmond River Catchment, and other key stakeholders to identify, scope and develop a preferred governance framework for delivering improved river health outcomes across the catchment.

Richmond River Catchment



Figure 1. Richmond River catchment (OEH, 2019)

1.2 Stakeholders

Traditional Owners and First Australians

The Bundjalung people (also known as Bunjalung, Badjalang and Bandjalang) are the First Peoples who are the original custodians of northern coastal area of New South Wales including the Richmond River. The Bundjalung Country comprises various tribal groups and clans including Widjabul/Wia-Bal, Ngayngbul, Arakwal, Ngandawal, Minjungbul, Bandjalang, and Githabul peoples.

A number of Aboriginal stakeholder groups have an active role in the management and protection of the Richmond River, these include the Aboriginal Land Councils (LALCs) (Table 1), Native Title Groups (Table 2) and the Githabul Rangers. The Githabul Rangers are a natural resource management team based in northern NSW, and work in partnership with the Githabul community to protect and improve important natural and cultural sites across 110,000 hectares of Githabul country by implementing projects that utilise contemporary and traditional natural resource management knowledge (Githabul Rangers 2019). The Githabul People also have an Indigenous Land Use Agreement registered with National Native Title Tribunal.

Table 1. Local Aboriginal Land Councils

Land Council	Local Government Area position in catchment
Gugin Gudduba LALC	Kyogle
Muli Muli LALC (eastern part)	Kyogle
Casino-Boolangle LALC	Richmond Valley (upper)
Bogal LALC	Coraki
Ngunlingah LALC	Lismore
Jali LALC	Ballina and Richmond Valley (estuary)

Table 2. Native Title groups

Native Title Group	Local Government Area – Claim registered within catchment
Western Bundjalung People Part A	Kyogle, Richmond Valley
Bandjalang People #1	Richmond Valley
Bandjalang People #2	Richmond Valley, Lismore
Bandjalang People #3	Richmond Valley, Lismore
Bandjalang People #4	Richmond Valley
Widjabul Wia – bul People	Kyogle, Richmond Valley, Lismore, Ballina
Githabul People	Kyogle

Local Government

The Richmond River catchment includes five Local Government Areas:

- Kyogle
- Lismore City
- Richmond Valley
- Byron Shire
- Ballina Shire

Rous County Council provides weed, flood mitigation and bulk water supply services under a Service Level Agreement, within the catchment.

State Government

Numerous NSW government agencies also operate within the catchment within their areas of responsibility including the Department of Planning Industry and Environment (comprising the former Crown Lands, Water Floodplains and Coast, Fisheries, Agriculture, Land Use Planning, Water and National Parks and Wildlife Service), which also includes North Coast Local Land Services (pests, sustainable agriculture, etc.), and further discussed in Section 4.

Industry bodies

Various industry bodies represent commercial, recreational and other interests in the catchment including commercial and recreational fishers, industry, canegrowers, Landcare, agriculture, horticulture and environmental groups. These stakeholders have contributed to previous catchment and estuary improvement actions and representatives, and have an active ongoing role in future management.

Local government were asked to assist with the nomination of industry and community stakeholders for the governance review process. Industry bodies asked to participate included NSW Farmers, NORCO, North Coast Meat Co-operative, Ballina Fishermans Co-operative, Richmond Landcare Inc, Sunshine Sugar, Richmond River Canegrowers Co-operative, Far North Coast Dairy Industry, Australian Macadamia Society and a number of Landcare and environmental community groups.

The process of communication and engagement undertaken with all the key stakeholders for the development of Richmond River Governance options is described in Section 2.2. The list was not exhaustive and contact was made during the process with other stakeholders who were briefed on and included in the engagement. This report is not the final engagement product and it is envisaged that any ongoing initiatives will continue to make contact with stakeholders.

1.3 Catchment and estuary values

Catchment and estuary values for the Richmond River Catchment are significant across the ecological, economic, social and cultural spheres. The landscape has a rich cultural significance and heritage for the Bundjalung people and is one of the earlier white regional settlement locations on the East Coast of Australia. The significance of the Richmond River catchment and estuary has been well documented (Hydrosphere Consulting 2011; Ryder *et al.* 2015). A synopsis of key values includes the following elements.

Traditional Owner values

The Richmond River estuary has spiritual and cultural significance for local communities. The Traditional Owners and custodians of the study area are the Bundjalung and Widjabul people. Given the long period of Aboriginal use of the land there are numerous sites around the Richmond River estuary that are of Aboriginal heritage significance (e.g. art sites, camp sites, middens, fishing and hunting areas, caves and rock shelters, burial sites, mythological sites and scarred trees). Both Aboriginal and European heritage sites and items exist in and around the catchment and their recognition and protection are important to the local community.

Townships on the water

Many significant urban and rural townships are located within the catchment with most located on the banks of the Richmond River estuary system including Lismore on the Wilsons River, Kyogle and Casino on the upper Richmond River, Coraki (near the meeting of the Wilsons and Richmond Rivers), Woodburn, Wardell, and Ballina on the lower sections of the Richmond River.

Socially and economically, the Northern River is colloquially known as the 'region of villages' reflecting the original European settlement pattern of small villages across the landscape with the larger towns of Casino and Lismore forming the central business districts. In more recent years, Ballina has assumed greater importance as the region becomes more urbanised and the 'sea-change' phenomena creates high demand for new homes.

It is expected that the realignment of the Pacific Highway between Woolgoolga and Ballina will change the nature of other river towns such as Broadwater, Woodburn and Wardell when the highway no longer moves through the township. The network of villages and small and large towns creates a complex social picture where formerly predominantly farming communities have moved toward a service economy. Lifestyle blocks have owners with different ambitions for their land, and in some locations farmland is being managed by industry associations to avoid a loss of critical mass in harvest volumes.

Environmental values

Environmental values identified for the Richmond River catchment include:

- **Biodiversity:** Areas of extremely high biodiversity, resulting from the wide range of soil types, climate and topography across the region.
- **National Park:** Large areas of National Park (Broadwater, Bundjalung and Bungawalbin National Parks) and Nature Reserves (Richmond River, Yarrigully, Ballina and Tuckean Nature Reserves, amongst others).
- **Wetlands:** The Bundjalung National Park and the Broadwater wetlands are listed in the Directory of Important Wetlands in Australia. The estuarine wetlands of the Richmond River catchment provide habitat for a large number of migratory waders including federally listed threatened species.
- **Fish:** The estuary is a significant contributor to the Australian east coast fishery through a range of mechanisms including direct contribution to catches, provision of nursery habitats, spawning stock and nutrients for offshore fisheries.
- **Habitat:** The wetlands of the Richmond River catchment provide habitat for one of the widest ranges of wetland dependant threatened species in NSW. The high-energy nature of the NSW north coast means there are no intertidal wetlands between estuaries, so there is a natural fragmentation of these habitats on a regional scale, giving weight to the conservation significance of habitats in each estuary.
- **Significant species:** In addition to the high fisheries/productivity value, the river supports species, habitats and communities of conservation concern (Hydrosphere Consulting, 2011).

Productivity

The highly fertile nature of the Northern Rivers and the Richmond River catchment is both an economic opportunity and, where poorly managed, an environmental risk. High returns attract investment for production, but there needs to be a corresponding investment in ensuring best management practice is implemented.

Agricultural use across the entire Richmond River catchment is a major driver of the regional economy. Cattle for meat and dairy, sugarcane cropping, horticulture (including macadamia but also vegetables, cut flowers and other tree crops) are featured across the catchment. The Richmond River estuary has also traditionally been a regionally important commercial and recreational fishery, with the Sydney rock oyster harvested within the Richmond River.

Tourism and recreation

More recently, tourism, recreation and education have become major economic drivers for the North Coast Region. Outdoor recreation and sports (e.g. swimming, fishing, boating) are popular activities, particularly in the lower estuary near Ballina. Tourism has been identified as a priority industry for the North Coast Region.

The values of the Richmond River catchment were further explored during the development of Richmond River Governance framework options, as discussed in section 4.1 of this report.

1.4 Ecosystem health pressures

Prior to European settlement the catchment supported the Big Scrub rainforest community, which is now an Endangered Ecological Community. Extensive wetland and swamp formations were also present on the floodplain supporting large fish and oyster populations in the estuary. The area is still considered, as previously mentioned, a biodiversity hotspot but it does struggle with weeds, feral animals, poor water quality and a lack of native vegetation as threats to its ecological value. National Parks and Nature Reserve preserve small areas of vegetation and animals, and large wetlands in the estuary and the catchment continue to provide some of their former ecological functions.

Post European settlement landscape changes

Notable catchment changes since European settlement include the following:

- **Vegetation clearing:** Broadscale clearing of both catchment slopes and floodplain locations, with corresponding hydrological change.
- **Drainage:** Constructed drainage on floodplains, impacting natural hydrology and processes, including interception of acid sulfate soils. The hydrology of the floodplain has been significantly modified. The naturally swampy floodplain has been extensively drained via complex networks of drainage channels and floodgates.
- **Landuse change:** Most of the cleared and drained lands are utilised for cattle grazing or sugar cane production. While urban areas account for only 2% of the land around the Richmond River estuary, the urban growth rate is rapidly increasing. The population of Lismore City, Ballina and Richmond Valley Shires now exceeds 100,000 and future urban expansion will be necessary to accommodate projected increases in population.
- **Water extraction:** Significant amounts of extraction for bulk (urban) water supply as well as (cropping) irrigation on both major tributaries and smaller creeks.
- **Vegetation change:** Replacement of flood tolerant native vegetation with exotic pastures, which do not tolerate inundation and rot causing a reduction in dissolved oxygen in floodwaters. Large areas of monoculture plantings are now present due to cropping.
- **Increase in impervious areas:** The introduction of hard surfaces such as roads and footpaths and roofs, altering both ground and surface water movement and supply. This continues to increase with new urban development.
- **Rock bank stabilisation:** Much of the lower estuary, including the entrance, has been rock lined to stabilise shifting channels and maintain navigation (Hydrosphere Consulting, 2011).
- **Increase nutrient and sediment loads:** Introduction of high nutrient and sediment loads into the creeks and rivers. This occurs from both point and diffuse sources, although point sources are usually licenced under the Protection of the Environment (Operations) Act 1997. Diffuse sources are both unregulated and difficult to address.

- **Pest plants:** Weeds becoming increasingly difficult to address due to change in the manner of ownership, where 'lifestyle' blocks which are not managed in the same manner as a farm, are becoming more common. Further, more difficult weeds are becoming resident within the catchment, causing serious biosecurity issues for native vegetation.

These changes contribute to the degradation of the waterway and floodplain and in turn impact on the commercial, social, environmental and cultural values of the catchment (Hydrosphere Consulting, 2011).

Acid sulphate soils

Approximately 34,000ha of floodplain within the Richmond River catchment are potentially underlain by high risk Acid Sulphate Soils (ASS), with another 34,000ha having low risk ASS. The catchment changes and natural characteristics contribute to the degradation of the waterway and occurrence of undesirable events such as poor water quality episodes, fish kills and oyster declines, which impact on commercial, social, environmental and cultural values (Hydrosphere Consulting, 2011).

Catchment condition

In 2015, the Richmond Ecohealth report (Ryder et al., 2015) assessed the riverine, coastal and estuarine condition of the Richmond River using indicators of ecosystem health. The overall grade for the Richmond Catchment was a D minus. This was derived from an average score across the catchment. Large areas of the mid-catchment attracted an F rating, with the best catchments being located in the upper Richmond estuary with a C rating.

Twelve of the 17 river systems recorded a score of D or worse. The upper freshwater reaches of the Richmond catchment had better water quality, aquatic macroinvertebrates and geomorphic condition than the lower freshwater reaches, but no better riparian condition. The upper estuary (upstream of Woodburn) was consistently in the poorest condition, with very high nutrient concentrations, turbidity and algal biomass. Scores were consistent among indicators within each system, highlighting that the issues with water quality, biota and physical condition are affecting short and long-term condition of the streams.

The drivers of change in ecosystem health for the Richmond River catchment were further explored during the development of Richmond River Governance framework options, as discussed further in section 4.2 of this report.



Humpback whale in Richmond River estuary: Source <https://www.abc.net.au/news/2019-06-25>

1.5 The need to explore governance options

Past plans

Various studies and management plans have been prepared in the past to guide and prioritise future works to address the key management issues facing the Richmond River. Recent key catchment-specific and state-wide documents include but are not limited to:

- Local Strategic Plan 2016-2021 (North Coast Local Land Services, 2016)
- Coastal Zone Management Plan for the Richmond River Estuary (Hydrosphere Consulting, 2011). This plan was the culmination of a series of environmental studies to characterise the catchment and consider management options to improve its health.
- Wilsons River Catchment Management Plan (Ecos Environmental Consulting, 2009). This plan was developed to manage enhance the safety of the Wilsons River as a bulk water supply source.
- Northern Rivers Catchment Action Plan (2006), and Catchment Action Plan 2 (CAP2, 2012) developed by the Northern Rivers Catchment Management Authority. These were holistic plans looking to improve the environment as a whole across the Northern Rivers.

Some local government authorities and state agencies run programs to address site specific issues within the catchment, and Landcare is very active across the catchment. Industry programs are also run to address issues which are identified as problematic.

Past plans and actions have led to the establishment of a range of collaborative partnerships and on-ground actions to improve the condition of the Richmond River. However the studies underlying these strategies and plans confirm that the task of improving the health of the Richmond River is substantial, complex and multi-faceted. Some of the difficulties experienced to date in implementing actions identified in existing/past plans reflect these complexities. The scale of the issues is large and difficult, and programs can be difficult to implement particularly on land that is privately owned. The varying ability of these plans to effect change reflect these complexities, and long term and sufficient resourcing is always a problem.

The Richmond River faces additional challenges compared to many catchments in that it spans five local government areas and one county council jurisdiction, along with multiple State Government agencies with multiple responsibilities.

CZMP findings

Governance was flagged as a key issue in 2011 in the Coastal Zone Management Plan (CZMP) for the Richmond River Estuary (Hydrosphere Consulting, 2011) as a Fundamental Strategy to be resolved as a priority. Determining efficient and effective administrative arrangements for estuary management is important in order to minimise lack of coordination, administrative gaps or overlaps and to streamline decision making. A co-ordinated attempt at developing a governance framework within the Richmond has not been attempted to date.

The mid-term review of the CZMP (Hydrosphere Consulting, 2017) identified progress on estuary health projects, mainly through initiatives planned and delivered independently by the stakeholders. Improved governance and funding arrangements are required to ensure strategically targeted and effective delivery of the catchment and estuary health improvement actions. The main roadblocks for successful implementation of improvement actions are the ineffective governance and administration arrangements and the lack of financial and staffing resources supported by a clear funding pathway. To date, these roadblocks remain a key barrier to improving the health of the Richmond River.

At a catchment scale, the Richmond River CZMP recommends that governance and administration arrangements for the management of the estuary should be resolved as a priority (Strategy 1 - Administration and Governance). That is that determining efficient and effective administrative arrangements for estuary management is important in order to minimise lack of coordination, administrative gaps or overlaps and to streamline decision making. Improved governance arrangements will rely on clearly defined responsibilities and adequate funding to implement these responsibilities (Hydrosphere Consulting, 2011).

Investigations as part of this current governance review also affirm specific needs for the Richmond River following on from the CZMP, including:

- To enhance the enabling environment for effective governance arrangements moving forward
- Collaboratively developed, agreed priorities and plan for any future investment of resources across the catchment
- Cross-agency coordination of effort where investments are made in catchment-related initiatives
- A clear lead role for catchment management initiatives.

Resolution of governance and funding issues will be a key factor in the maximising and building on the success of these and future projects to improve the health of the Richmond River (Hydrosphere Consulting, 2011).

Marine Estate Management Strategy initiatives

At a state-wide level, improving the health of the Richmond River is reflected in the initiatives of the Marine Estate Management Strategy (MEMS) 2018 – 2028 which recognises effective governance as one of its nine key areas (Initiative 9). Management Action 9.1 aims to “Improve(d) co-ordination and integration across all levels of government (including cross-border and the land–sea interface) by developing a governance framework piloted at a catchment scale.” (NSW Government, 2018).

The MEMS strategy specifically identifies the Richmond River catchment as a case study for a number of pilot initiatives addressing water quality, best management practice for agriculture (macadamias), mapping of floodplain drainage amongst others. Enhancing governance and funding arrangements for the Richmond River catchment will be important to provide the best platform for the success of the MEMS initiatives.

1.6 Opportunities in the review process

The review of governance options for the Richmond River catchment (as summarised in this document) has provided the opportunity to:

- Reflect on the many successes achieved by the organisations working across the catchment to date
- Better understand the key governance and funding challenges to be overcome
- Build on previous successful partnerships already established
- Identify alternative governance models that may assist stakeholders to boost collaboration and better facilitate implementation of actions to improve catchment condition.



Richmond River lighthouse: Source <https://lighthouses.org.au/nsw/richmond-river-lighthouse/>

1.7 Structure of this document

The process and outcomes for the governance review are presented in this report across the following sections:

- **Section 2 – Governance review approach** - Outlines the method adopted for the communication, engagement, background review, multi-criteria assessment and investment elements of the study
- **Section 3 – Historical governance context and drivers for change** - Summarises the findings from a broad review of governance arrangements, with a particular emphasis on those utilised on the NRM space
- **Section 4 – Current context for governance and investment** - Outlines some of the complexities of the current context and framework for governance and investment in the Richmond River catchment
- **Section 5 – Models of effective governance** - Shares modern theory and best practice for effective governance
- **Section 6 – Models for efficient investment and funding** - Summarizes models for efficient investment and funding, and what may be relevant / applicable for the Richmond River catchment
- **Section 7 – Richmond River catchment values** - Outlines the values and drivers for change in the Richmond River catchment
- **Section 8 – Principles and desired attributes of a Richmond River governance framework** - Outlines the collaboratively developed principles and desired attributes for future management of the study area
- **Section 9 – Options for investing in the Richmond River** - Explores options and issues linked to future investment and funding
- **Section 10 – Governance options for the Richmond River** - Outlines possible future models of governance
- **Section 11 – Assessing possible governance options** - Documents the assessment undertaken of the various possible options and includes a multi-criteria assessment of these options, and identifies the preferred model/s for moving governance forward in the Richmond River catchment.
- **Section 12 – Recommendations** – Provides a recommended way forward, including two possible implementation pathways, in order of priority, for the move towards enhanced governance outcomes.

Other project outputs include a Discussion Paper (Alluvium 2018a) which reflects on values, drivers of change and principles for the future governance of the Richmond River catchment – informed by stakeholder workshop discussions. Stand-alone case study summaries are also provided in Appendix A.

2 Governance review approach

2.1 Overview

The approach to the governance review was primarily focussed on bringing informed views to each of the key stakeholder engagement points during the project.

This included undertaking background review of governance frameworks and the associated issues linked to their funding/attraction of investment, as well as carefully planning each of the engagement phases of the project to ensure a collaborative process followed, upon which the foundations of any future governance model for the Richmond River catchment could be built. This process is summarised Figure 2 and outlined in the following sections.

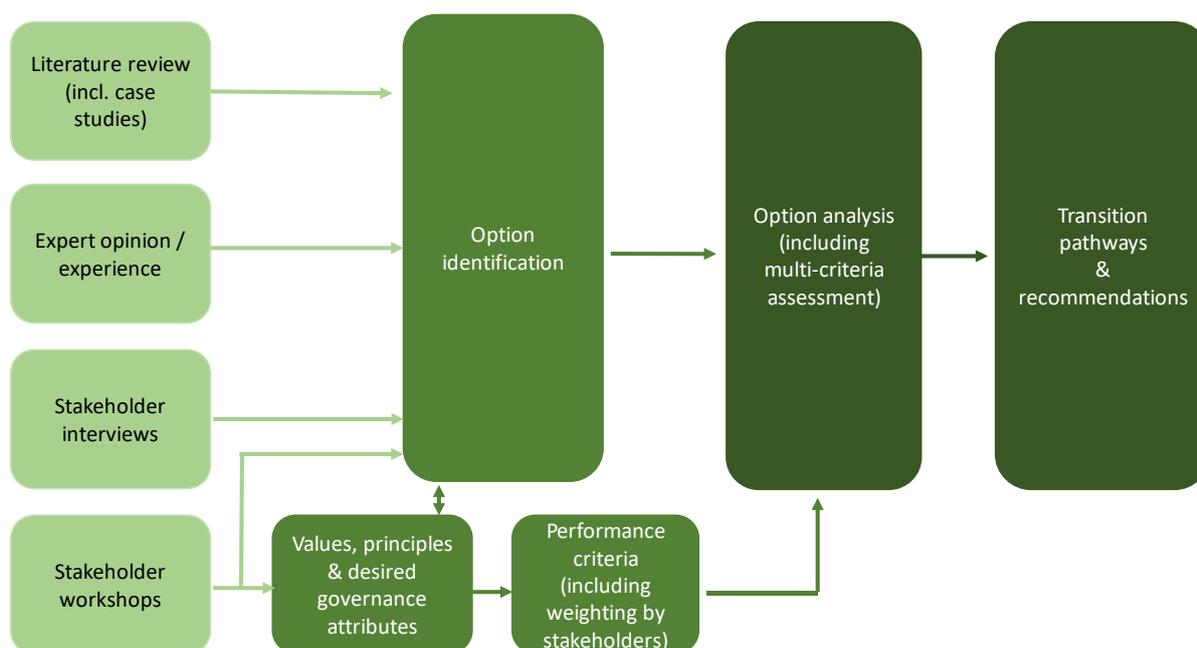


Figure 2. Summary of governance review approach

2.2 Literature review

The background information review concentrated on three primary areas. Firstly, a review of existing policy, regulatory instruments, plans of management, and river health studies was undertaken to ensure alignment of recommendations and current legislative responsibilities, and to understand the current strategic direction and opportunities for governance and investment reform.

Secondly a range of peer-reviewed and ‘grey’ literature was reviewed to ensure this project draws on the latest understanding of governance barriers and best practice governance for river basin management. Finally, data was sourced from a number of ‘real-life’ case studies from the United States of America (USA), New Zealand and across Australia. These case studies are explored further in Appendix A.

2.3 Communication and stakeholder engagement

A diversity of stakeholders

Engagement of local stakeholders in the development and selection of a new governance framework was an explicit outcome for this project, recognising the strong and important role local councils,

industry and business groups, and community-based or non-governmental organisations play in the protection and management of the Richmond River.

Communication and Engagement Plan

A Communication and Engagement Plan (Alluvium 2018b) was developed prior to the commencement of any dialogue with stakeholders. The purpose of the Communication and Engagement Plan was to clearly articulate what successful engagement will look like, as successful engagement underpins the outcomes of the review. Specifically, the plan documented the:

- Desired outcomes sought through a range of participatory and non-participatory approaches
- Principles of effective communication and engagement
- Objectives of communication and engagement
- Key messages for the various objectives
- Key strategies and activities to be undertaken throughout this project to deliver the objectives and outcomes
- Key risks to successfully achieving the desired outcomes including strategies to mitigate these risks.

The Plan also identified four broad outcomes that would need to be achieved if meaningful communication and engagement was to be effectively achieved (see Figure 3). These outcomes form a hierarchy of embedded outcomes recognising that without a shared catchment understanding of the whole-of-system needs, some stakeholders may not see the imperative for collaboration. Without full collaboration, it was identified that it will be challenging to reach consensus and a commitment to a new effective governance framework, and without the commitment to the framework it is highly unlikely that any significant funding contribution will follow.



Figure 3. Four outcomes of successful communication and engagement for the Richmond River Governance and Funding Framework Project

The Communication and Engagement Plan also recommended a process for ensuring strong engagement with key stakeholders. With such a large number of stakeholder's present in the

catchment, an analysis was undertaken to better understand how different stakeholders could be involved. The analysis included a review of all known stakeholders along with an assessment of their broad roles and responsibilities, relevance to the project and the degree (high, medium or low) to which they:

- a) Had a perceived impact on water quality (positive or negative)
- b) Were impacted by poor water quality and catchment management
- c) Influenced water quality and catchment outcomes and management.

Using the results of the assessment stakeholders were categorised using the IPA2 Public Participation Spectrum (IAP2 International Federation, 2014). Organisations identified with a participation goal of 'collaborate' or 'empower' were invited to attend the stakeholder workshops, while others would be kept informed of the project and invited to participate in other communication and engagement activities as appropriate.

Participatory process

The stakeholder analysis was critical to designing a participatory process that enabled a genuine opportunity for those individuals and organisations that directly use or have a role in the protection and management of the Richmond River catchment and / or those whose livelihoods and lives may be affected by future activities to be part of the process of creating a new governance and funding framework. The analysis also identified the most appropriate and effective means of working with local and regional stakeholders to ensure diverse representation of the different needs and perspectives, while creating a safe and productive platform to have open dialogue.

The end result was to establish multiple pathways for communication and engagement. Broadly, these pathways included face-to-face interviews of key organisations in the catchment with significant roles and responsibilities for catchment management, stakeholder workshops, and feedback opportunities (e.g. on the Discussion Paper) Figure 4. Each of these pathways are discussed below.

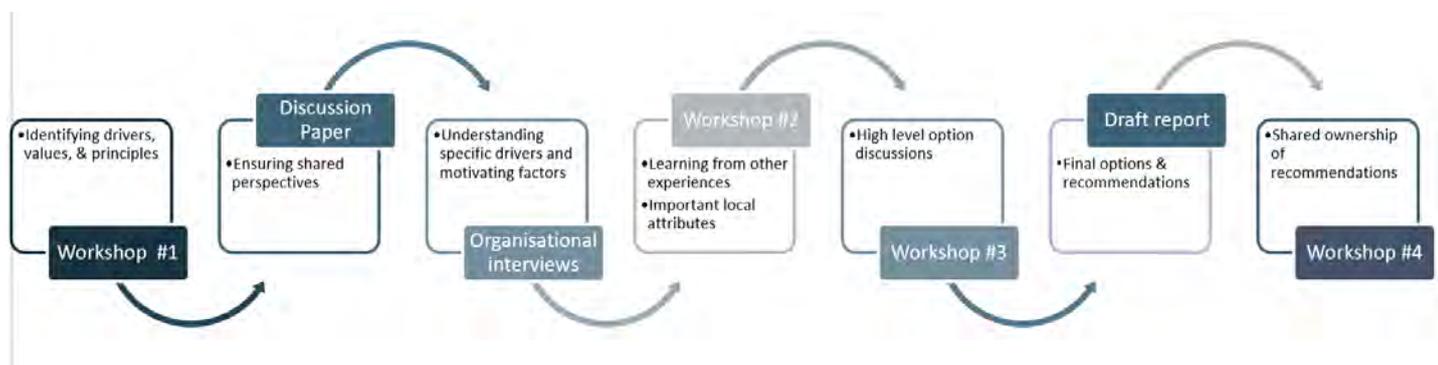


Figure 4. Key steps and pathways for supporting stakeholder engagement

Key stakeholder interviews

The purpose of interviewing senior representatives of the relevant local and state government agencies was to ascertain:

- The specific governance needs of key agencies and organisations from a governance framework for Richmond River catchment
- The specific values that are important to the organisation
- The impediments to supporting and protecting these values
- The intrinsic and extrinsic drivers influencing decisions and strategic directions (including institutional, physical, policy and regulatory, and socio-economic).

At this stage of the processes all options regarding preferred arrangements were in the mix for discussion.

A number of key organisations were identified with a participation goal of ‘empower’ during the development of the Communication and Engagement Plan, that is the final decision broadly rests in their hands and/or were funding partners in this project, and/or were thought to hold highly valued information regarding barriers and opportunities to local governance arrangements that may not have been identified during the stakeholder engagement workshops.

Face-to-face semi-structured interviews were undertaken by Dr Neil Byron in the majority of circumstances with one interview being conducted by Steve Skull and Fiona Chandler. Organisations formally interviewed included:

- Ballina Shire Council
- Lismore City Council
- Kyogle Council
- Richmond Valley Council
- Rous County Council
- Byron Shire Council
- North Coast Local Land Services (North Coast LLS).

Representatives of both the Norther Rivers Joint Organisation and Traditional Owner groups were unfortunately not available during the time interviews needed to be conducted.

In addition, a number of informal semi-structured interviews were also undertaken during this phase by Dr Neil Byron, regarding their views on what would be the most effective governance and funding arrangements to support restoration and management of the Richmond river and catchment, including:

- Office of Environment and Heritage
- Chair of Marine Estate Management Authority
- Chair, State-wide Board of LLS
- CEO and the Chief Scientist of The Nature Conservancy (Australia)
- two Trustees of the Biodiversity Conservation Trust.

The semi-structured interviews were based on the following five high-level themes and questions:

1. *Values:* What broad values does the Richmond River catchment hold for your organisation and the people you represent? Which do you think are most important? Which are most at risk?
2. *Current governance:* How would you describe the current governance / institutional arrangements in place for the Richmond River catchment? What has been working well? What have been the biggest challenges?
3. *Motivations:* What are the motivations and organisational internal and external drivers for your organisation to continue as part of the process of developing and implementing enhanced governance arrangements?
4. *Impediments—own organisation:* What do you believe to be some of the internal and external impediments (if any) to your own organisations’ involvement in the process of a) developing a new arrangement and b) implementing them?
5. *Impediments—other’s organisations:* What do you believe to be some of the a) internal, and b) external impediments to the involvement of other stakeholder organisations in the process?

Stakeholder workshops

The stakeholder analysis revealed a very large number of governments, industry, business and community-based groups who each play an important role in the catchment (see Section 2.2). A number of stakeholder groups also came forward during the process, identifying an economic, environmental or social interest in the process. Efforts were made to ensure the process was adaptable and flexible and recognised these groups and their important role in the future of catchment health within the Richmond.

Invitations were initially disseminated to approximately 50 organisations inviting them to identify a representative to participate in a series of three half day workshops over a two-month period. These organisations were not only invited to represent the views of their respective organisations but to also be an advocate and active conduit to other smaller groups to share information regarding the process. A fourth meeting was subsequently organised to enable further feedback to be shared on the final proposed options.

Some additional stakeholders were identified during the initial workshops who were considered to play an important role in the catchment and following consideration by the project team were added to future workshop invitations. Workshop locations were specifically chosen by OEH to help highlight the high diversity of values and issues associated with different sections of the catchment, and to enable easy access by local organisations to participate.

Workshop #1 - The purpose of Stakeholder Workshop #1 was aimed at setting the vision and principles of governance in the Richmond River catchment (Figure 5). Workshop #1 was held in on 1 November 2018 at the Casino Community and Cultural Centre and was designed to:

- Build a common narrative of the key drivers for enhanced governance in the catchment
- Co-develop the principles for governance in the Richmond River catchment that would ultimately be used to help assess the various governance framework options.



Figure 5. More than 40 stakeholders from across the catchment worked together to document the values of the catchment and identify the drivers of change.

The outputs of this workshop were shared with participants in the form of a Discussion Paper to provide a transparent record of the outputs as well as to enable stakeholders who were unable to attend the meeting to provide additional comment. A dedicated email address was established by Alluvium to coordinate responses. A limited number of responses were received from:

- OzFish Unlimited – Richmond River Chapter
- Kyogle Landcare
- Lismore City Council
- Department of Industry – Lands and Water (Crown Lands).

Workshop #2 - Stakeholder Workshop #2, held on 22 November 2018 at Lismore City Hall, built on the outputs of workshop #1 and started the conversation regarding governance options. Three guest speakers were invited to share their own experience in designing and managing a range of governance approaches largely in the catchment management, natural resource management, and parks management contexts (Figure 6). The experiences drew on case studies from the USA, New Zealand, Tasmania, Victoria, South East Queensland, and Far North Queensland. The guest speakers were:

- Neil McCarthy, CEO of Mosaic Insights and previous CEO of North East CMA in Victoria
- Richard Ingram, previous CEO of Cradle Mountain NRM in Tasmania
- Carol Sweatman, CEO of Terrain NRM in Far North Queensland.

Workshop participants used lessons from the various case studies to discuss the characteristics and attributes that might be appropriate for a governance framework in the Richmond River catchment. The outputs are discussed in Section 4 and also documented in the Discussion Paper.



Figure 6. Neil McCarthy presents on a range of case studies from the USA, New Zealand and Victoria

Workshop #3 - Stakeholder Workshop #3 was held on 12 December 2018 at the Ballina RSL. This workshop presented some of the initial reflections and views obtained from the stakeholder interviews and outlined four broad governance scenarios or high-level options. Workshop participants were invited to consider the strengths and weaknesses of the options in an interactive activity that sought to understand preferences and importantly to discuss elements that were missing or would be difficult to support.

Following Workshop 3 the Communication and Engagement Plan was reviewed, a fourth meeting was also held with key stakeholder representatives to outline in more detail the background review work

and how this, coupled with the project team's experience and expertise, had distilled the available information and arrived at any key recommendations.

All workshop logistics and operational arrangements were coordinated by DPIE (formerly OEH) on behalf of the project partners.

2.4 Case studies to inform future governance

To help inform the future governance options for the Richmond River catchment, thirteen relevant NRM case studies from both overseas and Australia were reviewed. For each case study the following elements were considered:

- Context
- Planning and governance challenges
- Drivers for change
- Description of current arrangements
- Strengths and weaknesses
- Key lessons.

The majority of the case studies were presented to stakeholders at Workshop 2 by the project's expert panel (including Dr Richard Ingram, Neil McCarthy and Carole Sweatman) and the project team. The case studies reviewed included:

- Central Park (New York)
- Regional Councils following structural and governance reviews of local governments (New Zealand)
- Cape York Peninsula (Queensland) – general models of NRM governance that have been attempted
- Wet Tropics – focussing on the Wet Tropics Sugar Industry Partnership (Queensland)
- South east Queensland Healthy Waterways Partnership (Queensland)
- North East Catchment Management Association (Victoria)
- Moonee Ponds Collaboration Initiative (Victoria)
- Tri-state Murray NRM Regional Alliance (River Murray Corridor)
- Tamar Estuary and Esk River Program (Tasmania)
- Duck River Water Quality Improvement Plan (Tasmania)
- Derwent Estuary Program Study (Tasmania)
- The Georges Riverkeeper (NSW)
- The Sydney Coastal Councils partnership (NSW).

A significant number of the programs and organisations outlined in the case studies share many similar characteristics that have enabled them to be successful and create change in their specific focus areas. The lessons identified in these case studies are explored in Section 3. Summaries of case studies are presented in Appendix A.

2.5 Identification and assessment of future governance options

Inputs to option identification

As summarised in Figure 2, the review process has drawn on several key sources of information to develop future governance and funding options for the Richmond River catchment. These included:

- A broad literature review including the development of case studies from both Australia and overseas
- Expert opinion

- Interviews with key stakeholders
- A series of stakeholder workshops which included the development of governance principles against which any of the options should be assessed (these principles are discussed further in Section 8).

Using all of this input information, the project team then developed six potential options for future governance and funding in the Richmond River catchment. For each option the advantages, constraints and risks, key governance features and possible pathways for implementation were considered. These are discussed in detail in Section 10 of this report.

Evaluation of options

To further assess and ultimately validate how the preferred governance framework and funding option was identified, a multi-criteria assessment (MCA) process was developed. The assessment framework draws on the Natural Resource Governance Framework Assessment Guide developed by the International Union for Conservation of Nature and Natural Resources (IUCN). The Natural Resource Governance Framework (NRGF) has the overarching goal of: *Setting standards and guidance for decision-makers at all levels to make better and more just decisions on the use of natural resources and the distribution of nature's benefits, following good governance principles, such that improved governance will enhance the contributions of ecosystems and biodiversity to equity and sustainability* (Campese J. et al, 2016).

Central to the NRGF ('the Framework') are key elements that need to be in place for effective and equitable natural resource governance – emphasising rights-based approaches, equity and social justice. The Framework is intended to be used as a basis for assessing the status of natural resource governance in multiple contexts and at multiple levels. There are four inter-related components – values, principles, criteria and indicators. The NRGF was populated with information sourced from a combination of a) literature-based information, b) stakeholder interviews, and c) stakeholder workshop outputs. The framework was used to assess six governance options developed as part of this process. Refer to Section 11 for more information and results of the MCA.

Following the MCA, two transition pathways were developed to detail how the preferred governance and funding arrangements could be delivered over time. Finally, one preferred pathway forming the key recommendation from this work (see Section 12).

In addition to the MCA assessment, DPIE conducted further internal interviews and discussions with Council staff to further refine the detail in the options and ensure all internal knowledge had been captured in the process and was reflected in the models.

2.6 Approach to finance/investment

Complexities

Assessing the costs and benefits of moving to a new governance framework are both complex to understand and difficult to quantify. This is further complicated by the fact that data on the aggregate levels of funding and investment from all sources are not freely available, the efficiency of investments is not well understood, and a detailed breakup of governance and administrative costs is not available.

Generally, it is understood that effective and efficient centralised coordination of regional projects can pay dividends in terms of avoiding administrative duplication and ensuring funds are targeted at high priority projects.

Aggregate funding levels & efficiency gains

In Section 11.5 a number of hypothetical aggregate funding levels are considered for the Richmond River catchment (e.g. \$4 million per annum), where benefits are proportional to efficiency gains in expenditure in catchment management, while costs are the additional establishment costs. This provides some insight into the efficiency gains that might be required to justify investing in the new governance arrangements. This approach is often used for ex-ante economic assessments of research and development projects.



Richmond River: Source <https://www.northernstar.com.au/news/whats-being-done-to-save-the-richmond-river/3263619/>

3 Historical governance context

3.1 Key context narrative

Healthy Rivers Commission

The Healthy Rivers Commission (HRC) into North Coast Rivers concluded in 2003. The HRC findings were quite broad reaching and did not focus solely on the Richmond River. As part of the HRC work, it was noted that the Tweed, Brunswick and Richmond catchments were in worse than average condition (likely due to earlier settlement and initial clearing for export of rainforest timbers). The Richmond was noted as being a Stressed Rivers catchment based on water extraction. Physico-chemical water quality and macroinvertebrate populations were poor.

The HRC findings noted that there needed to be joint accountabilities assigned across agencies (Recommendation 1) to develop a response to defined river goals (Recommendation 2). This included consideration of resourcing of these responses as a collective, whole of government exercise. The nine other recommendations covered broad areas from agriculture, fisheries, navigation and river health. The breadth of discussion across the full suite of recommendations demonstrated the need for a broad representation of sectors within any proposed governance framework, although the HRC recommended a NSW Government framework approach to implementing its recommendations.

Catchment Actions Plans

The Northern Rivers Catchment Management Board and later the Northern Rivers Catchment Management Authority worked on the Northern Rivers Catchment Action Plans (originally the Catchment Blueprint under the CMB, and later CAP and CAP2 under the CMA). The Catchment Blueprint featured specific river targets, and within the Richmond (and Tweed and Brunswick) had reach specific targets. Funds were applied according to a priority that was assigned with the CAP. An example target under the Catchment Blueprint is 50% of High Conservation Value Riparian Vegetation would be under active management by 2006. River management was a priority for these plans and there were specialist skilled staff assigned to their implementation. Over time, the numbers of these staff diminished as did levels of funding. The Catchment Blueprint was subject to a review by the Natural Resources Commission in 2006, which expressed confidence that it was a good plan and it could be successfully implemented.

CAP2 also identifies a brokering of an 'all of government and all of community' approach to implementation of the Plan, as well as facilitation of relationships to ensure that this important role was fulfilled. This document is still referenced on the NCLLS website, although a Local Strategic Plan is identified as the key guiding document for NCLLS. Riverine habitat condition and water quality are identified within the Local Strategic Plan as regional priorities. In 2018 NCLLS tightened the focus of its Local Strategic Plan, and now identifies the Richmond River as one of its 3 priority catchments for NRM and sustainable agriculture investment in the region.

RRCC and the CZMP

Throughout this time, Richmond River County Council (RRCC) was providing floodplain services to its constituent councils of Lismore City, Richmond Valley and Ballina Shire. Governance was identified as an issue within this framework in that accountability to constituent councils was not optimal and there was no agreed ongoing program of works. Notwithstanding, the process of development of a CZMP for the Richmond River Estuary was substantially progressed under the auspices of RRCC although its final stage was completed by Ballina Shire Council in 2011 and 2012. This document also identified governance as a fundamental issue that needed addressing for substantial change in the health of the estuary. Although not explored in detail, the Estuary Management Study identified

concerns regarding funding as a barrier to positive action on river health initiatives. Governance and funding were seen to be interdependent issues by those in the catchment.

Projects which were rolled out collectively by the CZMP Interim Committee (made up of local government, OEH and Rous County Council staff representation) included the Ecohealth program in 2014 and a Riparian Revegetation and Prioritisation exercise during 2015. This Committee has been re-established after a hiatus and other NSW agency staff have been invited to attend for a more holistic approach to projects and discussions. Numerous projects have also been implemented by local councils under the CZMP in seeking to achieve the objectives of the CZMP, throughout the catchment in the last 7 years since certification. Projects rely on the combined ability of local government to source funds from their own organisations and apply through the NSW Coasts and Estuaries fund on a 'dollar for dollar' basis. This can limit the ability of larger projects to be put forward by the group. Recent projects have included works in Shaws Bay and reinstatement of vegetation along Emigrant Creek, as well as upstream in the Wilsons and Richmond River catchments.

RRCC review

RRCC also commissioned a governance review in 2013. Its conclusions were that there was a need for a centralised contact point with the ability to make decisions and deliver projects. Funding and/or resourcing was also required. The formal recommendations of the project have not been implemented to date. Rous County Council amalgamated from RRCC, the former Far North Coast Weeds and Rous Water. One of the limitations it currently operates within in terms of its proclamation is that its natural resource management activities are limited to those which arise from its floodplain management activities.

Local Land Services

The Northern Rivers Catchment Management Authority was abolished under the Local Land Services Act in 2013 with NRM responsibilities being shifted and subsumed into the broader NSW Government Department of Local Land Services. Rous Water merged with Far North Coast Weeds and Richmond River Country Council in 2016 with the aim of providing greater cost effectiveness and efficiency in the provision of bulk water supply, weed biosecurity and flood mitigation services.

North Coast Local Land Services (NCLLS) has since been leading a range of initiatives and partnerships to further improve catchment condition. Current legislative and regulatory arrangements recognise LLS as having an established Head of Power for collaborative management of natural resource management (NRM). A recent partnership between NCLLS and Conservation Volunteers Australia has coordinated funding and expertise with the key floodplain partners including Richmond River Country Council, NSW Department of Primary Industries (Fisheries), and the community, to improve floodplain condition in the catchment. The project has engaged with more than 30 farmers to restore over 50 hectares of floodplain wetlands and open swamps while at the same time improving productivity for both farmers and fishers within the catchment.

Many successful partnerships and projects have been undertaken over the years and governance changes since the 2003 HRC review. Future options for enhancing governance arrangements for the Richmond River catchment will seek to build on the successes to date of past and existing plans and partnerships.

3.2 Drivers (and limiters) of change

In addition to its rich values, the Richmond River has a long and colourful history. The historical land uses, institutional systems, and the local communities have all influenced the Richmond River catchment as we know it today. In order to ensure we learn from our past as well as build on the good work done to date, stakeholders were invited through the workshops and interview processes to help document some of the specific drivers or influencing factors that have played a major role in shaping the catchment, and those which may underpin some of the ongoing management challenges for catchment health. Additional information on river health over time is provided in Appendix D.

A high-level synthesis of some of the key drivers that were discussed across stakeholders have been summarised below. This document does not necessarily represent an exhaustive or complete list of drivers that has influenced the management of the Richmond River, but they do represent the key drivers that were identified by the stakeholders engaged in the discussion regarding governance. Drivers are grouped into four broad categories: (i) natural / biophysical, (ii) socio-economic and cultural, (iii) institutional, and (iv) policy, planning and regulation. The information and summary points reflected below are those most commonly expressed by stakeholders to the project team.

Natural / biophysical

The Richmond River catchment is considered to be influenced by:

- **Land use change** – This includes a wide range of agricultural land uses that initially commenced with logging and timber and continued to include commercial fisheries such as oyster farming, grazing by beef cattle, dairy, sugarcane, and more recently macadamia plantations. Urban town centres have also become a major land use in the catchment. These land uses have contributed to:
 - Deforestation and the loss, change in vegetation type and distribution, and connectivity (including that caused through property boundaries, roads and other linear infrastructure)
 - Presence of invasive and pest species (terrestrial and aquatic)
 - The occurrence of erosion (including gully and hillslope) associated with grazing and urban development
 - Increase in pollutant loads.
- **Changes to the natural hydrology** – Land use and gaps in system understanding has resulted in changes to hydrology and hydraulic functioning, including in drinking water catchments, loss and modification of wetland systems, increased barriers (e.g. dams and culverts) to natural flow regimes, increased severity of stream bank and instream erosion resulting in increase of sediment loads, impacts on bulk water supply and fish breeding grounds.
- **Changes to ecosystem and habitat integrity** – Various plant and animal communities have had to adapt to modified and degraded systems or have been largely lost all together, for example, Big Scrub vegetation communities. Some diseases such as Bell Miner Associated Dieback (BMAD) have caused significant impact on some vegetation communities and QX disease on oysters.
- **Natural disasters** – While flooding is a natural feature of the Richmond River catchment due to its natural rainfall patterns, it has also resulted in loss and damage to property and agricultural production. As a result, there has been substantial investment to mitigate future impacts, for example through dredging and the construction of weirs, flood gates and bund walls.

Fish kills have been recorded throughout the history of white settlement on the Richmond River, partly driven by its extensive floodplain and natural flooding patterns. It is likely the severity of these fish kill events are likely to have been exacerbated by changes to the floodplain as a result of works to mitigate flood impacts on life and property. Some significant fish kills have been associated with some large flood events, for example in 2001 and 2008.

- **Loss of traditional land management practices** – Many vegetation communities have adapted to traditional burning over thousands of years. Yet this practice has mostly ceased and been replaced with contemporary fire management practices primarily aimed at risk management. Other traditional ecological knowledge has also been lost.
- **Recreation use on water** – An increase in the number of recreational users and types of uses promotes community awareness of the natural system but can have negative impacts where not managed appropriately.
- **Climate change** – Increasing climate variability and extreme events presents a number of flow-on effects to many of the issues identified above.



Richmond River bridge at Broadwater: Source <https://www.pacifichighway.nsw.gov.au/project-sections/coffs-harbour-to-ballina/woolgoolga-to-ballina/bridge-over-the-richmond-river-at-broadwater>

Socio-economic and cultural

The Richmond River catchment is considered to be influenced by:

- **Traditional and cultural significance** – While there is increasing recognition of Traditional Owners and their land custodianship in the region, much of their traditional knowledge has been lost over many years.
- **Changing agricultural industries** – Early logging for cedar changed post WWII with the introduction of bananas, potatoes and pineapples and more recently macadamia production. Agricultural / financial reforms such as the deregulation of the dairy industry in the 1990s have all created significant economic and financial turmoil in their respective industries. Farm management practices are also being increasingly linked to declining water quality and catchment health.
- **European colonisation and urbanisation** – The increasing development of the Northern Rivers Region, particularly the coastal fringe, has been largely driven by lifestyle choices and the 'seachange' phenomenon. This has provided some local economic growth as a result, but it has also resulted in environmental degradation and habitat loss where new subdivisions are created. Rural economies have been subject to changing and sometimes difficult economic circumstances. 'Rural residential' blocks have replaced some farming locations and retired valuable productive land from use. Weeds consistently require significant inputs for management, and where this does not happen can change the landscape.

Industries, particularly rural industries, are now much more likely to be well managed due partly to greater regulation, however there are legacy issues that still persist. These include acid sulphate scalds, a 'bank' of high nutrient sediment, channelization of creeks and rivers including bank erosion, amongst other issues. Stormwater runoff and diffuse source water pollution (also known as rural runoff) still contribute large amounts of sediment, nutrients and weeds to the catchment.

