

ATTACHMENTS UNDER SEPARATE
COVER

ORDINARY COUNCIL MEETING
25 JULY 2023

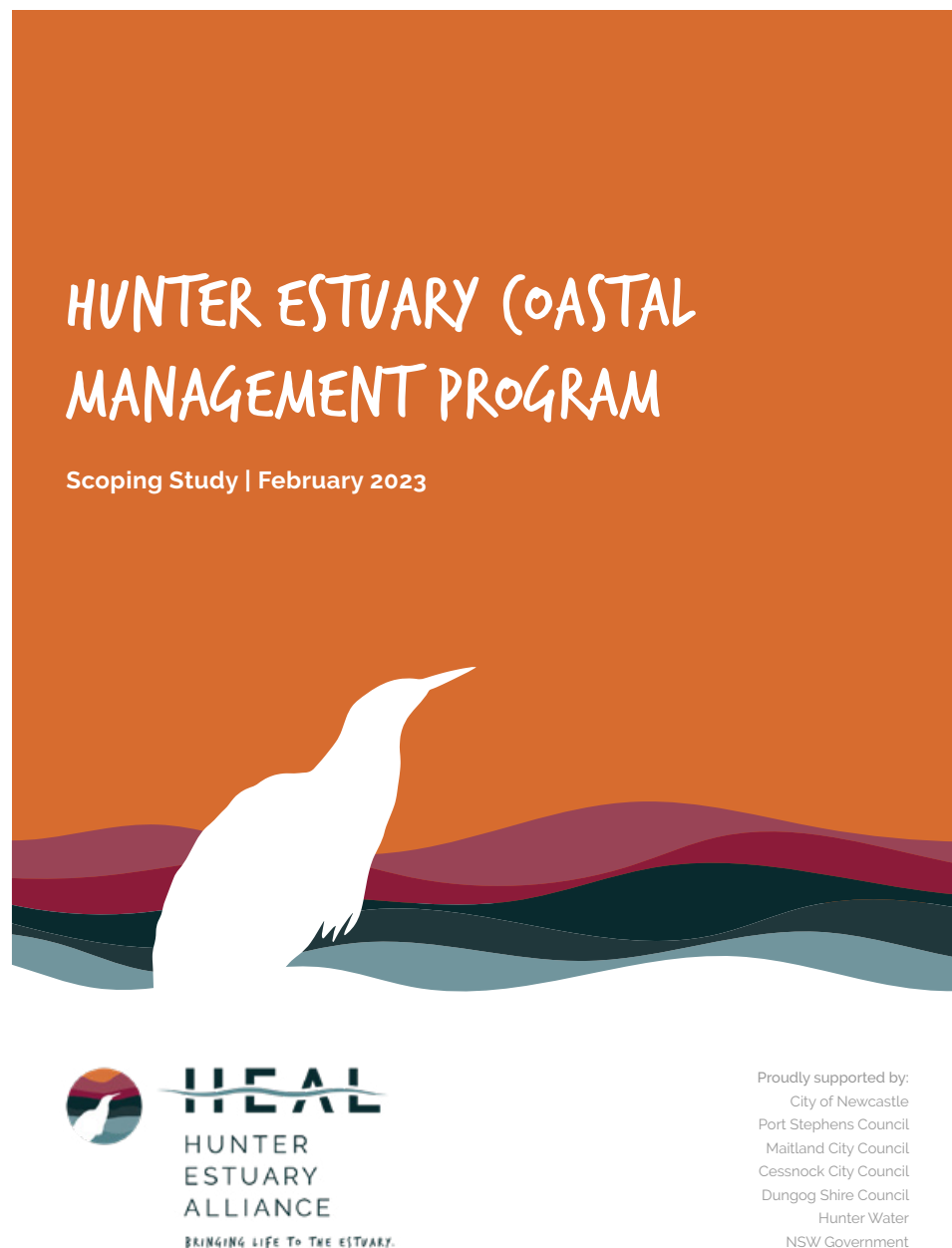


PORT STEPHENS
C O U N C I L

INDEX

Item No	Attach. No	Attachment Title	Page No
2	1	STAGE 1 HUNTER ESTUARY COASTAL MANAGEMENT PROGRAM - SCOPING STUDY.	4
3	1	HINTERLAND PLACE PLAN ENGAGEMENT REPORT.	69
3	2	DRAFT HINTERLAND PLACE PLAN.	144

ITEM 2 - ATTACHMENT 1 STAGE 1 HUNTER ESTUARY COASTAL
MANAGEMENT PROGRAM - SCOPING STUDY.





ACKNOWLEDGEMENT OF COUNTRY

We acknowledge the Traditional Owners and Custodians of the Hunter Estuary and its catchments.

The Councils of Maitland, Newcastle, Port Stephens, Dungog and Cessnock, Hunter Water and Hunter Local Land Services, pay respect to all Aboriginal Elders, past, present and future with a spiritual connection to these lands.

Our Councils recognise the vast knowledge the Traditional Owners provide to the management of the Hunter Estuary and thank them for their support in the development of the coastal management program.

ABOUT THE SCOPING STUDY

**The Scoping Study is written using
a two-stage process of Stage 1A and 1B.**

Stage 1A is Hunter River Estuary Coastal Management Program - Stage 1A Scoping Study by Umwelt Environmental & Social Consultants, November 2021. The compiled scoping study comprising of sections Stage 1B was developed by Deanne Nelson-Pritchard - Maitland City Council October 2022.



This project was supported by the NSW Government's
Coast and Estuary Management Program.



TABLE OF CONTENTS

I'M INTERACTIVE

Click the section's name to navigate to that topic.

01

Introduction

- 1.1 Purpose of a Coastal Management Program
- 1.2 Purpose of the Scoping Study
- 1.3 Existing Management Plans
- 1.4 Hunter Estuary Alliance

02

Vision & Objectives

03

Scope of the CMP

- 3.1 Mapped Hunter Estuary area
- 3.2 Coastal zones
- 3.2.1 Coastal wetlands and littoral rainforest area
- 3.2.2 Coastal Vulnerability Area
- 3.2.3 Coastal Environment Area
- 3.2.4 Coastal Use Area
- 3.3 Components of the Estuary

04

Current state of the Hunter Estuary

- 4.1 Climate
- 4.2 Population
- 4.3 Heritage
- 4.3.1 Indigenous Heritage
- 4.3.2 Non-Indigenous Heritage
- 4.4 Sediment Compartments
- 4.5 Water Quality
- 4.6 Estuary Health
- 4.7 Estuary Wetlands
- 4.7.1 Ramsar Wetlands
- 4.7.2 Floodgates and Wetland Rehabilitation
- 4.7.3 Other Wetland and Riparian Communities

05

Review of current management Practices and arrangements

- 5.1 CZMP Implementation

06

Identification of roles and responsibilities – Governance

07

Engagement, Values, Outcomes and Issues

- 7.1 Stakeholder Engagement – Value Identification
- 7.2 Outcome – A Healthy Estuary
- 7.3 Objectives meeting Outcomes

08

Strategic context

- 8.1 Strategic Aspects of environmental context
- 8.1.1 Coastal Processes and Hazards
- 8.1.1.1 Coastal Hazards
- 8.1.1.2 Hunter Estuary Hydrodynamic Model
- 8.2 Summary- Strategic Context that Differentiates the Hunter

09

Preliminary risk assessment

- 9.1 Hunter Estuary Issues
- 9.1.1 Integration – Key Issues for the Hunter Estuary CMP
- 9.2 Gap analysis
- 9.2.1 Knowledge Gaps
- 9.2.2 Knowledge Transfer Gaps
- 9.2.3 Limitations in the Evidence Base
- 9.3 Stage 2 Research

10

Community engagement strategy -Stage 2-4

11

Preliminary business case

12

Staging of the CMP development

01 APPENDIX

CZMP Implementation

02 APPENDIX

Preliminary risk assessment

03 APPENDIX

Hunter Estuary CMP Community Stakeholder Engagement Strategy

1.0 INTRODUCTION

The Hunter River is iconic in that it defines a region and as it passes through a variety of towns and properties is a community focal point for aesthetics, recreation and livelihoods.

The Hunter Estuary, floodplain, wetland and tributary catchments are of cultural significance to indigenous communities and as traditional owners and custodians of the estuary. Australia's first people provide the valuable contribution of knowledge, management and spiritual beliefs.

The Hunter Estuary, where the river meets the sea and at the juncture of two bioregions, is one of the largest and biologically diverse in New South Wales, reaching further inland than any other estuary and one of the largest catchments being 21,267 km². The Hunter River is a significant economic zone with Newcastle being one of Australia's major ports contributing \$26 billion to the National Economy every year. It is also a significant region for agriculture, coal mining, research and development and tourism.

The Hunter Estuary is one of the most complex estuaries in NSW. Subject to a range of pressures from mining, agriculture, industry and urbanisation, the estuary also provides a home to internationally

important shorebirds, wetlands and a variety of threatened species and ecological communities. The Estuary provides ecosystem services that support community economic, social, physical and spiritual wellbeing whilst also being sensitive to such risks as floods and sea level rise.

The Hunter Estuary is a significant landscape feature that contributes to the identity of regional communities and the amenity of the region. The estuary will continue to be a growing focus for recreational activities with an increasing local population and visitors to the region undertaking activities including fishing, boating, swimming, bird watching, cycling, sightseeing and walking.



8

1.1 PURPOSE OF A COASTAL MANAGEMENT PROGRAM

The purpose of a Coastal Management Program (CMP) is to set the long-term strategy for the coordinated management of the coastal zone with a focus on achieving the objects of the Coastal Management Act 2016 (CM Act) in accordance with the NSW Coastal Management Manual 2018.

The process of developing and implementing a CMP is an important strategic opportunity for Councils and public authorities to work together in an 'Estuary Alliance'. This alliance aims to achieve shared objectives and overcome key constraints to coordinated, effective and sustainable management of the Hunter Estuary for the social, cultural, and economic wellbeing of the community now and into the future.

The Coastal Management Manual 2018 recommends that a five-stage risk management process for the preparation and implementation of a CMP be followed.

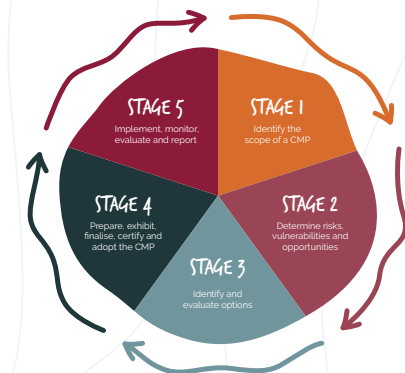


Fig 1 (Right): Five stages of the coastal management program development

1.2 PURPOSE OF THE SCOPING STUDY

Stage 1 of the CMP process is the development of the Scoping Study- this document.

The scoping study reviews plans, policies and guidelines to identify current management progress of issues relating to the Hunter Estuary since the certification of the existing Hunter Estuary Coastal Zone Management Plan. This stage is an opportunity to review the governance of the estuary and come to an

agreed understanding of current issues, risks and gaps relating to the system. This document identifies the focus of the new CMP and guides the development of key priority projects for the management of the Hunter Estuary.

[< BACK TO CONTENTS](#)

9

1.0 INTRODUCTION

1.3 EXISTING MANAGEMENT PLANS

The scoping study is required to consider the effectiveness of current management practices and arrangements for the Hunter Estuary. A review was undertaken of strategic plans and documents as provided below to provide context of activities, proposed actions and direction of key stakeholder agencies.

- » Hunter Estuary Zone Coastal Management Plan was certified in 2018 and provides actions for remediation of the estuary. Certification of this plan will end December 2023 and will be replaced by the CMP.
- » NSW Local Land Services Local Strategic Plan Hunter 2021- 2026 defines the specific actions and priorities tailored to meet the issues, risks and opportunities that characterise communities, industries and landscapes of the region.
- » Hunter Regional Plan 2036 (NSW Department of Planning and Environment, 2016). The Plans vision acknowledges the opportunities provided by natural resources and strong communities and sets the following regionally focused goals:
 - A strong and dynamic regional economy
 - A healthy environment with pristine waterways
 - Strong infrastructure and transport networks for a connected future
 - Attractive and thriving communities
- » Greater Newcastle Metropolitan Plan 2036 (NSW Department of Planning and Environment, 2018). The Plan sets out strategies and actions that will drive sustainable growth in the Greater Newcastle area which includes, Cessnock, Lake Macquarie, Maitland, Newcastle and Port Stephens communities.
- » Each Council has developed a Local Strategic Planning Statement and Local Environmental Plan along with planning documentation for the actions in the Local Government Areas (LGAs) derived from their Community Strategic Plans.
- » Hunter Wetlands National Park Plan of Management (NSW Department of Planning, Industry and Environment, 2020) supports the protection of this significant environmental asset.
- » Lower Hunter Water Security Plan (NSW Department of Planning and Environment, April 2022) is a whole of government approach to ensuring the region has a resilient and sustainable water future for the Hunter community.

1.4 HUNTER ESTUARY ALLIANCE (HEAL)

The Hunter Estuary Alliance is a group of influential government entities in the Hunter Region that are uniting efforts to "heal the estuary". United as government working together, HEAL is directed by:

- CITY OF NEWCASTLE
- PORT STEPHENS COUNCIL
- MAITLAND CITY COUNCIL
- CESSNOCK CITY COUNCIL
- DUNGOO SHIRE COUNCIL
- HUNTER LOCAL LAND SERVICES
- HUNTER WATER
- DEPARTMENT OF PLANNING & ENVIRONMENT

HEAL provides a platform for all stakeholders associated with the Hunter Estuary to work together towards dedicated projects to the betterment of estuary health; to drive development of resilience to the

changing climate; and find balance in the complexity of multiple demands of the river. As progress occurs within estuary management additional agencies may be included into HEAL to ensure effective communication.



[< BACK TO CONTENTS](#)

11

2.0 VISION AND OBJECTIVES

The Hunter Estuary is celebrated for its cultural significance, important ecosystems and the diversity of activities it supports. The people of the Hunter connect with the Estuary and are united in their stewardship of the Estuary for future generations. The Hunter Estuary is flourishing, resilient to change and rich in natural beauty.

- » Protect and enhance natural estuary processes and environmental values through restoration and rehabilitation.
- » Support the strategic economic importance of the Hunter Estuary.
- » Facilitate ecologically sustainable development
- » Maintain and enhance public access, amenity and safe use recognising the benefits that nature brings to human health and wellbeing.
- » Mitigate current and future risks from coastal hazards and climate change to improve resilience of the estuary.
- » Acknowledge, respect and protect indigenous communities' spiritual, social and economic use.
- » Enhance community stewardship of the estuary through consultation and engagement.

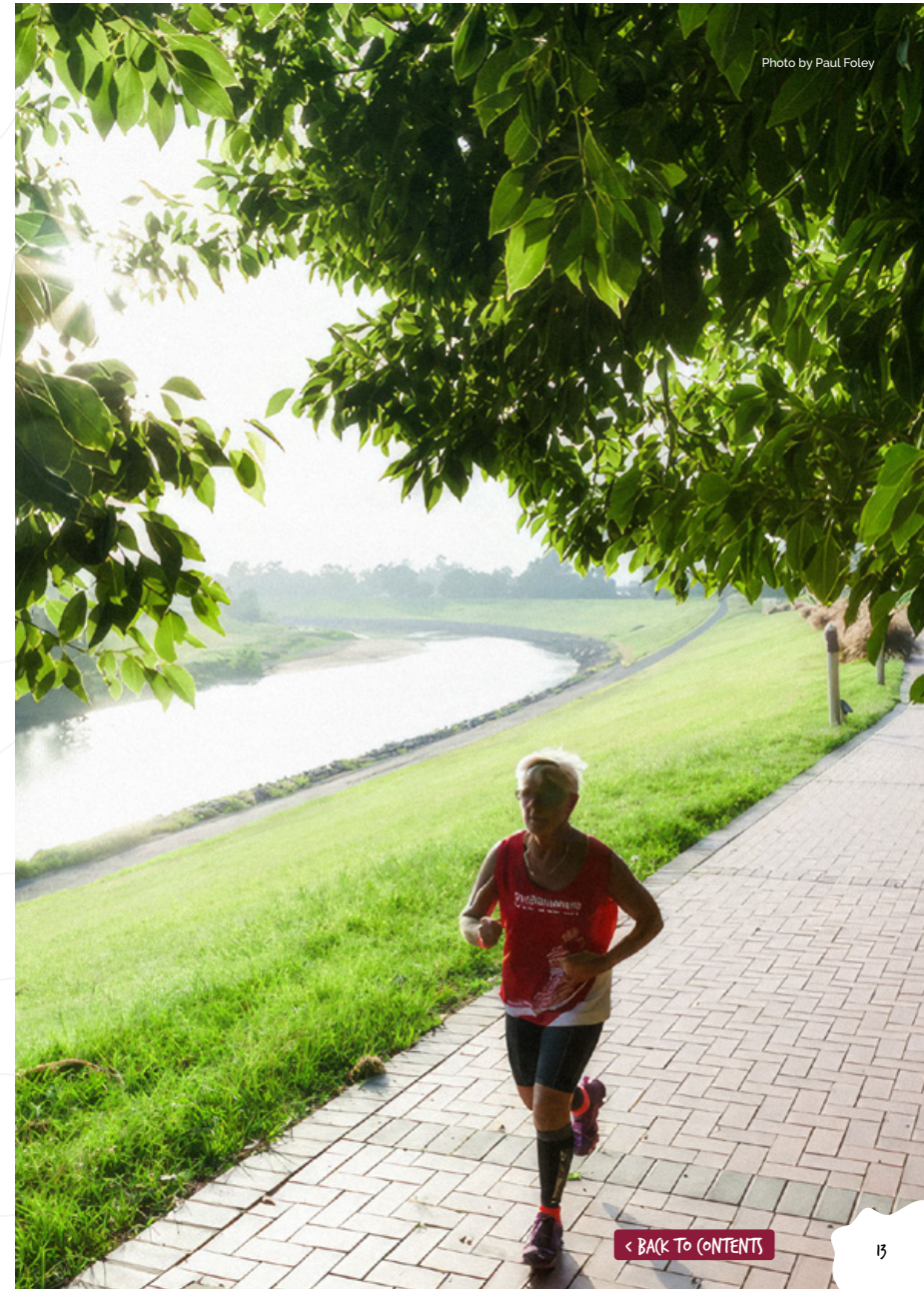


Photo by Paul Foley

3.0 SCOPE OF THE CMP

An estuary is a coastal water body where freshwater runoff from the land meets the saltwater of the sea. The reach of the estuary is defined by the extent of the tidal influence from the mouth entrance at the ocean up the rivers and tributaries.

The Hunter is a large barrier river estuary, and the CMP area extends from the mouth of the Hunter River at Newcastle Port to the length of the mapped coastal area. The area does not include Little Beach and Horseshoe Beach which are covered by the Southern Beaches Coastal Management Program being developed by City of Newcastle and whilst it includes the inland area of Stockton,

the Stockton beach area is covered by the Stockton Coastal Management Program- City of Newcastle (Royal Haskoning DHV, Aug 2020).

Whilst the Newcastle Port is part of the study area it is recognised that the SEPP (Three Ports) 2013 outlines the zoning boundaries which provide development provisions within the environmental planning instrument.

3.1 MAPPED HUNTER ESTUARY AREAS

The extent of the Hunter Estuary is mapped as 65 kilometres along the Hunter River to Oakhampton within close proximity to Melville Ford Bridge, 75 kilometres from the ocean along Paterson River to Gostwyck Bridge and 46 kilometres from the ocean along the Williams River to the Seaham Weir.

Fig 2 (right): Mapped Hunter Estuary extent



3.2 COASTAL ZONES

The State Environmental Planning Policy (Resilience and Hazards) 2021 (SEPP) outlines a range of planning and development controls that aim to preserve and protect sensitive coastal environments, manage risk from coastal hazards and support appropriate

development. The SEPP identifies four coastal management areas that when combined define the coastal zone and the spatial extent of the CMP. Figures 3-6 provide the mapped area by estuary reach.

3.2.1 COASTAL WETLAND AND LITTORAL RAINFOREST AREA

State Environmental Planning Policy (SEPP) No.14 - Coastal Wetlands and State Environmental Planning Policy No. 26 - Littoral Rainforests are replaced by the Resilience and Hazards SEPP 2021, which continues to provide protection for coastal wetlands and littoral rainforests.

Mapping of coastal wetlands has been updated by NSW Government since their original mapping in 1985, although there is provision to propose additional areas to be included if strategic assessment suggests that their inclusion will assist estuary health. The mapped coastal wetland areas display a range of hydrological and floristic characteristics, include estuarine and freshwater wetlands, and provide important habitat for a range of species and, when healthy, can assist with estuarine dynamics.

Littoral Rainforest have been managed by State Environmental Planning Policy's since 1988. These areas are generally closed forests, the structure and composition of which is strongly influenced by its proximity to the ocean. These areas have been impacted heavily by urban development associated with increasing coastal populations and are considered an Endangered Ecological Community in NSW.

No Littoral Rainforest areas have been mapped in the Hunter Estuary reach, however significant remnants of floodplain rainforest exist within the CMP area. Revised mapping and reestablishment of littoral rainforest could be investigated through the CMP.

The CM Act management objectives for the coastal wetlands and littoral rainforests area are:

- » to protect coastal wetlands and littoral rainforests in their natural state, including their biological diversity and ecosystem integrity.
- » to promote the rehabilitation and restoration of degraded coastal wetlands and littoral rainforests.
- » to improve the resilience of coastal wetlands and littoral rainforests to the impacts of climate change, including opportunities for migration.
- » to support the social and cultural values of coastal wetlands and littoral rainforests.
- » to promote the objectives of State policies and programs for wetlands or littoral rainforest management.

3.0 SCOPE OF THE CMP

3.2.2 COASTAL VULNERABILITY AREA

The Coastal Vulnerability Area is land which is subject to current and future hazards as defined in the CM Act. The intent of the development controls for this area is concerned with managing risks to human life, infrastructure, and public and private property that may be impacted by "coastal hazards" as defined by the CM Act.

Management objectives are noted in the CM Act for the coastal vulnerability area, however, no mapping has been provided in the SEPP Resilience and Hazards to identify these areas.

Coastal Hazards in an estuary as they are defined by the CM Act would extend to:

- » Tidal inundation
- » Coastal inundation
- » erosion and inundation of foreshores caused by tidal waters and the action of waves, including the interaction of those waters with catchment floodwaters, management



16

3.2.3 COASTAL ENVIRONMENT AREA

The coastal environment area is identified and mapped as land containing coastal features such as coastal waters, estuaries, coastal lakes, coastal lagoons, and the land adjoining those features.

The CM Act management objectives for coastal environment area are:

- » To protect and enhance the coastal environmental values and natural processes of coastal waters, estuaries, coastal lake/s and coastal lagoons, and enhance natural character, scenic value, biological diversity and ecosystem integrity,
- » To reduce threats to and improve the resilience of coastal waters, estuaries, coastal lakes and coastal lagoons, including in response to climate change
- » To maintain & improve water quality & estuary health
- » To support the social and cultural values of coastal waters, estuaries, coastal lakes and coastal lagoons
- » To maintain the presence of beaches, dunes and the natural features of foreshores, taking into account the beach system operating at the relevant place
- » To maintain and, where practicable, improve public access and use of beaches, foreshores, headlands and rock platforms.

3.2.4 COASTAL USE AREA

The coastal use area is identified as land adjacent and buffering coastal features including coastal waters, estuaries, coastal lakes, coastal lagoons where development is or may be carried out (at present or in the future).

The CM Act management objectives for coastal use area are:

- » to protect and enhance the scenic, social and cultural values of the coast by ensuring that -
 - the type, bulk, scale and size of development is appropriate for the location and natural scenic quality of the coast, and
 - adverse impacts of development on cultural and built environment heritage are avoided or mitigated, and
- urban design, including water sensitive urban design, is supported and incorporated into development activities, and
- adequate public open space is provided, including for recreational activities and associated infrastructure, and the use of the surf zone is considered.
- » to accommodate both urbanised and natural stretches of coastline.

[< BACK TO CONTENTS](#)

17

3.0 SCOPE OF THE CMP

3.3 COMPONENTS OF AN ESTUARY

For the purposes of this scoping study the spatial extent will remain the mapped coastal area in accordance with the SEPP and DPE advice. However, it is important to recognise that the area of influence, and impact to the estuary is far greater than the mapped area.

During the coming stages of the CMP these influences will be investigated and if areas that are unmapped have large impacts to estuary health the opportunity will be reviewed to:

- » map further areas in accordance with a planning proposal to amend the SEPP, or
- » look for plans/policies or a body of work that will integrate with the CMP to manage these influences.

To provide integrated management of the estuary, technical research in Stages 2 and 3 may investigate issues in the following:

- » the mapped coastal area
- » the floodplain and floodplain wetlands associated with the estuary, including Woodberry wetland, Tarro wetland, Barties Creek wetlands, Saltwater Gully wetlands, Four Mile Creek wetlands (also known as Tenambit Wetlands), Wentworth Swamp and wetlands on the floodplain below the natural tidal limit of Wallis Creek.

- » Fullerton Cove and land south of Cabbage Tree Road (Tomago) or west of Nelson Bay Road at Fern Bay
- » Hexham Swamp and its tributary creeks east of the Pacific Motorway (e.g. Minmi Creek), noting that these catchments include intensive residential development at Maryland and Fletcher.
- » catchments of tributaries that flow directly to the estuary. These include catchments flowing to the upper estuary (e.g. Wallis Creek, Swamp Creek, Four Mile Creek), mid estuary and lower Williams River (e.g. Purgatory Creek, Scotch Creek, Francis Greenway Creek, Windeyers Creek) and lower estuary (e.g. Cottage Creek, Throsby Creek, Ironbark Creek).
- » tributary catchments that join the Paterson River downstream of the tidal limit.
- » those parts of urban areas which drain to the Hunter River or its estuarine tributaries.

Further advice is provided in the DPE Factsheet Coastal Management Programs and integration with catchment management 2022,

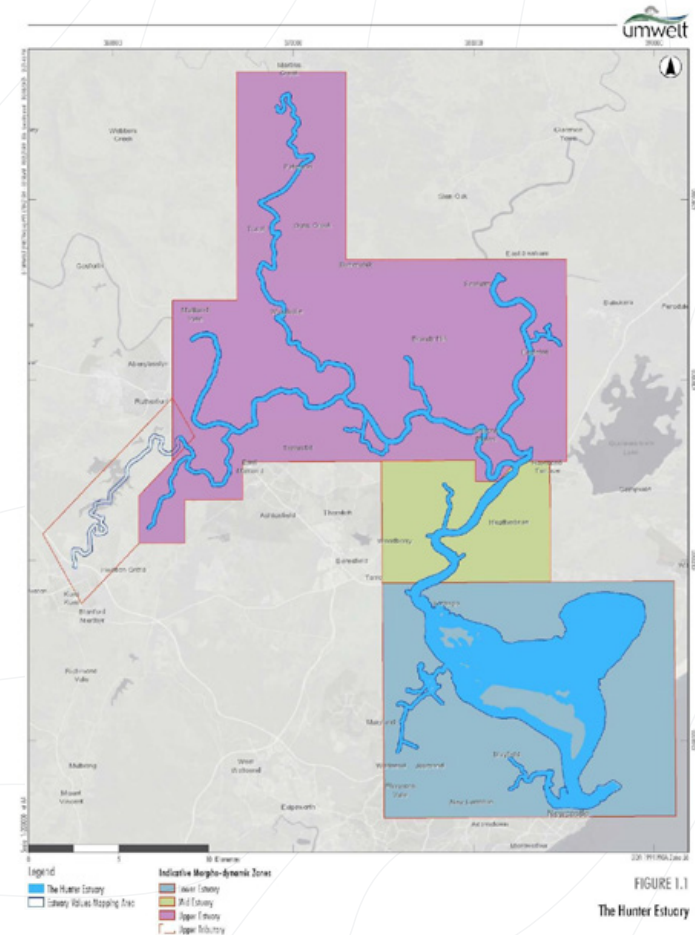


Fig 3: Umwelt's Stage 1A Graphical interpretation of the estuary zones based on WRL's Hydrodynamic model reflecting morphology and processes of the estuary.

3.0 SCOPE OF THE CMP

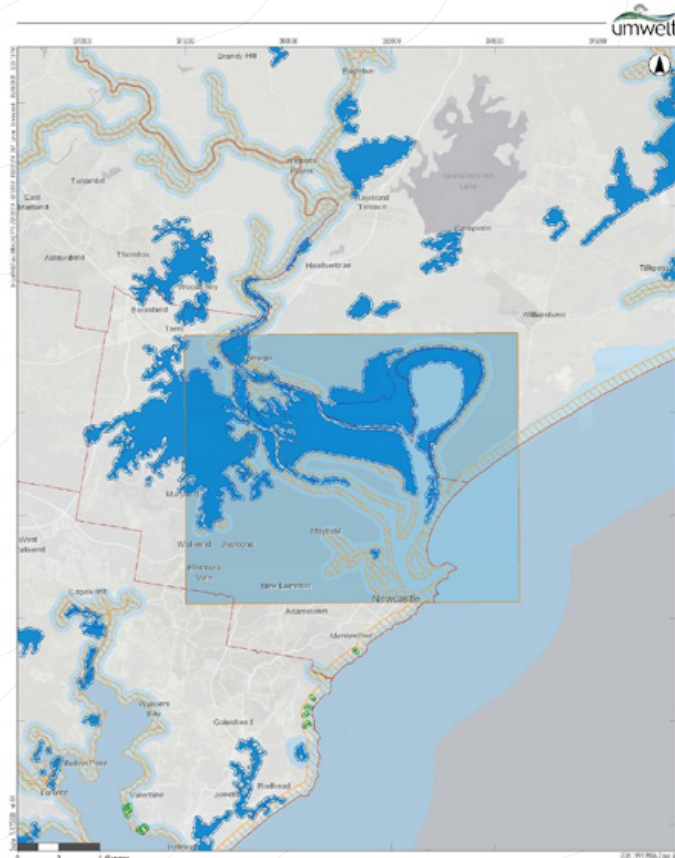


FIGURE 4.1
Coastal Management SEPP Mapping - Lower Estuary

Fig 4: Coastal Management SEPP Mapping - Lower Estuary

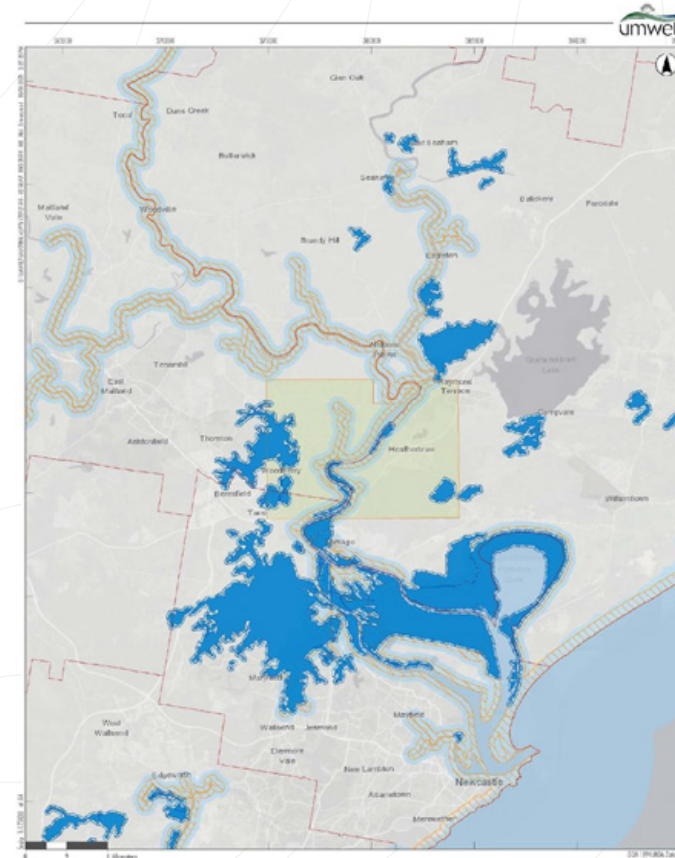


FIGURE 4.2
Coastal Management SEPP Mapping - Mid Estuary

Fig 5: Coastal Management SEPP Mapping - Mid Estuary

3.0 SCOPE OF THE CMP

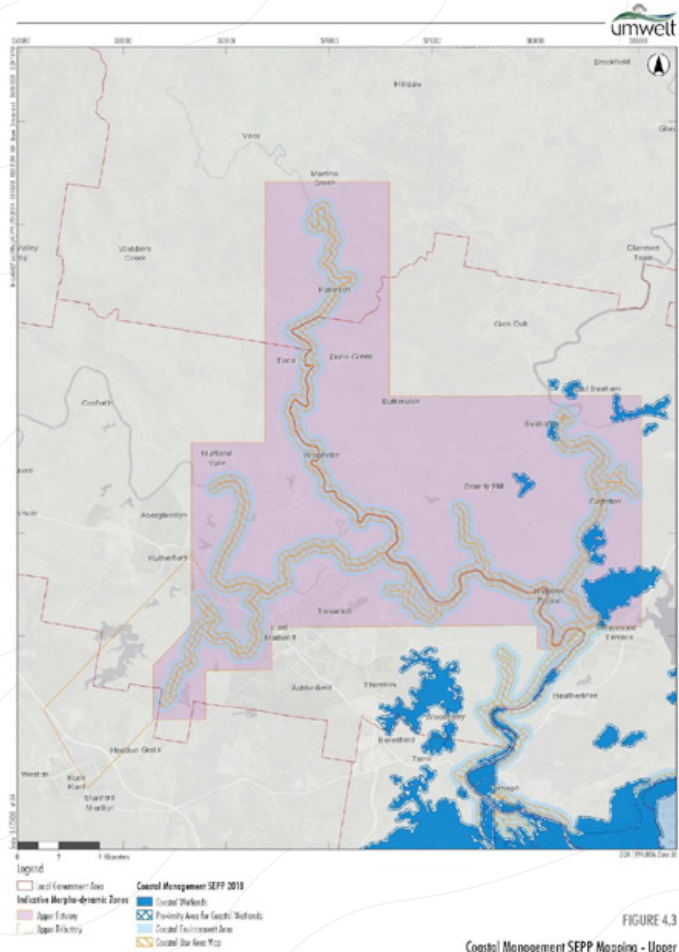
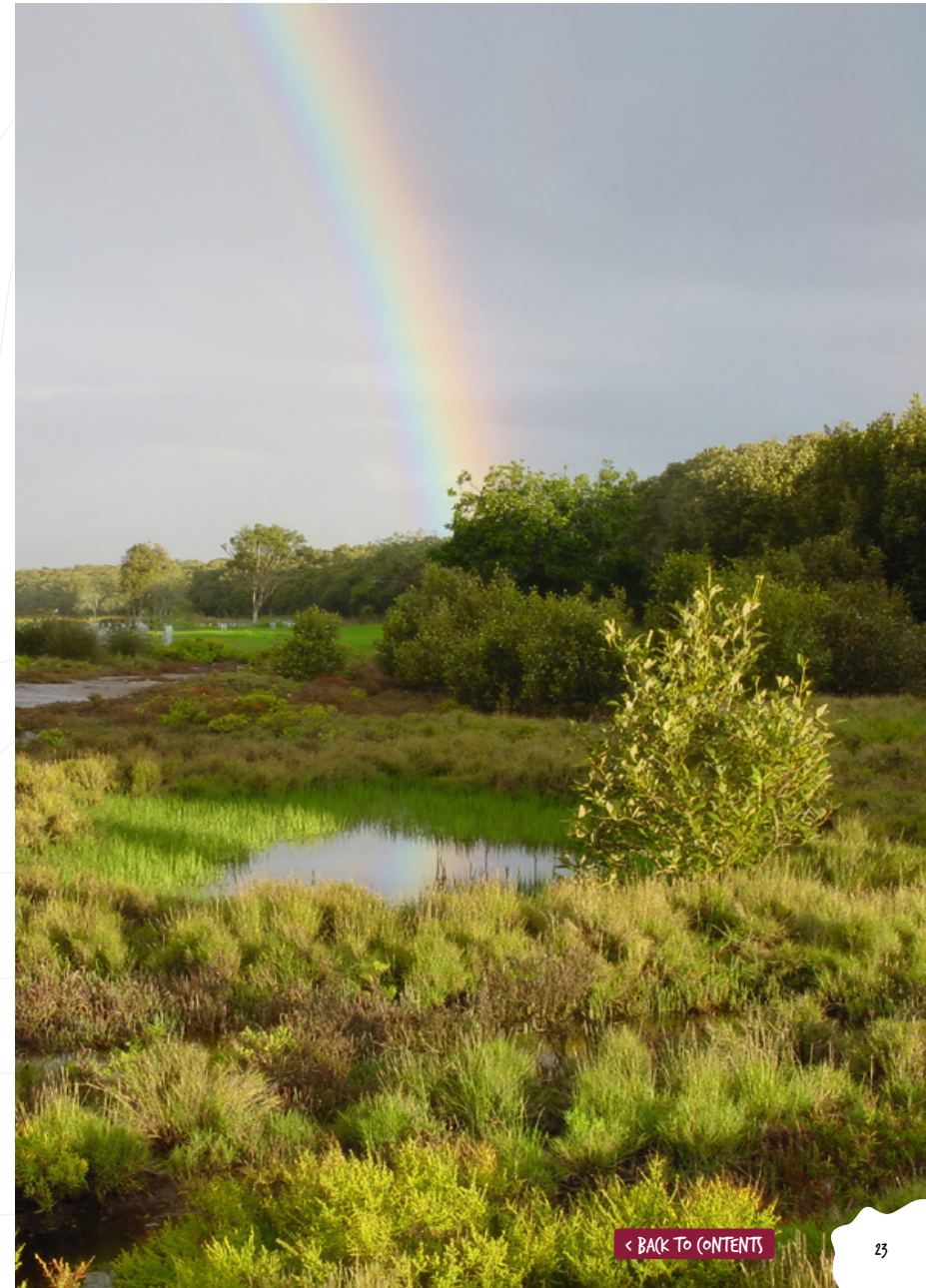


Fig 6: Coastal Management SEPP Mapping - Upper Estuary



[< BACK TO CONTENTS](#)

4.0 CURRENT STATE OF THE HUNTER ESTUARY

Management of the Hunter Estuary illustrates, more than most estuaries, the complex history and diverse priorities of coastal management in Australia. Before the arrival of British convicts and settlers in the early nineteenth century, the Hunter coastline, estuary and catchment were looked after by Awabakal, Worimi and Wonnarua people.

