

WATER PORTFOLIO

Please provide a list of all the projects currently undertaken by the catchment management authorities that are funded through the '\$222 million investment in waterway and catchment health' mentioned in Slide 5 of the Minister's presentation.

The following projects are being delivered by Catchment Management Authorities (CMAs) as part of the Government's investment of \$222 million into waterway and catchment health over the four years from 2016-17 to 2019-20. These projects are grouped consistent with the Minister for Water's presentation in the Budget Estimates Hearing.

\$90 million investment in regional waterway strategies including large scale projects in 36 priority rivers

Project Name	CMA
Otway and Coastal Waterway Restoration 2016-20	Corangamite CMA
Barwon & Corangamite Waterway Restoration 2016-20	Corangamite CMA
Corangamite Caretaker of Waterway Health 2016-20	Corangamite CMA
Corangamite Community Waterway Monitoring	Corangamite CMA
Improving Ramsar Site Management and Monitoring	Corangamite CMA
Corangamite Environmental Water Management 2016-20	Corangamite CMA
Corangamite Caretaker of Waterway Health 2016-20	Corangamite CMA
Corangamite Community Waterway Monitoring	Corangamite CMA
Floodplain Waterway Statutory Functions 2016-20	Corangamite CMA
Management of the Barwon through Geelong 2016-20	Corangamite CMA
Corangamite Drainage Scheme Management 2016-20	Corangamite CMA
Implementing the Regional Waterway Strategy	East Gippsland CMA
Rivers 2040 Trial	East Gippsland CMA
Community and Aboriginal Engagement	East Gippsland CMA
Environmental Water & Snowy River Restoration	East Gippsland CMA
Water Statutory Functions	East Gippsland CMA
Improving Ramsar Site Management and Monitoring	Glenelg Hopkins CMA
Coastal Works Program	Glenelg Hopkins CMA
Hopkins Works Program	Glenelg Hopkins CMA
Glenelg Works Program	Glenelg Hopkins CMA
Regional Works Program	Glenelg Hopkins CMA
Environmental Water Management & Engagement	Glenelg Hopkins CMA
Coastal Works Program	Glenelg Hopkins CMA
Regional Works Program	Glenelg Hopkins CMA
Floodplain and Waterway Management	Glenelg Hopkins CMA
On-Ground Works Program 2016/17	Goulburn Broken CMA
Improving Ramsar Site Management and Monitoring	Goulburn Broken CMA
Environmental Water Reserve Officer 2016/17	Goulburn Broken CMA
Caretaker of River Health & Floodplain Stat 16/17	Goulburn Broken CMA
On-Ground Waterway Works	Mallee CMA
Improving Ramsar Site Management and Monitoring	Mallee CMA
Environmental Water Reserve Officer	Mallee CMA
Waterway Statutory Functions	Mallee CMA
Delivering On-Ground Works Priorities 2016-20	North Central CMA
Protecting investment/improving capacity 2016-20	North Central CMA

Improving Ramsar Site Management and Monitoring	North Central CMA
Environmental Water Management 2016-20	North Central CMA
Waterway and Floodplain Statutory 2016-20	North Central CMA
North Central Waterwatch 2016-20	North Central CMA
Protecting investment/improving capacity 2016-20	North Central CMA
Regional Waterway Program	North East CMA
Environmental Water Reserve	North East CMA
Waterway Management & Statutory Functions	North East CMA
Ramsar Protection in Port Phillip and Western Port	Port Phillip and Westernport CMA
Waterway works: Gippsland Lakes and Tributaries	West Gippsland CMA
Waterways Works: Corner Inlet and Tributaries	West Gippsland CMA
Waterway Works: Other Priority Waterways	West Gippsland CMA
Improving Ramsar Site Management and Monitoring	West Gippsland CMA
Managing Environmental Water	West Gippsland CMA
Caretaker of Waterway Health	West Gippsland CMA
Rivers 2040 Evaluation Trial: Thomson River	West Gippsland CMA
Waterway Works: Other Priority Waterways	West Gippsland CMA
WGCMa Statutory Functions	West Gippsland CMA
Thriving Community Rivers	Wimmera CMA
Thriving Community Wetlands	Wimmera CMA
Improving Ramsar Site Management and Monitoring	Wimmera CMA
EWR Planning & Implementation	Wimmera CMA
Statutory Water Functions	Wimmera CMA

Summaries of three specific projects from the above list follow:

GB1617.09.029 On-Ground Works Program 2016/17

This project builds on past investment and capacity building to maintain and extend the outcomes achieved towards landscape scale change. The focus of this program will be the management of threats identified in the GBWS for priority streams.