- **Volunteerism** – While the region has had a strong and successful history of volunteerism, specifically environmental volunteerism, there has been a recorded decline in the number of active volunteers since the 2000s, for example, in the Landcare and catchment care movement.
- **Value of natural assets** – The region's unique and extensive natural terrestrial- and aquatic-based assets have always underpinned (and continue to support) much of the region's community and liveability; a healthy catchment is recognised to equate with a healthy community. There is a suspected decline in community interest/concern over the protection of the region's natural assets.



Historical image of Richmond River at Casino: Source https://www.records.nsw.gov.au/image/12932_a012_a012x2449000147

Institutional

The Richmond River catchment is considered to be influenced by:

- **Regular changes in government** – Which continues to result in a lack of stability especially with regard to funding initiatives and policy development. Changing policy platforms and priorities also disrupt locally relevant government programs and levels of services, such as the decline in extension support. Short political timeframes have also led to short funding cycles and project funding.
- **Funding and investment initiatives** – Funding initiatives for natural resource management have changed significantly over time, historically being seen as bipartisan and focused on regional needs. Today, there are concerns natural resource management is not a priority for government and where funding is available it is focused on national needs not local priorities. Some new initiatives are emerging such as the Indigenous Ranger program under the Caring for Country program in 2009. Councils are delivering more services and are tied to a fixed, albeit linked to CPI, rate base. There are some councils with very low populations and very large areas. These councils can find it very difficult to resource the bigger projects that are needed to address some key NRM issues.

Policy, planning and regulatory

The Richmond River catchment is considered to be influenced by:

- **Catchment and coastal zone management planning** – While the Richmond River Coastal Zone Management Plan (CZMP) was finalised in 2011, and multiple actions implemented / underway, there has not been a whole-of-catchment management plan or similar document guiding management and investment in the region. Implementation of the 2011 CZMP has been challenging under current governance/administration arrangements and the lack of a clear funding pathway.
- **Policy implementation and management responsibility** – Complex institutional arrangements and diverse agencies involved in NRM and catchment management, with consistently changing responsibilities for particular issues, has resulted in distrust and confusion within the community. Multiple approval pathways with some significant waiting times for licenses create problems for implementation of projects in riparian corridors even where such projects are expected to result in a positive environmental outcome.
- **Local environment planning** – Local Environment Plans (LEPs) support planning decisions by local government through zoning and development controls. Not that changes to the LEP process where a Standard LEP was mandated by NSW Government removed the ability of Councils to delineate site specific planning controls for specific purposes. Best practice river health initiatives are not supported by the Standard LEP, particularly in rural areas, even where the Coastal SEPP applies on riverbanks.
- **Inadequate and irregular funding for policy implementation** – see also institutional drivers above. There are a range of funding opportunities available, but they are often opportunistic and can require a matching contribution. Logistically they can be highly challenging to apply for and manage.

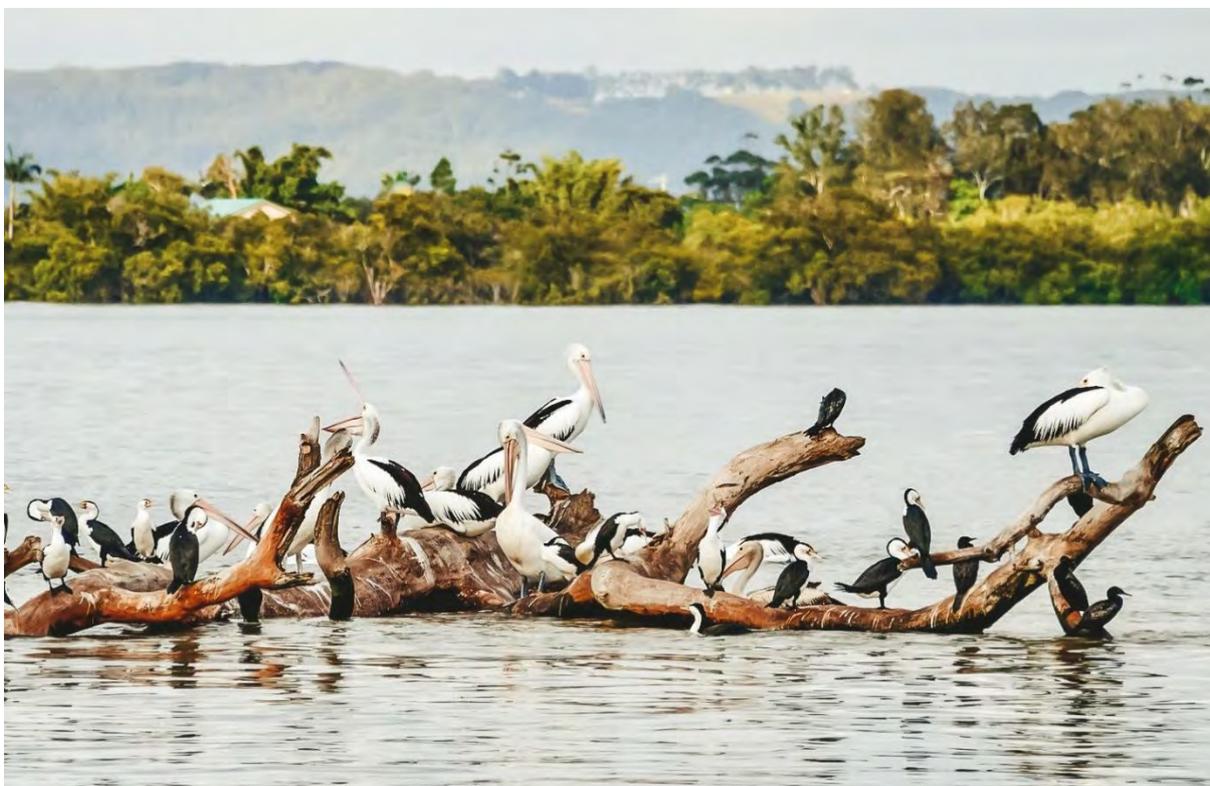
Key stakeholder organisations during the interview process, also identified a number of additional drivers or motivating factors as to why they felt the current process of developing and implementing enhanced governance arrangements. These are summarised below.

- **Competing localised priorities** - Some inland areas have more pressing basic priorities, such as limited budgets in the case of some of the local councils, lack of centralised water and waste services, and lack of a stake in tourism and environment-related revenue, or the

infrastructure to support it. Lack of services and infrastructure make environmental values a challenging issue to prioritise.

Downstream areas tend to be wealthier per capita and have better local services. There are multiple stakeholders that undertake NRM work to benefit both primary producers and the environment, with goals with varying degrees of overlap, alignment, conflict and coordination.

- **Catchment-wide mutual goodwill** - All in-catchment stakeholders affirm mutual goodwill, some to a high degree. Goodwill does not appear to be a limiting factor. Evidence of manifest goodwill goes beyond surveys and is visible in successes often as a result of voluntary contributions. The work of the Catchment Management Board and later, Authority, whilst focussing on NRM, worked across the whole catchment on multiple issues. There are other examples of collaboration including shared library services, contaminated land management, Landcare projects and rainfall/flood data sharing. There is a strong sense of a long and growing desire take good/effective/positive action.
- **Recognition of need for action** - Stakeholders recognise a need for action to varying degrees, and are seeking a clear view around next steps, and a shared view of priorities.



Richmond River: Source https://www.outoftheblueadventures.com/wp-content/uploads/2019/06/River-Cruise-4_1448-x-1068.jpg?x69741

4 Current context and framework for governance and investment

The NSW Coastal Management Framework

The NSW Government has established a modern and integrated coastal management framework to better equip coastal communities to respond to existing and future coast and estuary management challenges and opportunities.

The new framework aims to have thriving and resilient coastal communities living and working on a healthy coast, now and into the future.

The framework comprises:

- *Coastal Management Act 2016* (CM Act)
- State Environmental Planning Policy (Coastal Management) 2018
- NSW Coastal Management Manual
- Coastal Management Programs
- NSW Coastal Council
- Coastal and Estuary Grants Program.

Information on these components can be found at <https://www.environment.nsw.gov.au/topics/water/coasts/coastal-management/about>, and in Appendix C.

Coastal Management Programs

Under the new framework, local councils have a central role in managing the coast. They prepare a coastal management program (CMP) that sets out the long-term strategy for management of the coastal zone in its area.

The CMP development involves:

- Stage 1: Identify the scope of the CMP
- Stage 2: Determine risks, vulnerabilities and opportunities
- Stage 3: Identify and evaluate options
- Stage 4: Prepare, exhibit, finalise, certify and adopt the CMP
- Stage 5: Implement, monitor, evaluate and report

A CMP identifies coastal management issues in the area, the actions required to address these issues, and how and when those actions will be implemented. Local councils also identify the costs of the actions, proposed cost-sharing arrangements and viable funding mechanisms to ensure delivery.

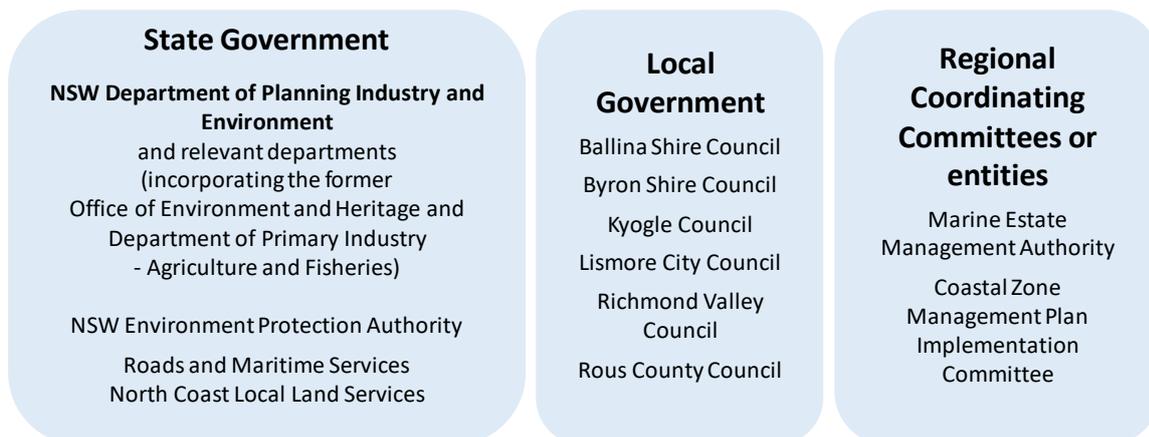
Once certified by the Minister, a local council implements the actions in a CMP through its strategic management systems and land-use planning instruments.

Development and implementation of a CMP for the Richmond River catchment and estuary (building on the CZMP) will be the framework/mechanism for coordinating and prioritising future management actions across the catchment.

Current complexities

The current governance arrangements for the Richmond River are relatively complex. Figure 7 outlines the current government and non-government stakeholders with important roles linked to governance within the Richmond River catchment, and Appendix D provides a high-level summary of key catchment management-related legislation, policy and implementation environments.

Government



Non-government



Figure 7. Current stakeholders linked to governance and investment in the Richmond River catchment

The perception of complexity was reflected in the stakeholder analysis to inform the Consultation and Engagement Plan (Alluvium 2018b), perspectives shared by stakeholders during interviews, and elements of the literature review in Section 2. The focus of the governance review has been to recognise and learn from the current governance and funding arrangements within the Richmond River catchment, and in so doing, develop future options for the Richmond River catchment. This section of this report has therefore deliberately been kept relatively succinct with some observations of the current situation and complexities.

Multiple agencies within stakeholder groups

Even within one stakeholder group such as the state government, there are multiple agencies involved with varying jurisdictions, some of which occasionally overlap. For example, as at June 2019, there are four agencies responsible for developing and implementing the regulatory framework for water management in regional NSW: Department of Industry, WaterNSW, Natural Resources Access Regulator and Office of Environment and Heritage. Their goal is to achieve economic, social, cultural and environmental outcomes for the people of NSW. They are involved in the design of the water market, NSW water management rules, operating the river system and other water delivery systems within NSW, and encouraging and enforcing compliance with NSW water management rules (NSW Government, 2018).

Desire for lead entity and coordinated approach

There are currently a range of planning processes occurring in the region such as the Marine Estate Management Strategy and the Coastal Management Program for the Richmond River Catchment (which is updating the CZMP for the Richmond River Estuary), and a range of partnerships working to deliver existing actions.

NCLLS has a legislatively defined role to work with private landholders for a number of purposes, including natural resource management. At present, they are delivering riparian vegetation works in the Emigrant Creek catchment under MoU to the MEMA agencies. There are also many good examples of agencies cooperating with program and project delivery that is focussed on delivery of holistic, positive river health outcomes (e.g. state and local governments). Ballina Shire and Lismore City Council's are undertaking works under the Special Rate Variations which are also delivering NRM outcomes.

However, there is no one agency or local government taking 'control' of a co-ordinated or strategic investment program. In recognition of this, there is a desire expressed by many stakeholders for a single, coordinated approach to governance and attracting investment in the catchment. There is strong sense from stakeholders that governance would be enhanced with a single entity responsible for leading catchment management, with a collaboratively developed “plan of attack” to guide future action and investment within the Richmond River catchment.



Richmond River at Woodburn: Source <http://www.visitnorthcoast.com.au/see-richmond-valley/woodburn/>

Past challenges are well known

Many previous studies, some of which have already been outlined in Section 3, have highlighted the complex and often difficult to coordinate nature of both the historic and current governance and funding arrangements relevant to the Richmond River catchment. Despite repeated calls for better coordination, higher degrees of cooperation, and the need for improved access to funding, it seems both the governance and funding arrangements and mechanisms remain highly challenging. This complexity varies with geography as some key areas of responsibility change linked to the nature and scope of the relevant legislation and the respective jurisdictions.

Enabling environment

For any governance (current or future) arrangement to be successful, they require a supportive enabling environment. This includes the right people in the right roles, high levels of trust and cooperation amongst stakeholders, and clearly identified roles and responsibilities for carriage of the actions and investment in catchment management.

Despite much goodwill and many good actions and efforts, this enabling environment could be enhanced for the Richmond River catchment. As outlined above in Section 3, there are also challenges with the current funding and investment arrangements. Experience from elsewhere typically shows that if stakeholders in a given region are clearly united with an agreed plan of action, investment is usually far easier to attract, and from a far more diverse range of investment partners (government and non-government).

During this project stakeholders repeatedly affirmed the need for an alternative model of governance and funding to take the management of current well documented, important catchment-related activities forward into the future. These possible arrangements for the future are explored more fully in the subsequent sections of this report.



Richmond River at Wiangaree: Source <http://www.northersights.net/australia/nsw/wiangaree-7.html>

5 Models of effective governance

5.1 What do we mean by ‘governance’

The term governance has changed rapidly in contemporary literature and especially in the case of water and river basin-related governance which has gradually been altered as a reaction to what was previously considered to be a narrow focus with government as the prime actor in shaping society.

Governance refers to the wide variety of decision-making processes leading to various environmental, social and outcomes within society.

Governance also refers to more than ‘government’. It includes the diverse suite of public, private and civil society decision that interact with government leading to various outcomes (Kooiman, 2003; Rhodes, 2007). Governance implies the recognition that there are many more actors and structures at play, and they interact in myriad ways and while there is no universally accepted definition of governance, there is wide agreement that governance today goes beyond regulation, public management, and traditional hierarchical state activity (Biermann, 2007; Olsson and Head, 2015).

Among the many definitions of governance, the IUCN refers to the norms, institutions and processes that determines how power and responsibilities over natural resources are exercised (Olsson, L., and Head, B W, 2015), how decisions are taken, and how citizens or other stakeholders participate in and benefit from the management of natural resources (IUCN, 2019).

For the purpose of this review and more specifically the stakeholder engagement activities, we have described ‘governance framework’ as:

‘A framework that facilitates the alignment of authority and accountability, relationships, formal and informal systems and processes, and resources and funding, to ensure the values of the Richmond River catchment are protected and enhanced. A framework will encompass attributes of authority, accountability, stewardship, leadership, coordination, collaboration, and direction’.



Richmond River bridge construction at Broadwater: Source <https://www.pacifichighway.nsw.gov.au/project-sections/coffs-harbour-to-ballina/woolgoolga-to-ballina/bridge-over-the-richmond-river-at-broadwater>

5.2 Indigenous governance

Reconciliation Australia (2019) recognises that effective Indigenous governance is key to creating lasting positive change for Aboriginal and Torres Strait Islander peoples, and for all Australians. Good governance is about Aboriginal and Torres Strait Islander people making and implementing decisions about their communities, lives and futures.

Aboriginal and Torres Strait Islander peoples have always had their own governance. It is an ancient jurisdiction made up of a system of cultural geographies ('country'), culture-based laws, traditions, rules, values, processes and structures that has been effective for tens of thousands of years, and which nations, clans and families continue to adapt and use to collectively organise themselves to achieve the things that are important to them (Reconciliation Australia, 2017).

Indigenous governance is not the same thing as organisational governance. While governance is a critical part of the operation and effectiveness of legally formalised and registered incorporated organisations, it can also be seen at work every day:

- In the way people own and care for their country, arrange a ceremony, manage and share their resources, and pass on their knowledge
- In networks of extended families who have a form of internal governance
- In the way people arrange a community football match or an art festival, informally coordinate the activities of a night patrol and develop alliances across regions
- In the voluntary work of Aboriginal and Torres Strait Islander men and women within their own communities, and as governing members on a multitude of informal local committees and advisory groups.

Indigenous governance is the role that Aboriginal and Torres Strait Islander social and philosophical systems, cultural values, traditions, rules and beliefs have in the governance of:

- Processes—how things are done
- Structures—the ways people organise themselves and relate to each other
- Institutions—the rules for how things should be done (Reconciliation Australia, 2017).

Cawthorn (2019) also recognises that Indigenous governance could be described as the unique ways in which Indigenous people come together to make decisions and engage in cultural, economic and social activities (Figure 8).

There are many different Indigenous communities throughout Australia, with their own cultural and historical backgrounds, however there are some characteristics that some groups may have in common. These may include cultural institutions, organisation into family or clan-based groups, cultural protocols regarding decision making, and the important role that leaders play.

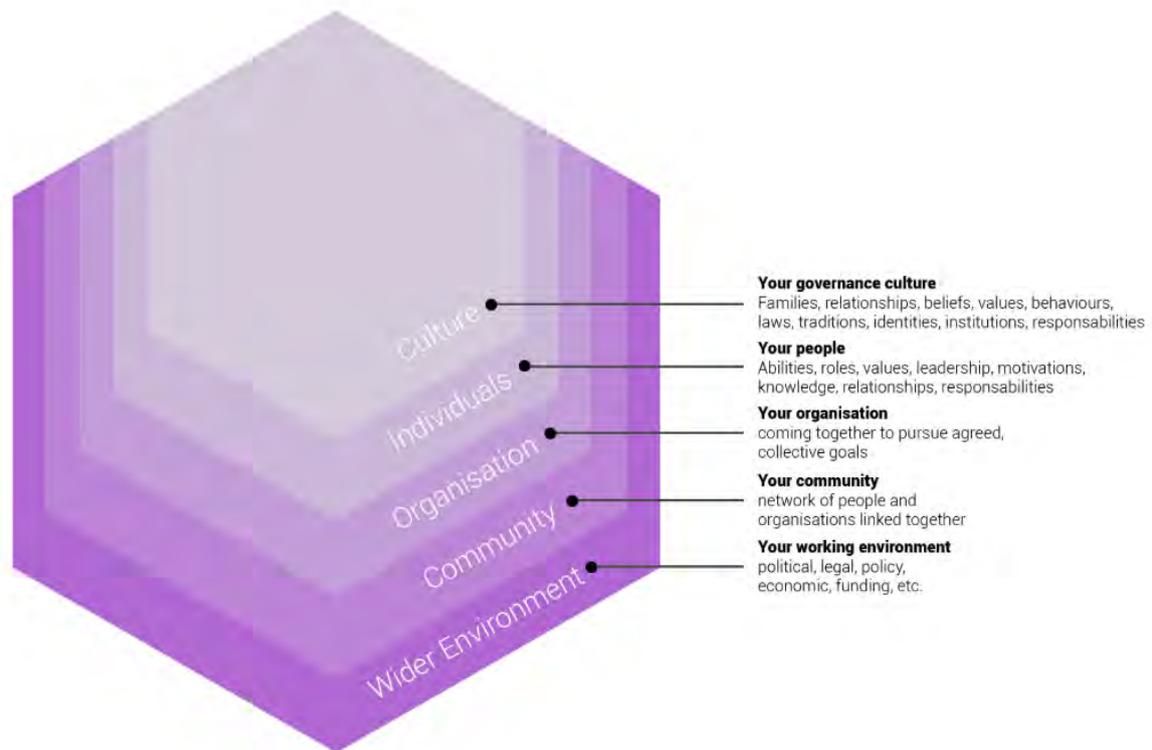


Figure 8. *The multiple cultural institutions and organisations that may exist in Indigenous governance and decision-making (Cawthorn M. , 2019)*

Additional information on Indigenous governance can be found in the Indigenous Governance Toolkit developed by Reconciliation Australia <http://toolkit.aigi.com.au/>.

5.3 Organisational governance

One such model or more contemporary organisational governance is that adopted by the then Queensland Department of Education and Training (DET) (Queensland Government 2017) which sets the standards of accountability and transparency that guide the organisation and its partners/stakeholders (see

Figure 9). Importantly it also outlines the principles, elements and mechanisms used for effective governance and stresses the need for continual performance improvement balanced with the need to meet corporate obligations and legislative requirements. The framework considers that effective governance should be characterised by:

- Clear roles and responsibilities
- Ensuring a shared understanding of priorities supported by a collaborative use of resources
- A focus on effective and efficient delivery
- Continual improvement over time based on good data including feedback on performance
- A well-documented understanding of key risks and how they are to be managed.

Many elements of this framework are relevant to the future governance arrangements for Richmond River. Additional principles are discussed in Section 8.



Figure 9. *Governance framework adopted by the then Queensland Department of Education and Training* (Source: Queensland Government 2017)

There are numerous other studies from which to draw important lessons for governance frameworks targeted more specifically at catchment management. For example, in a project for the Government of India and the World Bank, the Australian Water Partnership developed a User Guide for River Basin Planning and Implementation (Alluvium 2016). This work reviewed affirmed that an institutional structure with appropriate capacity is essential if catchment plans are to be successfully developed and implemented (Pegram et al, 2013; Wester and Hirsch, 2007). This structure can take various forms including centralised or decentralised and stakeholder or government driven models (Wester and Hirsch, 2007). They may also have different levels of authority. For example, a catchment commission generally has the power to convene stakeholders but not to enforce a catchment plan, and examples include the Mekong River Commission in South-East Asia and the Lake Chad Basin Commission in northern Africa. Whereas, a catchment authority generally has regulatory power to enforce a basin plan, an example being the Murray Darling Basin Authority in Australia.

Some authors suggest that if the formation of a governance organisation is agreed, it needs to have regulatory powers so that it can develop and implement a catchment plan (Wester and Hirsch, 2007; Pegram et al, 2013), although others suggest that a top-down approach can be seen to be out of touch with stakeholders.

Typically, a key purpose of any new catchment management organisation is to develop and implement a catchment management plan. To achieve this aim, it may have a number of functions

ranging from planning to monitoring (Table 3). To be effective in implementing these functions it is essential that the organisation has appropriate resourcing and capacities. Key capacity requirements for such organisations are outlined in Table 4. These important governance considerations have been considered in subsequent stages of this project, and the attributes required for successful and effective governance are considered further in Section 5.4.

Table 3. Key functions of a catchment management or river basin organisation (Wester and Hirsch, 2007; GWP, 2009; CAP NET, 2005)

Function	Description
Planning	Formulate a catchment management plan for the medium- and long-term management and development of water resources
Constructing and maintaining infrastructure	Develop and maintain the infrastructure needed to regulate and deliver water according to the catchment plan
Allocating water	Apportion water to different sectors and geographic areas, including the environment
Distributing water	Ensure that the allocated water reaches its point of use
Resolving conflict	Enable and promote negotiation and compromise between stakeholders
Monitoring and investigating	Collecting the information needed to assess and inform catchment planning

Table 4. Key capacity requirements for a River Basin Organisation (Pegram et al, 2013; GWP, 2009; CAP NET, 2005)

Capacity	Description
Human resources - Planning and management	Ability of the staff driving the process to facilitate the catchment planning process in complex institutional environments and to translate the outcomes into implementable activities
Human resources – Technical	Technically skilled people with the ability to synthesise water, environmental, social, economic and institutional information in order implement catchment management
Infrastructure	Access to infrastructure needed to regulate and deliver water according to the catchment plan
Financial	Access to financial resources to development and implement the catchment plan

5.4 Governance legal frameworks

This section reviews the regulatory environment a governance framework must operate within. This includes an overview of the legal issues to be addressed, and provides a basis for the consideration of identified options and how they may operate locally.

Broadly speaking there are three general governance arrangements commonly used in river basin and natural resource management contexts. These are:

- Memorandum of Understanding (MOU) / Consortium Agreement / Unincorporated Joint Venture
- Company Limited by Guarantee
- Company Limited by Shares.

The key elements of these options are explored in Table 5.

Table 5. Structural forms of possible legal governance frameworks (Carey, 2018)

UNINCORPORATED ENTITY (JOINT VENTURE)	COMPANY LIMITED BY GUARANTEE	COMPANY LIMITED BY SHARES
<ul style="list-style-type: none"> a) May be for profit or not for profit. b) No limit on number of Members. c) Liability of Members may be unlimited (unless carefully documented joint venture agreement (JVA) to the contrary). d) Need not comply with Corporations Act (2001). e) Governance via Board (no minimum). f) Not suitable for raising funds from public. g) Members may pay annual fee / subscription. h) No annual reporting obligations to ASIC. i) JVA recommended. j) No Members' Agreement/Shareholders Agreement - JVA. 	<ul style="list-style-type: none"> a) Not for profit. b) No limit on number of Members. c) Limited liability – Member's guarantee (nominal). d) Must comply with Corporations Act (2001). e) Governance via Board of Directors (minimum 3). f) Constitution not mandatory but recommended – may be prescriptive or broad. g) Can raise further funds from public. h) Members may pay annual fee / subscription. i) Annual reporting obligations to ASIC (depending on size). j) Members' Agreement is recommended to supplement any Constitution. 	<ul style="list-style-type: none"> a) For profit. b) Maximum 50 Members. c) Limited liability. d) Must comply with Corporations Act (2001). e) Governance via Board of Directors (minimum 1). f) Constitution not mandatory but recommended – may be prescriptive or broad. g) Cannot raise funds from public. h) Members may pay annual fee / subscription – usually in exchange for further shares. i) Annual reporting obligations to ASIC (depending on size). j) Shareholder's Agreement is recommended to supplement any Constitution.

Where there is no perfect model, many not for profit environmental entities have already, or are moving towards, a company limited by guarantee model as this ensures any Directors have a limitation on liability (for example the Queensland Trust for Nature). This also ensures a legal entity in perpetuity.

Joint ventures are also common and are relatively easy and less costly to establish. A joint venture could be established quickly with relevant 'member' entities making contributions. This option could be more practicable measure initially.

If a partnership model was established as a separate legal entity, it would be independent, transparent, and could enter into funding agreements, and contracts for on-ground works in its own right.

These broad options allow for a number of different combinations of contracting or funding arrangements, two examples of which are presented in Figure 10 and Figure 11 below.

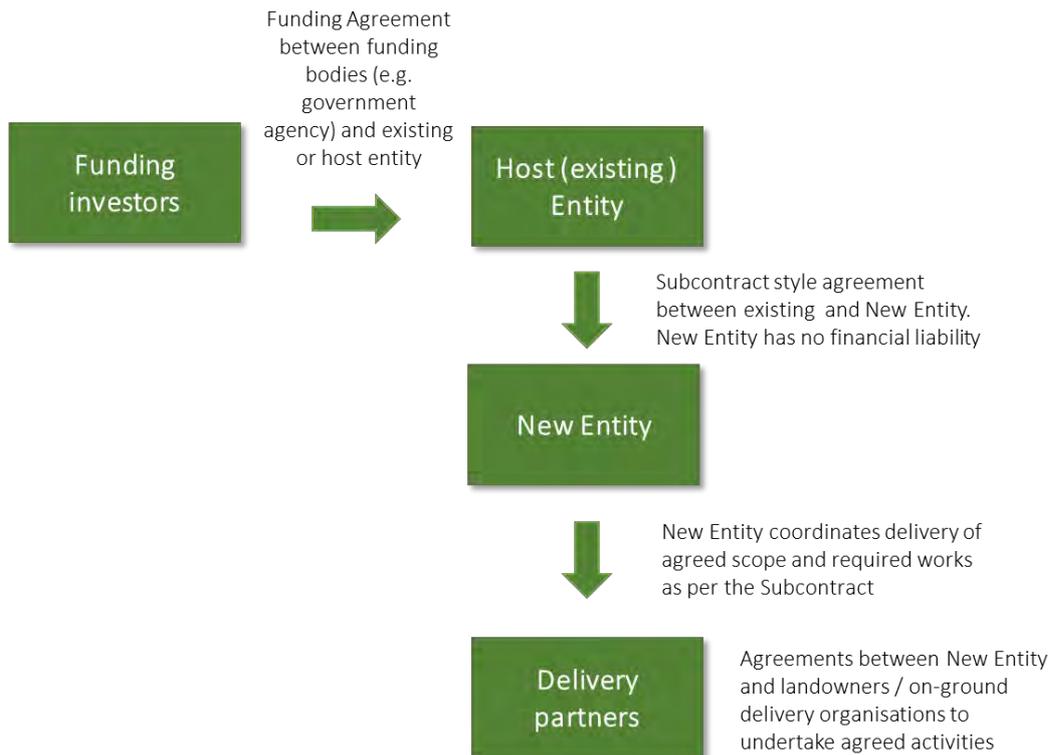


Figure 10. Option 1 for establishing legal funding arrangements (adapted from Carey 2018)

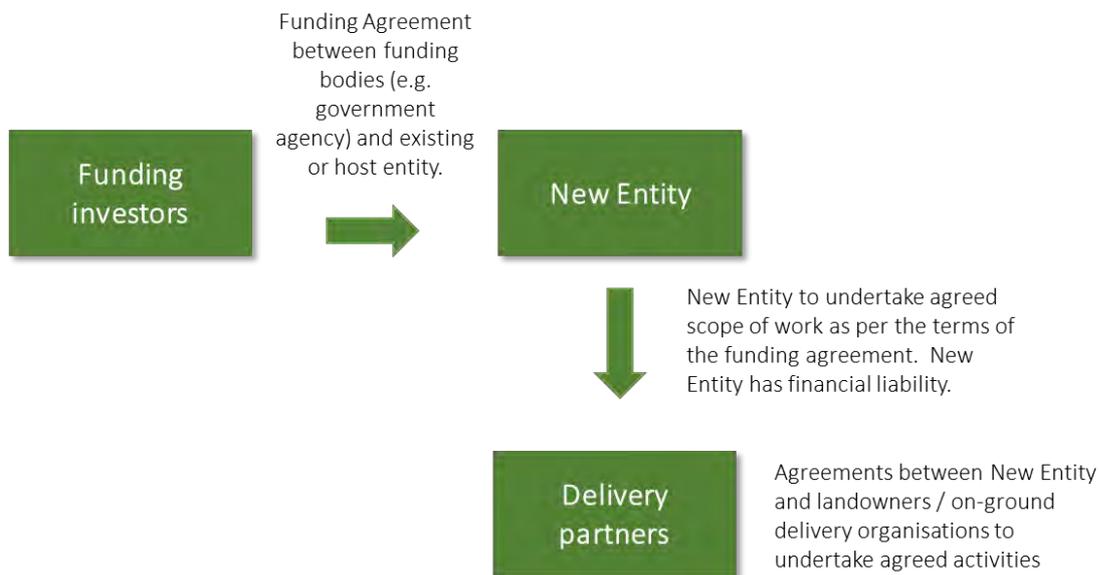


Figure 11. Option 2 for establishing legal funding arrangements (adapted from Carey 2018)

Legal governance frameworks in NSW must adhere to Commonwealth and State legislation (including the *Government Sector Finance Act, 2018* to ensure adherence with requirements for funding). There are a number of elements that dictates the legal form and type of a governance framework. These elements generally relate to:

- The number and requirements of stakeholders, that is any legal structure will need to cater for the diversity of stakeholder needs and values and include dispute resolution processes.

- Commonwealth and State Funding Arrangements which create both legal (contractual) requirements and financial (reporting, liquidity etc.) requirements.
- Different proposals for different potential projects, where funding entities may require a specific minimum legal entity.
- Ensuring that the entity is eligible for deductible gift recipient status to better attract and incentivise private philanthropic contributions.

5.5 Attributes of successful and effective governance frameworks

From the body of academic and action-based literature, experience with governance reviews, and learnings from the case studies, there are a number of factors or attributes that are consistently considered essential to long term success. Some of these more commonly reported attributes are discussed in turn below.

Successful NRM management and restoration is also recognised as a wicked problem and tremendous challenge, for which there is and can be no rulebook, time schedule or predefined path to success. Complex challenges are inherently resistant of grand designs and time pressure. However, there are many lessons to be learnt from experiences elsewhere.

Understanding the context, challenges and purpose

Central to all the case studies presented during the second stakeholder workshops was the importance of having a common and shared vision, and a well-articulated description of the purpose the institutional or governance framework is tasked with addressing.

The majority of reviewed case studies cite the importance of establishing a strong science-based approach to not only understanding issues and priorities but also in supporting early engagement with stakeholders. Common examples are the development of water quality improvement plans and other whole-of-catchment management plans such as the Coastal Management Program currently in preparation for the Richmond. Such plans enabled early investment in modelling to support and guide issue identification and prioritisation of management responses.

Visions are big, bold and audacious but importantly co-developed collectively by the affected stakeholders. Visions are also derived and driven by a shared understanding of emerging impacts and pressures – be they economic, social or environmental (Ingram 2018).

Olsson and Head (2015) in their own review of water governance confirm that it is increasingly apparent that effective and sustainable water governance requires both natural and social science understandings of water problems, whether these be water scarcity, water quality, public health and sanitation, food production, flood mitigation, the dynamics of rapid urban population growth, urban inequalities, multiple uses of catchments and reservoirs, and so on. As a result, many water and river basin organisations in Australia and around the world now include representatives from both physical and social sciences. Traditionally these groups were commonly spilt into different sub-groups or advisory groups, but today there is much stronger realisation that the two sciences must be strongly linked and integrated. The development of the Reef Integrated Monitoring and Reporting Program that supports the implementation of the Great Barrier Reef 2050 Long-term Sustainability Plan is one very contemporary example.

The importance of collaborative governance and building institutional capacity

In Australia, commonly reported early successes recognise and celebrate local achievements and outcomes delivered through grass roots or community-based groups such as Landcare groups (Ingram 2018). In the case of Duck River Water Quality Improvement Plan, it was the local Landcare group that provided the proof-of-concept for collaboration with landowners.

A study in 2015 of nine case studies of water and river basin scale governance frameworks (Olsson and Head 2015) highlights a number of key findings, including the need for more collaborative governance processes for managing complex and rapidly evolving issues, such as water in times of climate change when both floods and droughts are expected to increase. A post analysis of the water security and flood management crisis in South East Queensland in the 2000s demonstrates that crisis-led planning did trigger innovation and an opportunity for new thinking (e.g. the introduction of indirect potable reuse) but stops short of providing the institutional and other conditioning that would sustain system innovation. That is, the policy and governance changes introduced by the Queensland Government during this time did not generate and consolidate institutional capacity to plan collaboratively for the future (Head 2014).

A review of water management governance structures in Dublin by (Kelly-Quinn et al, 2014) similarly found that water challenges are still being addressed on a rather ad hoc basis with no clear apparent integrated management or governance framework citing the need for a framework that brings together the range of bodies dealing with water supply, flood control, waste assimilative capacity, fisheries, tourism, recreation, etc. It was also recognised that the relevant authorities also need to apply “adaptive management” where institutional arrangements can flex more readily to address long-term issues and unpredictability.



Richmond River at Casino: Source <http://www.aussietowns.com.au/town/casino-nsw>

Building collaborative governance

Collaborative governance according to Wanna (2008) comprises multiple, inter-related layers of:

- Collaboration within government, involving different agencies and players
- Collaboration between governments, involving agencies from different jurisdictions
- Collaboration between governments and external third-party providers of goods and services
- Collaboration between governments and individual citizens/clients.

Wanna (2008) also notes that collaboration has many different motivations and purposes, for example, collaboration can:

- Involve cooperation to build commonality, improve consistency and align activities between actors
- Be the process of negotiation, involving a preparedness to compromise and make trade-offs
- Can involve oversight roles, checking, pulling together and central coordination
- Can involve power and coercion, the ability to force outcomes or impose one's own preferences on another, to some extent, with their compliance or involvement
- Ideally involve future commitments and intentions, prospective behaviour, planning or preparation to align activities
- Involve engagement, the development of internal motivations and personal commitment to projects, decisions, organisational goals or strategic objectives.

Regardless of the purpose, having a shared understanding of what and why stakeholders want to collaborate is paramount. In addition, the performance of the system depends on the people and their attitudes and behaviours in it and does not depend so much on the specific form of the organisations nor governance and funding framework. This highlights the importance of champions in the system to drive and support effective governance.

Building institutional capacity

Researchers have commonly highlighted a number of institutional impediments to implementing more sustainable water management techniques and systems, including governance systems. Concerns raised in the literature include institutional fragmentation, poorly defined organisational responsibilities, limited incentives and disincentives, poor organisational commitment, technological path-dependency, limited community capacity to meaningfully participate and an overall lack of experiential knowledge on how to facilitate more sustainable systems (Brown et al. 2006). Failure to address these impediments have been found to lead to institutional inertia where the agreed vision for more sustainable water or river basin management cannot be realised in the delivery of such outcomes in the current institutional system. Brown et al. (2006) also found that without institutional and cultural transformation there is the risk that a series of ad hoc policy rules, competition for influence among organisation groups, poor alignment between organisational cultures and new organisational agendas will arise.

Like governance, institutional capacity building is a complex field of study in its own right, but Australian-led research has found that improving institutional capacity is likely to require directive (mandatory) and facilitative (non-mandatory) institutional reforms. Directive interventions typically involve formal regulative initiatives that places requirements, usually through legislation, on government agencies and other stakeholders to undertake actions such as the development of management plans and adoption of new management practices, establishing policy statements, regulations and standards and setting performance targets and objectives. Facilitative institutional

reforms include the use of market-based instruments (e.g. trading schemes) that use financial incentives and disincentives to achieve desired outcomes. Other examples include mobilising community and political support, creating adequate funding mechanisms and incentive structures, using active cross-sectional stakeholder networks and active stakeholder participation, and auditing and performance reporting (adapted from Brown et al. 2006).

A process of continual transition and adaptation

Another common theme highlighted in a wide range of case studies and governance reviews is the dynamic nature of the various frameworks and institutional relationships. The most successful frameworks displayed constant processes of reflection and renewal. Case studies also highlight the importance and value of being highly targeted to a single or small number of specific management actions. This ensured funding and human resource effort could be similarly targeted. For example, in South East Queensland the upgrade of wastewater treatment plants were recommended by their Scientific Expert Panel to be of high priority to address nitrogen loads and while expensive was relatively straight forward and simple to implement. In the Tamar Estuary and Esk River Program (TEER) chose the locally visible and contentious issue of siltation to focus their initial efforts on. The latter is explored further as a case study in Appendix A.

These often small but momentous successes formed the basis of important business cases and public confidence to underpin new funding initiatives and to engage with new stakeholders. The emergence of new stakeholders often led to the review of existing governance frameworks to fill any significant knowledge gaps and to ensure equity in representation.

Across all of the studies, it is clear that community involvement is a key component to success and allowing the input of citizens and local groups into decision-making and actions is a common way of maintaining healthy community relations. In terms of stakeholders, many of the organisations mentioned also used scientific evidence and reasoning, modelling and proof of past successes and action to attract stakeholders to their causes and encourage future support and investment.

Another key element to the success of these initiatives is their local focus, while still receiving consistent Federal or State government support in the form of funding to allow them to accomplish their goals. These goals tend to be small and achievable, rather than large and time-consuming. This means that several projects are always being worked on and completed, which leads to further stakeholder support and engagement.

Another key to the success of these alliances is the use of the success of past programs (for example, the Tamar Estuary & Esk River Program structure is based on that used in the Derwent River Estuary). This allows the success of other organisations to be passed on and utilised in other areas quickly and efficiently. It is also clear from the case studies that many of the governance structures have evolved over time to adapt to changing circumstances, funding requirements and stakeholder needs. These learnings have all been considered carefully in the development of future governance options for the Richmond River catchment considered in subsequent sections of this report.



Richmond River at Casino: Source <http://www.waterwaysguide.org.au/files/casino-upstream-town-bridge-old-wier-sitejpg>

6 Models for efficient investment and funding

6.1 Context

Given the wide variety of projects and actions already developed to improve the condition of the Richmond River catchment, efficient investment and funding will be key to delivery. This section outlines the broad principles of efficient investment and funding for a setting such as the Richmond River catchment. Section 9, then applies these models to the specific circumstances of the Richmond.

Despite the broad range of policy interventions (e.g. regulations on land use) and investment options, it is widely recognised that investment into maintaining and enhancing the condition of the Richmond River catchment falls sort of what is needed. This is one of the underlying limitations on progress to date.

Given the recognised need for investment and limited resources, it is vital that the greatest possible return on investment is achieved.

The following sections outline the theory, principles and suggested approaches for efficient investment and funding. This includes:

- Cost-effectiveness
- The three interrelated functions of sourcing, managing and disbursing funds:
 - Tapping into multiple funding sources and funding options
 - Money management
 - Efficient funding disbursement.

The discussion across the following sections is based on research undertaken, expert opinion of the project team, consultation, and previous work establishing funding and investment strategies in other catchments (e.g. Moreton Bay and the Great Barrier Reef catchments).

6.2 Investment within a constrained budget – cost-effectiveness

With likely ongoing / future constraints on available funds, the investment process needs to be managed to ensure the most cost-effective options are identified and prioritised. Investment within a constrained budget must facilitate the improved allocation of funds.

Increasing and enhancing the effectiveness and efficiency of investments will ensure that the greatest impact is achieved. Significant efficiency improvements could be achieved through greater co-ordination of investment, targeting actions and using more innovative approaches to both investment and policy.

Cost-effectiveness as the underlying goal

The principle of cost-effectiveness ensures that maximum benefits are derived from a given pool of investment. An example of this is illustrated in Figure 12, for sediment abatement costs (\$/tonne/annum).¹ As shown, there is a significant degree of variability in cost across different management actions.

Efficiency of investment can be achieved by prioritising actions based on their relative cost-effectiveness. There are often more opportunities for funding low-cost options, e.g. an organisation

¹ Source: Alluvium (2017). Indicative costs for actions to mitigate diffuse source pollution. Report to NSW EPA

may be more able/willing to provide funds to a low cost option than other higher cost actions. Other partners may be more willing/able to contribute to higher cost actions and projects.

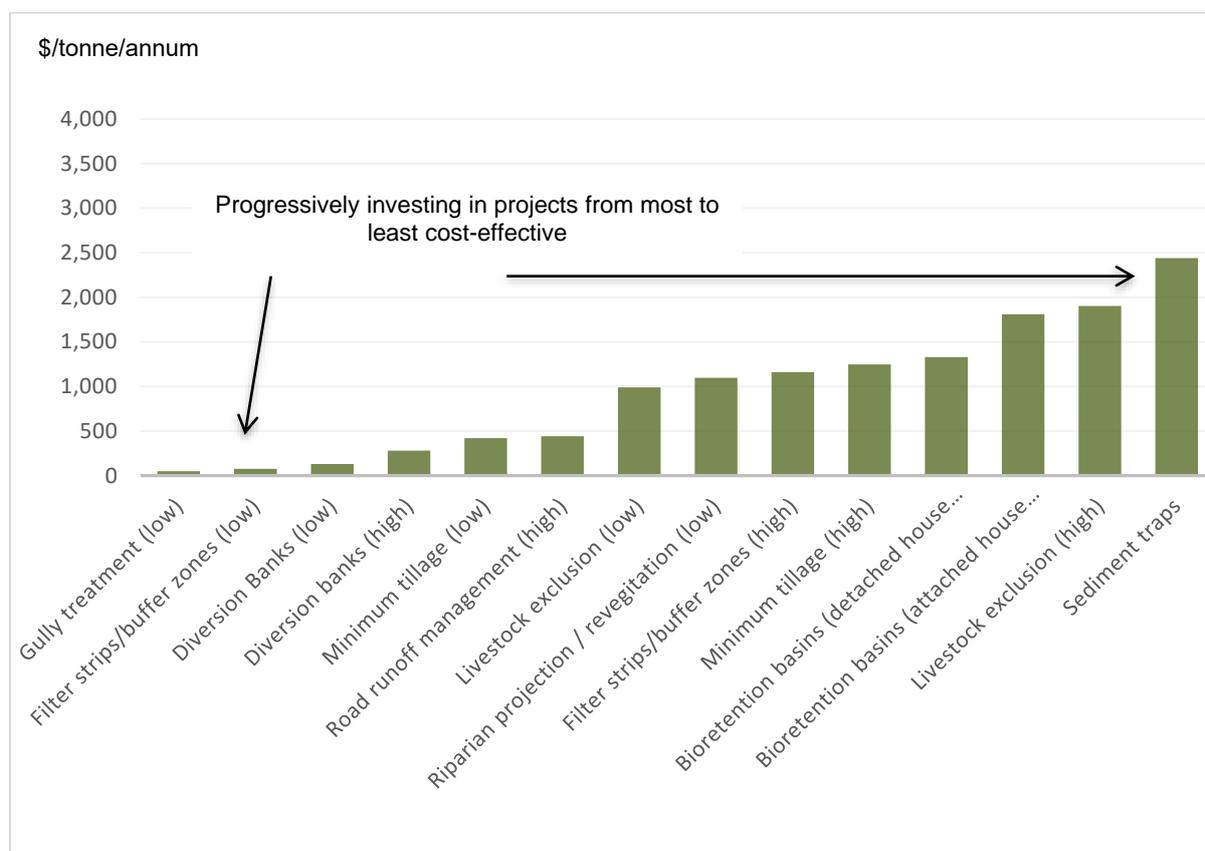


Figure 12. Achieving value for money – cost effectiveness of actions to reduce Total Suspended Sediment - moving up the cost curve (TSS example indicative of typical works)

Recommendation

Significant efficiency gains can be made by ensuring future investments are based on identifying and prioritising the most cost-effective actions. This should be underpinned by an evidence base as to their efficacy and impact, in targeted areas of the catchment, assessed as delivering the highest outcomes to overall waterway health.'

6.3 Three broad interrelated functions

Efficient investment and funding will rely on a funding and investment model structured to ensure optimal performance in three broad interrelated functions as shown below in Figure 13. These functions, which are discussed in more depth in the following sections, are defined as funding sources, money management and project funding disbursement. Each is a stand-alone task, as well as interrelated. Furthermore, the success of delivering on each of these functions is also reliant on establishing and supporting the capacity of entities charged with each functions, as well as entities and the community ultimately engaged in delivering on-ground change. This section focuses on the economic and financial components of good governance only.

This model shows the venues available for funding sources (noting this list is not exhaustive) and highlights the tasks required for the management of funds and also the disbursement of funds. A key point to note is the objective of economic efficiency, with the principal that investing for cost-effectiveness (as previously discussed) is vital.

Each of these functions is discussed in further detail in the following sections.