Transformation of the morphology of the estuary, and its relationship with the open coast and its catchment, commenced from the early nineteenth century with ongoing and cumulative impacts especially as a result of clearing riparian and floodplain forest.

Today, parts of the estuary have national and international significance, including the Hunter Estuary Wetlands Ramsar site and one of Australia's largest ports. Newcastle is the State's largest regional city. The Hunter Valley Flood Mitigation Scheme is a major engineering asset, unique in NSW. It provides protection for settlements and land use but has impacts on the riparian zone and hydrodynamic character of the estuary. Urban population is dramatically increasing creating demands and impacts across the region. Water quality is considered poor

in the freshwater tidal mid estuary area and good in the lower estuary due to good connectivity with the oceanic area resulting in frequent flushing.

Looking forward, the strategic context of the Hunter Estuary is dynamic, including new science; high regional development projections and economic transition; ongoing adjustments to climate change and sea level rise; and clear evidence of impacts of legacy and continuing pollutant sources on the health of the estuary.

Community values are changing, recognising environmental impacts and the linkage of healthy ecosystems to human health, and the desire to interact with the estuary and river.

See next page for overview of the timeline of major management interventions, leading to the first whole of estuary plan (CZMP 2017, certified 2018), progress towards implementation and steps towards a CMP.

AN OVERVIEW OF APPROACHES TO HUNTER ESTUARY MANAGEMENT

Historical management intervention

Pre 1800	Aboriginal stewardship of country including the Hunter coast, estuary and catchment
1820s	Changes to the entrance area to the estuary, including Macquarie Pier, removal of oyster reefs for colonial lime resources
19th Century	Land reclamation for industrial and port lands around the lower estuary, construction of full entrance training works; clearing, floodplain drainage and protection works across the entire estuary and floodplain
20th Century	Major industrial development and pollution of the lower estuary; dredging and extensions of port facilities; expansion of urban development; development of reticulated sewage services, treatment plants and point source discharges. Riparian land clearing, and bank erosion treatments throughout the catchment and estuary; major modifications to catchment flow patterns. Extension of entrance breakwalls and major channel dredging in the Port to allow access by larger ships
1950s	Hunter Flood Mitigation Scheme commenced (response to the 1955 floods)
1984	Parts of the Hunter Estuary and wetlands listed as a Ramsar site – wetlands of international importance
1989 – now	Major estuary management and rehabilitation projects such as Throsby Creek, Hexham Swamp, Kooragang wetlands including Ash Island and Stockton Sandspit, Tomago Wetland, remediation of contaminated reaches of the South Arm of the Hunter River and establishment of Hunter Wetlands National Park

Key milestones in modern planning processes

2002	Integrated Catchment Management Plan for the Hunter Catchment
2003	Estuary Processes Study
2009	Estuary Management Study
2009	Coastal Zone Management Plan (CZMP) adopted by the Councils of Newcastle, Port Stephens and Maitland
2017	Review for certification under CP Act 2016
2018	CZMP certified with 25 management objectives
2018	CM Act commenced
2019	Completion of predictive numerical model of the Hunter Estuary
2020	Maitland Council – strategic advice on requirements and process
2021	Project Steering Committee to establish governance model, funding and progress Stage 1

4.0 (CURRENT STATE OF THE HUNTER ESTUARY

4.1 CLIMATE

The Hunter Region is classified as sub-tropical to temperate with an annual rainfall across the region averaging 870 mm per year. Rainfall varies across the region with the coastal and mountainous areas of the region receiving higher rainfall than the inland upper Hunter. It is mild to warm in summer throughout much of the region and winters are cool with mountainous areas and inland receiving the colder temperatures at that time.

The Hunter Region has been experiencing fluctuations to the norm in recent times. The Hunter experienced the worst drought on record between 2017 and 2020 with water restrictions needing to be put in place for the first time in a number of years. From 2020 until 2022 the Hunter has experienced heavy rainfall and floods associated with La Nina climatic conditions. Heatwaves are also becoming more prevalent.

Climate projections suggest that the Hunter is expected to experience an increase in all temperature variables for the near future (2030) and far future (2070). Projections forecast there are to be more hot days and fewer cold nights. Rainfall is projected to decrease in spring and winter and to increase in autumn (OEHL, 2014).

Projected changes:



Fig 7: Projected Changes noted in 'Hunter Climate Change Snapshot' - Adapt NSW, Officer of Environment and Heritage (2014)

PROJECTED TEMPERATURE CHANGES	
Maximum temperatures are projected to increase in the near future by 0.4-1.0°C	Maximum temperatures are projected to increase in the far future by 1.6-2.6°C
Minimum temperatures are projected to increase in the near future by 0.5-0.9°C	Minimum temperatures are projected to increase in the far future by 1.5-2.5°C
The number of hot days will increase	The number of cold nights will decrease
PROJECTED RAINFALL CHANGES	
Rainfall is projected to decrease in spring and winter	Rainfall is projected to increase in autumn
PROJECTED FOREST FIRE DANGER INDEX (FFDI) CHANGES	
Average fire weather is projected to increase in summer, spring and winter	Severe fire weather is projected to increase in summer and spring

Communities living around estuaries are particularly vulnerable to climate change because of the number of people, residences, commercial areas, recreational facilities and transport infrastructure that are on low lying land, potentially impacted by tidal inundation and the combined impacts of catchment flooding and tidal processes in coming decades.

Sea level rise is not uniformly distributed and for NSW mean model predictions suggest a sea level rise of up to 10% above the global average (OEHL, 2018a). Modelling suggests that the Hunter River is the 6th most exposed estuary system in NSW to the impacts of sea level rise, based on the number of properties predicted to be exposed to inundation under a variety of scenarios (OEHL, 2018a). This is largely due to the extensive development that has occurred on low-lying areas adjacent to the lower estuary. Sea level rise will also affect the efficiency and effectiveness of flood plain drainage systems and the viability of low-lying agricultural land.

The potential implications of sea level rise and climate change for the Hunter Estuary therefore include:

- » higher projected storm surge and inundation levels
- » saltwater intrusion and landward advance of tidal limits within estuaries impacting agricultural enterprises.
- » landward recession of sandy shorelines
- » existing coastal gravity drainage, stormwater infrastructure and sewerage systems may become compromised over time as mean sea level rises (this is relevant to low lying urban areas such as Maryville and Carrington in City of Newcastle)

- » altered catchment flood behaviour, associated with changes to storm intensity and frequency
- » changes to drought frequency and intensity also have the potential to drive periods of very low flow into the estuary and impact on water quality
- » decrease in the level of protection provided by existing seawalls and other hard engineering structures (this applies both to structures in the lower estuary, around the harbour and tributary creeks such as Throsby Creek and Cottage Creek, and to flood infrastructure in the mid and upper estuary)
- » Changes in salinity and inundation will change the environmental growing conditions for habitat resulting in relocation of current areas such as saltmarsh and mangroves.
- » Movement of habitat further inland will have impacts to the current Ramsar site with implications to original conservation principles.



Photo by © Good Thanks Media

[< BACK TO CONTENTS](#)

27

4.0 CURRENT STATE OF THE HUNTER ESTUARY

4.2 POPULATION

The Hunter region is home to over 9% of the NSW population and is the largest growth centre outside the Sydney Metropolitan area (Regional Development Australia website 2021). Newcastle is Australia's 7th largest city.

The "Greater Newcastle Area" which includes Maitland, Raymond Terrace, Northern Lake Macquarie and Newcastle had a population of around 540,000 residents in 2016. The population of Newcastle is projected to grow by more than 41,000 people, Maitland is projected to increase by 54,800 and Port Stephens is projected to increase by 16,818 by 2040.

These projected population increases have important implications for the Hunter estuary, including:

- » higher demand for water supply, affecting flows particularly into the estuarine reaches of the Williams River.
- » increases in wastewater discharges to the estuary and its tributaries (unless diverted to recycling).
- » increases in the area of urban land, especially around the upper estuary; rapid expansion of urban areas adjacent to the floodplain to meet housing demand results in stormwater management issues, flash flooding and likely further impacts on water quality and ecosystem health in the upper estuary.

- » increasing demand for lifestyle and liveability, and associated access to the banks and waterway of the Hunter estuary, for recreational uses. This includes the potential for swimming in the upper estuary, access for kayaks and rowing, and along-bank walking routes. It may also lead to changed preferences for vegetation management and shade-providing trees along the riverbank.
- » as a 'river city', recreational and amenity access to the Hunter Estuary will be increasingly important for Maitland's growing population. There is limited council owned and managed land along the upper estuary, and this constrains access opportunities, especially along the riverbank.
- » further downstream in the navigable reaches (which are still within 15 minutes' drive of growing population centers), increased pressure on boating infrastructure such as ramps and jetties is also expected.

4.3 HERITAGE:

4.3.1 INDIGENOUS HERITAGE

The Hunter Estuary, floodplain, wetlands and tributary catchments are of cultural significance to indigenous communities, including traditional owners and the Awabakal, Worimi, Mendaribba and Karuah Local Aboriginal Land Councils. The Hunter River and the estuary have various language names, including Coquun, Myan and Coonanburra.

Aboriginal people have occupied the Hunter Valley for up to 60,000 years and a few sites with late Pleistocene dates are known from both the upper and lower Hunter.

The early European settlement of the Hunter region means there are widespread records of the economic and cultural activities of Aboriginal people in the region (e.g. see the reviews in Brayshaw 1986 and Albrecht 2000), although the resources noted in the colonial reports and art works do tend to focus on European perspectives.

Aboriginal culture in the early years of European settlement of the estuary is recorded in drawings by Lycett and others and in the records of Rev. Threlkeld. Aboriginal people living around the estuary accessed diverse fish and shellfish species, which are evidenced in records, artwork and in archaeological sites (open campsites and middens). They had access to a wide range of plant resources from the wetlands and forests that lined the middle and upper estuary. There are also grinding groove sites within the channel in the upper estuary.

Whilst the Hunter Estuary is rich in cultural value there has been loss of archaeological evidence due to a combination of factors, including:

- » many activities and tools involving plant materials are poorly preserved archaeologically
- » there have been significant channel changes along the estuary, removing areas of archaeological potential
- » large parts of the floodplain around the upper estuary rapidly accreted sediment in the nineteenth century which would have both buried evidence of Aboriginal cultural activities and changed the context and productivity of the floodplain and wetland areas
- » in the lower estuary, there has been extensive channel change and land reclamation, removing previously resource rich areas (historically, it is reported that both natural oyster reefs and midden sites were 'mined' for lime resources for the colony)
- » early Newcastle developed over the sites of Aboriginal economic, cultural and spiritual activity.

Detailed work on the cultural values of the estuary has progressed through the review of the HVFMS and forms a strong basis for further engagement and codesign of any further cultural studies with the relevant Aboriginal community stakeholders.

Photo by Paul Foley



4.0 CURRENT STATE OF THE HUNTER ESTUARY

4.3 HERITAGE:

4.3.2 HERITAGE NON-INDIGENOUS HERITAGE

Newcastle and surrounds were one of the first sites of European settlement in NSW and the Hunter Estuary includes a unique variety of historical structures and sites of local, state and national significance.

Early Colonial Heritage

- » Coal reserves at the entrance to 'Coal River', later known as the Hunter River, were reported by convicts and soldiers in 1796 and confirmed by Shortland in 1797; i.e. less than a decade after the establishment of the colony in Sydney. After an initial unsuccessful attempt, a convict and military outpost was established at the mouth of the river in 1804. The Macquarie Pier connecting Nobbys Island to the southern headland of the harbour was constructed between 1818 and 1846. Convict workers remained in Newcastle until 1855. The Coal River lumberyard, established from 1804, is of national significance. Other elements of the early settlement of Newcastle are recognised as being of at least State significance.
- » When the European settlement commenced in the lower estuary, the area featured extensive natural oyster reefs in shallow waters and the shoreline was lined with large shell middens. Oyster shell was dredged (e.g. from Fullerton Cove), mined, burnt in pits and heaps, to provide lime for the construction of buildings in Sydney and elsewhere. Shell was a major product in early colonial shipping. Removal of oyster reef and shoreline midden was one factor contributing to morphological transformation of the lower estuary, along with land reclamation, hardening of the foreshore, entrance control and navigation dredging.

- » The history of Ash Island, documented in colonial scientific studies and art works, including studies and drawings by John and Elizabeth Gould, Conrad Martens, Ludwig Leichardt and the Scott family who owned the land on the island at the time, illustrates the flora, fauna and landscape of the mid nineteenth century estuary.
- » Morpeth became the major port of the Hunter Valley between 1832 and 1890 with a regular steamer service operating in Maitland up to Paterson and down to Newcastle. Today Morpeth is a tourist destination with many of the heritage buildings remaining intact.

20th Century Industrial and Port Development

- » The heritage of the Hunter estuary illustrates and is critical to the development of Australia's industrial and maritime sectors during the twentieth century. This includes the development of the port for coal and other commodities, and the development of the BHP Steel works at Mayfield. This industrial and maritime heritage is unique to the Hunter in terms of long-term use of barrier estuaries in Australia.

4.4 SEDIMENT COMPARTMENTS

The coastal zone of the Hunter lies within a primary sediment compartment that extends from Gosford to Port Stephens (Birubi Point), a distance of 97.8km (Carvalho and Woodroffe 2015). Two secondary sediment compartments (Birubi Point to Nobbys Head and Nobbys Head to Redhead) define linked areas of the open coast.

The barrier system that separates the Hunter Estuary from the open coast is within the Birubi Point to Nobbys Headland sediment compartment, with rocky coast and smaller embayments occupying the Nobbys to Redhead compartment.

Active sediment exchange occurs between the lower parts of the Hunter Estuary and the open coast within the Birubi Point to Nobbys Headland sediment compartment (see the Stockton CMP 2020 for further information).

4.5 WATER QUALITY

The catchment of the Hunter Estuary has been highly modified by human activity and includes many land uses. The upper catchment is predominantly agricultural land with a number of large open pit coal mines whereas the mid-lower catchment includes extensive urban areas, and industrial area around the Port of Newcastle.

The Department of Planning and Environment undertake a water quality monitoring program for NSW estuaries and have recently assessed the Hunter River as having poor water quality. Reporting has ranked the Hunter Estuary as 124 out of 160 estuaries in the lower estuary and the worst water quality (in NSW) in the upper part of the estuary.

Contamination by industrial chemicals is a long-standing feature of the lower Hunter estuary. Multiple legacy sources occur around the Port of Newcastle. Risks from contamination in a section of the South Arm of the estuary have been reduced through an extensive dredging and remediation project. Legacy

contamination from historical heavy industry remains an issue in the sediments of Throsby Creek (Swanson et al., 2017).

Contamination of parts of the Hunter River and connected wetlands and groundwater by Per and Poly Fluoroalkyl Substances (PFAS) was reported in 2017 and impacts continue. This group of manufactured chemicals was used, until recently, in firefighting foams at the Williamstown RAAF Base. It has also been used at other industrial sites around the estuary. The impact of these substances on the Hunter Estuary is still under investigation and will need to be considered in future management actions.

4.0 CURRENT STATE OF THE HUNTER ESTUARY

4.6 ESTUARY HEALTH

In 2017 OEH published Health of the Hunter – Hunter River estuary report card 2016, which provided a snapshot overview of the health of the Hunter Estuary in 2014–16, based on the findings of the Lower Hunter River Health Monitoring Program and a preliminary ecological assessment.

The Hunter Estuary is not healthy now, with poor scores for:

- » turbidity (upper estuary)
- » estuary form and function (lower estuary)
- » nutrient pollution (all parts of the estuary)
- » metal contamination (mid and lower estuary)
- » microalgal growth on the bed (middle estuary)
- » sediment oxygen demand (mid estuary)
- » mangrove health (mid and lower estuary)

The report found that there has been an improvement in water quality in the lower estuary of the Hunter River in the past decade, due to significant changes in portside land use, introduction of pollution reduction programs, regulation of discharges and remediation of contaminated lands. However, ecological processes are still impaired and will take longer to recover.

OEH 2017 provides a conceptual model (Figure 8) of the pressures affecting the health of the Hunter estuary, including diffuse and point source pollution and the differential impact of pollutants in parts of the river with slow rates of tidal flushing and long residence times.

Diffuse pollution from agricultural, urban and industrial areas surrounding the estuary is substantial following rainfall in the catchment. Point source pollution from industrial sites contributes pollutants daily to the lower estuary in licensed discharges. High levels of dissolved inorganic nutrients, sediment or toxicants in estuary waters become 'stressors' on the ecosystem, as illustrated Figure 8 (See Next page).

Two interacting estuary health issues in the Hunter Estuary are suspended sediment load (and associated water clarity) and nutrient loading leading to high phytoplankton populations and eutrophication. Spatial and temporal patterns of sediments and phytoplankton are illustrated in Figure 9 and Figure 10 (See Next page).

Sediments that form the riverbed play a vital role in aquatic ecosystems. Unhealthy (nutrient loaded) sediments consume more oxygen than they produce and are unable to recycle nutrients and instead become a source of nutrients to estuarine waters. Sediments in the North Arm adjacent to the Hunter Wetlands National Park appear to be reasonably healthy.



Fig 8: Conceptual Diagram of Pressures on the Hunter River Lower Estuary



4.0 (CURRENT STATE OF THE HUNTER ESTUARY



Eutrophication

Phytoplankton growth responds to excess nutrients

Biomass is limited by residence times

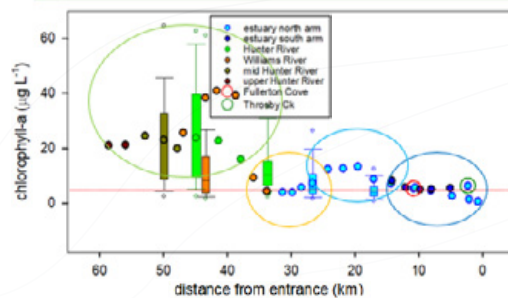


Fig 9: Tidal Circulation, Residence Time and Evidence of Eutrophication of the Hunter Estuary
Source: DPIE presentation to Stage 1A stakeholder workshop, July 2021



Floods

Very high suspended sediment concentrations and turbidity occur during floods due to inputs of eroded catchment soils

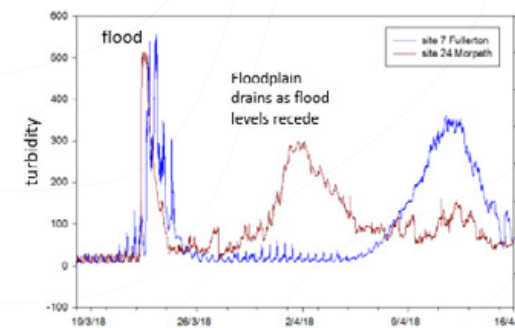


Fig 10: Suspended Sediment Transport During Floods and High Flows
Source: DPIE presentation to Stage 1A stakeholder workshop, July 2021

4.0 (CURRENT STATE OF THE HUNTER ESTUARY

4.7 ESTUARY WETLANDS: 4.3.1 RAMSAR WETLANDS

The wetland system in the Hunter Wetlands National Park is of international significance and part of the system was listed under the Ramsar Convention on Wetlands in 1984. It is one of 12 Ramsar listed wetland sites in NSW, of which four are coastal wetlands. It is protected under the Ramsar convention and the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).

The Kooragang component of the Hunter Estuary Wetlands Ramsar site is located on the North Arm of the Hunter River and covers an area of 2,926 hectares. The Ramsar site comprises:

- » the bed of Fullerton Cove
- » the northern part of Kooragang Island (including the Kooragang Dykes)
- » the eastern section of the Tomago Wetlands. The Tomago Wetlands were converted to grazing land in the mid twentieth century by drains and levees which lie to the west of Fullerton Cove. Tidal circulation to the site has been restored and the wetland rehabilitated over the last decade.
- » the fringing mangroves and islands within Fullerton Cove and part of the North Arm, as well as Stockton Sandspit and the Kooragang Dykes.

The Ramsar site is recognised because:

- » The Hunter estuary wetlands are of exceptional conservation value, containing the second largest area of mangroves in New South Wales and extensive areas of coastal saltmarsh.
- » The national park provides mudflat and saltmarsh habitat for a diversity of wildlife including 41 threatened species such as the Australasian bittern (*Botaurus poiciloptilus*), green and golden bell frog (*Litoria aurea*) and breeding habitat for the eastern freetail-bat (*Mormopterus norfolkensis*).
- » The national park provides important habitat for migratory bird species listed under international agreements, including the curlew sandpiper (*Calidris ferruginea*), sharp-tailed sandpiper (*C. acuminata*) and the red knot (*C. canutus*). It is a site on the East Asian – Australasian Flyway and is part of the Hunter Estuary Important Bird Area (DPIE, 2020a).

Table 1: Ramsar Wetlands and Strategic Context

KEY FEATURE	CONTEXTUAL ISSUES
The Ramsar wetlands and habitat for listed species are vulnerable to sea level rise	Sea level rise could change the habitat value of the Stockton sandspit and inundate the Kooragang Dykes for more time, reducing feeding and roosting space in the estuary
Wetland resilience and recovery potential	Success of the Hexham Swamp and Tomago Wetlands restoration projects is a key piece of strategic context for the Hunter Estuary as it demonstrates the resilience and recovery potential of degraded wetland habitat, provided other threats can be controlled
Wetlands illustrate the diverse sources and complex dynamics of legacy and contemporary contamination in the estuary	<p>A Formal Assessment of Change in Ecological Character was prepared for the Ramsar site in 2019 (Arcadis and Umwelt, 2019), investigating evidence that contamination has impacted on the Ramsar components, processes and services (CPS) of the Kooragang component of the Ramsar site since its listing.</p> <p>The Formal Assessment considered accumulation profiles (in waters and sediments), the persistence of toxicity profiles and potential for bioaccumulation of a wide range of chemicals, including nutrients, sediment, metals and heavy metals, PAH and other petroleum hydrocarbons, pesticides, PFOS/PFAS and other emerging contaminants such as hormones, antibiotics and microplastics. These contaminants derive mainly from industry, but also from agriculture and urban stormwater.</p> <p>The Formal Assessment found that for most Ramsar CPS, a change associated with the impacts of contaminants is considered likely but there is insufficient evidence for a conclusive determination. As the site manager, NPWS is considering further data collection and analysis opportunities to clarify the trends in contamination and implications for the Ramsar values of the site.</p>
Complexity and the value of quality science	The interactions of hydrodynamic processes, pollution control, temporal change and stakeholder responsibilities that affect the Ramsar CPS illustrate why complexity is critical strategic estuary context for the Hunter Estuary
The importance of partnerships across all levels of government and between industry, universities, citizen scientists and government	Managing and protecting Ramsar CPS will require partnerships with Defence, DAW/E, and DPE EES, as well as industry, university and community organisations illustrates issues to be considered in the development of an effective governance model for managing the estuary

4.0 (CURRENT STATE OF THE HUNTER ESTUARY

4.7 ESTUARY WETLANDS:

4.7.2 FLOODGATES AND WETLAND REHABILITATION

There are 176 floodgates on the Hunter River and its tributaries, most of which were constructed as part of the HVFMS (Winning and Saintilan, 2009). The role of floodgates in preventing or restricting tidal flows and controlling floodwaters (in combination with land clearing) has also led to significant changes in vegetation. In Hexham Swamp alone, from 1971 to 2005, the area of mangroves had decreased by 94%, saltmarsh by 92% and brackish swamp by 98% (Winning and Saintilan, 2009).

Rehabilitation projects to reverse these impacts have been successful in Hexham Swamp, following the opening of the floodgates on Ironbark Creek, and in the Tomago wetlands, following modification of floodgates at Fullerton Cove. The successful wetland rehabilitation projects create habitat and biodiversity value (Tomago wetland is within a Ramsar site) but also have measurable benefits for fishery productivity (Boys 2015, Boys and Pease 2016). The drivers, process and benefits of these wetland projects are summarised in Coast Adapt 2015:

https://coastadapt.com.au/sites/default/files/case_studies/CSO4_Coastal_adaptation_Hunter_River.pdf

DPE has recently completed an assessment of tidal inundation risks and opportunities as part of the review of the HVFMS. This assessment investigated controlled tidal flushing to increase in-drain salinity levels for the control of freshwater weeds and exotic vegetation. This management option has been successfully implemented in several locations across NSW, including at Tomago wetlands and Kooragang Island.

In addition to improving the hydraulic efficiency of the drains, tidal flushing has added co-benefits including a reduction of pesticide use, the creation of intertidal habitat, the neutralisation of acid-sulfate soil runoff and the reduction of fish barriers (Water Research Laboratory UNSW, 2020).



[< BACK TO CONTENTS](#)

39

4.0 CURRENT STATE OF THE HUNTER ESTUARY

4.7 ESTUARY WETLANDS:

4.7.3 OTHER WETLAND AND RIPARIAN COMMUNITIES

Diverse wetland communities were reported in the Estuary Processes Study (MHL 2003), based on mapping available at that time. Councils, DPI Fisheries, DPE (formerly OEH) estuary science, and Hunter LLS have conducted more recent mapping of selected wetland and riparian communities in the estuary. It is important to note that not all the wetlands on the floodplain of the Hunter Estuary are included in the CM SEPP, because of the width of the floodplain and the diversity of wetland types.

Communities include:

- » estuarine wetlands such as mangrove and saltmarsh, more recently mapped in the CM SEPP.
- » freshwater wetlands on the floodplain (mostly highly modified) including backswamps and cut off lagoons associated with former channel alignments of the Hunter River. Examples include part of Hexham Swamp, part of the Shortland Wetlands, Woodberry Swamp and Irrawang Swamp. However, there are extensive areas of ephemeral freshwater wetland across the floodplain of the middle and upper estuary, where standing water accumulates in old channels or backswamps after extended rain.
- » WRL 2016 completed a detailed study of the hydrology of Woodberry Swamp, one of the largest (currently) freshwater wetlands. The swamp has a local catchment of 4350 ha and includes permanent open water, intermittently inundated wetlands and pasture areas. It is connected to the Hunter River via Greenways Creek. The hydrology of the wetland is controlled by drains, floodgates and levees (including some in poor condition which constrain internal drainage processes), stormwater runoff from expanding urban areas and licensed discharges from industry. The licensed industrial discharge accounts for over 85% of N and over 90% of P load in the Woodberry Swamp catchment and is licenced to discharge 2.3 Mega Litres per day directly into the swamp. This is a key factor (along with drainage changes) in the changes to vegetation communities. The wetland and pasture areas are impacted by invasive vegetation species and are also a source of deoxygenated 'blackwater' events after rainfall which often are released into the Hunter River.
- » fresh/brackish wetlands
- » reed swamps (*Phragmites australis*) and phragmites lined sections of the channel such as along the Williams River. The community is affected by cattle grazing and access to the waterway.
- » *Casuarina glauca* and *Melaleuca* sp stands and remnant forests
- » seagrass is largely absent from the Hunter estuary. MHL 2003 reported that at that time, seagrass beds had not been seen along the foreshores of the lower estuary for at least 30 years (other than a small area of *Ruppia* spp on Kooragang Island)

Woodberry Swamp and the wetlands of catchments such as Wallis Creek and Swamp Creek (e.g. Wentworth Swamp) illustrates strategic challenges for freshwater and brackish wetland management along the estuary, including:

- » robust science is necessary to understand the complex interactions of freshwater hydrology, groundwater and tidal dynamics in these systems, all influenced by historical structures and systems of drainage, floodgates and very high rates of floodplain sedimentation. There are historical reports of metres of sediment accumulation across the floodplain in major flood events in the late nineteenth and twentieth century.
- » the wetlands are natural filters and processors of sediment and nutrients and along with restored riparian communities are a key part of any approach to reduce nutrient loads in the Hunter estuary. Highly degraded and modified wetlands change from being natural biodiversity protection areas to sediment and nutrient exporters and threats to estuary health.
- » while many floodplain wetlands are currently fresh and are part of the grazing land use of the floodplain, they are vulnerable to sea level rise, with increasingly likely overtopping of floodgates and changes to the balance between fresh and saline standing water. The transformation of wetland hydrology and salinity will change their nutrient processing functions in ways that are not fully understood.
- » floodplain wetlands would have been a highly attractive environment for the Aboriginal people living in the region, especially over the last 10,000 years when sea level was at approximately its current level. The cultural heritage and archaeological value of the wetlands is poorly documented.
- » there are complex interactions between riparian vegetation, flood protection infrastructure and bank stability which need to be resolved to find an adaptive pathway for the channel as sea level rises; and to reduce the contribution of local sediment load to poor estuary health.

5.0 REVIEW OF CURRENT MANAGEMENT PRACTICES AND ARRANGEMENTS

The Certified Hunter Estuary Coastal Zone Management Plan (CZMP 2017) presented a series of 25 prioritised management objectives which essentially defined the 'goal posts' towards which future management of the estuary would be targeted.

The top five priorities were:

- » protecting estuarine biodiversity
- » increasing native riparian vegetation
- » preventing pollution
- » optimising the management of flood mitigation works and other flow control structures
- » minimising and remediating bank erosion throughout the estuary.

These highest priority objectives from the CZMP continue to be of concern to stakeholders today.

5.1 CZMP IMPLEMENTATION

Although a significant effort from councils, public authority stakeholders and peak community organisations contributed to the preparation of the CZMP, much of the data and analysis is now out of date. The strategic context has changed; a new statutory framework is in place; new issues, threats and risks have emerged; and some new tools are available.

The existing CZMP does not meet current requirements of the updated Coastal Management Manual, 2018. CZMP's were written as guiding documents for each responsible agencies actions not as business case led strategic documents as required by the manual.

The complex governance of the Hunter Estuary has reduced joint accountability, limited delivery of priorities in the CZMP, and allowed poor formal communication between key stakeholders. Progress towards the objectives of the CZMP is patchy, uncertain and poorly documented. No shared understanding exists of the current status of implementation, of estuary health or of the management of coastal hazards and risks in the estuary context, or of access and amenity opportunities.

The CZMP was written to the standards of the time and the strategies were applicable to the possible actions available to each responsible agency.

Of the 25 strategies proposed, 20 were completed either partially or fully however these strategies need to be reviewed as much legislation has changed as have the government agencies. A full list of strategies and actions undertaken is provided in Appendix 1.

Whilst the CZMP provides valuable information to assist understanding of the CMP, the coastal manual provides the development of a strategically different document. A new governance framework will assist in developing a document that is known to all estuary stakeholders and has commitment from them prior to building the business case for projects provided in the new CMP.



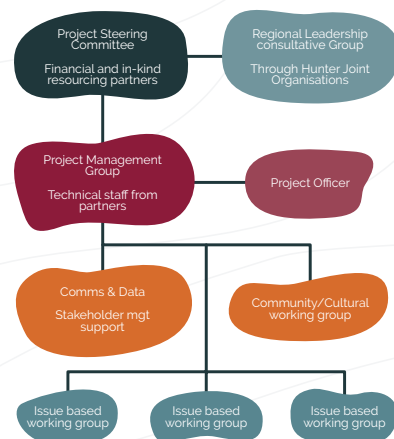
6.0 IDENTIFICATION OF ROLES AND RESPONSIBILITIES – GOVERNANCE

The Hunter River is one of the largest estuaries in NSW, and arguably one of the most complex from an administrative perspective. The Hunter Estuary intersects five LGAs; Maitland, Newcastle, Port Stephens, Cessnock and Dungog. Multiple other public authorities also have management responsibilities for key issues affecting the health of the estuary and the values it provides for the communities of the Lower Hunter region. Recent restructures of several public authorities, together with other staff changes, mean that responsibilities for estuary management are evolving.

The strategic context of the Hunter Estuary is dynamic. Important recent and ongoing changes to strategic context include (but are not limited to) the rapid population growth of Maitland City and its impact on the local catchment context of the estuary; ongoing and increasing demand for estuary based recreational opportunities on the banks and in the waterway, linked to emerging NSW government policy for sustainable urban areas; a wide-ranging review of the Hunter Valley Flood Mitigation Scheme (HVFMS); and new information about the future impacts of sea level rise and climate change on the hydrodynamics of the estuary and its floodplain wetlands.

The complexity of these responsibilities means that governance arrangements are a critical issue for Stage 1 of the preparation of the CMP. Governance arrangements established in Stage 1 will support the completion of the CMP, certification process and implementation of the certified CMP. As estuary management progresses Governance arrangements may change to bring additional groups or agencies together to ensure effective communication.

The following chart provides the governance arrangements chosen for the development of the CMP:



The Project Steering Committee

Nominally the "Hunter Estuary Alliance (HEAL)" the committee consists of groups which provide a financial or in-kind support to the development of the coastal management program and have direct influence on matters pertaining to the Hunter Estuary. The Project Steering Committee provides a governing role and will work to collaboratively share information to resolve coastal and estuary management issues to the benefit of all stakeholders, community, and the environment in the Hunter Estuary.

The Project Steering Committee is comprised of senior management level staff from:

- » City of Newcastle
- » Port Stephens Council
- » Maitland City Council – provides dedicated project officer
- » Cessnock City Council
- » Dungog Shire Council
- » Hunter Local Land Services
- » Hunter Water
- » NSW Department of Planning and Environment – non-voting

The Steering Committee has a "Memorandum Of Understanding (MOU)" that has been signed by all voting committee members.

The key objectives of the MOU are to:

- » Provide guidance and a framework to ensure a productive partnership that builds capacity for all participants to deliver the project
- » Create a working relationship between all participants to develop an open communication and information sharing atmosphere
- » Provide a basis to actively seek grants for projects as a collaboration of estuary stakeholders.

The Project Management Group

Consists of staff from HEAL- the project steering committee at a technical expertise level. This group's role is to manage the core projects to develop the coastal management program.

The Project Management Group has a "Terms of Reference" endorsed by the group to facilitate regular liaison between staff pertaining to the Hunter Estuary CMP.

The Communications and Data Group

Consists of the communication and / or engagement staff in each HEAL group and data specialists where they are available. This group is responsible for the development of an engagement plan and website development.

The Community / Cultural Working Group

Discussions are being held with key stakeholders to investigate how they wish to be involved in the coastal management program development. Early indications suggest that the Traditional Owners would value a groups development. This opportunity and terms of reference will be developed as Stage 2 is undertaken to assist with key issue investigations.

Issues Working Groups

Groups will be developed to aid in direction of key issue investigations. These groups may be short or long term depending on the need of the project. Whilst representatives from the project management group and appropriate technical staff from HEAL will be part of the groups, other major stakeholders are envisioned to be part of the issue groups and are detailed below.

The list of stakeholders for the Hunter Estuary is many and varied. Whilst public authorities can be defined in the following Table 2, stakeholders also include groups from the economic facet such as irrigators, fishing and aquaculture enterprises, coal associated industries, development; social facet such as community and other Councils outside the coastal area; cultural facet such as traditional owners and European Heritage interests; and environmental facet such as the Hunter Wetlands Centre and other community groups.