This program will be delivered via direct engagement with landholders and community with an incentive based approach to achieve on ground works and outcomes. Key targets for works on priority waterways over the 4 years include:

- 28 Management Agreements with Landholders
- 25.5 km of riparian fencing
- 32.5 ha of indigenous revegetation
- 20.7 ha of woody weed control
- 0.31 km of erosion control
- 245 waterway structures for native fish habitat (large wood)
- 17 native fish monitoring/research projects
- Annual funding and support of Waterwatch
- Annual funding and support for RiverConnect
- Funding and support for Landcare projects
- Reengagement with landholders involved in previous GB CMA river health projects

CO1617.05.241 Otway and Coastal Waterway Restoration 2016-20

This project delivers major on ground works and other priority actions to protect and enhance the rivers, wetlands and estuaries with the region's coastal zone, including the region's Great Ocean Road, in line with priorities identified through the Corangamite Waterway Strategy and the large scale waterway restoration focus of the Water for Victoria Discussion Paper. It also includes delivery of accelerated riparian activities under the 2015 Regional Riparian Action Plan.

A targeted asset-based approach is utilised, based on priority reaches described in the Corangamite Waterway Strategy 2014-2022. The project aims to protect and enhance; wetlands, freshwater

reaches, wetlands and estuaries. This includes the Gellibrand and Barham water supply catchments, priority waterways along the Great Ocean Road, and wetlands (Limeburners Bay and Connemara complex) that form part of the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar Site.

This project delivers on the following priorities:

- > protection and restoration of priority river, wetland and estuarine assets (inland aquatic environments) and their ecosystem services;
- > involvement of Landcare groups and other regional partners in the delivery of on ground projects aligned to regional and state priorities;
- > delivery within special water supply catchments;
- > delivery of targeted riparian works to improve waterway condition and connectivity;
- > delivery within the “largely-intact landscape” of the Otways as detailed in NaturePrint V3;
- > delivery of threatened native fish species protection based on high priority actions at high priority locations; and
- > delivery of waterway maintenance works that secure past investment in waterway projects.

The project also supports government policy for the protection of estuaries within coastal environments under Part 1.3 of the Victorian Coastal Strategy 2014.

WG1617.20.280 Waterways Works: Corner Inlet and Tributaries

This program seeks \$1.818M over the next 4 years to deliver on-ground works to improve the health of the Corner Inlet Ramsar site, as well as a number of connected waterways including the Tarra, Jack, Albert, Agnes and Franklin Rivers. The project complements the Australian Government National Landcare Program funded Corner Inlet Connections Program, and builds on a well established partnership approach to planning and delivery of programs in Corner Inlet, overseen by the Corner Inlet Partner Group (with representation from Parks Victoria, Landcare, DEDJTR, local government, South Gippsland Water, Gippsland Coastal Board, HVP, Dairy Australia, commercial fishers and Gunaikurnai Land and Waters Aboriginal Corporation). Key activities will include:

- Protection of pristine headwater areas and prevention of the downstream spread of threats through remote willow control;
- Rehabilitation of priority rivers, creeks and fringing wetlands through strategic intervention in the highly modified mid-catchments (stock exclusion, weed control and vegetation establishment), to maintain areas in good condition and build catchment connectivity;
- Responding to waterway risks in a timely and adaptive manner. This includes weed and revegetation maintenance to protect past investment; and
- Spartina control to protect key values of the Corner Inlet Ramsar site.