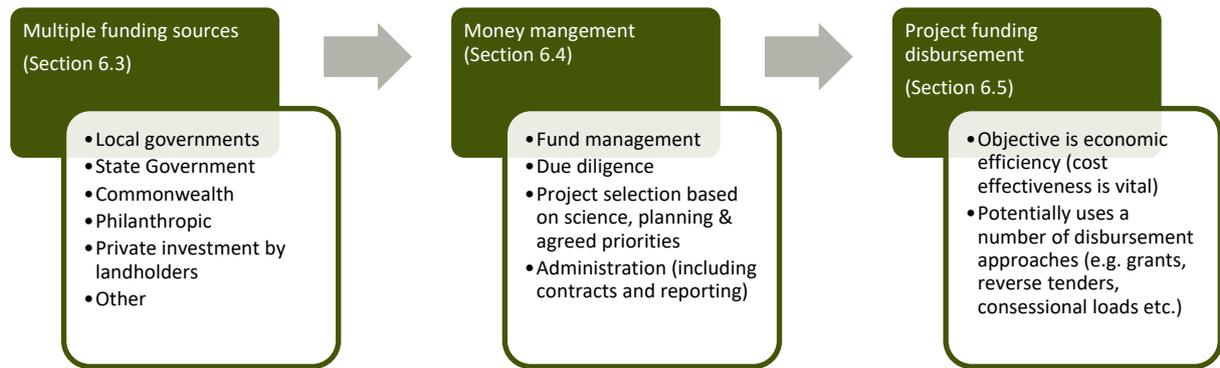


Figure 13. *Three broad functions of funding and investment*

6.4 Tapping into multiple funding sources

There is a broad suite of potential funding sources available, many of which are beyond the current funding sources utilised in the catchment. These alternative funding sources considered in more detail in Section 9, including recommendations for their use in the short-term and longer-term within the Richmond River catchment.

A key element of accessing new funding sources is the need for fund management discipline (discussed further in section **Error! Reference source not found.**) and efficiency, without which will be a major impediment to broadening the suite of funding sources.

A list of the possible funding sources is shown in

Table 12, noting that this is list is not exhaustive. Key considerations for each source include:

- **Requirement to be repaid.** While most funding sources are typically by way of budget allocations or grants, where projects have a capital component and partial/full long-term commercial returns, then funding that is repaid over the long-term may be appropriate. For example, the Queensland Rural and Industry Development Authority provide loans to farmers to undertake projects that result in both commercial outcomes (e.g. drought resilience) and enhance resource management.²
- **Public or private capital investments.** There will be opportunities for private sector capital investments in addition to the predominantly public capital investment approach. While private sector investment on waterway management is relatively limited at present, the market is developing, and much of the current investment is by downstream corporate entities (e.g. ports or water utilities) investing in upstream waterway management as part of a broad treatment train approach. Examples include the Port of Brisbane investing in catchment management to reduce sedimentation of the Brisbane River; while Seqwater, Melbourne Water, Sydney Water and Unity Water all invest in catchment management to reduce water treatment costs.
- **Regulated/government decision or voluntary.** Some funding sources require regulation to underpin their use, while some are purely voluntary.
- **Commonly used in catchment management.** Some funding sources are common for catchment management, while some are still emerging as options.
- **Invested through new governance arrangements.** Some will require a change to the existing governance arrangements to be more effective.

The effective management of funding can lead to

- New funding sources underpinned by greater efficiencies and economies of scale from consolidated funding
- Greater levels of funding that are currently unavailable for worthy projects.

The funding sources outlined in this document extend the purview of the current funding sources and will require formation of new funding pathways. Strong fund management and efficiency will be required to underpin the broadening of potential funding sources.

Table 6. A broad suite of possible funding sources

Funding source	Are funds repaid to investors (Y/N)?	Public or private capital?	Regulated/government decision or voluntary?	Commonly used in catchment management (Y/N)?	Invested through new governance arrangements (partially/fully)?
Government budget					
Budget appropriations (could be Commonwealth, State or local government)	N	Public	Government decision	Y	Partially
New investment					
Bonds	Y	Private	Voluntary	N	Fully

² <http://www.qrida.qld.gov.au/current-programs/Productivity-Loans/sustainability-loan/Sustainability-Loan-Primary-producer>

Philanthropic	N	Private	Voluntary	Y	Fully
Water quality offsets	N	Private	Regulated	N	Partially
Developer charges	N	Private	Regulated	Y	Partially
Licence fees	N	Private	Regulated	Y	Partially
Load-based license fees	N	Private	Regulated	N	Partially
Catchment management levies	N	Private	Government decision	N	Partially
Local Land Services fees for service	N	Public	Government decision	Y	Partially
Water service charges reflecting risk to Richmond River	N	Private	Regulated	N	Partially
Nature-based tourism levy	N	Private	Regulated	Y	Partially

Points to note in relation to funding sources include the following:

- Budget appropriations dominate the current funding landscape in the Richmond, with Government appropriations (from all levels of governments) being disbursed to subordinate entities for project funding (e.g. State Government budget finding for LLS, which is used to fund grants to landholders).
- Many of these sources of funds are generated through some form of regulation of government decision. The mechanisms that generate these funding sources are designed to accumulate funding to address the negative consequences of activities that negatively impact on the Richmond River.
- Only a portion of the available funding sources available are currently being used. Of those being used most provide little (if any) effective price signal to modify behaviour to reduce risks to the Richmond River.
- The mechanism used to raise funds are mixed. Some mechanisms are ultimately funded by impactors (those who impact the Richmond River) such as offsets or developer charges and some are funded those who benefit from improving the condition of the river. Arguably, it is more often the latter source of funds which is utilised.

There is scope for an improvement in management and efficient distribution of funds from most potential sources. However, the degree to which the revenue from existing fees and charges would or could be channelled through any proposed governance organisation is uncertain, as there is a tendency for entities that raise funds to spend the money themselves.

A brief description of many of the current and potential funding options are outlined below.

Budget appropriations

Budget appropriations from consolidated revenue, irrespective of the level of government is a common option for environmental funding. This is currently the dominant source of funding, and may continue to be for the foreseeable future.

Government appropriations are administratively simple as no new funding mechanism needs to be established for the funded actions and are entirely appropriate as a means to fund pure public good projects. It must be noted that this option has significant risk in a tight fiscal environment.

Grants

Grants are included here as they are an established part of the NRM delivery programs for most organisations, both government and non-government. Grant programs can be extremely time-

consuming to develop and administer, but they assist with budget constraints and allow access to funds for project which many not otherwise go ahead. Landcare, the NSW Environmental Trust, NSW Recreational Fishing Trust and the NSW Coasts and Estuaries Fund are established and regular funding programs, with other opportunistic grant funds being accessed when they become available. Feedback from local government has indicated that the requirement to match funding on a dollar for dollar basis is a significant limiting factor to accessing NSW Coasts and Estuaries Funds, particularly as there is a requirement to also absorb the project management costs. A review is currently underway to consider a more favourable funding ratio, particularly for smaller Councils or where there are multi-jurisdictional projects proposed.

Bonds

Private capital markets can play an important role in mobilising private funding into enhancing the condition and resilience of the Richmond River. To facilitate this flow of funds, investment products must appeal to a broad range of investors. Internationally and increasingly in Australia, there is an emerging market for bonds issued to investors where funds are used as loans to finance commercially viable projects that also provide environmental benefits. These are traditionally known as 'Green Bonds' but are becoming more common in a water resources context. For example, a utility could finance a catchment management project that delivers better water quality to an existing treatment plant where the cost of the catchment management is lower than the infrastructure-based treatment solution. As at August 2019, total issues of green bonds in Australia have totalled \$15.6 billion. Of that, around 6% were used to fund water projects, while a further 2% to fund changes in land management. Funding low emissions energy and buildings dominate the funding.³

Philanthropic funding

Philanthropic donations by individuals and business are another source of funding, albeit a relatively small source based on recent trends. However, as business becomes more attuned to Corporate Social Responsibility (CSR) issues, and as investors increasingly value CSD, opportunities for philanthropic funding will also increase. The advantage of philanthropic funding is that donations are tax deductible if the receiving organisation is structured as a charitable organisation.

Water quality offsets

Offsets are typically designed to manage for residual impacts after reasonable efforts are made to avoid, mitigate and remediate impacts on site. Offsets are a policy tool used to replace environmental values lost through development. Under regulated development requirements, projects go through a process to avoid and mitigate negative impacts on the actual development site. This often leaves a residual envisage impacts that can be offset by undertaking an equal and countervailing action on another site. The use of offsets is becoming more common in Queensland.

Water quality offset banking

A further extension of water quality offsets model would be the establishment of water quality offsets banking. Under this arrangement, investors in projects that create water quality benefits (e.g. an investment in a constructed wetland) could earn credits providing specific requirements were met. These credits can then be sold to buyers requiring an offset. This has recently been undertaken by Unitywater in Queensland.

Developer charges

Developer charges are a common approach applied by local governments and infrastructure service provider to recover costs of service provision up-front at the time of development rather than over a long timeframe. Developer charges if set efficiently, should at least cover the direct, forward-looking

³ Climate Bonds (2019) Green finance state of the market. August 2019.

costs of certain projects. Current practice in NSW is that developer charges are effectively set by the State, and do not necessarily reflect the costs of local impacts.

Load-based licence fees

Licence fees may be charged based on the scale and type of pollutant load released (e.g. by a water treatment plant). Where fees could be set to reflect external cost of the activity, they could provide a source of funds. It should be noted that calculating an efficient price is problematic, as fee's need to be based on actual pollutant loads and the value of the damage caused, which may not be the case. An example of load-based licensing is the scheme currently used in New South Wales.

Catchment management and environmental levies

Catchment management and environmental levies target residents living within a catchment for a financial contribution, which is used to improve water health prioritised at a catchment level. The levies are often collected by local governments through property rates and are common across councils. For example, **Local Land Services have the ability to levy funds from their rural property ratepayers**. Levies have the advantage of beneficiaries paying for actions within their own catchment, however with the absence of a consistent regime across the catchment, applying levies to pooled investments at a larger scale could be constrained. Also, regional variation across the broader catchment may be justified due to where impacts are generated and where the benefits of action are received. Furthermore, the establishment of levies can be subject to IPART review and endorsement. This would require a robust business case to underpin any request.

Adjustments to bulk water charges

Many water service providers impose a modest catchment management charge as part of their water services charge. These charges reflect that catchment management can enhance waterway health and water quality, providing commercial benefit largely from avoiding input costs. This approach is currently used by Sydney Water, where the charges are overseen by IPART.

Nature-based tourism levy

The nature-based tourism sector may provide funds through implementation of an environmental management charge. This approach is used for all commercial tourism operators on the Great Barrier Reef (a flat levy charge for full-day or half-day tours incorporated into ticket prices).

A key element to the sourcing of funds will be to consider whether to pursue existing funding sources only or actively seek to tap into new sources of funding.

Summary

In summary, there is a broad suite of funding sources available for the Richmond River catchment, many of which are still emerging options / not commonly used. Awareness of, and initiatives to draw on, these broader sources may significantly boost investment in the catchment.

Under any future governance arrangements, it would be prudent to investigate the opportunities to better utilise existing funding arrangements and broaden the scope of funding arrangements.

The initial focus should continue to be budget appropriations. However, once governance arrangements are in place and a costs investment plan is developed, a more cohesive case can be made for new funding sources. Initially this should focus on options with a more direct causal linkage between funding entities and impacts. This would infer catchment management levies reflecting the benefits received by the broader community from NRM. The use of adjustment to bulk water charges and the potential use of water quality offsets could also be explored by utilities. The other options identified are still emerging and are less likely to be viable in the shorter-term.

Future governance arrangements should be cognisant of the requirements for a broader scope of funding options. This would require a degree of formal cooperation/integration where some funding arrangements require regulatory underpinning (e.g. local governments implementing a catchment management or environmental levy of households).



Richmond River floodplain: Source <https://conservationvolunteers.com.au/news/2017/03/richmond-river-floodplain-management/>

6.5 Managing the money

Irrespective of the final governance option (in Section 10 of this document) implemented, there are several other requirements that should be met to underpin efficient financing and investment in the Richmond River catchment. These are outlined in Table 7.

The key elements of managing the money, include the management of funds themselves, due diligence of any proposed projects, the selection of projects based on science, planning and the agreed priorities, and administration, including contracts and reporting.

Table 7. Key requirements for money management

Clear purpose	A clear and unambiguous purpose is fundamental to good governance. The purpose of the funding and investment must be clear to ensure maximum value-for-money improvements in catchment and waterway health and resilience from the use of the funds available.
Independence and accountability	The financial governance should be independent of undue influence and should be accountable to investors (e.g. a philanthropic organisation or institutional investor) for investments made on their behalf.
Relevant expertise	Any staff or individuals performing governance oversight roles on behalf of investors should be appropriately skilled.
Low administrative overheads	Administrative overheads and functions (administrative and management functions, contract design, payments for milestones, reporting etc.) for on-ground project assessment and selection should be undertaken by officers with the required skills in science, economics, and finance.
Commercial transaction approach	All transactions, whether for non-repayable or repayable disbursements, should be underpinned by legally enforceable contracts to ensure appropriate performance and financial protection for all contracted parties.
Appropriate accounting and financial reporting	Accounting and reporting should be consistent with appropriate accounting and financial reporting standards. Given that some on-ground projects may

	require transactions over several years, future assets and liabilities will need to be accounted for correctly.
Appropriate regulatory approvals	All necessary accounting, and the requirements of the Financial Management and Accountability Act 1997, the Commonwealth Tax Act and ASIC regulatory requirements will need to be met.
'Deductible Gift Recipient' tax status for voluntary contributions	While much initial funding is likely to be sourced from public sources and (potentially) via regulatory requirements (e.g. from offset contributions), it should be the intention that, in the longer term, a proportion of the funding for the Richmond should be from private sources. Ideally, the investment fund should achieve Deductible Gift Recipient status with the Australian Taxation Office. This status would allow private sector donors to use the deduction allowances, encouraging greater levels of investment.
Recognise and manage risks	The overall governance framework will need to mitigate technical, administrative, landholder compliance, and political risk. Financial risks can be significantly mitigated through the use of appropriately skilled and experienced funds administrators, and the cost of undertaking this risk management should be embedded in administrative functions and the capacity of those administering funds.
Linking with other governance arrangements	The governance arrangements for the investment should be linked and complementary to other relevant governance arrangements. The financial governance arrangements are essentially 'stand-alone', which ensures the independence investors look for, while they enable the decision making (i.e. prioritisation of investments, on-ground monitoring, and overall monitoring and evaluation) to be managed via existing processes, where possible.

All of the existing local and state government entities currently have these requirements in place, to differing extents. These requirements should be carried forward and enhanced under new governance arrangements in addition to initiatives to boost the quantity of funding and alignment of effort.

Summary

Irrespective of the final broader governance arrangements implemented, specific requirements for efficient funds management will need to be met. A robust system for financial management is needed as part of the preferred governance model. Rather than re-inventing a new system, it would be prudent to utilise an existing and tested system such as the project and financial management system currently used by LLS.

6.6 Efficient project funding disbursement

The final key function is the disbursement of funds to projects that ensure investment makes a material contribution to enhancing the condition of the Richmond River. Disbursement could be undertaken via a number of mechanisms, such as grants, reverse tenders and other market-based instruments.

As discussed previously, fund disbursement should be based on the principles of cost-effectiveness, ensuring that maximum benefits are derived from a given pool of investment. This should also consider the degree to which there are private benefits accruing to the recipient (usually a landholder).

Ideally any structure developed to disburse funds would operate collaboratively with other relevant parties when disbursing funds. This would allow cost efficiency gains through working collaboratively with well-established organisations that already have a network of engaged landholders and hold the

confidence of both funding organisations and stakeholders alike. This approach allows enhanced participation, cost sharing and administrative efficiencies.

A potential risk when distributing funds from multiple sources is that funds may be used on projects which are incompatible with the intentions and priorities of providers of capital. This risk can be significantly reduced if providers of capital were able to place constraints on the types and locations of projects that are financed and projects that are compatible with any constraints can be identified and prioritised from the Richmond River catchment Investment Plan (to be established) which will complement the Coastal Management Plan for the Richmond River Catchment.

Principles for disbursement of funding

The following list outlines a number of key principles to underpin the disbursement of funds in the Richmond River catchment. It should be noted that this list is not exhaustive. The guiding principles include:

- All projects must make a positive contribution to enhancing the improvement of the Richmond River catchment.
- Funding is most appropriate for projects with a significant public good component (i.e. they deliver improvements in waterway health) and where there are insufficient private incentives to justify full private funding (i.e. the projects wouldn't proceed in the absence of the funding). In effect, moral hazard should be avoided (i.e. paying people to do what they should be doing anyway).
- Investments in capacity development are often very efficient and may be a precursor to the effectiveness and efficiency of other actions. Therefore, capacity building should always be considered as part of a broader package of projects to receive disbursements.
- Funding should be allocated based on the relative cost-effectiveness of projects, including consideration of expected environmental changes attributable to the project, and the lifecycle cost of the project.
- Consideration of projects should include the value of any in-kind contributions of time / effort by landholders, and any co-investments of cash or other inputs by the landholder (e.g. use of equipment).
- Metrics and other measures of environmental equivalence will be needed to underpin assessments and ensure transparency and repeatability of assessment processes.
- In assessing projects, consideration should be given to any constraints imposed by investors, funding bodies, or by regulatory requirements. For example, where funds originated from a regulated water quality offset requirement, the funded project will need to meet those offset requirements (e.g. environmental equivalence criteria are met).
- All funding should be underpinned by suitable contractual arrangements to underpin investor confidence and certainty in delivery.
- The consideration of costs and the comparison of options should include the lifecycle costs of alternative options including their respective maintenance and asset refurbishment / renewal costs.
- Discriminative funding mechanisms, such as reverse tenders, may be preferable to fixed cost-sharing arrangements as they have a lower risk of over/under payment for actions undertaken.

In summary, fund disbursement should be underpinned by sound scientific, economic and commercial principles outlined immediately above; always ensuring the projects selected provide the most cost-effective solutions available, and with alignment of effort to reduce duplication. These principles should be included in the Coastal Management Program for the Richmond River Catchment as a framework for the Investment Plan to be developed.



Richmond River high school flooded: Source <http://www.abc.net.au/news/image/7480164-3x2-940x627.jpg>

7 Richmond River catchment values synopsis

The environmental, social, cultural and economic values of the Richmond River have been widely documented. These values lie at the heart of establishing a common purpose for a governance framework and ideally are regularly reviewed and explored by the stakeholders that are most at risk should these values be lost or negatively impacted.

Long-term strategic outcomes and values considered most important by key stakeholders

Based on the discussion held by participants during the first stakeholder workshop, the key values that were considered to be important to the future protection and management of the Richmond River catchment were:

- **First Australian's culture** – including their historical land use, spiritual connection to land and sea, and continuing stewardship of the land and their people
- **Access** – to support and enable cultural and spiritual connection, passive and active recreation, and amenity
- **Diverse and productive rural industries (including fisheries)** – that support strong regional economies
- **Healthy, functioning ecosystems** – that support resilient and abundant biodiversity; maintain hydrological and landscape integrity; and protect a wide range of ecosystem services including water quality.
- **Sustainability** – that respects an appropriate carrying capacity of the catchment and its resources
- **Collaboration** – between government, industry and business, community and special interest groups
- **Participation** – in decision making, planning, and implementation of on ground action
- **Cultural and social diversity** – recognising that our local communities have long associations with the catchment, and are highly diverse in their backgrounds and lifestyle choices
- **Lifestyle and liveability** – for all local citizens who have chosen to make the Richmond River catchment their home or place of business
- **Prosperity** – that enables affordable access to services and lifestyle choices
- **Intergenerational equity** – respecting the needs and rights of our young people and future generations to a healthy catchment
- **Water security** - ensuring there are clean, safe, secure and affordable water supplies to deliver a range of domestic, commercial and agricultural services.

A copy of all the individual views and perspectives can be found in The Richmond River Governance Framework Discussion Paper (Alluvium, 2018).

Additional observations

During the stakeholder interviews, representatives also identified:

- **A highly variable values landscape within the catchment.** That is, the value of the catchment varies with organisational, personnel and local community values. The predominant (and historic) framing of values has historically been 'production versus environment', rather than

seeing the two as complementary ideas, and value sets, let alone as workable realities. Science-based values can also imperfectly correspond to local's assigned values.

- **Up and downstream divide.** Overall, environmental values were considered to be stronger and prioritised more highly closer to the coast — it's fair to say downstream locals love their river; primary production is more valued in upstream/inland areas, and aesthetic, intrinsic or recreational is not as well perceived. Some stakeholders suggested that downstream areas including the river can be considered 'out of sight, out of mind' for many upstream stakeholders.



Richmond River mouth: Source <https://www.environment.nsw.gov.au/images/estuaries/stats/9richmond4.jpg>

8 Principles and desired attributes of a Richmond River governance framework

Effective governance systems and frameworks are commonly unpinned by a set of guiding principles. These guiding principles provide a basic framework for how a governing entity or institutional arrangement will operate. For the purposes of this project, principles have also been used to inform the development of criteria for assessing the suitability of potential governance models for the Richmond River catchment.

This section describes a number of different approaches to identifying principles, and a selected suite of principles to underpin future governance of the Richmond River catchment.

8.1 Principles of good corporate governance

Good governance

Good corporate governance as described by the (Australian Government, 2018) its very definition facilitates:

- **Accountability** – being answerable for decisions and having in place meaningful mechanisms to ensure adherence to standards
- **Transparency and openness** - having clear roles and responsibilities, and clear procedures for making decisions and exercising power
- **Compliance and risk management** - ensuring it meets the requirements of the law, regulations, standards and community expectations of probity, accountability and openness
- **Integrity** - acting impartially, ethically, and in the best interests of its members
- **Stewardship** – using every opportunity to enhance the value of the public assets and institutions that have been entrusted to its care
- **Efficiency** – ensuring the best use of resources to further the aims of the organisation
- **Leadership** – achieving an agency-wide commitment to good governance.

International principles for good river basin or catchment scale governance

The Organisation for Economic Cooperation and Development (OECD) has regularly made the assertion that “the current water crisis (including water quality crisis) is not a crisis of scarcity but a crisis of mismanagement, with strong public governance features” (OECD, 2011). This is due to institutional fragmentation, poorly managed multilevel governance, unclear allocation of roles, lack of integrity and transparency, poor economic regulation, and poorly drafted legislation (OECD, 2013).

In an effort to drive change and following extensive dialogue and discussion at the 6th World Water Forum in 2012, the OECD established a world-wide community of practice on river basin and water governance. Together they developed a suite of principles under the auspices of the OECD Water Governance Initiative.

Importantly the OECD (2015) recognised that water systems and river basins hold intrinsic characteristics that make it sensitive to and dependent on multi-level governance, as it:

- Connects across sectors, people and places as well as geographic and temporal scales in which hydrological boundaries and administrative perimeters do not coincide
- Involves a plethora of public, private, and non-profit or civil society stakeholders in decision making

- Is a highly capital-intensive and monopolistic sector with important market failures where coordination is essential
- Involves water policy that is inherently complex and strongly linked to a wide range of public good domains such as health, environment, energy and regional economy.

OECD evidence also shows that there is not a one-size-fits all solution to water challenges worldwide but rather governance is highly context-dependent. They stress that:

- It is important to fit water policy and governance to places and not the other way around
- Bottom-up and inclusive decision-making is key to effective water policy (i.e. to avoid governance bottlenecks)
- Integrated water resources management requires operationalisation frameworks that consider the short, medium and long term is a consistent and sustainable way (OECD, 2015).

The OECD Principles on Water Governance acknowledge that these principles are rooted in broader principles of good governance: legitimacy, transparency, accountability, human right, rule of law, and inclusiveness, and are based on three mutually reinforcing and complementary dimensions of water governance namely effectiveness, efficiency, and trust and engagement. A summary of these principles is provided below in Table 8 and highlighted diagrammatically in Figure 14.

Table 8. Overview of OECD Principles on Water Governance (Source: OECD 2105)

Principle		Enhancing the effectiveness of water governance
Principle 1	Clearly allocate and distinguish roles and responsibilities - including for policy making, policy implementation, operational management, regulation and enforcement.	
Principle 2	Manage water the appropriate scale to reflect local conditions and foster coordination between the different scales – that is water governance and policy practices should respond to long term environmental, economic and social objectives; reflect the hydrological cycle; and promote adaptive and mitigation strategies, actions and measure based on clear and coherent mandates and plans.	
Principle 2	Encourage policy coherence through effective cross-sectoral policy coordination – by encouraging coordination mechanisms to facilitate coherent policies across ministries, public agencies and levels of government, including the use of cross-sectoral plans; identifying, assessing and addressing barriers to policy coherence; and providing incentives and regulations to mitigate conflicts among sectoral strategies.	
Principle 4	Adapt the level of capacity of responsible authorities to the complexity of water challenges – by identifying and addressing capacity gaps.	
Principle		Enhancing the efficiency of water governance
Principle 5	Produce, update, and share timely, consistent, comparable and policy-relevant water and water-related data and information , and use it to guide, assess and improve water policy – including reviewing data collection, use, sharing and dissemination to identify overlaps and synergies and track unnecessary data overload.	
Principle 6	Ensure that governance arrangements help mobilise water finance and allocate financial resources in an efficient, transparent and timely manner – by carrying out sector reviews and strategic financial planning to assess short, medium, and long term investment and operational needs and take measures to help ensure availability and sustainability of such finance; adopting mechanisms that foster efficient and transparent allocation of public funds (i.e. through scorecards and audits); and minimising unnecessary administrative burdens.	

Principle 7 Ensure that sound water management *regulatory frameworks* are effectively implemented and enforced

Principle 8 Promote the adoption and implementation of *innovative water governance practices* across responsible authorities, levels of government and relevant stakeholders – by promoting social learning to facilitate dialogue and consensus-building; promoting innovative ways to co-operate, to pool resources and capacity, to build synergies across sectors and search for efficiency gains; and promoting a strong science-policy interface.

Principle Enhancing trust and engagement in water governance

Principle 9 Mainstream integrity and *transparency practices across water policies*, water institutions and water governance frameworks for greater accountability and trust in decision-making - through use of codes of conduct or charters; and establishing clear accountability and control mechanisms.

Principle 10 *Promote stakeholder engagement* for informed and outcome-oriented contributions to water policy design and implementation – by mapping public, private and non-profit actors who have a stake in the outcome or who are likely to be affected by water-related decisions; Defining the line of decision-making and the expected use of stakeholders’ inputs, and mitigating power imbalances and risks of consultation capture from over-represented or overly vocal categories; and encouraging capacity development of relevant stakeholders.

Principle 11 Encourage water governance frameworks that help *manage trade-offs* across water users, rural and urban areas, and generations – by promoting non-discriminatory participation in decision-making across people; empowering local authorities and users to identify and address barriers to access quality water services; and promoting public debate on the risks and costs associated with too much, too little or too polluted water to raise awareness, build consensus on who pays for what, and contribute to better affordability and sustainability now and in the future.

Principle 12 Promote regular *monitoring and evaluation* of water policy and governance – by promoting dedicated institutions for monitoring and evaluation that are endowed with sufficient capacity, appropriate degree of independence and resources; developing reliable monitoring and reporting mechanisms; and encouraging timely and transparent sharing of the evaluation results and adapting strategies as new information becomes available.

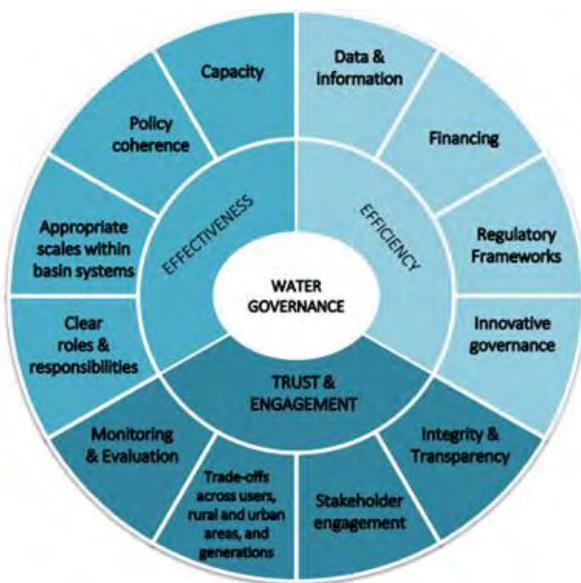


Figure 14. OECD principles for governance

The IUCN has also been very active in developing the Natural Resource Governance Framework to help set standards and guidance for decision-makers at all levels to make better and more just decisions on the use of natural resources and the distribution of nature's benefits, following good governance principles such that improved governance will enhance the contributions of ecosystems and biodiversity to equity and sustainability (Campese, 2016). Their framework is founded on twelve principles:

1. Inclusive decision-making - especially increasing voice and participation of youth, women, indigenous peoples, and local communities
2. Recognition and respect for legitimate tenure rights – especially customary rights of indigenous peoples and local communities, and women's tenure rights
3. Embracing diverse cultures and knowledge systems
4. Devolution – especially for community-based natural resource governance
5. Strategic vision and direction
6. Empowerment
7. Coordination and coherence
8. Sustainable resources and livelihoods
9. Social and environmental accountability
10. Protection of the vulnerable
11. Rule of law
12. Access to justice on natural resource issues, including to resolve natural resource conflicts (Campese, 2016).

8.2 Principles for the Richmond River as identified by local stakeholders

At the first stakeholder workshop for the governance review process, stakeholders collectively shaped the following principles to underpin future governance arrangements for the Richmond River catchment. Governance arrangements will be:

- **Sustainable** – that is, they will:
 - Support a long-term view
 - Ensure stability
 - Ensure appropriate levels of resourcing and strategic funding
 - Be supported by strong policy and regulation.
- **Inclusive and equitable** – that is, they will:
 - Be founded on trust and respect
 - Respect and value the interests of the large number of stakeholders equally across the catchment
 - Support and promote collaboration and effective communication
 - Consider the needs of Traditional Owners and future generations
 - Consider the whole-of-catchment and whole-of-system
 - Ensure all industries are openly welcomed and encouraged to collaborate, including those with specific licence / compliance requirements.

- **Collaborative** – that is, they will:
 - Encourage and promote the necessity for all stakeholders, including landholders, to be part of the solution and commit to implementing relevant and appropriate actions that contribute to river health improvement.

- **Adaptive** – that is, they will:
 - Build on, and learn from previous efforts, experience and knowledge
 - Consider climate change uncertainty
 - Continue to learn and adapt by using an agreed monitoring, evaluation, reporting and improvement (MERI) framework.

- **Evidence-based** – that is, they will:
 - Support decision-making that is founded on scientific evidence and /or traditional knowledge
 - Ensure strong links to data and new knowledge consistent with the MERI framework.

- **Focused** – that is, they will:
 - Be underpinned by an agreed prioritised strategy of investment and with clearly defined management objectives
 - Deliver on-ground solutions that align directly to the agreed priorities
 - Concentrate on the future.

- **Flexible** – that is, they will:
 - Attract diverse sources of funding and investment
 - Promote a range of novel funding strategies
 - Minimise bureaucracy and ‘red-tape’.

A copy of individual views and perspectives regarding principles identified during the stakeholder consultation phase can be found in The Richmond River Governance Framework Discussion Paper (Alluvium, 2018).

8.3 Desired attributes for a Richmond River governance framework

During the second stakeholder workshop participants heard from a number of nationally recognised governance and natural resource management practitioners (see Section 2.2). These practitioners shared a number of case studies that offered up practical examples of different governance approaches and structures or arrangements. Following this sharing of different experiences, stakeholders were invited to reflect on which attributes would be most relevant and appropriate to include in a governance framework for the Richmond River catchment. Additional input was also gathered via interviews with additional representatives from key stakeholder organisations.

A summary of stakeholder reflections desired attributes of a future governance framework for the Richmond River catchment - including *Function*, *Form* and *Behaviour* - is outlined in Table 9.

Table 9. Summary of responses regarding what attributes stakeholders desire in a future governance framework

Feedback from stakeholder workshops	Additional feedback via interviews
Function (what it will do)	
Leads the creation of a shared whole-of-catchment vision	Be the voice and ‘champion’ for the Richmond River
Focus on whole-of-catchment protection and enhancement of values (e.g. biodiversity, local economies and livelihoods)	Provide the authority, responsibility, resources and accountability (to both State Government and local communities)
Works with existing delivery mechanisms and local ‘trusted champions’	Enable to harness and optimise investment from a range of sources including existing commitments as well as additional sources of new funding and revenue
Provides a single point of communication and coordination	Ensure sustainable funding
Attracts investment	Have a clear vision and mandate
Develops clear, prioritised strategy that leads to on-ground action	Establish clear priorities but be adaptive as circumstances change
Respects indigenous values and lore	Continuously inform stakeholder about progress (good and bad)
Drives and coordinates collaboration	Celebrate achievements through stories (not just scientific reports and bureaucratic reports)
Creates exposure of on-ground results	
Respects local socio-cultural and geographic diversity	
Supports and incentivises local action (e.g. with local landholders)	
Addresses knowledge gaps	
Form (how it is organised)	
Whole-of-catchment focussed	Long-term focus
Multi-layered with multi-layers of ‘ownership’ – has broad community buy-in	Interdisciplinary and integrative (no silos)
Trusted and endorsed by local people	Flexible
Enables local and state government to get their job done	
Single entity with locally delegated responsibilities	
Adopts an adaptive management approach	
Sufficiently resourced	
Flexible with minimal bureaucracy, independent from government	
Locals determining projects with broader group accessing resources	
Behaviour (how it behaves on a day-to-day basis)	
Displays trust and values communication between all stakeholders	Ensure actions are based on sound and robust evidence and science (including indigenous / Traditional Owner knowledge)
Facilitates strong links between all stakeholders	Committed
Values and uses local science – ensuring local science champions are at the table	Clear accountability and disclosure
Inclusive, specifically including Traditional Owners and indigenous people	Collaborative
Empowers stakeholders	Inclusive
Nimble in a dynamic political setting	Equitable
Non-political	Respectful
Celebrates success	Unifying not divisive
	Guiding and facilitating
	Use incentives and education rather than regulation – but with ability to enforce as required

A copy of all the individual views and perspectives regarding the desired attributes identified during the stakeholder workshops can be found in The Richmond River Governance Framework Discussion Paper (Alluvium, 2018).

8.4 Performance criteria for assessing governance options

Desired attributes for a future governance framework, as informed by stakeholder input, was further shaped into a set of performance criteria (principles and indicators) for assessing governance options for the Richmond River (Table 10). The indicators were applied both qualitatively and semi-quantitatively to explore the suitability of different governance options (Sections 10 and 11 of this document).

Table 10. Performance criteria for assessing governance options

Principle	Indicators
Inclusive decision-making - provides a voice for all stakeholders, including Indigenous people, industry, community, and future generations	<ul style="list-style-type: none"> • Ability to create and maintain appropriate participatory processes • Extent to which Traditional Owner and other indigenous stakeholders can be meaningfully engaged • Extent to which Traditional Owners are empowered to manage land and sea resources • Capacity to communicate effectively with a range of stakeholders
Empowerment and collaboration - promotes and facilitates shared decision-making, and values devolution of implementation to local council and community groups	<ul style="list-style-type: none"> • Perceived ability to take a balanced view • Demonstrated ability to develop and maintain strong, productive relationships with a range of stakeholders • Demonstrated track record in working with local organisations to deliver on-ground outcomes (Government & non-government)
Knowledge based - decision-making underpinned by physical and social sciences, traditional knowledge, and local expertise	<ul style="list-style-type: none"> • Ability and capacity to underpin decision-making with whole-of-system understanding • Ability to develop and maintain relationships to address knowledge gaps • Ability to integrate Indigenous knowledge and understanding • Capacity to develop and use a range of decision support tools (e.g. models) • Capacity to develop and use effective monitoring and assessment tools and processes to evaluate and improve decision-making
Strategic vision and direction - whole-of-catchment focussed, and co-created by stakeholders and community	<ul style="list-style-type: none"> • Perceived ability to consider needs and values across catchment (i.e. fairness) • Capacity to develop shared vision and strategic goals
Adaptive and flexible - builds on previous experience and effort, and responds to a changing environment	<ul style="list-style-type: none"> • Demonstrated use of adaptive management approaches • Demonstrated ability to develop and use strong MERI frameworks
Future focussed and action orientated - delivered through an agreed and prioritised investment strategy (15%)	<ul style="list-style-type: none"> • Extent to which diverse and sustainable sources of funding can be attracted and maintained • Capacity and capability to coordinate and manage small (i.e. <\$100,000) projects • Capacity and capability to coordinate and manage large (i.e. >\$100,000) projects • Track record in successful delivery of outcomes
Sustainable - provides stability, independence, and respects corporate governance law and relevant government regulation	<ul style="list-style-type: none"> • Ability to ensure transparency and probity • Capacity to maintain stable working environment • Capacity to remain impartial and independent • Ability to facilitate bipartisan political support

9 Options for investing in the Richmond River

This section builds on the financing and investment model theory and principles identified and scoped in Section 6 of this document, and identifies short-term and long-term options specifically for the Richmond River catchment.

9.1 Current context

As identified early on in the governance review process, coordination for the financing or investment in waterway enhancement in the Richmond River catchment has not historically occurred through a single / lead entity. Investment is driven by the ability to attract grants (Landcare, Councils), Special Rate Variations (Councils), private investment (private landholders) and NSW Government programs which are aimed at target issues.

Currently, the Marine Estate Management Strategy is working within the Richmond River catchment also, utilising it as a pilot site for reinstating riparian vegetation (Emigrant Creek), Best Management Practice for horticulture (macadamias), and mapping of floodplain drains and floodgates amongst other projects with a wider focus. This is a significant investment of approximately \$4 million but it is a 'one-off' situation and not expected to continue into the longer term.

Therefore, there is a need to identify a stream of investment income which can be relied on for the implementation of investment plans such as the Coastal Management Program for the Richmond River catchment (in development). The stream of income required is likely to be substantial, at least for the first ten years, to ensure a solid basis for comparison with current conditions and to demonstrate the efficacy of investment in natural resource management on a large scale for improving river health.

Funding available is skewed towards government funding sources and is predominantly via discretionary budget allocations. Investment in on-ground waterway health projects has historically been via shorter-term grants or through disbursements from the former Catchment Management Authority or Boards. The current North Coast Local Land Services is working within the Richmond River Catchment at the moment through a Memorandum of Understanding on the riparian revegetation project, utilising MEMA (government) funding. However, their other programs are focussed more in the production sphere, rather than consideration of NRM. It is unlikely that more sophisticated and enduring market-like mechanisms (e.g. reverse tenders, or water quality offsets) have been used to date, and the institutional arrangements are not yet in place to utilise some of these mechanisms (e.g. regulatory requirements to underpin the use of water quality offsets).

Private investment through producer organisations such as the Northern Rivers Meat Co-operative is beginning to be discussed, along with the benefits to the private landholder with respect to ensuring soil management for longer term bank stability and reduction in nutrients entering the river as a result of best management practices being applied to riverfront properties. The Rural Landholder Initiative developed by Lismore City Council utilises Council staff and their expert knowledge and project management to work with landholders in clusters (geographical or industry based). They utilise Council funds (attributed after a long strategically developed process to support a Special Rate Variation) attract private investment on lands resulting in biodiversity outcomes both on and off-river (this investment will still benefit catchment health). The Australian Macadamia Society encourages best management practice in their orchards, part of which includes the use of native riparian vegetation in drainage lines and waterways. Many farmers employ professional bush regenerators to maintain these areas as weed free and undertake supplementary planting where required.

Where grant funds are available, they are strict in their requirement for caps on project management expenses (usually 10%) and there is an expectation of significant in-kind or cash contributions. Where Landcare and other volunteer organisations apply for these funds, the volunteers often expend significant amounts of unfunded time developing the projects, and then managing and reporting on them. For local government, the NSW Coasts and Estuaries Fund asks for 50% cash contribution and expects project management to be fully funded by Councils, **although for larger projects for groups of Councils it will fund up to 10% of the project cost for project management.** Grant programs also generally are targeted toward particular outcomes so that projects may not necessarily be targeting the area of greatest need, but the area which meets the objectives of the grant program.

All of these funding options have their limitations. The scope of interest and influence for single focus organisations may be too narrow to effectively address all drivers and threats to the Richmond River Catchment and provide a solid institutional basis for ensuring the most efficient projects are funded. In addition, current planning and strategy initiatives such as the CZMP, are often constrained in the geographical and sectoral scope within which they apply.

While some degree of coordination of investment is occurring, a region-wide, cohesive and consistent approach to financing and investment in the Richmond River catchment would greatly enhance impact on the ground. To date there has not been sufficient funding available within the Richmond River catchment to holistically apply in such a way that a clear positive benefit to waterway health can be demonstrated. Whilst this is likely to continue, given the scale of the issues measured by the 2015 Ecohealth Report, it is argued that the scale and efficiency of any investment could be improved significantly.

The number of organisations working on different aspects of catchment and river health with the Richmond has resulted in governance arrangements and an approach to investing that constrains both the magnitude of funding available and the likely efficiency of investments that are made (often exacerbated by duplication of administration). Further, the disparate nature of the efforts makes it difficult to demonstrate the efficacy of the investment, and therefore difficult to attract further funds from any source.

9.2 Establishing a comprehensive investment plan is vital irrespective of the governance framework adopted

The development of an investment plan (or prospectus) of key projects based on science, planning and stakeholder priorities to attract funding, and guide project selection and funding, would be of great benefit to the Richmond River catchment.

This could accompany the more strategic Coastal Management Plan for the Richmond River Catchment which is under development (a renewal, update and increased geographical scope from the former CZMP for the Richmond River Estuary). The CMP will go beyond the scope of the existing planning such as the CZMP for the Richmond River Estuary and local government's INPR planning. A way to capture the broader suite of projects, geographical areas and sectors may be the planned NCLLS Local Strategic Plans or utilisation of the current INPR framework to develop an ongoing Operational Plan and Delivery Program which directly delivers on the CMP over time.

The portfolio of projects for investment should be developed based on the following elements:

- Recognition of community priorities. Focus on the important issues.
- Underpinned by sound science, planning and associated targets. Use science to inform investments.

- Recognise historical and existing actions. Have your previous interventions contributed to meeting targets? This essentially provides a base-case against which any monitoring and evaluation framework can be established, and future interventions/projects assessed.
- Efficacy of on-ground investment. Science will inform what works and what doesn't.
- Substitutability. Often there is more than one option than can be seen as substitutes. Any investment portfolio should recognise and document this.

It would be very valuable to add indicative costings to any proposed projects as this provides potential investors with a solid indication of the investments required to achieve project-specific and portfolio-wide investment outcomes.

This may include an overarching **regional plan** such as the **CMP for the Richmond River catchment and estuary**, supported by a series of **sub-regional plans** (i.e. the priority issues and actions within that sub-region), **industry-specific plans** (i.e. grazing, local government, fishing etc) or **undertakings by the various sectors involved in delivery, such as local government, LLS, Landcare and industry**. The sub-regional plans are important as there may be restrictions (real or perceived) on where some funds can be spent. For example, ratepayers will expect funds raised through a catchment management levy in the Ballina Shire to be spent in the Ballina Shire. A sub-regional plan directing this investment and placing it within a regional context (ie plan) will enhance transparency both locally and regionally.

The regional investment plan should also be cognisant of complementary local government regulatory and statutory resource management issues (e.g. land use planning, urban stormwater management etc.), industry policy and practice (e.g. best management practice) and broader State policies (e.g. the NSW biodiversity offsets scheme). It would, in the first instance, aim to fill gaps or address barriers to the application of these regulatory and statutory mechanisms.

The investment plan should also include a framework for monitoring and evaluating overall investment and progress towards established targets for the health of the Richmond River catchment.

Ultimately the investment plan provides a key document to underpin funding decisions, the prioritisation of projects for investment at the regional and sub-regional scale, and a means of underpinning a long-term strategic approach to enhancing the condition of the Richmond River catchment. It should also underpin the transition to a longer-term cohesive approach to funding and investment.

The investment plan should also recognise the existing barrier to landscape scale change (information, capacity, funding available) and the magnitude of the challenge.

Recommendation: Utilise and build on the existing CZMP and the developed CMP process to inform a rolling investment plan across the Richmond River catchment with roles for all stakeholders, with regional and sub-regional priorities clearly articulated.

9.3 Recommended funding sources

In the shorter-term a relatively simple governance arrangement will likely prevail, with a transition to longer-term suite of arrangements.

In Section 6 a comprehensive suite of funding sources was considered. For the Richmond River catchment, some sources may be more applicable in the immediate to short term, while others may require further investigation with a view to medium and longer-term applicability.

Consideration of the pros and cons of each of the recommended funding sources is outlined in the Table 11 below. Recommendations to pursue as a priority are noted.

Table 11. Funding sources

Funding Source	Pros	Cons	Recommendation
Existing investment			
<i>Budget appropriations</i>	<ul style="list-style-type: none"> • Already the dominant funding source • Fits with existing initiatives • Works with all potential governance arrangements • Would provide an initial funding source for preferred option. 	<ul style="list-style-type: none"> • Largely discretionary (possible issues with change of government or policy) • May be difficult to attract this commitment from government over long time frame. 	<p>High priority.</p> <p>Recommended as a dominant funding source going forward, to support structural framework and some seed investment.</p>
<i>Local Government (Budget Allocations, SRV's)</i>	<ul style="list-style-type: none"> • Long term interest in catchment community. • Extremely accountable both to community and NSW government through INPR. • SRV requests require community support AND NSW government review/agreement. • Provide ongoing source of funds. 	<ul style="list-style-type: none"> • Community capacity to pay may be limited (and therefore LG may not wish to ask). • River health can be seen as a discretionary item. • NCLLS already levy funds from some rural landholders, could be seen as 'double-dipping'. 	<p>Continuing high priority but within community ability to pay.</p>
<i>Local Land Services rates</i>	<ul style="list-style-type: none"> • Rates already charged by LLS for properties above 10ha. Proposal for properties to 2ha could be supported by NSW Government. • Structure already in place for charge and collection of rates. • Directly charges landholders with landuse which contributes to diffuse source water pollution. 	<ul style="list-style-type: none"> • Does not discriminate between landholders implementing BMP and those who are poor performers. All charged at the same rate. • Not a popular option within the community. 	<p>High priority in the short term.</p> <p>Consideration of move to levying properties 2ha and above needed. Funds must be applied within catchment, with a 90% return to on-ground works. Staff expertise and project management, including admin support to be funded by NSW Government funds.</p> <p>Investigate differential rating system for landholders implementing BMP.</p>

Funding Source	Pros	Cons	Recommendation
<i>Marine Estate Management Strategy</i>	<ul style="list-style-type: none"> • Short term funds addressing 'difficult' issues using the Richmond as a pilot. • Larger than usual amounts of funding available for short term projects. • Room for governance project as part of pilot for first 3 years to set up ongoing framework. 	<ul style="list-style-type: none"> • Funds are short-term and subject to budget bid rounds – lack of certainty. • MEMA/MEMS is a 10-year plan, not intended as a funding source for ongoing works. 	<p>Very high priority as a short-term option within the Richmond.</p> <p>Could fund the Coordinator option whilst the transition to preferred option occurs.</p>
<i>Grants as a disbursement mechanism for projects</i>	<ul style="list-style-type: none"> • Already provide a significant source of funding in the catchment through various grant programs. • Requires in-kind or cash contribution so highly efficient use of external funds. • Provide opportunities for many organisations to contribute to river health in some capacity. 	<ul style="list-style-type: none"> • Requires significant amounts of voluntary or externally funded time to apply for and project manage. • Grants not necessarily targeted to investment priorities. 	<p>Continuing high priority where programs meet target objectives for Richmond River.</p> <p>Modification of the funding ratio for NSW Coasts and Estuaries funding would help significantly (this is the subject of a review).</p>

New investment

<i>Philanthropy</i>	<ul style="list-style-type: none"> • New source of funding not reliant on government. • Potential sources already available and not leveraged effectively as yet. • Ability to utilise to raise profile of importance of river health as a community consideration. 	<ul style="list-style-type: none"> • Competition from very high-profile locations (such as Great Barrier Reef). • Philanthropic funding very limited in application as yet in Australia. • Can be targeted at very high-profile projects (need to ensure that these meet catchment priorities). • Potential that oversight of project implementation is compromised (ie approvals etc) due to need to spend money quickly. 	<p>Medium priority for the longer term.</p> <p>This is a possibility, but a track record of effective action needed. Could be linked to a high-profile event (such as Bluesfest or similar).</p>
<i>Load based licensing fees</i>	<ul style="list-style-type: none"> • These already exist within NSW, and there is a structure set up for assessment and attributing charges to industry. • Increase regulatory transparency. • Polluter pays principles is implemented (for point source pollution). 	<ul style="list-style-type: none"> • Diffuse source water pollution is not addressed (from which most sediment and nutrients occur). • Charges are not currently applied back in the catchment. • Not very many polluters to whom this applies within the Richmond River catchment. 	<p>Medium priority for the longer term.</p> <p>Application of licensing and charges back to the catchment the pollution occurs in would be a useful tool, if limited.</p>

Funding Source	Pros	Cons	Recommendation
<i>Catchment management levy</i>	<ul style="list-style-type: none"> • A catchment wide levy could be applied to the Richmond for ongoing funding of on-ground works, but would need to be cognisant of existing levies and charges. • Would increase the ability to apply funds to regionally important projects. • Application in an urban/industrial setting would complement LLS rating of rural properties. 	<ul style="list-style-type: none"> • Ballina and Lismore already have a levy in place with an NRM focus. • Capacity to pay may not be universal. • Better utilised for a centrally managed option (such as Rous County Council or one LG housing a Coordinator (similar to Library or Waste Services) • If raised at current Lismore/Ballina rates would only provide another \$260K. May not be enough to justify expense of collection or address the larger issues requiring substantial budget. 	<p>Potential high priority for modest levy in the shorter-term. Lower priority for the medium term.</p> <p>If other budgetary investigations are not successful, this may be an option to consider but its limitations are significant.</p>
<i>Water service charges reflecting risk to Richmond River</i>	<ul style="list-style-type: none"> • Inclusion of catchment management charge within bulk water charge becoming more common (ie Sydney Water, SEQWater). • Allows utilities to invest in catchment management as part of 'treatment train'. 	<ul style="list-style-type: none"> • Only businesses and households utilising formal water services would contribute to this funding. 	<p>High priority.</p> <p>Other mechanisms could apply in other locations (ie NCLLS could prioritise). Non-bulk water supply customers would be largely charged through NCLLS rates.</p>

Summary

In the short-term, it would be most efficient to participate in a budget bid that works with the Marine Estate Management Strategy funding for Round 2, to capitalise on the Richmond River catchment's status as a pilot catchment. This budget bid would be best focussed on operations to operate in the short term (3 – 5 years). This funding would be supplemented by or in lieu of a new budget appropriation.