6.0 IDENTIFICATION OF ROLES AND RESPONSIBILITIES – GOVERNANCE

Table 2: Key Public Authority Stakeholders

ORGANISATION	ROLE
Coastal Councils	Prepare and oversee implementation of the CMP as managers of the LGA in which the coastal interface is located. Councils also manage landuse planning through zoning and development approval which impact waterways and land management.
Hunter Valley Flood Mitigation Scheme (HVFS)	Designed by DPE, the scheme is designed to mitigate flood damage using a system of levees, floodgates and drains on the Hunter, Paterson and Williams Rivers. The HVFS team is within the Water Group of DPE.
Hunter Local Land Services (Hunter LLS)	Hunter LLS delivers services and programs that add value to local agricultural industries, enhance natural resources, protect primary production from pests and disease, and help local communities prepare for and respond to emergencies, such as flood and fire.
Marine Estate Management Authority (MEMA)	The Marine Estate Management Authority is working to implement the NSW Marine Estate Management Strategy outlining how to protect and enhance waterways, coastlines, and estuaries over the next ten years.
Office of Local Government	The Office of Local Government is responsible for strengthening the performance of the local government sector including the local councils involved in the CMP.
Hunter Joint Organisation of Councils	A collaborative body of ten Hunter region councils aiming to provide cohesion for key regional strategic priorities. This is important as the mapped coastal area is only a small portion of a larger connected river and catchment which has implications to the health of the estuary.
Department of Planning and Environment (DPE)	DPE manages planning, industry and environment for urban and regional NSW and upholds regulatory frameworks for biodiversity conservation, sustainable development and productive farming. Coast and estuary management is supported by the Biodiversity and Conservation Division.
NSW Crown Lands	This Authority administers public land across NSW which includes the beds of most tidal and non-tidal waterways.
National Parks and Wildlife Service (NPWS)	NSW NPWS is a part of the NSW DPE and manages more than 870 NSW national parks including the Hunter Wetlands National Park.
Local Aboriginal Land Councils (LALCs) NSW Aboriginal Land Council (NSWALC) Aboriginal Affairs	LALCs are at the heart of the organisational structure of the land rights network, representing the many Aboriginal communities across NSW and overseen by the NSW Aboriginal Land Council (NSWALC). Aboriginal Affairs NSW works with Aboriginal communities to promote social, economic and cultural wellbeing through opportunity, choice, healing, responsibility and empowerment.

ORGANISATION	ROLE
Commonwealth Department of Climate Change, Energy, the Environment and Water, Commonwealth Department of Agriculture, Fisheries and Forestry	The departments of the Australian Government which regulate Australia's agriculture, environment and heritage, and water. These departments manages matters of environmental significance in accordance with the EPBC Act and is the administrative authority for the Ramsar Convention on wetlands. These departments also provide funding to stakeholders including regional natural resource management (NRM) organisations such as Hunter Local Land Services.
Hunter Water Corporation	A state-owned Corporation that provides water services across the Lower Hunter and manages seven key water catchment areas.
Department of Planning and Environment – Water	This division of DPE manages the surface and groundwater in NSW, develops and implements plans for water security, and manages regional and metropolitan water supply and usage.
Natural Resources Access Regulator (NRAR)	The Natural Resources Access Regulator is responsible for the enforcement of water laws in NSW through licensing, monitoring compliance, and education.
Department of Primary Industries – Fisheries (DPI)	DPI is responsible for administering fisheries laws governing the fisheries resources and is actively involved in protecting and rehabilitating wetlands via legislation regulating and creating Marine Protected Areas.
Environment Protection Authority (EPA)	EPA is the primary environmental regulator and consults with communities, industries, governments, and businesses on activities and issues that affect the NSW environment. They also respond to environmental emergencies and enforce regulations.
Department of Defence	The Defence Environmental Strategy (2016) focuses on five strategic aims to manage environmental challenges and opportunities regarding environmental impacts, resource consumption, biodiversity conservation, pollution and contamination, and heritage values. The Williamstown RAAF Base lies to the north-east of Fullerton Cove, within the lower estuary.
Port of Newcastle Port Authority of NSW	The Port of Newcastle maintains both an Environmental Management Plan and an Environmental Management System that outlines port activities and ensures commitment to environmental standards. Port of Newcastle also manages biosecurity threats and undertakes regular environmental monitoring. Port of Newcastle manages ongoing navigation dredging and survey in the Port. Port Authority of NSW manages navigation, safety security and operational needs of Newcastle Harbour (and five other major commercial ports in NSW)
University of Newcastle (UON)	The University leads an Environmental Sustainability Plan to achieve environmental sustainability outcomes and is participating in the Newcastle Wetland Connections Project. UoN also plays an extensive role in teaching, research, and innovation in energy, biodiversity and environmental areas.
Transport for NSW (TfNSW)	TfNSW is committed to delivering a sustainable transport system for NSW in a manner that balances economic, environmental and social issues. Current major projects with implications for the estuary include the M1 Pacific Motorway Extension to Raymond Terrace and the proposed Lower Hunter Freight Corridor.

7.0 ENGAGEMENT, VALUES, OUTCOMES AND ISSUES

7.1 STAKEHOLDER ENGAGEMENT - VALUE IDENTIFICATION

Many Hunter estuary stakeholders have thought about and identified values of the estuary – what the estuary means to their organisation, their customers, community, partners and regulators. These value reviews, conducted over the last decade, each offer a slightly different perspective. Value statements have been informed by a number of consultation processes involving the community of the lower Hunter region, through which the Hunter Estuary flows. These previous consultation programs and value statements provide a strong start to understanding the different perspectives on the values of the estuary.

For this project the vision and values are interrelated. The vision was directed by initial consultation that had occurred prior to the program. Further engagement reinforced the community values and the desired vision and therefore provides the anticipated outcomes required. Whilst the objectives are extrapolated from the Coastal Management Act 2016 these directly reflect the communities' values.

Values change over time as community need varies, more research is undertaken, and environmental conditions change such as sea level rise. Identifying the current community values directs the identification of risks associated to meeting these values in the Hunter Estuary, and therefore the need for data and research to identify projects which will manage the system.

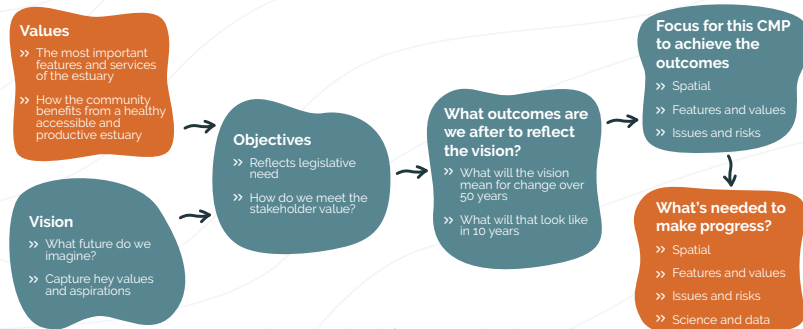


Fig 11: How values influence CMP development

Recently a number of projects have undertaken community and/or stakeholder engagement which has assisted the understanding of the value of the river, estuary and environment.

Consultation undertaken for this scoping study:

- » participants at seminar on the Hunter Estuary hosted by Hunter Environmental Institute. The 66 attendees included a mix of council, public authority, consultant, academic and community representatives – June 2021
- » Senior Managers briefing of Maitland City Council by council's environmental staff to assist with broader planning development reflecting on the value of the estuary to their community. – June 2021
- » workshop which included 35 participants from multiple stakeholder groups to support analysis of governance development – July 2021
- » briefing of Hunter Local Land Services – December 2021
- » briefing Newcastle Coastal Management Program Working Group December 2021
- » briefing Port of Newcastle – January 2022
- » briefing Hunter Water – February 2022
- » briefing Hunter Joint Organisations group – May 2022
- » briefing General Managers Advisory Committee – May 2022
- » briefing Cessnock City Council – May 2022
- » briefing Mindaribba Local Aboriginal Land Council – June 2022
- » stakeholder tour of estuary and workshop – August 2022
- » Cessnock area values identification – September 2022
- » Dungog area values identification – September 2022

Consultation projects which provide important information for value identification:

- » Hunter Water undertook Community and Stakeholder engagement in 2020 to identify catchment values for the Wastewater Masterplan currently being developed.
- » all Councils have undertaken community engagement for their community strategic plans in accordance with the Integrated Reporting and Planning guidance and have undertaken community satisfaction surveys in 2022. This data provides a wealth of information on community expectations of environmental protection and engagement with their natural resources including the river
- » NSW Department of Planning and Environment undertook a community survey to identify community values of the river to assist with the creation of NSW Water Quality Objectives in 2022.
- » Hunter Wetland Centre Australia hosted a Hunter Estuary Forum to bring together estuary stakeholders to consider the future of the estuary and the Ramsar listed wetlands in 2022. A deliverable from the forum was the development of a list of issues and values of the estuary.

All consultation with stakeholders to date were evaluated and value themes identified and are summarised below. Whilst these values have been placed in selected domains it is recognised that all values are related and not independent; for example water quality is important to estuary health, however without good water quality you will not achieve a healthy lifestyle or productivity.

7.0 ENGAGEMENT, VALUES, OUTCOMES AND ISSUES

ESTUARY HEALTH	HEALTHY LIFESTYLE	PRODUCTIVITY
Water Quality	Liveability	Jobs and Growth
Connectivity	Resilience	Resilience
Biodiversity/ Habitat/ Shorebirds	Community knowledge & understanding	Heritage
Wetlands	Recreation	Fisheries /Aquaculture
Resilience	Community Access	Creative and beautiful cities-urban design and liveability
Ecological Health	Amenity /scenic quality	Economy activated
Protecting and increasing native vegetation	Nature/Green Spaces	Tourism
Flow	Community	Flood mitigation
Healthy Riverbanks	Flood planning & emergency response	Agriculture
Significant species	Indigenous Culture	Water extraction- drinking
Indigenous Culture		Port and associated industry
		Research base
		Indigenous Culture

Table 3: CMP Objectives meeting community / stakeholder values

OBJECTIVE	VALUES
Protect and enhance natural estuary processes and environmental values through restoration and rehabilitation	Estuary Health
Maintain and enhance public access, amenity and safe use recognising the benefits that nature brings to human health and wellbeing	Healthy Lifestyle Estuary Health
Acknowledge, respect and protect indigenous communities' spiritual, social and economic use	Estuary Health Healthy Lifestyle Productivity
Support the strategic economic importance of the Hunter Estuary	Productivity
Facilitate ecologically sustainable development	Estuary Health Healthy Lifestyle Productivity
Mitigate current and future risks from coastal hazards and climate change to improve resilience of the estuary	Estuary Health Healthy Lifestyle Productivity
Enhance community stewardship of the estuary through consultation and engagement	Estuary Health Healthy Lifestyle



Fig 12: Interrelationship of estuary values



7.0 ENGAGEMENT, VALUES, OUTCOMES AND ISSUES

7.2 OUTCOME - A HEALTHY ESTUARY

Estuary health is nominated by many stakeholders as a key value and an objective of estuary management. Participants in the Scoping Study multi-stakeholder workshop provided feedback on what they saw as critical characteristics of a healthy estuary.

This feedback complements the measurable indicators used by the NSW Government to assess the health of estuaries in NSW (OEH, 2017).

Both groups of estuary health characteristics are shown in Figure 13. These characteristics highlight the outcomes to be achieved by changes to estuary management in the Hunter over the next 10 years and beyond.

DPE science indicators of estuary health

- » Degree of modification of morphology and hydrodynamics
- » Nutrient load and nutrient cycling
- » Water clarity
- » Algal production (Chlorophyll-a)
- » Free from water pollutants and contamination in sediments
- » Health of mangroves
- » Fish diversity

Workshop descriptors of estuary health

- » Stable, natural vegetated riparian zone -banks and shorelines
- » Consistently high water quality
- » Healthy wetlands
- » High in-stream biodiversity
- » Accessible for diverse recreation - shorelines and on water
- » Supports productive primary industries (fishing and agriculture)
- » Stable catchment

Figure 13: Indicators and Descriptors of a Healthy Estuary

Together, the characteristics identified in DPE guidance and by participants in the workshops, point to a suite of outcomes to be achieved from the CMP for the Hunter Estuary (Table 4).

Table 4 Outcomes from successful management of the Hunter estuary

OUTCOME	WHAT WOULD HAVE HAPPENED WHEN THIS OUTCOME IS ACHIEVED?
Stable, vegetated riparian zone in all parts of the estuary	Bank erosion severity and extent reduced in the estuary and the near catchment
Restored hydrodynamic processes and functions	Restored tidal circulation to estuarine wetlands and floodplains Improve interaction of catchment floods and floodplain wetlands
Improved water quality	Reduced nutrient load from all sources, so that nutrient processing functions effectively in the waterway and no part of the estuary is eutrophic Metal and PFAS contamination impacts reduced to negligible Improved water clarity in the upper estuary
Healthy wetlands and instream biodiversity	Improved mangrove health Priority saltmarsh areas restored and resilient Function restored in floodplain wetlands in tributary catchments Fish and water bird diversity is maintained
Cultural landscape values are recognised and protected	Aboriginal community has a voice in deciding actions and priorities to protect and restore the health and condition of places, natural systems and biodiversity of the estuary that support cultural values
Productive, sustainable agriculture, fisheries and port operations	Decisions have been made about sustainable floodplain land uses and transition is underway where necessary The port continues to connect the Hunter region to the world, while balancing port operations and economic value with a healthy and stable estuary
An accessible waterway	Waterway health is suitable for diverse recreational uses in the upper estuary as well as the middle and lower estuary Increased accessibility at points and along bank/shoreline
Residential land use does not increase risks	Water sensitive urban development contributes to wetland and waterway health Integrated water cycle management is functioning across local and regional catchment flows, supply, demand and wastewater – to drive reduced nutrient loads Flood risks from catchment floods, local flash flooding and tidal inundation recognised and mitigated in urban planning and design.
Barriers to coordinated efforts to achieve improved estuary health are reduced	Governance arrangements support information sharing, coordination of stakeholder priorities and actions and regular reporting of progress, successes and lessons learnt so that estuary health continues to improve
The community has a say in how the estuary is managed	The community is more informed and resilient The community celebrates a healthy estuary and understands the trade-offs involved

7.0 ENGAGEMENT, VALUES, OUTCOMES AND ISSUES

7.3 OBJECTIVES MEETING OUTCOMES

To ensure that the CMP objectives meet the community and stakeholder outcomes a review has been undertaken to ensure that they are aligned.

The objectives are also reviewed to ensure that the objectives of the CM Act, MEMS and regional plans and policies are being met.

Table 5 provides this analysis which shows that each objective contributes to several outcomes, reflecting the interconnected nature of estuary values, objectives and outcomes.

Table 5: CMP Objectives meeting CMP outcomes

CMP OBJECTIVES	EXPLANATION/ALIGNMENT	RELATED OUTCOMES
Protect and enhance natural estuary processes and environmental values through restoration and rehabilitation.	CM Act Object (a) and (g) MEM Act object (a) (ii) CZMP objectives 1 to 5, 10, 12 to 15, 18 to 20 (some of these CZMP objectives could become specific strategies or targets for moving towards the broader objective of natural processes, character and ecosystem diversity and integrity)	Stable vegetated riparian zone in all morphological zones of the estuary Restore hydrodynamic processes and functions » tidal circulation to estuarine wetlands and floodplains » improve interaction of catchment floods and floodplain wetlands Improved water quality » Reduced nutrient load from all sources, so that nutrient processing functions effectively in the waterway and no part of the estuary is eutrophic » Metal and PFAS contamination impacts reduced to negligible » Improved water clarity in the upper estuary Healthy wetlands and instream biodiversity, including » Improved mangrove health » Priority saltmarsh areas restored and resilient » Function restored in floodplain wetlands in tributary catchments » Fish and water bird diversity is maintained
Maintain and enhance public access, amenity and safe use recognising the benefits that nature brings to human health and wellbeing.	CM Act object (b) and (l) MEM Act object (a) (iii) MCC vision PSC vision Hunter Regional Plan Greater Newcastle Metropolitan Plan CZMP objectives 11, 21, 22	A more accessible waterway » Waterway health is suitable for diverse recreational uses in the upper estuary as well as the middle and lower estuary » Increased accessibility at points and along bank/shoreline Waterway health is suitable for diverse recreational uses, with improvement in the Upper estuary

CMP OBJECTIVES	EXPLANATION/ALIGNMENT	RELATED OUTCOMES
Acknowledge, respect and protect indigenous communities' spiritual, social & economic use	CM Act object (c) MEM Act object (a) (ii) CZMP objective 25	Cultural landscape values are recognised and protected » Aboriginal community has a voice in deciding actions and priorities to protect and restore the health and condition of places, natural systems and biodiversity of the estuary that support its cultural values
Support the strategic economic importance of the Hunter Estuary	CM Act Object (d) MEM Act object (a) (i), (ii) Hunter Regional Plan Greater Newcastle Metropolitan Plan CZMP objectives 3, 15, 23, 24	More sustainable productive land uses (agriculture, fisheries and port operations), adapting to change » Decisions made about sustainable floodplain land uses and transition underway where necessary » The port continues to connect the Hunter region to the world, while balancing port operations and economic value with a healthy and stable estuary
Facilitate ecologically sustainable development	CM Act object (e) NCC LSPS CZMP objectives 11, 13, 20, 23, 24 (plus those that refer to impacts of specific industries or activities on the health or resilience of the estuary)	Productive, sustainable agriculture, fisheries, aquaculture and port operations Cultural landscape values are recognised and protected » Aboriginal community has a voice in deciding actions and priorities to protect and restore the health and condition of places, natural systems and biodiversity of the estuary that support its cultural values Residential land use does not increase risks » Water sensitive urban development contributes to wetland and waterway health » Integrated water cycle management is functioning across local and regional catchment flows, supply, demand and wastewater – to drive reduced nutrient loads » Flood risks from catchment floods, local flash flooding and tidal inundation recognised and mitigated in urban planning and design. Decisions made about sustainable floodplain land uses and transition is underway where necessary
Mitigate current and future risks from coastal hazards and climate change to improve resilience of the estuary	CM Act object (f) and (i) Alluded to in Hunter LLS vision (resilient) CZMP objectives 4 and 16 This is a significant omission in the vision for LSPS and regional planning documents	Residential land use does not increase risks » Flood risks from catchment floods, local flash flooding and tidal inundation recognised and mitigated in urban planning and design.
Enhance community stewardship of the estuary through consultation & engagement	CM Act Object (k) CZMP objective 6	The community has a say in how the estuary is managed » The community is more informed and resilient » The community celebrates a healthy estuary and understands the trade-offs involved » Community is active in estuary management

8.0 STRATEGIC CONTEXT

Strategic context refers to the characteristics of the Hunter Estuary, its catchment, land use and management processes, which set it apart from other systems and have a significant influence on management issues, opportunities, feasible approaches and outcomes.

The strategic context includes environmental, governance (including legal), social, cultural, economic and technical factors which may affect coastal management.

These factors may:

- » increase coastal vulnerability, sensitivity or risks, or conversely enhance resilience
- » amplify or reduce the risks associated with climate change and sea level rise
- » affect community attitudes to risk and their willingness to engage in or pay for coastal risk mitigation
- » increase uncertainty
- » affect community knowledge and capacity to adapt to change (for example, rapidly growing communities are likely to include relatively fewer people with experience of the local impacts of coastal hazards; aging communities generally have a higher level of vulnerability)

- » add complexity to decision-making processes, with multiple stakeholders, having different objectives and perspectives on risk or priority responses
- » make avoidance of coastal risks challenging, for instance where historical land use planning decisions have resulted in existing intensive development in high-risk areas
- » add complexity to responsibility and accountability, for instance through complex land tenure or significant lags in aligning detailed plans of management for public land to the strategic direction set in the CMP, and
- » create barriers to an effective business case and equitable sharing of costs and benefits.

This section presents an overview of the strategic implications of the environmental, governance, and socio-economic context of the Hunter Estuary.

8.1 STRATEGIC ASPECTS OF ENVIRONMENTAL CONTEXT

Table 6 summarises the strategic elements of the environmental context of the Hunter Estuary.

STRATEGIC ELEMENT	CHARACTERISTICS	STRATEGIC CONTEXT SIGNIFICANCE
Scale	<ul style="list-style-type: none"> » The catchment area is more than 22,000 km². It is the largest coastal catchment in NSW. » The Hunter Estuary is at the juncture of the NSW North Coast Biogeographic Region to the North and Sydney Basin Biogeographic Region to the South » Tidal limit of the Hunter River at Oakhampton is 65 km from the coast. Tidal circulation above Morpeth is very slow. Tidal limits on the Williams River (at Seaham Weir and Paterson River are 46km (at Seaham Weir, which protects drinking water supplies) and 75km respectively » A network of large and small tributaries with rural, urban and industrial catchments, including the Williams River, Paterson River, Wallis, Fishery, Four Mile, Windeyers, Ironbark, Throsby, Styx and Cottage Creeks 	The interactions of wider catchment, local catchment and tidal flows in the upper and mid estuary are critical to improving water quality improvements and estuary health.
Geomorphology and Geodiversity	<ul style="list-style-type: none"> » The Hunter Estuary and its associated coastal barrier systems incorporate one of the most diverse and best documented coastal sedimentary sequences in Australia. This dated sedimentary sequence is a significant scientific and geo-heritage feature of the estuary. » The natural morphology of the lower estuary included a sinuous river channel and well-developed bay head and flood tide deltas, multiple islands, coastal wetlands and extensive oyster reefs. Contiguous floodplains with backwater swamps and cut-off bays are the remnants of former back barrier lakes. » The catchment scale and magnitude of major floods means that sediment and nutrient load from the catchment are major influences on estuary processes and estuary condition in wet periods » The estuary includes rare evidence of high sea levels during the last Interglacial period (at Largs), adding to its geo-heritage significance 	<p>Extensive and systemic hydrodynamic, morphological and ecological modification is a key feature of the Hunter Estuary and contributes to its poor condition in DPE assessments.</p> <p>The entire estuary and almost all of its catchment have been modified and impacted over the 200 years of European occupation.</p>

8.0 STRATEGIC CONTEXT

STRATEGIC ELEMENT	CHARACTERISTICS	STRATEGIC CONTEXT SIGNIFICANCE
Extent of modification	<ul style="list-style-type: none"> » Entrance form and stability, channel length, sinuosity, depth, wetland area, floodplain morphology and sediment character and tidal processes are highly modified. The floodplain and riparian zones are almost entirely cleared of native vegetation. Major impacts commenced with European settlement in the early nineteenth century. » These changes have impacted on all aspects of estuary function and health, including catchment hydrology (floods and droughts), tidal hydrodynamics and interactions between the catchment and tidal flows. They impact on habitat and biodiversity, erosion and sedimentation, and water quality. » During the twentieth century flood mitigation works and floodplain drainage structures reduced tidal ventilation and inundation of former intertidal areas, reducing the area and functions of saltmarsh and mangrove wetland systems. <p>Over the last 15 years, some floodgate systems have been modified, facilitating the recovery of coastal wetland in Hexham wetland and at Tomago/Kooragang. In the long term, tidal inundation is also a hazard and a risk to floodplain agriculture.</p>	<p>The estuary is in poor condition.</p> <p>The extent of modification and the economic significance of modifications affect what can be considered as a healthy Hunter Estuary.</p> <p>The impacts of these historical and ongoing development pressures mean difficult decisions must be made to balance social and economic values with restoring the health of the estuary. Difficult decisions require systematic and transparent processes and suitable data to ensure fairness and scientific credibility.</p>
Estuary processes, hazards and knowledge	<ul style="list-style-type: none"> » A detailed hydrodynamic and water quality model (the WRL Model) to simulate ecological processes in the Hunter Estuary, and to ensure the widespread, robust application of the approach, has been developed to assess estuary processes and catchment management options to improve estuary water quality and health. The model outcomes are linked to water sharing plans and pollution reduction plans in the Hunter. » Hazards (f) (tidal inundation erosion) and (g) (inundation of foreshores caused by tidal waters and the action of waves, including the interaction of those waters with catchment floodwaters) from the CM Act, are directly relevant to the Hunter Estuary. 	<p>The WRL model (Glamore et al 2019) is now an important part of the strategic context for managing the Hunter Estuary. It facilitates quantitative testing of scenarios of estuary change and catchment and estuary management. This is essential for making decisions about a large, complex and dynamic estuary system.</p>

STRATEGIC ELEMENT	CHARACTERISTICS	STRATEGIC CONTEXT SIGNIFICANCE
Estuary health	<ul style="list-style-type: none"> » The Hunter Estuary is not healthy now, with poor scores for: <ul style="list-style-type: none"> - turbidity (upper estuary) - estuary form and function (lower estuary) - nutrient pollution (all parts of the estuary) - metal contamination (mid and lower estuary) - microalgal growth on the bed (middle estuary) - sediment oxygen demand (mid estuary) - mangrove health (mid and lower estuary) » The Upper section of the Hunter River Estuary has the worst water quality in NSW (for the freshwater tidal zone) 	<p>Health of the lower estuary is affected by legacy issues such as harbour structures and contaminants from heavy industry, as well as ongoing port and industry functions.</p> <p>The middle and upper estuary, where dynamic interactions between catchment and tidal flows occur, are affected by sediments/turbidity and excess nutrient load. These point and diffuse source pollutants interact with each other in complex ways in space and time, across the estuary waterway, floodplain, wetlands and local catchments.</p> <p>The best ways to manage sources and interactions to improve estuary health are not well understood.</p>
Wetland values	<ul style="list-style-type: none"> » The wetland system in the Hunter Wetlands National Park is of international significance and was listed under the Ramsar Convention on Wetlands in 1984. » The Hunter Estuary Wetlands Ramsar site of the Hunter Wetlands National Park (Tomago and Kooragang wetlands) and Shortland Wetlands (Hunter Wetlands Centre) along with Hexham Swamp in the National Park are outstanding case studies in wetland rehabilitation and resilience and the necessity of partnerships across all levels of government, and between industry, universities, citizen scientists and government. » Wetlands, including estuarine saltmarsh, floodplain backswamps and wetlands at or just above the tidal limit of tributaries are a key feature of the Hunter estuary. Their natural functions include mediating catchment flows (local and whole of Hunter), floods and nutrient loads, most are now heavily degraded by clearing, grazing, cultivation, hydrological and hydrodynamic modification. 	<p>Restoring and enhancing the natural functions of wetlands across the floodplain and local catchments should be a priority component of Hunter estuary management</p>
Climate change vulnerability	<ul style="list-style-type: none"> » The Hunter estuary, floodplain and associated communities are the 6th most vulnerable system to climate change in NSW » The Hunter estuary is strongly impacted by extreme catchment flooding events and by extreme drought when freshwater flows into the upper estuary are minimal. » HVFMS Review shows the vulnerability of land uses and infrastructure function on low lying land, where tide gates are likely to be overtopped by tidal process in coming decades. In the lower estuary urban areas, stormwater system functions are impacted by high tides » Studies of climate change risks that have been prepared by key industries and management authorities, including HVFMS, Port of Newcastle, Hunter LLS, Hunter Water Corporation, other infrastructure providers and local councils provide local detail supplementing the broader climate risk and vulnerability assessments prepared by the NSW government 	<p>Climate risks in the Hunter Estuary are diverse but significant.</p> <p>The processes and hazards driving climate risks vary widely across the estuary and floodplain, because of the scale, distance inland to the tidal limit, morphological differences and the patterns of development, assets and natural resource values.</p> <p>A related component of strategic context is that these risks are not well understood across the broader community. This lack of understanding will make negotiation of trade-offs and land use change challenging.</p> <p>Emissions reduction is a key consideration in relation to the implementation of the CMP and activities such as carbon sequestration through riparian revegetation and blue carbon should be considered for dual benefit of this and habitat creation.</p>

8.0 STRATEGIC CONTEXT

8.1.1 COASTAL PROCESSES AND HAZARDS:

8.1.1.1 COASTAL HAZARDS

The CM Act identifies seven coastal hazards, including two which are directly relevant to the Hunter Estuary:

(f) tidal inundation

These hazards affect the health and functions of wetlands, channel stability, the viability of agricultural land, land suitable for residential and recreational uses, community safety and resilience.

Tidal inundation (hazard (f)) is both a hazard and a factor in estuary function, health and productivity. During the twentieth century flood mitigation works and floodplain drainage structures reduced tidal ventilation and inundation of former intertidal areas, reducing the area and functions of saltmarsh and mangrove wetland systems.

Over the last 20 years, some floodgate systems have been modified, facilitating the recovery of coastal wetlands in Hexham Swamp and at Tomago/Kooragang. In the long term, tidal inundation is also a hazard and a risk to floodplain agriculture.

Hazard (g) is illustrated by ongoing bank erosion and bed sediment resuspension by tidal currents and flood flows. Review and analysis of bank erosion hazards by Soil Conservation Service on behalf of HVFMS and Hunter LLS indicates some current high-risk locations where rates of bank recession and channel widening are high.

(g) erosion and inundation of foreshores caused by tidal waters and the action of waves, including the interaction of those waters with catchment floodwaters.

Ongoing bank erosion along the estuary:

- » increases sediment and nutrient load into poorly flushed reaches of the waterway
- » threatens flood mitigation infrastructure such as levees
- » reduces potential riparian vegetation recovery
- » affects access.

Both hazard (f) and hazard (g) are expected to extend in their reach and impact as sea level rises and climate warms in the coming decades.

Detailed studies by HVFMS associated with the review of the scheme indicate that sea level rise will affect the banks and floodplain of the estuary by:

- » Reducing the efficiency of drainage channels and floodgates that currently protect low lying agricultural land. Some sections of the floodplain that currently drain will become permanently wet with sea level rise, reducing their viability for farming.
- » Increasing the likelihood of riverbank erosion that impacts on existing levee banks.
- » Increasing the likelihood of tidal overtopping of low-lying levees on the estuarine floodplain.

Figure 14 shows the additional area expected to be inundated by a 20% flood event by the end of the century, based on "Representative Concentration Pathway" (RCP) 8.5 (assumed sea level rise of 0.5 m by 2050 and 0.9 m by 2100).

The entrance to the Hunter Estuary is controlled by extensive training wall structures, so there is no lateral migration of the entrance. However, the entrance area is still affected by tidal delta processes, with associated impacts on dredging to maintain navigability for the large vessels accessing the Port, and for the sediment budget of the broader coastal sediment compartment.

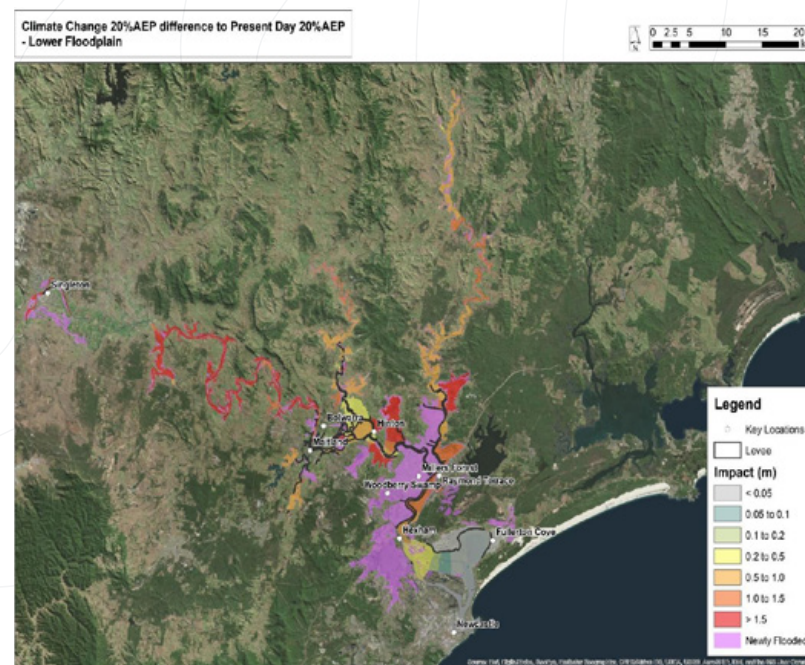


Fig 14: Climate Change 20% AEP Difference to Present Day 20% AEP Flood Areas, Lower Floodplain
Source HVFMA Presentation to Hunter Environment Institute, June 2021

8.0 STRATEGIC CONTEXT

8.1.1 COASTAL PROCESSES AND HAZARDS:

8.1.1.2 HUNTER ESTUARY HYDRODYNAMIC MODEL

An understanding of hydrodynamic processes and hazards is fundamental to managing the estuary.

To support the assessment of threats, hazards and risks in the estuary, an estuary wide scoping study was undertaken in 2014 to determine the 'state of the science' for modelling and data in the Hunter Estuary (Glamore et al., 2014). The outcomes of this study highlighted numerous data gaps and the lack of adequate models of the broader hydrodynamic and water quality dynamics of the estuary.

An overarching independent committee, the Hunter Estuary Hydrodynamic Modelling Platform Committee, was formed to oversee the development of a detailed hydrodynamic and water quality model to simulate ecological processes in the Hunter Estuary, and to ensure the widespread, robust application of the approach.

Following an extensive three-year multi-disciplinary field campaign, WRL developed a multi-faceted hydrodynamic model to assess estuary processes and catchment management options to improve estuary water quality and health. The model outcomes are linked to water sharing plans, pollution reduction plans and coastal reform in the Hunter.

The WRL model (Glamore et al 2019) is now an important part of the strategic context for managing the Hunter Estuary. It facilitates quantitative testing of scenarios of estuary change and catchment and estuary management. This testing capacity is essential for making decisions about a large, complex and dynamic estuary system.

The hydrodynamic model refers to three zones which reflect the morphology and processes of the estuary:

- » The Lower Estuary combines the bay head delta and the tidal delta components of the estuary. It includes Newcastle Harbour/Port of Newcastle, the South and North Arms of the Hunter Estuary, and the Hunter estuary wetlands. These are Fullerton Cove, Hexham Wetland and Kooragang Island/ Ash Island, which are remnants of the many islands formerly occurring in this area.
- » The Mid Estuary includes the reach from just north of Hexham Bridge upstream to the Williams River junction.
- » The Upper Estuary (sometimes referred to as the tidal pool) includes the Williams River (below Seaham Weir), the Paterson River (to below Gostwyck Bridge) and the Hunter River (from the Williams River junction upstream to around Aberglasslyn). The upper estuary has low tidal circulation and may be dominated by fresh water in wet periods. It becomes strongly saline in extended dry periods.

8.2 SUMMARY- STRATEGIC CONTEXT THAT DIFFERENTIATES THE HUNTER

There are 12 strategic and interconnecting factors which influence the scope and approach to the Hunter Estuary CMP.

COMPLEX ESTUARY Scale, diversity and complexity: a large estuary with complex evolution and pressures	INTERNATIONALLY IMPORTANT Internationally significant wetlands and shorebird habitat in the lower estuary. Estuarine and floodplain wetlands across the system are critical to recovery of estuary health. Wetlands are threatened by ongoing rural, urban and port development and sea level rise	POOR WATER QUALITY Poor to very poor water quality, worse in the upper estuary; poor water clarity, very high nutrient levels
HIGHLY MODIFIED Major long term and ongoing morphological modification and adjustment, supporting national level economic values	POOR RIPARIAN VEGETATION Riparian vegetation removed, mangroves in poor condition, but clear evidence that wetland and estuarine habitat and function can be restored; opportunities for "blue carbon" projects	PATENT DATA A much studied waterway, but still limited robust data on the performance of specific responses to key drivers of poor estuary health - low confidence in management decisions.
CLIMATE CHANGE Flood protection infrastructure is vulnerable to climate change and sea level rise, with implications for floodplain land use and productivity	URBANISATION Urbanisation of all flood free immediate catchment lands, increasing local stormwater issues, increasing flash flood risks and reducing agricultural flood refuge	RECREATIONAL NEED Increasing demand for quality river and harbour based recreation opportunities, highlighting existing poor connectivity of 'green' public land; on water risks and conflicts
CULTURAL SIGNIFICANCE Engagement about the scope and significance of Aboriginal culture and heritage, not well documented. National heritage significance of early estuary settlement - not fully recognised and protected	GOVERNANCE Clarity and continuity of communication between public authorities, coordination of management responses, accountability for outcomes are all limiting management progress	COMMUNICATION How best to engage a diverse urban and rural community, spread across several local council areas, with different perspectives on values and priorities

Fig 15: Twelve Elements of Strategic Context

9.0 PRELIMINARY RISK ASSESSMENT

In accordance with the objects of the CM Act and guidance from the Coastal Manual, the scoping studies of CMP are required to undertake a first pass risk assessment.

This assessment is to be based on current knowledge and is to identify what values and assets might be at risk, and to establish whether these risks are high enough to warrant more detailed assessment in Stage 2 of the CMP.

The Coastal Manual suggests the use of the Threat and Risk Assessment (TARA) developed for the Marine Estate Management Strategy in 2015.