\$30 million for the Regional Riparian Action Plan

(Please note that some of these projects are also listed in the above category, where they are co-funded by the two streams.)

Project Name	CMA
Otway and Coastal Waterway Restoration 2016-20	Corangamite CMA
Barwon & Corangamite Waterway Restoration 2016-20	Corangamite CMA
Regional Riparian Action Plan	East Gippsland CMA
Coastal Works Program	Glenelg Hopkins CMA
Hopkins Works Program	Glenelg Hopkins CMA
Glenelg Works Program	Glenelg Hopkins CMA
Regional Works Program	Glenelg Hopkins CMA
Twinning project 2016-2017	Glenelg Hopkins CMA
RRAP - Landcare grants 16/17 to 19/20	Glenelg Hopkins CMA
Riparian Works 2016/17	Goulburn Broken CMA
Regional Riparian Action Plan	Mallee CMA
Delivering Riparian Priorities 2016-20	North Central CMA

Accelerated Riparian Works	North East CMA
Rivers 2040 Evaluation Trial: Thomson River	West Gippsland CMA
Waterway works: Gippsland Lakes and Tributaries	West Gippsland CMA
Waterways Works: Corner Inlet and Tributaries	West Gippsland CMA
Waterway Works: Other Priority Waterways	West Gippsland CMA
Regional Riparian Action Plan Implementation	Wimmera CMA

Summaries of three specific projects from the above list follow:

NC1617.04.001 Delivering Riparian Priorities 2016-20

The North Central CMAs Delivering Riparian Priorities program will focus on delivering a range of activities aimed at improving waterway health, building capacity and supporting our community, and ensuring that the investment in our Region is reaching its full potential. To do this we have prioritised the following activities:

- The Caring for the Campaspe project is one of the largest river restoration projects in the State and aims to improve the health of the river through a range of on ground works and strong community, Landcare and Traditional Owner engagement. Activities address the key threats of uncontrolled stock access in the lower catchment and weed invasion in the upper catchment. Landholder engagement will target areas to maximise continuity of well managed riparian land following the previous four years of widespread investment.
- Funding to support Landcare initiatives on riparian land throughout the region as part of the annual Community Grants program. Funding allocated each year to support Landcare initiatives on riparian land as part of the annual Community Grants program. The approach is run in conjunction with the VLG and NLP grants to ensure a fair, efficient and transparent grants round from the communities perspective.

GH1617.22.359 RRAP - Landcare grants 16/17 to 19/20

The CMA will deliver the Regional Riparian Action plan - Landcare allocation through a devolved grants process for the region's Landcare Groups. The devolved grants process will use an open call for applications for the region's Landcare Groups that is transparent, accountable and accessible. Funded community projects will deliver of on-ground riparian works and ensure that clear public benefit is demonstrable. The grants will be delivered within the annual Victorian Landcare Grants allocation process.

This funding will be provided to Landcare groups to:

- protect riparian vegetation through fencing
- enhance remnant riparian vegetation through fencing and vegetation enhancement
- restore riparian vegetation through fencing and revegetation

All projects supported through the grants will be on-ground riparian works including fencing, revegetation, vegetation enhancement and weed control. Projects will be supported in both priority and non-priority reaches, as identified in the Waterway Strategy.

The Glenelg Hopkins Waterway Strategy recognises that management activities can be undertaken on non-priority waterways when opportunities arise if the works meet certain criteria. The main criteria which has a strong relationship to the aims of the Landcare program is as follows: 'maintain or strengthen community commitment to improving the condition of local waterways'.