Consideration of the application of catchment management levy (urban/industry) and rates under the NCLLS model should occur during that time with the objective of them being able to be applied as a substitute for the MEMA funding period. Whilst this is a very short timeframe for the application of new charges, the Richmond River catchment is a priority location for action due to its very poor health status.

Also in the short term, existing funding streams can be reviewed on a partnership basis across the catchment to consider the best application of existing funds. Whilst it is likely that programs will not change during this timeframe the advantages of better communication and teamwork, and the accompanying synergies, will enhance the efficiency of funds applied and retain the ownership of parties who manage these funds. There is a review of the NSW Coasts and Estuaries Grant Program

that presents an opportunity to change the funding ratio in the Richmond in recognition of its environmental need, multi-jurisdictional nature and lower rate base across the catchment.

In the medium to longer-term consideration of water quality offsets, industry programs, and enhanced load-based licence fees would also be appropriate. However, these options require either State policy/regulatory change, a broader regulatory framework or a change in focus from industries within the catchment to underpin their use.

9.4 Money management

As outlined previously (in Section 6.4 of this document), managing funds properly will be vital under any of the governance arrangements and there are a number of clear principles to underpin financial management.

During the transition phase it is likely that the funding sources available will be relatively consistent with existing sources. The financial management of the funding needs to be transparent, accurate and compliant with best practice. This is particularly the case where funds from multiple sources are 'pooled' to enable more strategic and larger investments across the region. Potentially this could be handled by any competent member of the partnership however it is important that where community or public funds are being applied, that this transparency and accountability are demonstrated.

As the funding sources become more sophisticated and varied, the financial reporting needs of the various funding entities will differ. For example, where water service changes (catchment levy) and new rates for LLS are applied, consideration as to how money is managed transparently and accountably is needed. Trust will be undermined within the catchment where value for money cannot be demonstrated. One location for funds to be spent within the Richmond may be one way in which to demonstrate this value for money. Another is an MoU style arrangement where financial accountability is demonstrated on an organisation by organisation basis. This becomes important in models such as the collaborative partnership or in a hybrid style model.

Local government could, under agreement, perform this task on behalf of the model selected if required. Where the model has its own framework (such as the LLS, local government or Rous County Council models discussed in Section 10), it must ensure that it accounts for resources spent within the catchment and can provide the assurance that a minimum amount is spent on on-ground works. Whilst reporting on spending is an existing expectation with respect to local government, this is not necessarily the case for state government agencies who have typically delivered programs rather than on-ground actions. The expectation of transparency and accountability with these funds would need to be an upfront feature of any proposal for any model, including a government agency.

Summary

The principles of money management are provision of accountability and transparency. Funds should be able to be demonstrated as being applied to priority locations or projects, with the agreement of the preferred model.

Where necessary, the establishment of a central money management function for the Richmond River catchment should deliver immediate efficiencies. Again, The focus should be on transparency, accuracy and compliance with best practice. This recommendation is irrespective of the underpinning governance arrangements.

9.5 Funding disbursement

In Section 6.5 of this document, a number of key principles for the disbursement of funding / investment in on-ground projects were outlined. To implement these principles in a practical manner a number of specific tasks are required. These tasks should be undertaken as part of any new governance arrangements during the transition phase.

To re-cap, these specific tasks with particular relevance to the Richmond River catchment include:

- Based on the priority projects identified in the investment plan, specific scientifically robust metrics should be developed to estimate the expected change in resource condition that should be expected by different project types (e.g. change in TSS loads attributable to riparian restoration). These metrics become the measurement of 'benefit' when considering alternative on-ground projects. These benefits can be compared to the project life-cycle costs to ensure all projects are assessed and prioritised on the basis of their cost-effectiveness. It is noted that a CMP requires an economic assessment of projects.
- To ensure that only the public good of on-ground projects is funded, move away from fixed cost sharing arrangements (e.g. 50:50) to approaches that cater for variability in the private benefits and costs to landholders. This could include 'price-discriminative' and competitive approaches for some funding. Ultimately a more sophisticated approach to incentive design is required.
- Develop standardised contracts/funding agreements to be used across the region. Compliance with contracts should be enforced, and reporting against contract milestones should be embedded in any monitoring and evaluation strategy.
- The outputs and expected outcomes from individual projects should be aggregated to enable monitoring against regional and sub-regional targets outlined in the investment strategy.

Given the emerging complexity of disbursement mechanisms, capacity in financial and contract management is vital to ensure the effective and efficient disbursement of funds. It would be prudent to ensure these functions are undertaken by specialists (as with the management of funding outlined in Section 9.4).

Summary

It is vital to ensure that the future disbursement of funding is effective and efficient. These include the development of metrics to measure the benefits from projects, enhanced financial and contract management, and more sophisticated approaches to incentive design.

10 Options of governance for the Richmond River

10.1 Context for developing options

The governance review process

The development of options for future governance in the Richmond River catchment drew on multiple lines of inquiry undertaken. This included the following elements as documented in this report:

- An understanding of the Richmond River catchment context (stakeholders, values, pressures, governance context, successes and challenges, and opportunities for the future) (Sections 1, 3 and 4 and 7 of this document)
- An appreciation of governance theory – definition and attributes of effective frameworks (Section 5)
- A review of national and international experiences on governance and funding arrangements for NRM generally (Section 5, Appendix A)
- A focused stakeholder engagement process to confirm historical context, catchment values and principles and desired attributes and indicators of an efficient future governance framework (Sections 2, 3, 7 and 8)

This engagement process include workshops (four) and interviews with representatives of shire Councils, Rous County Council, North Coast Local Land Services, native title holders, industry and community groups.

- An appreciation of the theory on efficient investment and funding, and the broad spectrum of funding options and priority sources for the Richmond River catchment (Section 6 and 9)
- The consultant project team’s previous experience with governance in NRM settings, including a range of example case studies (Appendix A)
- Additional internal discussions and interviews across State and Local Government stakeholders (conducted by DPIE) to refine details in the governance options.

Throughout the review process there was strong agreement across stakeholders in relation to the values and drivers for change in the Richmond River catchment, and the principles for future governance.

Challenges and complexity

Key past studies including the 2011 Coastal Zone Management Plan and 2018 Marine Estate strategy have all been based on robust science, with pragmatic and defensible management strategies and actions. However implementation of actions has remained challenging. Uncertainty around responsible parties (particularly for shared actions) and secured funding sources are likely to have contributed to implementation challenges to date.

Moving forward, as part of future governance arrangements it will be important to provide clear direction on:

- Who will be responsible for making decisions and on what basis (science and evidence)?
- Who will do what activities, when, how, and with whom?
- Does every party involved understand and accept their role in the problem and in the potential solutions?

- Do parties all have the authority necessary (if any) and the resources (people with relevant expertise, money, technology, etc) to do their part? if not, where and when will they get the authority and the resources required?
- Are there any players or resources that have not been identified in the plans, but which are crucial to long-term success?

In the absence of such governance ground-rules being crystal clear and agreed by all parties, many good ideas fail to happen on the ground. The recommended models from the governance review provide the decision making structures, processes and experience most likely to address these issues.

The complexity of the Richmond River catchment is also important context to future governance arrangements, with a synopsis including the following:

- Spatially, the Richmond River catchment crosses five local government areas
- There are multiple state and local agencies responsible for varying aspects of catchment management (and this has varied significantly over time). All three levels of government also have different funding priorities for management actions in the NRM field.
- Sectorally, the region is diverse with key industries including beef, cane, dairy, market gardens, tree horticulture including macadamias, blueberries, and tourism
- Culturally, the region is diverse with Traditional Owners, old-style primary producers, life-stylers (tree/sea changers), community groups like Landcare and local progress associations
- Demographically the region is diverse including in age groups, coastal vs inland, urban vs rural.

Future governance arrangements will need to account for the physical, social, cultural and management diversity across the Richmond River region.

10.2 Governance options

Six different options for future governance of the Richmond River catchment were developed for consideration. These are:

1. Richmond River Catchment First Australians Partnership
2. Richmond River Collaborative Partnership
3. Richmond River Councils Partnership
4. Expanded Rous County Council
5. Richmond River Coordinator
6. NSW Government Agency Lead

These are described in the following sections. Options have been developed with consideration of the aforementioned context, the ideas and experiences of key stakeholders, and expert opinion of the consultant project team.

10.3 Richmond River Catchment First Australians Partnership

“A First Australians-led governance framework for the Richmond River catchment”

Summary description

The ‘Richmond River First Australians Partnership’ would be a collaborative partnership led by the Bandjalang and Githabul Traditional Owners groups in partnership with the four Local Aboriginal Land Council (LALC), working with industry, the broader community and government stakeholders to deliver river health outcomes on the ground. The Indigenous governance structure (Cawthorn M. 2019) recognises the importance of the connection and custodianship demonstrated by First Australians for thousands of years and would be developed through targeted consultation with local First Australians to propose an effective model for this organisation to attract funding and delivering projects.

The organisation would ideally be led by a high-level board or similar comprising member and non-member directors in collaboration with other stakeholder representatives. An indigenous manager and at least one support staff should be appointed to lead the organisation’s activities, which, in the initial phases, would strategically target funding sources for catchment restoration related activities. The organisation could be hosted by an existing Indigenous body such as the Bandjalang Aboriginal Corporation Prescribed Body Corporate (RNTVC) on the ground. This partnership would have access to a range of Indigenous funds and possibly, philanthropic funding sources to ensure the sustainable use of traditional and contemporary catchment management practices.

Strategic intent

- To recognise the importance and role of native-title holders and Traditional Owners across the catchment in sustaining the diverse ecosystems over thousands of years.
- To utilise traditional knowledge in appropriate areas to inform natural resource management.
- To provide a First Australian’s perspective in sustainably managing landscapes into the future.
- To access Aboriginal and Torres Strait Island (ATSI)-related funding sources from the Federal Government, New South Wales Government and other private sources.
- While some of the other options might overlook the importance of these stakeholders, their knowledge, involvement and active participation may be essential for long term viability and success.
- The major strengths of this as the centre of a framework are the knowledge, legitimacy and capabilities it would bring, and the very substantial socio-economic and cultural benefits that could flow if Traditional Owners were to be paid for looking after country and the river, according to traditional practice wherever possible.
- A chance to enhance two-way understanding of issues within the catchment.

Key considerations

- A track-record of submitting proposals for funding and successfully delivering projects would be helpful, as well as with acquittals and financial accountability.
- There would need to be consideration of how best to position this option to ensure that it has the best opportunity within Aboriginal communities and the NSW Government structures to develop projects and access funding.

- There is likely to be a tension between the accountabilities of Traditional Owners to their culture and their place, and the structure of an organisation expected to work within the accountabilities and frameworks meeting government objectives.
- There may be longer lead-time required for setting up this model compared to other options to allow for these considerations to be worked through and accommodated.

Advantages

- Recognises the importance and value of First Australian's custodianship of land and sea.
- Provides a substantial and genuine role for Traditional Owners.
- Promotes the use and value of traditional knowledge and approaches to land and water management.
- Potentially provides jobs for local Indigenous people, both within the organisation and through on ground delivery organisations
- Contributes to a larger aspiration of NSW Government which advocates for Traditional Owners having a 'seat at the table' and ensuring a clear transparent accountability for Aboriginal people being included in decision-making about natural resources, in this case, the Richmond River and estuary.
- Major strengths of this framework would be the goodwill and cultural legitimacy it would bring to 'new' ways of management for specific areas within the catchment. Note that these areas would not be privately owned lands without permission from current landholders.
- Potential for enhanced economic and social benefits for some native title holders and Traditional Owners.
- Would allow access to ATSI- related funding streams as well as other natural resource-related funding.

Constraints and risks

- Engagement with First Australian's can be perceived as challenging and can be often related to under-resourced groups and the predominate use of 'white people' engagement models through workshops and structured interviews, rather than approaches more familiar and/or effective with Indigenous groups. This problem could continue if a 'white people' governance framework is applied upon indigenous groups, even in the case where they are leading it.
- There are many pressures being faced by Traditional Owners and other Indigenous stakeholders following the recognition of Native Title, resulting in often complex and complicated consultation processes, as well as many competing issues and agendas requiring the attention of a relatively small number of people. There has been limited engagement to date with local and state government agencies regarding natural resource and catchment management. It is likely additional time will be required before a well-resourced partnership can be established.
- While there are some good case studies in the region, there has been limited engagement opportunities between Traditional Owner groups and local land holders who also have an important role to play in the protection and management of the Richmond River, it is highly likely that additional resources and time will be required to build the required relationships.
- In many areas, the effective integration of traditional knowledge and practices with contemporary land use and farming practice requires additional investment prior to broad implementation.

- A non-statutory body might not be sufficient for engaging with some stakeholder who are not interested in contributing to the process, which might not align with their agendas.
- It would require a new framework to set up best ways of working together and develop collective capacity for projects. This may take some time to gain traction.
- This partnership may end up creating more plans and strategies rather than pursuing action on the ground, which could result in frustration from stakeholders and the community.

Key investment pathways

This First Australians-led partnership could benefit from numerous grants schemes which are not usually accessible to non-indigenous organisations, however, an initial strategic contribution from the state government would be required to kick start the initiative and fund staff. It is worth noting here that the access to funding sources would be largely subject to the capacity of the organisation's leadership in identifying, negotiating and effectively spend grants money. This model is probably a more attractive investment option for private and philanthropic organisations than more 'government' style options, which could result in attracting more funding to the Richmond River catchment. A list of potential funding sources includes:

- State government targeted contribution through a funding source such as MEMA.
- NSW Government Aboriginal Affairs Grants
- Australian Government Landcare grants for NRM
- Australian Government Landcare grants for indigenous NRM
- Australian Government Department of the Prime Minister and Cabinet Indigenous Advancement Strategy
- Australian Government Indigenous Land and Sea Corporation grants
- Philanthropic funds and grants.

Key governance features

- Ideally, the 'Richmond River First Australian's Partnership' would be driven by indigenous governance principles, while being effective in delivering outcomes for the Richmond River.
- The organisation could utilise an existing Prescribed Corporate Body or can be set up as a new Aboriginal Corporation, with a management structure including members and non-members. Most of the management board would be local Indigenous representatives, with a recognised role in their communities.
- External stakeholders, including government and non-government, should be engaged through a specifically appointed Richmond River Stakeholder Reference Group which will advise the organisation regarding various activities and progress.
- An external independent auditor will be employed to audit finances and governance processes.
- Regardless of the final framework, a clear, transparent and accountable process for including Native Title Holders and local First Australians is essential.
- It is important to note that contemporary corporate structure might not work effectively in engaging indigenous stakeholders and these should work together to determine which model would work and how.

Implementation timeframe and pathways

The 'Richmond River First Australian's Partnership' could be launched as an interagency initiative after further stakeholder consultation, in particular with Aboriginal groups. This round of consultation may take from six months to two years until an agreed framework is established, with initial seed-funding required to kick-start the new organisation.

Once the new organisation is established, key implementation pathways will be mostly driven on a case by case basis, depending on the type of funding utilised for activities on the ground, and based on the requirements of the funding body. If an ongoing fund for core activities is provided, this budget expenditure will have to undergo through an internal process which will be periodically audited by an external body.

Alternatives – inclusion of key elements into all other options

The development of this governance model would be innovative and potentially challenging. A new structure and new ways of operating would need to be established, with associated funding. It may be considered an ambitious target, and further expertise should be sought beyond this study if considered to be a preferred option.

Alternatively, elements of this model should be included into all other governance models. Ensuring a mechanism for meaningful engagement with Aboriginal groups all throughout the catchment should be a feature of every model. Ongoing collaboration with and across Traditional Owner groups will be important for all future governance arrangements, and providing a path toward more discussion between local landholders and Aboriginal peoples who have traditional custodianship of the land. Appendix F provides a parallel methodology for First Australians engagement across all governance models.

10.4 Option 2: Richmond River Collaborative Partnership

“A non-statutory, collaborative partnership between local and state government, industry, community and Traditional Owners. The partnership will provide strategic co-ordination and whole of catchment co-operation and planning for the Richmond River catchment.”

Summary description

The ‘Richmond River Collaborative Partnership’ would be a partnership between government and non-government stakeholders, including representatives from NGOs, indigenous groups, primary industries, environmental organisations and other stakeholder groups with an interest in the Richmond River’s health.

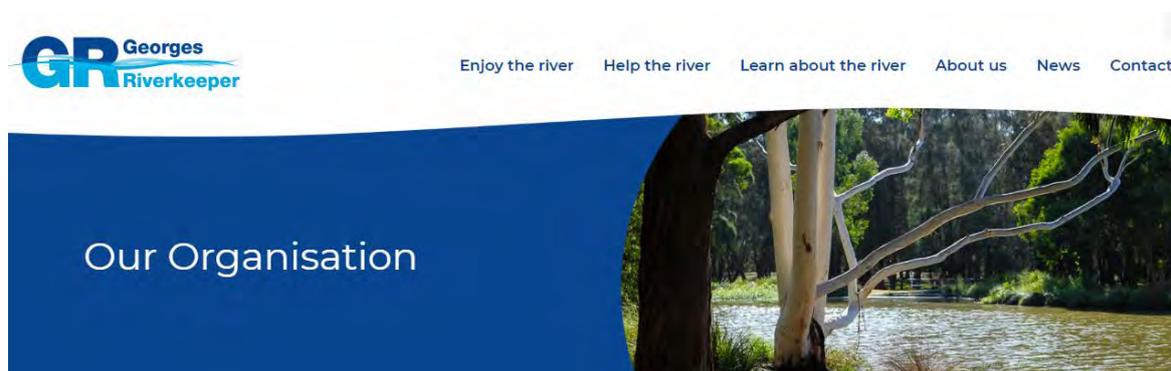
This option is one that could utilise the goodwill within the various volunteer organisations in the Richmond River catchment, as well as develop partnerships between state government agencies, local government and various industry partners. The great strength of this option is the very detailed local knowledge that each of the grassroots organisations possess about their localities or specific area of interest. Another powerful advantage is the often very good local relationships the people within the organisations have with each other, with local landholders and often with relevant agency or local government staff.

The primary goal of the Richmond River Collaborative Partnership would be to ensure that on-ground and strategic projects are coordinated for the improvement of catchment health, including water quality, across the entire catchment. It would provide an avenue for discussion, identification of synergies and opportunities for integration across the large number of organisations, groups and individuals with current and future responsibilities in the protection and management of the health of Richmond River. It would be well positioned to coordinate and provide oversight and advice for future whole-of-catchment strategic management planning activities, and associated river health and management action monitoring, assessment and reporting initiatives.

The partnership should be created through a joint effort of state government agencies, local government, industry partners, community groups and Traditional Owners. Whilst ideally, a Collaborative Partnership would be financially supported by a diverse range of public and private investment sources, it is more likely to be functionally continuous with a minimum amount of guaranteed government funding for a position or positions that can provide support to the partnership.

A prominent example of such a partnership is the Georges Riverkeeper in NSW (refer case studies in Appendices and summary in Text Box 1). The Georges Riverkeeper is currently leading (among other initiatives) the development of a Coastal Management Program and Plan for the combined region of the eight member Councils.

Text Box 1 – Georges Riverkeeper (NSW) <https://georgesriver.org.au/about-us/our-organisation>



Georges Riverkeeper is the business name of the Georges River Combined Council’s Committee Incorporated (GRCCC). Formed in 1979 by councils with a collective responsibility for the health of the Georges River to work together to improve its environmental condition and ongoing management.

The eight member councils – Bayside Council, Campbelltown City Council, City of Canterbury Bankstown, Fairfield City Council, Georges River Council, Liverpool City Council, Sutherland Shire Council and Wollondilly Shire Councils – of the Georges River catchment make up the Georges Riverkeeper.

A General Meeting is held four or five times per year and is attended by Georges Riverkeeper staff, Host Manager, member councils nominated representative Councillors, council staff and community representatives.

Georges River Combined Council’s Committee Incorporated is an independent and non-for-profit organisation governed by the Georges Riverkeeper Executive Group, who is elected annually and meet monthly.

Georges Riverkeeper stakeholders, who may be represented on the Committee, include but are not limited to:

- Corrective Services NSW
- Environmental Education Centre (Georges River and Botany Bay)
- Greater Sydney Local Land Services
- Lands and Water – Crown Lands
- Local Aboriginal Land Councils
- National Parks and Wildlife Service
- NSW Department of Land and Property Information
- NSW Department of Planning and Environment
- NSW Department of Primary Industry
- NSW Office of Environment and Heritage
- NSW Roads and Maritime Service
- NSW State Emergency Service
- Sydney Water Corporation
- Various environmentally focused community groups and other regional organisations.

Five focus areas for Georges Riverkeeper were identified through a stakeholder engagement process undertaken in the development of the Strategic Plan 2019-2022 and are represented by the five programs, which are:

- Catchment Actions Program
- River Health Monitoring Program
- Stormwater Program
- Research Program
- Education & Capacity Building Program

Although these are distinct Programs they are integrated and work together to protect the health of the Georges River.

Georges Riverkeeper staff comprises of professionals with diverse career backgrounds. The team includes a Program Manager, Aquatic Ecologist & Programs Coordinator, Programs Coordinator, Administration Officer and Communications Officer.

Richmond Landcare Inc also provides an example of how this type of collaboration can work. Its focus is supporting Landcare within the catchment in a number of ways. Another example would be an organisation such as Plant Health Australia, an industry-government partnership focussed on plant biosecurity. It independently represents its industry base on those issues and works with growers, usually voluntarily but where a biosecurity issue such as a pest plant incursion threatening macadamia crops arises emergency funds can be levied to address the issue. Ongoing levies assist with research and development, supporting the industry growers with signage and information and ensuring industry standards are maintained with each crop.

Representation from stakeholder organisations would form the basis of a skills-based Board which would also include representatives from government (both state and local), indigenous groups, community and industry.

Other similar organisations include Healthy Waterways in QLD (now merged with SEQCatchments into Healthy Land and Waters) or the Derwent Estuary Program in Tasmania.

Strategic intent

- To create a new and fresh independent body which has the community on board, recognising this partnership as an opportunity for improving the Richmond River catchment.
- To create an independent body which is not tied to, or accountable to a single specific government agency, local government, or non-government organisation. This body is not driven by the agenda limitations of a specific local or state government organisations, non-government organisation or industry/community group.
- To create an organisation which can provide whole-of-catchment oversight regarding the progress towards jointly agreed river health outcomes, and a place for each on-ground project contributing to those river health outcomes.
- To create an opportunity for vertical and horizontal integration between stakeholders across the catchment, with the inclusion of NGOs, industry and indigenous groups.
- To create a body with a flexible and adaptive structure designed to access additional funding from a broad range of sources and mechanisms, including grants, private investment, budgetary allocations from state and local government amongst others.
- To improve the health of the Richmond River through access to and coordination of multiple sources of public and private investment, enhanced integration of all partners' strategic actions and initiatives, and monitoring.

Key considerations

- A Collaborative Partnership would still need some structure to ensure that it is transparent and accountable to its community, as well as to government. Consideration of a Board style arrangement would ideally be required (similar to the Georges Riverkeeper and other examples) to provide an avenue to ensure all stakeholder groups have an opportunity to contribute if they wish to.
- It is likely that a CEO type position would be required, to co-ordinate reporting to an independent Board regarding the manner in which priorities are being addressed as well as reporting to investors.
- It may be that a range of specialised sub-groups are required to address particular aspects of catchment health. Ensuring that there is sufficiently broad representation without creating too much bureaucracy would be important both at the Board level and its representation.

- Ideally the Collaborative Partnership would be hosted by an existing organisation to minimise administrative costs and processes. This would mirror other collaborative partnerships such as Healthy Land and Water in QLD or the Derwent Estuary Program in Tasmania.
- The development and delivery of large complex projects would need a sufficiently resourced lead delivery partner.
- The Collaborative Partnership would need to consider in its Constitution how accountability would be determined, and the relationship between the partnership and its member organisations.
- This model would leverage the enthusiasm of many existing volunteers and potentially attract many more. Its ability to engage with all sectors could also be an advantage, although ensuring some sectors see a reason to engage may be a challenge.
- Many NRM issues are often very personal as they relate to how land is managed or different value systems. There can be personal costs for those involved where this occurs (examples include former water sharing committee processes or regional vegetation committees), and yet the personal interest is the strength of this model type as you want an engaged cohort. Managing this balance is very important and requires a skilled person to assist.
- The model would need to consider how it would structure itself, and whilst this would not affect existing on-ground or planned projects run by member groups, there may still be a necessary time lag before the model is operational and effective. However there are other examples to follow (e.g. Georges Riverkeeper).
- A parallel government process or contact may be useful to provide the statutory engagement required with legislation or to assist with accessing government funds.
- A steering committee with sitting fees, advisory panels and similar mechanisms would recognise the expertise and contributions brought to a partnership model.
- Consideration of a safe working environment for those working for a collaborative partnership approach also needs consideration. Use of a parallel government process may be able to provide this, as well as ongoing training, resources such as vehicles and supervision.
- Engagement with all stakeholders is required. A mechanism to consider how best to meaningfully, frequently and in a co-operative manner engage with different agency staff, Aboriginal stakeholders, industry stakeholders and a range of community stakeholders is needed.
- The Charter of the Partnership will need to be explicit regarding how investment decisions are made and how these will be delivered on the ground by existing or new (where gaps exist) partners.
- Volunteerism should be considered as an added resource for an already viable, financially secure framework in this context.

Advantages

- The 'Richmond River Collaborative Partnership' would enable strategic coordination, investment, management planning, integration, and long-term monitoring of river health outcomes in the Richmond River catchment.
- The non-government nature of such a model provides flexibility, adaptability and an ability to decide its own priorities within the catchment, as well as the ability to support (and leverage off) the priorities of a catchment investment plan such as a CMP.

- It would seek out and negotiate new and innovative sources of public and private investment not currently available to any single organisation (in addition to existing investment already successfully accessed by existing organisations).
- The governance structure of the Partnership would build on the existing successful networks and relationship but also constitute new collaborative mechanisms where gaps exist to support collective decision making. It would be sufficiently small and flexible to ensure it can adapt to changing stakeholder and river health needs.
- The Partnership would be driven by a strategic plan, vision and goals jointly agreed by all the participating stakeholders, combining government, industry and the community of the Richmond catchment. The Coastal Management Program for the Richmond River (in development) could form the statutory basis of this plan but the broader plan would be wider in scope.
- The Partnership would integrate scientific knowledge and traditional indigenous knowledge by establishing focussed scientific and indigenous advisory mechanisms.
- This model while building on successful activity to date provides a new, future focussed arrangement enabling a completely “fresh start” in the catchment. This is a highly important advantage of this model over many others.
- Most groups who would be represented within the partnership are used to multiple accountabilities – whether to grant bodies, to government or to the community.
- The perceived informality would be very attractive to many individuals and interests within the catchment, but this may also be a barrier to engagement with other organisations and individuals.

Barriers and risks

- A non-statutory arrangement requires a genuine desire by all stakeholders to collaborate and to voluntarily agree to participate and engage in the agreed charter of the organisation. Where state or local government involvement is not mandated, it may be difficult at times to engage with particular agencies or personnel.
- The initial Partnership establishment phase may prove to be a lengthy process, requiring the engagement and financial commitment from a large number of government and non-government partners. (Beneficial work will still likely continue but potentially not at a scale which would be desirable for demonstrable catchment health improvements.)
- Volunteers can be subject to burnout from taking too much on. This model needs to consider how it would be structured to ensure there was paid support at both an administrative and project rollout level.
- If the organisation relies too heavily on volunteerism for on-ground delivery, this may create additional barriers to implement effective technical solutions for improving river health.
- Although a spontaneous loose coalition or federation might be possible many of these groups may also tend to reject what they see as unnecessary bureaucracy. Others may have varying track records for devising or delivering effective action for management or restoration. They also have no regulatory or coercive powers. The scale of project delivery is typically at the smaller end of the scale.

Key investment pathways

There are significant programs which are already underway across the catchment, across the many different stakeholder organisations. The first step would be to undertake a simple mapping exercise

to map existing investment (amount and locations) across the catchment. This would allow a collective gap analysis to consider the best placement of new investment.

This new initial investment would ideally be funded without requiring any contribution from existing partners beyond their existing programs. A funding commitment, potentially from government, would initially be sought for a minimum of five years with an investment strategy to attract investment from other sources to be implemented from Day 1. The MEMA may provide a source of funds to meet this requirement in the first instance, subject to future MEMS funding opportunities, however, this is uncertain.

Targeting requests to grant programs as a result of the investment gap analysis and review of a detailed strategic plan would allow the Collaborative Partnership to develop its ability to show results and run projects collaboratively. Funding sources to support on-ground implementation could include the NSW Coastal and Estuary Grants which are local government-specific, the NSW Environmental Trust programs, Landcare grants in partnership with Local Land Services, and Traditional Owner organisations (Native Title Holders, LALC's) working through grants specific to indigenous programs, amongst others.

It is worth noting that the access to funding sources would be partly subject to the capacity of its leadership in identifying, negotiating and effectively spending funds. The Collaborative Partnership governance model would have the flexibility to attract private and philanthropic funds and to build public-private partnerships. Below is a non-comprehensive list of funding pathways:

- NSW Government programs such as Marine Estate Management Strategy
- Federal Government programs such as the former 20 Million Trees program
- NSW Recreational Fishing Trust
- NSW Coastal and Estuary Grants (local government-specific)
- Local government yearly contribution
- Landcare grants for NRM, directly or in partnership with LLS
- Grants specific to Aboriginal people and landholders
- Philanthropic funds and grants such as BCF.

This model may be able to leverage philanthropic funding more easily than a strictly government model. A river or estuary 'keeper' may appeal to investors.

Key governance features

In the initial stages, the Collaborative Partnership would be best as a coalition of stakeholders as it finds its way. This would allow groups to understand their role in the ongoing process and develop respectful relationships prior to moving into a more formal arrangement. The partnership model could begin by mapping existing work that is occurring within the catchment and deciding on a way forward.

As the Collaborative Partnership develops it could move into a framework similar to the Georges Riverkeeper or the Derwent Estuary Program governance model, where it would be set up as a not for profit company limited by guarantee. It would then be driven by non-for-profit governance law, principles and structure, and it may seek to integrate features of indigenous governance over time. The structure will then allow the Collaborative Partnership to apply for funding from all sources, and to rollout projects. Government grants have strict requirements as regards competitive procurement process and this would need to be accommodated within such a structure. As the model gains momentum it may also include/form advisory groups for specific matters, e.g. investment, policy, research, education and engagement.

Implementation timeframe and pathways

The 'Richmond River Collaborative Partnership' would be launched as a collaborative multi-stakeholder organisation requiring further important dialogue and negotiations with all stakeholder groups.

This negotiation phase may take from 12 – 24 months until an agreed framework is established, with initial seed-fund to be negotiated (by whom) to align with the start of the new entity. This could be negotiated by DPIE staff for funds out of MEMA (if possible), or a once-off treasury allocation, a grant, or a contribution from local government and State agencies.

Once the new entity is established, key implementation pathways will be driven through the development of an agreed strategic investment plan that will build on and integrate with the new Coastal Management Program. Ultimately the strategic investment plan would be linked to an agreed Richmond River Catchment Management Plan. Implementation of the Plan will comprise existing accountabilities (and funding arrangements) as well as new funding and delivery mechanisms. This recognises existing relationships such as local government working together on the www.loveitorloseit.com.au, and Joint Organisation initiatives amongst others.

There may be some specific initiatives that result in the co-investment of cash and in-kind resources from existing partners, for example, the establishment of a long-term ecosystem health monitoring and reporting program.

The Georges Riverkeeper, as one of Australia's longest serving catchment management groups, provides a road map for creating a successful Collaborative Partnership, harnessing community and stakeholder good-will and passion for enhancing catchment health. Georges Riverkeeper is the business name of the Georges River Combined Council's Committee Incorporated (GRCCC), formed in 1979 by councils with a collective responsibility for the health of the Georges River to work together to improve its environmental condition and ongoing management (refer details in Text Box 1).

10.5 Richmond River Councils Partnership

“A partnership bringing together local governments across the Richmond River catchment. Local government is close to its communities and is well positioned to deliver, in partnership, better health outcomes for the Richmond River catchment”

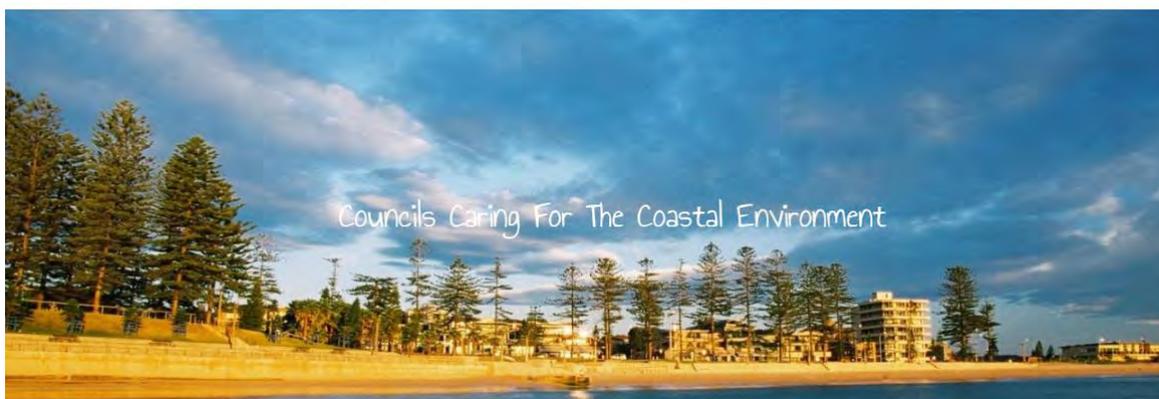
Summary description

Local government is the first ‘port of call’ for many community members looking for funding, and answers to land based questions and assistance. The extent to which many community members rely on local government for information may be underestimated. The five ‘general purpose’ Councils within the Richmond River catchment (Kyogle, Byron, Lismore City, Richmond Valley and Ballina) and the ‘special purpose’ Rous County Council are already responsible for a range of activities related to the rivers’ health. A collaborative agreement between councils would be operating as an over-arching organisation to deliver river health outcomes (e.g. NEWaste and the Richmond Tweed Regional Library already supply services in a similar manner).

This model could also be framed under a Memorandum of Understanding between councils or as a new Joint Organisation under the Local Government Act 1993. The organisation would be hosted by one council, which would provide administrative and logistical support, although it is likely that at least one and potentially two new positions would be required to roll out these services.

A prominent example of this is the Sydney Coastal Councils Group in NSW (refer case studies in Appendices and summary in Text Box 2).

Text Box 2 – Sydney Coastal Councils Group Inc <https://www.sydneycoastalcouncils.com.au/>



The Sydney Coastal Councils Group Inc. (SCCG) was established in 1989 to promote collaboration between Member Councils on environmental issues relating to the sustainable management of the urban coastal and estuarine environment. The Group consists of 9 Councils adjacent to Sydney marine and estuarine environments and associated waterways, and represents nearly 1.3 million Sydneysiders.

Guided by the SCCG Strategic Plan and Business Plan, the SCCG is providing benefits to Councils across a range of coastal management issues including; climate change adaptation and resilience; coastal infrastructure and asset management; strategic and land use planning; biodiversity restoration and conservation; natural hazard and emergency management; and integrated water management.

The strength of the SCCG rests in engagement and shared expertise of the elected representatives, executive and technical staff of our Member Councils, and the capacity of the Secretariat to facilitate coordination, collaboration and knowledge-sharing within the Group and provide general and specialised expertise in delivering a range of services and programs that build the capacity of members in the management of Sydney’s urban coastal and estuarine environments.

Goals:

- Collaboration: Facilitate cooperation between, and coordination of, actions by Member Councils and coastal stakeholders.
- Capacity Building: Develop and exchange knowledge and tools to support the role and build the capacity of Member Councils.
- Advocacy: Provide a regional and cohesive voice representing Member Councils
- Research: Identify and address current and emerging regional coastal issues.

The Secretariat is hosted by a financial Member Council. The Host Council is nominated and determined at an Annual General Meeting every three years. The SCCG is currently hosted by the Northern Beaches Council.



THE EXECUTIVE COMMITTEE

Membership consists of between 5 to 8 elected delegates: a Chairperson, two Vice-Chairpersons (Ocean and Estuarine), a Secretary, a Treasurer, and up to three other Delegates. Delegates are appointed by vote at the AGM. The Committee meets quarterly, or as required.



THE FULL GROUP COMMITTEE

Membership consists of 1-3 elected and/or staff representatives as determined by the Member Council. Meetings are held three times per year and direct the core activities of the SCCG. Nominated Honorary Members are appointed as observers to this Committee at the Annual General Meeting for their expertise and/or contribution to the work



THE TECHNICAL COMMITTEE

Membership consists of one or more professional staff from each Member Council, including strategic planners, environmental officers, engineers, sustainability educators, and other relevant staff. The Technical Committee meets four times a year to exchange information, collaborate on current and emerging needs and develop regional projects and programs.



THE GM'S FORUM

Membership consists of General Managers and/or Senior Staff from each Member Council. The GM's Forum meets twice a year to provide strategic direction to the SCCG and advise on the review and implementation of the SCCG Business Plan.



DEDICATED WORKING GROUPS AND ADVISORY COMMITTEES

These groups/committees are periodically established to advance specific issues and projects, and may comprise elected and/or technical members, and may occasionally include external experts and other stakeholders.

Councils have a very large area of responsibility and many different roles in their communities. Some of these areas are mandated by the NSW Government and others are decided, through the elected Council, by the community. These organisations already have a very significant role and mandate for management of environmental issues although the scale of such issues is large and the available funds are not sufficient for broadscale change at this time. Most effort is dependent on grant funding partnerships with state and federal government programs. The requirement for part or matching funding from local government, as well as the requirement to provide project management and supervision, is often a limiting factor in what can be achieved on ground due to both financial and time resources.

A partnership of Councils has the potential to boost the combined effectiveness of member Councils spanning large areas and challenging / complex management issues.

Strategic intent

- To utilise an existing framework, although with an enhanced community mandate to work to improve river health across the catchment.
- To provide a more effective voice to government and other locations about the importance of the Richmond catchment and its broader functions.
- To leverage existing agency relationships in a more formal sense to focus on broad river health outcomes in the Richmond.

Key considerations

- Councils in the Richmond already co-operate effectively on collective issues such as public libraries, biodiversity projects and river health projects, however not at a sufficient scale to make significant improvements to WQ. This framework could expand under the Joint Organisation arrangement which has key State Government agency personnel attending. The NRJO GM's group (which also has senior agency personnel attending) could provide an oversight role to a framework convened under Joint Organisation responsibilities.
- Alternatively, the 'Richmond River Councils Partnership' can be set up as a not-for-profit incorporated association of its members (such as the Sydney Coastal Councils Group governance model).
- External stakeholders, including government and non-government, should be engaged through a specifically appointed Richmond River Stakeholder Reference Group which will be informed periodically of the organisation activities and progress.
- Councils do not 'own' the responsibility for the river (this is a Crown Lands responsibility). Councils are also limited by their LEP in what they can manage on-ground, particularly in rural locations although urban areas are simpler to regulate and provide enforcement activities for where river health is being impacted.
- Although Councils are heavily utilised by their local communities, there is also an inherent level of distrust for their ability to address some issues. Some of this is due to misinformation or a lack of appreciation for the constraints Council's work within.
- Councils already have the capacity to manage very large projects, with multiple sources of funding and high visibility. They already have a very significant role and mandate in environmental and river health, and in some instances a long history with catchment management activities.
- Representation on the NRJO single issue groups tend to be working at an operational level which may not provide the scale and breadth of representation and funding needed to

address the issues. It is also local government focussed which would not provide the representation from other groups such as industry and community and Aboriginal people which would be required for the best outcomes.

- The public nature of Local Government and its accountabilities provides a high degree of accountability and transparency.

Engagement with stakeholders who are not local government is still required. A mechanism to consider how best to meaningfully, frequently and in a co-operative manner engage with different agency staff, Traditional Owners, industry stakeholders and community stakeholders is needed. This can be partly be addressed through working groups and advisory committees similar to the Sydney Coastal Councils Group.

Advantages

- The Richmond River Councils Partnership would have capacity to carry out activities on the ground on behalf of and in coordination with member councils, local organisations and agencies (similar to the Sydney Coastal Councils Group).
- The partnership would improve the communication and coordination of activities of local government across the catchment. Mapping of gaps and areas for new or enhanced investment could occur more readily.
- It would be able to directly access the NSW Coastal and Estuary grants funding (although requiring a matching funding component).
- Local Governments are already used to working effectively together on focus areas. Staff relationships are often already in place and the Integrated Planning & Reporting framework provides a high degree of local and state accountability.
- There are existing examples of similar organisations and structures such as Joint Organisations and other MoU-based organisations (e.g. NEWaste), and the Sydney Coastal Councils Group which could provide a template. The Councils already cooperate closely in areas where the nature and scale of the problem (such as weed and pest control, flood control, supply of bulk potable water, and public libraries) dictate that management should be at a scale greater than a Shire or City council.
- There is already a key contact point or group within each Council with NRM/river expertise, who can already liaise with other aspects of LG service delivery (roads, sanitation, health, recreation) and there is existing cooperation across councils and with relevant Rous County Council expertise (although there is of course scope for improving this).
- Councils are already consultative on a range of issues important to their community or required by legislation.

Barriers and risks

- State government agencies may not commit to a Local Government-led organisation where there are staff resource constraints.
- The initial set-up and agreement may be a lengthy process, as it would require the engagement and financial commitment from all Local Government partners and Rous County Council. However, there are existing road maps to follow for this process (e.g. Sydney Coastal Councils Group).

- Different Local Governments have different abilities to fund projects. Smaller councils may feel as though their issues are not prioritised accordingly or larger councils may find it difficult to justify funding works which are not within their Local Government boundary.
- There will be a need to consider which issues are ‘within the remit’ and which are ‘without’ particularly in estuarine locations where climate change and sea level rise will be interacting with existing river health issues. Catchment health, in general terms, feeds estuary health. Whilst higher temperatures and changed rainfall regimes may be impacting on the catchment, sea level rise and storm surge may not even though there is significant potential for localised impacts.
- Working with Traditional Owners could be made simpler, depending on the Local Government relationships with local groups. However, widening the geographic location of the specific river health organisation may not necessarily translate the existing relationships with indigenous groups if the correct indigenous engagement mechanisms are not explored and applied.
- Philanthropic contribution or private partnerships may not wish to invest with a Local Government organisation.

Key investment pathways

The main initial investment pathway for the ‘Richmond River Councils Partnership’ would be a committed contribution from each local government entity applied as part of the IPNR framework which guides investment for all local councils. Initially, it would be expected that existing programmes would continue (ie Ballina and Lismore council already run NRM programs using special rate variations) until the Coastal Management Program for the Richmond River Catchment was finalised to guide ongoing investment. During the CMP process it would be expected that negotiations would occur as to the manner in which the CMP would be funded across the catchment. Local options would include:-

- Contributions from recurrent funds from partner councils.
- A catchment-wide Special Rate Variation to support the CMP implementation (this could be a lengthy and time-consuming process, however).
- Grants such as Landcare, the NSW Environmental Trust and other sources of external funds.
- NSW Coasts and Estuaries Program, potentially with a revised State:Local ratio of funding available (currently it is 1:1 with a project management expectation from LG). The NSW Floodplain Program funds projects at 2:1 and in cases of particular need with higher ratios of funding. This provides for local investment, supplemented by the NSW Government.

This model may be less attractive to non-government sources of funding such as philanthropy, as compared to the broader Collaborative Partnership model (e.g. Georges Riverkeeper).

Financial contribution would be welcome from State government agencies although this has not traditionally been the role of agencies. The recent Marine Estate Management Strategy funding has been disbursed through other agencies to date, however is not recurrent funding.

Implementation timeframe and pathways

Implementation pathways and timeframes may be similar, or potentially more streamlined than the collaborative partnership model. A 12 – 24 month establishment phase is likely while the Council Partnership is established and initial funding sources and functions of the Partnership are confirmed.

10.6 Expanded Rous County Council (RCC+)

“Rous County Council with a new Proclamation (expanded functions and geographical scope), to deliver projects and environmental outcomes for the Richmond River to improve the health of the catchment.”

Summary description

Rous County Council is a county council constituted under the Local Government Act 1993. County Councils are different to local general-purpose councils in that they provide particular functions under service level agreement. Rous County Council has currently three main functions provided on behalf of the constituent councils (Ballina, Byron, Lismore and Richmond Valley): bulk water supply, weed biosecurity and flood mitigation (including natural resource management issues arising therefrom). As a special purpose Council, Rous has the ability to focus more directly and in more depth on the issues with which it is tasked.

The Richmond River catchment includes the Local Government Areas of Ballina, Byron, Lismore, Richmond Valley and Kyogle.

A renewed Rous County Council (RCC+) would expand both its geographic scope and its functions provided under agreement to the five LGA's. The scope would cover the Richmond River catchment, and include any project improving the contributing to the health of the Richmond River from a water quality perspective would be able to be included (this would help to ensure duplication with agencies and other LG organisations would be minimised). The renewed Proclamation would provide legal legitimacy to the RCC+ model, enhance the local (catchment) nature of model's responsiveness and provide the ability for RCC+ to work across LG borders on projects benefiting the river as a whole.