The top risks identified in the TARA Hunter Estuary are:

TARA (CENTRAL REGION) PRIORITY THREATS

Environmental

- Urban stormwater discharge
- Foreshore development
- Entrance modification
- Shipping (large commercial vessels and port industries)
- Agricultural diffuse source runoff
- Clearing riparian and adjacent habitat including wetland drainage
- Climate change 20 years
- Recreational Boating and boating infrastructure
- Sewage effluent and septic runoff
- Navigation and entrance management/ dredging
- Modified freshwater flows

Socio-economic

- Water pollution on environmental values – urban stormwater
- Water pollution on environmental values – agricultural diffuse source runoff
- Water pollution on environmental values – litter, solid waste, marine debris, microplastics
- Sediment contamination (toxicants in sediment, particularly in Greater Sydney waterways)
- Inadequate social and economic information
- Anti-social behaviour and unsafe practices
- Limited or lack of access infrastructure to the marine estate
- Lack of compliance with regulations (by users) or lack of compliance effort (by agencies)
- Reductions in abundances of species and trophic levels
- Climate change stressors 20 years

A stakeholders meeting was held to further review known threats/risks to the estuary to develop a preliminary risk assessment. The results are provided in Appendix 2. It is noted that stakeholders that would represent the economic industry were not well represented at meetings. For stage 1 purposes it is assumed that impacts to the environment would impact industry, however these will be further investigated in the more in-depth risk assessment in Stage 2.

The "extreme" rated risks and those high risk assessed by the project management group to be notable issues that require additional research are provided below. These risks will form the basis of research projects in Stage 2 of the CMP.

Table 7 Preliminary risk assessment highest issues

RISK DESCRIPTION	RATING	ISSUE
Knowledge held with people without system / network for managing / retaining	Extreme	Governance
Changed weather patterns	Extreme	Climate Change
Changed weather patterns- NPWS land / Ramsar site	Extreme	Climate Change
Urban runoff is of poor quality and not sufficiently treated before discharge into waterways	Extreme	Water Quality
Upper catchment contribution of nutrients, sediments and other pollutants	Extreme	Water Quality
Unstable riverbanks	Extreme	Water Quality
Carp- reducing water quality through bank and bed feeding, out competing native fish	Extreme	Water Quality
Lack of riparian vegetation, inappropriate riparian vegetation causes unstable riverbank- leads to erosion	Extreme	Water Quality
Increased pollution, increased runoff, land clearing	Extreme	Water Quality
Use of boats creating wake impacts	Extreme	Water Quality
Lack of catchment vegetation, poor sediment and erosion control	Extreme	Water Quality
Habitat Loss	Extreme	Biodiversity
Poor water quality	Extreme	Water Quality
Flood mitigation infrastructure eg flood gates and flaps limits natural intrusion of brackish water from river to tributaries/ floodplain/ wetlands	Extreme	Biodiversity
Black water events eg Woodberry Swamp	Extreme	Water Quality
Lack of single direction to create healthier estuary	Extreme	Governance
More extreme events – bigger floods, worse droughts	Extreme	Climate change
Sea Level Rise	High	Climate Change

9.0 PRELIMINARY RISK ASSESSMENT

9.1 HUNTER ESTUARY ISSUES

In Table 8, the issues which were identified in the Hunter Estuary CZMP (certified 2018) have been organised into categories, and a simple discussion of scope and scale is presented as a starting point for understanding which are the most important for future management.

For each group of issues, the objects of the CM Act to which the issue could be relevant (in whole or in part) are noted. Links to the MEMA TARA rankings (MEMA, 2015)

for threats to environmental assets for the Central Region (Stockton to Shellharbour) are also identified to provide consistency.

Table 8 Review of 'Key Estuary Issues' from the CZMP (2018)

ISSUE	INDICATIVE PERFORMANCE
Biodiversity: Object (a) of the CM Act	
Habitat loss	Hunter Strategic Context
Impacts on native flora and fauna	» Riparian vegetation removed, mangroves in poor condition, but clear evidence that wetland habitat and function can be restored
Lack of riparian vegetation	» Internationally significant wetlands and shorebird habitat in the lower estuary, with values threatened by ongoing port and industry development, relic contamination and sea level rise
Mangroves and noxious weeds invasion	As a group, these issues relate to riparian and estuary wetland habitats, some of which have specific statutory protection. Loss of these habitats has important implications for water quality and response to climate change.
What's missing from this group	
Loss of function and diversity in floodplain wetlands and saltmarsh in the lower estuary with changes to nutrient load, drainage, tidal circulation, clearing, cultivation; increasing threat from more intensive catchment/urban development and sea level rise; lack of ecological connectivity; oyster reef extent and condition	
Ranking of this group in the TARA?	
Clearing of riparian and adjacent habitat including wetland drainage was overall ranked 6 (as a threat to the environment) for the Central Region	

ISSUE	INDICATIVE PERFORMANCE
Estuary processes: Object (a) of the CM Act, potentially object (g), climate change is object (f)	
Bank erosion and sedimentation	Hunter Strategic Context
Changes to estuarine hydraulics	» Flood protection infrastructure is vulnerable to climate change and sea level rise, with implications for floodplain land use and productivity
Climate change	» Urbanisation of all flood free immediate catchment lands, increasing local stormwater issues, increasing flash flood risks and reducing agricultural flood refuge
Coastal inundation	» Major long term and ongoing morphological modification and adjustment, supporting national level economic values Climate change is projected to impact on the frequency and duration of tidal inundation and to change catchment flooding patterns.
What's missing from this group	
Linkages to flood mitigation works; modified freshwater flows	
Ranking of this group in the TARA?	
Estuary entrance modification (which affects hydrodynamics) was overall ranked 3 for the Central Region	
Climate change generally was overall ranked at 7 for threats to environmental assets for the Central Region, and 10 for threats to social and economic values.	

ISSUE	INDICATIVE PERFORMANCE
Estuary values, impacts and conflicts: Objects (a), (b), and (c) of the CM Act	
Protecting estuary natural significance	Hunter Strategic Context
Estuary users and conflicts	» Increasing demand for quality river and harbour based recreation opportunities, highlighting existing poor connectivity of 'green' public land; on water risks and conflicts
Heritage	» Engagement about the scope and significance of Aboriginal culture and heritage, not well documented. National heritage significance of early estuary settlement - not fully recognised and protected
Scenic quality	
Fishing	
Need for foreshore reserves	User conflict will become increasingly relevant as populations continue to grow in the Hunter River catchments, and the scenic and recreational value of the estuary becomes more important.
What's missing from this group	
Tourism, cultural values, litter/marine debris	
Ranking of this group in the TARA?	
In relation to threats to environmental values, Recreational boating was overall ranked 8 for the Central Region. For social and economic values, threats 6, 7 and 8 relate to recreational users	

9.0 PRELIMINARY RISK ASSESSMENT

ISSUE	INDICATIVE PERFORMANCE
Catchment development/land use: Object (e) of the CM Act, and object (d) regarding economic value	
Development pressures and land management	Hunter Strategic Context
Flood mitigation works	» Poor to very poor water quality, worse in the upper estuary; poor water clarity, very high nutrient levels
Water quality	Water quality issues are of key importance in the Hunter Estuary, including both point source (industrial and wastewater) and diffuse sources (catchment runoff, urban stormwater), risks increased by loss of floodplain and riparian biofiltering functions. Diffuse Source Water Pollution Strategy (Department of Environment and Climate Change 2009) priorities are sediment, nutrients and pathogens.
Agricultural inputs	
Urban inputs	
Industrial inputs	
Water extraction	
Dredging and commercial sand and gravel extraction	Water quality in the upper estuary is poor (OEH 2017)
Port operations	
Condition of sea walls	
What's missing from this group?	
Service infrastructure (particularly in relation to pipes, cables, trenching and boring activities); thermal discharges; mining in the upper catchment; PFAS contamination; litter/marine debris	
Ranking of this group in the TARA?	
In relation to the environmental values: Urban stormwater discharge was ranked 1, foreshore development 2, port operations 4, sewage effluent and septic runoff 8 and industrial discharges 12 for the Central Region	
Agricultural diffuse source runoff into estuaries was ranked 5 and stock grazing of riparian and marine vegetation at 14 for the Central Region	
In relation to socio-economic and cultural values, aspects of water pollution ranked at 1, 2 and 3 in the TARA, with sediment contamination at 4, litter/marine debris was of significant concern to the community in community values as highlighted in 9.0 above	

ISSUE	INDICATIVE PERFORMANCE
Governance: Object (h) and object (j) of the CM Act	
Estuary management coordination (CZMP)	<p>Hunter Strategic Context</p> <ul style="list-style-type: none"> » Clarity and continuity of communication between public authorities, coordination of management responses, accountability for outcomes are all limiting management outcomes » A much-studied waterway, but still limited robust data on the performance of specific responses to key drivers of poor estuary health - low confidence in management decisions. » How best to engage a diverse urban and rural community, spread across several local council areas, with different perspectives on values and priorities <p>Finding a workable governance and funding arrangement for a large estuary system with conflicting values from one end to the other an important issue</p>
What's missing from this group?	
The role of public participation in the management of the estuary	
Ranking of this group in the TARA?	
This is not listed as a threat in the TARA, which is based on activities.	

9.0 PRELIMINARY RISK ASSESSMENT

9.1.1 INTEGRATION – KEY ISSUES FOR THE HUNTER ESTUARY CMP

In combination, the Strategic context of the Hunter Estuary, the priority regional issues identified in the TARA, the previous assessments for the CZMP and recent technical and risk studies highlight the following issues as the most important to be addressed in a coordinated way in the CMP.

Some Key CMP Issues

- » Restoration of the riparian zone throughout the estuary. This includes bank stabilisation processes and restoration of riparian vegetation. It also includes tenure and land management arrangements along floodplain margins. Investigate opportunities for oyster reefs as streambank reinforcement instead of rock revetment.
- » Restoration of wetland condition and function, including saltmarsh, floodplain wetland, wetlands at the tidal limits of tributaries
- » Roles and responsibilities of floodplain land-owners and managers, to ensure that drainage, levees, access, grazing and water rights, nutrient management and other land management processes are managed effectively and fairly
- » Processes to help local communities better connect waterway and public recreation values to estuary health values
- » Improving understanding of sub-catchment contributions to estuary sediment and nutrient loads
- » Finding the right balance between point source and diffuse source pollutants (urban and rural) to improve water quality and the health of the estuary
- » Engaging Aboriginal traditional owners and others in the Aboriginal community in defining and protecting estuary values through cultural stewardship and participation in estuary management
- » Enhancing opportunities for communities to access the banks and waterway for public recreation
- » Developing a land use and infrastructure/asset adaptation and transition process for low lying land that is impacted by rising sea level over the next two decades and onward
- » Understanding climatic change implications on existing habitat, ecological adaptation and transition process for migration along the estuary
- » Strengthening data and knowledge sharing for more effective management
- » Building confidence in the capacity to manage the challenges of the Hunter estuary. Establish governance that allows projects to move forward to deliver change and uniting as a region to focus our efforts and resources towards the same goal.

9.2 GAP ANALYSIS

- » Although the region has a wealth of research opportunities and information from groups such as University of Newcastle, Hunter Water, Hunter Valley Flood Mitigation and Hunter Research Foundation, a number of knowledge and data gaps are also apparent, particularly studies linking science to management. These gaps hinder decision making and evaluation of the effectiveness of management interventions in a complex system with diverse

interrelated processes. They reduce certainty and confidence in the management process and the outcomes that can be achieved.

- » Examples of knowledge gaps, knowledge transfer gaps and limited evidence bases for decision-making have been noted from literature review and from discussion with stakeholders. Important gaps are summarised below.

9.2.1 KNOWLEDGE GAPS

- » The NSW Government and the Manual have stated expectations that management actions should deliver value for money for the people of NSW and for coastal regions.

To demonstrate value for money, quality data on community and environmental values, as well as financial costs, are required. Multiple organisations in the lower Hunter region have reviewed community values and the nature of values is understood. Most often, quantitative information to support robust analysis (in a cost benefit analysis) is not available. This includes recreational use data for the estuary and relevant quantified indicators of environmental benefit.

- » Although there have been estuary monitoring programs at various times, there is no continuous monitoring or performance indicators for the whole of the estuary and its near tributaries to show change as projects are undertaken.

There is strong agreement that diffuse source pollutants from the catchment have a major influence on estuary water quality and estuary health. However, there are no sub-catchment

specific data on sub-catchment flows and water quality which can be used to provide a detailed analysis of catchment risks. Risk assessment is currently based on generic pollutant loads linked to land use.

- » The WRL hydrodynamic model of the Hunter estuary is a powerful tool for testing scenarios such as climate change, estuary processes and estuary morphological and health response.

More work is necessary to better understand risks, such as individual and interacting pressures, hazards and responses, particularly the impacts of climate change in a highly modified and dynamic system. These include system responses:

- ongoing maintenance dredging of the harbour
- interactions of future runoff variability (extreme flood and drought events) on channel stability, water quality and wetland health
- the capacity of saltmarsh and floodplain wetlands to accommodate sea level rise and how to manage adaption and transition

9.0 PRELIMINARY RISK ASSESSMENT

9.2.2 KNOWLEDGE TRANSFER GAPS

- » The sharing of current knowledge on the environmental context of the Hunter Estuary is inconsistent and not transparent. Some research and management programs are published in peer reviewed journals; some reports are on council or agency websites; some reports are never made public. There is no consolidated public reporting of progress in estuary management for the Hunter.
- » There are multiple organisations pursuing data for specific issues within their statutory responsibilities; but an overarching program of research and monitoring to support initiatives to improve estuary health has not been developed. With the diverse interests of the coastal councils and multiple state authorities, there is significant risk of duplication but also of missing opportunities to connect studies to inform management of interconnected natural systems.

9.2.3 LIMITATIONS IN THE EVIDENCE BASE

- » There is an interest in the efficiency and effectiveness of management actions. This is strongly promoted by the Natural Resources Commission and the Coastal Manual. Various grant funding programs for catchment management and estuary management over the last decade or more have required some element of monitoring of outcomes, over a short period following the funded works. It is apparent that these short-term, grant-linked monitoring programs do not provide the robust science that is necessary to strengthen confidence in management decisions.

Well-structured monitoring programs, linked to specific hypotheses about specific estuary health improvements are necessary. Pilot studies at a sub-catchment scale would be very beneficial.

9.3 STAGE 2 RESEARCH

The preliminary risk assessment, issue identification and gap analysis provided a list of research projects that will be undertaken in Stage 2 to assist in the development of the CMP.

- » Business case for lead project group beyond the development of the CMP
- » Map of inundation and impact to the Hunter Estuary catchment from predicted climate change. Predictive identification of those areas to be prioritized for impact assessment and resilience actions.
- » Sub-catchment evaluation of water quality and prioritising actions for those catchments that will provide greatest water quality benefit to the estuary.
- » Catchment review for prioritized riverbank management and user education
- » Evaluation of risk from carp and impact of current carp management plans.
- » Alignment of catchment management controls across all Hunter Estuary Coastal Councils.
- » Habitat mapping, prioritization of rehabilitation projects particularly informed by climate change data.
- » Socio economic analysis to inform the values of the estuary.

10.0 COMMUNITY ENGAGEMENT STRATEGY STAGES 2-4

The Coastal Management Manual suggests that in Stage 1 a "Community and Stakeholder Engagement Strategy" be developed to identify opportunities and important timing at which engagement should occur. It is a requirement of the Coastal Management Act 2016 that Councils consult with the community and stakeholders before adopting the CMP. To ensure the stakeholders have an understanding and commitment to the CMP it is therefore crucial that engagement be undertaken throughout the CMP development process.

Stage 1 engagement has been undertaken as discussed in section 7 of this scoping study, and Molino Stewart (Water Technology) was engaged to develop a strategy for stage 2-4. This is provided in Appendix 3.

The strategy provides an indication of timing of engagement for each stage. Further refinement of the engagement will need to be undertaken in each stage depending on the research topic and related impacts.

Crucial to the development of the CMP is to ensure that the community is kept informed of its progress and given opportunity to comment at a time that suites the stakeholder which importantly links to an effective website development.


[< BACK TO CONTENTS](#)

75

11.0 PRELIMINARY BUSINESS CASE

Developing a CMP is a strategic opportunity to unite the Hunter Region in the management of the Hunter Estuary to increase the environmental health, usability, resilience and spiritual wellbeing of the community. The following table provides the benefits of developing the CMP.

Table 8 Review of 'Key Estuary Issues' from the CZMP (2018)

ITEM	DISCUSSION	BUSINESS CASE –INDICATIVE ASSESSMENT
The complexity of management issues and decisions	The Hunter Estuary is a large, high value, multi-stakeholder system. It traverses five local council areas. While there is general agreement among the public authority stakeholders that work is needed to improve the health of the estuary, there is less agreement on strategic and priority issues and actions.	Preparation of the CMP is an opportunity to refine the approach to managing the estuary and focus on strategically important responses, implemented at the right scale.
The level of understanding about coastal (estuary) issues and coastal change	The Hunter Estuary has been the subject of many detailed studies of processes, ecological values, productivity, physical and biodiversity threats and risks. There are long historical records of estuary change. Despite this, water quality and ecological condition of the estuary (particularly the upper estuary) are poor. There is difficulty in ascertaining change created by successful estuary health initiatives due to the number of negative influences and the complex nature of the estuary system.	Preparation of the CMP is an opportunity to strengthen structured responses to key estuary health issues, including collecting data on what contributes to sustainable beneficial outcomes, and how significant implementation risks can be managed. The CMP process will also enhance knowledge sharing across organisations with management and estuary health roles and responsibilities.

ITEM	DISCUSSION	BUSINESS CASE –INDICATIVE ASSESSMENT
The level of uncertainty about risks and outcomes	There is abundant evidence of changes to estuary processes, associated with development and engineering works in the lower, mid and upper estuary and in the large Hunter River catchment. A detailed hydrodynamic model was developed by WRL in 2018 and enables testing of diverse scenarios and responses in the estuary. Detailed risk analysis has recently been completed as part of the review of the HVFMS. Compared to other estuaries, there is a greater certainty about the impacts of current and future threats and hazards on the health of the estuary. More uncertain is the most effective way to mitigate risks from threats and hazards affecting the estuary.	Whilst there is a lot of work undertaken to achieve some positive outcomes, the overall condition of the estuary remains poor. This suggests that there is uncertainty about appropriate outcomes and how to achieve and maintain them. The CMP offers an opportunity to clarify appropriate estuary health outcomes for the Hunter Estuary and to increase certainty about what is needed to achieve them.
The budget allocated to coastal management activities	More work is needed to understand the total cost of current 'coastal management' activities associated with the ecological health, use and physical stability of the Hunter Estuary.	Preparation of the CMP offers an opportunity for stakeholders to collaborate to understand the actual cost and benefits of efforts by all responsible organisations, public and private, to maintain or restore the health of the Hunter Estuary. Importantly, this will require better understanding of the environmental, social and economic benefits of a healthy and productive estuary system.
The capacity and willingness of the community and other private and public entities to contribute to the future cost of coastal management, particularly to the ongoing cost of management of areas exposed to current and future risk from coastal hazards or in coastal vulnerability areas	The willingness of the Lower Hunter community to contribute to the cost of natural hazard management has been tested with the ongoing HVFMS levy. Hunter LLS currently contributes 25% of the operating and maintenance costs of the HVFMS with funds derived from the Hunter Catchment Contributions levy (under the Water Management Act 2000). The HVFMS is a state-owned engineering work, protecting private interests. It is valued at more than \$860 million and provides significant flood protection to community and commercial interests. However, future specific coastal hazards in the estuary include tidal inundation of low-lying agricultural land (mostly pasture) separate to catchment flooding impacts. In the lower estuary, there are also tidal inundation impacts on residential and recreation land. The cost of managing the lower estuary to support the operations of the Port of Newcastle is known (as is the willingness of stakeholders to meet these costs to protect port operations).	Recent work by HVFMS and HWC provides some information about the costs and benefits of aspects of estuary management, how those costs and benefits are, or could be, shared and the willingness (or capacity) of beneficiaries to pay for higher investment in improving the health of estuary systems (particularly water quality and estuarine ecology). Hunter LLS also has some evidence of the willingness of landholders to contribute to the cost of estuary health. Preparation of the CMP will facilitate sharing lessons from existing studies and improve the use of economic analysis in decision making.

11.0 PRELIMINARY BUSINESS CASE

ITEM	DISCUSSION	BUSINESS CASE –INDICATIVE ASSESSMENT
The value of economic activity in the area that is dependent on the coast	The lower Hunter estuary (the Port of Newcastle) is Australia's largest coal export port and contributes to the value of a major resources sector. The estuary also supports a moderate commercial fishing industry, recreational fishing and other recreational boating. The estuary provides landscape amenity for a growing regional population (Maitland as a 'river city'). Maitland also promotes its fresh rural produce – a city surrounded by productive farmland. Some of this is irrigated out of the tidal pool of the estuary, or from groundwater under the estuary floodplain. The NSW government has invested in recreational amenity along the Newcastle foreshore of the lower estuary.	Preparation of the CMP will strengthen understanding of the ways in which estuary systems contribute to the economic success of the lower Hunter region. Even without detailed analysis it is apparent that the Hunter Estuary contributes a significant share of the NSW economy. The CMP will facilitate consideration of changes in the land/waterway uses and economic value of the estuary and floodplain over the coming decades, as sea level rise and climate change factors become more influential.
The economic and ecosystem service value of a healthy coastal environment	The economic value of healthy estuary systems is continuing to be refined, with studies on the economic contribution (e.g. through productive fisheries) of healthy mangrove and saltmarsh systems, stable banks protecting agricultural land and pump sites, flood mitigation infrastructure) and water quality suitable to support recreational aspirations (e.g. see studies for swimming in the Parramatta River). Some of these are studies from the Hunter Estuary and its wetlands. Others would need to be reviewed and adapted before use in the Hunter estuary context.	There is strong agreement that healthy estuary systems have high ecosystem service and economic value across a range of indicators, but regionally appropriate values are not currently available.
The potential cost and liability of future coastal impacts if known threats are not addressed; and the added social, economic and environmental value if coastal threats and opportunities are well managed	Work has been undertaken to review implication of coastal hazards on the flood mitigation system and Hunter Water infrastructure. However, neither of these cover the whole picture of estuary management. Strategic analysis of the costs of not managing climate change impacts on the estuary and associated land uses has been prepared by Hunter JO and DPE EES, noting that sea level rise and estuary health impacts are only one part of the broader spectrum of climate change risks to community resilience and sustainability.	Preparing the CMP provides an opportunity to better understand roles and responsibilities for critical issues and aspects of estuary management and to review how costs and benefits are distributed in relation to roles and responsibilities. It will facilitate a strategic review of where liabilities from not managing risk may be accruing and where investment is supporting benefits that more than offset risk.

ITEM	DISCUSSION	BUSINESS CASE –INDICATIVE ASSESSMENT
How Council currently generates funding and allocates resources to priorities and whether these sources and mechanisms are sustainable for coastal management	The current situation in the lower Hunter, with five councils, a JO and multiple state level public authorities suggests that current funding frameworks need clarification and are likely not sustainable in their current form. None of the councils are in a position to lead estuary management with their available resources. The grants scheme offers approximately 2 for 1 funding for planning.	Preparing the CMP offers an opportunity to review funding sources and mechanisms and how these can be used more effectively to achieve agreed outcomes for the estuary. Funding will be allocated to projects by ensuring the CMP is linked to the IP&R framework.
The proposed timeframe for preparing the CMP	Given the extension of the certified plans to December 2023, this now provides greater opportunity for the CMP's to be developed.	Whilst the development of the CMP's by December 2023 will be a dedicated task that will require extensive resourcing to ensure this occurs, completing the CMP is urgent so that the Councils and other public authority stakeholders can access funding to meet the requirements of necessary estuary projects.



[< BACK TO CONTENTS](#)

79

12.0 STAGING OF THE CMP DEVELOPMENT

Stage 2: Determine Risks, Vulnerabilities and Opportunities

Stage 2 of the CMP involves undertaking detailed studies that help us to identify, analyse and evaluate risks, vulnerabilities and opportunities.

The Coastal Management Manual identifies the following for Stage 2:

- » Engaging with the community and stakeholders
- » Refining understanding of key management issues
- » Identifying areas exposed to coastal hazards and threats to coastal values
- » Analysing and evaluating current and future risks (details risk assessment)

- » Identifying scenarios for social and economic change and related opportunities for coastal communities
- » Preparing a planning proposal to amend maps of coastal management areas, to commence the Gateway process if required
- » Identifying timing and priorities for responses, thresholds and lead times.

These works have begun during the Stage 1 process and will continue through to completion of the Stage 2 forecast for June 2023

Stage 3: Identify and evaluate options

Stage 3 involves the identification and evaluation of options following the research of risks investigated in Stage 2.

The Coastal Management Manual identifies the following for Stage 3:

- » Identifying and collating information on management options
- » Evaluating management actions, considering:
 - Feasibility (is it an effective and sustainable way to treat the risk)
 - Viability (economic assessment)
 - Acceptability to stakeholders
- » Engaging public authorities about implications for their assets and responsibilities
- » Evaluating mapping options and implications if a planning proposal is being prepared
- » Identifying pathways and timing of actions
- » Preparing a business plan for implementation

Stage 3 is forecast to be prepared by October 2023

Stage 4: Prepare, exhibit, finalise, certify and adopt the CMP

Stage 4 delivers the development of the coastal management program following public exhibition, adoption by all 5 Councils and submission to the Minister for certification.

The Coastal Management Manual identifies the following for Stage 4:

- » Preparing a coastal management program (CMP)
- » Exhibiting the draft CMP and any related planning proposal
- » Reviewing and adopting the draft CMP
- » Submitting the draft CMP to the Minister for certification
- » Publishing the certified CMP in the Gazette.

Stage 4 is forecast to be undertaken to adoption by the Council and submission for certification by the Minister, by December 2023.

Stage 5: Implement, monitor, evaluate and report

Stage 5 will be implemented following Ministerial certification of the CMP. Governance should be reviewed at that time to ensure the best model is created to deliver the CMP business case projects.

Interim review of the CMP should be undertaken yearly and in more detail in the fifth year, with a full review and rewrite at year 10.



[< BACK TO CONTENTS](#)

REFERENCES

- » BMT WBM (2009) Revised (2017) Hunter Estuary Coastal Zone Management Plan
- » Boys CA 2015. Changes in fish and crustacean assemblages in tidal creeks of Hexham Swamp following the staged opening of Ironbark creek floodgates. NSW Department of Primary Industries.
- » Boys CA and Pease B 2016. Opening the floodgates to the recovery of nektonic assemblages in a temperate coastal wetland. Marine and Freshwater Research 68(6) 1023-1035
- » Carvalho RC and Woodroffe CD (2015) From Catchment to Inner Shelf: Insights into NSW Coastal Compartments
- » Department of Environment and Climate Change 2009 Diffuse Source Water Pollution Strategy
- » Glamore, Mitrovic, Ruprecht, Dafforn, Scanes, Ferguson, Rayner, Miller, Dieber, Tucker, Rahman and King (2019) The Hunter River Estuary Water Quality Model. Presented at Australasian Coasts & Ports 2019 Conference – Hobart, 10-13 September 2019.
- » NSW Department of Commerce and Manly Hydraulics Laboratory (MHL) (2003) Hunter Estuary Processes Study. Report No. MHL1095.
- » NSW Department of Planning, Industry and Environment (2020a) Hunter Wetlands National Park Plan of Management. Prepared by the NSW National Parks and Wildlife Service.
- » NSW Marine Estate Management Authority (2015) Threat and Risk Assessment Framework for the NSW Marine Estate.
- » NSW Office of Environment and Heritage (2014) Hunter Climate Change Snapshot.
- » NSW Office of Environment and Heritage (2017) Health of the Hunter: Hunter River estuary report card 2016.
- » NSW Office of Environment and Heritage (2018a) NSW Estuary Tidal Inundation Exposure Assessment
- » Royal HaskoningDHV 2020 Stockton Coastal Management Program.
- » Umwelt 2021 Hunter River Estuary Coastal Management Program. Stage 1A Scoping Study
- » State of New South Wales and Office of Environment and Heritage 2018 NSW Coastal Management Manual (all sections)
- » Swanson RL, Ferguson AJP and Scanes PR (2017) Preliminary Ecological Assessment of the Lower to Mid Hunter River Estuary 2015–16, Office of Environment and Heritage, Sydney.
- » Winning G and Saintilan N (2009) Vegetation changes in Hexham Swamp, Hunter River, New South Wales, since the construction of floodgates in 1971. Cunninghamia 11(2): 185–194.


[< BACK TO CONTENTS](#)

APPENDIX 1: (ZMP IMPLEMENTATION

(ZMP STRATEGY)	(ZMP "SUGGESTED ONLY" ACTIONS)	IMPLEMENTATION	ACHIEVED
1. Establish or modify local planning guidelines and controls to allow appropriate assessment and consideration of estuarine habitats and biodiversity as part of any future development within the estuary and its surrounds	Investigate opportunities to develop compatible land use zonings and/or LEP mapping overlays (particularly near LGA boundaries) along the foreshore for each of the LGAs in consultation with community and government authorities	Considered at the time of the Standard LEP instrument being implemented by Councils	Yes
	Investigate new LEP provisions relating to the protection of the estuary identified by LEP overlays	Considered at the time of the Standard LEP instrument being implemented by Councils	Yes
	Organise a series of workshops to be attended by planning departments from each of the councils and aimed at establishing a unified and consistent approach to environmental planning on lands surrounding the estuary	Undertaken at the time of LEP development	Yes
	Investigate the creation of a checklist of considerations for all future development that allows assessing officers to identify and assess potential impacts on estuarine processes	Undertaken at the time of LEP development	Yes
	Continually update the checklist and associated assessment guidelines following monitoring, benchmarking and research	Not implemented	No

(ZMP STRATEGY)	(ZMP "SUGGESTED ONLY" ACTIONS)	IMPLEMENTATION	ACHIEVED
2. Investigate opportunities to protect key habitats and significant existing vegetation stands through rezoning to a more appropriate conservation zone	Councils should identify the key estuary management issues that need to be addressed by the DG's environmental assessment report which accompanies State significant listings, concept plans and project applications.	Unknown if implemented, Councils would have provided this information as a matter of course if asked	No
	Based on habitat mapping (in Strategy 3) and the conservation and Rehabilitation Masterplan (Strategy 6), along with other new information, update and/or prepare new DCPs or similar. DCP documents should incorporate buffers, offsets and considerations and numerical controls such as boundary set backs to minimise impact on key habitats and biodiversity through development restrictions	Would have been considered at the time of LEP development, however with the updated mapping this would need to be revisited.	Yes
	Overlay mapping from Strategy 3 with current zoning and land ownership maps	Not implemented	No
	Identify locations where current zoning is inadequate for conservation of existing vegetation and habitat areas	Would have been considered at the time of LEP development, however with the updated mapping this would need to be revisited	Yes
	Identify options for protection of key habitats and significant vegetation stands including voluntary conservation measures alongside zoning options	Unknown if implemented	No
	Coordinate among councils to establish a consistent approach	Not implemented	No

APPENDIX 1 – (ZMP IMPLEMENTATION)

(ZMP STRATEGY)	(ZMP "SUGGESTED ONLY" ACTIONS)	IMPLEMENTATION	ACHIEVED
	As appropriate recommend alternative conservation agreements for areas of key habitat and existing vegetation in consultation with community and government authorities	Unknown if implemented however new biodiversity conservation Act has changed this working space.	No
3. Map estuarine /instream and riparian vegetation to determine habitat potential, health and location and extents of estuary-related EECs	Collate all available mapping of estuarine vegetation. Source may include councils, WCA, OEH, DPI Fisheries, Hunter LLS Acquire the most recent available aerial photography. Where appropriate photography was not available arrange for new air photographs to be taken	Ad hoc review and compilation of mapping has been undertaken at various sites in the estuary for various reasons (eg SEPP 2018 Coastal management; OEH report card; Hunter Water Wastewater Strategy)	Yes
4. Develop an integrated predictive numerical model of the Hunter estuary, incorporating hydrodynamics, water quality and sediment transport processes, as necessary		Model developed by WRL. Started by Hunter Estuary sub technical group and continued by Hunter Water	Yes
5. Identify all structures within the estuary that are interfering with fish passage and then replace and rehabilitate on a priority basis	Conduct an audit of all estuarine waterways in the Hunter and establish which barriers continue to impede fish passage. Identify relevant land managers/asset owners	'Bring Back the Fish' noted as an example of implementation Also work by HVFMS in their review of the scheme DPI/ Hunter LLS project on restoring stream connectivity at selected sites.	Yes
	In consultation with relevant agencies establish priorities for removal of barriers in the Hunter estuary	On going	Yes

(ZMP STRATEGY)	(ZMP "SUGGESTED ONLY" ACTIONS)	IMPLEMENTATION	ACHIEVED
6. Develop a Hunter estuary conservation and rehabilitation masterplan that provides clear priorities for implementation of future conservation and rehabilitation		Hunter LLS undertook a collation of works to date as a demonstrated masterplan	Yes
7. Incorporate objectives from the CZMP into the Plan of Management for Hunter estuary wetlands National Park and assist with support for implementation		City of Newcastle was a representative on the stakeholder working group and provided the objectives of the CZMP. City of Newcastle assisted with implementation of the PoM at the Stockton Sandspit	Yes
8. Prioritise bank erosion sites with consideration to assets (built and natural), infrastructure, River Styles condition and recovery potential, rates of recession, land tenure/use and vegetation. Implement strategies to address erosion on a priority basis		Part of this action has been undertaken by SCS for HVFMS within their strategic review of the design and operation of the scheme. This includes use of aerial imagery over the last 15 years to map rates of recession/migration of banks, and how bank retreat relates to HVFLS infrastructure. Not clear whether this type of risk assessment has been completed for other assets – such as RMS roads and bridges or private land outside the HVFMS.	Yes
9. Support volunteers and environmental group participation, including Aboriginal Land Management Teams, in revegetation of riparian zones, where appropriate include opportunities to improve public access		Actively targeted at the time with Hunter LLS, however it is unclear whether this continued	Yes
10. Build on existing riparian vegetation guidelines to encourage consistency across the estuary landscape and differing land tenures		Whilst Hunter LLS has guidelines and so do HVFMS, these need to be united as a single document and distributed widely	Yes

APPENDIX 1 – (ZMP IMPLEMENTATION)

(ZMP STRATEGY)	(ZMP "SUGGESTED ONLY" ACTIONS)	IMPLEMENTATION	ACHIEVED
11. Introduce environmental planning requirements for all new development to achieve no net increase in pollutant runoff loads, through best practice stormwater management		Each Council has a Manual of Engineering Standards to assist with this knowledge piece, however this will need to be reviewed in light of the draft NSW Water Quality Objectives at the time of their finalisation.	Yes
12. Through Hunter and Central Coast Estuary Management Committee (or similar) host on a needs basis intergovernmental panel/ forum with senior administrators and agency staff to streamline coordinated and integrated decision making		Not implemented at the time, however the Hunter Wetlands Centre has undertaken a forum and will look to continue this with support from Hunter stakeholders	No
13. Raise public awareness of the values of the Hunter estuary including its international significance and sustainable use of the estuary through targeted community education		Some actions have been undertaken through the Estuary Health Report Card prepared by OEH and the Plan of Management for the Hunter Wetlands, however this has not been implemented at a community level	No
14. Improve land use practices throughout the catchment to minimise soil erosion and improve water quality		At the time of writing the CZMP, Councils were supported by a community support officer in association with Hunter LLS. These positions were not continued in some Councils, and this work is now done as a "business as usual" action by Hunter LLS with interested private landholders	Yes

(ZMP STRATEGY)	(ZMP "SUGGESTED ONLY" ACTIONS)	IMPLEMENTATION	ACHIEVED
15. Develop incentive mechanisms to promote and facilitate the adoption of sustainable agricultural practices that generate a commercial and environmental benefit		Hunter LLS provides incentive programs which have adapted over time depending on State Governments directive policy	Yes
16. Conservation of key habitat and significant vegetation should be undertaken through the Biobanking scheme or through preparation and implementation of individual conservation agreements		Unknown if implemented however new biodiversity conservation Act has changed this working space.	Yes
17. Undertake estuarine and related habitat restoration through physical works, revegetation and/or change management practices of assets and infrastructure		Some specific sites have had remediation undertaken specifically from the Hunter Wetlands and into the lower area for bird habitat. More planning is required for areas in the mid to upper estuary area	Yes
18. Develop a plan of all public access points along the Hunter estuary, review which coincide with sensitive habitats and formalise those with highest recreational usage/value to provide ongoing and undiminished access to the river		Not implemented	No
19. Support and participate in research programs and run these programs in partnership with stakeholders on a case by case basis		City of Newcastle worked with WRL to develop the hydrodynamic model and worked with UON on microplastics in the lower estuary	Yes
20. Investigate impacts from climate change and potential adaptations		Council undertook climate risk and adaptation plans in 2010 which need to be updated if they haven't been done already	Yes