\$22 million for integrated catchment management

Project	CMA
The Tyrell Project: Ancient Landscapes, New Connections	Mallee
Delivering 'Our Catchments Our Communities' in the Wimmera	Wimmera
Wetlands of the Greater Grampians	Glenelg Hopkins
Community delivered ICM (under development)	North Central
The Upper Coliban Integrated Catchment Plan	North Central
New partnership across North Central	North Central

Connected Landscapes – Adapting Corangamite’s Natural Assets to Climate Change	Corangamite
Protecting the environment via on-farm water efficiency	Corangamite
Sustainable Dairy Management	Corangamite
Resilient Landscapes Vibrant Communities - Linking Lower Goulburn	Goulburn Broken
Resilient Landscapes Vibrant Communities – Bogies and Beyond	Goulburn Broken
Restoring the natural glory of Jacksons Creek at Sunbury	Port Phillip & Westernport
Transforming the Dandenong Creek Corridor into a world class ‘living link’	Port Phillip & Westernport
Greens Bush to Arthurs Seat Biolink	Port Phillip & Westernport
Delivering the Regional Catchment Strategy in the Perry Catchment	West Gippsland
Implementing the RCS of the Red Gum Plains	East Gippsland
Implementing the RCS in the Tambo valley	East Gippsland
Building Resilient Environmental and Social Networks in the Upper Mitta Mitta	North East
Lower Ovens; Connecting Communities: Icon ecosystems	North East

\$70 million for environmental water delivery

Project Name	CMA
Corangamite Environmental Water Management 2016-20	Corangamite CMA
Hospital Swamps Outlet Fishway (construction)	Corangamite CMA
Reedy Lake Outlet (construction)	Corangamite CMA
Environmental Water - Community Engagement	East Gippsland CMA
Environmental Water Management & Engagement	Glenelg Hopkins CMA
Glenelg River Weir Bypass	Glenelg Hopkins CMA
Improving flows in the Upper Glenelg	Glenelg Hopkins CMA
Glenelg River Estuary Flow requirements	Glenelg Hopkins CMA
Improving flows to the Budj Bim landscape	Glenelg Hopkins CMA
Moodie Swamp Works & Measures	Goulburn Broken CMA
Community Engagement – Environmental Water	Mallee CMA
Catfish Billabong Regulator Merbein	Mallee CMA
Environmental Water Management 2016-20	North Central CMA
Works and measures - Fishways	North Central CMA
Environmental Water Community Engagement	North East CMA
Demonstrating outcomes on the Lower Ovens Rv	North East CMA
Managing Environmental Water	West Gippsland CMA
Thomson River Fish Passage	West Gippsland CMA
Waterway Works: Other Priority Waterways	West Gippsland CMA
Enhanced Environmental Water Community Engagement	Wimmera CMA

Summaries of three specific projects from the above list follow:

CO1617.05.261 Hospital Swamps Outlet Fishway (construction)

This high priority project involves the construction of a fishway and new regulator on the Hospital Swamps outlet channel and will include; detailed design, construction of a new spillway, installation of penstock gates and culverts. This project will be informed by the Lower Barwon Wetlands Connectivity report developed in July 2014 in consultation with the Lower Barwon Community Advisory Committee.

The project activity has been identified as a priority project in improving ecological outcomes for the lower Barwon system (with the Reedy outlet) and the long-term delivery of the Seasonal Watering Plan for the lower Barwon wetlands, and supports management actions for Hospital Swamps under the Corangamite Waterway Strategy 2014-2022.

Benefits of this project include:

1. Improved fish and eel passage between Hospital Swamps and the Barwon River for estuarine / freshwater fish to complete their life-cycle.
2. Improved ability to manage water levels in Hospital Swamps and reduce the risk of private land inundation following major inflow events.
3. Greater ability to achieve the objectives of the Lower Barwon Environmental Entitlement that will deliver environmental water to the Ramsar listed Hospital swamps over the next four years.

GH1617.22.356 Improving flows to the Budj Bim landscape

This project seeks to improve water flow pathways for rivers and wetlands on the Budj Bim National Heritage Landscape. The landscape is currently under nomination for World Heritage Status for its unique cultural values.