Many of the constraints and considerations of local government apply equally to Rous County Council, although it is slightly more removed from the day to day matters general purpose councils must deal with.

Rous County Council is currently convening the development of a Coastal Management Program for the Richmond River, and RCC+ would be well placed to begin implementation of the CMP.

Strategic intent

- To utilise and enhance an existing organisation to provide a single acknowledged contact point for catchment management improvement projects.
- To leverage existing agency relationships in a more formal sense to focus on broad river health outcomes in the Richmond.
- To provide a more effective voice to government and other locations about the importance of the Richmond catchment and its broader functions.
- To leverage project work already begun in the Wilsons River and other catchments which enhance water quality and environmental outcomes.
- To provide a transparent, future focussed investment plan for Local Government within the catchment.
- To ensure projects are targeted at strategic catchment locations for best NRM impact.

Key considerations

- Councils do not 'own' the responsibility for the river (this is a Crown Lands responsibility).
- Rous has some separation from the day-to-day responsibilities of general purpose councils. It is accountable to member (or constituent) Councils through a Service Level Agreement although its Councillor's make autonomous decisions (Councillors are present for each of the LGA's it provides services for).
- An operational committee comprising state and local government staff, industry and community groups could be convened by Rous County Council to do the detailed planning, liaison and strategic work required. The former Richmond River County Council convened an operational committee in the early to mid-2000's. In addition, the Richmond Coastal Zone Management Plan implementation committee is still active today as an informal committee that convene every few months to review existing NRM projects, and seed new projects where funds are available to implement actions of the CZMP.
- Oversight and direction to the operational committee would need consideration, particularly in light of the very significant issues within the catchment. This could come from a number of sources including the NRJO GM's group or similar.
- Communication of its work, accountability and transparency would need to be addressed to ensure that all sectors of the community including its funding partners were involved. It would be important to ensure that its work was inclusive, facilitated other groups effectively, developed partnerships and provided a support role to its constituent councils.
- A new Proclamation would be required which fully encapsulated the new geographic location and mandate. A Service Level Agreement with its constituent councils would be required. A full review of potential funding sources would also be useful during this work.
- Engagement with stakeholders who are not local government is required. A mechanism to consider how best to meaningfully, frequently and in a co-operative manner engage with different agency staff, Traditional Owners, industry stakeholders and community stakeholders is needed. Rous County Council already has a very positive relationship with the local indigenous community, and this could be expanded to other geographic locations.

Advantages

- Ability to bring local perspectives to determine local priorities. Committee structures and operational staff working groups are already developed and projects such as the development of a Coastal Management Program in train.
- Council already has the capacity to manage very large projects, with multiple sources of funding and high visibility.
- RCC+ would be eligible to apply for NSW and Federal Government funding under a variety of grant programs which are specific to LG.
- The public nature of LG and its accountabilities provides a high degree of accountability and transparency.
- An RCC+ model would improve the communication and coordination of NRM activities focussed on improving water quality and catchment health across the five LGA's and partly address the issue of differing ability to leverage funds from the rates base.

Barriers and risks

- Industry and community stakeholders may not engage with this model as it is a LG model.
- The ability to leverage funds may be problematic especially given the scale of the issues to be addressed across the catchment. Ballina and Lismore already have a Special Rate Variation in place, with a Natural Resource Management application. This may reduce the ability of those Councils to be involved with a catchment-wide levy scheme, or displace funds previously allocated to those programs in favour of the RCC+ investment plan.
- Agencies may not effectively engage or be engaged, considering it as a Local Government model. This would represent an issue where jurisdictional issues arise and desirable outcomes cannot be pursued. The possible financial contribution agencies can make over time may also decline by reducing the visibility of the issues within the Richmond within agency processes.
- The initial set-up and agreement might be a lengthy process in a statutory sense as the Proclamation and MoU's will need to be renegotiated to cover the full suite of operations required by catchment wide approach.

Key investment pathways

One of the primary limitations with this option would be the budget. Rous County Council is primarily funded through its Service Level Agreement with its constituent Councils as it is essentially a service organisation, providing agreed services to Councils. Floodplain services have been the subject of review due to the large area and number of assets which exist. Rous County Council is still analysing how best to approach the service provision that there appears to be an expectation for within the community on an ongoing basis, within the constraints of the available budget.

The RCC+ model ability to leverage funding may be limited by:

- Its ability to make the case for service provision across the catchment for NRM relating to improvements in catchment health.
- The ability and willingness of constituent councils to pay. Two councils already have a targeted levy for environmental outcomes which support their own programs.
- Rous County Council can bill its own customers but on a fee for service basis. This is not similar to the ability of North Coast Local Land Services to levy rates on property.
- There is a possibility that a catchment levy could possibly be approved by IPART, although this is a lengthy and involved process taking up to 2 years.

This model may be less attractive to non-government sources of funding such as philanthropy, as compared to the broader Collaborative Partnership model (e.g. Georges Riverkeeper).

Many of the constraints and considerations of local government apply equally to Rous County Council.

RCC+ could consider an option such as applying a catchment charge to its bulk water and direct supply customers, in addition to presenting a rolling investment plan for individual Councils to fund under Service Level Agreement.

RCC+ would also be able to continue its ongoing work with Landcare and other partners, and expand these operations. Grants such as the NSW Coasts and Estuaries and Floodplain Management programs, NSW Environmental Trust and NSW Recreational Fishing Trust are other potential sources of external funding either leverage existing budget or able to be applied for in their entirety. RCC+

has existing relationships with a number of NGO's which would continue and could expand. Seeking a better funding ratio from the NSW Coasts and Estuaries fund is also an option.

However, it would require extra resources (staff) to expand the facilitation of stakeholder communication, to pursue extra funding and to develop projects. This would be an ongoing cost.

Implementation timeframe and pathways

RCC is already convening a process with Local Government to develop a Coastal Management Program for the Richmond River. This could be expanded to identify and partner with community and industry stakeholder groups on the implementation of projects.

Coastal Management Programs are the preferred methodology for setting out a strategic works program for improving catchment health. **All options should work toward implementing the CMP for the Richmond River Catchment.**

The formal process of enhancing the Proclamation can take up to 2 years, but this would not be a barrier to Local Government and communities working together in the meantime.

In effect, it would take approximately 3-6 months once a decision has been made to select this option for it to begin implementing its responsibilities.

10.7 Richmond River Coordinator

“A champion for the river, appointed for a fixed period of time, to work with agencies and stakeholders to begin the journey to improving the health of the Richmond River through new arrangements and coordinated action.”

Summary description

The ‘Richmond River Coordinator’ (the Coordinator) would be a champion or advocate for the River, temporarily appointed by the NSW State Government to coordinate efforts and work with government and non-government stakeholders and industry across the catchment.

The Coordinator would be a three year temporary initiative to set a transitional pathway towards a better governance model in delivering environmental health outcomes for the Richmond River in the long term. It recognises the time lag that set up of any new comprehensive arrangements (such as Option 2 - Collaborative Partnership, or Option 6 - NSW Government Agency) will involve, and provides a bridging mechanism between the relationships developing within this project (the Richmond River Governance and Funding Project) and the new preferred long term arrangement. The Coordinator could continue providing opportunities for discussion, planning for on-ground works, relationship development and liaison at a relatively low cost. Relationships within the catchment are strong within some sectors but the Coordinator could begin to work across public and private sector boundaries, profit and not-for-profit sectors and draw in new sections of the community.

The Coordinator can complete the initial groundwork for the longer-term governance model in a low-key manner, and handover (to the longer term model) can be achieved with minimal disruption. There are many projects potentially improving river health which are already being delivered across all land tenures, for both public and private purposes. There are potential synergies which could be leveraged through better communication across the catchment, and the Coordinator begins the process of there being one recognised location for contact on river health issues for the Richmond River catchment. This was a key component of feedback from stakeholders during workshops and discussions.

The Coordinator will begin to set the foundations of a new or improved governance arrangement to deliver river health outcomes, and expand the development of priorities and agreed forward investment plan using the CMP for the Richmond River Catchment process.

Ideally, the position would be hosted by an existing State Government office within the catchment. Ideally, the Coordinator would be supported by, and report to, a high-level decision-making group, operating as an interim-Local Board comprising key stakeholders across primary and other industries, NSW agencies, local government and peak community bodies. They would also be supported by at least one staff member, with the possibility to increase the size of the team if need be.

The Local Board could also transition across to the new arrangements to provide continuity, with a review undertaken annually to ensure it remains representative across stakeholder groups within the catchment.

Strategic intent

- To create a new and fresh independent role which is not tied to a specific government or non-government organisation role. It would be task oriented, and designed to stimulate discussion around opportunities and barriers to better catchment health outcomes.
- To create an opportunity for vertical and horizontal integration between stakeholders across the catchment, with the inclusion of NGOs, industry and indigenous groups.
- To create an opportunity for an independent oversight which is not driven by the agenda or budget limitations of a specific local government, state government or other non-government organisation or limited interest association.
- The Coordinator would not undertake projects on its own, per se, but act as facilitator, communicator, engagement operative and relationship builder to enhance and create relationships across sectors, tenures and interests within the Richmond River catchment. The ultimate goal of these relationships and the actions developing therefrom would be to provide a positive benefit to the health of the river.
- A champion or “keeper” as was proposed by a number of interviewees, often compared to the Border Coordinator who is tasked to resolve and coordinate cross-jurisdiction issues that irregularly arise.
- The Coordinator would not replace existing projects but would forge new, and strengthen existing, relationships. To achieve this, the Coordinator would establish a Richmond catchment working group or committee as a mechanism to increase collaboration and investment efficiency.
- To appoint someone with high visibility and sufficiently clear powers to bring together non-cooperative parties and stimulate strong and effective actions in mutually agreed areas, leading to catchment and river health outcomes (as well as related social and economic issues).
- To transition this option to a preferred model over a three year timeframe, in consultation with the preferred model, to ensure that local priorities can be addressed.
- To foster a collaborative catchment working group/committee comprising key stakeholders
- To develop and maintain relationships among NRM groups, industry and government across the catchment
- To provide a front door for enquiries and interactions on NRM related activities in the catchment
- To build momentum in NRM and improved governance across the catchment.
- To oversee and coordinate development of the CMP for the catchment, and the associated investment plan.

Key considerations

- This role, as an interim one, would need a strong mandate and clear goals to ensure that it could provide the desired outcomes. The role could report directly to the Premier’s Office or to the Coordinator General Environment, Energy and Science Group (EES), and have “convening power” that would compel collaboration amongst all state government agencies involved (including local government) to facilitate this goal.

- Ideally, the Coordinator would be senior enough to negotiate to ensure these local priorities can be prioritised within regional organisations. This may require a statutory role.
- Other catchments have utilised a less formal role than that noted above which has also been successful in other jurisdictions, including a number of the case studies considered in this project (see Appendix A). If government were to invest directly within the Richmond River catchment however, it is likely to want a more direct involvement in the likely outcomes.
- The interim nature of the office has the potential to create confusion within the catchment about who is ultimately responsible for what. It may be simpler to confer the responsibility onto the preferred model/option in the first instance and accept that it will take time for it to be able to demonstrate positive outcomes.

Advantages

- The 'Richmond River Coordinator' can be quickly appointed by the State Government. The timely appointment of a Coordinator demonstrates how seriously government takes the health of the Richmond River.
- It provides a buffer for the preferred ongoing model to develop its approach so that it is able to be immediately effective once convened. It also allows an adaptive approach to longterm arrangements, whilst having a specified end date.
- The Coordinator can bring together government and non-government stakeholders to agree on a pathway to achieve catchment health outcomes.
- The Coordinator will be the reference person to deal with issues related with the health of the Richmond River for local government, state government, industry and community groups and other external stakeholders. This provides an opportunity for a single communication point which could identify existing opportunities and barriers which are not being addressed.
- The Coordinator can provide ongoing information to Action 9.1 of the Marine Estate Management Strategy for consideration of optimal governance arrangements within coastal catchments to inform government policy.

Barriers and risks

- As a new approach, the Coordinator will need to develop new relationships with agencies, local government, industry and community groups only to have to withdraw after a three year process (recognising there will be a formal handover process).
- The Coordinator will have limited ability to influence government policy and (it is likely) no funding to implement on-ground actions, which could result in frustration from stakeholders and the community.
- It is possible that this option will be seen as 'yet another agency' or 'another solution' in an already very crowded space with the potential to duplicate other functions. Some participants in the RRGFP suggested that existing roles (such as the head of NRM in Rous CC) could do the same role and be more immediately effective in liaising with industry and other stakeholder associations.
- Some organisations do not wish to engage on river health as an issue. This is a barrier to all models/options and an inability on the part of the Coordinator to address this as a problem is likely to continue to be an issue for the preferred option/model.

Key investment pathways

The Coordinator would be appointed by the NSW State Government with an operating budget over the three year period. It would be expected that the allocation of resources towards further planning would be limited, particularly given that local government has begun a Coastal Management Program process which can be built on as it is in the early stages. The Coordinator could take on oversight and coordination of the CMP as a powerful way to engage the catchment community and ensure the CMP benefits from broad input and opportunity.

Therefore most of the budget allocation could be directed to action on the ground, including building stakeholder awareness and networks, forming a working group/ committee, and funding targeted restoration projects. Initial projects could be focussed mostly on agreed 'no regrets' activities, and working with existing groups such as local government or Landcare on a couple of 'wicked problem' areas. This would occur whilst the collaboratively derived Coastal Management Program for the Richmond River Catchment plan is developed, **and overseen by the coordinator**, to take the management of the river forward.

The Coordinator may benefit from an initial budget allocation from the NSW State Government, potentially MEMA or other funding sources. Private, philanthropic funding may be much more willing to invest in this type of option. Possible investment pathways include:

- NSW Department of Premier and Cabinet
- NSW MEMA Strategy Stage 2 funding
- Philanthropic funds and grants, private funds
- NSW Treasury allocation, including re-allocation of existing budgets in DPIE.

10.8 NSW Government Agency Lead

“A NSW Government Agency Lead for enhancing the health of the Richmond River Catchment.”

Either:

- A. Department of Planning Industry and Environment - North Coast Local Land Services with an expanded role **OR**
- B. Department of Planning Industry and Environment – MEMA, led by EES.

Introduction

Discussion on the NSW Government led option is presented slightly differently. The Richmond River governance framework is a local project, looking to meet the needs of local communities, stakeholders, industry, agencies and local government. There are other programs which consider an approach which is at a scale broader than the Richmond River catchment. This means that there will be some tension between what has been expressed as being desirable at the catchment scale for the Richmond, and what can be delivered under existing statutory mechanisms by NSW agencies.

Government, operating through its Departments and agencies, has the ability to implement regional programs. It often uses a decentralised regionally based implementation model to deliver services including planning, coordination, and on-ground work activities. As example of such services is health where regionally distributed service delivery is required, and the Department of Health is set up to ensure that this can occur with reasonable efficiency. This may mean that not all services are available in all locations.

The NSW Department of Planning, Industry and Environment (DPIE) offers the opportunity to coordinate input of a range of agencies that were formerly separate, and which deliver services and fund programs on river and estuary health management.

The vision of the DPIE is as follows:

“As stewards of the physical and cultural treasures of New South Wales (NSW), we create great places and experiences for all, plan for a changing and thriving NSW, inspire strong and resilient communities and regions, and ensure the responsible and sustainable use of our State’s resources.”

DPIE also includes the Marine Estate Management Authority (MEMA), comprised of four agencies; DPI (fisheries), the Environment Energy and Science Group (EES), Crown Lands and Transport. It also includes Department of Industry – Water, DPI Agriculture, as well as the Natural Resources Access Regulator and other agencies which have responsibility for areas of catchment management.

As a whole, DPIE reports to the Ministers for Planning; Energy and the Environment; Water, Property and Housing; Agriculture and the Western Division; and the Minister for Local Government. This would communicate a clearly holistic approach to catchment management within the Richmond.

There are two options for a NSW Government agency lead within the Department of Planning, Industry, and Environment that are considered potentially suitable to lead governance in the Richmond catchment as considered below.

Local Land Services (LLS) - LLS are a regionally based NSW Government organisation within DPIE that deliver services such as pest and weed control, sustainable agriculture, protection of animal

biosecurity and Soil Conservation Service activities. North Coast Local Land Services (NCLLS) operate from the Queensland border in the north to Laurieton in the south. Services are provided under the Local Land Services Act 2013. Additional information on the LLS governance framework is provided in Appendix E.

LLS programs aim to support landowners with information, networks and resources to:

- Improve agricultural productivity
- Control declared pests and weeds, assisting landholders to meet their legal obligations in this respect
- Administer private native forestry and other vegetation clearing on private lands
- Assist with ensuring biosecurity and productivity for stock.

The NCLLS Board set the local strategic direction for the North Coast.

Prior to 2013, catchment management in NSW was delivered through the Catchment Action Plans (CAP, CAP2) by Catchment Management Boards and Authorities. The Board had a smaller geographic area which evolved over time to the Catchment Management Authority (CMA). To accommodate this transition the concept of socio-economic landscapes was utilised and the CAP was delivered to take account of differences in these landscape. These plans provided the mechanism for NSW government investment into NRM outcomes. In 2013, the CMA transitioned to Local Land Services.

Marine Estate Management Authority (MEMA), led by Energy, Environment and Science Group (EES) - offers the opportunity to coordinate input of a range of agencies that are now located with DPIE that were formerly separate, and which deliver services and funding programs on river and estuary health management.

MEMA/EES also have several staff located and working in the Richmond catchment having knowledge of local values, issues and key stakeholders. Existing relationships with key stakeholders in local government, industry and NGO sectors provide excellent opportunities for further and increased collaboration under a revised and refreshed governance framework.

Strategic intent

- To leverage the significant present and past investment in programs benefiting river health within the Richmond River Catchment.
- To provide the Richmond River Catchment with a methodology to work towards more collaboration, more effective relationships across project building and a more holistic look in project delivery across all areas of land management including agricultural industry and urban and industrial development.
- To focus on the Richmond River Catchment as social and economic geographic landscape requiring a catchment focus to improve river health.
- To leverage the involvement of agencies across government in all aspects of catchment management within the Richmond River catchment, and streamline investment and resourcing

Summary description of a working model

A State agency lead would need to undertake the following tasks:

- A. Develop a partnership approach to issues within the Richmond River Catchment, incorporating local government, industry, community (including Landcare), and agencies with NRM functions or functions which impact NRM.
- B. Initially work with the priorities identified within the CZMP for the Richmond River Estuary including development of an investment plan for the first two years, whilst the CMP for the Richmond River Catchment is developed and completed. The priorities for each of these documents need to be driven locally to ensure their relevance to the Richmond River and its catchment.
- C. Continue to work in partnership with MEMA and other agencies on implementing the Marine Estate Management Strategy.
- D. Identify both public and private funding sources across all sectors. It is likely that this model would utilise mostly public funding itself, but stakeholders would be able to leverage private funding within their own structures.
- E. Identify gaps where the agency can add value either by undertaking (or commissioning) on-ground works or by addressing barriers to implementation of on-ground works by other entities.
- F. Provide project development and some project management services to stimulate the development of relationships, where required.
- G. Enhance communication across all sectors to develop partnerships between different bodies and organisations.
- H. Provide facilitation and engagement services to enhance the profile of the Richmond River catchment as a priority works program that requires investment from all sectors.

Key considerations

- North Coast Local Land Services have a legislative role in land management and could develop the appropriate structure to deliver natural resource management outcomes in the Richmond River Catchment.
- Whilst the need for NRM activities within the catchment is recognised within the LLS Act, these activities have not been funded in the North Coast. The Water Management Act, Crown Land Management Act and other acts which provide for components of catchment management would be utilised to their best purpose for achieving NRM outcomes within the catchment. The Richmond River catchment would provide a useful case study in how to achieve synergies between Acts for a coherent outcome.
- An example of this is that water sharing, water policy, water licensing and water compliance are currently managed by different parts of DPIE. Formerly, these activities were also removed from an NRM perspective. The new DPIE structure provides an opportunity to look for balance in this area, both for production and the environment, and consider the picture at a local catchment level.
- MEMA agencies are currently utilising NCLLS as a service provider to implement a pilot for riverine health improvement using Stage 1 from the Marine Estate Management Strategy. This arrangement could continue under an MoU arrangement for on-ground works.

- Whilst the organisation and its structure is important, the people who are employed to undertake the task are extremely important, as is the manner in which they are supported to do so. A lead manager with appropriate seniority to achieve the liaison with industry, community and local government is required. This manager would be supported within NSW Government agencies to ensure teams work collaboratively, to ensure situations where working at cross-purposes is minimised, to reduce barriers to communication and to require decision-making across all agency responsibilities to be considerate of the broader picture of river health.
- Governance should aim to be representative of all interests within the catchment and not too 'agency-heavy'. Local government, community representation, industry, and agencies with responsibilities within the catchment should be involved in decision-making and communication of priorities.
- Funding should be focused on on-ground outcomes. Some positions on the committee structure may need to be remunerated to ensure that attendance is not exploitative of volunteerism and administrative support will be required. However, funding to support the framework itself should come from sources other than catchment levies or rates, or there should be a cap applied to these activities to ensure a return on NRM investment to the ratepayers.
- A feedback loop should be incorporated into project management to report to local communities on the outcomes of their own, and public, investment.

Advantages

OPTION 'A' – NCLLS Lead

The NCLLS have an existing presence within the Richmond River Catchment with Sustainable Agriculture and other programs, and they have an existing legal and statutory framework from which to work within. NCLLS have already considered how they can roll out a greater range of NRM services within the Richmond with their proposal (see Appendix E). They are able to call in existing expertise on a range of land management issues. NCLLS already have an existing stakeholder base in productive agriculture which is advantageous to addressing such issues as diffuse source water pollution and production related land degradation.

The proposal put forward by LLS would require some modification to meet the key considerations identified above and address some of the barriers and risks identified in the following section. Accountability can be achieved through agreements and staff allocated to projects, and through effective communication to the wider community.

A Richmond Committee as identified within the proposal could perform the functions of reporting to the NCLLS Board; doing the detailed planning and monitoring in partnership with local government utilising the Coastal Management Program methodology (but involving industry and community stakeholders); and engage with sub-catchment groups through existing voluntary and industry organisations such as the Australian Macadamia Society and Richmond Landcare Inc. Other programs that NCLLS have developed and rolled out such as Sustainable Agriculture would also be represented within this Committee through staff liaison and representation. This would be a cost-effective option with only one group. Attendance from voluntary organisations and those for whom there is a cost in attending (ie time away from farming or other work) could be paid a sitting fee. The Committee structure as put forward in Appendix E would require some further consideration to ensure local government and community groups were more comprehensively represented to allow this option to work most effectively.

OPTION 'B' – MEMA, led by EES

This option would provide an opportunity to form a link between industry and community stakeholders (including local government as a local stakeholder), and the varied responsibilities for natural resource management across DPIE. This option would utilise MEMA or EES staff to provide both the seniority and local knowledge focus required to bring together government programs holistically. As this would be a new way of working, it would bring confidence to catchment stakeholders that this is a new area of focus for the government and that their message with respect to valuing local messages and local priorities has been heard.

The role of those staff would be to prioritise outcomes for the Richmond River catchment in their work, and should focus on developing partnerships within and between agencies, as well as with community and industry stakeholders into the longer term.

This option could still utilise a Richmond Committee structure as identified above to ensure that accountability is maintained both for the NSW Government and for the community. Various agencies which have responsibility for smaller or larger aspects of catchment management, as noted above. The real advantage would be in the enhanced opportunity for partnership between government and the local catchment community. The charter for this option would be one of enhancing coordination, communication, and facilitating co-operation and engagement. This option would be less of a 'doing' option, but would leverage off the many activities that each stakeholder, particularly government, already does to ensure that these activities work together to achieve a positive outcome. This outcome would necessarily need to consider both production and NRM outcomes.

One advantage of this option is the ability to ensure government funds are applied as efficiently and effectively as possible, and that they are working towards a common benefit for the catchment.

This option also continues to support the autonomy of community groups, industry and local government in their activities, working as a partner for the most part in achieving beneficial outcomes. This is very attractive to independent groups who are fierce advocates for their 'patch', whilst linking them with other groups and hopefully enhancing some shared understanding between sectors such as industry and community. This option can also potentially assist with government processes. It promotes a shared ownership of the catchment which is attractive to many.

Barriers and risks

OPTION 'A' – NCLLS

The NCLLS option has some significant barriers to overcome, in the eyes of the community as evidenced through consultation during this project. The discussion within this report has focussed on the positive principles that any future governance framework should work towards. However, it is noted that there is a significant degree of discomfort among stakeholders about NCLLS's capacity in developing natural resource management partnerships and outcomes within the Richmond River catchment in recent years.

There have also been some reservations expressed by some key stakeholders about the model presented by LLS (see Appendix E) and its alignment with the preferred governance principles developed through broad consultation during this project. This stakeholder discomfort is summarised in the following dot points. It should be noted that this report reproduces these comments only to ensure the expressed concerns are captured so when considering the NCLLS governance option, measures can be identified and proposed to address the concerns.

- There has been a reduction in the provision of services in natural resource management within the Richmond since 2013. This includes weed management, support for Landcare, pest management and programs which previously provided direct assistance with achieving on ground outcomes on both private and public lands. The comment was made by a number of stakeholders.
- There was a lack of confidence expressed by stakeholders with respect to LLS's capacity to adequately collaborate, as well as concern raised that LLS have not for some time, been developing NRM capacity with landholders in the Richmond.
- There appears to be a lot of bureaucracy and accountability in the model proposed which takes away from funding for ground action. It also hampers the synergistic partnerships which arise in a spontaneous way in a less formal environment. The proposed model is very bureaucratic and inflexible, and any local input may still be over-ruled by the Board.
- A criticism for agencies in general is that existing communication with local communities, including local government, has been poor in recent times. The impact is a lack of trust, breeds resentment and creation of a poor image for the subject agency.
- Local priorities, delivered locally using local (often, existing) frameworks, were emphasised as a desired outcome. NCLLS are not seen to be delivering these local priorities at the moment within the Richmond from an NRM perspective.
- Whilst NCLLS have some staff who work in the NRM area these tend to be funded from other sources such as Saving our Species or the MEMA funding, and are not recurrently funded.

Additionally, NCLLS do not currently levy funds on properties below twenty hectares or properties which grow sugar cane. Whilst this is not a barrier as such, non-production stakeholder feedback is that pest management (pigs, rabbits and wild dogs) has been reduced. Funding is required to make address properties which do not currently fall within the ability of NCLLS to levy, to ensure that resources are available to address the significant NRM, water quality and other issues which still arise on these properties in a sub-tropical location. LLS will need support for increasing the number of properties for which it levies service fees to address these problem areas.

NCLLS has five major catchments that it operates within. It may be difficult operationally to assign appropriate resources to a 'Richmond River Chapter' at the expense of other catchments which also have complex problems requiring attention.

Appointment of a coordinator would assist LLS in building relationships, capacity, and to develop and embed a governance framework that is more appropriate and inclusive for multi-jurisdictional catchments like the Richmond. The revised LLS governance framework should be more inclusive of local government, industry and other stakeholders and refinement of such should be undertaken with key stakeholders to meet needs more broadly.

OPTION 'B' – MEMA, led by EES

One of the disadvantages for this option are that it would require an ongoing budgetary allocation for its implementation (for new staff resources) and there could be an expectation that this arrangement would be replicated in other catchment locations. Ensuring accountability and attracting funds within the local community may be more difficult within an agency framework, as this is not the usual business of state government staff working in developing or implementing NSW Government policy.

This option is more likely to end up being a quasi-collaborative partnership model with a greater degree of government funding than Model 2 (Collaborative Partnership) which is represented as a broader stakeholder and community based collaborative partnership. It would not be the usual business of government agencies to implement on-ground projects (except DPI (fisheries) and LLS who do some onground works) and this would need to be carefully considered. Although this option is presented as developing relationships and bringing agencies together, there are some important points to consider in this work. They include:

- A new entity working within the catchment would need to recognise the significant work that has occurred and is still occurring within the catchment. This work has been carried by community groups, local government and industry. The task of this model would be to continue to work with those stakeholders to identify a place to work collaboratively. There has been a tendency for this to be overlooked in rolling out new government programs in the past.
- A criticism for agencies in general is that existing communication with local communities, including local government, has been poor in recent times. The impact is a lack of trust, breeds resentment and creation of a poor image for the subject agency.
- The risk that there is no funding stream associated with this option.

This option, poorly implemented, could potentially also duplicate the work of other agencies which would be a concern.

Key investment pathways

The investment pathways for this model is somewhat dependent on which agency within DPIE is considered as the best option.

OPTION A – NCLLS Lead

- Direct fund raising through rates on rural lands above 10ha (current arrangement)
- Move to direct fund raising through rates on rural lands above 2ha and into new geographic areas such as the floodplain.
- Utilisation of NCLLS rates and bulk water supply rates could be explored as an option, using a transfer mechanism from each organisation to a designed ‘Richmond River’ account. However, this is not likely to be a simple option for implementation. On-ground actions to be implemented in partnership with specific DPIE staff.
- Increase of government funding to LLS.

OPTION B – MEMA, led by EES

- Requires additional budget allocations, either reallocated within DPIE or from Treasury
- Utilisation of NCLLS rates and bulk water supply rates could be explored as an option, using a transfer mechanism from each organisation to a designed ‘Richmond River’ account. However, this is not likely to be a simple option for implementation. On-ground actions to be implemented in partnership with specific MEMA or EES staff.

Both Option A and B have the opportunity, in supporting industry and community partnerships, to leverage off other sources of funding to reach the objectives that are collectively decided. Private and philanthropic investment may be one of these sources, where industry and community are able to attract this funding.

Implementation timeframe and pathways

For both options presented above there would be some lead time required for the NSW Government to allocate sufficient funds for staff and on-ground actions to support the structure as put forward. It may take approximately twelve months once a decision has been made to select this option for it to begin implementing its responsibilities to allow for resourcing strategies to be decided and implemented and effective initial planning to occur.

10.9 Critical success factors

The stakeholder workshops for the governance review process generated quite a long list of critical success factors for Richmond River governance framework. These are summarised below.

What the responsible entity does

- Catchment-based vision statement
- Harmonisation of existing and future goals / strategies / policies
- Improved coordination at grassroots level to demonstrate organisation and attract investment

How the responsible entity is organised

- Community-led/engaged – Trust and endorsement by local people (i.e. people-based) – and believe in the ability to achieve (also Community-led, collective thinking)
- Supported / enabled by local government and state government
- Flexibility and lightness – not heavyweight – relatively independent from government - minimal bureaucracy, and innovative
- Multiple scales of ownership – community scale-grassroots, whole of catchment

How the responsible entity should behave (and the values it expresses)

- Trust and communication between all stakeholders
- Broad community buy-in – avoid the shame-blame game
- facilitates stronger links between groups / stakeholders
- Inclusive – indigenous people specifically – working for a common good

How the responsible entity could be funded

- Catchment-based environmental levy (well governed) rather than LGA-based = secure funding
- Ability to attract funding critical – this will relate to structural issues and would, wherever possible, leverage existing strategies and programs.

10.10 Conclusions from the options investigations

Regardless of the initial form of the combined governance and funding framework, it will inevitably need to evolve and adapt over time as growth occurs and circumstances change. Administrative and political circumstances change, lessons are learnt, and the environment itself changes with pressures from locally felt globalised climate change and local developments.

Expert opinion of the experience of successful NRM governance/funding frameworks around Australia, and in many overseas jurisdictions, is that it is important to start with a framework that is “adequate” (and explicitly not perfect or ideal), and to then let it evolve with experience and in response to the changing external environment. Long-term success is more likely to be achieved by starting with small projects that develop and demonstrate expertise and accountability, and in doing so build new and strengthen existing trust-based connections, eventually leading to strongly networked participants.

This emphasises aiming for arrangements that are:

- Simple
- Adequate (not perfect)
- Workable (fit-for-now given resources and circumstances at hand)
- Fit-for-purpose
- Adaptable
- Focussed on taking the “low-hanging fruit” initiatives – these smaller scale, smaller risk projects successes help build strength of trust in existing connections and to support the creation of new connections. These successes are prerequisite to working together on large and more complex projects. However, these large projects will come about over time as all parties work together with a ‘no surprises’ approach and interest in mutual cooperation.

It is also important to understand that any governance structure is supported and driven by people. So regardless of the structure of the governance framework pursued in the Richmond River catchment, it is the willingness of stakeholders across the NRM spectrum to come together, collaborate and focus on the agreed priorities. If individuals and/or their representative organisations adopt behaviours that work in other manners, then the long-term viability of the arrangements will be weakened and undermined.

As outlined in previous sections, there are many governance models and frameworks that have been developed both in the NRM space and elsewhere. To make sure the framework implemented for Richmond River catchment is robust, the elements of governance widely used in other arenas can provide good guidance on key issues that need attention, resourcing and effort over the life of the framework as agreed priorities for action are pursued.

11 Assessing possible governance frameworks

11.1 Approach

The previous Section (10) explored through a qualitative narrative the key advantages and potential barriers/risks to each of the governance models proposed. The overall assessment of each option includes consideration of these narratives, as well as a semi-quantitative multi-criteria analysis based on the criteria and indicators developed with stakeholder input (as per Section 8.4). This section documents the outcomes of the multi-criteria analysis.

11.2 Multi-criteria analysis

MCA process

The six options (governance frameworks) identified in Section 10 have been assessed using a Multi-Criteria Analysis (MCA) framework adapted from the IUCN's Natural Resource Governance Framework. The MCA highlights the strengths and weaknesses of the possible frameworks in regard to the attributes considered most important by stakeholders.

It is acknowledged that applying values against each criterion is inherently subjective for any one user, context and subject, and so another user may develop a different assessment. However, a strength of this assessment is that they make explicit the attitudes and assessments of the user, and the assessment is both transparent and repeatable.

Principles, criteria, indicators and weightings

Within the MCA framework, relevant criteria were developed utilising the IUCN framework. These criteria were developed using the broad Richmond River values as identified by stakeholders during the first workshop. The same stakeholder group was then asked to weight these values (called 'criteria' in the MCA) based on their opinion, with 15 responses collected and used for the weighting. Under each criterion, a number of specific indicators were then established. These criteria, their preliminary weightings and their indicators are shown in Table 12.

Table 12. Criteria (including % weighting) and indicators

Inclusive decision-making - provides a voice for all stakeholders, including Indigenous people, industry, community, and future generations (15%)
<ul style="list-style-type: none"> Ability to create and maintain appropriate participatory processes Extent to which Traditional Owner and other indigenous stakeholders can be meaningfully engaged Extent to which Traditional Owners are empowered to manage land and sea resources Capacity to communicate effectively with a range of stakeholders
Empowerment and collaboration - promotes and facilitates shared decision-making, and values devolution of implementation to local council and community groups (15%)
<ul style="list-style-type: none"> Perceived ability to take a balanced view Demonstrated ability to develop and maintain strong, productive relationships with a range of stakeholders Demonstrated track record in working with local organisations to deliver on-ground outcomes (Government & non-government)
Knowledge based - decision-making underpinned by physical and social sciences, traditional knowledge, and local expertise (15%)
<ul style="list-style-type: none"> Ability and capacity to underpin decision-making with whole-of-system understanding Ability to develop and maintain relationships to address knowledge gaps Ability to integrate Indigenous knowledge and understanding Capacity to develop and use a range of decision support tools (e.g. models) Capacity to develop and use effective monitoring and assessment tools and processes to evaluate and improve decision-making
Strategic vision and direction - whole-of-catchment focussed, and co-created by stakeholders and community (15%)
<ul style="list-style-type: none"> Perceived ability to consider needs and values across catchment (i.e. fairness) Capacity to develop shared vision and strategic goals
Adaptive and flexible - builds on previous experience and effort, and responds to a changing environment (10%)
<ul style="list-style-type: none"> Demonstrated use of adaptive management approaches Demonstrated ability to develop and use strong MERI frameworks
Future focussed and action orientated - delivered through an agreed and prioritised investment strategy (15%)
<ul style="list-style-type: none"> Extent to which diverse and sustainable sources of funding can be attracted and maintained Capacity and capability to coordinate and manage small (i.e. <\$100,000) projects Capacity and capability to coordinate and manage large (i.e. >\$100,000) projects Track record in successful delivery of outcomes
Sustainable - provides stability, independence, and respects corporate governance law and relevant government regulation (15%)
<ul style="list-style-type: none"> Ability to ensure transparency and probity Capacity to maintain stable working environment Capacity to remain impartial and independent Ability to facilitate bipartisan political support

Approach to scoring against criteria and indicators

Each governance option (e.g. Collaborative Partnership) was assessed against the criteria and subordinate indicators presented above by the consulting project team (effectively an ex-ante analysis informed by the research, consultation and professional experience working on regional NRM projects in other regions). For each indicator, possible scores ranged from 5 (highest possible) to 1 (lowest possible).

For each governance option, average indicator scores for each criterion were then calculated. Using the average scores ensures that a criterion is not inadvertently weighted too high/low due to the

differences in the number of indicators under each criterion.⁴ The scores derived from the MCA are shown in Table 13 below.

Table 13. Scoring for MCA (option lettering corresponds to Figure 15)

Inclusive decision-making - provides a voice for all stakeholders, including Indigenous people, industry, community, and future						
	Governance model option					
Indicator	A	B	C	D	E	F
Ability to create and maintain appropriate participatory processes	3.0	4.0	3.0	3.0	4.0	3.0
Extent to which Traditional Owner and other indigenous stakeholder can be meaningfully engaged	5.0	4.0	3.0	3.0	4.0	3.0
Extent to which Traditional Owners are empowered to manage land and sea resources	5.0	4.0	3.0	3.0	4.0	3.0
Capacity to communicate effectively with a range of stakeholders	3.0	4.5	3.0	3.0	4.5	3.0
Average	4.0	4.1	3.0	3.0	4.1	3.0
Empowerment and collaboration - promotes and facilitates shared decision-making, and values devolution of implementation to						
	Governance model option					
Indicator	A	B	C	D	E	F
Perceived ability to take a balanced view	3.0	4.5	3.0	3.0	4.5	3.0
Demonstrated ability to develop and maintain strong, productive relationships with a range of stakeholders	3.0	5.0	3.0	3.5	5.0	3.5
Demonstrated track record in working with local organisations to deliver on-ground outcomes (Government & non government)	3.0	4.0	4.0	3.5	4.0	4.0
Average	3.0	4.5	3.3	3.3	4.5	3.5
Knowledge based - decision-making underpinned by physical and social sciences, traditional knowledge, and local expertise						
	Governance model option					
Indicator	A	B	C	D	E	F
Ability and capacity to underpin decision-making with whole-of-system understanding	3.0	4.5	3.0	3.0	4.5	4.0
Ability to develop and maintain relationships to address knowledge gaps	3.0	4.5	3.0	4.0	4.5	4.0
Ability to integrate Indigenous knowledge and understanding	5.0	4.0	3.0	3.0	4.0	4.0
Capacity to develop and use a range of decision support tools (e.g. models)	3.0	4.5	3.0	4.0	4.5	4.0
Capacity to develop and use effective monitoring and assessment tools and processes to evaluate and improve decision-making	3.0	4.5	3.0	4.0	4.5	4.0
Average	3.4	4.4	3.0	3.6	4.4	4.0
Strategic vision and direction - whole-of-catchment focussed, and co-created by stakeholders and community						
	Governance model option					
Indicator	A	B	C	D	E	F
Perceived ability to consider needs and values across catchment (i.e. fairness)	3.0	4.5	3.0	4.0	4.5	4.0
Capacity to develop shared vision and strategic goals	4.0	4.5	3.0	4.0	4.5	4.0
Average score	3.5	4.5	3.0	4.0	4.5	4.0
Adaptive and flexible - builds on previous experience and effort, and responds to a changing environment						
	Governance model option					
Indicator	A	B	C	D	E	F
Demonstrated use of adaptive management approaches	4.0	4.5	4.0	4.0	4.5	4.0
Demonstrated ability to develop and use strong MERI frameworks	3.0	4.5	3.5	4.0	4.5	4.0
Average	3.5	4.5	3.8	4.0	4.5	4.0
Future focussed and action orientated - delivered through an agreed and prioritised investment strategy						
	Governance model option					
Indicator	A	B	C	D	E	F
Extent to which diverse and sustainable sources of funding can be attracted and maintained	2.0	4.5	3.0	4.0	5.0	4.0
Capacity and capability to coordinate and manage small (i.e. <\$100,000) projects	4.0	5.0	5.0	5.0	5.0	5.0
Capacity and capability to coordinate and manage large (i.e. >\$100,000) projects	3.0	4.5	4.0	5.0	5.0	5.0
Track record in successful delivery of outcomes	3.0	4.5	4.0	4.0	4.0	4.0
Average	3.0	4.6	4.0	4.5	4.8	4.5
Sustainable - provides stability, independence, and respects corporate governance law and relevant government regulation						
	Governance model option					
Indicator	A	B	C	D	E	F
Ability to ensure transparency and probity	3.0	4.5	4.5	4.0	4.5	5.0
Capacity to maintain stable working environment	3.0	4.0	4.0	4.0	4.5	4.0
Capacity to remain impartial and independent	3.0	4.0	3.0	4.0	4.5	4.0
Ability to facilitate bipartisan political support	3.0	4.5	3.0	4.0	4.0	4.0
Average	3.0	4.3	3.6	4.0	4.4	4.3

⁴ Individual indicators could also be weighted. However, given the relatively subjective nature of the analysis, this could inter a misleading level of precision for the analysis.

11.3 Conclusion from MCA process

Once each governance option had been assessed against the criteria and subordinate indicators, the weighted scores for each option were then calculated. This enables a relative comparison of the alternative governance options. This is shown in Figure 15 below, where a perfect option would achieve an overall score of 5.

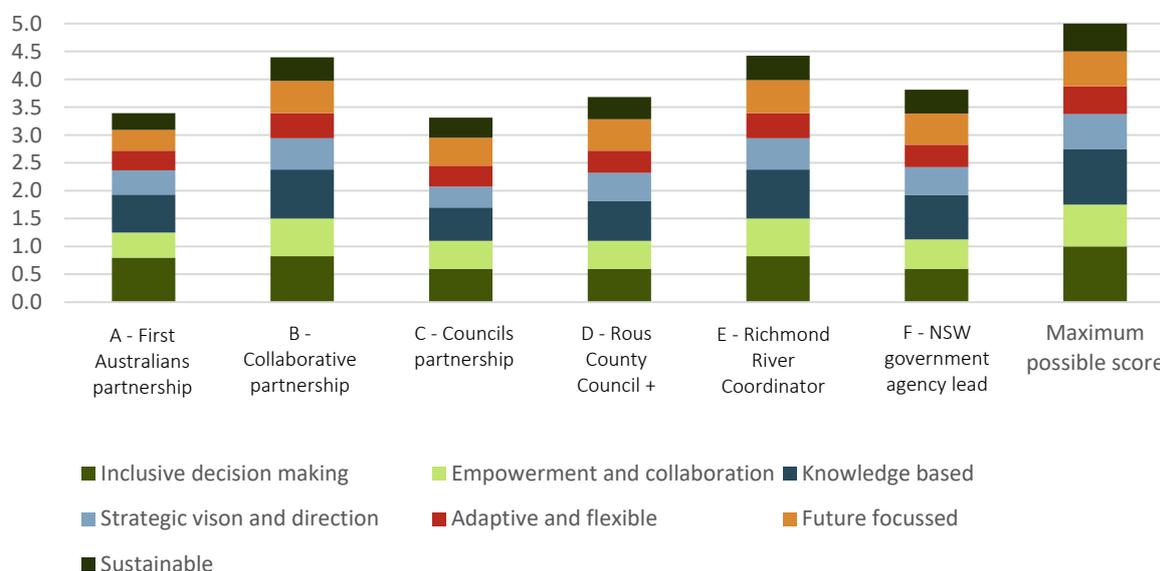


Figure 15. Outcomes of MCA assessment of governance options

The key points to note include:

- No option is perfect or is necessarily universally superior for each criterion. Often the differences between options was seen as relatively negligible. Furthermore, the options are not mutually exclusive and there is a degree of commonality across different elements of many options.
- All options are good, viable options for boosting the effectiveness of future governance arrangements in the Richmond River Catchment. Government and non-government led models have the capacity to deliver strong outcomes for the catchment.
- The non-government led models have potential to provide a platform for more inclusive decision making and empowerment across all stakeholders based on their structural set up (e.g. similar to a Georges Riverkeeper model).
- Two options stand out – Richmond River Coordinator and the Collaborative Partnership Model. As reviewed previously across Sections 9 and 10, both of these options are also considered to be best placed to secure funding (public and private) and provide confidence to investors going forward.
- The option of a Richmond River Coordinator scored particularly well with respect to its ability to meet many of the sustainability and future focussed criteria. In addition, if implemented well, this option should enable robust empowerment and engagement. A relatively centralised option may also prove valuable in the short to medium term as the confidence of investors is established. Major investors will have a major focus on commercially astute governance and cost-effective investment initially (see section 6 of this document).

- The strength of the Collaborative Partnership Model lies particularly in inclusive decision making and empowerment. However, the broader spread of decision making will take time to become an established working model.
- The next highest ranked is the NSW government agency lead model, which has been scored in this case for the LLS led approach however similar results would apply for a MEMA lead. The LLS model also benefits from bringing the past knowledge and experiences of the Catchment Management Authority. As a government led model, the scoring for inclusive decision making and empowerment is lower than the Collaborative Partnership. However this model could be assisted by initial support from a Coordinator type of role to build relationships and processes for this to occur over time.
- The other options all have their merits. However, they fall short against some criteria, often due to a relatively narrow sectoral/stakeholder/geographical scope, or face limitations in the degree to which they could attract investment from private sources.

The success of any given option will also be determinant on the skills, ability and good will of the professionals charged with implementing the preferred option. As such the MCA results should not be viewed as a final ranking, rather as another means to clarifying strengths and weaknesses of different options and overall suitability of each for the Richmond River catchment.

Other issues for consideration

The strengths and weaknesses of the options vary with circumstance. To illustrate using hypothetical projects, if a small budget tree planting project were to be implemented, it would be very likely that a somewhat informal group of mostly volunteers without a corporate structure would be both effective and efficient at implementation when compared to larger organisations with tight project schedules and labour costs. Conversely, if the same type of project were initiated on a very large scale (say over \$100,000) it would be inefficient, more likely ineffective and even inappropriate to even attempt without a governance structure supporting high degrees of transparency, probity and accountability. In this instance a larger organisation would be suited for project execution, in coordination with smaller groups if not in entirety.

Similarly, if an extension program were to be implemented over many years across all multiple economic sectors and users in the catchment, it seems self-evident that the organisation most capable would not be a small grassroots group, rather one with a sufficiently robust capability as a product of organisation, knowledge and resources. However, the grassroots and local community groups bring specific knowledge which, when combined with science to best inform at decisions at larger scales, can help assure the proper fit of an initiative to both specific localised as well as larger regional circumstances. Additional consideration of how each options might deal with a project/event is provided in Appendix F.

Overall and on balance, it is very reasonable to conclude that who does what, when and how is most appropriately guided by who is most able and gives the best value for money in the context of a particular initiative. In this way, all options offer value, and that impacts will be most effective and efficient when the entity or entities are the most fit for purpose. The type and form of the governance option selected, therefore, should be one that supports inclusion, integration, coordination and cooperation of the diverse specific existing groups and is able to ensure that any organisation or group executing a project is the best fit-for-purpose option that can be workably developed with available resources.

11.4 The preferred framework for the Richmond River catchment

This outcomes of this review confirms that a governance and funding framework for the Richmond River catchment must:

- Be inclusive of all types of actors, but not necessarily every individual
- Be adaptive and designed to evolve over time
- Address all scales - grass roots to state agencies
- Comprise continuous dialogue with strong information exchange and iteration
- Be sufficiently flexible to undertake small innovative pilot programs for ongoing iterative learning by doing
- Be locally owned, anchored, rooted among communities with “skin in the game” - enhancing the construction and preservation of trust
- Build on community positivity even when government policies and institutional change.