APPENDIX 1 – CZMP IMPLEMENTATION

CZMP STRATEGY	CZMP "SUGGESTED ONLY" ACTIONS	IMPLEMENTATION	ACHIEVED
21. Undertake a critical review of the salinity trading scheme, Hunter WSP and upstream activities in terms of environmental consequences of water discharges and offtakes		Unclear if this has all been completed and considered the CZMP	No
22. Undertake assessments for contaminated sediments in the estuary		Assessments have been undertaken in relation to PFAS and dredging of the river mouth	Yes
23. Where appropriate reuse sediment dredged from the estuary			Yes
24. Identify and conserve heritage objects, places and landscapes in the Hunter estuary		HVFMS has undertaken some work in relation to this, however not for the whole estuary	No
25. Review the impact of the accumulation/migration of sediments within the Hunter Estuary		WRL has undertaken some of this work during flooding however recent floods in 2022 may have changed this	Yes


[BACK TO CONTENTS](#)

91

APPENDIX 2: PRELIMINARY RISK ASSESSMENT

RISK RANK = ● MEDIUM ● HIGH ● EXTREME				IS THIS RISK ADDRESSED IN A MANAGEMENT PLAN?		PRESENT DAY RESIDUAL RISK			FUTURE RISK			COMMENTS ON (CONTROLS, PROGRAMS, STRATEGIES)
DOMAIN	VALUE IMPACTED	RISK DESCRIPTION	OUTCOME	IS THIS RISK ADDRESSED IN A MANAGEMENT PLAN?	WATER ESTUARY (CMP)	CONSEQUENCE	LIKELIHOOD	RISK RANK	CONSEQUENCE	LIKELIHOOD	RISK RANK	
Healthy lifestyle	Liveability	Riverfront land is kept within private ownership	Limited access to the river for cultural and recreation purposes	✗		Insignificant	Almost certain					How is this addressed in LEPs, Region Plan, Greater Newcastle Metro Plan, LSPS's etc
Healthy lifestyle	Public safety	Climate change: more frequent flooding	Increase in injuries and/or loss of human life. Loss of infrastructure	✗		Major	Likely					
Healthy lifestyle	Recreation / public safety	Primary contact poor water quality impacting public health (pathogens, algae)	Reduced opportunity for recreation and/or poor public health outcomes			Moderate	Likely					
Healthy lifestyle	Recreation	Secondary contact - poor water quality impacting public health (pathogens, algae)	Reduced access for recreation			Minor	Likely					
Healthy lifestyle	Recreation	Fishing - impacted by poor water quality leading to poor food safety	Reduced access for recreation, cultural			Moderate	Possible					
Healthy lifestyle	Recreation	Fishing - lack of habitat and poor water quality	Reduced fish stock	✗		Moderate	Almost certain					
Healthy lifestyle	Recreation / Community access	Passive recreation (bird watching) limited by lack of habitat and access	Reduced recreation opportunity			Minor	Almost certain					

RISK RANK = ● MEDIUM ● HIGH ● EXTREME				IS THIS RISK ADDRESSED IN A MANAGEMENT PLAN?		PRESENT DAY RESIDUAL RISK			FUTURE RISK			COMMENTS ON (CONTROLS, PROGRAMS, STRATEGIES)
DOMAIN	VALUE IMPACTED	RISK DESCRIPTION	OUTCOME	IS THIS RISK ADDRESSED IN A MANAGEMENT PLAN?	WATER ESTUARY (CMP)	CONSEQUENCE	LIKELIHOOD	RISK RANK	CONSEQUENCE	LIKELIHOOD	RISK RANK	
Healthy lifestyle	Recreation / Community access	Recreation is limited by lack of public access to waterway and wetlands	Reduced recreation opportunity	✗		Insignificant	Likely					Consider how this is addressed in the Hunter Region Plan and the Greater Newcastle Metro Plan
Healthy lifestyle	Indigenous Culture	Lack of access	Limited access to the river for cultural practices			Moderate	Likely					
Healthy lifestyle	Indigenous Culture	Shellfish closures	limits indigenous cultural practices			Moderate	Possible					
Healthy lifestyle	Indigenous Culture	Knowledge not well understood by decision-makers	Cultural practices not considered in decisions leading to destruction of cultural sites			Major	Possible					
Healthy lifestyle	Indigenous Culture	Inadequate protection for heritage sites	Loss of cultural heritage	✗		Major	Possible					
Healthy lifestyle	Indigenous Culture	Stories and significance of place not known	Loss of cultural heritage	✗		Major	Possible					
Healthy lifestyle	Indigenous Culture	Traditional owners not involved in management of the estuary	Important knowledge and practices not considered, no trust in the development of the CMP			Major	Possible					
Healthy lifestyle	Indigenous Culture	Loss of culturally important species from the estuary	Limited indigenous cultural practices			Moderate	Possible					
Healthy lifestyle	Indigenous Culture	Sea level rise	Inundation / loss of important cultural heritage	✗					Moderate	Possible		
Healthy lifestyle	Indigenous Culture	Erosion	Loss of important cultural heritage	✗		Moderate	Possible					
Healthy lifestyle	Post contact heritage	Sea level rise	Inundation / loss of important cultural heritage	✗					Moderate	Possible		
Healthy lifestyle	Post contact heritage	Erosion	Loss of important cultural heritage	✗		Moderate	Possible					
Healthy lifestyle	Community Access / public safety	Appetite of land managers to provide green space access	Uncertainty of whether opportunity to create these spaces limits planning / reduced access for recreation			Moderate	Possible					
Healthy lifestyle	Liveability / Amenity	Need to manage floods	Community amenity & access blocked by flood infrastructure	✗		Minor	Possible					

APPENDIX 2: PRELIMINARY RISK ASSESSMENT

RISK RANK = ● MEDIUM ● HIGH ● EXTREME				IS THIS RISK ADDRESSED IN A MANAGEMENT PLAN?		PRESENT DAY RESIDUAL RISK			FUTURE RISK			COMMENTS ON (CONTROLS, PROGRAMS, STRATEGIES)
DOMAIN	VALUE IMPACTED	RISK DESCRIPTION	OUTCOME	IS THIS RISK ADDRESSED IN A MANAGEMENT PLAN?	IS THIS RISK ADDRESSED IN A MANAGEMENT PLAN?	CONSEQUENCE	LIKELIHOOD	RISK RANK	CONSEQUENCE	LIKELIHOOD	RISK RANK	
Healthy lifestyle	Community knowledge & understanding	Knowledge held with people without system/network for managing it	Knowledge gained can be lost over time			Major	Almost certain					
Healthy lifestyle	Liveability	Development/land use (urban/industrial) change doesn't consider liveability outcomes	Community loses access, amenity of waterway			Minor	Possible					
Healthy lifestyle	Public safety	Lack of regulation of pathogen sources	Potential community illness, lack of recreation opportunity			Moderate	Possible					
Healthy lifestyle	Resilience	Sea level rise	Risk to infrastructure/houses within close proximity to river/tributaries/wetlands	X					Major	Likely		
Healthy lifestyle	Resilience	changed weather patterns	Damage to recreational areas, infrastructure, vegetation reducing aesthetics and shade	X					Catastrophic	Almost certain		
Estuary health	Ramsar wetland / NPWS land	Sea level rise	Inundation, reduction in habitat available for migratory shorebirds, uncertainty of forward planning and revegetation efforts	X	X				Moderate	Likely		
Estuary health	Ramsar wetland / NPWS land	Salt water intrusion	Changing vegetation/ecosystem type, increased difficulty in maintenance and infrastructure installation	X	X				Moderate	Likely		
Estuary health	Ramsar wetland / NPWS land	PFAS discharge to Fullerton Cove	Possible impact to migratory birds	X	X	Moderate	Likely					
Estuary health	Ramsar wetland / NPWS land	Development pressure	Disturbance to birds and potential habitat reduction	X	X	Moderate	Likely					

RISK RANK = ● MEDIUM ● HIGH ● EXTREME				IS THIS RISK ADDRESSED IN A MANAGEMENT PLAN?		PRESENT DAY RESIDUAL RISK			FUTURE RISK			COMMENTS ON (CONTROLS, PROGRAMS, STRATEGIES)
DOMAIN	VALUE IMPACTED	RISK DESCRIPTION	OUTCOME	IS THIS RISK ADDRESSED IN A MANAGEMENT PLAN?	IS THIS RISK ADDRESSED IN A MANAGEMENT PLAN?	CONSEQUENCE	LIKELIHOOD	RISK RANK	CONSEQUENCE	LIKELIHOOD	RISK RANK	
Estuary health	Ramsar wetland / NPWS land	Increase pest and weeds	Degradation of NPWS land due to increased presence of pests such as deer and increasing costs of weed maintenance as legislated species change	X	X	Minor	Possible					
Estuary health	Ramsar wetland / NPWS land	Industrial discharges	Pollution of significant international site	X	X	Major	Possible					
Estuary health	Ramsar wetland / NPWS land	Reliance on flood mitigation system which is aging, however without issues such as wetland survival and acid sulphate soils may be impacted				Major	Likely					
Estuary health	Ramsar wetland / NPWS land	changed weather patterns	Increased storms creates a monetary impact to resolve damage, risk of reliance on aging flood mitigation system	X	X	Major	Almost certain					
Estuary health	Ramsar wetland / NPWS land	Loss of Assets of intergenerational significance (AIS)	Loss of habitat for species such as green and golden bell frog may mean possible extinction and loss to generations of the future		X	Catastrophic	Possible					
Estuary health	Water quality	Urban runoff is of a poor quality and not sufficiently treated before discharge into waterways	Water quality is below community objectives	X	X	Major	Almost certain					
Estuary health	Water quality	Sewage effluent and septic discharge to estuary	Water quality is below community objectives	X	X	Major	Possible					
Estuary health	Water quality	Industrial discharges	Water quality is below community objectives	X	X	Major	Possible					
Estuary health	Water quality	Upper catchment contribution of nutrients, sediment and other pollutants	Water quality is below community objectives	X	X	Major	Almost certain					
Estuary health	Water quality	Unstable riverbanks	Water quality is below community objectives	X	X	Catastrophic	Almost certain					
Estuary health	Water quality	Carp - reducing water quality through bank & bed feeding, out competing native fish	Increased sediment, reduced bank stability, impact to native marine animal health		X	Major	Almost certain					

APPENDIX 2: PRELIMINARY RISK ASSESSMENT

RISK RANK = ● MEDIUM ● HIGH ● EXTREME				IS THIS RISK ADDRESSED IN A MANAGEMENT PLAN?		PRESENT DAY RESIDUAL RISK			FUTURE RISK			COMMENTS ON (CONTROLS, PROGRAMS, STRATEGIES)
DOMAIN	VALUE IMPACTED	RISK DESCRIPTION	OUTCOME	IS THIS RISK ADDRESSED IN A MANAGEMENT PLAN?	IS THIS RISK ADDRESSED IN A MANAGEMENT PLAN?	CONSEQUENCE	LIKELIHOOD	RISK RANK	CONSEQUENCE	LIKELIHOOD	RISK RANK	
Estuary health	Water quality	Litter in the environment results in plastics in waterways	Impact to aquatic & marine animal health	✓	✓	Major	Likely	High				
Estuary health	Water quality	Acid sulfate soil exposure	Acid discharge to estuary	✓	✓	Catastrophic	Possible	High				
Estuary health	Healthy riverbanks	Lack of riparian veg. inappropriate riparian veg causes unstable riverbank - leads to erosion	Bank erosion from flood impacts, increased velocities, sediment input, nutrient loss of land	✓	✓	Major	Almost certain	High				
Estuary health	Urban development	Increased pollution, increased runoff, land clearing	Water quality & Biodiversity (all health values) impacts	✓	✓	Catastrophic	Likely	High				
Estuary health	Healthy riverbanks	Use of boats creating wake impacts	Boat wash impact increasing erosion of banks	✓	✓	Major	Almost certain	High				
Estuary health	Healthy riverbanks	Sedimentation	Causes shallowing of river and further bank erosion	✓	✓	Major	Possible	High				
Estuary health	Water quality	Lack of catchment vegetation, poor sediment and erosion control	Sediment in the water	✓	✓	Major	Almost certain	High				
Estuary health	Water quality	Dredging	Sediment in the water, loss of habitat, change in tidal prism, potential toxin release	✓	✓	Major	Likely	High				
Estuary health	Biodiversity	Habitat loss	Potential localised extinction of species, reduced genetic stock, competition for remaining habitat, pushing species into inappropriate space	✓	✓	Catastrophic	Likely	High				
Estuary health	Biodiversity	Poor water quality	Loss of food sources, incompatible habitat	✓	✓	Catastrophic	Likely	High				

RISK RANK = ● MEDIUM ● HIGH ● EXTREME				IS THIS RISK ADDRESSED IN A MANAGEMENT PLAN?		PRESENT DAY RESIDUAL RISK			FUTURE RISK			COMMENTS ON (CONTROLS, PROGRAMS, STRATEGIES)
DOMAIN	VALUE IMPACTED	RISK DESCRIPTION	OUTCOME	IS THIS RISK ADDRESSED IN A MANAGEMENT PLAN?	IS THIS RISK ADDRESSED IN A MANAGEMENT PLAN?	CONSEQUENCE	LIKELIHOOD	RISK RANK	CONSEQUENCE	LIKELIHOOD	RISK RANK	
Estuary health	Biodiversity	Disruption of migratory bird feeding times by human activities (e.g. fishing, boating, passive recreation, located alongside incompatible land uses e.g. industrial)	Loss of biodiversity	✓	✓	Moderate	Possible	High				
Estuary health	Biodiversity	Loss of food sources due to channel modification, snag reduction, water quality	Loss of biodiversity	✓	✓	Major	Unlikely	High				
Estuary health	Biodiversity	Acidification of estuary	Unsure if we have any data on this?	✓	✓	Catastrophic	Unlikely	High				
Estuary health	Biodiversity	Loss of water/flow due to extraction through the system impacts ecosystem health	Fresh water less available to ecosystems e.g. wetlands	✓	✓	Catastrophic	Possible	High				
Estuary health	Biodiversity	Change in salinity in the mid to upper estuary due to sea level rise	Changes the ecosystem (type and location of aquatic species)	✓	✓	Moderate	Possible	High				
Estuary health	Biodiversity	Loss of biodiversity from floodplain, loss of opportunity for migration of ecosystems with sea level rise	Loss of biodiversity from floodplain, loss of opportunity for migration of ecosystems with sea level rise	✓	✓	Catastrophic	Possible	High				
Estuary health	Biodiversity	Flood mitigation infrastructure e.g. flood gates and flaps, limits natural intrusion of brackish water from river to floodplain/wetlands	Lack of flushing, poor water quality, change of ecosystem type, loss of biodiversity, loss of opportunity for future habitat and migration of ecosystems up the estuary	✓	✓	Catastrophic	Likely	High				
Estuary health	Biodiversity	Black water events (Woodberry Swamp)	Pollution, fish kills	✓	✓	Major	Almost certain	High				
Estuary health	Biodiversity	Over fishing	Loss of food sources, impact to economy	✓	✓	Major	Possible	High				
Estuary health	Biodiversity	By catch	Loss of food sources, impact to economy, potential impact to threatened or significant species, nutrient source if put back into waterways	✓	✓	Moderate	Possible	High				

APPENDIX 2: PRELIMINARY RISK ASSESSMENT

RISK RANK = ● MEDIUM ● HIGH ● EXTREME				IS THIS RISK ADDRESSED IN A MANAGEMENT PLAN?		PRESENT DAY RESIDUAL RISK			FUTURE RISK			COMMENTS ON (CONTROLS, PROGRAMS, STRATEGIES)
DOMAIN	VALUE IMPACTED	RISK DESCRIPTION	OUTCOME	IS THIS RISK ADDRESSED IN A MANAGEMENT PLAN?	IS THIS RISK ADDRESSED IN A MANAGEMENT PLAN?	CONSEQUENCE	LIKELIHOOD	RISK RANK	CONSEQUENCE	LIKELIHOOD	RISK RANK	
Estuary health	Governance	Lack of single direction to create healthier estuary	Conflicts of projects, duplication of efforts, lack of planning resulting in no action due to indecision	✓		Catastrophic	Almost certain	EXTREME				
Estuary health	climate change - Flow	More extreme events - bigger flood, worse droughts	More pollution, erosion, less enviro flow, habitat changes	✓	✓				Catastrophic	Likely	EXTREME	
Estuary health	Climate change - Flow, healthy riverbanks	More intense local storms	Mobilise pollutants, riverbank erosion.	✓	✓				Major	Likely	HIGH	
Estuary health	Climate change - All estuary health values	Sea level rise	Changes in tidal prism, mosaic of habitat (loss/change)	✓	✓				Major	Likely	HIGH	
Estuary health	Climate change - All estuary health values	Changes in temperature	Change in species habitat/range	✓	✓				Major	Possible	HIGH	
Estuary health	Climate change - Water quality, Biodiversity	Fire - Habitat destruction, long and short-term ecosystem impacts, acid/sediment runoff	Fish kills, long recovery, ecosystem shifts, tipping points		✓				Catastrophic	Possible	HIGH	
Estuary health	Water quality	Diffuse and point source contamination	Closure of fisheries, vegetation impacts, fisheries closure, shorebird health impacts	✓	✓	Moderate	Possible	HIGH				
Productivity	Indigenous Culture	Lack of access and climate change	Reduced opportunity for economic enterprises			Major	Possible	HIGH				
Productivity	Post contact heritage	Climate change - sea level rise	Reduced opportunity for economic enterprises such as tourism at heritage buildings, wharves etc						Major	Possible	HIGH	

RISK RANK = ● MEDIUM ● HIGH ● EXTREME				IS THIS RISK ADDRESSED IN A MANAGEMENT PLAN?		PRESENT DAY RESIDUAL RISK			FUTURE RISK			COMMENTS ON (CONTROLS, PROGRAMS, STRATEGIES)
DOMAIN	VALUE IMPACTED	RISK DESCRIPTION	OUTCOME	IS THIS RISK ADDRESSED IN A MANAGEMENT PLAN?	IS THIS RISK ADDRESSED IN A MANAGEMENT PLAN?	CONSEQUENCE	LIKELIHOOD	RISK RANK	CONSEQUENCE	LIKELIHOOD	RISK RANK	
Productivity	Ramsar wetland / NPWS land	Impacts to Ash Island	Increasing maintenance financial implication to NPWS		✓	Moderate	Likely	EXTREME				
Productivity	Fisheries	Degrading wetlands or inability to maintain wetlands due to climate change	Financial loss to the fisheries industry			Major	Likely	EXTREME				
Productivity	Research	Research groups not included in the CMP development	Loss of opportunity to share the Hunter knowledge as examples to others, loss of collaboration			Moderate	Unlikely	MEDIUM				

APPENDIX 2: PRELIMINARY RISK ASSESSMENT

SUCCESS CRITERIA					
RATING	PUBLIC SAFETY	LOCAL ECONOMY AND GROWTH	COMMUNITY AND LIFESTYLE	ENVIRONMENT AND SUSTAINABILITY	PUBLIC ADMINISTRATION
Catastrophic	Large numbers of serious injuries or loss of lives	Regional decline leading to widespread business failure, loss of employment and hardship	Region would be seen as very unattractive, moribund and unable to support its community	Major widespread loss of environmental amenity and progressive irrecoverable environmental damage	Public Administration would fall into decay and cease to be effective
Major	Isolated instances of serious injuries loss of lives	Regional stagnation such that businesses unable to thrive and employment does not keep pace with population growth	Severe and widespread decline in services and quality of life within the community	Severe loss of environmental amenity and danger of continuing environmental damage	Public administration would struggle to remain effective and be seen as in danger of failing completely
Moderate	Small numbers of injuries	Significant general reduction in economic performance relative to current forecasts	General appreciable decline in services	Isolated but significant instances of environmental damage that might be reversed with intensive efforts	Public administration would be under severe pressure on several fronts
Minor	Serious near misses or minor injuries	Individually significant but isolated areas of reduction in economic performance relative to current forecasts	Isolated but noticeable examples of decline in services	Minor instances of environmental damage that could be reversed	Isolated instances of public administration being under severe pressure
Insignificant	Appearance of a threat but no actual harm	Minor shortfall relative to current forecasts	There would be minor areas in which the region was unable to maintain its current services	No environmental damage	There would be minor instances of public administration being under more than usual stress but it could be managed

LIKELIHOOD	CONSEQUENCE				
	Insignificant	Minor	Moderate	Major	Catastrophic
ALMOST CERTAIN	Medium	High	High	Extreme	Extreme
LIKELY	Medium	Medium	High	High	Extreme
POSSIBLE	Low	Medium	High	High	High
UNLIKELY	Low	Low	Medium	Medium	High
RARE	Low	Low	Medium	Medium	High

APPENDIX 3: HUNTER ESTUARY CMP (COMMUNITY STAKEHOLDER ENGAGEMENT STRATEGY

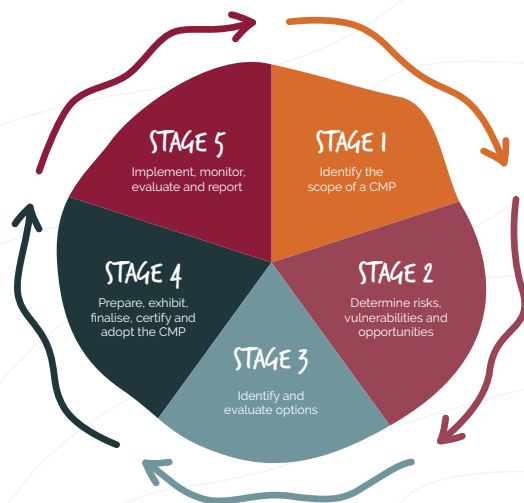
1.0 PROJECT BACKGROUND:

1.1 COASTAL MANAGEMENT PROGRAM

The purpose of a Coastal Management Program (CMP) is to set the long-term strategy for the coordinated management of the coastal zone with a focus on achieving the objectives of the Coastal Management Act 2016 (CM Act) in accordance with the NSW Coastal Management Manual 2018 (the Manual).

The Coastal Management Manual 2018 recommends that a five-stage risk management process for the preparation and implementation of a CMP be followed as shown in Figure 1.

Fig 1 (Right): Five stages of the coastal management program development



1.2 (CMP ENGAGEMENT REQUIREMENTS).

The CM Act (Section 16) requires councils to engage with the community and other stakeholders before adopting a CMP. Part A of the coastal management manual includes statutory provisions and mandatory requirements relating to community and stakeholder engagement.

The NSW Government has provided guidance in how to prepare a CMP community and engagement strategy in its document: Guidelines for community and stakeholder engagement in coastal management (Guidelines). It is recommended that councils prepare

a community and stakeholder engagement strategy in Stage 1 to assist in identifying how the council will engage with the community and stakeholders during the preparation of the CMP. This strategy adheres to the guidance from the NSW Government.

1.3 STUDY AREA

The Hunter Estuary is one of the largest and most complex estuaries in NSW. It is subject to a range of pressures from mining, agriculture, industry and urbanisation while providing a home to internationally important shorebirds and wetlands.

The Estuary provides ecosystem services that support community economic, social, physical and spiritual wellbeing whilst also being sensitive to such risks as floods and sea level rise.

The extent of the Hunter Estuary is mapped as 65 kilometres along the Hunter River to Oakhampton within close proximity to Melville Ford Bridge, 75 kilometres from the ocean along Paterson River to Gostwyck Bridge and 46 kilometres from the ocean along the Williams River to the Seaham Weir.

It should be noted that the study area is limited to the coastal zone along each waterway as defined by the State Environmental Planning Policy (Resilience and Hazards) 2021 (SEPP). The SEPP identifies four coastal management areas that when combined define the coastal zone:

1. Coastal rainforest and littoral rainforest area
2. Coastal Vulnerability Area
3. Coastal Environment Area
4. Coastal Use Area



Fig 2 (Above): Map of the study area

APPENDIX 3: HUNTER ESTUARY CMP COMMUNITY STAKEHOLDER ENGAGEMENT STRATEGY

2.0 CONTEXT:

2.1 HUNTER ESTUARY CMP

In Stage 1 it is recommended that councils develop a vision for the coast that is consistent with the objects of the CM Act and councils' broader vision, as set out in its CSP.

The Vision of the Hunter Estuary CMP is:

The Hunter Estuary is celebrated for its cultural significance, important ecosystems and the diversity of activities it supports. The people of the Hunter connect with the Estuary and are united in their stewardship of the Estuary for future generations. The Hunter Estuary is flourishing, resilient to change and rich in natural beauty.

The Objectives of the Hunter Estuary CMP are to:

- » Protect and enhance natural estuary processes and environmental values through restoration and rehabilitation.
- » Facilitate social interaction with and understanding of the Hunter estuary by maintaining and enhancing public access amenity and safe and appropriate use and activities, recognising the benefits that nature brings to human health and wellbeing and the importance of protecting the Hunter estuary.
- » Acknowledge, respect and protect indigenous communities' spiritual, social and economic use
- » Support the strategic economic importance of the Hunter Estuary
- » Facilitate ecologically sustainable development
- » Mitigate current and future risks from coastal hazards and climate change to improve resilience of the estuary
- » Enhance community stewardship of the estuary through consultation and engagement.

2.2 HUNTER ESTUARY ALLIANCE

Preparing and implementing a CMP is a major long-term project, requiring consideration of multiple complex issues about which there will be differing perspectives across the project partners and the community. Engagement is therefore not a one-off event, rather it is a long-term dialogue.

Maitland City Council is leading the development of the CMP supported by the Hunter Estuary Alliance (HEAL), a strategically designed initiative composed of influential government entities in the Hunter Region that are uniting efforts to "heal the estuary".

HEAL is directed by:

- » City of Newcastle
- » Port Stephens Council
- » Maitland City Council
- » Cessnock City Council
- » Dungog Shire Council
- » Hunter Local Land Services
- » Hunter Water
- » Department of Planning & Environment.

2.3 INTEGRATED PLANNING AND REPORTING

Many councils have comprehensive community engagement policies, strategies and capabilities in a range of engagement methods. The Integrated Planning and Reporting (IP&R) manual provides detailed guidance on how to develop a broad community engagement strategy to develop and review the Community Strategic Plan (CSP).

That manual and strategy are both relevant to the CMP. In developing the CMP community and stakeholder engagement strategy, this Strategy has drawn on the following engagement policies and strategies.

- » Maitland City Council Communication and Engagement Strategy 2022 – 2026
- » City of Newcastle Community Participation Plan
- » Port Stephens Communication and Engagement Strategy 2021 to 2025
- » Cessnock City Council Community Engagement Strategy
- » Dungog Shire Community Participation Plan.

APPENDIX 3: HUNTER ESTUARY CMP COMMUNITY STAKEHOLDER ENGAGEMENT STRATEGY

2.4 COMMUNITY VALUES, ISSUES AND RISKS

Much of the information needed to develop this community and stakeholder engagement strategy has been generated by the councils and other public authorities in previous stakeholder engagement processes or in developing the councils' engagement policy and strategy.

Other plans, such as an existing coastal zone management plan or flood risk management plan or community development plan, may document issues and priorities that have previously been identified by stakeholders and the community.

Recently, several projects have undertaken community and/or stakeholder engagement to understand the value of the river, estuary and environment. These values are summarised in Table 1.

Table 1: Ramsar Wetlands and Strategic Context

ESTUARY HEALTH	HEALTHY LIFESTYLE	PRODUCTIVITY
Water Quality	Liveability	Jobs and Growth
Connectivity	Resilience	Resilience
Biodiversity / Habitat / Shorebirds	Community knowledge & understanding	Heritage
Wetlands	Recreation	Fisheries /Aquaculture
Resilience	Community Access	Creative and beautiful cities- urban design and liveability
Ecological Health	Amenity / scenic quality	Economy activated
Protecting and increasing native vegetation	Nature/Green Spaces	Tourism
Flow	Community	Flood mitigation
Healthy Riverbanks	Flood planning & emergency response	Agriculture
Significant species	Indigenous Culture	Water extraction- drinking / Port and associated industry / Research base

Issues and risks identified through prior community and stakeholder engagement relate to the following:

- » Restoration of riparian zone
- » Restoration of wetlands
- » Effective land management
- » Community connection to waterways
- » Better understanding contributions to estuary sediment and nutrient loads
- » Improving water quality by understanding pollutant source
- » Engagement of local Aboriginal groups and Traditional Owners
- » Preserving local recreational uses
- » Adaptation to sea-level rise
- » Improving data sharing for more effective land management
- » Building confidence in the capacity to manage the estuary
- » Loss of knowledge without system / network for managing / retaining
- » Changed weather patterns and more extreme events
- » Impact of pest species such as carp
- » Loss of habitat
- » Flood mitigation infrastructure
- » Lack of governance in relation to estuary management
- » Socio economic impacts.



Photo by Kat Stanley

[< BACK TO CONTENTS](#)

107

APPENDIX 3: HUNTER ESTUARY CMP COMMUNITY STAKEHOLDER ENGAGEMENT STRATEGY

2.5 IAP2 SPECTRUM

According to the Guidelines for community and stakeholder engagement in coastal management, 'community' refers to any individual or group of individuals who have something in common. They are members of the public who may be residents in the local government area or a local interest group.

'Stakeholders' refers to individuals or groups who have a stake or direct interest in the outcome of the process. This may include public authorities, community groups, directly affected landholders or business groups.

The IAP2 spectrum (Figure 3) provides a framework for defining the appropriate role of community and stakeholders in an engagement process. The spectrum identifies five levels of engagement, the goal of each level and the community's role in decision-making and implementation.

INCREASING IMPACT ON THE DECISION →					
	Inform	Consult	Involve	Collaborate	Empower
Public participation goal (what we are trying to achieve)	To provide the public with balanced and objective information to help them understand the problem, alternative and/or solutions	To obtain public feedback on alternatives and/or decisions	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered	To partner with the public in each aspect of the decision including the development of alternatives and identification of the preferred solution	To place the final decision making in the hands of the public
Promise to the public	We will keep you informed	We will keep you informed, listen to and acknowledge concerns and provide feedback on how public input influenced the decision	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision	We will work with you to formulate solutions and incorporate your advice and recommendations into the decisions to the maximum extent	We will implement what you decide

Fig 3: IAP2 Public Participation Spectrum

According to the Guidelines, the identification of issues and the decisions made during the preparation of a CMP are generally of the same level of public impact as the decisions for the CSP, so tools and techniques

aligned with the 'involve' and 'collaborate' levels of engagement are strongly recommended. It is important to note that to operate at the 'involve' and 'collaborate' levels, the council will 'inform' throughout the process.

2.6 COMMUNITY PROFILE

The Guidelines for community and stakeholder engagement in coastal management recommend the development of a community profile for the CMP study area. This helps inform the engagement content and methods developed in the Strategy.

For the purposes of the Hunter Estuary CMP, the communities of Maitland LGA Newcastle LGA, Port Stephens LGA, Cessnock LGA and Dungog LGA have

been included in the community profile (Table 2). Data used in Table 2 has been obtained from the 2021 Census statistics.

Table 2: Community profile of the study area

	MAITLAND	NEWCASTLE	PORT STEPHENS	CESSNOCK	DUNOG	NSW
LGA Population (2021)	90,553	169,317	75,276	64,082	9,525	
Median age of persons (years)	36	37	39	37	46	39
Percentage <15 years old	21%	16%	17%	20%	19%	18%
Percentage >64 years old	16%	17%	26%	17%	22%	17%
Percentage Population Aboriginal and Torres Strait Islander	8%	4%	7%	10%	7%	3%
Birthplace: Australia	87%	81%	83%	88%	89%	65%
Language used at home: English only	91%	85%	91%	90%	95%	68%
Median total household income (\$/weekly)	\$1,766	\$1,760	\$1,372	\$1,493	\$1,485	\$1,829
Highest year of school completed: Year 12 or equivalent	12%	14%	11%	11%	9%	15%
Highest year of school completed: Bachelor's degree level and above	15%	28%	14%	10%	15%	28%
Employed population	64%	64%	52%	57%	59%	59%
% requiring assistance	6.7%	6.4%	7.2%	7.8%	10.5%	5.8%

APPENDIX 3: HUNTER ESTUARY CMP COMMUNITY STAKEHOLDER ENGAGEMENT STRATEGY

Features to note from the community profile include:

- » All LGAs had close to the NSW average percentage of population less than 15 years old (18%).
- » 26% of Port Stephens LGA and 22% of Dungog LGA are above the age of 64 years, higher than the NSW average of 17% of the population.
- » All LGAs had higher Aboriginal and Torres Strait Islander populations than the NSW average, with the highest percentage in Cessnock LGA (10%).
- » All LGAs had a higher percentage of people born in Australia and only speaking English at home compared to the NSW state average. The lowest percentages are in Newcastle LGA, where 81% of the population was born in Australia and 85% of the population only speaks English at home.
- » The LGAs generally have lower rates of year 12 and university schooling completed. Newcastle LGA had the highest rate of schooling completed, with 28% of the population having a bachelor's degree, compared to 10% in Cessnock LGA.
- » Port Stephens LGA has the lowest rate of employed population (52%) likely reflecting a higher rate of retirees. Maitland LGA and Newcastle LGA have 64% of the populations employed, higher than the state average of 59%.
- » The percentage of those requiring assistance is greatest in Dungog LGA (double the NSW average). This should be noted in the development of engagement activities for those people with disabilities and/or older people.

3.0 ENGAGEMENT OBJECTIVES:
3.1 PURPOSE OF ENGAGEMENT

To work with communities and other stakeholders to:

- » understand stakeholder's issues, goals and aspirations for the Hunter Estuary and the social, economic and environmental services it provides.
- » identify and evaluate alternative management options to reduce impacts on the Hunter estuary.
- » identify preferred management actions to reduce impacts on the Hunter estuary.

The decision about the final management actions and priorities in the CMP remains with council, subject to advice from the NSW Coastal Council and certification by the Minister.

3.2 ENGAGEMENT OBJECTIVES

According to the Guidelines, the general objectives (intent) for each stage of the CMP are to:

- » **STAGE 1** - bring all interested parties on board early to share information and ideas (before decisions are made).
- » **STAGE 2** - work with community and stakeholders with knowledge to contribute to decisions in subsequent stages. Share information equitably among stakeholders.

- » **STAGE 3** - share the decision-making process. Establish a process that will be used to choose between management options, incorporating community preferences and criteria.
- » **STAGE 4** - gain community confidence and support for decisions that are in the documented CMP.
- » **STAGE 5** - maintain community support for and commitment to the CMP, especially among those directly involved in, or impacted by the implementation.

4.0 STAKEHOLDERS:
4.1 STAKEHOLDER IDENTIFICATION

The Guidelines recommend classifying stakeholder groups into four broad categories:

1. Community/business
2. Councils
3. Public authorities
4. Groups that require additional consideration.

Through discussion with the five councils directly involved in the Hunter Estuary CMP and review of previous stakeholder engagement, the following main stakeholder groups were identified (Table 3-Next page).

APPENDIX 3: HUNTER ESTUARY CMP COMMUNITY STAKEHOLDER ENGAGEMENT STRATEGY

Table 3: Main stakeholder groups for the Hunter Estuary CMP

COMMUNITY/BUSINESS	COUNCILS (FIVE)	PUBLIC AUTHORITIES	GROUPS THAT REQUIRE ADDITIONAL CONSIDERATION
Local Aboriginal Land Councils and traditional owner groups	Mayor and councillors	NSW Department of Planning and Environment	Indigenous peoples
Landholders: residents, non-residents, landholder groups	Senior leadership teams	Local Land Services	Children and youth
Visitors including tourists, non-resident workers	Relevant council advisory committees	Hunter Water	People with disabilities
Chambers of Commerce and other business groups	Council staff from land use planning	NSW Crown Lands	Older people
Tourist operators and organisations	Council staff from natural resource management	NSW Department of Primary Industries - Fishing	People from Culturally and linguistically diverse communities (focus on Newcastle LGA)
Aquaculture industry	Council staff from asset management	NSW Department of Primary Industries - Agriculture	Caravan park owners and dwellers
Farmers and agricultural groups e.g. NSW Farmers	Council staff from parks and recreation	Transport for NSW (Maritime)	
Environment groups including Landcare, Bushcare, birdwatcher groups, Hunter Wetlands Centre	Council staff from emergency services	NSW State Emergency Service	
Recreational groups including fishing clubs, rowing clubs	Council staff from communications	Port Authority NSW (Newcastle Port)	
Community groups including Lions, Rotary, Progress Associations	Neighbouring councils	WaterNSW (including Hunter Valley Flood Mitigation Scheme)	
Education institutions including pre-schools, schools, universities, TAFEs	Hunter Joint Organisation	Other public authorities e.g. NSW National Parks & Wildlife Service, EPA	

A detailed 'live' list of specific stakeholders related to each stakeholder group is provided as an addition to this Strategy.

4.2 STAKEHOLDER PROFILING

Identifying and establishing a profile of various stakeholders, the community and existing networks will enable the council to consider appropriate engagement techniques that encourage meaningful stakeholder and community involvement.