The Budj Bim basalt lava flow creates a series of wetlands and rivers including Lake Condah, Homerton and Whittlebury Swamp, Darlot Creek and Fitzroy River and estuary. Increased knowledge of water movement and improved hydraulic connection of waterways and wetlands contributes to protection of ecological and cultural values of the waterways and is a key priority of the Gunditjmara Traditional Owners. This project will support the following actions:

- training and building capacity of Budj Bim rangers in hydrological data collection and storage;
- an hydrological study to better understand water movement including the relationship between surface and ground water on the Budj Bim landscape;
- identification of any barriers to water movement

The hydrological study will inform the design and construction of works under proposed future works to enable natural flows to be restored to the Budj Bim National Heritage Landscape. The benefits of these future works will be improved habitat for a number of threatened species including EPBC-listed Yarra pygmy perch, Australasian bittern, growling grass frog and Glenelg spiny crayfish.

This project will deliver:

- development of a 4 year project brief and work plan, guided by the Budj Bim Steering Committee
- installation of a rainfall gauge in the Lake Condah area
- installation of surface water gauges to determine water level fluctuations
- regular collection of groundwater level data from existing observation bore network and/ or accessible private bores
- refinement and publishing detailed conceptual models for the groundwater and surface water connections
- development the Budj Bim Water Balance model for the Budj Bim landscape, incorporating validation of collected data, anecdotal evidence from stakeholders and designed by suitably qualified consultants
- development of communication material to disseminate the findings of the investigation
- identification of important wetland features requiring hydrological intervention to maintain ecological and cultural values.
- identification of options and issues associated with hydrological interventions
- Budj Bim Rangers trained in water flow and quality data collection and storage methods by hydrography service providers

MA1617.02.237 Community Engagement – Environmental Water

This project seeks to put the community at the centre of decision making in regard to environmental watering, by delivering targeted and effective activities to improve water literacy, embed community values and shared-benefits in the setting of watering priorities and maintain strong links to the

community. This will be achieved through complementary activities with the Mallee CMA's established Citizen Science and Landcare programs, along with the Mallee CMA's Aboriginal Reference Group and advisory committees. By ensuring community members are able to play a meaningful role in supporting strategic, long-term actions to improve the health of waterways through environmental watering, this program will deliver a locally validated approach to policy implementation, as evidenced through a range of collaborative on-ground activities.

This project will deliver against the Mallee CMAs four priority project sites identified in the Water Plan; Merbein common wetlands, Lindsay-Wallpolla Islands, Belsar Yungera Floodplain complex, Kings Billabong and Woorlong complex.

\$10 million for Gippsland Lakes

All projects in this category are overseen and/or directly managed by East Gippsland CMA

Community Projects

- Birds as Indicators of Healthy Wetlands
- Reducing human disturbance on migratory and resident shorebird hotspots in the Gippsland Lakes
- Perry River Protection Project
- Harper's Bight Inlet Preservation and Restoration
- Developing a Waterbird Breeding Index to monitor management success of focal species in the Gippsland Lakes
- Forge Creek Erosion
- Flynn Creek Enhancement Project
- Marine Life in the Gippsland Lakes
- Nagle College Rainforest Project
- Stage II Expansion of Heyfield Wetlands
- Heart Morass Swamp Scrub and Woodland Restoration

Management agency/group Projects

- The Gippsland Lakes Care Groups - Linking People, Land and Lakes
- The Gippsland Lakes Wetlands Project
- Protecting the Mitchell River Silt Jetties
- Protecting Waterbirds through Landscape Fox control - Perry River & Lake Wellington
- Managing for metal mobility and bioavailability in the Gippsland Lakes
- Boating with Burrunan - Gippsland Lakes Burrunan dolphin and boats public awareness campaign
- Tern Habitat Management
- Gippsland Lakes Invasive Species Strategy Implementation - Invasive Plants and Animals
- Gippsland Lakes Landscape Scale Predator Control
- Northern Pacific Sea Star - Monitoring Program / Towards an effective monitoring and management regime for marine pest issues in the Gippsland Lakes

- Vessels and Burruran dolphins in the Gippsland Lakes: Drivers of distribution, anthropogenic or environmental influences
- Water Quality Hotspots - reducing sediment loads to the Gippsland Lakes
- Trialling CORE 4 in the Macalister Irrigation District
- Jones Bay - Nutrient Reduction Stripping Wetlands
- Dowd's Morass Saline Inundation: Assessment and Management Options
- Heart Morass Outlet Structure