Following the multiple lines of assessment completed in this study, the preferred model for the future governance of the Richmond River catchment takes the form of a new Collaborative Partnership, similar to those developed in other NRM arenas in Australia and overseas (e.g. case studies in the Appendices, including the Georges Riverkeeper in NSW). This the Collaborative Partnership Model was outlined in Section 10.

In this model it is envisaged that existing entities operating within the Richmond River catchment transition towards collectively implementing an informal, non-statutory partnership to better manage the Richmond River. Although this might initially lack formal structure and statutory power, it can be a legal entity in its own right and have access to the resources and authority of existing partners (government, industry, community-based groups etc) and would be able to attract external funding, of increasing size and complexity over time.

In this model it is not envisaged that any specific state or local government agency would have a controlling or lead role with the entity, but each entity would rather offer collaboration, grants and in-kind support. Over time a membership type arrangement could be developed with/without agreed/structured financial contributions.

Accountability would be primarily to the stakeholders involved (and to any external funding bodies or partners through contracts). The partnership is supported by a non-statutory coordinating role which is funded by an initial injection of investment by partners.

It is envisaged that such a partnership model would further enhance coordination and collaboration across the catchment and enable deeper engagement with local grass-roots organisations and industry associations. It would also provide a mechanism (albeit non-statutory) to manage instances of similar and overlapping mandates and objectives.

11.5 The business case for the recommended model

As with all governance arrangements, they are an accounting cost to an organisation. Because the preferred model involves additional staff and the cost of establishing the new arrangements, it is reasonable to consider if the benefits of the new governance arrangements will exceed the costs.

The benefits of the new arrangements will largely be attributable to the ability to leverage new sources of funding (refer examples in Section 9) and the efficiency improvements of greater planning, coordination, prioritisation and costs effectiveness of catchment management expenditure in the Richmond River catchment.

While data of expenditure from all funding sources is not available, data on successful estuary and floodplain funded projects provided by DPIE indicate an annual budget of around \$1.2 - \$1.5 million, while the expenditure through the Local Land Services Catchment Action Program for the North Coast region (whole region) was in excess of \$3 million in 2016-17. In addition, there will be additional funding from the National Landcare Program, initiatives and investments from local governments, industry bodies, philanthropic organisations and private individuals. It is probably reasonable to assume that total relevant investment in the Richmond is on the range of \$2.5 - \$4.0 million per annum.

The costs of establishing the new arrangements are likely to include:

- Legal and associated registrations – say \$100,000. Once-off cost.
- Strategic planning – including / complementing the CMP (including the identification and prioritisation of projects) – say \$250,000. Once-off cost (potential for partial Estuary Grants program funding).
- Ongoing staffing and associated costs – say \$250,000 per annum (although it could be argued that this cost could be lower due to offsetting savings across Partnership entities).

Well-planned and targeted cost-effective investment in catchment management typically delivers efficiency gains in excess of 10-15% on the money invested. It is instructive to consider the cumulative benefits of the efficiency gains against the cumulative additional costs. Where the benefits exceed the cost over the longer-term, there is a business case for the new governance arrangements. Figure 16 shows analysis of the indicative cumulative costs (solid line) of the new governance arrangements against a range of hypothetical benefits (efficiency gains – dashed lines), specifically:

- Cumulative benefits (\$2.5 M annual spend - 10% efficiency gain)
- Cumulative benefits (\$2.5 M - annual spend – 15% efficiency gain)
- Cumulative benefits (\$4.0 M annual spend - 10% efficiency gain)
- Cumulative benefits (\$4.0 M - annual spend – 15% efficiency gain)

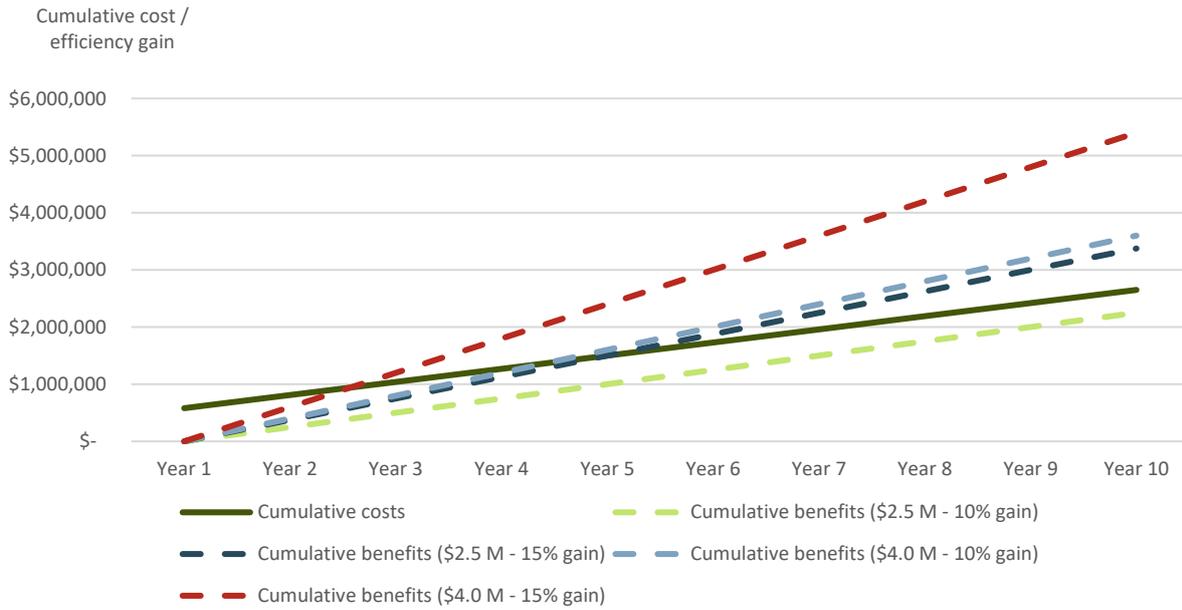


Figure 16. Hypothetical cumulative efficiency benefits vs. cumulative costs

The analysis shows that, if annual expenditure is around \$2.5 million efficiency gains of greater than 10% would be required to justify the new governance arrangements. However, all other scenarios assessed indicate a significant gain from the arrangements.

12 Recommendations

12.1 Recommended pathway

Based on the combined results of the governance review process, including governance theory, the catchment context, case studies, stakeholder workshops, interviews, multi-criteria analysis and expert opinion, two possible transition pathways towards a more effective governance of the Richmond River are proposed:

1. Recommended pathway: State Government appoint a Richmond River Coordinator, hosted by the newly formed Department of Planning Industry and Environment, who works with stakeholders to create an independent Collaborative Partnership
2. Alternative pathway: A Richmond River Coordinator works with a NSW agency lead to improve its capacity in delivering agreed outcomes for the Richmond River. Agency options include the North Coast LLS or MEMA (led by EES).

To ensure successful implementation of the recommended pathway it is recommended that:

- Three carefully planned transition phases are implemented over a 1-3-year period
- A strategic investment is made to help create a positive and constructive enabling environment to underpin changes in governance arrangements
- A co-contribution is sought from all partners and key state agencies to establish an appropriate budget to fund the establishment both the Richmond River Coordinator-type role and the initial steps linked to the establishment of the Collaborative Partnership Model.

The alternative pathway should be implemented if the recommended pathway is deemed not feasible.

12.2 Key features of recommended governance models

Figures 18, 19 and 20 below summarise relevant key features of the governance models considered in the recommendations:

- A Richmond River Coordinator (interim role)
- A Collaborative Partnership
- A NSW Agency Lead.

North Coast LLS has been supportive of a renovated model of catchment governance led by their office, with a business case prepared in October 2019. (see Appendix E).

Richmond River Coordinator

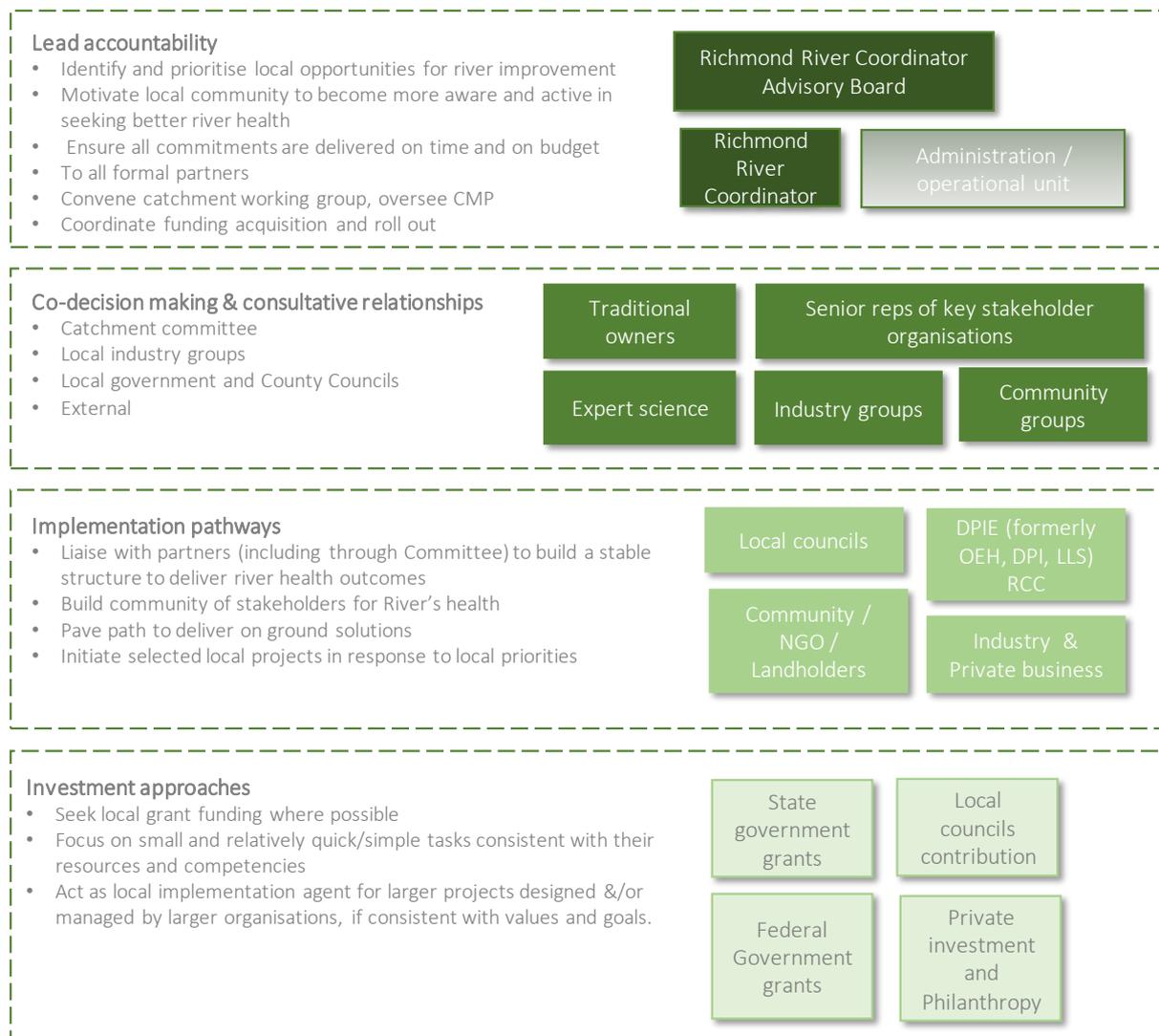


Figure 17. Key features of the Richmond River Coordinator

Richmond River Collaborative Partnership

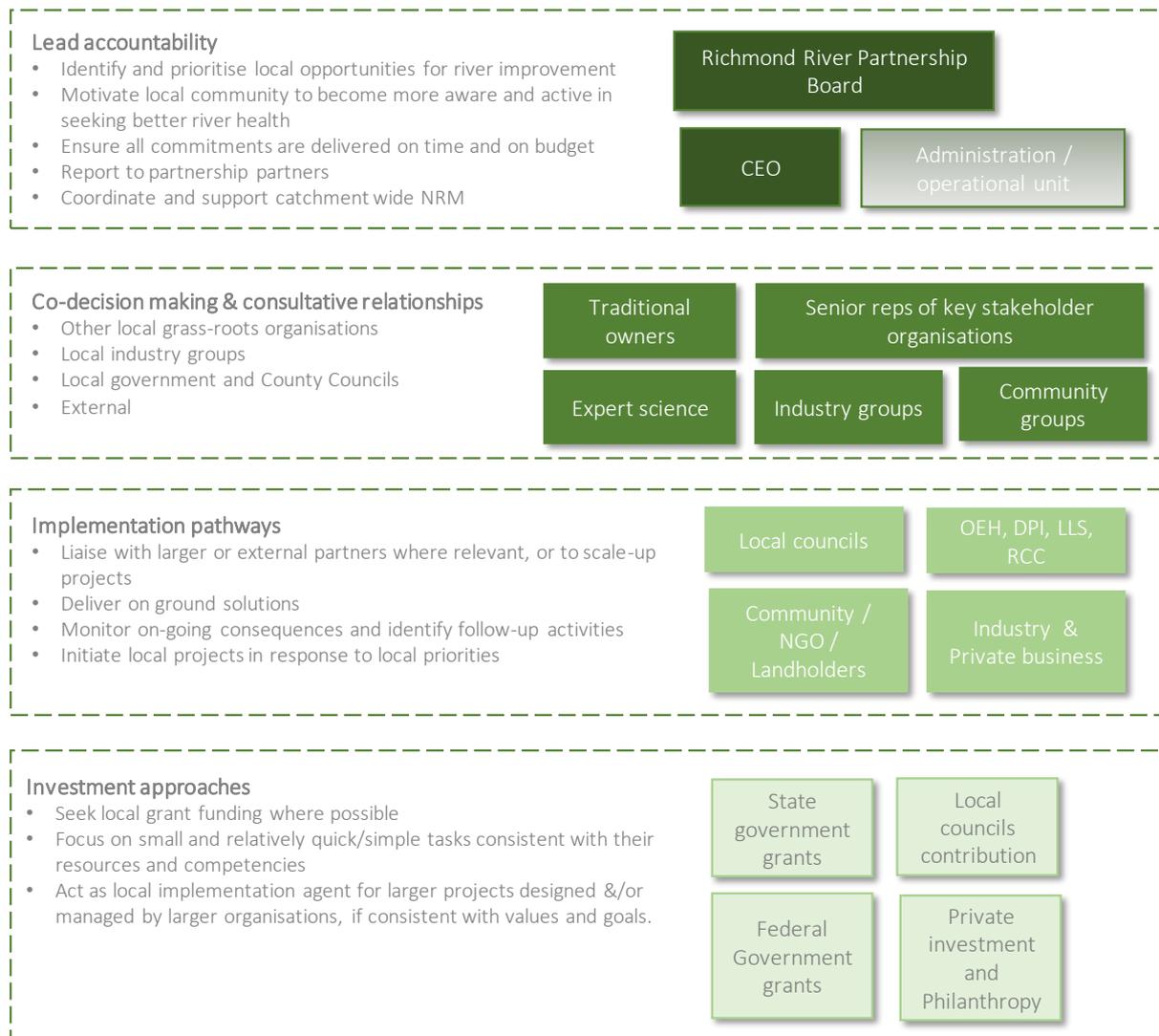


Figure 18. Key features of the Richmond River Collaborative Partnership

NSW Government Agency Lead

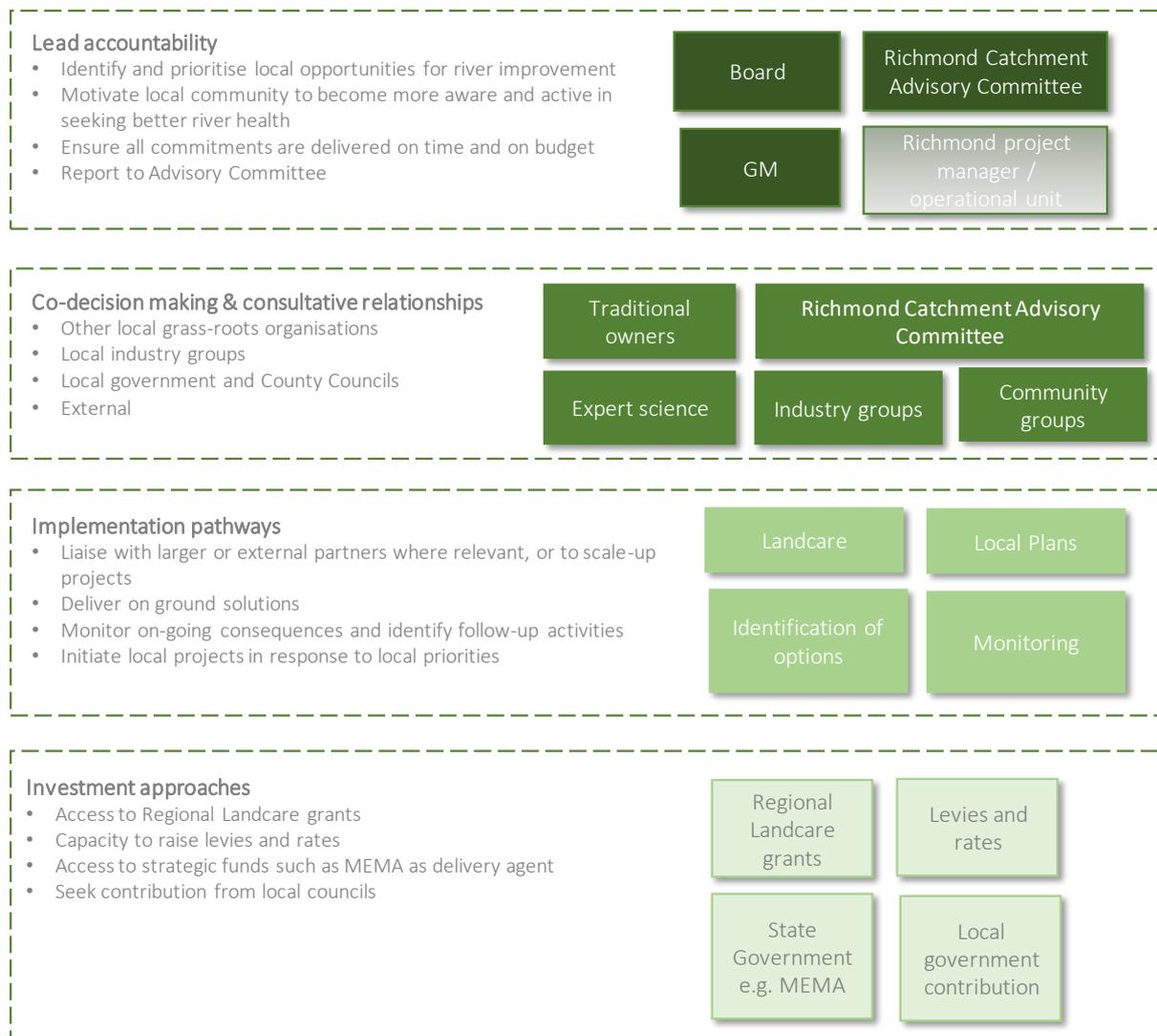


Figure 19. Key features of the NSW government agency lead model (MEMA or LLS)

12.3 Possible transition pathways

Indicative steps for transition pathways towards a Collaborative Partnership or a NSW Agency Led model (LLS example) outlined in Figure 20 and 16. Importantly, each step needs to be supported by the appropriate enabling conditions, as well as the necessary monitoring/evaluation of the previous step in the pathway's performance.

As outlined in previous sections, it is also likely that the chosen option will need to adapt and be refined over time.

Richmond River Collaborative Partnership

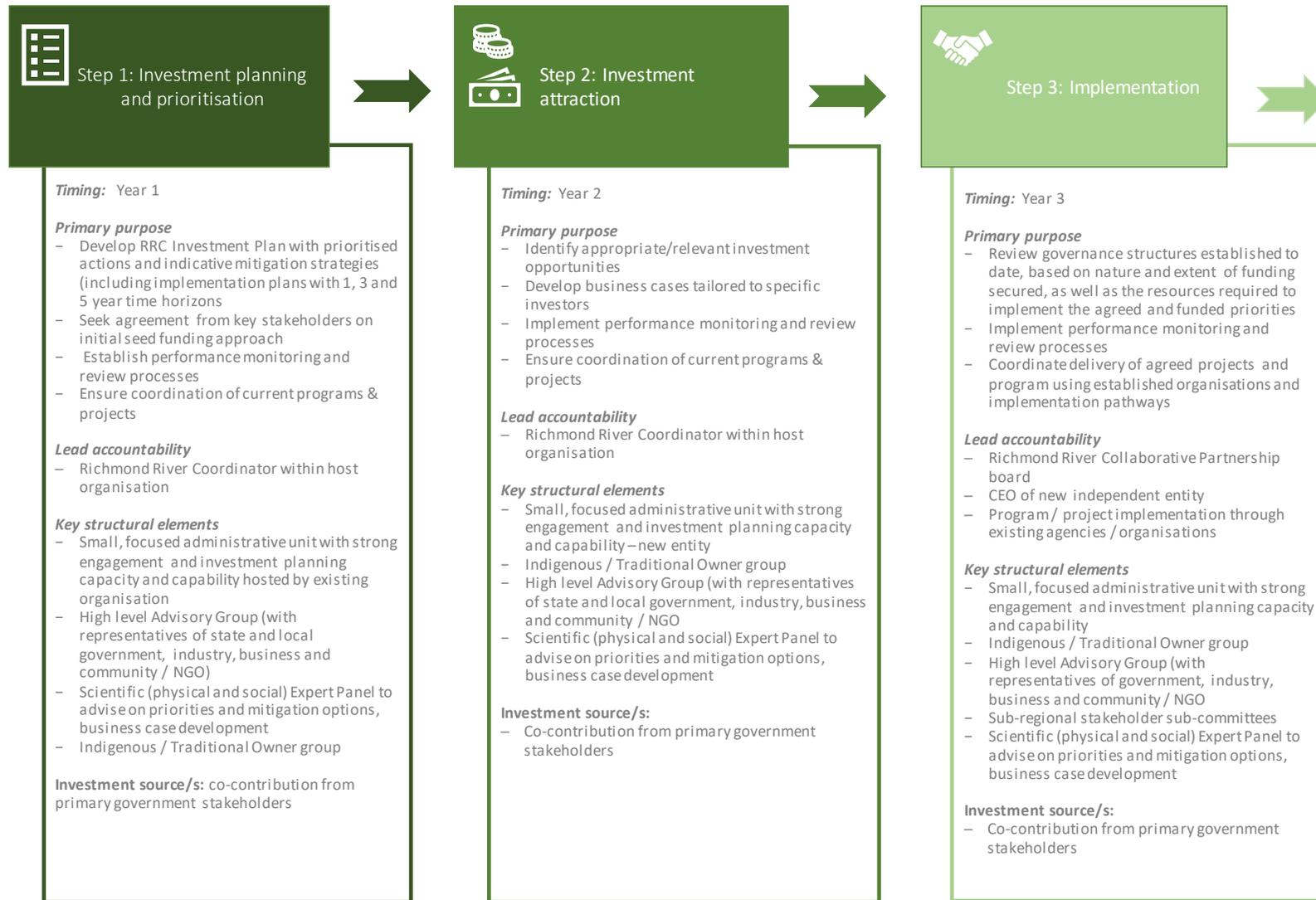


Figure 20. Implementation pathway for proposed the recommended Pathway towards Richmond River Collaborative Partnership

Richmond River NSW Government Agency Lead

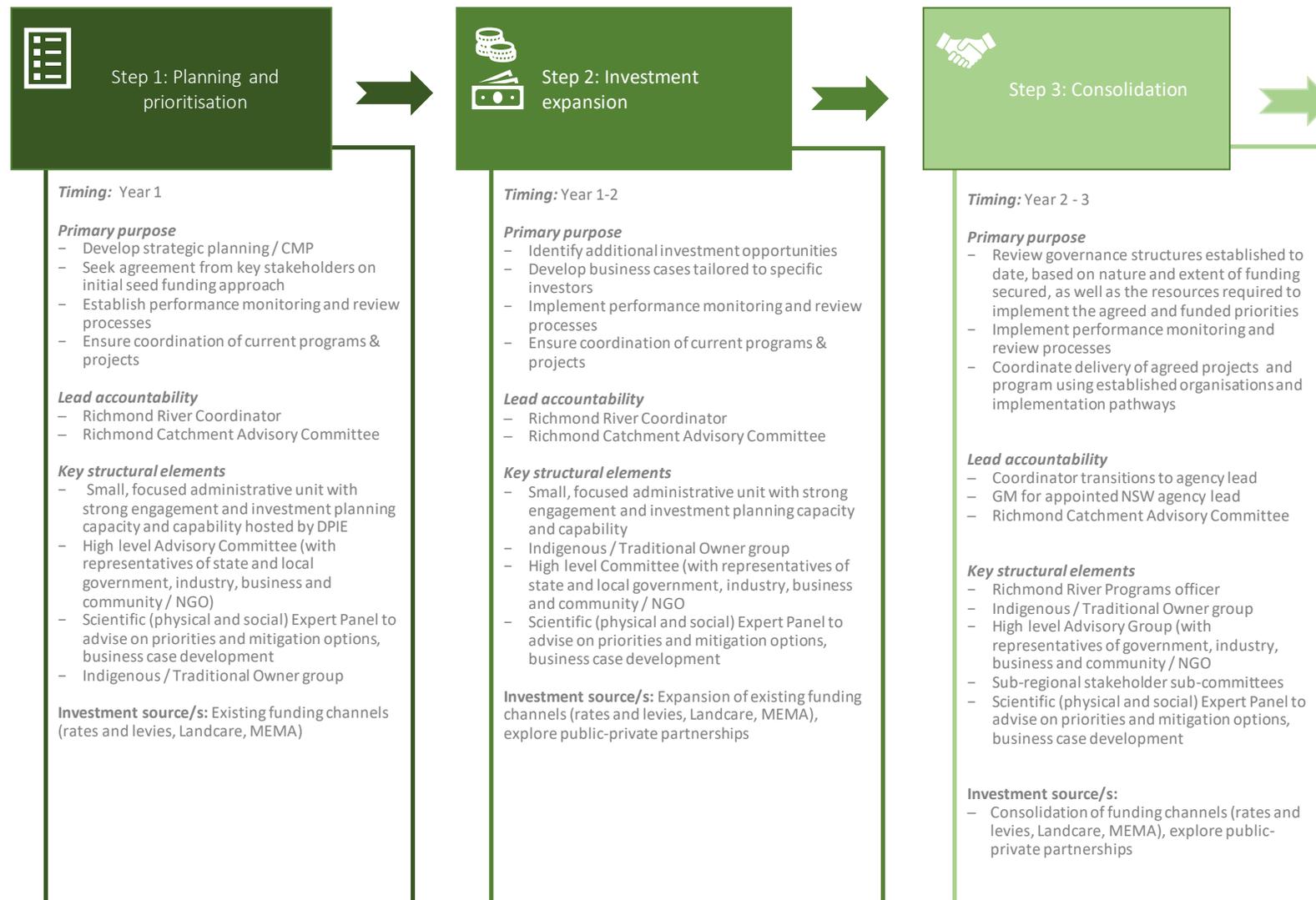


Figure 21. Implementation pathway for proposed the alternative Pathway towards a NSW Agency Led model (LLS/MEMA)

12.4 Creating a positive enabling environment

Performance of the system depends on the people, and their attitudes and behaviours in it, and depends less on the specific form (or structure) of the organisations nor governance and funding framework. Commitment of all involved stakeholder groups to engage is required to address this classic example of a collective action problem. All must engage without exception, or the collective enterprise will be undermined and achieve little if any success. In this collective endeavour, one weak link could break the whole process.

This challenge is analogous to that faced by a volunteer fire brigade—in a crisis, if they all work together, they can succeed and survive; if someone is not yet successful or struggling in their tasks, it is beholden on others to assist for the good of the whole, or else all involved are put at risk. In this case the crisis is the poor and declining health of the Richmond River and the present and future wellbeing of all those whom directly and indirectly depend upon it and each other.

To reiterate, it is critical for all stakeholders involved to be responsible and accountable for doing their honest best to deliver on their responsibilities within their capabilities, and—also critical and fundamental—that wherever any party is unable to deliver, then tis inability is made clear to all stakeholders as quickly as possible. It is the beholden on those more capable or wealthier to support lesser-performing/less-able parties to deliver agreed actions. Only in this fashion can a collective action challenge be managed—and managed rather than resolved, because the need for the collective endeavour will remain so long as the catchment is populated and used.

The goodwill and existing relationships across the stakeholder groups of the Richmond River catchment currently provides a strong platform for a positive enabling environment and the transition to future governance arrangements.

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Appendix A
Governance case studies

Planning and governance challenges:

The fact that the Central Park Conservancy is a collaboration between the government and the private sector did not sit well with the people of New York City during the planning and development stages of the Conservancy. In 1979, the Office of Central Park Administration was created, only to be superseded later by a contract that recognised the Conservancy as the Central Park management organisation. This process highlighted the lack of control that the citizens had on the organisation and management of Central Park, and other NYC parks like it as more privately-run organisations take control of these locations. This simultaneously leaves other parks to fall into disrepair due to lack of government funding and ultimately highlights the citizen's lack of control.



Aerial View of Central Park

<https://www.cbsnews.com/pictures/new-york-central-park/7/>

Drivers for change

Various historical events have caused the management and organisation of Central Park to alter significantly over the years since its original design in 1858. By the early twentieth century, however, the park was in decline due to a lack of a maintenance management strategy, coupled with the fact that visitors weren't educated on how to best care for the park. To help remedy this situation, a Chief Executive was appointed – someone who would have “clear and unambiguous managerial authority” over the park and a Board of Guardians in support. The Chief Executive formed a partnership with the then Park Commissioner to work towards managing and restoring the park. In 1980, the two most prominent private advocacy groups, the Central Park Task Force and the Central Park Community Fund, merged to become the Central Park Conservancy that remains present today.

Under a Conservancy-funded master plan, the gradual restoration of those decrepit landscapes evolved. As the Conservancy showed its ability to protect and maintain its investment, it received many more investments. Between 1987 and 2008, the Conservancy led three successful capital campaigns toward rebuilding Central Park, ensuring the completion of the Park's transformation.

Key lessons:

- *A group of people willing to work hard to achieve a vision can create extraordinary change*
- *Good governance takes time to build and design, the Conservancy started with a simple partnership at a time of crisis and evolved over time*
- *The donations of philanthropists/citizens to assist with funding the Park's ongoing developmental and maintenance needs were essential (i.e. it is crucial to create a program that encourages community support and has proof of success).*

1. CENTRAL PARK CONSERVANCY

Central Park New York City (USA)

Central Park, New York City's largest public park and located in Manhattan, occupies 840 acres and extends approximately 4 km. It was the first park in America to be developed using landscape techniques and has undergone many changes in organisation and management over the course of its existence. The current management body, Central Park Conservancy, is a private, not-for-profit organization, and is tax exempt under Section 501(c)(3) of the Internal Revenue Code—a system has long been a source of discussion and dispute among New York citizens.



Description of current arrangements:

Today, the Conservancy continues to develop to advanced quality and sustainability of urban parks and green space around the world. City officials and park professionals from across America and around the world come to the Central Park Conservancy Institute for Urban Parks to learn of its best practices to restore and manage their local park. Some of the Conservancy's current projects include restorative projects (preserving the vision presented in the Park's original design), sustainable projects (creating spaces such as forest areas and wildlife sanctuaries inside the park) and construction projects to introduce more play equipment and other facilities for the community of New York City.

Strengths:

- The Conservancy continues to receive donations due to its presence in the city's community
- The framework of the government has been able to adapt over time to meet the government's needs

Weaknesses:

- Full community support has not yet been achieved for the Conservancy and thus fundraising/support is not maximised

Planning and governance challenges:

The main challenge that the Auckland Region has faced has been the numerous governance changes that have taken place prior to the establishment of the current arrangement. The Auckland Regional Council was formed in 1989, replacing the Auckland Regional Authority as the governing body. Following the Auckland Regional Council, the Auckland Council Group was established and has been the local governing group for the Auckland Region since 2010.



Auckland City

<https://www.fullers.co.nz/media/1026/auckland-destination-landing.jpg?width=800>

Drivers for change

The formation of the Auckland Council Group brought together all the cities of the region after it was recognised that there was an absence of a strong regional government which was felt to hinder the city's progress. This led to a Royal Commission into the inquiry of restructuring the government. The outcome of the inquiry was to establish the governing body and local boards, which is the structure today.

Key lessons:

- *This model is unique one that can be very empowering and might only work as there is no state layer that exists in NZ*
- *The revived structure has established Integrated Reporting to create transparency in how the Auckland Council is creating value for the region in an integrated way*

2. AUCKLAND COUNCIL GROUP *City of Auckland (New Zealand)*

Auckland Council Group, located on New Zealand's North Island, has undergone many governance changes before reaching its current arrangement – which is unique to New Zealand due to its lack of states (contrary to Australia's own system). The council's roles are many and varied and include regional planning and leadership; regional civil defence; regional land transport; managing the effects of activities on air, soil, coastal and water resources; regional research and investigation; flood control and drainage; animal and plant pest control; environmental education; and regional and local council integration.



Description of current arrangements:

The Auckland Council is set up to provide two decision making bodies; the governing body and local boards. The governing body consists of the mayor and 20 ward councillors. There are an additional 21 local boards. These bodies have been established to meet both regional and local needs. The two bodies are autonomous, making decisions within their area of responsibility.

Strengths:

- It is resource-sharing and consequently efficient
- Responds to the landscape
- Resource approval - separates base land use decisions from other secondary processes

Weaknesses:

Planning and governance challenges:

Across the 5 approaches the following issues were common. The remoteness and subsequent lack of liveability in the Cape York Peninsula Area, combined with the extreme climatic conditions and low market base – made it difficult to successfully attract investors. More specifically, the Natural Heritage Trust Phase II NRM Agreement also failed to gain tri-lateral support from Commonwealth, State Government and local committees and therefore was not ratified. Its leadership was also fragmented because of the lack of an NRM group in the region at the time and was thus never implemented.

The Cape York Regional Plan also found that it was extremely difficult to manage balancing the need for economic development with Cape York's sustainable and cultural values. The region – similarly to other parts of Australia - also has an increasingly varying and risky climate due to global warming, with predictions for a significant increase in cyclones and storms, sea levels and ocean and air temperatures by as early as 2030.

Drivers for change

The drivers for change throughout all five attempts remain predominantly the need for Cape York Peninsula to be successfully managed and its land used correctly and efficiently in a way that can both boost the economy and maintain the biodiversity and values of the area. Other specific drivers include:

- The desire to improve and grow the region's economic development and diversity
- Reducing potential land use conflict and improve land use certainty for landholders and investors
- Attracting and securing resource sector development and investment and facilitate tourism
- Identifying regional infrastructure outcomes that will support economic and community growth and avoid the
- introduction of additional, unnecessary regulation



Figure 1: Cape York Peninsula Map

Strengths:

- Drive and desire for change to eventually occur

Weaknesses:

- Inequity – land use arrangements do not generally incorporate the community and resident's needs/views equally compared to the NRM planning groups;
- Accountability of externally-driven organisations (e.g. governments) is generally fairly low and thus their ability to manage disputes that arise is low;
- Effectiveness – despite common interests and objectives, fragmentation is present between the key regional institutions
- Efficiency – the governance arrangements for land use and NRM planning are not efficient due to the low availability of social, economic, cultural and biophysical information, in combination with fragmented institutions and limited financial resources to support planning in the relatively large region perpetuate the inefficiency of existing arrangements.
- Adaptability – while the corporate governance arrangements of individual institutions involved in NRM in Cape York Peninsula are moderately adaptive, the broader governance arrangements for NRM planning across the region are not. Low levels of connectivity among institutions at the regional scale in combination with low levels of alignment between the priorities of national funding bodies and regional institutions limit the adaptiveness of planning arrangements.
- Sustainability – governance arrangements for NRM planning in Cape York Peninsula are yet to develop to the point of being sustainable, largely due to a combination of shifting political mandates, inadequate funding, short-term funding cycles, and a degree of territoriality and competition amongst regional institutions

3. VARIOUS NRM AGENCIES Cape York Peninsula

This case study reflects an assessment of 5 attempts at both land use and NRM planning on Cape York in the last 20 years by researchers (Dale; Potts; Sipe; Vella, n.d.). Cape York Peninsula is at the Northern-most point of Queensland, Australia. With a population of 15,000 people and covering twice the size of Tasmania, Cape York Peninsula is rich in natural resources, including rainforests, mineral reserves, rivers (ecological significance) and Indigenous culture. The 5 attempts at land use and NRM planning over the last two decades have all been met with challenges, including the remoteness of the land, the sparsely populated nature of the communities and the complexities associated with the engagement of multiple Indigenous groups. Planning also remains heavily contested by Cape York's main stakeholder groups – these include miners, conservation groups, indigenous groups and developers – which essentially makes reaching any agreement on future land use highly challenging.

The 5 land use attempts investigated in the study were:

1. Cape York Economic Development Strategy (1989)
2. Cape York Peninsula Land Use Strategy—Stage 1 (early 1990s), Stage 2 (late 1990s) and Cape York Agreement (1996)
3. Natural Heritage Trust Phase II NRM Plan (2005)
4. 'Next Generation' NRM Plan for Cape York (2014)
5. Cape York Regional Plan (2014)

Description of current arrangements:

Cape York remains filled with projects and programs attempting to boost the region's tourism, infrastructure, and economic growth. The current plans for the region mainly encompass protecting the residents and multiple industries against climate change whilst also using these developments as a platform to increase the region's appeal. An Australian Government Report for Climate Change in the Cape York Region stated that its plan for the region includes protecting smaller tourist business operators, improving the area's infrastructure (taking into account climate impacts and extreme events such as flooding and tropical cyclones), and identify cultural sites at risk and mitigate impacts. This can be done by reviewing existing cultural practices and increase cultural activities and ceremonies to transfer vitally important knowledge.

Key lessons:

- *Progress in an area as remote and undeveloped as Cape York requires a cohesive and unfragmented governance system*
- *Accountability is required, otherwise other aspects of the projects – efficacy, equity - are undermined*
- *Organised and continuous funding cycles are necessary*
- *Overall, the region requires greater investment and attention*

Planning and governance challenges:

One of the challenges that the SEQ Healthy Waterways Partnership has faced is the integration of separate entities into one larger organisational partnership. In 2016, Healthy Waterways and SEQ Catchments merged to form Healthy Land and Water. This presented the challenge of not only an increased area to manage but also potentially opposing management objectives.

Drivers for change

As mentioned above, the SEQ Region has undergone significant and noticeable changes over the years, especially since the mid-1990s. One of the main drivers for change is the region's fast-growing population and thus the need to accommodate the needs of more residents across the area. The desire to maintain both the quantity and quality of the region's water supply remains a key driver, and linked to this is the need to maintain the viability of SEQ's main industries – tourism, fishing and agriculture – to ensure the large annual profit they provide was not lost. The growing population also led to growing expectations from the community regarding the health of the region's ecosystems, and at the time of the mid-1990s, 18 government agencies existed but in the absence of organised or consistent leadership.

Due to this, the region has seen significant governance changes over time as the SEQ Healthy Waterways Partnership has grown and developed. A brief summary of this development and the resultant changes is outlined below:

- The 'Scoping' phase: governance included 6 local councils and State and Federal Governments
- 'Bay and Estuaries' phase: 6 local councils and State and Federal Governments
- 'Rivers and Catchments' focus: 19 local councils and State and Federal Governments
- Waterways management – 'Land to Sea': 19 local councils, State and Federal Governments and NRM Initiatives
- 'Healthy Catchments and Waterways': 19 local councils, State and Federal Governments, NRM initiatives and Water Initiatives
- Water Cycles Management: 10 local councils, State and Federal Governments, NRM initiatives and Water Initiatives

Key lessons:

Regarding Science and Reporting:

- *The Partnership was able to draw in stakeholders early on by using credible scientific modelling and research*
- *Catchment water quality models are used strategically for policy and planning, and also operationally for the design of major infrastructure*
- *The monitoring of water quality – a vital part of scientific research – has been made a priority*

Regarding Stakeholder Engagement:

- *Individual relations and personal connections are considered crucial*
- *Great importance is attached to communicating information to stakeholders, and involving the wider community*
- *The Partnership sponsors annual Healthy Waterways Awards to showcase successes*

Regarding Common Vision and Approach:

- *The Partnership consistently upholds a commitment to work in a coordinated structure in which all partners are valued and contribute to decision-making processes*
- *The Partnership's formulation of management strategies is always based on sound science, continuous monitoring of the waterways and adaptive learning*

4. SEQ HEALTHY WATERWAYS PARTNERSHIP South East Qld (Aust.)

With a rapidly rising population and an area of 22,672 square kilometres over 14 major catchments, South East Queensland (SEQ) is one of the fastest growing regions in Australia. Along with drastic changes to governance over the region throughout the years, it has also experienced significant alterations since European settlement, including:

- Significant modifications to the catchment
 - Land clearing, leading to more water flow, erosion and displacement of sediment and nutrients
 - A decline in terrestrial and aquatic biodiversity.
- The region's main partnership, the SEQ Healthy Waterways Partnership, has changed significantly over the years, after originally changing from the Moreton Bay and Catchments Partnership to the SEQ Healthy Waterways Partnership (SEQHWP) in 2001. The merging of these entities represented a government and community approach to understanding, planning for and managing the use of the waterways and catchments in South East Queensland.



Description of current arrangements:

Currently, The SEQHWP produces outcomes which have led to significant cost savings in the protection of water quality and ecosystems resources. The Partnership currently has 127 freshwater sample sites across the catchments, in addition to 284 marine and estuarine sites. Over time the Partnership has become more regionally based, but still receives annual support from both Federal and State Governments. It also now incorporates both water initiatives and NRM initiatives, leading to more projects across the catchment, including assisting farmers restore degraded waterways (the Healthy Country Program) and work with local councils to ensure development and construction is managed effectively to prevent erosion.

Strengths:

- Constant monitoring of the environment and conditions
- Various projects are being completed to address different aspects of healthy waterways
- Locally based, but continues to receive federal funding

Weaknesses:

-

Planning and governance challenges:

A challenge that North East CMA currently faces is the uncertainty of funding. Funding from the Australian Government has contributed to the operations of the North East CMA, however, as of July 2018, this funding will cease. Therefore, this threatens the operations of the organisation and its ability to continue to protect and enhance land, water and biodiversity resources.



Mitta Mitta River – a North East CMA Project

<https://www.necma.vic.gov.au/About-Us/Our-region/Map>

Drivers for change

- Lack of funds
- Lack of community passion and organised leadership

Description of current arrangements:

Currently the North East CMA is divided into three business units – Land Water and Biodiversity, Leadership and Strategy, and Business Services which work with the program's partners to implement projects. Some of the projects the CMA is currently implementing include flood recovery (in response to the flooding that occurred throughout the North East in Winter/Spring of 2016), flood investigation (reviewing flood mapping), building Indigenous community capacity, rehabilitation of the Mitta Mitta River (addressing erosion issues) and many more across North East Victoria. The program also continues to grow its partnerships and currently has partnerships with landcare groups, education facilities, NGOs, agencies and government.

Key lessons:

- *The North East CMA remains community centric in regard to leadership*
- *It also remains an arms-length from the government*
- *No buy-in from LGA*

5. NORTH EAST CATCHMENT MANAGEMENT AUTHORITY North East Victoria (Aust.)

The North East Catchment Management Authority (North East CMA) is one of ten authorities established by the Victorian Government in July 1997. Each CMA works with the community, government and funding organisations to protect and enhance land, water and biodiversity resources. Specifically, the North East CMA encourages government, community groups and landholders to address resource management issues that affect the North East region. These include adapting to climate change, managing cultural heritage and developing sustainable agricultural practices.



Strengths:

- The North East CMA is multi-jurisdictional
- The board contains 50% agricultural representation

Weaknesses:

- Partnerships exist, but remain difficult due to lack of control over funds
- At risk of being over governed by State and Federal Governments
- Generally costly and inefficient
- No direct powers regarding flooding

Planning and governance challenges:

Since this program is relatively new, it is unknown as to what issues are currently being faced in its early stages. In the past, however, the planning stages of any program have yielded several issues. Not only was the creek historically seen solely as a drain or water conduit - a perception that led to inappropriate development, neglect and degradation – but the overall area suffered from a lack of catchment-wide governance. This means that past projects, whilst making some progress in terms of social and environmental improvements, have led to several issues that persist today.

Drivers for change

The main driver for change in this scenario is the initial quality of the creek and the desire to significantly improve it. Other factors include the future economic and social benefits to the creek and surrounding suburbs. Given the creek's substantial inner-city location, it has the power not only to reap significant social and environmental benefits, but also provide an example of sustainable development and infrastructure whilst maintaining the creek's original characteristics.



Moonee Ponds Creek Map

<http://mooneeponds creek.org.au/the-creek/>

Key lessons:

- *Involvement from a variety of government and industry groups to provide a range of perspectives and contributions*
- *Clear future vision and a single catchment-wide government system to ensure developmental continuity and consistency*
- *Specific groups/projects to target effort and action*

6. MOONEE PONDS COLLABORATION INITIATIVE *Moonee Ponds, Vic (Aust.)*

Moonee Ponds Creek, one of Melbourne's most urbanised and modernised creek systems, runs through the city's northern and innermost suburbs and has a long history of questionable management and treatment. The initiative mentioned in this case study, the Moonee Ponds Collaboration Initiative, joins together 18 collaborators and 10 supporting partners with the overall goal of providing economic and social benefits for the region. The program brings together both relevant stakeholders and the Melbourne community to plan ways to improve the health of the creek and develop ways to create change. Some of the partnerships involved include:

- Melbourne Water
- Moonee Valley City Council
- Moreland City Council
- Hume City Council
- City of Melbourne
- Friends of Moonee Ponds Creek
- Friends of Upper Moonee Ponds Creek

Description of current arrangements:

Currently, the project is working to achieve their goals for the development of the creek and the related benefits. These goals include reframing the public aspect of the creek into a piece of green infrastructure that combines social and ecological benefits for the community and stakeholders. The aim is for the creek to combine seamlessly with the different parklands, recreational areas, public transport hubs, commercial and residential precincts that surround it.

The project aims to both facilitate these changes and provide a single vision for the creek's eventual appearance and is currently organised into three projects:

- Spatial data mapping
- Design guidelines
- Collaboration governance model

Strengths:

- Clear catchment-wide governance system
- Clear future vision for creek's development and integration with infrastructure
- Specific projects to target particular issues/challenges

Weaknesses:

- Network governance often comes down to individuals
- High level principles for the whole creek need to be identified and documented, and used by the group
- Lacks an organisation that is the "journey navigator" – a clearly defined leader and decision maker who owns oversight of the vision as a whole

Planning and governance challenges:

The main planning challenges that the Alliance has faced include gaining the trust and support of the relevant communities along the River Murray Corridor. As stated in a case study performed by the Alliance, gaining the support of members of the community is not always easy, as the benefits can often be slow to emerge. Many of the proposed projects and policies have also raised considerable concern among the Murray communities.



Tri-state Murray NRM Regional Alliance Map

http://au.geoview.info/duck_river_smithton,105907471p

Drivers for change

The main drivers of change for the Alliance are based around maintaining the health and diversity of the catchment and the animals and plants that inhabit it, especially recognised endangered species. This is particularly important throughout the world today, as climate change remains a real and pressing threat to our environment. The Alliance continues to strive for change and action through creating large corridors that are resilient to external pressures like climate change and environmental variability, and supports threatened and endangered species through pest control. Other drivers include competition from other similar organisations and expectations of community members and industry for goals to be met and change to be visible.