A profile of the main stakeholder groups identified in Table 3 is provided in Table 4.

Table 4: Stakeholder profile

STAKEHOLDER GROUP	LEVEL OF INTEREST/IMPACT	LEVEL OF INFLUENCE	WHAT IS IMPORTANT TO THE STAKEHOLDER	POTENTIAL VALUE OR THREAT TO ISSUE	STRATEGY FOR ENGAGING THE STAKEHOLDER
Local Aboriginal Land Councils and traditional owner groups	High	High	Tangible and intangible indigenous cultural heritage. Opportunities for indigenous peoples to be involved or lead CMP management actions.	It is valuable to understand the cultural significance of the Hunter estuary and the influence that estuarine processes, hazards and environmental change may have on the values of physical and non-physical elements of cultural heritage	Important to build trust throughout the CMP and meet regularly in a way that is appropriate to each indigenous group.
Landholders: residents, non-residents, landholder groups	Medium	High	Estuary health, healthy lifestyle, productivity	A threat is apathy and poor awareness of the need to maintain Hunter estuary health. Some people do value the estuary highly and these people should be strongly supported.	Online and in-person engagement with landholders throughout the process backed by communications to encourage involvement in the CMP stages.
Visitors including tourists, non-resident workers	Low	Low	Aesthetics and recreation (tourists), place to earn income (non-resident workers), environmental interests e.g. birdwatching	Generally not attuned to the Hunter estuary and not aware of issues.	Online engagement. Also link with tourist operators (tourists) and business groups e.g. Chambers of Commerce (non-resident workers)
Chambers of Commerce and other business groups	Low	Medium	Productivity	Opportunity for businesses to support CMP management actions. Also could have impacts on estuary health e.g. via stormwater pollution	Presentations and discussions at Chambers of Commerce meetings

APPENDIX 3: HUNTER ESTUARY CMP COMMUNITY STAKEHOLDER ENGAGEMENT STRATEGY

STAKEHOLDER GROUP	LEVEL OF INTEREST/ IMPACT	LEVEL OF INFLUENCE	WHAT IS IMPORTANT TO THE STAKEHOLDER	POTENTIAL VALUE OR THREAT TO ISSUE	STRATEGY FOR ENGAGING THE STAKEHOLDER
Tourist operators and organisations	Medium	Medium	Estuary health, healthy lifestyle	Could promote good estuarine health behaviours to visitors.	Meetings with tourist operators/ organisations
Aquaculture industry	High	Medium	Estuary health, Productivity	Estuary health is critical to this industry and could be involved in some management actions	Meetings with aqua culture industry reps. Possible use of Oceanwatch and other resources
Farmers and agricultural groups e.g. NSW Farmers	Medium	High	Estuary health, Productivity	Directly involved in catchment WQ and shoreline erosion	Target farmers especially in the coastal zone of the estuary
Environment groups including Landcare, Bushcare, birdwatcher groups, Hunter Wetlands Centre	High	High	Estuary health, healthy lifestyle,	Conduits into the community to promote CMP and its management actions	Meetings with environment groups, online engagement
Recreational groups including fishing clubs, rowing clubs	Medium	High	Estuary health, healthy lifestyle	River users and can influence others to participate in the CMP and its management actions	Meetings with recreational groups, online engagement
Community groups including Lions, Rotary, Progress Associations	Low	Medium	Healthy lifestyle, estuary health	Conduits into the community and can promote CMP and its management actions	Meetings with recreational groups, online engagement
Education institutions including pre-schools, schools, universities, TAFEs	Medium	High	Curriculum-based studies relating to local environment. Environmental education activities (non-curriculum)	Opportunities to promote CMP and possible management actions using local Environmental Education Centres, Hunter Wetlands Centre	Meetings with Environmental Education Centres, Hunter Wetlands Centre, online engagement. Promotion via online engagement

STAKEHOLDER GROUP	LEVEL OF INTEREST/ IMPACT	LEVEL OF INFLUENCE	WHAT IS IMPORTANT TO THE STAKEHOLDER	POTENTIAL VALUE OR THREAT TO ISSUE	STRATEGY FOR ENGAGING THE STAKEHOLDER
Mayor and councillors	Medium	Medium	Interest in local issues and Council activities	Conduits into the community and can promote CMP and its management actions	Regular briefings to Mayor and councillors of the five Councils
Council staff	High	High	Estuary health, healthy lifestyle, productivity	Have responsibility to develop and promote the CMP	Council workshops via HEAL throughout all Stages of the CMP, promotion of the CMP to stakeholders
Neighbouring councils	Medium	Medium	Estuary health, healthy lifestyle, productivity	Part of Hunter River catchment and thus influence Hunter estuary. Possible learnings from other CMPs	Meetings to brief and include neighbouring councils in the development of the CMP
Public authorities	High	High	Estuary health, healthy lifestyle, productivity	Have major legislated and policy influence on the Hunter estuary	Stakeholder workshops and interviews throughout the development of the CMP
Groups that require additional consideration	Low	Medium	Estuary health, healthy lifestyle	Some of these groups appear vulnerable to natural events (e.g. floods) and possibly not engaged, however may be important for the future of the CMP	Youth forums, school excursions, field trips for specific groups, online engagement

APPENDIX 3: HUNTER ESTUARY CMP COMMUNITY STAKEHOLDER ENGAGEMENT STRATEGY

5.0 KEY MILESTONES

Table 5 outlines the key milestones for the completion of each stage in the Hunter Estuary CMP.

Table 5: Hunter Estuary CMP milestones

ACTIVITY	DATE
Stage 1	March 2023
Stage 2	June 2023
Stage 3	October 2023
Stage 4	December 2023 (dependent on certification by the Minister)
Stage 5	2033 (ongoing for 10 years)

6.0 IMPLEMENTATION PLAN

The following implementation plan provides an indication of the engagement content and methods for stakeholders in each stage of the CMP. The various engagement activities are linked to the engagement outcomes for each CMP stage as outlined in the Guidelines for community and stakeholder engagement in coastal management.

It should be noted that a more detailed engagement and communications action plan is required for each stage particularly to relate engagement actions to timeframes and responsibilities.

Stage 1

In Stage 1 councils set the scene for the coastal planning process. They will consider the status of coastal management for the council area and decide on the focus of the CMP.

The engagement outcomes for Stage 1 are:

- » stakeholders and the community understand how they can be involved in the preparation of a CMP
- » increase community and stakeholder understanding of the new legislative and planning framework – CM Act, State Environmental Planning Policy (Coastal Management) 2018 (CM SEPP) and manual
- » establish strong working relationships with community networks and stakeholders which are built on mutual trust and respect
- » be clear about the coastal management roles and responsibilities of the council and public authorities
- » understand community goals and aspirations for the coastal zone and community views on values, opportunities and priorities
- » understand community motivations for participation and preferred approaches and processes, to encourage increased community interest and willingness to actively participate in coastal management
- » increase community and stakeholder understanding of the dynamic nature of coastal processes, risks and opportunities and the need to set long-term objectives
- » determine the engagement activities that are required during the preparation of subsequent stages of the CMP.

Considerable community and stakeholder engagement has been undertaken over the past years to identify values, issues and risks. The outcomes of this engagement are summarised in Section 2.4 of this Strategy.

In addition, the following engagement activities were conducted in Stage 1 of the Hunter Estuary CMP:

- » Participants at seminar on the Hunter Estuary hosted by Hunter Environmental Institute. The 66 attendees included a mix of council, public authority, consultant, academic and community representatives – June 2021

- » Senior Managers briefing of Maitland City Council by council's environmental staff to assist with broader planning development reflecting on the value of the estuary to their community. – June 2021
- » Workshop which included 35 participants from multiple stakeholder groups to support analysis of governance development – July 2021
- » Briefing of Hunter Local Land Services – December 2021
- » Briefing Newcastle Coastal Management Program Working Group December 2021
- » Briefing Port of Newcastle – January 2022
- » Briefing Hunter Water – February 2022
- » Briefing Hunter Joint Organisations group- May 2022
- » Briefing General Managers Advisory Committee – May 2022
- » Briefing Cessnock City Council – May 2022
- » Briefing Mindaribba Local Aboriginal Land Council CEO – June 2022
- » Stakeholder tour of estuary and workshop – August 2022
- » Cessnock area values identification – September 2022
- » Dungog area values identification - September 2022
- » Port Stephens Council Aboriginal Strategic Committee – Oct 2022
- » Cessnock City Council Aboriginal and Torres Strait Islander Advisory Committee - Dec 2022
- » Mindaribba Local Aboriginal Land Council – Dec 2022.

The previous engagement activities in the study area and those conducted for Stage 1 help to achieve the recommended engagement outcomes. This Strategy fulfils the final engagement outcome for Stage 1: determine the engagement activities that are required during the preparation of subsequent stages of the CMP.

APPENDIX 3: HUNTER ESTUARY CMP COMMUNITY STAKEHOLDER ENGAGEMENT STRATEGY

Stage 2

Stage 2 involves detailed scientific, engineering, economic and social studies to fill knowledge gaps and help understand relevant to coastal management issues. Stage 2 may also include a detailed coastal risk assessment.

It is anticipated that there will be five detailed study areas in Stage 2:

1. Climate Change / Biodiversity / Resilience
2. Water quality / catchment management
3. Governance
4. Streambank erosion / riparian corridor creation
5. Socio economic analysis.

Each study will require its own community and stakeholder engagement plan. However, there is some general engagement that can be conducted in Stage 2 to build awareness in the community of the risks, vulnerabilities and opportunities and prepare it for informed consideration of management options and actions in Stage 3. This general engagement for Stage 2 is covered in Table 6 (Right).



118

Photo by Kat Paul Foley

Table 6: General engagement activities for Stage 2

ENGAGEMENT OUTCOMES	STAKEHOLDERS	IAP2 SPECTRUM	CONTENT & MESSAGES	METHODS
2.1 A shared understanding of risks and opportunities over different timeframes, and the range of actions that could address different risks	Community/ business, council, public authorities, other groups	Inform	Further identification of risks (e.g. flood, water quality, habitat) and opportunities on a community basis. The identification of possible risk management actions	Establish HEAL website to provide information about CMP stages
		Involve		Use promotional communications, meetings with indigenous groups and other community groups/business
2.2 A shared understanding of the varied perspectives about coastal management within the community	Community/ business, other groups	Inform	Information on perspectives of estuary management. Various views on management of the Hunter estuary	Establish HEAL website and use promotional communications.
		Involve		Use social pins or equivalent program to encourage community members provide photographs and observations regarding management of the Hunter estuary
2.3 Council understands community's 'attitude to risk'	Community/ business	Consult	The range of attitudes to risk in communities across the study area	Use previous social research and engagement conducted by Councils, HEAL and other organisations e.g. Hunter Water
2.4 Community and stakeholders understand vulnerabilities, risk and opportunity studies, including technical aspects such as scenarios for sea level rise, hazards and impacts	Community/ business, council, public authorities, other groups	Inform	Findings from detailed studies e.g. water quality	Refer to stakeholder and engagement actions for each of the detailed studies in Stage 2.
		Involve		HEAL website covers and promotes the detailed studies
2.5 Increased community trust of technical information based on their involvement and understanding of assumptions and limitations	Community/ business, other groups	Inform	Understanding trade-offs e.g. if you focus on one risk and management option others may not be possible	Use of technical details (including Stage 1 report) in the HEAL website.
		Involve		Use Waterwatch and other citizen science programs to encourage community participation

< BACK TO CONTENTS

119

APPENDIX 3: HUNTER ESTUARY CMP COMMUNITY STAKEHOLDER ENGAGEMENT STRATEGY

Stage 3

In Stage 3 councils identify and evaluate management options to address the coastal risks and opportunities identified in Stages 1 and 2. The engagement process aims to facilitate stakeholder and community

involvement in identifying and evaluating the local and regional scale management options so that preferred actions are consistent with the objects of the CM Act.

The proposed community and stakeholder engagement for Stage 3 is covered in Table 7.

Table 7: Engagement activities for Stage 3

ENGAGEMENT OUTCOMES	STAKEHOLDERS	IAP2 SPECTRUM	CONTENT & MESSAGES	METHODS
3.1 Strong working partnerships	Community/ business, council, public authorities, other groups	Involve	We do better together	Use and promote existing working partnerships e.g. HEAL, Council-community networks e.g. resident associations, chambers of commerce, indigenous and other groups
3.2 Managers within council aware of coastal hazards, threats, risks and vulnerabilities, opportunities and actions relevant to their responsibilities and potential conflict with other council priorities	Council staff	Consult	Awareness of intrinsic linkages across council related to CMP risk analysis findings. Need to tie CMP strategic planning across divisions of each council.	Workshop with council managers to review CMP risk analysis, what it means for council and implications of possible CMP actions
3.3 Public authorities contribute to identification and evaluation of management options, are aware of responsibilities and accept the adaptive nature of the CMP	Public authorities	Consult	Section 16 of the CM Act requires that councils consult with public authorities if the CMP proposes actions or activities to be carried out by that public authority or if the CMP relates to, affects or impacts on any land or assets owned or managed by that public authority.	Meetings with relevant public authorities to identify and evaluate management options and their responsibilities
3.4 Robust options, understood by all stakeholders in terms of risks, cost and benefits	Community/ business, council, public authorities, other groups	Inform	Findings from detailed studies e.g. water quality	Refer to stakeholder and engagement actions for each of the detailed studies in Stage 2. HEAL website covers and promotes the detailed studies
3.5 Council understands stakeholder views about cost-benefit distribution, willingness to pay and potential trade-offs	Councils	Consult	Council understands stakeholder views and implications for the choice of management options	Use HEAL to review stakeholder views and implications for management options. Communicate this to upper management and councillors via briefings

In Stage 4, Councils must prepare a draft CMP. Section 16 of the CM Act requires that before adopting a draft CMP, a council must consult with the community. It also requires the council to consult with other public authorities if the draft CMP:

- » proposes actions or activities to be carried out by that public authority

- » proposes specific emergency actions or activities to be carried out by a public authority under the coastal zone emergency action subplan
- » relates to, affects or impacts on any land or assets owned or managed by that public authority.

The proposed community and stakeholder engagement for Stage 4 is covered in Table 8.

ENGAGEMENT OUTCOMES	STAKEHOLDERS	IAP2 SPECTRUM	CONTENT & MESSAGES	METHODS
4.1 Community and stakeholder support for actions and priorities in the CMP	Community/ business, council, public authorities, other groups	Inform	It is a mandatory requirement that a draft CMP must be exhibited for public inspection at the main offices of the council of all local government areas within the area to which the CMP community and stakeholder engagement guidelines applies, during the ordinary hours of those offices, for a period of not less than 28 calendar days, before it is adopted.	Exhibition at main offices of each council Draft CMP available on HEAL website with online feedback form
		Consult		Hold drop-in session in study area to brief community on draft CMP and obtain feedback Continue dialogue with indigenous and other groups
		Involve		Brief councillors re draft CMP Meet with public authorities re draft CMP and their responsibilities.
4.2 Increased awareness about funding options and how CMP implementation will be integrated with council's Resourcing Strategy and Delivery Program under IP&R	Council	Inform	Recognition of multiple funding sources for the coastal zone. Identification of integration into council IP&R planning and operations. Recognition of funding and resourcing limitations.	Use internal council working groups to facilitate and raise awareness of funding options and integration of the CMP within council's IP&R framework
4.3 Public authorities accept roles and responsibilities in the CMP	State government and other public authorities	Involve, Collaborate	Determination of cost apportionment across responsible public authorities	Link with state government agency meetings in Strategy 4.1

APPENDIX 3: HUNTER ESTUARY CMP COMMUNITY STAKEHOLDER ENGAGEMENT STRATEGY

Stage 5

The engagement activities in Stage 5 continue to build on the relationships and opportunities that have been fostered in the earlier stages of preparing the CMP.

During Stage 5, councils may take the opportunity to:

- » provide project-based updates on implementation of specific coastal management actions that detail actions, costs and results

- » report to the community on progress in achieving coastal management outcomes
- » establish project-specific working groups to oversee the implementation of large-scale works (i.e. involving landowners, council, DPE and other relevant public authorities)

- » continue to work with the coastal management advisory working group (e.g. HEAL), where it exists.

The proposed community and stakeholder engagement for Stage 5 is covered in Table 9.

Table 9: Engagement activities for Stage 5

ENGAGEMENT OUTCOMES	STAKEHOLDERS	IAP2 SPECTRUM	CONTENT & MESSAGES	METHODS
5.1 Community understanding of how CMP will be implemented through the IP&R framework and land use planning system; and by other public authorities	Community, indigenous and other groups	Inform	Outline integration with council IP&R framework and roles and responsibilities for council and public authorities. Stress shared responsibility and that all are involved e.g. behaviour change	Project bulletin on HEAL website Use Council community networks and newsletters
		Involve		Continued dialogue with indigenous and other groups where appropriate
5.2 Community informed about progress on actions	Community, indigenous and other groups	Inform	Community initiative – the need to continue to work together on actions	Media releases and social media on progress. Letters to community groups re progress on actions
5.3 Community is aware of the effectiveness of actions in terms of changes to coastal risk profile, coastal condition and community satisfaction	Community, indigenous and other groups	Involve	Reporting measured improvements	Involve communities in implementation and monitoring actions e.g. via citizen science Prepare and disseminate 'report cards' on the effectiveness of actions

ENGAGEMENT OUTCOMES	STAKEHOLDERS	IAP2 SPECTRUM	CONTENT & MESSAGES	METHODS
5.4 Continue partnership with community by creating opportunities for community involvement in implementing, monitoring, evaluating and reporting CMP effectiveness	Community, indigenous and other groups	Involve	Communities can be involved in implementing and monitoring and evaluation	Involve communities in monitoring actions e.g. via citizen science. Continue dialogue with indigenous and other groups on their involvement Use community reference groups for large projects
5.5 Maintain and enhance partnerships across public authorities and also to seek opportunities to leverage off other programs (e.g. MEMA)	Council, public authorities	Collaborate	Importance of maintaining and enhancing partnerships	Use CMP governance structure including HEAL to regularly meet with public authorities Partner with public authorities on implementation projects

7.0 MONITORING AND EVALUATION

The participating partners via HEAL should use formative and summative evaluation to review this Strategy.

Formative evaluation is used during the implementation of the Strategy and related communication/engagement action plans. It can include evaluation methods such as feedback sheets, peer review, reflection and satisfaction surveys. The future Strategy content and methods may be amended as a result of this evaluation.

Summative evaluation occurs at the end of each Stage and generally involves the review of all evaluation data culminating in an engagement report in the report for the Stage.

Metrics could include:

- » number of responses to community surveys
- » quality of responses to community surveys
- » compliments/complaints received
- » level of interest in activities
- » positive feedback from workshop and drop-in sessions.

8.0 ACTION PLANS

Engagement action plans for Stages 2-4 related to the Strategy are provided below. The action plans provide a general sequence of engagement and associated communication activities for each Stage.

As noted previously, there are five specific projects required in Stage 2 with each requiring its specific action plan. However, there is general engagement required

in Stage 2 with it being an information gathering activity and the requirement to continue to keep community/stakeholders aware that the CMP is being written.

APPENDIX 3: HUNTER ESTUARY CMP COMMUNITY STAKEHOLDER ENGAGEMENT STRATEGY

Table 10: General engagement action plan for Stage 2

ACTION	STAKEHOLDERS	COMMUNICATION TOOLS	RESPONSIBILITY	RESOURCING NEEDS
Brief each Council's communication/engagement staff re actions for Stage 2	Council	Hold virtual briefing session	HEAL	Briefing notes
Inform about Stage 2 specific studies as part of progress with CMP	Community/business/special interest groups	HEAL website Media releases Posts through Council social media Email to stakeholders (use Stakeholder Contact List)	HEAL	Update HEAL website with CMP progress infographic Develop media release, precanned social media posts
Inform about Stage 2 specific studies as part of progress with CMP	Indigenous groups	Direct organisation of meetings with each indigenous group	HEAL	Meetings with indigenous groups
Inform about Stage 2 specific studies as part of progress with CMP	Council staff, Councillors	Organise Council internal meetings Organise councillor briefing at Council meetings	Each Council	Briefing notes, PP presentation for relevant Council staff, Councillors
Inform about Stage 2 specific studies as part of progress with CMP	Public authorities	Use Stakeholder Contact List to organise briefing meeting with public authorities	HEAL	Briefing notes, PP presentation
Continue to engage interest in CMP as prelude to identifying management options	Community/business/special interest groups	As part of media release and social media posts encourage people to pin their thoughts on Hunter estuary management and possible management options	HEAL	Develop social pins or equivalent program on map on HEAL website to encourage community members provide photographs and observations regarding management of the Hunter estuary
Inform stakeholders of findings from detailed Stage 2 CMP studies e.g. water quality	Community/business/special interest groups, indigenous groups	Email to Stakeholder Contact List with link to HEAL website Media release re summary of findings	HEAL	Summary of findings of the five specific studies on HEAL website
Inform stakeholders of findings from detailed Stage 2 CMP studies e.g. water quality	Council staff	Organise Council internal meetings	All Councils	Briefing notes, PP presentation for relevant Council staff

Table 11: General engagement action plan for Stage 3

ACTION	STAKEHOLDERS	COMMUNICATION TOOLS	RESPONSIBILITY	RESOURCING NEEDS
Brief each Council's communication/engagement staff re actions for Stage 3	Council	Hold virtual briefing session	HEAL	Briefing notes
Hold workshops with council managers to review CMP risk analysis, what it means for council and implications of possible CMP actions	Council	Organise manager workshops in each Council	HEAL	Briefing notes, PP presentation for relevant Council staff
Facilitate workshop with relevant public authorities to identify management options and their responsibilities	Public authorities	Organise virtual workshop with public authorities	HEAL	Briefing notes, PP presentation, facilitator
Meet with indigenous groups to identify possible management options	Indigenous groups	Organise meetings with indigenous groups	HEAL	One-on-one meetings at venues preferred by indigenous groups
Engage with community stakeholders re their preferred CMP management options	Community/business/special interest groups	Update HEAL website with community survey, information about Stage 3	HEAL	Provide list of possible management actions Project bulletins and HEAL website
		Brief councillors of each Council on evaluation of possible management options	Each Council	Briefing notes for Councillors Community online survey on possible management options
		Advertise drop-in sessions and online survey via media releases, social media posts Send email to stakeholders re online survey and drop-in sessions using Stakeholder Contact List	HEAL	Community drop-in sessions in each LGA to review and choose management options
Hold workshop with relevant public authorities to evaluate management options	Public authorities	Organise virtual workshop with public authorities	HEAL	Briefing notes, PP presentation, facilitator
Hold workshop with Council staff to evaluate management options	Council	Organise virtual workshop with reps from each Council	HEAL	Briefing notes, PP presentation, facilitator
Meet with indigenous groups to evaluate management options	Indigenous groups	Organise meetings with indigenous groups	HEAL	One-on-one meetings at venues preferred by indigenous groups
Inform stakeholders of findings of the preferred management options	Community/business/special interest groups	Email to Stakeholder Contact List with link to HEAL website Media release re summary of findings	HEAL	Summary of outcomes of Stage 3 including preferred management options

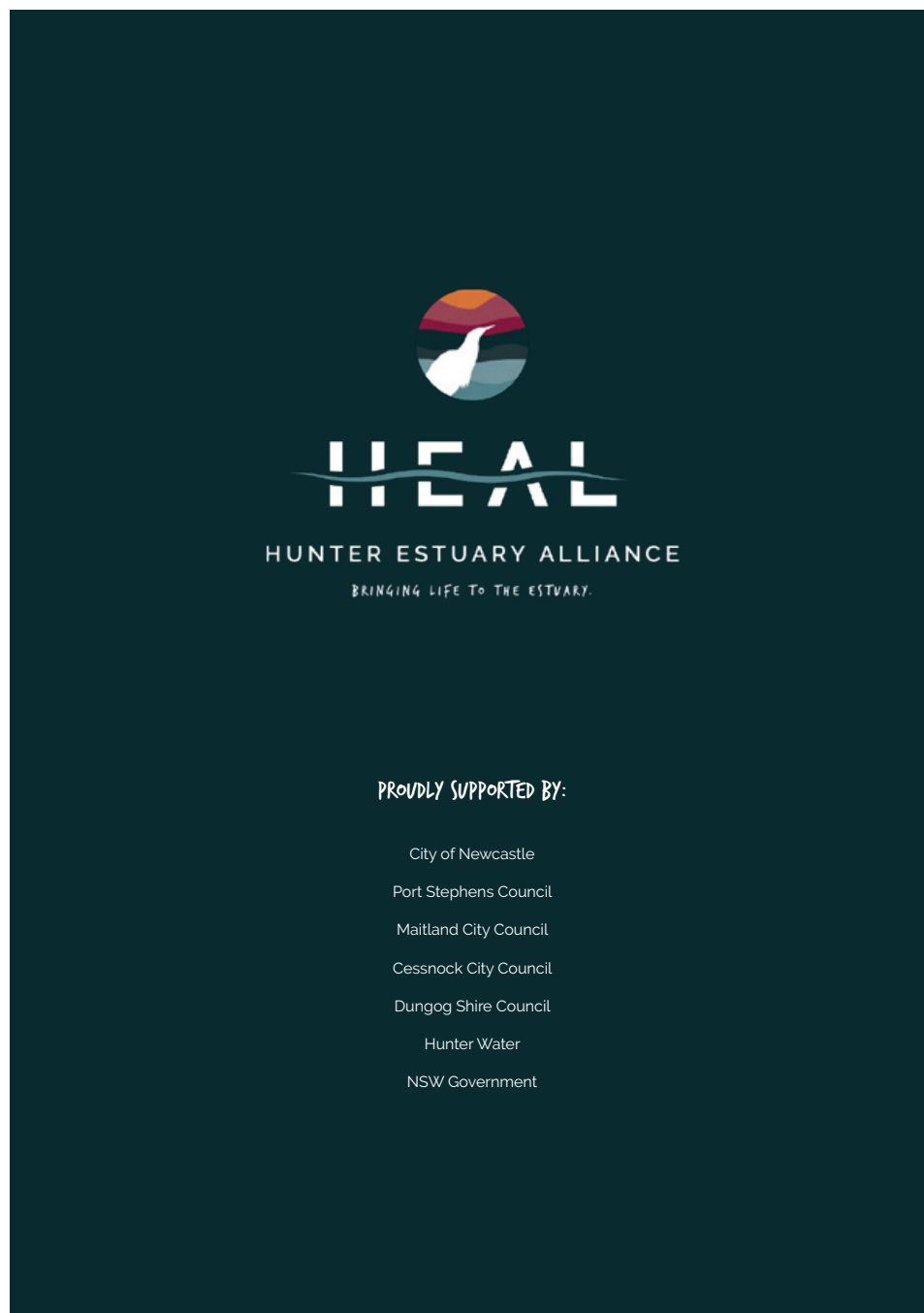
APPENDIX 3: HUNTER ESTUARY CMP COMMUNITY STAKEHOLDER ENGAGEMENT STRATEGY

Table 12: General engagement action plan for Stage 4

ACTION	STAKEHOLDERS	COMMUNICATION TOOLS	RESPONSIBILITY	RESOURCING NEEDS
Brief each Council's communication/engagement staff re actions for Stage 4	Council	Hold virtual briefing session	HEAL	Briefing notes
Exhibit draft CMP online and at Council offices	All stakeholders	Draft CMP available as a hard copy in each Council office and selected libraries	Each Council	Draft CMP must be exhibited for public inspection at the main offices of the council, during the ordinary hours of those offices, for a period of not less than 28 calendar days
		Draft CMP available online	HEAL	Provide draft CMP and a summary infographic online at HEAL website Provide feedback sheets (digital and hard copy) for comments on draft CMP
Involve community in the review of the draft CMP	Community, business, special interest groups	Provide media releases and social media posts to advertise the exhibition of the draft CMP and how people can be involved	Each Council	Media release, precanned social media posts at beginning and during exhibition period
		Organise and advertise drop-in session in each LGA to brief participants on the draft CMP	HEAL	Hold drop-in sessions at beginning of exhibition period
		Email to stakeholders on Stakeholder Contact List encouraging them to provide comments on the draft CMP	HEAL	Provide details of exhibition of draft CMP and how people can be involved
Meet with Indigenous groups re their comments on draft CMP	Indigenous groups	Organise meeting with each indigenous group	HEAL	Hold meetings with indigenous groups to discuss draft CMP and obtain their comments
Advise public authorities and Councils of opportunity to provide comments on draft CMP	Public authorities, Council	Email public authorities re the draft CMP exhibition and encouraging their comments	HEAL	Provide draft CMP and deadline for comments
		Email relevant Council staff re the draft CMP exhibition and encouraging their comments	Each Council	Provide draft CMP and deadline for comments



ITEM 2 - ATTACHMENT 1 STAGE 1 HUNTER ESTUARY COASTAL
MANAGEMENT PROGRAM - SCOPING STUDY.



Hinterland Place Plan Engagement Report

Planning for your place



Phase 3



ITEM 3 - ATTACHMENT 1
REPORT.

HINTERLAND PLACE PLAN ENGAGEMENT



Hinterland Place Plan

Engagement snapshot

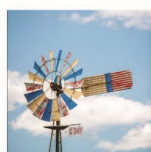
The place planning process aims to capture the character of the unique communities within Port Stephens and to give voice to their residents. By giving ownership to the community of the roadmap for the future, it not only enhances their connection to place but also ensures that the priorities and actions within the plan are created by those who it will impact. The Hinterland Place Plan is an action-oriented strategy informed and guided by community input.

What we've been up to



Community workshops

18 attendees



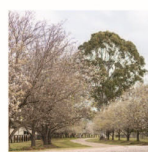
Drop ins

100+ attendees



Surveys + comments

365 recorded



Direct emails

4000+ sent



Social media

17272 reached

Top 5 Hinterland Liveability Index care factors



76%

Elements of natural environment

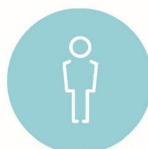
(LGA 71%)



71%

Sense of neighbourhood safety

(LGA 54%)



66%

Sense of personal safety

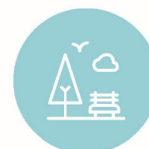
(LGA 51 %)



62%

Protection of the natural environment

(LGA 53%)



61%

General condition of public open space

(LGA 62%)

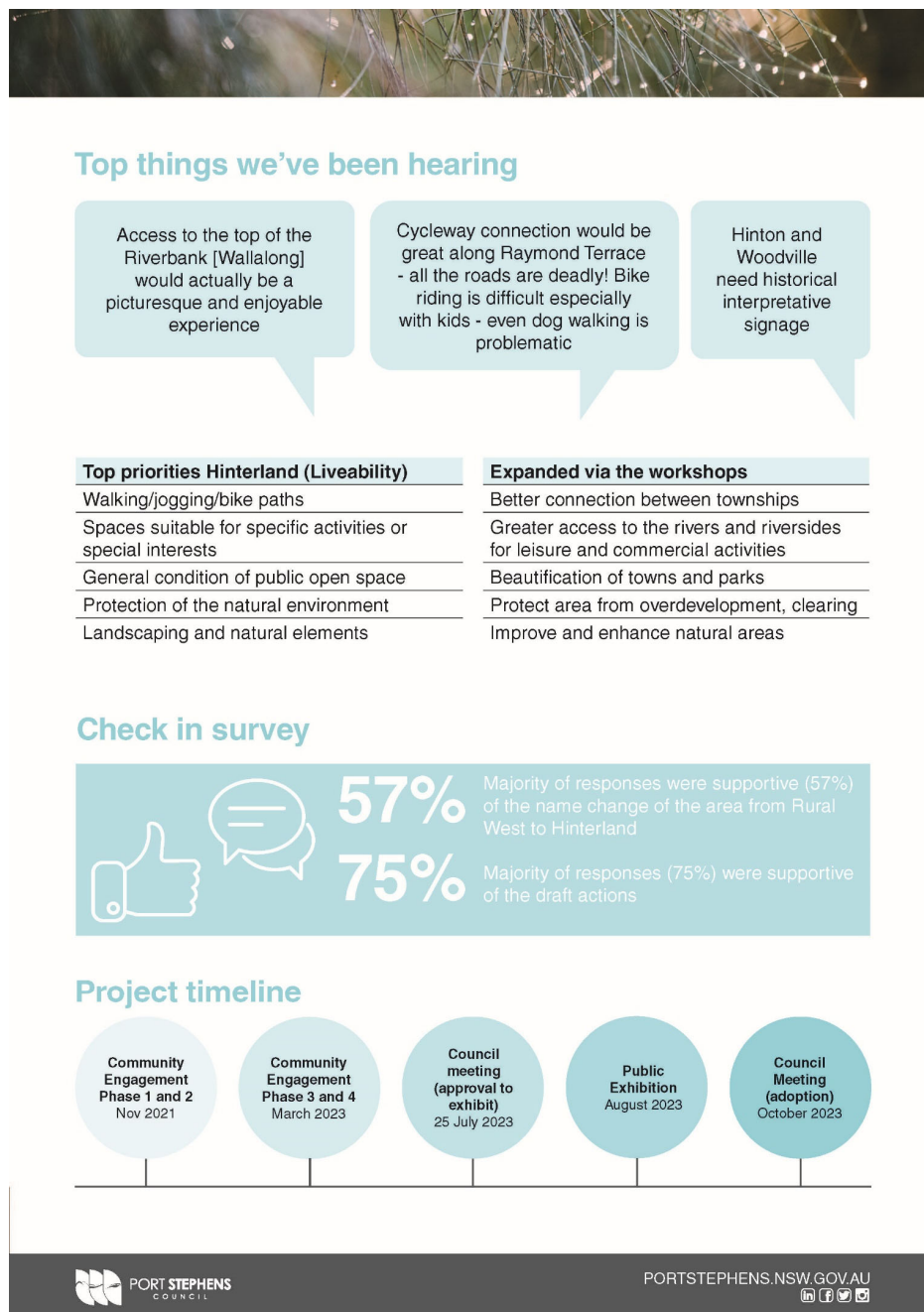


PORT STEPHENS
COUNCIL

PORTSTEPHENS.NSW.GOV.AU



ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.



**ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT
REPORT.**

Contents



	Page
Summary	4
Communication and engagement methods	6
Key engagement findings – What the community told us	9
Appendices	16
Appendix A: Liveability Index survey (Sep 2020)	17
Appendix B: Workshop 1 (3 Nov 2021)	19
Appendix C: Workshop 2 (10 Nov 2021)	34
Appendix D: Check-in survey responses (Mar- Apr 2023)	38
Appendix E: Comments from drop-ins (Mar- Apr 2023)	71

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Context and engagement approach

Place Plans are a new way of planning for the growth of the unique communities across Port Stephens. Place Plans provide a local filter on the Port Stephens Local Strategic Planning Statement and other strategic documents to create actions which improve the liveability and wellbeing of our communities.

Place plans will capture the character of our unique communities, including their values and priorities and document this into an action orientated roadmap for the future. Place plans are intended to be developed from the 'bottom-up' providing the community with a tangible document that incorporates their collective ideas. It's an action-oriented strategy that enhances a community's connection to their place.

The Hinterland Place Plan will focus on four rural areas in the west of Port Stephens-Woodville, Wallalong, Hinton and Seaham primarily and is working through a four phased engagement approach:

- Phase 1** Involved the collection of the Liveability Index data collection. Completed September 2020.
- Phase 2** Was a targeted and collaborative engagement approach and allowed an opportunity to 'deep dive' into the Liveability data. It also provided a chance for local residents, business and other stakeholders to identify future vision and actions for the place. Completed November 2021.
- Phase 3** Involved testing of the draft key themes and actions with the broader community. Completed May 2023.
- Phase 4** Will involve exhibition of the draft document for public comment and exhibition. Expected delivery mid 2023

The key objectives of all phases of engagement are to:



Increase community awareness of the development of the Hinterland Place Plan



Inform the key stakeholders and community about upcoming engagement opportunities in the Hinterland





Seek feedback on the draft Place Plan and how community priorities might have changed




Identify and report on community preferences to inform the Hinterland Place Plan

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Communication and engagement methods





ENGAGEMENT METHODS		
ACTIVITY	DESCRIPTION	RESULTS
Phase 1 	Liveability Index	146 surveys for The Hinterland (previously identified as Rural West) area
Liveability Index reports		
Phase 2 	Workshops investigated the outcomes of the Liveability Index survey and provided more detail to explore ideas and solutions. Workshop 1: 3 November 2021 Workshop 2: 10 November 2021	18 participants
Community Workshops		
Phase 3 Check in Survey and drop-ins	Survey was open from 24 April 2023 to 15 May 2023 Drop in on 29 April 2023 Woodville Coffee Cubby 8:30-10:30am Drop in on 5 May 2023 at Seaham Shop 2-4:30pm	~100 people across both drop ins 166 surveys completed 53 social pinpoint comments

COMMUNICATIONS METHODS

COMMUNICATION METHODS		
ACTIVITY	DESCRIPTION	RESULTS
 Project webpage	Phase 3 April 2023 Dedicated Hinterland Place website page /developments/place-plans/hinterland-place-plan Phase 3 only visits 24 April 2023 to 16 May 2023	491 visits
	Phase 2 General Place Plan page /developments/place-plans From October 2021 to May 2023	588 visits

ITEM 3 - ATTACHMENT 1
REPORT.

HINTERLAND PLACE PLAN ENGAGEMENT

 Have Your Say page	Have Your Say page for Place Plan early recruitment for engagement phases 1 and 2. https://haveyoursay.portstephens.nsw.gov.au/planning-for-your-place	965 visits
 Direct emails	EHQ members direct email and newsletter PSToday on 19/8/21 Direct emails via converse@portstephens.nsw.gov.au to identified known stakeholders and interest groups.	4000+ reach
Social media 	Phase 3 April 2023 Port Stephens Council Facebook Boosted post includes video	Social media 17272 reached 34 shares
	Phase 2 September - October Port Stephens Council Facebook Advertisements ran from 27 August to 8 September 2021 and 8 October to 27 October 2021	2 posts 6959 reached 122 link clicks
 Media Release	A media release was issued on 18 August 2021 <i>Plans that put people and places first</i>	Published in the Port Stephens Examiner and News of the Area

**ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT
REPORT.**

Key engagement findings – What the community told us

Phase 1: Liveability Index

The top priorities identified in the Liveability Index for the Hinterland area included:

Celebrating and protecting the strengths of the area:

- Sense of personal safety (for all ages, genders, day or night)
- Overall visual character of the neighbourhood
- Physical comfort (including noise, smells, temperature)
- Elements of natural environment (natural features, views, vegetation, topography, water, wildlife etc)
- Sense of neighbourhood safety (from crime, traffic, pollution)

Improve underperforming areas highlighted as follows:

- Walking/jogging/bike paths that connect housing to communal amenity (shops, parks)
- Spaces suitable for specific activities or special interests (entertainment, exercise, dog park, BBQs)
- General condition of public open space (street trees, footpaths, parks)
- Protection of the natural environment
- Landscaping and natural elements (street trees, planting, water features)

See Appendix A for full details.

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.**Phase 2: Workshops – see Appendix B and C for full details**

The key engagement component for Phase 2 was 2 x community workshops. These workshops were facilitated by Matthew Endacott of Wren Consulting and included the following:

- **Introduction and education** - building rapport, building understanding of scope, setting the scene and presenting Liveability data to guide the session, and what makes a great place.
- **Immersion and detailed exploration of place** - priority places, issues and deep dive into local values
- **Ideas generation** - quick wins and big picture moves - actions for both Council and community leaders. Identification of barriers to delivery and how we can deliver.
- **Action planning** - actions planning of some of the quick wins and big picture moves identified as part of the workshop.

Key Findings

- A diverse mix of ages and genders were represented in the workshops
- The group was passionate and community-minded with great pride in their place. It was clear participants want to protect the natural environment and wildlife corridors from overdevelopment and clearing, while leveraging off the natural assets for greater outdoor recreation opportunities e.g. mountain biking, riverside camping, canoeing
- Connections and access was a common theme in both workshops. Participants want better pathway connections for walking and cycling within town centres and across townships e.g. Seaham to Raymond Terrace; Hinton to Wallalong. In addition, participants also spoke about feeling unsafe for themselves and for local children being forced to walk on high-speed and truck-heavy roads due to a lack of footpaths. It should also be noted that participants didn't necessarily want traditional concrete footpaths and suggested sand or bush trails were more in keeping with the local character
- Participants spoke of wanting greater access to the river and riverside for leisure (canoeing, walking, picnicking) and for commercial purposes. Participants compared the potential here to similar to that of neighbouring Morpeth
- Beautification of towns through walking trails, local history signage and tree planting were suggested ways in which the rural towns of Hinton, Wallalong, Woodville and Seaham could be elevated
- It should be acknowledged that the Place Planning workshop series was designed to both learn from the community and understand their vision and priorities for their place, as well as build capacity within a group of passionate community members to encourage community-led action into the future. As such, not all activities in the workshops were designed to gain information and community insight for Council purposes, but also to build capacity and networking amongst the group.

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.**Phase 3: Check-in survey and ideas generation**

The approach for Phase 3 consisted of a survey seeking to confirm the direction of the draft place plan, provide feedback on the draft actions, as well as providing an opportunity for further ideas generation. This engagement also included two drop-in sessions.

The check-in phase for the Hinterland Place Plan used a wider approach in comparison to what was used for the Medowie Place Plan. This wider approach was decided upon due to the spread of suburbs that this plan covers and also because of the break between when the workshops were held in Phase 2 and the development of the draft actions in Phase 3.

The survey received 166 responses. Full details are available in Appendix D.

Key survey findings include

- Q1: Majority of responses were supportive on the name change of the area from Rural West to Hinterland (57% supportive, 28% unsure, 15% unsupportive).
- Q2: See Appendix D for full list of comments (46 comments).
- Q3: Majority of responses were supportive of the draft Economy actions:
 - Create pop up experiences (67% supportive, 23% unsure, 5% unsupportive)
 - Agritourism mentoring program (73% supportive, 23% unsure, 4% unsupportive)
 - We're here to help (63% supportive, 31% unsure, 6% unsupportive)
 - Deliver an annual event (76% supportive, 17% unsure, 7% unsupportive)
 - DA incentive rebate (60% supportive, 28% unsure, 13% unsupportive)
- Q4: See Appendix D for full list of Economy action suggestions (49 comments)
- Q5: Majority of responses were supportive of the draft Character actions:
 - Celebrate local character (77% supportive, 17% unsure, 6% unsupportive)
 - Create a brand identity (70% supportive, 20% unsure, 10% unsupportive)
 - Beautifying village centres (87% supportive, 10% unsure, 3% unsupportive)
 - Connection with your community (87% supportive, 10% unsure, 3% unsupportive)
- Q6: See Appendix D for full list of Character action suggestions (35 comments)
- Q7: Majority of responses were supportive of the draft Management and Safety actions:

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

- Establish a Hinterland 'Town Team'
(65% supportive, 28% unsure, 7% unsupportive)
 - Connect with neighbours
(82% supportive, 13% unsure, 5% unsupportive)
 - Establish a Community Resilience Network
(74% supportive, 20% unsure, 6% unsupportive)
 - Start with yes
(62% supportive, 31% unsure, 7% unsupportive)
 - Has it worked?
(45% supportive, 47% unsure, 7% unsupportive)
- Q8: See Appendix D for full list of Management and Safety action suggestions (31 comments)
- Q9: Majority of responses were supportive of the draft Movement actions:
 - Improving access to interesting places
(83% supportive, 11% unsure, 6% unsupportive)
 - Options for connection
(79% supportive, 13% unsure, 8% unsupportive)
 - Walking and cycleway paths
(82% supportive, 10% unsure, 8% unsupportive)
 - Keeping our kids safe
(84% supportive, 9% unsure, 7% unsupportive)
- Q10: See Appendix D for full list of Movement action suggestions (45 comments)
- Q11: Majority of responses were supportive of the draft Environment actions:
 - Promote the sustainable conservation of landmarks
(87% supportive, 9% unsure, 4% unsupportive)
 - Preserving the waters of The Hinterland
(85% supportive, 10% unsure, 5% unsupportive)
 - Protection and enhancement of wildlife corridors
(88% supportive, 8% unsure, 4% unsupportive)
 - Encouraging sustainable gardening
(84% supportive, 11% unsure, 5% unsupportive)
- Q12: See Appendix D for full list of Environment action suggestions (27 comments)
- Q13: Majority of responses were supportive of the draft Open Space actions:
 - Where the rivers run
(83% supportive, 11% unsure, 6% unsupportive)
 - A shared space for a better place
(75% supportive, 17% unsure, 8% unsupportive)
- Q14: See Appendix D for full list of Open Space action suggestions (33 comments)
- Q15: Do you have any final comments (43 comments)
- Q16: Contact information (98 comments)

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

- Q17: I am interested in learning more about the Hinterland Town Teams – 60 people said yes and the remainder (106) skipped this question.

Full details see Appendix D.

At the drop ins people were encouraged to complete the survey and were also invited to make comments on sticky notes and these were recorded in Appendix E.

Survey and Drop-in comment analysis

Overall the responses to the survey questions were generally well supported with an average of 75% supportive across all of the questions. Some of the actions needed more information with a high 'neutral/unsure/need more information' score to help answer the survey effectively.

To address the themes in the comments of both the survey and the drop-in comments we've coded them primarily against the actions above. This coding helps us quickly determine if other great action suggestions can be reviewed for inclusion in the draft Place Plan.

Some of the common comments and suggestions as per the coding assigned include:

Clearer understanding of the function of a place plan (coded: More information required, misinterpretation)

There was a clear lack of trust in Council represented across many of the responses to retain the rural character of the Hinterland area. There was also an overwhelming fear of an 'unconsidered' overdevelopment of the area.

Comments indicated that there was a need for clearer understanding and more education about the function of a place plan and Council in general.

These comments are totalled as follows:

Survey Q2	5 comments
Survey Q4	14 comments
Survey Q6	11 comments
Survey Q8	8 comments
Survey Q10	8 comments
Survey Q12	8 comments
Survey Q14	4 comments
Survey Q15	14 comments
Drops ins	5 comments
Total	69 comments

Example comments

1. *A lot of TALK! What we need is complete and detailed precinct planning so we know our way ahead, as many residents are now being priced out by above average valuations creating unaffordable rate increases. All your programs are short term - we need long term solutions*

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

- covering planning alterations on a whole of area basis to create the new environmentally sensitive planned precincts required by the rapidly advancing future. These changes should be led by Council initiative, not await developer interest, and address the diversity of ownership and physical characteristics. If you wish to address ECONOMY, residents need the security of concrete and detailed planning for the future. Use planning for the Ralstons Road area as an example of what can be achieved if the effort is applied. [Source Q4]*
2. *My main concern is that council will move to turn the 'hinterland' into another Thornton or Aberglassyn with mid and high density residential development. The whole appeal of the area is it's nature and rural aspect. [Source Q4]*
 3. *Changes to planning approvals/planning incentives does not have a good history in the hinterland. We're proud of the natural and rural feel, and do not want that to change. Anything that lessens the rural appeal will not be supported, and given the relative lack of transparency and complicated nature of DAs, I do not support anything that would make it easier to increase developments beyond existing controls [Source Q15]*
 4. *Totally support the development, promotion and maintenance of the unique peaceful rural environment that the area encompasses, Can't afford to lose that due short sighted opportunistic developments that provide no true benefit to the area and long term degradation of the area [Source Q15]*
 5. *Flood mounds – why are these being approved? [Source Drop in comments]*

Getting around safely for all is a priority in this area! (Coded: Getting around safely (roads))

There was a strong focus on improving the road network not just the pedestrian or cycling network. The action around 'keeping our kids safe' had a high level of support of 84.48% however there was some commentary around making sure it was not only our kids being kept safe. Also, some of the draft actions were seen as superfluous and that Council should concentrate on delivering essential services such as roads.

These comments have been totalled as follows:

Survey Q4	5 comments
Survey Q6	2 comments
Survey Q8	5 comments
Survey Q10	9 comments
Survey Q15	7 comments
Drops ins	8 comments
Total	36 comments

Example comments

1. *Not just kids being kept safe, everyone! [Source Q10]*
2. *Cycleways on the regional roads with trucks and all the quarry trucks is ridiculous [Source Q10]*
3. *It all sounds a bit like putting lipstick on a pig. Fix up the roads first. East Seaham Road and Italia Road are horrendous. If you want people to come, they need to be able to drive their cars without losing their diff. [Source Q15]*
4. *What can be done about the truck movement and danger to our community – we went from 47 trucks to over 150 trucks each year – the issue is getting worse and no one is doing anything about it ie. Brandy Hill quarry, Seaham Battery etc [Source Drop in comments]*

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Advocacy of the use of non-Council controlled land for leisure activities (coded: Advocacy of the use of non-Council land)

Comments indicated that there was a strong focus for Council to advocate for public access to non-Council-controlled land for leisure activities including the rivers. Strongest response was from Q14 which was focused on open space.

These comments have been totalled as follows:

Survey Q2	5 comments
Survey Q4	2 comments
Survey Q10	2 comments
Survey Q12	3 comments
Survey Q14	18 comments
Survey Q15	1 comments
Drops ins	1 comments
Total	32 comments

Example comments

1. *More focus on the state forests and national parks for space, bbqs, tables, maps, mountain biking, hiking [Source Q14]*
2. *Bring back access to areas that have been closed, eg. Seaham Weir, Hunter/Paterson River Junction. [Source Q14]*
3. *Absolutely love the idea of more connection with rivers. Allow canoe hire business, segway tours along the levee, a place where people could swim their horses, cafes & picnic spots with water views. Maybe an annual (novelty) raft race from Seaham to Raymond Terrace. [Source Q14]*
4. *Look at private land owners / reserve and working with the likes of HWC to open up corridors for people to us so they can get bikes, people and horses off the roads (80KM zone) [Source Drop in comments]*

Recognition of the indigenous history of the area (coded: Indigenous recognition)

There were quite a few comments regarding better recognition of the indigenous culture of the area in the Place Plan.

These comments have been totalled as follows:

Survey Q2	5 comments
Survey Q6	2 comments
Survey Q14	1 comments
Survey Q15	1 comments
Drops ins	1 comments
Total	10 comments

Example comments:

1. *I'd prefer an appropriate name reflecting indigenous culture and heritage [Survey Q2]*
2. *A suitable Aboriginal name. Why not Wallalong? (Wollalaghn - meaning flat near a river or creek. The key feature of your Hinterland is that it is dominated by floodplains.) It was a gathering place for large numbers of people around the former Lake Paterson, and was an*

**ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT
REPORT.**

- initiation site (colonial records of circles near junction of Butterwick and Clarencetown roads;
b) a name that acknowledges the area's outstanding farming heritage, beginning with John
Tucker Junior's establishment of Albion Farm at Woodville in 1812 - the first free Australian-
born settler in the entire Hunter Region, and the first outside the Sydney Basin. [Survey Q2]*
3. *No mention of Indigenous history or dual names for important places.[Survey Q14]*

Future engagement recommendations

Due to the specific engagement approach for this phase of the development of the draft Hinterland place plan it meant that there were a lot of responses from people who had not been involved in phase 2 of the place plan development. In our approach during this phase of engagement, we relied heavily on social media rather than direct emails to previous participants which meant that a lot of people didn't have any background about place plans in general. More education around the function of a place plan is required.

Despite this the level of engagement was extremely high and there was a significant amount of thoughtful feedback received.

**ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT
REPORT.**

Appendices

Appendix A: Phase 1: Liveability Index survey (Sep 2020)

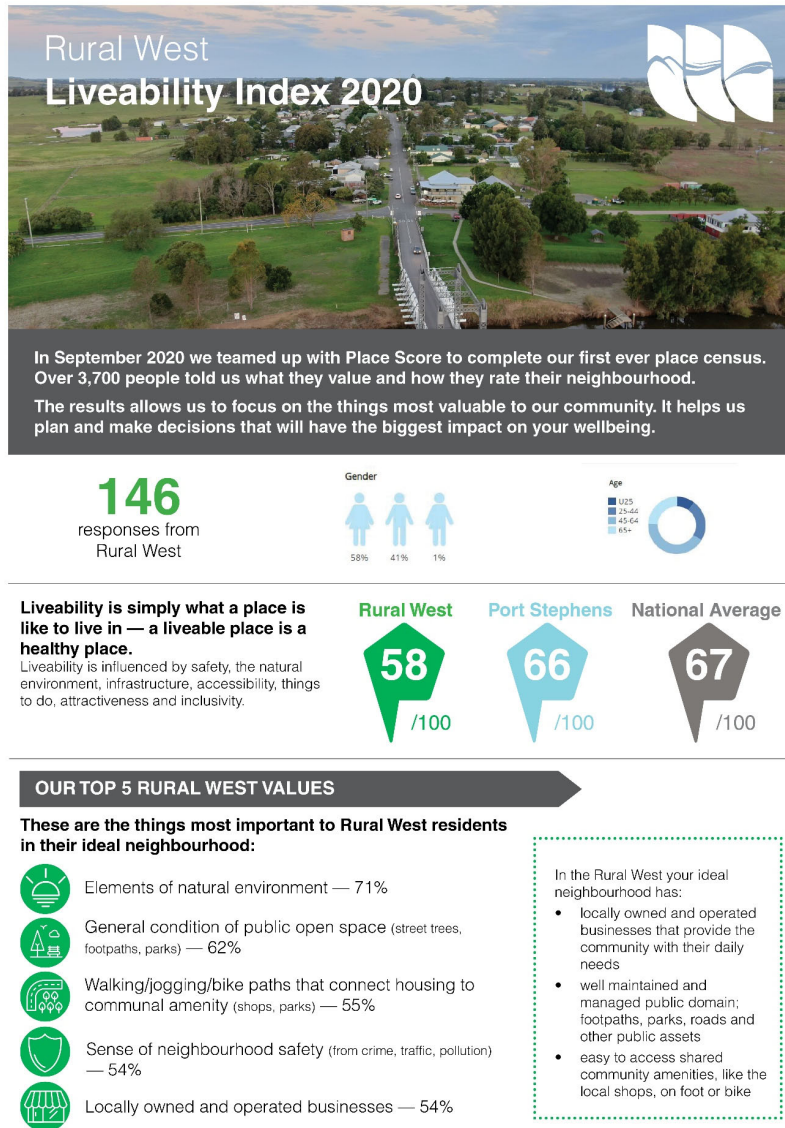
Appendix B: Phase 2 Workshops 1 (3 Nov 2021)

Appendix C: Phase 2 Workshops 2 (10 Nov 2021)

Appendix D: Phase 3 Check-in survey (Mar-April 2023)

Appendix E: Phase 3 Comments from drop-ins (Mar-April 2023)






Appendix A - Liveability Index survey



ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

OUR STRENGTHS

These are the things you care about most and say are performing well. We must continue to celebrate and protect these.

-  Sense of personal safety (for all ages, genders, day or night)
-  Overall visual character of the neighbourhood
-  Physical comfort (including noise, smells, temperature)
-  Elements of natural environment (natural features, views, vegetation, topography, water, wildlife etc)
-  Sense of neighbourhood safety (from crime, traffic, pollution)

OUR LIVEABILITY PRIORITIES

These are the things most important to you and are underperforming. We must work to improve these.

-  Walking/jogging/bike paths that connect housing to communal amenity (shops, parks)
-  Spaces suitable for specific activities or special interests (entertainment, exercise, dog park, BBQs)
-  General condition of public open space (street trees, footpaths, parks)
-  Protection of the natural environment
-  Landscaping and natural elements (street trees, planting, water features)
-  Evidence of recent public investment (roads, parks, schools)
-  Access and safety of walking, cycling and/or public transport (signage, paths, lighting)
-  Quality of public space (footpaths, verges, parks)
-  Evidence of community activity (volunteering, gardening, art, community-organised events)
-  Evidence of Council/government management (signage, street cleaners)
-  Amount of public space (footpaths, verges, parks)
-  Spaces for group or community activities and/or gatherings (sports, picnics, performances)
-  Things to do in the evening (bars, dining, cinema, live music)
-  Local history, historic buildings or features
-  Local businesses that provide for daily needs (grocery stores, pharmacy, banks)
-  Free places to sit comfortably by yourself or in small groups
-  Spaces suitable for play (from toddlers to teens)

For more information go to
PORTSTEPHENS.NSW.GOV.AU



PORT STEPHENS
COUNCIL



Appendix B - Workshop 1 (3 November 2021)

Workshop Activities

Activity: Testing the Liveability Index values for Rural West

The online engagement tool Social Pinpoint was used to help capture and focus a 'deep dive' into the Liveability Index findings for Rural West. The exercise was designed to explore what the attributes mean to different people.

The following table is a summary of the activity findings.

In the summary table, the 'raw' comments have been uplifted to focus on the broader Placescore attribute rather than on specifics. For example, if someone had commented, 'Local people have been fighting for pathways/corridors for animals and that these are retained and not destroyed', this comment has been uplifted to the attribute Elements of natural environment (natural features, views, vegetation, topography, water, wildlife etc). This process ensures similar comments can be grouped and key priorities are more easily highlighted.

There were 85 comments received and these have been aligned into the following table to best highlight the similar attributes and comments and are not in the order of priorities.

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

TESTING THE LIVEABILITY INDEX VALUES FINDINGS

Type	Liveability attribute	What does this mean to me? Why is it important to me?	Comment count
STRENGTHS	Overall visual character of the neighbourhood	Green hills, forest walks, natural bushland, stress-free living	5
	Elements of natural environment	Protection of wildlife corridors from over-development	4
	Physical Comfort	A quiet and peaceful area free from noisy mine blasting or too much infrastructure	2
	Sense of personal safety	I feel safe here	1
HIGH PRIORITY	Walking/jogging/bike paths that connect housing to communal amenity	Roads are dangerous to walk along, risky for school children to wait for and catch buses along busy and unsafe roads	8
		Pathway connection between townships is poor	3
	Protection of the natural environment	Overdevelopment concerns, specifically waste from housing fill, destruction of koala habitat, air quality, flood risks	5
	Landscaping and natural elements	More street trees wanted, including edible street trees	3
	Spaces suitable for specific activities or special interests	Greater public access to the river for leisure for canoeing and picnicking	2
		Areas and activities which draw on and highlight local areas and businesses e.g. mountain biking, local artisan trail, riverside camping	7
SECONDARY PRIORITIES	Spaces suitable for play	The character of Hinterland is to be retained in public spaces e.g. no gaudy playground colours	1
		Additional play equipment	3
	Local history, historic buildings or features	Celebrate local historic buildings and bridges through historic trails and signage	3
	Spaces for groups or community activities and/or gatherings	A community hub for information, community support, and connections in harmony with local aesthetics and environment	3
	Amount of public space	Greater community access to the river for both leisure and tourism/business opportunities	2
	Evidence of Council/government management	Solar-powered speeding signs – to encourage safer and slower driving speeds	1
	Quality of public space	Gravel or sandy paths, and not traditional concrete pathways	1
		Existing playground equipment replacement	1
	Access and safety of walking, cycling and/or public transport	Roads walking is too dangerous. Greater pathway and river access would mean less reliance on cars	3
	Evidence of recent public investment	Good roads will mean more visitors to our area	1
	Evidence of community activity	Events and markets that leverage local food production and gardens	4

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Testing the Liveability Index values – ‘raw’ contributions

No.	<u>Attribute and related comments</u>	<u>Liveability area</u>
#	Attribute: Elements of natural environment (natural features, views, vegetation, topography, water, wildlife etc)	Strengths
1	Please keep this area a special and unique part of the Hunter and Port Stephens animals should not be relocated but should be able to live where they were born.	
2	Local people have been fighting for pathways/corridors for animals and that these are retained and not destroyed	
3	The main reason for living in Wallalong is for the Rural Outlook. It must not be allowed to Rezone for high residential development.	
4	Please remember that the plants and animals are important to the entire ecosystem. Remove any part of that and you condemn or compromise everything else. When you allow clear felling for development as is visible in some areas already, you destroy habitat, connectivity for animals, change the liveability of an area through an increase in temperature as there is now no natural shade, pollution through run off.....and so on. Everything is linked and we are in that picture.	
	Attribute: Physical comfort (including noise, smells, temperature)	Strengths
1	Feeling secure living in a peaceful rural location without the worry of new mines/quarries & constant blasting pushing us away into another location.	
2	Retaining trees and other flora in the landscape reduces the temperature of your environment. It is essential that this is taken into consideration in future development and it would be wonderful if the council could increase tree planting on streets where possible.	
	Attribute: Overall visual character of the neighbourhood	Strengths
1	People travel to this area: Woodville, Seaham, Brandy Hill, Wallalong, Butterwick, Dunns Creek, and Green Wattle Creek Rd to experience driving the open roads, rolling green Hills, views of mountain ranges, forest walks and the absence of infrastructure. It is an escape place, the Byron of the Hunter. The openness is special and it's the "Green Sea" of Port Stephens.	
2	It is also important to note the mental benefits of this landscape. People report the feeling of ease, fall in stress levels and anxiety when either viewing or living in this kind of environment.	
3	The visual characteristics that I appreciate are natural bushland and healthy ecosystems	
4	Rural aspect, character and ambience of the area. Openness and natural environment and not cheap housing	
5	Yes, free of noxious weeds on council land.	
	Attribute: Sense of personal safety (for all ages, genders, day or night)	Strengths

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

No.	<u>Attribute and related comments</u>	<u>Liveability area</u>
1	Road conditions and traffic can affect the safety on our community, Nelsons Plains. Apart from that the safety of our area is fine.	
	Attribute: Landscaping and natural elements (street trees, planting, water features)	Highest priorities
1	It would be wonderful if edible street trees were planted. Some suitable species would be - olive, carob, macadamia, almond, pecan, chestnut, quince, pomegranate, Lilly pilly	
2	It would be so wonderful if street trees focused on edible species (such as olive, carob, macadamia, almond, pecan, chestnuts, quince, pomegranate, Lilly pilly)	
3	Street plantings were going to happen at Brandy Hill but only one street was picked and crepe myrtles were chosen. It was never expanded. Imagine Brandy Hill Drive with an Avenue of trees. At first, it might need a small incentive to get homeowners to look after them, but the majority would rise to the occasion.	
	Attribute: Protection of the natural environment	Highest priorities
1	Concern regarding the amount of fill being brought into flood plain areas by trucks for the construction of pads for the construction of houses in the flood plain. Consideration to be given to water displacement.	
2	Concern: Coal Fly Ash is planned to be imported to Brandy Hill Quarry. This is to be stored and then mixed with concrete. 1. It's a waste product being stored in our area. 2. It may jeopardize the air quality when the concrete and bitumen is crushed that has coal fly ash in it. 3. This area has the last remaining examples of Hunter dry and wet Sclerophyll forests. The area is rich in bird diversity and other species. Koala Corridors isn't the solution to clearing 52 H of forest = noisy miners destructive.	
3	While the floodplain was once covered in natural vegetation it is now a part of our environment as it is. We relate to it but it is now also at risk with the fill for house mounds with no end in sight. Flood risks, environmental risks.	
4	With the number of subdivisions being planned by developers the natural environment and biodiversity is under threat. Developers see trees as an intrusion on their plans of jamming more houses onto smaller and smaller blocks. Little regard is made by them and in many cases the consent authorities on the impacts on flora, fauna and the natural environment which we all love.	
5	Eagleton has a large number of koalas and native fauna. With huge development of Kings Hill, it puts most of the native corridors at risk north of this development, by shutting it down. Very concerned.	
	Attribute: Spaces suitable for specific activities or special interests (entertainment, exercise, dog park, BBQs)	Highest priorities
1	There are 2 x Rivers near Wallalong and almost zero access to the Riverbank bar under Hinton Bridge. More public access to the River is needed.	
2	Accessibility to river - northern end of Raymond Terrace cricket ground area would be good place to start - better access. Also, about access to river at Woodville - scoping works for a number of spots to allow for canoes; power boats - trail options/picnicking.	
3	It would be great to have growers and artisan markets held near Seaham, Hinton & other areas to bring people in.	

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

No.	Attribute and related comments	Liveability area
4	There was a suggestion years ago that it would be interesting to have a "3 bridges" running or cycling event. This could become an annual event and draw card for the increasing interest in these activities.	
5	We have an air BNB and would like to offer stand up paddle boards - HWC owned reserve - whether we could open it up again.	
6	People come to me and ask to use private land for activities like mountain biking; trail walking - rewilding experience.	
7	Three river region; farm gate trail, local artisan trail.	
8	It would be nice if more people in the area used HipCamp to allow Campers to buy time on their property for accommodation. Along rivers, floodplains, bushland etc.	
9	We own an events business in Woodville and are new to the area. Keen to see more community spaces and events, to bring the community together.	
	Attribute: Walking/jogging/bike paths that connect housing to communal amenity (shops, parks)	Highest priorities
1	Pathways to connect people within 5km radius of Brandy Hill - smaller areas and Seaham - so people can walk and ride their bikes between communities and to community facilities. Can only use the car at the moment.	
2	For our area there are no paths at all, a connection to Raymond Terrace and Seaham would greatly increase the amenity of the area and safety. There are a number of regular bike riders in the area who would I am sure use these facilities.	
3	For Wallalong, there are almost zero connecting pathways to other areas. From Rosebank to Anne street for example - seems like it would be easy but it is not connected. I have witnessed people on the road walking from Wallalong to Hinton. Even the roadway from Wallalong to Woodville would be useable. Can McClymonts Swamp road connect to Brandy Hill for example?	
4	Safe walking / cycleways on rural roads would be amazing so that we're not all forced to try and use the shoulder on 80-100km roads	
5	Eagleton section of gravel road has no footpath just bush and children can't walk to friends property due to being unsafe.	
6	Concerned about school kids and bus stops on gravel section of Six Mile Road. Very dangerous.	
7	In answer to 'buses in Brandy Hill'.....we only have school buses.	
8	Traffic in the Brandy Hill area creates hazardous conditions for residents, including school children accessing buses. Also, very dangerous to ride a bicycle along Brandy Hill Drive when the trucks are running.	
9	with the brandy hill quarry expansion the safety of children catching school buses on Seaham Rd is becoming more dangerous. Parents are already driving their children to relatives in other areas rather than use the bus routes on Seaham rd. With the added subdivisions mooted for Eskdale and 610 along with the trucks more thought is needed in providing safe infrastructure for school children in the morning and afternoon	
9	Quarry trucks, and buses passing on minimum road widths is dangerous on gravel section of Six Mile Road. Let alone children walking along roads with poor visibility to bus stops.	

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

No.	<u>Attribute and related comments</u>	<u>Liveability area</u>
10	Being a kid in Wallalong can be dangerous - and lonely. Getting from place to place is difficult due to lack of safe connectivity options. No public transport. To get anywhere they have to walk or ride along a main road. There are bus routes nearby - for Brandy Hill/Seaham and for Morpeth - but NOTHING for Hinton or Wallalong. Additional safe connectivity to areas within Wallalong (Rosebank to Ann Street for example) or to neighbouring suburbs would make a big difference.	
	Attribute: Spaces suitable for play (from toddlers to teens)	Secondary priorities
1	Maybe with more a natural feel, and tribute to the honey and bee's, the boats on the river. Blending in with natural landscape. Gordy blue and yellow colour sun shelter at the park in Paterson (Dungog Shire) is a distraction from the natural beauty of the park and really detracts from the historic building and natural beauty of the tree's, open space the natural uplifting green of our area.	
2	Additional play equipment around the rural west and park furniture in other areas other than Seaham Park would make the rural west more inviting to residents and visitors.	
3	Lack of adequate playground facilities suitable for all ages.	
4	Along with the additional playground facilities the infrastructure for the children to get to these places safely without relying on being driven by car.	
#	Attribute: Local history, historic buildings or features	Secondary priorities
1	I get sad when I see this building empty and neglected. The feedback I get is people want to enjoy and enhance their knowledge of historical local places and stories and buildings. I think this is why Woodville is also popular - it's a unique little pocket. If every area we visit is the same and created by some development group you may as well not go there because it looks the same as everywhere else.	
2	I feel that the old Wallalong Broom Factory is a wasted opportunity. A Micro Brewery/Eatery or Vineyard outlet like Boydells. Is there a tourism trail for the 'Founding' houses of the area? Wallalong House, Hinton, Osterley, Seaham etc?	
3	VOWWW, at a meeting with PSC, made the suggestion that interpretive signs could be placed in strategic historic sites. Woodville would have several locations where a sign might say....this shop was once....., Hinton pub, bridges etc. there is some amazing history and other areas have self-guided drives where the route highlights the amazing past and what still remains. A historic photo would show what it was once like.	
	Attribute: Spaces for group or community activities and/or gatherings (sports, picnics, performances)	Secondary priorities
1	Definitely needed, but please not over developed and "infrastructured" and expensive. So people can experience Nature, simplicity and its non cluttered or chaotic like many public spaces these days.	
2	Need a community Hub - a Connect and Share space - Info on tourism, events, mental health services, child and family and activities, help when needed and a friendly person working there to pull it all together and things to do to meet others, not just an empty hall for hire.	
3	I would love to see a repair cafe in the area which would build community and reduce waste.	
	Attribute: Amount of public space (footpaths, verges, parks)	Secondary priorities

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

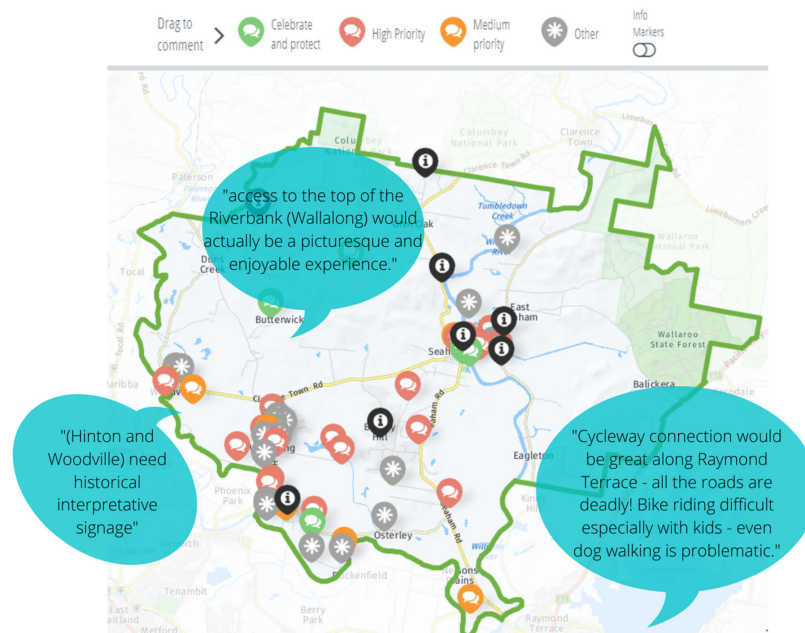
No.	<u>Attribute and related comments</u>	<u>Liveability area</u>
1	Public access to the River at Woodville will be amazing and let's celebrate the cultural heritage by replacing the wharf that was washed away many years ago in a flood. Potential for Guided tours. The Woodville precinct is very family friendly and it would be great for people to picnic and play launch canoes/kayaks there or tie a boat up and grab a pie. A community Hub Space & tourism "welcome to Port Stephens" could be good there. A commercial tourism business could operate. May need to purchase property though.	
2	My main query here is that there are two Rivers through and near Wallalong - but almost no public access to the Riverbank (bar Hinton Pub). Why are the footpaths on the roadside publicly accessible, but the riverbanks along rivers are not? The UK has the Ramblers code, NZ has the Queens Chain, why does Australia not have a Riparian access law?	
	Attribute: Evidence of Council/government management (signage, street cleaners)	Secondary priorities
1	Active solar power signs entering Wallalong and Hinton 50kmh Zones that read back the speed of the approaching vehicle - might help to reduce the speed of vehicles in the area. Approaching Hinton from Osterley is particularly bad with vehicles still at high speed well into Hinton, but cars through Wallalong from either end of town tend to arrive too fast as well, especially on the down-hill approach.	
	Evidence of community activity (volunteering, gardening, art, community-organised events)	Secondary priorities
1	Slow food earth markets like at the levee brings people from Sydney, Newcastle and Maitland. Love to see it happen as a regular event.	
2	Encouraging and supporting food production in the area - to celebrate and encourage our rural character	
3	Can Port Stephens provide some input or get some advantage from the Maitland Garden Ramble? A number of properties within Port Stephens are visited - specifically out along Paterson Road between Woodville and Dunns Creek. Might there be other locations in the LGA that could participate?	
4	A proper farmers market (with food rather than rubbishy market junk) would really bring a focus on our rural skills and values. It could bring tourists to the area and provide a sustainable food source to the locals	
	Attribute: Quality of public space (footpaths, verges, parks)	Secondary priorities
1	gravel sandy paths not concrete please xx	
2	Playground equipment is run down in most areas. Need to be replaced with more modern equipment which reflects safety for children using and educational benefits, coordination, all important for development. Great examples all over Australia but sorely lacking in PS.	
	Attribute: Access and safety of walking, cycling and/or public transport (signage, paths, lighting)	Secondary priorities
1	My children have grown up in Wallalong without access to Public Transport. They have also grown up without access either River that pass through the region - The Williams or the Hunter. Even a walk to the Skate Park is semi-dangerous from Rosebank due to the need to walk on the road along High Street. We have had to drive them everywhere their whole lives and their ability to ride anywhere beyond Wallalong is just too dangerous.	