Key lessons:

- *The importance of the Murray Catchment is immediately recognisable: it is home to 800,000 people and around 500 national and state recognised threatened species, as well as 10 internationally recognised sites. The importance of these features encourages government, community and industry support*
- *Consistent meetings and connections with members of the Murray Darling Basin Authority focussing on support for existing projects*
- *The Alliance was able to prove its success in taking action and achieving goals, and thus was able to gain the quick support of industry and government*
- *Less formal arrangements have enabled different states with different agendas to be at the table*

7. TRI-STATE MURRAY NRM REGIONAL ALLIANCE *River Murray Corridor (Aust.)*

At 2,508 km long, the Murray River is Australia's longest and is comparable to India's Ganges. It has a catchment area of approximately 1 million square kilometres and has been inhabited by traditional Indigenous groups for over 10,000 years.

The Tri-state Murray NRM Alliance (the Alliance) is a partnership between 6 NRM groups that span the Murray Catchment, that work with communities along the River Murray Corridor to grow the economy, secure the environment and motivate and inspire the community. It was created because the regional NRM bodies were working in isolation from one another which did not always yield the best and most effective outcomes (in terms of the environment, the economy and the community). The Alliance is especially helpful when projects are catchment-wide and require a consistent delivery and management, and has developed and proved its ability to catalyse action, thus gaining community and industry support.

Description of current arrangements:

Currently, the Alliance utilises several more specific projects in and around the region, including an Indigenous Employment program that helps to create business opportunities for Indigenous groups in the Murray River corridor, and initiatives to boost fish numbers and health in the region whilst continuing to support recreational fishermen. Additionally, the Alliance values working with farmers and helping them to work towards producing food/fibre effectively and sustainably. Specifically, the Better Beef Group (Upper Murray) is focussing on perennial pasture establishment, assisting farmers with budgeting and feed quality. Other projects include the Alliance's community involvement, which supports project volunteers by running community workshops in order to build skills in areas such as soil management, river health, grant writing and governance.

Strengths:

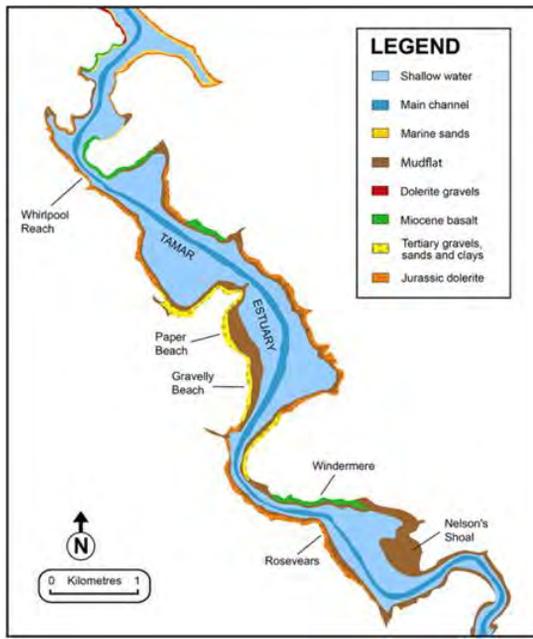
- Community involvement is high, and the Alliance has a large number of volunteers at its disposal for assistance with projects
- The projects take into account various stakeholder perspectives and thus is able to implement solutions to reflect this
- Very collaborative approach across a very complex landscape

Weaknesses:

- The Alliance is highly dependent on individual leaders who can get organisations to the table and keep them there

Planning and governance challenges:

Various issues arose when establishing this program, generally centred around the need to negotiate with existing stakeholders and corresponding management issues. It was initially difficult to establish the program with a range of large and established management stakeholders in the catchment. Siltation, a contentious land management issue, also posed a threat to the program's early stages of development. The program's science-based approach also led to the need for knowledge gaps to be filled, which required significant funds.



Tamar Estuary and Esk Rivers

<https://www.sciencedirect.com/science/article/pii/S0272771414001863>

Drivers for change

A key driver for change throughout the existence of this program has been the various issues that have plagued the area, including harmful blue-green algal blooms and stormwater management. Due to the presence of these issues, focus groups within the two committees were able to collect water quality data over a period and eventually establish new indicator levels specific to the TEER Region.

Key lessons:

- *The program was able to acquire a 3-year funding agreement after completing a WQIP and subsequent funding has followed over time*
- *7-years-worth of water quality data was utilised to establish specific indicator levels for the report card*
- *Strong support from state and local government was received during the program's initiation – as marginal electorate prospects were artificially boosted.*

8. TAMAR ESTUARY & ESK RIVER (TEER) MANAGEMENT GROUP Tasmania (Aust.)

Established in 2008, the Tamar Valley and Esk River (TEER) Management Group is a partnership program that aims to provide a coordinated approach to the management and guidance of the Tamar Valley and Esk River systems in Northern Tasmania. This program is based on the Derwent Estuary Model, but its framework was developed through community consultation and currently operates with two committees; strategy & partnership (SPC) and science & technical (STC). It derives its funding from federal, state and local government and industry partners.



Tamar Estuary

[https://www.nrmnorth.org.au/tamar-estuary-management-taskforce-\(temt\)](https://www.nrmnorth.org.au/tamar-estuary-management-taskforce-(temt))

Description of current arrangements:

Currently, the TEER Program is a partnership that continues to leverage funding from state and federal government for specific projects, an action that stems from their completion of WQIP in 2017 and subsequent obtainment of a 3-year funding agreement from both state and local government. Its two specific committees (SPC and STC) contain members from over 7 councils, and many other water/environment-based organisations. The TEER program works to provide integrated planning, governance and management whilst restoring and enhancing the health of the waterways. It also values community awareness and understanding of the Tamar Estuary and Esk Rivers through various ongoing projects.

Strengths:

- Governance framework has been able to adapt over time to meet program's needs
- Multiple levels of government and industry involvement

Weaknesses:

- Program could be more sustainable and cost-effective

Planning and governance challenges:

Recognised issues and challenges that arose during planning were, and continue to be, linked to the program's long-term governance. There also continues to be challenges over the funding that can be obtained, and how reporting is conducted on the state of the area.

Drivers for change

Drivers for change in this region and program stem mainly from the need for action due to emerging industry impacts – including intensive dairy, aquaculture, forestry and community recreation – all of which pose a direct threat to the river system and its health and biodiversity. Environmental values, in this case, were a key driver for change as the needs of the community and other industries needed to be met whilst preserving and improving the quality of the Duck Catchment as a result.



Duck River and Surrounding Areas

<http://www.paddletsr.org/programs/conservation/updates/2016/08/16/duck-river-opportunities-project-drop.2157874>

Key lessons:

- *The program was driven by emerging impacts and water quality pressures – economic, social and environmental – thus demonstrating an immediate need for action*
- *It was built on efforts and engagement successes of local landcare group, meaning ownership remained local*
- *It was adapted from an existing model/successful components of the TEER program; e.g. straight to WQIP, and contained many of the same stakeholders so the process was familiar*
- *The program implemented a collegiate effort to identify and implement easy wins to begin with, attracting initial investment and energy*

9. DUCK RIVER WATER QUALITY IMPROVEMENT PROGRAM *Tasmania (AUST.)*

Located in North-West Tasmania and discharging into Duck Bay and the Bass Strait, the Duck River has long been plagued with pollution and sediment issues. The catchment's gentle gradient meant it previously contained lowland streams branching through swamp forests. After large modification due to agricultural development, however, much of the riparian vegetation has been cleared and the necessary in-stream habitat no longer exists. The Duck River Water Quality Improvement Plan, derived from the TEER Program in 2017, stemmed from a local landcare group that provided proof of the concept's probable success in terms of collaboration and local ownership. This partnership approach is hosted by the Cradle Coast NRM group, and the program initially derived its funding from government programs.

Description of current arrangements:

The current arrangements in the Duck River are built on scientific modelling, a result of the catchment being extremely well-studied and mapped. The program is now described as a 'Holden' version of the more 'Rolls Royce' approach of the TEER program, meaning the former is more sustainable, adequate and cost-effective. The program includes focused workshops and consultation on important themes – water quality, biodiversity – to test suitable options and how to employ reasonable limits and barriers. The current arrangement remains more industry and community-focussed rather than being driven by the government.



Strengths:

- Community-focus, leading to more local influence rather than government influence
- More cost-effective and sustainable than the system it was based upon

Weaknesses:

- Existing challenges still need to be resolved around long-term governance, reporting and funding

Planning and governance challenges:

Issues that have arisen throughout the program's development – and continue to present challenges – largely centre around the incorporation of new stakeholders. Aquaculture is a prime example of this as heavy metal and mercury contamination are both present in several popular fish and shellfish species throughout the river and estuary. Currently the program is working with its partners to continue to raise public awareness of the possible health implications of consuming seafood in the Derwent Estuary, as well monitoring and managing these levels throughout the estuary.



Derwent River Estuary Map
<https://www.sciencedirect.com/science/article/pii/S0964569113001774>

Drivers for change

A key driver of change throughout the program's development was the originally disparate approach to monitoring (\$500,000 across agencies/industry) and thus the need for a more collegiate approach. After a government grant was used to develop a management plan and funds and support were leveraged, the result was both the local and federal governments coming on board with the program.

Derwent River Estuary (lower estuary)

<https://www.derwentestuary.org.au/about-the-derwent/>



Key lessons:

- The program's science-based approach was key to attracting and engaging initial stakeholders, and led to crucial, strong support from local and federal governments*
- The program had always remained focussed on small, achievable goals and this has enabled it to use its funding to continue to advance the ecological health and economic prosperity Derwent River Estuary*

10. DERWENT ESTUARY PROGRAM Tasmania (Aust.)

Located in Tasmania's south, the Derwent River Estuary is a unique aquatic environment - its partially-enclosed nature allows tidal seawater and fresh water to combine. Due to this unusual characteristic, the estuary, which is home to 41% of Tasmania's population and numerous cultural heritage sites, creates a unique habitat for specific species. The Derwent Estuary Program, which focuses on the health and biodiversity of the estuary, began as a volunteer program in 1999 and has since stemmed into a far larger science-driven initiative that leverages project funds to complete small, specific projects. Their main categories of importance include:

- education (working with the community)
- environment monitoring (monitoring estuary health)
- enhancement and protection of the estuary system
- pollution reduction

Description of current arrangements:

Currently the Derwent Estuary Program takes the form of a joint initiative between local government, the Australian government and industry. It has the common goal of ensuring Tasmania's River Derwent develops into a renowned area, using science for the direct benefit of the community, nature and the economy. It has grown into a not-for-profit entity managed by a five-person board. The program currently works on small, targeted projects such as litter management, heavy metal monitoring, a Beach Watch program and the development of educational resources.

Strengths:

- Governance framework has been able to adapt over time to meet the program's needs
- Unified stakeholders focused on small, manageable projects
- Multiple levels of government and industry involvement

Weaknesses:

Planning and governance challenges:

The present and ongoing challenge for the Georges River catchment is the population. Georges River catchment is the second most populated catchment in NSW. As such, the greatest challenge is urbanisation and the associated stormwater pollution. Over time, water quality has been influenced by a number of anthropogenically-driven factors, including industrial discharge, coal mining and sandmining / dredging. With the catchment covering an extensive area encompassing multiple LGAs, the integration of these Councils through the Georges Riverkeeper, while also uniting with state government agencies, regional organisations and community groups has been integral to overcome the complex management arrangement.



Georges River Catchment map

<https://stormwater2018.files.wordpress.com/2018/10/salt-constraints-and-opportunities-for-management-of-urban-waterways-to-achieve-multiple-benefits.pdf>

Drivers for change

The key driver for change in the catchment is the need to mitigate the potential environmental impacts that are associated with the projected population increase and the existing pressures on the environment. Another driver for change has been the oyster industry. Georges River was once the second-most productive oyster growing area in NSW but has since been reduced to two leases as a result of disease.

Georges River catchment

<https://georgesriver.org.au/sites/default/files/resources/2019-05/Georges%20Riverkeeper%20Annual%20Report%202017-2018.pdf>



Key lessons:

- The organisation's collaboration with industry partners and community stakeholders has enabled it to achieve the goals set out in each of its programs*
- The Georges Riverkeeper Monitoring, Evaluation, Reporting and Improvement (MERI) framework has enabled transparency in their work and allows them to improve their programs*

11. GEORGES RIVERKEEPER New South Wales (Aust.)

Located within the Sydney Metropolitan area, Georges River catchment spans approximately 960 km². Georges River flows for around 100km to its mouth in Botany Bay. The catchment accommodates a population of approximately 1.4 million people, with a projected increase to 1.7 million people by 2031. The catchment has undergone a number of changes since European settlement, including: dredging of the upper estuary reaches, which has changed the river morphology and accelerated bank erosion; habitat loss from deforestation due to urbanisation; polluted waterways from industrial discharge in stormwater runoff; and pest animal and weed infestation.

Five focus areas have been identified through an engagement process and are actioned through the following programs:

- Catchment Actions Program
- River Health Monitoring Program
- Stormwater Program
- Research Program
- Education & Capacity Building Program

Description of current arrangements:

Georges Riverkeeper (Georges River Combined Council's Committee Inc.) formed in 1979 and represents eight member councils within the catchment, including Bayside Council, Campbelltown Council, City of Canterbury Bankstown, Fairfield City Council, Georges River Council, Liverpool City Council, Sutherland Shire Council and Wollondilly Shire Council. Georges Riverkeeper also represents a number of stakeholders, such as government agencies, community groups and regional organisations.

Strengths:

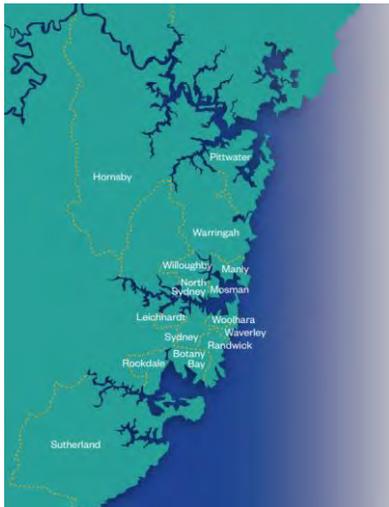
- One of the longest surviving catchment management groups in Australia
- Holistic catchment approach
- Proactive waterway management that is adaptive and integrated across other areas of council
- Involves community representatives

Weaknesses:

- Funding through grant applications

Planning and governance challenges:

A significant challenge for the Sydney Coastal Councils Group is the population that resides within the member council LGAs. The population along the Sydney coastline will continue to increase, placing pressure on already stressed coastal ecosystems and environments. These councils must balance the growing population and the increased development and pollution, as well as the pressure on natural resources. Local government reforms and associated amalgamations have also impacted the organisation's structure and operation.



Sydney Coastal Councils Map

https://www.sydneycoastalcouncils.com.au/wp-content/uploads/2010/11/SCCG_Strategic_Plan_2015-2019_Web.pdf

Drivers for change

The primary driving force behind the establishment of the Sydney Coastal Council Group was to address the discharge of primary treated sewerage off Sydney's shoreline. This sewerage discharge was polluting the beaches and gained significant attention. The founders recognised the need for an integrated approach to coastal management. The group's scope of work now centres around four key activities: collaboration, capacity building, advocacy and research.

Diamond Bay, Sydney

https://www.sydneycoastalcouncils.com.au/wp-content/uploads/2010/11/SCCG_Strategic_Plan_2015-2019_Web.pdf



Key lessons:

- *Government support through funding and partnerships has enabled the group to deliver the objectives of its coastal and estuarine projects*
- *Workshops, training and information portals have enabled knowledge sharing, capacity building and peer-to-peer learning*

12. SYDNEY COASTAL COUNCILS GROUP

New South Wales (Aust.)

Sydney Coastal Councils is a cooperative organisation that aims to sustainably manage the coastal environment in the Sydney metropolitan area. The organisation's efforts cover an area of around 800 km², including 87 beaches or swimming sites as well as the Hawkesbury River, Broken Bay, Pittwater, Port Jackson, Middle and North Harbours, lower Lane Cove River, Botany Bay, lower Georges River and Cooks River, and Port Hacking. The population in this area is approximately 1.3 million people. The group has recognised the need to advance sustainable coastal management as there are pressures such as population growth, increased pressure placed on natural and built coastal assets, and impacts from climate change.

The Sydney Coastal Council's scope of work centres on three guiding principles:

- Restore, protect and enhance the coastal environment, its associated ecosystems, ecological and physical processes and biodiversity
- Facilitate the sustainable use of coastal resources, now and in the future
- Promote adaptive, integrated and participatory management of the coast

Description of current arrangements:

Sydney Coastal Councils Group was established in 1989 and presently incorporates 15 councils across the Sydney metropolitan area, including the councils of City of Botany Bay, Pittwater, City of Sydney, Randwick City, Rockdale City, Hornsby, Sutherland Shire, Leichhardt, Warringah, Manly, Waverley, Mosman, Willoughby City, Woollahra Municipal and North Sydney.

Strengths:

- They are the peak NSW Regional Organisation of Councils for sustainable coastal management
- SCCG draws on technical, experiential and local knowledge from a range of practitioners in coastal management

Weaknesses:

- Limited community involvement

Appendix B
Stakeholder interview summary

This document is a de-identified high-level summary of semi-structured interview discussions held by Dr Neil Byron with key existing local governance stakeholders within and adjacent to the Richmond River catchment.

Purpose of interviews

The purpose of interviewing senior representatives of the key local and state government agencies was to ascertain:

- the specific governance needs of key agencies and organisations from a governance framework for Richmond River catchment
- the specific values that are important to the organisation
- the impediments to supporting and protecting these values
- the intrinsic and extrinsic drivers influencing decisions and strategic directions (including institutional, physical, policy and regulatory, and socio-economic).

Importantly at this stage of the project no options had been developed regarding preferred arrangements (that is, all options were on the table).

Context and key terminology

For the purpose of these stakeholder interviews, we have described ‘governance framework’ as:

A framework that facilitates the alignment of authority and accountability, the relationships, and the formal and informal systems and processes that are established to ensure the values of the Richmond River Catchment are protected and enhanced. A framework will encompass attributes of authority, accountability, stewardship, leadership, coordination, collaboration, direction and control.

Representatives were interviewed from the following local government organisations (shortened name in parentheses): Ballina Shire Council (‘Ballina’), Lismore Shire Council (‘Lismore’), Kyogle Council (‘Kyogle’), Richmond Valley Shire Council (‘Casino’, as the main town in the LGA), Rous County Council (‘Rous’), North Coast Local Land Services (‘LLS’); Joint Organisation (‘JO’).

High level questions

These interviews were based on the following five high-level questions:

Values: *What broad values does the Richmond River catchment hold for your organisation and the people you represent? Which do you think are most important? Which are most at risk?*

Current governance: *How would you describe the current governance / institutional arrangements in place for the Richmond river catchment? What has been working well? What have been the biggest challenges?*

Motivations: *What are the motivations and organisational internal and external drivers for your organisation to continue as part of the process of developing and implementing enhanced governance arrangements?*

Impediments—own organisation: *What do you believe to be some of the internal and external impediments (if any) to your own organisations’ involvement in the process of a) developing a new arrangement and b) implementing them?*

Impediments—other’s organisations: *What do you believe to be some of the a) internal, and b) external impediments to the involvement of other stakeholder organisations in the process?*

Responses to questions 4 and 5 are merged due to the overlap of themes from responses.

Question 1: Values

What broad values does the Richmond River catchment hold for your organisation and the people you represent? Which do you think are most important? Which are most at risk?

Values vary across the catchment, reflecting different organisational, personnel and local community values. 'Production versus environment' attitudes predominate. Scientific evidence only partly corresponds to local's assigned values.

Up and downstream divide. Overall, environmental values tend to strengthen and be prioritised closer to the coast. Those upstream tend to value production, with the environment 'out of sight, out of mind'.

Question 2: Current governance

How would you describe the current governance / institutional arrangements in place for the Richmond river catchment? What has been working well? What have been the biggest challenges?

Fragmented, conflicted, failed. Current arrangements are considered failed. Specifically: ineffective, inefficient, fragmented (spatially, demographically, politically), context-insensitive, uncoordinated, with incentives and unaligned goals.

Wrong tools for a collective action problem. Currently, no-one takes ownership or responsibility for shared problems. Organisations make-do within constraints and an institutional context of poor accountability.

Question 3: Motivations

What are the motivations and organisational internal and external drivers for your organisation to continue as part of the process of developing and implementing enhanced governance arrangements?

Competing localised priorities. Upstream areas tend to prioritise immediate and basic needs (e.g., reticulated services, unemployment). Wealthier downstream areas can afford their perceived environmental priorities.

Catchment-wide mutual goodwill. All in-catchment stakeholders affirmed at least some mutual goodwill, some to a high degree. Goodwill does not appear to be a limiting factor, rather a lack of resources and adequate governance.

Recognition of need for action. Stakeholders recognise a need for action, to a greater or lesser degree. However, they don't yet have a clear view around next steps, let a shared view.

Question 4 and 5: Impediments – own and other's organisations

What do you believe to be some of the internal and external impediments (if any) to your own organisations' involvement in the process of a) developing a new arrangement and b) implementing them?

What do you believe to be some of the a) internal, and b) external impediments to the involvement of other stakeholder organisations in the process?

Responses have been combined due to the overlapping themes in responses.

No barriers / many barriers – differing perceptions of impediments. Issues include funding, poor governance, lack of trust ('we won't until they do'), lack of fair distribution of benefits, and competing basic priorities.

Differing and aligned future values. Present and future losses are seen different up and downstream, in the context of different economic bases and perceived distribution of potential future benefits.

Conflict from beyond the catchment; unaligned goals. Locals aim to progress despite NSW state and federal agencies which are seen as conflicting, out of touch, not locally invested, uncoordinated and conflict ridden.

“Everybody’s problem, but no-one’s responsibility”. The Richmond is a collective action problem where previous fragmented efforts have failed to support. Silos impede success if they don’t cooperate.

“Hunting in a pack” wins more funds/resources. Councils know that singular approaches are less effective than collectively seeking funds and resources.

Limited and insecure funding. Local organisations have a limited revenue base, little capacity to expand on existing rates bases, and little assurance of reliable external funds to support the likely required programs.

Reluctance to invest ‘over the fence’. There is a general reluctance to invest resources outside an organisation’s own footprint/operational boundary until success is more/well assured. Progress needs a “partnership, not a dictatorship”.

Contested assumptions of NRM captaincy. ‘Turf wars’ continue for executive primacy for NRM in the catchment. A new organisation is seen to likely to worsen the situation, and waste money, time and opportunity.

Overly complex administrative processes. Up to now, catchment NRM has been complicated by complex administrative processes and relationships. Success is more likely with simplified / straightforward processes.

Differing perceptions of what motivates. Some organisations think others don’t act out of not caring, and that peer pressure or other ‘stick’-type stimulus could work (and presumably

Lack of (right) incentive(s). Rewards need to be tailored to each stakeholder, proportional, contextually appropriate (social, economic), and seen as adequately fair by all involved parties. ‘What’s in it for me?’ must fit for all.

Respect and sensitivity for contexts support success. The Richmond has a long history of conflict, competing interests, social and economic inequalities, diverse cultural and economic interests, and differing worldviews and values.

Silent voices—cultural. Culturally diverse First Australians have deeply rooted stakes in the catchment and are required for integrated long-term outcomes. However, their inputs are so far missing; trusted intermediaries are needed.

Silent voices—producers. Primary producers have influence and need to be included. include sugar producers and the sugar mill, dairy farmers and NORCO, and blueberry and macadamia farmers and representative bodies.

New Joint Organisation create doubt. The newly constituted JO’s create doubt and may be seen as a threat to roles and resources currently undertaken by LG-level organisations.

Lack of means to demonstrate achievement. Currently, in addition to a lack of a whole-of-picture integrating/coordinating function, is a lack or weak means for organisations to measure, evaluate, acquit and justify their work.

Lack of ‘low-hanging fruit’. Over 20 years many simpler issues have been addressed. The catchment is affected by more difficult issues (e.g., state government complexities, preservation of arable land in face of urbanisation).

Perceived threat to control/status/existence. Discussion of revised catchment governance and any proposals threaten the status quo, and therefore present a threat to organisations and individuals.

Key Messages from Interviews

1. The Richmond River needs a Champion. There must be one responsible entity which has the authority, responsibility, resources and accountability (to both State Government and local communities).
2. But different opinions on whether it should be an *existing* entity (Rous, JO, LLS) Or a *new special-purpose* creation.
3. If an existing one, who? If new (e.g., a Richmond Catchment Coordinator? The Riverkeeper?) who or what? Whatever the entity, actions should be based on sound robust evidence and science (including Indigenous Traditional Owner's knowledge as well as social sciences inputs).
4. The *principle question* is which is the right scale, has the track record of inclusion and delivery, and ability to raise and acquit substantial external funding?
5. Our conclusion is that Rous and North Coast LLS need to find a way of working constructively together rather than pretending the other doesn't exist.
6. Form? Does it *need* Statutory powers (a regulator), or can it be *voluntary/informal* (so relying on incentives), or a *hybrid*? (e.g. a partnership or consortium that is recognized by all arms of State Government as the focal point and the funding node, but which then farms out fieldwork across the region depending on who is best-suited or most capable.
7. Funding? Some might come from State Budgets or from local citizens' rates, but each of these would probably be insufficient, given size of the challenge). There was very strong support for a multi-agency multi-level consortium including State or Commonwealth grants/allocations + local residents' contributions + philanthropy (perhaps?) + earnings (sale of access rights, or Biodiversity credits. We also strongly support this approach.
8. Attributes it should or must have:
 - a. A clear vision/mandate; Committed, with a long-term focus and sustainable funding; strong evidence base; interdisciplinary and integrative (no silos); clear priorities but adaptive as circumstances change; clear accountability and disclosure.
 - b. A modus operandi that is collaborative, inclusive, equitable, respectful, unifying not divisive, flexible, continuously informing stakeholders about progress (good and bad); guiding and facilitating rather than controlling (more incentives and education than regulations, but with ability to enforce as required), celebrate achievements with stories, not just scientific or bureaucratic reports.

Appendix C High level summary of key catchment management-related legislation, policy and implementation environment

Legislation	Related policy and Implementation mechanisms	Lead organisations	Comments (funding, etc.)
Outcome area: coastal zone			
<p><i>Coastal Zone Management Act 2016 (NSW)</i></p>	<p><i>Coastal Zone Management Plan (CZMP) for the Richmond River Estuary Volume 1: CZMP (2011)</i> - The CZMP for the Richmond River Estuary provides a ten (10) year strategic plan for the implementation of key actions to address identified estuary issues. The primary goal is to achieve integrated, balanced, responsible methods to restore and maintain the ecological sustainability of the estuary as well as the recreational and commercial activities associated with it.</p> <p>The CZMP for the Richmond River Estuary outlines thirteen strategies to achieve increased health and resilience of the Richmond River Estuary.</p> <p><i>Coastal Zone Management Plan (CZMP) for the Richmond River Estuary Volume 2: Estuary Management Study (2011)</i> - provides background information on the estuarine processes and their interaction in the Richmond River Estuary and defines values, management objectives, issues to be addressed and potential management options.</p> <p><i>Coastal Zone Management Plan for the Richmond River Estuary: Mid-term Review (2017)</i></p>	<p>The CZMP was developed for the Office of Environment and Heritage in line with the Guidelines for Preparing Coastal Zone Management Plans (NSW Government, 2010). The Draft CZMP was referred to the Minister for certification under section 55g of the now repealed <i>Coastal Protection Act, 1979</i>.</p> <p>Lead implementation organisations vary between the twelve strategies.</p> <ul style="list-style-type: none"> - <i>Strategy 1:</i> BSC, LCC, RVC, RRCC, CZMP Implementation Committee - <i>Strategy 2:</i> BSC, RVC, LCC, RRCC - <i>Strategy 3:</i> CZMP Implementation Committee, BSC, LCC, RVC, RRCC - <i>Strategy 4:</i> RRCC - <i>Strategy 5:</i> DPI - <i>Strategy 6:</i> CZMP Implementation Committee, BSC, LCC, RVC - <i>Strategy 7:</i> BSC, LCC, RVC, NRCMA, FNCW, RRCC - <i>Strategy 8:</i> CZMP Implementation Committee - <i>Strategy 9:</i> CZMP Implementation Committee, BSC - <i>Strategy 10:</i> CZMP Implementation Committee, BSC, LCC, RVC - <i>Strategy 11:</i> BSC, LCC, RVC - <i>Strategy 12:</i> CZMP Implementation Committee, BSC, LCC, RVC - <i>Strategy 13:</i> DPI-Fisheries 	<p>Supports <i>NSW Coastal Policy 1997</i> and the <i>NSW Sea Level Rise Policy Statement 2009</i>.</p> <p>Implementation generally funded through local councils and State Government contributions, grants and in-kind contributions.</p> <p>Coastal and estuary grants are available to local governments as a part of an \$83.6 million funding package for coastal management from 2016-17 to 2020-21. This is supported by the NSW OEH. (NSW Office of Environment and Heritage, 2019).</p>

<p><i>Marine Estate Management Act 2014 (NSW)</i></p>	<p>Marine Estate Management Strategy (MEMS)</p> <p>The MEMS is a response to the 2012 Independent Scientific Audit of Marine Parks in NSW. It pertains to coastal waters defined by Part 10 of the <i>Interpretation Act 1987</i> and environments influenced by oceanic processes including estuaries, lakes and lagoons and coastal wetlands. It utilises a 5-step decision making process to implement evidence-based priorities that balance environmental, social, cultural and economic values in a 10-year strategy. Richmond Catchment is classified as the Northern Region under the MEMS.</p>	<p>Marine Estate Management Authority (MEMA)</p> <p>The MEMA set strategic framework and priorities and oversee implementation. They are an independent chair comprised of six primary bodies (See Figure 2).</p> <p>* delegated to Director General, Department of Primary Industries</p>	<p>\$45.7 million (first stage only) funded by NSW Government following a state-wide threat and risk assessment.</p>
<p>Outcome area: water quality, water resource management and flood plain management</p>			
<p><i>Local Land Services Act 2013</i> <i>Environmental Planning and Assessment Act 1979</i></p>	<p>Local Land Services (LLS) North Coast Local Strategic Plan 2016-2021</p> <p>The localised Plan was constructed under the State Strategic Plan which aims to link the NSW LLS plan with local and federal government NRM frameworks. The North Coast Local Strategic Plan outlines four goals and lists riverine habitat and water quality as regional priorities.</p>	<p><i>North Coast Local Land Services</i></p> <p>Established under the <i>Local land Services Act</i>.</p>	<p>\$175 million total budget for LLS</p>

N/A	<p>Northern Rivers Catchment Action Plan 2013-2023</p> <p>The Northern Rivers Catchment Action Plan 2013–2023 (CAP2) is an all-of government and all-of community plan to guide the sustainable management of natural resources in the Northern Rivers Region for the next decade. These natural resources include soils, biodiversity, rivers, estuaries, wetlands, and coastal and marine environments.</p>	NRCMA	Overtime involved staff and funding diminished. Plan is now...?
N/A	<p>NSW Water Quality and River Flow Objectives (2006)</p> <p>Water quality objectives align with the Fresh and Estuarine surface waters and Marine Water Quality Objectives outlined in the ANZECC 2000 guidelines. The river flow objectives refer to high-level goals. The objectives are state-wide but tailored specifications have been prepared for each catchment.</p>	Department of Environment, Climate Change and Water NSW	Not sure if on-going, website last updated in 2006 Operates under; <ul style="list-style-type: none"> - ANZECC 2000 Guidelines - National Water Quality Management Strategy
N/A	<p>Richmond Ecohealth Report 2015</p> <p>This report was produced as a supplement to state-wide assessment of the ecological condition of rivers and estuaries under the NSW Natural Resources Monitoring and Evaluation and Reporting (MER) Strategy. The Richmond Catchment received an overall grade of D-.</p>	State agencies (NC LLS, OEH, DPI), Local Councils and University of New England.	This project was funded by the Ballina Shire Council, Kyogle Council, Lismore City Council, Richmond River County Council, Richmond Valley Council and Rous Water with supporting funds from the NSW Office of Environment and Heritage and North Coast Local Lands Services.
N/A	<p>Best Management Practices for Temperate Perennial Pastures in NSW 2006</p> <p>This publication was designed for farmers and land managers to provide Best Management Practice (BMP) guidelines for grazing lands. The document outlines how BMPs can help to improve water quality and reduce soil erosion.</p>	DPI NSW	
N/A	<p>Soil and Water Best Management Practices for NSW Banana Growers 2008</p> <p>This document was produced as a guide for banana growers to encourage on and off-farm</p>	DPI NSW	Created in consultation with NSW banana growers and the Northern Rivers Catchment Management Authority

	benefits from improved banana farm management practices. The guide is specific to plantations on the North coast of NSW. It considers water quality; pesticide use and biodiversity all of which can impact the Richmond Catchment.		
<i>Water Management Act 2000</i>	<p><i>Water Sharing Plan for the Richmond River Area Unregulated, Regulated and Alluvial Water Sources 2010</i></p> <p>The Water Sharing Plan is a 10-year plan which was implemented in 2010. The vision of this Plan is to deliver healthy water sources and water dependent ecosystems and achieve equitable water sharing among users in the Richmond River Area (Department of Environment, Climate Change and Water NSW, 2018).</p>	<i>Department of Environment, Climate Change and Water NSW</i>	Updated in 2018
<i>Outcome area: Water supply, sanitation and urban stormwater management</i>			
<i>tbc</i>	<p>Under the NSW Office of Water's <i>Best Practice Management of Water Supply and Sewerage Guidelines 2007</i>, local water utilities are required to achieve best practice including the determination of service and pricing levels based on long term strategic business planning and full cost recovery principles.</p> <p><i>Future Water Strategy</i> - the Future Water Strategy developed by Rous County Council guides the long-term water planning and provide certainty about water needs and infrastructure development over the coming decades. The Future Water Strategy outlines three key actions to ensure future water security:</p> <ul style="list-style-type: none"> - Key action 1—Maximise water efficiency through demand management and conservation. - Key action 2—Investigate increased use of groundwater as a new water source. 	Rous County Council	

	<p>– Key action 3—Investigate the suitability of water re-use as an additional new water source.</p> <p>The <i>Drought Management Plan</i> - aims to provide a consistent restriction regime for all water supplies across the Rous County Council supply region incorporating Ballina, Byron, Lismore and Richmond Valley Local Government Areas. The primary objective of this Drought Management Plan is to ensure continued water supply during drought conditions in order to meet water user, public health and firefighting needs.</p> <p>The <i>Regional Demand Management Plan</i> (RDMP) describes the water supply demand management initiatives to be implemented in the local government areas (LGAs) of Ballina, Byron, Lismore and Richmond Valley over the next four years (2019 – 2022). Water demand management in this region is undertaken to support and maintain an effective, flexible and adaptable approach to efficient water use and water supply security. The aim of the RDMP is to implement economically, socially and environmentally sound measures to achieve defined outcomes in water efficiency and conservation, alternative water sources and water loss minimisation over the long term.</p>		
Outcome area: Biodiversity (including fisheries management)			
<p><i>National Parks and Wildlife Act 1974</i></p> <p><i>Threatened Species Conservation Act 1995</i></p>	<p><i>Richmond River Nature Reserve Plan of Management 2005</i></p> <p>The Plan of Management pertains to 254 ha of land situated on the southern bank of lower Richmond River at South Ballina (NSW National Parks and Wildlife Service, 2005). The Nature Reserve includes mangroves, wetlands and a habitat for 160 bird species, 22 of which are</p>	<p><i>Department of Environment and Conservation – National Parks and Wildlife Service NSW</i></p>	

<i>NSW Environmental Planning and Assessment Act 1979</i>	protected under international conservation agreements. It aims to provide a management plan that promotes conservation, rehabilitation, cultural awareness, visitor access and support ecological and hydrological regimes.		
<i>National Parks and Wildlife Act 1974</i>	<i>Richmond Range National Park Plan of Management 2005</i> The management plan includes Toonumbar, Richmond Range and Mallanganee National Parks and Hogarth Range Nature Reserve in the north of Richmond Range. The area includes five World heritage Listed Areas that comprise part of the Central Eastern Rainforest Reserves. The area makes up a part of the upper Richmond Catchment.	<i>Department of Environment and Conservation – National Parks and Wildlife Service NSW</i>	
<i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i> <i>NSW Threatened Species Conservation Act 1995</i> <i>Fisheries Management Act 1994</i>	<i>Northern Rivers Regional Biodiversity Management Plan 2010</i> The plan establishes recovery strategies for 298 federally and state recognised threatened species within the Northern Rivers region. It has a proposed duration of ten years.	<i>Department of Environment, Climate Change and Water NSW and The Northern Rivers Catchment Management Authority (NRCMA)</i>	Meets the requirements of NSW recovery planning for threatened species, populations and ecological communities.
<i>Primary Industries Research and Development Act 1989</i>	<i>Fisheries Research and Development Corporation</i> fund projects that promote fisheries management and improvement. Projects specific to the Richmond Catchment include; Funding the RRCC to construct a pipe through a pre-existing levee to enhance fish passage (Richmond River County Council, 2013). Funding the OzFish and their Richmond River Chapter (Fitzpatrick, 2017).	<i>Fisheries Research and Development Corporation</i> A co-funded partnership between the Australian Government and the fishing and aquaculture sectors. The corporation is a national body who plan and invest in fisheries research, development and extension (Fisheries Research and Development Corporation, 2017).	Responsible to the Minister of Agriculture and Water Resources

<p><i>Fisheries Management Act 1994</i></p>	<p><i>Fisheries Management (Estuary General Share Management Plan) Regulation 2006</i></p> <p>This document outlines restrictions governing fishing regulatory controls including catch limits, methods and restricted species (NSW Department of Primary Industries, 2006). Under this document Richmond River is classified as being a part of the Upper North Coast (Region 1).</p>	<p>DPI NSW</p>	<p>Commenced on February 5th, 2007.</p>
<p>Outcome area: Biosecurity</p>			
<p><i>Biosecurity Act 2015</i> <i>Biosecurity Regulation 2017</i></p>	<p>The Act provides for the prevention, elimination, minimisation and management of biosecurity risks, supported by a state-wide regulatory document outlining aquatic and land-based biosecurity zones, mandatory measures, enforcement and authorities.</p> <p>North Coast Regional Strategic Pest Animal Management Plan 2018 – 2023 - This plan outlines how Government, industry and the community can work together and share the responsibility to prevent, eradicate, contain or manage pest animals to achieve a balance in economic, environmental and social outcomes.</p>	<p>A number of organisations have responsibility for biosecurity. Rous County Council works with a wide range of stakeholders to combat the spread of targeted weeds in the Northern Rivers region of NSW. The council is the local control authority responsible for administering the Biosecurity Act 2015 for weeds in the region.</p> <p>The North Coast Local Land Services also works with landholders, industry and the community to uphold biosecurity.</p>	
<p>Outcome area: Land use planning</p>			
<p><i>Environmental Planning and Assessment Act 1979</i></p> <p><i>Local Government Act 1993</i></p>	<p><i>Standard Instrument Local Environmental Plan (LEP) Program 2006</i></p> <p>NSW local governments are required to construct LEPs under the format prescribed by the Department of Planning and Environment NSW. The purpose of the LEP is to guide planning decisions through land-use zones. Land is primarily denoted as community land or operational land. Community land can then be further classified as a; natural area, sportsground, park, area of cultural significance or general community use. Land categorised as a</p>	<p><i>Department of Planning and Environment NSW</i></p>	<p>State environmental planning policies prevail over the LEP.</p>

	natural area is then deemed as; bushland, wetland, escarpment, watercourse, foreshore or a category prescribed by the regulations. These zones are of particular significance to the catchment system. The LEPs outline permitted and prohibited development activities in each zone. It is the local government's responsibility to manage the land use of community land under the <i>Local Government Act 1993</i> .		
	<i>Ballina LEP 2012</i>	<i>Ballina Shire Council</i>	
	<i>Richmond Valley LEP 2012</i>	<i>Richmond Valley Council</i>	
	<i>Lismore LEP 2012</i>	<i>City of Lismore</i>	
	<i>Kyogle LEP 2012</i>	<i>Kyogle Council</i>	
	<i>Byron LEP 2014</i>	<i>Byron Council</i>	

Appendix D Timeline of reports on the condition of Richmond River

In the past 30 years there have been at least 24 reports identifying the poor condition of the Richmond River and setting out plans to improve it. There have been three major fish kills and blackwater events since 2001, events not previously documented in Australia. Reports of fish kills also date back to the late 1800s and early 1900s.

June 1987 - State Pollution Control Commission conducts water quality surveys of major rivers on the North Coast. Richmond Valley water quality was found to be poor.

1992 - The NSW State Rivers and Estuaries Policy is adopted, committing the NSW Government to reporting on the condition of each of the State's major river systems.

1995 - A report on the Local and Regional impacts of acid sulphate soil runoff in the lower Richmond River catchment is prepared for the Department of Land and Water Conservation by scientists at Southern Cross University.

1996 - The Richmond Catchment Management Strategy is released.

1997 - The NSW Government discussion paper, A Stressed Rivers Approach to the Management of Water Use in Unregulated Streams, addresses the problem of stressed rivers and establishes a consistent rationale for the future management of rivers.

1999 - NSW Government sets Water Quality Objectives (WQOs) and the River Flow Objectives (RFOs) for the Richmond River catchment. These are not regulatory.

Aug 1999 - The Stressed Rivers Assessment Report presents data for the Richmond Catchment which indicates high levels of stress from human commercial activities.

2000 - NSW adopts the Australian and New Zealand Environment Conservation Council (ANZECC) guidelines for fresh and marine water quality to "provide government and the community ... with a framework for conserving ambient water quality."

Feb 2001 - Following major flooding in the Richmond catchment, a major fish kill occurs in the Richmond River due to low dissolved oxygen levels. NSW Fisheries closes the Richmond River to all forms of fishing for eight months.

March 2002 - The Australian Catchment, River and Estuary Assessment 2002 finds the Richmond River in "extensively modified condition" and sets out options for improvement.

2002 - The Richmond Regional Vegetation Committee releases a Draft Richmond Regional Vegetation management plan for the Department of Land and Water Conservation.

Feb 2003 - The Upper North Coast Catchment Management Board releases the Catchment blueprint: integrated catchment management plan for the Upper North Coast catchment 2002.

March 2003 - Final report of the independent inquiry into the North Coast rivers identifies a "whole of-government" effort is required for effective river management.

2004 - Ballina Shire Council State of Environment Report identifies "pressures on the Richmond River Catchment from urbanisation, and economic and agricultural activities".

Oct 2005 - NSW Government introduces Marine Water Quality Objectives (MWQOs) for NSW Ocean Waters which directly relate to the coastal marine environment.

2006 – Richmond River Estuary Processes Study (WBM)

2006 - The Northern Rivers Catchment Action Plan launched by Northern Rivers CMA

2008 - The Wilsons River Catchment Management Plan launched by Rous Water.

2010 - The Northern Rivers Regional Biodiversity Management Plan released

2012 - The Coastal Zone Management Plan (CZMP) for the Richmond River Estuary is released as a \$16 million, 10-year plan to address management issues.

2012 - The North Rivers CMA's Regional State of the Environment 2012

2013 - The Northern Rivers Catchment Action Plan 2013- 2023 is launched.

Nov 2013 - The Fisheries Research and Development Corporation Richmond River case study for its Revitalising Australia's Estuaries project finds a need to "greatly repair and extend the available habitat and therefore improve overall fishery productivity". 2014 The Ecohealth Report for the Richmond River grades the waterway's overall health at 'D-', or poor. Grades ranged from an 'F' in the Wilsons River (the lowest rating possible) and upper Richmond estuary to a C in the headwater streams of the catchment.

Nov 2016 - The North Coast State of the Environment Report highlights the poor quality of the Richmond River's health compared to other catchments on the North Coast

March 2017 - Another major fish kills, and black water event occurs.

Aug 2017 - The New South Wales Marine Estate Threat and Risk Assessment Report finds that major impacts on the Richmond catchment are almost certain to have significant impacts on fishing in the Richmond catchment.

2018 - The NSW Government's Marine Estate Management Strategy case study on the Richmond River finds the catchment is "in worse ecological health than most estuaries in NSW."

Appendix E Local Land Services model additional information/proposal from LLS



Local Land Services Proposed Catchment Governance Model

October 2019



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Executive Summary

The proposed North Coast Local Land Services (LLS) Richmond Catchment governance model aims to contribute to improved catchment health and water quality. The model provides for integrated, evidence based decision making and action across four key interrelated areas: policy, strategy, planning and delivery. It will promote collaboration with all key stakeholders, ensure a clear line of sight from strategic direction through to local delivery outcomes and achievements, support rigorous performance monitoring and assessment and be accountable and auditable.

Existing LLS governance mechanisms (for both governance and functional responsibility for natural resource and catchment management) underpin the model, offering a collaborative, coordinated and cost effective approach to catchment management, through:

- Collaborative NRM and catchment management approach
- Establishment of advisory committee and associated key roles

- Investigation and attraction of investment, including levies and contributions through existing Heads of Power, financial services mechanisms, and commercial and philanthropic opportunities.

The North Coast LLS Richmond Catchment governance model has implications for state wide catchment management in New South Wales. It is cost efficient as it proposes utilizing existing mechanisms where possible, is designed to be scalable and therefore easily adapted to any one of the eleven New South Wales LLS regions and their catchments .

The Richmond Catchment governance model is defined by four integrated decision making components.

1. Policy and Executive

North Coast LLS Executive and North Coast LLS Board Chair will utilise existing and expanded mechanisms to access and consult with State agencies, Ministers and other key stakeholders. As an Executive Agency within the Department of Planning, Industry and Environment (DPIE), the LLS Senior Executive Team have clear access to other land management and/or key stakeholder departments and agencies and their respective Ministers, including the Minister for Energy and Environment. In addition, as an Executive Agency LLS has a clear and direct relationship to the Minister for Agriculture and Western New South Wales.

2. Strategy

The Richmond Catchment Advisory Committee

The Committee will be established as a statutory committee of the North Coast LLS Board under the Local Land Services Act. The Committee will consist of key stakeholders (State and Local governments, industry and community) who will work to strategic, investment, planning, monitoring and consultation mechanisms that facilitate and coordinate stakeholders to deliver cost effective and prioritised catchment decision making, programs and projects.

The Committee will be responsible for developing the Richmond Catchment Management Plan, guiding implementation of the Plan, identifying opportunities for stakeholders to value add to each other's programs, securing investment and facilitating stakeholder agreement to resourcing and involvement in Plan delivery.

Committee Chair

The Chair of the Richmond Catchment Advisory Committee will be a meritoriously appointed role, with the requisite skills, knowledge and experience to understand and facilitate outcomes for the Richmond Catchment.

Richmond Catchment Coordinator

A meritoriously appointed Richmond Catchment Coordinator will:

- provide secretariat and executive support to the Committee, facilitating meetings and working closely with Committee members and other stakeholders to ensure that decisions and activities are delivered and reported in an appropriate manner
- identify a planning, monitoring and delivery framework that supports development and delivery of the catchment management plan
- facilitating stakeholder engagement in delivering and reporting against the Plan.

3. Planning and Monitoring

The Committee will establish a Richmond Catchment Working Group responsible for the development, implementation and monitoring of the Catchment Management Plan. The Plan will incorporate identification, resourcing and delivery of actions agreed by the key stakeholders and communities of the Richmond Catchment.

4. Delivery

The aim of the proposed catchment governance model is to have a flexible delivery model where the actions of stakeholders are agreed on and economies of scale are achieved through coordinated and prioritised investment. Existing and potential Richmond River Catchment stakeholders will invest in, plan and deliver water quality and river health projects, guided by the strategic direction of the Richmond Catchment Management Plan, ensuring evidence based, prioritised river health outcomes.

Introduction and background

North Coast Local Land Services (North Coast LLS), on behalf of the Biodiversity and Conservation Division of Energy, Environment and Science (formerly Office of Environment and Heritage), has developed a proposed governance model for the Richmond Catchment.

This governance model has been proposed in response to a recent report (Alluvium 2019) that found ineffective governance and fragmented approaches to decision-making, investment prioritisation, evidence, monitoring and reporting by multiple stakeholders has hindered the achievement and delivery of improved Richmond Catchment health outcomes.

The proposed model addresses these systemic failures and provides an effective and enduring approach that:

- Has decision making power sufficient to engage all existing agencies/interests (i.e. requisite Head of Power/s), across four key interrelated areas: policy, strategy, planning and delivery
- Promotes collaboration and involvement amongst existing agencies, interests and communities
- Is transparent and accountable, with clear responsibilities and decision making mechanisms
- Is evidence based and outcomes focused
- Has regard for risk and compliance
- Is resource efficient (i.e. utilises existing resources)
- Removes/can easily avoid duplication of effort
- Has regard for learning and adaptation to change.

The principle objective for the proposed North Coast LLS governance model is to contribute to and support improved Richmond Catchment health and water quality. A place-based governance model is therefore proposed to achieve this objective, and to address the Catchment's other unique characteristics:

- Multi-jurisdictional: five local government areas overlaid by a County Council providing weed, flood mitigation and bulk water supply services, and numerous state government agencies incorporating multiple tenancy and planning provisions
- Poor reported catchment condition e.g. in 2015 an overall Ecohealth Grade developed for the Richmond Catchment was D- (Ryder et al 2015)
- Multiple values: the catchment supports extremely high biodiversity and cultural values and a diverse range of productive industries such as beef, dairy, macadamia, sugarcane, commercial fishing and tourism
- Multiple pressures: increased population growth and expansion, recreational use and changing climates
- High profile: the catchment community is extremely engaged and vocal in its protection and management.

The North Coast LLS model proposes an approach that:

- Utilises existing legislative and policy arrangements
- Minimises costs in governance and overheads
- Streamlines decision making
- Accesses stakeholders to gain agreement
- Invests resources and effort into a platform that can cope with changes in local conditions
- Utilizes a broad range of experience
- Targets investment and action.

The model also benefits from North Coast LLS's involvement in a range of other land management functions (i.e. biosecurity, public land management, pest and weed management, etc).

Local Land Services (LLS) has a distinct business model and governance framework, one that uniquely positions it to provide a collaborative partnership approach, with clear and concise decision making power, open and transparent consultation and effective planning and delivery mechanisms. Importantly, the framework's reach extends from agencies, to community groups, and through to individual landholders.

State-wide applicability, transferability and cost

Any proposed governance models for the Richmond Catchment will have implications for state wide catchment and waterway management in New South Wales. Recommending a governance model that can be readily replicated across the State must be a key consideration, as must the ongoing cost of developing and maintaining the preferred option.

The proposed new governance model is scaleable, and can therefore be easily adapted to a regional scale with resourcing intensity scaled to match a catchment's needs. For example, whilst the proposed Richmond Catchment governance model is a place based solution due its intricacy, its key components (a Catchment Advisory Committee with associated roles and functions) can be established in any one of the eleven New South Wales LLS regions and their catchments that do not present the complexity and profile of the Richmond Catchment.

Utilising an existing governance mechanisms for catchment management that offers a collaborative, coordinated approach underpinned by a sound legislative basis is the most cost effective option for government, industries and communities. Costs associated include funding for:

- Richmond Catchment Advisory Committee Chair
- Richmond Catchment Coordinator
- Establishment and maintenance of the Richmond Advisory Committee plus

Supporting analysis and evidence

Existing NRM statutory, governance and community engagement arrangements within LLS are not utilised to their full potential. Parallel arrangements are already in existence for other LLS core services (i.e. pests, weeds, etc) and can be expanded to achieve waterway health at a catchment scale.

Local Land Services Legislative framework

Current legislative and regulatory arrangements recognise LLS as having an established Head of Power for collaborative management of natural resource management (NRM). Crucially, this enables LLS to work and make decisions in collaboration with other agencies that have other existing and specific Heads of Power. In short, the requirement for collaborative management of NRM, which includes effective and prioritised catchment actions focused on improving water quality/condition, is stated within the *LLS State Strategic Plan 2016-21*, the *North Coast Local Strategic Plan 2016-21*, and is explicitly stated as an object under the *Local Land Services Act 2013* (The Act) in Part 1, Section 3 and 4.

North Coast LLS Board and associated Advisory Groups and Committees

The Act establishes Local Boards for each of the eleven LLS regions within NSW. Local Boards are tasked with regional strategic and governance functions, which include the power to establish community advisory groups or committees consisting of qualified experts who represent the interests of local stakeholders and communities who can be tasked to deliver specific functions.

These requirements are explicitly stated in Part 3, Division 2 of the Act, with Section 27 detailing the requirement for a Local Board and Section 33 detailing the creation of local advisory groups.

The North Coast LLS Board consists of four ministerially appointed Board members and three elected Board members. Current advisory groups created by the North Coast LLS Board include the Pest Advisory Committee, the Regional Weeds Committee and the Aboriginal Community Advisory Committee. All three Committees are tasked to deliver strategic and collaborative facilitation and coordination of specific core business areas.

The North Coast LLS Board Chair reports to and acts on behalf of the State LLS Chair, who reports directly to the Minister for Agriculture and Western NSW.

North Coast LLS Executive

North Coast LLS Executive, the General Manager, reports directly to the Chief Executive Officer of Local Land Services, is a member of the LLS Senior Executive Team, and has responsibility and accountability for strategic, financial and operational decision making within LLS. LLS is an Executive Agency within the Department of Planning, Industry and Environment, a large integrated cluster that incorporates substantial State Government functions including primary industries, environment, planning, public land management, public works and regional development.

The North Coast LLS Executive utilises existing governance processes to access and consult with relevant agencies, state authorities, key stakeholders groups, Members of Parliament and Ministers.

Levies and rates

It is worth noting that Part 5, Division 2, Section 57 of The Act 2013 confers power to LLS to make and levy rates, levies and contributions on 'rateable and other land in a region....in accordance with the regulations'. Local Land Services currently utilises this power to levy rateable holding greater than 10 hectares, in accordance with the regulations, for the provision of biosecurity services to landholders.

Current North Coast LLS technical and strategic foundations

North Coast LLS has over the last 1-2 years established several key leadership and management arrangements that will provide a rigorous strategic and operational foundation for the proposed Richmond Catchment governance framework:

- LLS has recently established several State wide Advisory Groups (SWAG) to provide strategic advice and recommendations to the LLS Senior Executive Team:
 - The first actions agreed to by the NRM and Sustainable Agriculture SWAGs are the exploration and development of state wide NRM and Sustainable Agriculture strategies and requisite associated funding mechanisms to deliver same. Issues associated with Richmond Catchment health will be integral to the NRM and Sustainable Agriculture strategies
 - The North Coast LLS General Manager co-chairs the NRM SWAG in partnership with the Western LLS General Manager, ensuring coastal and inland catchments are adequately represented (including the Richmond catchment)
- North Coast LLS successfully undertook a competitive tender process through AusTender to become the lead Service Provider for the Australian Government in the North Coast region for 2018-2023
- North Coast LLS, in partnership with OEH, has developed a Multi Criteria Analysis Shell for Spatial Decision Support (MCAS-S) for the Richmond Catchment to identify and prioritise landscape condition and water quality improvement action, through an environmental and primary production based asset and risk based approach at a sub-catchment scale
 - North Coast LLS is currently utilising its Richmond MCAS-S model to prioritise and deliver \$5M Marine Estate Management actions in partnership with DPI.

Proposed Richmond Catchment governance model

The proposed North Coast LLS Richmond Catchment governance model (Figure 1) provides for integrated decision making and action across five key interrelated areas: policy, strategy, investment, planning and delivery. The model will promote collaboration with all key stakeholders, ensure a clear line of sight from strategic direction through to local delivery outcomes and achievements, be supported by rigorous performance monitoring and assessment and be accountable and auditable. Existing, functional North Coast LLS advisory groups such as the aforementioned North Coast Pest Advisory Committee have informed the proposed Richmond catchment governance model.

It is understood that other State agencies and Local Government Authorities have their own policy and executive mechanisms for consultation and access within government and within political structures. The model proposed provides for a whole of government approach to agreed policy and positions for the Richmond Catchment.

Policy and Executive

North Coast LLS Executive and North Coast LLS Board Chair will utilise existing and expanded mechanisms to access and consult with State agencies, Ministers and other key stakeholders. As previously stated, North Coast LLS Executive, the General Manager, reports directly to the Chief Executive Officer of Local Land Services, is a member of the LLS Senior Executive Team, and has responsibility and accountability for strategic, financial and operational decision making within LLS.

As an Executive Agency within the Department of Planning, Industry and Environment (DPIE), the LLS Senior Executive Team have clear access to other land management and/or key stakeholder departments and agencies and their respective Ministers, including the Minister for Energy and Environment. In addition, as an Executive Agency it has a clear and direct relationship to the Minister for Agriculture and Western New South Wales.

Through its existing governance model and Board structure, LLS operates to ensure that regional decisions, whilst adhering to state policy and positions, are strategically determined and delivered to meet local and regional needs. The North Coast LLS Board Chair is a member of the LLS Board and through this mechanism has direct access to the Minister for Agriculture and Western New South Wales.

North Coast LLS will provide the business support to ensure the successful development and ongoing implementation of the model.

Richmond Catchment Advisory Committee

A key component of the LLS governance model is the creation of a Richmond Catchment Advisory Committee and the strategic, investment, planning, monitoring and consultation mechanisms this Committee would work to. The Committee will consist of key decision makers and stakeholders and their key role will be to facilitate and coordinate stakeholders to deliver cost effective and prioritised catchment decision making, programs and projects.

The Committee will be established as a statutory committee of the North Coast LLS Board. The Board will endorse stakeholder nominations for appropriate Committee members who possess the delegation necessary to make timely and effective decisions on behalf of their organisations. The Board will monitor the Committee's progress and achievements and ensure that its strategic intent and action are followed.

Key functions

The Committee's key functions will include:

- Development and agreement of key Terms of Reference
- Development of an overarching catchment management plan
- Provision of strategic oversight and guidance to implement the plan

- Identification of opportunities to value add to each other's programs and secure investment
- Facilitation of key stakeholder commitment and agreement to resourcing, involvement and/or effort

The Richmond Catchment Advisory Committee Chair

The Chair of the Richmond Catchment Advisory Committee will be a meritoriously appointed role, with the requisite skills, knowledge and experience to understand and facilitate outcomes for the Richmond Catchment. The Chair will be expected to demonstrate sound corporate governance, business performance, leadership and people skills, and will guide and facilitate the Committee towards meeting decided outcomes.

Richmond Catchment Coordinator

A Richmond Catchment Coordinator will be meritoriously appointed, utilising the DPIE recruitment facility, led by LLS as the host organisation, utilising appropriate and agreed representatives in the recruitment process i.e. state and local government representatives plus an independent. The Richmond Catchment Coordinator will provide a secretariat and executive function to the Committee, facilitating meetings and working closely with Committee representatives to ensure ensure that decision, actions and activities are delivered and reported in a timely and effective manner.

The Richmond Catchment Coordinator will work with the Advisory Committee to identify a prioritised and risk based planning, monitoring and delivery framework. The Coordinator will work with the Committee to implement the agreed and endorsed framework.

Planning and monitoring

A key priority for the Committee will be the development and implementation of an evidence based Richmond Catchment Management Plan (the Plan); one that incorporates identification, resourcing and expedition of regulatory, policy and aspirational priority actions agreed by key stakeholders and communities of the Richmond Catchment.

The Committee will nominate representatives for and provide oversight to a task-based working group, the Richmond Catchment Working Group, to undertake the development, implementation and monitoring of the Plan. Under the guidance of the Committee, this Working Group will be responsible for spatial prioritisation, assessment of the cost-effectiveness of interventions and establishing a standardised monitoring and reporting framework and portal to collect data to validate the Plan's achievements and investment outcomes. This group is a task specific working group; it will only be called upon to deliver the Committee's workload and is not required to be established or operational outside of those parameters.

Implementation and delivery

Existing Richmond River Catchment stakeholders will continue to deliver water quality and river health projects. The difference to the current business-as-usual approach is the coordination of strategic direction (e.g. agreed catchment plan), investment prioritisation and evaluation, the sharing of knowledge and spatial prioritisation models and a unified, central monitoring and reporting framework.

Delivery of waterway management actions will utilise regional/local expertise and providers where appropriate. This could be delivery by agencies and local government that provide use their own resources or by utilising services from non-government organisations such as Landcare, private enterprise and other local community representatives. The aim is to have a flexible delivery model where actions are agreed on and economies of scale are achieved through large investments or by coordinating investments from different sources to achieve strategic outcomes. This will avoid the situation of piece-meal investment and effort and secure improved river health outcomes.

The Committee will monitor any project delivery and their outcomes against the agreed catchment plan as part of its function. Onground delivery agents and representatives will be expected to provide regular project progress reports, and to identify any lessons learned that can be applied to other catchment projects. The Richmond Catchment Coordinator will be the Committee and the delivery agents common contact, and is responsible for ensuring project planning, delivery and reporting meet the Plan's standards and agreed monitoring and reporting frameworks.

Key stakeholders and their roles and responsibilities

Key stakeholders are proposed to encompass NSW Government agencies, Local Government representatives, and key industry and community interests. Suggested stakeholders are:

- Department of Planning, Industry and Environment (DPIE):
 - Local Land Services
 - Environment Energy and Science
 - Housing and Property (Crown Lands)
 - Department of Primary Industries
- Forestry Corporation
- Roads and Maritime Services
- Local Government representatives
 - Northern River Joint Organisation
 - Rous County Council
- Aboriginal community representatives
- NSW Farmers
- North Coast Regional Landcare Network
- Industry representatives (e.g. grazing, macadamia, cane growers)

Note that this is not an exhaustive list and other relevant stakeholders can be considered.

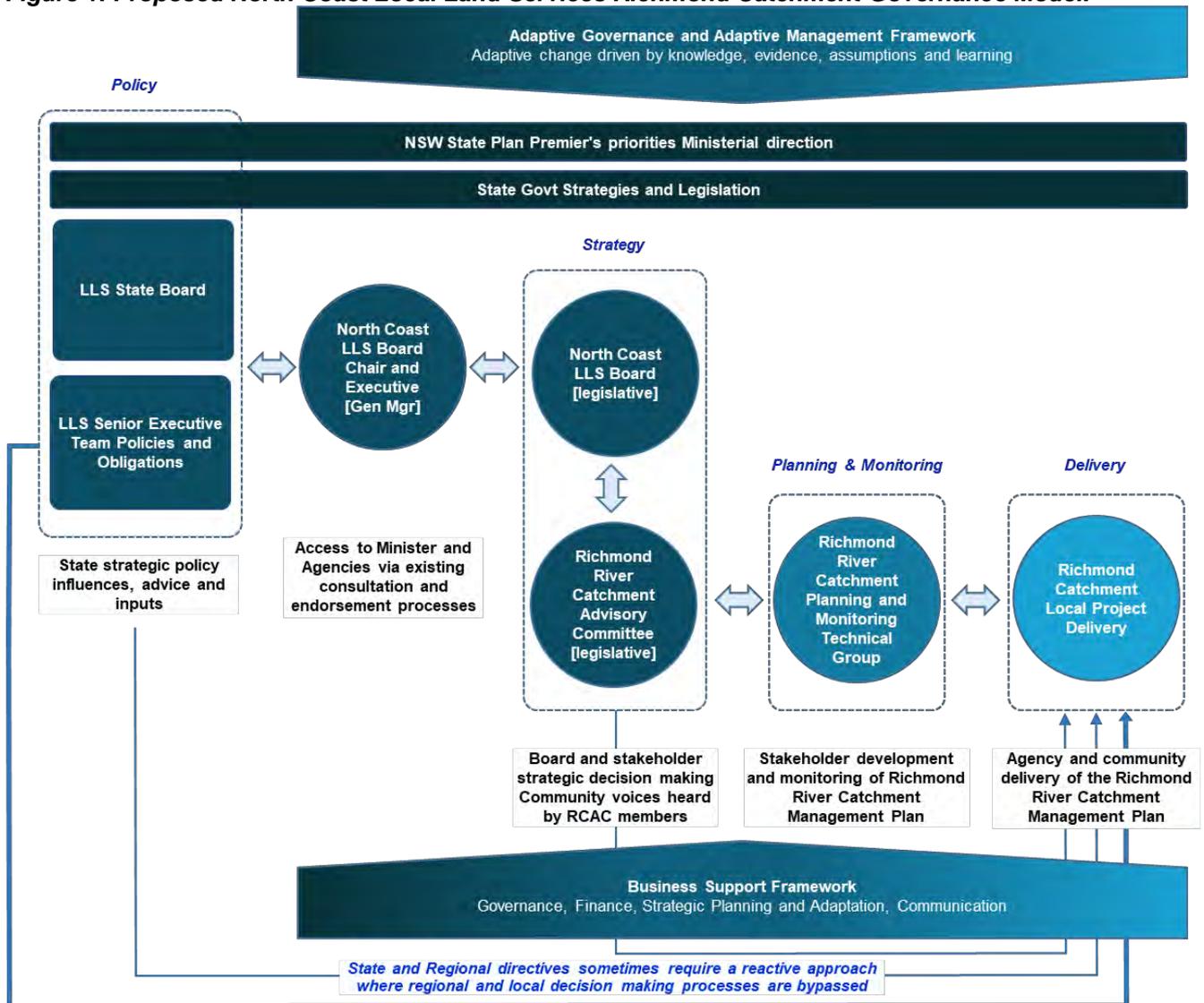
Table 1 summarises potential governance components and key roles and responsibilities across policy, strategy, planning and delivery functions of the Committee. It will be expected that the Committee will recommend and the Local Board endorse an agreed Terms of Reference for the Committee as a first action. The Terms of References should reflect final roles and responsibilities for the Committee.

Community engagement and consultation

The Richmond Catchment Advisory Committee is designed to be a collaborative model, engaging public and private land managers and key stakeholders and community representatives. Opportunities for community consultation, engagement and active participation occur at multiple points:

- Through the elected membership of North Coast Local Land Services Board (landholders within the Richmond Catchment who are democratically elected through an independent process)
- Through the ministerially appointed membership of North Coast Local Land Services Board (landholders within the Richmond Catchment who are appointed to the Board via a Ministerial application process)
- Through their nominated representative/s on the Richmond Catchment Advisory Committee (this can include Local Government representative, industry body representative, Landcare and/or environmental representatives, Aboriginal community representative, etc)
- Through any community engagement and consultation undertaken by the Richmond Catchment Advisory Committee
- At the planning and monitoring level with the Working Group
- In the delivery of onground works through any representative organisation/agency on the Richmond Catchment Advisory Committee.

Figure 1: Proposed North Coast Local Land Services Richmond Catchment Governance Model.



KEY:

- Provides direction to / informs
- ↔
- State policy focus
- Regional strategic focus
- Regional planning & monitoring focus
- Local delivery focus

Table 1: Key stakeholder / influencer roles and responsibilities

Governance component	Key roles and responsibilities of relevant stakeholders/influencers
Policy	Influences, guides state-level goals, directions and policy that will influence catchment and waterways management
Whole of government access	North Coast Local Board Chair, Local Land Services General Manager, and other NSW Gxecutives: <ol style="list-style-type: none"> 1. Utilise existing governance processes to access and consult with relevant Ministers, Secretary, Deputy Secretary, Coordinator-Generals and senior Departmental executives 2. Ensure local approaches meet statutory obligations and align with relevant national, state and regional strategies and programs 3. Identify and act on opportunities for cross-agency collaboration 4. Monitor financial and risk frameworks and organisational performance
Strategic and investment decision making	North Coast Local Board and Local Land Services General Manager: <ol style="list-style-type: none"> 1. Establish Richmond Catchment Advisory Committee (RCAC) 2. Provide Local Board Member to be North Coast Local Board Member on RCAC 3. Understand, note and/or act on RCAC recommendations 4. Ensure community engagement during Richmond Catchment Management Plan (RCMP) development and delivery 5. Advise and monitor RCAC performance, risk and governance
Strategy and investment decision making continued	RCAC: <ol style="list-style-type: none"> 1. Commit to representing their respective organisation, constituents or community, and facilitate the two-way exchange of information and feedback between the Committee and their respective organisations, constituents or community 2. Approve the intent and structure of the Richmond Catchment Management Plan (RCMP), and its performance standards and measures 3. Endorse the RCMP development process, including level of community consultation 4. Share organisational priorities as they relate to the RCMP and identify opportunities to value add to new and existing programs and investment 5. Undertake gap analysis to identify stakeholder roles, responsibilities and resource allocation to cost effectively implement the RCMP 6. Champion the RCMP priorities and actions within their representative organisations local delivery and staff work plans 7. Inform and report to the North Coast LLS Local Board on RCMP development and implementation progress 8. Mitigate key risk factors that may impact on the development and implementation of the RCMP 9. Identify, recommend and secure joint investment proposals that support implementation of the Plan 10. Prepare issues and options papers for submission to State stakeholders via the North Coast LLS Local Board and/or North Coast LLS Executive 11. Promote RCMP achievements and outcomes
Planning	<ol style="list-style-type: none"> 1. Development of the RCMP under direction and advice of RCAC. 2. Collation of evidence and application of spatial and risk based prioritisation model and tools 3. Identify programs and projects that support the priorities of the RCMP. 4. Allocate common key performance indicators to support delivery of the RCMP 5. Consult with communities, through Community Reference Groups or other mechanism, on the development and implementation of the RCMP 6. Develop catchment-wide investment proposals for RCAC consideration that support implementation of the RCMP 7. Reporting to the RCAC on the progress of RCMP implementation 8. Monitoring stakeholder progress on implementation of the RCMP 9. Evaluating evidence that supports and triggers improvement of the RCMP
Delivery	<ol style="list-style-type: none"> 1. Develop new and/or adapt existing local plans for consistency with the RCMP 2. Secure investment and deliver local projects that implement RCMP priority actions 3. Facilitate local community participation in project delivery and reporting 4. Collect data and report project achievements and outcomes into a monitoring framework 5. Promote project and catchment-wide outcomes 6. Apply and participate in adaptive management exercises and activities.

References

Alluvium 2019, Richmond River Governance and Funding Framework – Final Report for OEH.

Ryder, D., Mika, S., Richardson, M., Schmidt, J. and Osborne, M. (2015). Richmond Ecohealth Project 2014: Assessment of River and Estuarine Condition. Draft Technical Report. University of New England, Armidale.

Document Version History

Version	Date issued	Notes	By
1.0	17/05/2019	Proposed Local Land Services Richmond Catchment governance model: new paper	Louise Orr, General Manager, North Coast LLS Graeme Moss, Team Leader Strategy, North Coast LLS
2.0	23/05/2019	Comment and review	LLS NRM State Wide Advisory Group
3.0	30/05/2019	Comment and review	Graeme Moss, Team Leader Strategy, North Coast
4.0	06/09/2019	Address DPIE Biodiversity and Conservation Division and DPI Fisheries feedback	Melinda Cox, Investment Planner, North Coast LLS
5.0	10/09/2019	Expand planning, delivery and community sections. Clarify stakeholders, roles and responsibilities	Melinda Cox, Investment Planner, North Coast LLS
6.0	22/10/2019	LLS Senior Executive Team feedback and comment: expand stakeholders, roles and responsibilities	Louise Orr, General Manager, North Coast LLS Carolyn Raine, Executive Director, LLS Sue-Anne Nicol, Director State Programs & Partnerships, LLS
7.0	29/10/2019	Draft provided to DPIE Biodiversity & Conservation and DPI Fisheries	Louise Orr, General Manager, North Coast LLS

Appendix F Supporting information prepared by DPIE

First Australians engagement under all frameworks

How the models would respond to an event

Parallel methodology for working with First Australians in the Richmond River catchment

This methodology will need future refinement but should sit alongside the model which is selected for ongoing management of the Richmond River catchment. It seeks to be inclusive of upstream and downstream communities, to consider the long term development of relationships between landholders and Aboriginal people responsible for looking after country, and to embed a collective approach to catchment management for best water quality and biodiversity outcomes throughout the Richmond River catchment.

Summary description

As for all industries and communities on the Richmond River, the links that Aboriginal peoples have with the catchment differ depending on their location and their cultural associations with the river. An avenue for considering these different responsibilities is a priority for the Richmond River governance framework review, and the result needs to consider also how best to support those who are representing their community within the model which is selected as the preferred option.

In some ways, the Collaborative Partnership proposal would be best suited to support Aboriginal people's involvement as a collaboration across all land tenures and responsibilities. The voluntary nature of involvement in the work is more likely to be felt to be a more supportive environment in which to develop new relationships across the catchment, and a board could mandate this supportiveness into the Partnership Charter.

An agency model also provides advantages in that the discussion with Aboriginal people can be a statutory obligation to be had. In this model, the need for understanding with respect to what locations Aboriginal people can speak for (which can be very locations specific) and information they can share would need to be included in the methodology. This would mean that a single representative is unlikely to be able to represent the whole catchment.

This could be managed a number of ways:-

- A. Use of a separate Advisory Committee with representation from across the catchment and across jurisdictions could consider and come to an interim decision about programs, with a recommendation to the 'Board' or similar structure employed. This Committee would need support through a Chair and also some administration, but could be situated within a government agency.
- B. Use of multiple representation within the 'Board' structure so that discussions can be heard first hand with regard to issues and considerations about particular programs.

The key functions of ensuring Aboriginal involvement in ongoing decision-making about improving catchment health are:-

1. To recognise the broadscale landscape change that has occurred and engage Aboriginal communities in decision-making about what to address from a cultural and natural resource management perspective. This function does not detract from the food and fibre use of areas of land, which are important in themselves, but considers how landuse can work in parallel with these other priorities.
2. To build relationships and capacity with Aboriginal communities to consider a catchment focus for river and waterway health.
3. To build relationships and capacity within the community as a whole to work together collaboratively for positive change in river and waterway health.

Although it is recognised that a defined methodology for engaging effectively with Aboriginal people would be useful for this report, it is considered that this would be pre-emptive and that an allocation of time and resources should be made to working with Aboriginal people and the preferred model to develop this methodology as a priority during the Coordinator phase of the implementation of the recommendations of this report.

This work would include Aboriginal people working as professionals already within the NSW Government structure in various capacities, Aboriginal people within the community, those with legislative responsibility for delivery of catchment outcomes and other professionals within statutory organisations (including but not

limited to the NSW Government) who work with Aboriginal communities. The methodology they recommend needs to meet the following criteria:-

- a. Inclusive of community members, both Aboriginal and non-Aboriginal.
- b. Structure must be able to communicate effectively with the preferred model (ie either Collaborative Partnership or Agency model).
- c. Respectful of Aboriginal culture from all areas.
- d. Develops a way for communication and consideration of conflict between communities with different priorities.
- e. Ensures that WHS and issues of equity in providing advice are respected (that is, that representatives are supported to be involved in the ongoing provision of advice and are fairly recompensed for the activities they undertake to provide this advice (such as consultation with their communities, time working toward developing a position etc)).

As noted above, the development of this methodology to work with Aboriginal communities would begin in the Coordinator phase. It would consider existing NSW Government policy and work within the statutory framework provided by NSW Aboriginal Affairs to ensure equity and cultural heritage issues are respected. The methodology would be endorsed by the NSW Government independent of the preferred model, and the preferred model would need to work with the methodology developed on an ongoing basis.

How the options would deal with an event

How would the option deal with a 'small', easily definable problem such as a fish kill? How would the option deal with a 'large' logistically complex problem such as a very large investment (say, \$50million over 5 years)?

There are some assumptions made in this table. They include an ability for each option to have resources at its disposal, that it works within its own remit and does not take on the responsibility of other organisations.

The first table deals with some operational issues that MAY be experienced using each entity. The second table identifies a smaller, more operational issue that is commonly experienced in the catchment and the third with a much larger, more strategic issue that it is hoped will be experienced in the catchment.

General operational comments regarding options

The following is presented as general comments for consideration and background for each of the options. They do not represent barriers to implementation as such, but they provide points for discussion. Some issues occur across any option and this is noted.

Potential operational issues which may be experienced

Native title holders/ Traditional owners led	Collaborative partnership	Existing LGA's working with existing frameworks	Rous County Council with expanded role	A new Coordinator for the Richmond	Regional LLS or other SG entity led
<i>Set up</i>					
<p>Would require entirely new organisational framework.</p> <p>COMPLEX</p>	<p>Would require entirely new distributed framework.</p> <p>COMPLEX</p>	<p>Framework mostly available, although some new work to set up issue specific working group. Some new staff required.</p> <p>LESS COMPLEX</p>	<p>Framework mostly available, some statutory work required with proclamation. Some new staff required.</p> <p>LESS COMPLEX</p>	<p>Would require entirely new organisational framework.</p> <p>COMPLEX</p>	<p>Framework mostly available, although some new work to set up issue specific working group. Some new staff required.</p> <p>LESS COMPLEX</p>
<i>Governance</i>					
<p>Would need to consider a framework for both internal stakeholders (native title holders and traditional owners, across different geographic locations). Then needs to consider how this internal framework will engage with external stakeholders such as LG and SG.</p> <p>Benefits: decision-making rests with native title holders and traditional owners, capacity building within these groups, ability to effect desired change in natural systems.</p> <p>Possible problems: Setting up and then management of a new entity may be too difficult. May detract from individual Aboriginal groups ability to represent their own needs within a larger management structure.</p>	<p>A framework for working together would need to be developed, and this could take some time. A centralised point is desirable for correspondence, administration, finance etc.</p> <p>Benefits: potential for engagement of groups who may distrust government, the 'grassroots' call to action appeals to many individuals. Enhances community feel of the collaboration.</p> <p>Possible problems: Setting up and then management of a method for correspondence,</p>	<p>A host council and possibly senior project officer would be required. The JO and other project working teams (SoE reporting, waste, water etc etc) illustrate that this can work effectively.</p> <p>Benefits: existing frameworks for HR, finance, administration etc. Trust within LG is strong. IP&R provides good accountability mechanisms for reporting. Councils retain responsibility for projects in their own LGA's.</p> <p>Possible problems: SG and other stakeholders/community less used to work with LG in this way. General purpose councils would need to develop a track record for the issue to gain trust in this space. Resources would remain scarce at some councils to get projects happening, if framework utilised in this way (framework could work across whole area which would address this issue).</p>	<p>Rous County Council could, with a revised Proclamation, become a service delivery provider to other LG in the Richmond. It currently provides some weed, some floodplain management and bulk water supply already.</p> <p>Benefits: existing frameworks for HR, finance, administration. IP&R provides accountability mechanisms for reporting. Rous can work across the whole area, but individual Councils can retain some projects themselves.</p> <p>Possible problems: Haven't worked with industry before across whole catchment (although have with smaller projects), reporting to constituent Councils would need to be</p>	<p>Commissioner option would implement a new 'office' in the area. Governance framework would need to be built.</p> <p>Benefits: Its single focus would be an effective communication and discussion mechanism. Opportunity to 'start anew' on the Richmond with no 'history'.</p> <p>Possible problems: could be expensive to set up administration etc (if hosted by agency etc this would become a non-issue). Questions regarding former CMA/CMB may be asked. Ability to attract funding that is not SG requires its own resources.</p>	<p>A state agency led initiative would provide a focal point for Richmond River issues both within the agencies, but could also act as a defacto Commissioner style entity within the catchment.</p> <p>Benefits: Identifies the Richmond as a priority for government. All administration etc sorted within existing agency. Simple for other agencies to engage. Would need to ensure strong links with LG and stakeholders continue.</p> <p>Possible problems: Perception may be drawn with former CMB/CMA and the progressive withdrawal of funding from NRM over time. Need to keep</p>

Native title holders/ Traditional owners led	Collaborative partnership	Existing LGA's working with existing frameworks	Rous County Council with expanded role	A new Coordinator for the Richmond	Regional LLS or other SG entity led
	administration, finance etc is required. Looking for funds to continue this takes its own resources. LG and SG can work with a partnership, but need to also meet IP&R responsibilities.		regular and timely. Proclamation change is statutory and would take time.		engagement strong with LG – including both operational and elected members.
<i>Communications</i>					
Different kinds of communications are required, including general day to day working together; event-based communications including grant schemes, planting days, priority works happening; high priority issues such as a fishkill or other problem. Annual reports or newsletters are another example.					
<i>Future planning and funds</i>					
Development of Richmond River Investment Program collectively. Independent body with no perceived bias. Would still need to be managing multiple internal stakeholders as well as external stakeholders. CMP Process is SG and LG, so potential for duplication of effort although this could be managed with good communication and liaison.	Collective development of Richmond River Investment Program. Would need one identified host organisation to keep momentum. CMP Process is SG and LG, so potential for duplication of effort although this could be managed with good communication and liaison	Attraction of funds to LG projects requires a CMP. Would need to consider how this would work with a broader Richmond River Investment Program. Host council would need to ensure sufficient funds applied to collaboration with all stakeholders, not only LG and SG. Could be managed.	Attraction of funds to LG projects requires a CMP. Would need to consider how this would work with a broader Richmond River Investment Program. Rous CC would need to ensure sufficient funds applied to collaboration with all stakeholders, not only LG and SG. Could be managed (and potentially more easily than through a host council approach).	Development of Richmond River Investment Program collectively. Independent body with no perceived bias. Possible disconnect between elected representative and operational staff responsibilities, representation would need to be carefully considered to ensure balance between seniority and knowledge of how projects can roll out. CMP Process is SG and LG, so potential for	Development of Richmond River Investment Program. Would need to ensure LG involved (reduce duplication with CMP process) and stakeholders properly involved (not just consulted) to ensure program is collaboration.

Native title holders/ Traditional owners led	Collaborative partnership	Existing LGA's working with existing frameworks	Rous County Council with expanded role	A new Coordinator for the Richmond	Regional LLS or other SG entity led
				duplication of effort although this could be managed with good communication and liaison.	
<i>Stakeholder Engagement</i>					
All organisations need to consider how they best engage other organisations, representative representation and attract new players.					
<p>New entity may find it simpler to engage with new stakeholders. Must build new engagement network.</p> <p>Benefits: no 'history' to overcome. May be seen as an opportunity by all, to help address issues.</p> <p>Potential problems: need to build relationships over time.</p>	<p>Engagement would likely continue with existing stakeholder groups unless a reason for new groups to come on board (such as significant resources).</p> <p>Benefits: engages with grass roots stakeholders, effective networks already exist.</p> <p>Potential problems: need to build new networks to include LG, SG and industry (assumption has been made here that existing networks do not necessarily include these entities – often they do). May</p>	<p>LG has good connectivity in its own local area, would provide good distribution networks through its own and regional collaborations.</p> <p>Benefits: existing engagement with own communities, can leverage off this by enhancing to regional communities. Can build each Council's own brand by being part of regional group addressing river health as an issue.</p> <p>Potential problems: Some stakeholders are not willing to engage (because its council/government).</p>	<p>LG has good connectivity in its own local area, would provide good distribution networks through its own and regional collaborations.</p> <p>Benefits: regional approach providing efficient contact point for stakeholders.</p> <p>Potential problems: Some stakeholders are not will to engage (because its council/government). This probably somewhat buffered by distance from general purpose councils. There have been some prior issues with floodplain where resources did not allow structure, strategic approach to problems.</p>	<p>New entity may find it simpler to engage with new stakeholders.</p> <p>Ability to distribute funds can be a way to engage.</p> <p>Benefits: no 'history' to overcome. May be seen as an opportunity by all, to help address issues.</p> <p>Potential problems: need to build relationships over time. Possible CMB/CMA legacy issues.</p>	<p>SG entity has a broader stakeholder reach (in general) than LG, and works within industries to effect change already. Issue (as for other organisations) in that not all landholders willing to engage.</p> <p>Benefits: resources usually available for engagement across industries and agencies. Opportunity to develop closer links to LG in the Richmond.</p> <p>Potential problems: Some landholders very disengaged with government. Government agencies often not provided with 'open funds' to spend on priorities but reliant on grant programs etc to</p>

Native title holders/ Traditional owners led	Collaborative partnership	Existing LGA's working with existing frameworks	Rous County Council with expanded role	A new Coordinator for the Richmond	Regional LLS or other SG entity led
	be difficult to progress projects without substantial industry engagement and trust built.				disseminate funds. Lead times can be long.
<i>Working with Native Title Holders and Traditional Owners</i>					
<p>Utilising a Native Titleholder/Traditional Owners Option would address this issue. However, it is possible that the internal pressures would be very difficult to manage in terms of ensuring groups being able to work on their own and collective issues effectively, as well as then engaging as one voice with external stakeholders.</p> <p>This may present an equity issue for staff as not every group will wish to express the same viewpoint on an issue.</p> <p>This solution may present as efficient to government, but it may not provide equity to Aboriginal organisations working in different geographical locations.</p>	<p>Each option needs to consider the methodology with which it engages with Native Title Holders and Traditional Owners. The option would include the following considerations as a minimum:-</p> <ol style="list-style-type: none"> 1. The different requirements for statutory engagement with native title holders and traditional owners. 2. What would be the most equitable arrangement for engagement with all native title holders and traditional owners. 3. Ensuring there is opportunity for Aboriginal people working on Country. 4. Paid engagement. 5. Ensuring the correct people are engaged, depending on geography and other considerations. 6. Locations where multiple Aboriginal stakeholders exist. 				

Issue Number 1 – Smaller Event – A Fishkill

A medium rainfall event has fallen in the mid catchment, resulting in inundation of some non-native pastures species for about a week. It's a warm spring, and by the time the water begins to drain off the pastures it has killed off the grass and the water has begun to turn dark. Dissolved oxygen has plummeted within the flooding water, and it then discharges quickly on an outgoing tide. A large school of fish are caught by this event and approximately 2000 fish die, floating down the river and being deposited on The Spit at Ballina at the turn of the tide. The river management organisation is inundated with calls about the dead fish, although Ballina Shire Council is tasked with cleaning them up from the beach as they represent a potential public health/environmental health issue. What happens now?

Component Issue	Native title holders/ Traditional owners led	Collaborative partnership	Existing LGA's working with existing frameworks. A single contact point appointed.	Rous County Council with expanded role	A new Commissioner/Coordinator for the Richmond	Regional LLS led
Media	Share media responsibilities with Ballina Shire Council to demonstrate response to fishkill both operationally but also to discuss other projects happening upstream to influence pasture management.	Lack of single contact point would reduce ability to communicate effectively with community. This may introduce confusion and a sense of 'nothing is happening'. Ballina Council still cleans up fish.	These include the Joint Organisation and CZMP Implementation Committee, both at a staff level. Ballina Shire Council would be likely to lead on this event, given the fishkill has manifest in its shire (no matter where it came from originally). Possible difficulties with clear communication across LG boundaries.	Single contact point with all councils, which is already established in region. Would share media responsibilities with BSC and discuss other projects happening upstream to influence pasture management.	Media responsibilities would rest here. Ballina Shire Council would provide operational support and some media. Arguably statutory role would provide resources to deal with immediate impacts, although operational role still for BSC.	Media responsibilities would rest here. Ballina Shire Council would provide operational support and some media. Likely no regional resources to deal with immediate impacts – ie cleaning up fish. Task would fall to BSC.
Pasture Management	Pasture management projects gaining some traction with landholders but many barriers including ability to pay and lack of interest. No ability to require works to happen and would need to work collaboratively and offer incentives.	Collaborative partnership could be very successful if interest from backswamp landholders, but would need a community champion to provide a focal point. Dependent on community interest in critical locations.	Pasture management projects gaining some traction with landholders but many barriers including ability to pay and lack of interest. Councils unable to require works to happen, and need to work collaboratively and offer incentives.	Pasture management projects gaining some traction with landholders but many barriers including ability to pay and lack of interest. Councils unable to require works to happen, and need to work collaboratively and offer incentives.	Pasture management projects upstream may gain a higher profile with a Commissioner or similar. Still issues with gaining traction as noted previously. This can be time-consuming and resource hungry with slow results.	Has existing pasture management extension officers. Other issues as noted are still relevant – that is that work cannot be required on private land but rather projects need to be collaborative and offer incentives. This takes time and resources.

Component Issue	Native title holders/ Traditional owners led	Collaborative partnership	Existing LGA's working with existing frameworks. A single contact point appointed.	Rous County Council with expanded role	A new Commissioner/Coordinator for the Richmond	Regional LLS led
Community Education	Community education programs about fishkills – cause, effect, what can you do etc	Community education program would rely on traditional sources, including media stories.	Community education program could work very well (www.loveitorloseit.com.au) but inevitably better resourced councils take the load. This depends on personal interest, Council's priorities and workloads.	As for LG program, but Rous would attract more focus as the single point of contact. Program for ongoing community edn required.	Community education about fishkills – cause, effect, what you can do, what government are doing etc.	Community education about fishkills – cause, effect, what you can do, what government are doing etc
Background Info to the issue	Discussion regarding traditional practices and their ability to build fish populations.	Could demonstrate voluntary projects very effectively.	Can work with each other as above, but harder to communicate the many projects working across catchment towards improvement. However, a host Council could be nominated to work on messaging and provide central contact point.	More likely to have voluntary organisation comm's, so could provide a background information easily.	Highlight best practice in other catchments or improvements over time in this catchment.	Highlight best practice in other catchments and/or improvements over time in this catchment. Discuss Sustainable Agriculture program.
Working collaboratively	Ability to leverage off agencies and local government to influence catchment practices may be difficult without statutory authority.	A Board style arrangement where there is a single point of contact would assist agencies and LG to work with CP. Allowing room for many views and ways of working required. Strong leadership skills required (as for all models, but particularly so for this one to demonstrate how the CP model working to address issue).	A 'host' council could be nominated. They would work with Ballina Shire Council on messaging re fishkill and other projects (as above). Ability for LG to ensure range of agencies with responsibility (ie water use, water regulation, primary industry, fisheries, coasts and estuaries etc) will be available for comment not understood.	Could work with BSC on messaging re fishkill. Single focal point for leveraging engagement with agencies simpler, although they may not engage effectively on the issue. Again, difficult for LG to ensure range of agencies with responsibility (ie water use, water regulation, primary industry, fisheries, coasts and estuaries etc) will be available for comment.	Ability to engage constructively with agencies and LG to require involvement, as government appointed mandate.	Ability to engage constructively with agencies and LG to require involvement. Some existing relationships. ATM, LLS acting as a service provider for MEMA initiatives. This may not be the optimal relationship in a river manager (ie difficult to demonstrate transparency as providing services to agencies).

Issue Number 2 – A larger event – A substantial investment in the Richmond

This option explores a more complex issue such as a large investment being made within the catchment. For example, a large investment of \$5 million is made, and the investor would like to ensure monies are spent equitably, on-the-ground and in high priority locations. The investor understands that there may be up to 10% project management costs in resourcing the governance and distribution of the funds.

Component Issue	Native title holders/ Traditional owners led	Collaborative partnership	Existing LGA’s working with existing frameworks	Rous County Council with expanded role	A new Commissioner/Coordinator for the Richmond	Regional LLS led
Contact Point	Single contact point. Framework with different groups would provide possible distribution points and projects. Would possibly need a framework both for native title holder and traditional owner groups as well as broader stakeholders including LG to ensure integrity of framework.	Lack of single contact point would reduce ability to work with investor and to facilitate spending of the funds in a co-ordinated and timely manner. Utilising a CEO and Board would address this.	Potential single contact point could include the Joint Organisation or CZMP Implementation Committee, both at a staff level. Likely keen interest both from elected Council representatives (and potential need for reports to Council meetings) as well as stakeholders. Could result in stakeholder dissatisfaction (this is a risk for all models, however). Statutory CMP for RR provides some accountability.	Single contact point with all councils, and is already established in region. Would need a methodology to equitably distribute funding (according to CMP for RR). Some distributive decisions may result in stakeholder dissatisfaction (this is a risk for all models). Accepted as a regional model. Statutory CMP for RR provides some accountability.	Single contact point for the Richmond. Distribution dependent on attributed priorities (could be CMP for Richmond River). Transparency and accountability simpler for investor.	Single contact point for the Richmond. Could work to CMP for Richmond River. LLS doesn’t have the direct communication LG does in how it reports to local communities, so would need a mechanism to report to address any misperceptions. May be less attractive for private investment as a government entity.

Component Issue	Native title holders/ Traditional owners led	Collaborative partnership	Existing LGA's working with existing frameworks	Rous County Council with expanded role	A new Commissioner/Coordinator for the Richmond	Regional LLS led
Project Management – how to fund this?	Ten percent project management could be used to employ extra people within existing framework. Provide employment, increase capacity in catchment for NRM/project management.	Ten percent project management could be used to employ project managers. Would likely require a host to reduce overheads and provide supervision. Accountability to stakeholders including SG and LG potentially difficult.	Ten percent project management allocation could provide funds for a host council for position and finance/governance support. Existing projects run this way within region. Support already in place so potential savings here.	Ten percent project management allocation could provide funds for position and finance/governance support although the support is already in place so savings may be made or higher ratio to on-ground actions.	Ten percent project management allocation could provide funds for position and extra finance/governance support (for example, to ensure funds spent properly).	Ten percent project management allocation could provide funds for position and finance/governance support although the support is already in place so savings may be made.
Fund distribution	Frameworks for prioritising and distribution would need to be identified.	Frameworks for prioritising and distribution would need to be identified.	Frameworks for prioritising and distribution should already be in place. Coastal Management Program for Richmond River should provide a way to target priorities. Investment may or may not meet these priorities.	Frameworks for prioritising and distribution should already be in place. Regional position provides ability to designate. Coastal Management Program for Richmond River should provide a way to target priorities. Investment may or may not meet these priorities.	Frameworks for prioritising and distribution would need to be identified.	Frameworks for prioritising and distribution would need to be identified. LG may need to be formally included in decision-making.

Component Issue	Native title holders/ Traditional owners led	Collaborative partnership	Existing LGA's working with existing frameworks	Rous County Council with expanded role	A new Commissioner/Coordinator for the Richmond	Regional LLS led
Attracting funds – public vs private	<p>Probity etc would need to be proved to ensure investor is confident to invest.</p> <p>Public funds investment may be simpler to attract but would probably require a quasi-government style framework to work within.</p>	<p>Probity etc would need to be proved to ensure investor is confident to invest.</p> <p>Public funds investment would likely require a quasi government style framework to work within for this scale of investment.</p>	<p>Private sector investment may not be keen to invest in LG.</p> <p>Public funds investment would be simpler, and there are existing reporting frameworks and structures. Possible requirement for matching or part-contribution.</p>	<p>Private sector investment may not be keen to invest in LG, although may be different as Rous is a specific purpose council.</p> <p>Public funds investment would be simpler, and there are existing reporting frameworks and structures. Possible requirement for matching or part-contribution.</p>	<p>Richmond River Coordinator would likely need to be shown to be independent to attract non-government investment.</p> <p>Commission/Trust style arrangement has been funded before with public funds, existing reporting and structures available.</p>	<p>Private sector investment may not be keen to invest in LLS.</p> <p>Public funds investment would be simpler, and there are existing reporting frameworks and structures.</p> <p>Investment would be less likely to ask for contribution from LLS.</p>
Comms	Communication: Best organised centrally but using a framework of host distributors (including Landcare, LG and SG and all signatory stakeholders)					
Creating and ensuring accountability	<p>Means ensuring funds attracted through investment (both public and private) is able to be easily accounted for.</p> <p>Could require something similar to an IPNR framework, and utilise accounting and audit standards with publicly available accounts published annually.</p> <p>Need to ensure the organisation is registered (ie Landcare Group, ABN etc). Organisations such as LG and LLS may have an easier time ensuring accountability as they have compliance and governance departments within their structure. Newer structures such as a Commission, Aboriginal organisations, and collaborative partnership would need to consider how best to achieve this.</p>					