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

No.	Attribute and related comments	Liveability area
2	Apart from the school buses which pick up on busy Seaham Road there is no public transport. We have a number of regular cyclists who use Seaham Rd for training and fitness. They contend with b double trucks travelling at 80 to 100k on poor roads extremely scary. If a cycling/ walking path were constructed the danger for children and adults alike would be greatly improved along with the health benefits of physical exercise. The roadsides also along here need to be mowed more regularly by council.	
3	Wallalong road from Wallalong to Woodville. Almost unpassable at the moment. A small dirt road now mainly used by the local farmers and some kids who ride to the Woodville general store (there is nothing else within safe distance for kids to ride to. Access to Riverbank would make this route even more attractive for use). Has PSC discontinued maintenance by any chance? It has even damaged a BMX bike (!!)	
	Attribute: Evidence of recent public investment (roads, parks, schools)	Secondary priorities
1	Easy navigation and pleasant driving for community and tourists including business tourism - people will be more likely to return.	

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Activity: Mapping your priorities



This exercise mapped specific areas to a liveability priority. There were 57 responses received and some of the key themes are as follows:

- More pathways are needed, particularly ones which connect towns together e.g. Wallalong to Hinton; Seaham to Raymond Terrace (13 comments)
- Town centres to be beautified and local history acknowledged and celebrated (11 comments)
- Greater access to river for recreation and commercial use (9 comments)

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Workshop activity: Mapping your priorities 'raw' contributions

COMMENT TYPE	LOCATION	COMMENT
High Priority	Weir Park, Seaham	Closed of weir park - hunter water park - there was some safety issue here perhaps. We can investigate the problem at the site.
High Priority	High Street, Wallalong	Pathway along High Street or backstreet if not possible to connect Clarence Town Road to Hinton - Pathway connectivity
High Priority	High Street, Wallalong	People wanted to walk further during lockdown
High Priority	Seaham to Raymond Terrace	Cycleway - connection - would be great along Raymond Terrace - all the roads are deadly! Bike riding difficult especially with kids - even dog walking is problematic.
High Priority	Wallalong	Connecting pathways to the sport facilities and skate park - connectivity to facilities
High Priority	Seaham Road, Brandy Hill	High load of trucks - quarry and others, creates hazardous conditions for residents. Many near misses, including cyclists. Road too narrow, speed too high. Need to make environment safe before inviting visitors, lower speed limits would help.
High Priority	Seaham Road, Brandy Hill	Living there also the road is of a poor quality due to the heavy traffic and also extremely unsafe for school children who have to stand on the edge of the road with b doubles etc running past at 80km +. Also residents and local farmers have difficulty entering and exiting their own properties very pertinent when a driver hit our vehicle at over 90km as we tried to turn into home. More visitors would make it even worse. Speed reductions needed
High Priority	Seaham	Very under-utilised resource - and is not well known - come across it by accident - needs promoting - including the historic area of Seaham.
High Priority	Seaham Road, Nelsons Plains	Pathway connection to Hinton Road to Brandon Park which is linked to Seaham - pathway connectivity
High Priority	Wallalong to Brandy Hill	Connect McClymonts Swamp Road from Wallalong to Brandy Hill - for pedestrian and cycle access
High Priority	Wallalong to Brandy Hill	Pathway connection from McClymonts Swamp Rd to Brandy Hill
High Priority	Brandy Hill	Pipeline walking trails - using dirt or gravel - softer on your feet for runners - mountain bikes and horses friendly.
High Priority	Stuart Park, Hinton	More facilities in this park. Improved maintenance in this park. It's not welcoming for people to enjoy the facilities. Children's play equipment would be beneficial. - General condition of open space
High Priority	Wallalong	2 things. (1) Clean up and maintain the road so BMX bikes do not get damaged and (2) if there was access to the top of the Riverbank it would actually be a picturesque and enjoyable experience.
High Priority	Seaham Swamp Natural Reserve	support the walkway around Seaham Swamp with some signage that talks about some of the heritage of the area, and the natural attributes, bird ID etc.
High Priority	Woodville	Open deck eatery near new private shed overlooking river - things to do in the evening

ITEM 3 - ATTACHMENT 1
REPORT.

HINTERLAND PLACE PLAN ENGAGEMENT

High Priority	Wallalong	People enter either end of Wallalong too fast. It would be good to have solar power radar displays at each end of town showing 'Your Speed' as each car approaches. They did this at Paterson years ago and it made a big difference to slowing the traffic.
High Priority	Hinton	People enter the East entrance of Hinton WAY too fast, especially coming from a 100 zone. It would be good to have a solar power radar display showing 'Your Speed' as each car approaches. They did this at Paterson years ago and it made a big difference to slowing the traffic.
High Priority	Hinton	Plant Fig Trees north of the bridge, and make sure it is mowed more frequently to prevent snakes. Design to allow future covered family/picnic area when funds allow, and to allow pathway along levee bank.
High Priority	Seaham town centre	Create a town environment - more shops, footpaths, sense of place.
High Priority	Seaham town centre	Sense of place rural, foody, recreation, remaining native forests
Medium priority	Nelsons Plains, entry to Raymond Terrace	Opportunity for entry signage, tree lines and so on - transition into Raymond Terrace etc. Create a real visual sense of entry and space.
Medium priority	Wallalong Playground	Play equipment needs updating as there is no good kids playground in the area - spaces suitable for play
Medium priority	Woodville	Need historical interpretative signage to help engage residents and visitors with history.
Medium priority	Hinton	Need historical interpretative signage to help engage residents and visitors with history.
Medium priority	Hinton, Swanreach Road	2 things again (1) Why is Swan Reach Road not open to the public along it's total length and (2) this would give casual walkers/riders access to the Hunter riverbank?
Medium priority	Woodville	A spot near Woodville Bridge to view or picnic - Free places to sit comfy in small groups/ spaces suitable for special interest
Medium priority	Woodville	A small launch wharf or jetty to put canoes kayaks in - how awesome would it be to have a tourist info and community neighbourhood hub or "activity centre". The history of the area re old wharf. It be kind of cool to have a walk/horse bike trail loop from Green Wattle Creek Road crown land or equestrian centre to the water at Woodville or somehow to the Seaham Weir.
Medium priority	Cross Street, Seaham	Very busy road with excess speeds used. More signs with speed limits and policing of heavy vehicle usage
Medium priority	Morpeth Street, High St Wallalong	Street Tree plantings and kerb along Morpeth Street and High Street would improve amenity.
Other	Wallalong	This does not connected and would be great to connect - Pathway connectivity
Other	Eagleton	Develop the old church precinct
Other	Hinton	With Maitland creating a Pathway from Morpeth to Walka, could pedestrian access over the River be a possibility - and Link Hinton, Wallalong etc and Beyond to Maitland. A Rope Bridge/suspension bridge of some kind at the end of the dirt road from Hinton Pub?

ITEM 3 - ATTACHMENT 1
REPORT.

HINTERLAND PLACE PLAN ENGAGEMENT

Other	Hinton	Where the Paterson meets the Hunter, why is all the land completely inaccessible to the public - on both the Maitland and PSC sides? Is there a way to open up these up for all to benefit?
Other	Noongah Road, Nelsons Plains	The Hunter Water Pipeline Corridor. Lobbying Hunter Water to block Motorcycles, but to make it easier and more apparent that Pedestrians and Cyclists could use the corridor.
Other	Woodville	Riverside Jetty access for Wedding Parties to travel to/from Woodville weddings along the waterway
Other	Wallalong	Connectivity between areas within and out of Wallalong that do not require travelling down high Street. For example linking pedestrians from Rosebank to Ann St allowing 1 swift crossing of high St to get to Bowthorne Park. Connecting Wallalong to Brandy Hill via McClymonts Swamp. Connecting Bowthorne to Hinton down the Wallalong Hill road and the Riverbank - which is also a route to Woodville.
Other	Hinton	The Riverbank on the sweeping bend front Hinton is absolutely beautiful. It would make for a good pathway to link Wallalong to Hinton. There are also old riverside woodworkings only visible from on the river - was this some kind of Jetty for the old Bowthorne Butter factory?
Other	Wallalong	The old Broom factory would make for a fantastic Microbrewery location.....
Other	Wallalong	There are gourmet cheese/chocolate/cafe experiences based at Dairy Farms. Look at Gallo Dairyland for example in Queensland. Could the Wallalong Dairy extract itself from low-price high-volume milk supply and instead become an artisan Dairy that supplies gourmet products to places like Morpeth and King St Raymond Terrace?
Other	Hinton	Maintained areas along the Riverbank could make for opportunities using HipCamp - an AirBnB style service that attracts paying travellers and campers who want to stay just for the location.
Other	Pathways, Osterley	Richmond Vale Rail Trail (RVRT) will use the HWC corridor across Hexham connecting Shortland to north end of the RVRT/SMR Rail Line corridor. Attempts are in progress to have Maitland extend this from Hexham via the HWC pipeline corridor from Tarro to Duckenfield. M1 to Heatherbrae consultation is ensuring the Hexham to Tarro corridor is preserved. If this comes to pass, PSC should consider Pedestrians crossing at Osterley and link ongoing HWC Pipeline path to Brandy Hill/Seaham/Wallalong
Other	Woodville	Some of the big Hay Barns in the area could benefit from historical murals or signage. Think of the Indian Root Pills barn leading to Morpeth, and how much that features in their marketing of the area.
Other	Wallalong	No Public Transport in Wallalong or Hinton AT ALL. Can any Port Stephens services extend this way? Perhaps is it more prudent to lobby to have the Maitland Bus route 184 extend from Morpeth?
Other	Seaham Weir-Williams River	Places upstream of Seaham Weir along either side of the Rivers Edge would be GREAT additions to Hipcamp.com.au.
Other	River towns- Seaham, Raymond Terrace, Hinton	Linking towns via the River is a thing of the past. But if Raymond Terrace was ever to succeed in establishing a River Bus link to Morpeth to help bootstrap commerce at historical King Street, perhaps one day that could be extended to Hinton/Paterson and, if a Lock could be built at Seaham, up to Clarence Town. (I have watched a number of British Canals videos of late!)

ITEM 3 - ATTACHMENT 1
REPORT.

HINTERLAND PLACE PLAN ENGAGEMENT

Other	Hinton, Swanreach Road	Swan Reach would be a great area for public river access and a boat ramp don't you think? An incredibly picturesque area locked away from the public (See attached photo). Imagine roping off all of Newcastle Beach Shoreline or the periphery of Lake Macquarie as inaccessible to the Public. That a place like this is roped off is bordering on criminal. Can Port Stephens be the catalyst to have sweeping changes made to Riparian Access legislation?
Other	Wallalong	Wallalong is close to services at Raymond Terrace, Maitland, and Newcastle, so it is a locality to be shared and celebrated with existing residents, new residents, and visitors alike.
Information - upcoming projects	Brandy Hill Drive shared pathway	Let's make this a priority as it is part funded by Hanson.
Celebrate and protect	Seaham Park Playground	Good playground that is well liked and used - Spaces suitable for play
Celebrate and protect	Seaham Swamp Natural Reserve	Protect this area - Natural environment
Celebrate and protect	Non-specific	Supporting existing local business; support people on the journey on producing food and living rurally; farm gate tours; DA issues and legal support; don't want to be sued for selling a jar of jam; help support home businesses selling produce; connecting businesses in Nelson Bay but not in this area - we are not welcome down there; workshops to help people do their businesses confidently and within the rules;
Celebrate and protect	Seaham Park Playground	Add more facilities to park such as fitness equipment
Celebrate and protect	Wallalong Skate Park & Playground	Great little playground that flies under the radar.
Celebrate and protect	Hinton	Harry Boyle Park - celebrates the heritage of the area and an underutilised space. Right beside the bridge. Harry Boyle was a local historian, and a character!
Celebrate and protect	Green Wattle Creek Road Equestrian Area	Horse trails - Green Wattle Creek Road equestrian area
Celebrate and protect	Green Wattle Creek Road Equestrian Area	Green Wattle Creek Road - beautiful forest and escape place protect the crown land

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Workshop 1: Activity: What name would give your district?

Participants were asked to brainstorm alternate names for the Rural West which would brand and create a sense of identity for the area. Suggested names included:

- Port Stephens Hinterland
- The Hinterland
- The Three Rivers

Collectively the group settled on 'The Port Stephens Hinterland' as their preferred district name.

Activity: Local case study – Destination Rural West

A case study using online break out rooms was used to discuss ways to improve the rural west as a destination that can be shared with visitors.

Some of the ideas shared are:

- Farmers Markets at Woodville Church
- Pathway connectivity between Woodville, Wallalong, Morpeth and Brandy Hill.
- Historical interpretative signage and potential historic trail
- River access between Woodville and Wallalong
- Festival of small halls
- Local noticeboards of what's on
- Artisan markets

Local Case Study: Destination Port Stephens

What is our brand and identity?	What experiences or destinations would you highlight?
<ul style="list-style-type: none"> • The Australian dream – to live with so much nature and openness, • The green treechange dream – room to breathe. • Could 'taste' the air, it's so fresh • Accessible – get away, but without going too far • From a visitor perspective – close enough for a day trip – or just a beautiful • Gateway to Port Stephens • Very central for tourism – vineyards one way, beaches and Newcastle the other. Easy access to Barringtons • Nature, space, community 	<ul style="list-style-type: none"> • Historic villages • Farmers Market – potential host at Woodville church! • Historic villages • Old fashioned Sunday drive – or motorbike ride. • Seaham Swamp • Coffee and local produce at Woodville Store • Morpeth • Phoenix Park – farm to gate, picnic • Birdwatching, koalas • Paddling on the rivers • Rock Frog Grange? Clarencetown • Bushwalking – green wattle creek Rd - crown lands, mountain biking and horse-riding? Off Butterwick Rd. Aboriginal heritage here too. • Paintball and motor racing at Eagleton • Mountain biking and hiking at Dungog • State forest on Balickera Road

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

What are some ideas for community led projects?

- Several areas – close to each other but not connected – Woodville has a great history/church + viewing areas to river (private property issues)
- Levee Bank between Woodville and Wallalong (dirt road) somewhere for access to River along here – like Patterson – excellent for cycleway opportunity – not high traffic road and then connect to McClymont Swamp Road – either dirt or sealed??
- Similar situation for Seaham near to Boat Ramp – better park near bird hide
- Access to former Seaham Weir Park- Hunter Water
- Connectivity between Woodville – Wallalong – Morpeth and Brandy Hill Shared Pathway connect to Seaham
- Woodville is a destination.
- Wallalong House – privately owned – potential for open house/open garden scheme??
- Access to Woodville from Maitland side as a tourism – potential footbridge across River as there is no pedestrian access at all
- Woodville and Hinton bridges are heritage listed – could be very expensive??
- Historical areas interpretative signs – trail
- Christmas market (at community hall/s?)
- Christmas in July (open fires, into the wild! etc)
- There's a lack of information about what the area has – visitor information at general stores (need noticeboards)
- Driving tour of the area with historical background info – birds and nature
- There might be a food swap market style thing in Seaham – check FB.
- Growers market.
- Artisan market.
- Treasure hunt – geocaching
- Some way to share the stories of the area – Matt's got some great ones.
- Forestry workshops from private property.
- Festival of Small Halls
- Bush Dance in the hall

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Appendix B - Workshop 2 (10 Nov 2021)

Workshop 2 November Activity: Quick Wins, Big Picture

At the conclusion of Workshop 1 participants were asked to undertake a home work exercise which would feed into the activities for Workshop 2. This activity centred around people detailing their quick win and big picture ideas. These were presented as part of the presentation for Workshop 2 as follows:

Quick wins ideas

- Improve existing parks
- Create a sense of arrival with signage, plantings
- Protect wildlife corridors & create a way for locals to report koala sightings
- Allow informal use in parks and along the river, including camping
- Signage to tell our stories & identify existing pathways, lanes, public tracks
- Create a walkway with signage around the Seaham Swamplands
- Improve sense of community through street libraries, pop-ups.

Big picture

- Plan a Three Rivers Festival
- Improve & create open spaces
- Link villages with paths and cycleways
- Link Brandy Hill & Wallalong via McClymonts Swamp Road
- Investigate options to utilise Hunter Water service roads
- Horse trails
- Investigate options for public transport
- Improve our village experiences, especially Seaham
- More eateries
- Farm to gate experiences

The above quick wins and big picture ideas were further distilled into four key actions and these were then action planned using online workshop breakout rooms.

Quick Wins	Big Picture
Create sense of arrival using signage and trees	Create a Three Rivers festival
Improve access and connectivity between village centres	Upgrade village centres and connect them via paths and cycleways
Enable camping/accommodation in areas	Enable local businesses to grow and become attractions

**ITEM 3 - ATTACHMENT 1
REPORT.**

HINTERLAND PLACE PLAN ENGAGEMENT

Action Planning

QUICK WIN 1: CREATE A SENSE OF ARRIVAL USING SIGNAGE AND TREES	
What do we already have to work with?	Bridge – avenue of trees – beautiful landscaping Existing situation with sunflowers at Redgate Farm
What's the situation?	Mowing of existing levee banks with owner permission at Raymond Terrace Finding/scoping areas for putting access to the river – kayaks and canoes – signage required
What does success look like?	Better signage into the villages – suburb signage Better signage for walking options
Who needs to be involved and what is their role	Potential for competitions
What might stop this happening?	Legislation requirements

QUICK WIN 2: IMPROVE ACCESS AND CONNECTIVITY BETWEEN VILLAGE CENTRES	
What do we already have to work with?	Potential access routes on service land and private land that could be utilised
What's the situation?	Off the main roads there isn't a lot of access Potential access routes on service land and private land that could be utilised Unknown who owns the land alongside the levy banks
What does success look like?	Existing connections and opportunities to be brought up to a safe standard Drawing on existing roads and pipelines to create the access rather than expect large amounts of infrastructure
Who needs to be involved and what is their role	Hunter Water; Property owners; State Government responsible for levy management. Community involvement in where the need is, potential routes and what success looks like
What might stop this from happening?	Lack of funding, community support may decrease if too much time goes by and legislation requirements
Three key actions to make it happen	1. Create a plan with the community about where connections should occur 2. Create logical steps for the connections to be established

QUICK WIN 3: ENABLE CAMPING AND ACCOMMODATION IN AREAS	
What do we already have to work with?	Existing businesses which offer accommodation; develop a location where there are existing facilities (loos etc.). There is camping at Hinton Pub – there's a website called pubcamp; there are a number of locations that advertise their sportsgrounds for camping, but these do have facilities – power, loos etc. Maybe around the community halls? Hipcamp.com.au – like Airbnb but for campers – the area has some attractive spaces.

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

What's the situation?	Lack of facilities – loos, power etc. Riverside access. People unsure of what might be required in terms of Council approvals. Insurance! People need to understand that this is an option to activate their properties and the area. Need clarity around access to river – is this public?
What does success look like?	Trial making camping available to see how it goes, whether it's attractive, good for the community and so on. Adoption – increased options on AIRBNB/hipcamp. Active camping creating economic benefit for villages.
Who needs to be involved and what is their role	Council/national parks – regulatory. Hunter Water possibly. Clarify public access entitlement to rivers. Property owners for Airbnb.
What might stop this happening?	Money Private land owners
Three key actions to make it happen	<ol style="list-style-type: none"> 1. Identify a potential pilot site and do a trial 2. Survey property owners of riverside land to determine attitudes to public access 3. Let property owners know they have options to have guest accommodation, and the process.

BIG PICTURE 1: CREATE A THREE RIVERS FESTIVAL

What do we already have to work with?	Where and what you are allowed to do - LEP compliance River sites – choosing location Music Charity fundraiser Existing nearby areas such as from Dungog to share their success and learnings
What's the situation?	We are lacking that the current groups are very specifically, focussed groups and not an overarching community group – VOWW suggested as sub-committee Risk assessment and safety requirements Involvement and interest from the community What would the event be???
What does success look like?	Would need active committee or existing groups to join Event contractor to help pull together
What might stop this happening?	Accessibility for parking, traffic etc etc Community consultation to residents Exhausting – potential for an event organisation business to take over from exhausted volunteers
Three key actions to make it happen	<ol style="list-style-type: none"> 1. Get interested people together to learn more about what is involved, what would it actually be – mini wild festival? Anything? a tik tok taster?; develop broad event options; 2. Would need a project committee rather than a specific committee – concentric circles – or a partnership committee/organisation to help run the event. 3. Location aspects – potential for smaller sized events rather than a single large event?? Timetable of events to showcase the area a bit more – see Harvest Festival at the Central Coast/ Hastings Farm Gate tour

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

BIG PICTURE 2: UPGRADE VILLAGE CENTRES AND CONNECT THEM VIA PATHS AND CYCLEWAYS	
What do we already have to work with?	Woodville village centre and Seaham village centre
What's the situation? e.g. No connecting pathways; nowhere for young people to hang out; no activities for families	<p>Woodville – popular village centre for a little town with people coming to the area. Not a lot to do but there is the coffee cubby and also the store that is taking a different approach to stock more local produce and health food. Food stall up the road that has been shut for a long time. Not any 'space' in the area to create a community space for gathering, picnics etc. People generally try and use the church grounds but these are private property.</p> <p>Seaham – existing general store and used a lot by tradies. Store is on the route from Pacific Hwy and Barrington.</p>
What does success look like?	<p>Woodville - Continue the romantic historic village feel for the area with a community space for picnics and play. This should remain the main centre for the west.</p> <p>Seaham – The uniqueness of Seaham is celebrated and not try to be changed. They serve a 'mean fish and chips'! Include a Seaham walk with interpretive signage that also connects around the swamp.</p>
Who needs to be involved and what is their role	Business owners, private property owners, Council, community groups, local residents

BIG PICTURE 3: ENABLE LOCAL BUSINESSES TO GROW AND BECOME ATTRACTIONS	
What do we already have to work with?	<p>Existing businesses which could expand/diversify – ie dairy could sell gourmet cheeses and chocolates, broom factory could add a café etc.</p> <p>There are many home business which, with support and encouragement could diversify, maybe into farm gate, tours?</p> <p>Could tag onto the Maitland Garden Ramble</p>
What's the situation?	<p>People don't know what's required</p> <p>You really need a car to get anywhere</p> <p>Need to get river access sorted</p> <p>Need to promote reasons to visit the area</p> <p>Much cycling in the past but now too much traffic and road safety issues. Road edge is poor.</p>
What does success look like?	Vintage car clubs visit regularly.

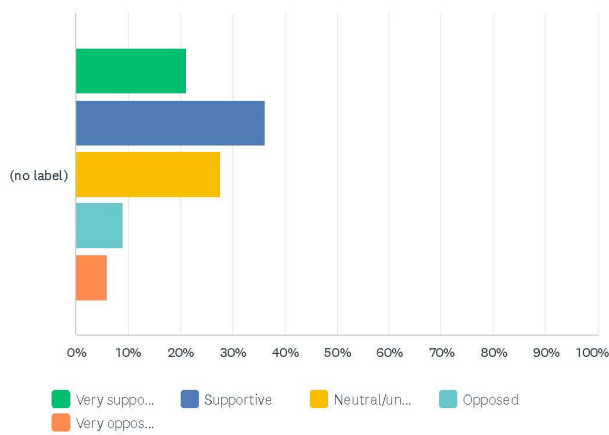
ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Appendix D – Check in survey results

Please note survey written responses have only been updated to improve spelling or punctuation to improve readability.

Q1 How do you feel about the name 'Hinterland' to describe the area of Port Stephens LGA outlined on the map below?

Answered: 166; Skipped 0



	VERY SUPPORTIVE	SUPPORTIVE	NEUTRAL/UNSURE	OPPOSED	VERY OPPOSED	TOTAL	WEIGHTED AVERAGE
(no label)	21.09% 35	36.14% 60	27.71% 46	9.04% 15	6.02% 10	166	2.43

Key survey finding:

Q1: Majority of responses were supportive on the name change of the area from Rural West to Hinterland (57% supportive, 28% unsure, 15% unsupportive).

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Q2: Do you have any other suggestions for the name?

Answered: 46; Skipped: 120

Q2 Responses	Comment code(s)
Rural Communities Place Plan	Other suggestion
No other suggestions, very much like "Hinterland".	Positive comment
Rural port stephens	Other suggestion
River lands	Other suggestion
No	
No I think that's a wonderful name	Positive comment
Not really	
No Hinterland sounds fine, unless it becomes the name of a huge residential development.	Positive comment
was there a problem with the term 'rural west'?	More information required, misinterpretation
Neglectland; Wasteofratesland; Onlytheretocollecttheratesland; Giftittomaitlandland	Negative comment
Consult with the local Aboriginal people to give it a proper name or at least a name that represents them. The lack of visible acknowledgement of Aboriginal people in this area is appalling.	Indigenous reference
The Hills	Other suggestion
A hinterland suggests "hills", most of this area floods	Negative comment
No, Hinterland is Perfect	Positive comment
I'd prefer an appropriate name reflecting indigenous culture and heritage	Indigenous recognition
I feel Raymond Terrace should be included in this plan	More information required, misinterpretation
To be honest I live here and until I saw this survey did not know it was referred to as The Hinterland.	More information required, misinterpretation
Rural Port	Other suggestion
a) A suitable Aboriginal name. Why not Wallalong? (Wollalaghn - meaning flat near a river or creek. The key feature of your Hinterland is that it is dominated by floodplains.) It was a gathering place for large numbers of people around the former Lake Paterson, and was an initiation site (colonial records of circles near junction of Butterwick and Clarencetown roads; b) a name that acknowledges the area's outstanding farming heritage, beginning with John Tucker Junior's establishment of Albion Farm at Woodville in 1812 - the first free Australian-born settler in the entire Hunter Region, and the first outside the Sydney Basin.	Indigenous recognition
Rural West as it has been known for. Ages, or preferably it's original Worimi name.	Indigenous recognition; Other suggestion
port trade OPEN BAY 2 bridgeway port	Other suggestion
Outlander	Other suggestion
The forgotten part of Port Stephens LGA	Negative comment

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Q2 Responses	Comment code(s)
Rural West is just fine. The Hinterland is better for tourism and real estate marketing purposes. Another suggestion: "God's Country"	Positive comment, Other suggestion
Port Stephens Riverlands	Other suggestion
no	
No the hinterland describes the location perfectly	Positive comment
Feel that the hinterland sounds a bit like the forgotten people which I feel we are.	Negative comment
Westport	Other suggestion
Giacomoville	Other suggestion
The outskirts	Other suggestion
no	
Port Stephens green belt	Other suggestion
This name just feels very marketing heavy ready like it's an estate, rural west was more relatable.	Negative comment
Greater Port Stephens Port Stephens Rural	Other suggestion
No	
No hinterland sounds pretty good	Positive comment
Riverland.	Other suggestion
Nothing wrong with the names of the suburbs now	More information required, misinterpretation
Just 'Port Stephens'	More information required, misinterpretation
An Indigenous name	Indigenous recognition
Country Port Stephen's	Other suggestion
Rural Port Stephens	Other suggestion
No	
The forgotten lands is more fitting. Council routinely forgets to do any road maintenance and the like out here.	Negative comment
Barbakewaria.	Other suggestion

Q2 Comment code summary (Answered: 46; Skipped: 120)

Code	Percentage	Comment code #'s*
Other suggestion	41.3%	19
Positive comment	15.22%	7
Negative comment	13.04%	6
Untagged	13.04%	6
Indigenous recognition	10.87%	5
More information required, misinterpretation	10.87%	5

* Note comment code numbers are higher than individual comments received (Q2 = 46) due to multiple comment codes applied

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Q3 What do you think of each of the Economy action items from the Draft Hinterland Place Plan?

Answered 134; Skipped 32

	VERY SUPPORTIVE	SUPPORTIVE	NEUTRAL/UNSURE/NEED INFORMATION	OPPOSED	VERY OPPOSED	TOTAL	WEIGHTED AVERAGE
Create pop-up experiences	38.06% 51	33.58% 45	23.13% 31	2.99% 4	2.24% 3	134	1.98
Agritourism mentoring program	32.84% 44	40.30% 54	23.13% 31	2.24% 3	1.49% 2	134	1.99
We're here to help	28.36% 38	34.33% 46	31.34% 42	2.99% 4	2.99% 4	134	2.18
Deliver an annual event	41.79% 56	34.33% 46	17.16% 23	3.73% 5	2.99% 4	134	1.92
DA incentive rebate	28.36% 38	31.34% 42	27.61% 37	7.46% 10	5.22% 7	134	2.30

Key survey findings:

Q3: Majority of responses were supportive of the draft Economy actions:

- Create pop up experiences
(67% supportive, 23% unsure, 5% unsupportive)
- Agritourism mentoring program
(73% supportive, 23% unsure, 4% unsupportive)
- We're here to help
(63% supportive, 31% unsure, 6% unsupportive)
- Deliver an annual event
(76% supportive, 17% unsure, 7% unsupportive)
- DA incentive rebate
(60% supportive, 28% unsure, 13% unsupportive)

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Q4 Do you have any other great ideas or comments to add about the draft Economy action items?

Answered 49; Skipped 117

Q4 Responses	Comment code(s)
A lot of TALK! What we need is complete and detailed precinct planning so we know our way ahead, as many residents are now being priced out by above average valuations creating unaffordable rate increases. All your programs are short term - we need long term solutions covering planning alterations on a whole of area basis to create the new environmentally sensitive planned precincts required by the rapidly advancing future. These changes should be led by Council initiative, not await developer interest, and address the diversity of ownership and physical characteristics. If you wish to address ECONOMY, residents need the security of concrete and detailed planning for the future. Use planning for the Ralstons Road area as an example of what can be achieved if the effort is applied.	More information: clearer understanding of function of place plan
Bike and walking trails	Captured under existing action
A lot of people move out here to be away from lots of traffic. Creating pop-up experiences and annual events nullifies this. It is hard enough to get through the round-about at Raymond Terrace Road and Seaham Road without adding more to it.	Getting around safely (roads)
Not really high on my priority list	Miscellaneous
Don't allow for the quiet location to be over run, we choose to live in Rural settings for a reason	More information: clearer understanding of function of place plan
I strongly believe an annual event or markets within our area would be lovely	General positive comments
We really need a walkway in Wallalong down High St, and I would argue that the walkway could continue down past the Hinton Bridge to Morpeth. It would be a great incentive to boost the economy in the Hinton area, as it may encourage a cafe or a corner store to open up.	Captured under existing action, General positive comments
What makes this area is the community and the land. I think it's really important to ensure it keeps its 'old world' charm and not become overly touristy. It needs to be a fine balancing act by the council to ensure the area is not urbanised by the change. Any change to properties to include businesses & accommodation need to be sympathetic to the area and not be over commercialised. The roads definitely need increased maintenance to handle any increase in traffic.	Captured under existing action, Getting around safely (roads)
My main concern is that council will move to turn the 'hinterland' into another Thornton or Aberglassyn with mid and high density residential development. The whole appeal of the area is its nature and rural aspect.	More information: clearer understanding of function of place plan
Proper crossing to Seaham Public School from Seaham General Stop, car do not slow down, we have seen so many near accident, we don't want to wait till someone gets hurt for something to be done	Getting around safely (roads)

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Q4 Responses	Comment code(s)
Artwork along walking trails that fit the natural environment.	Captured under existing action
A bit concerned about the effect of some ideas on neighbouring residents. Eg, a mini caravan park - let's say for up to 10 vans/tents with noise and behaviour/septic tank upgrades needed.	More information: clearer understanding of function of place plan
All residents within the Hinterland area should be given written information. Not all have access to the internet nor are Facebook members. Therefore they miss out on the information. Information should be given well in advance of any meetings or deadlines.	Miscellaneous
Cycleways between the hinterland areas.	Captured under existing action
Wallalong/Hinton/Woodville using the levee banks, etc.	Captured under existing action
Celebrate our rivers and waterways	Captured under existing action
Include Raymond Terrace please	More information: clearer understanding of function of place plan
There is nothing 'wrong' with the community as it is. Why does it have to create economic benefit?	More information: clearer understanding of function of place plan
I think allowing more subdivisions like Rosebank estate will enhance the area and allow for infrastructure e.g... bus services, more places for people to build	More information: clearer understanding of function of place plan
Community events at local businesses, sponsored by council, similar to what you would do at Nelson Bay	Captured under existing action
A walk way along Italia Road and limiting dangerous amounts of trucks through the area	Captured under existing action
Invite clubs/organisations to use facilities e.g. Flyball to use sports grounds for competitions.	Suggestion; Captured under existing action
Create trailer parking areas for horse riders / motor bike riders adjacent to state forests / national parks	Advocate for use of non council land for leisure activities, Suggestion; Captured under existing action
More water tours	Suggestion; captured under existing action
Na	Miscellaneous
Look at existing halls like at Seaham. Look at existing events like at Karuah with the Oyster and Timber Fest. Look at linkage with Tocal Field Days. Look at historical tours and the Williams River usage over time. Look at new Solar Battery at Seaham, and the Seaham Wear and	Captured under existing action, General positive comments

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Q4 Responses	Comment code(s)
Balickera Pumping Station. Look at Wallaroo Nature Reserve and Forest.	
Sounds good, as long as everyone keeps their freedom of travel through and beyond the implementation of Agenda 2030.	More information: clearer understanding of function of place plan
Hay bale sculptures annually to celebrate the harvest.	Suggestion
Three rivers - use these in an annual triathlon, kayaking, cycling, running.	Suggestion
No	Miscellaneous
Loosening restrictions for agritourism and businesses on shared land would be good.	General positive comments
Why is the term growth always incorporated in proposals. Can't we learn to be content with the way things are?	More information: clearer understanding of function of place plan
The area must be kept rural	More information: clearer understanding of function of place plan
Festivals similar to Bluesfest/splendour etc but with sufficient on site accommodation/Camping and transport to accommodation services in coastal PS towns. Regional park upgrades with playgrounds and facilities that allow cafe businesses to lease commercial space. Seaham would be an excellent location. Similar to Wiseman's Ferry park and kiosk.	Captured under existing action, Suggestion
No.	Miscellaneous
Do not want to lose that 'country' feel.	More information: clearer understanding of function of place plan
The promotion of events needs to bring together local accommodation options and include entertainment at pop up events. To bring people from other regions we need more than just another market but an event that is a draw card with entertainment that provides local providers a platform to promote their produce.	Captured under existing action, Suggestion
Improve the sporting facilities	Captured under existing action
Many of these initiatives are just community suggestions lacking tangible support structures	Captured under existing action
Don't let the area become an industrial region with large industrial type developments battery banks etc	More information: clearer understanding of function of place plan
Roadside local produce drive. Farmers could opt in to have their roadside stall placed on a map for people to map out 'weekend drives'	Captured under existing action

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Q4 Responses	Comment code(s)
Access to another service station in the area - it's Woodville, Raymond Terrace or Dungog and for some areas, it takes over 30kms to reach one of these places.	Suggestion
All of these ideas sound great but I believe road improvements to the area need further attention before we increase traffic to the area.	General positive comments, Getting around safely (roads)
Improve the roads	Getting around safely (roads)
Regularly maintain parks and walkways where these event may occur. Most areas are not maintain so can't be used.	Captured under existing action
Bike/walking track on Italia Road - it's a much used road that is already dangerous for locals to exercise	Captured under existing action, Suggestion
More ways to access rivers. E.g. jetty / canoe hire. Council-owned multi-purpose buildings with great river views, leased for cafes & events.	Advocate for use of non council land for leisure activities
I had no heard of this before. Will be doing further enquiry.	More information: clearer understanding of function of place plan, Miscellaneous
No	Miscellaneous
The DAs need to fit in with the rural lifestyle. There are too many developments going to council for small blocks. We need to keep farmland and not build it out.	More information: clearer understanding of function of place plan

Q4 Comment code summary:

Answered 49; Skipped 117

Code	Percentage	Comment code #'s*
Captured under existing action	32.65%	19
More information required, misinterpretation	28.57%	14
Other suggestion	20.41%%	10
Getting around safely (roads)	10.2%	5
General positive comment	10.2%	5
Miscellaneous	10.2%	5
Advocate for use of non-council land for leisure	4.08%	2

* Note comment code numbers are higher than individual comments received (Q4 = 49) due to multiple comment codes applied

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Q5 What do you think of each of the Character action items for the Draft Hinterland Place Plan

Answered 128; Skipped 38

	VERY SUPPORTIVE	SUPPORTIVE	NEUTRAL/UNSURE/NEED INFORMATION	OPPOSED	VERY OPPOSED	TOTAL	WEIGHTED AVERAGE
Celebrate local character	40.63% 52	36.72% 47	17.19% 22	1.56% 2	3.91% 5	128	1.91
Create a brand and identity	38.28% 49	32.03% 41	19.53% 25	6.25% 8	3.91% 5	128	2.05
Beautifying village centres	55.47% 71	32.03% 41	10.16% 13	0.78% 1	1.56% 2	128	1.61
Connection with your community	49.22% 63	38.28% 49	10.16% 13	0.00% 0	2.34% 3	128	1.68

Key survey findings:

Q5: Majority of responses were supportive of the draft Character actions:

- Celebrate local character
(77% supportive, 17% unsure, 6% unsupportive)
- Create a brand identity
(70% supportive, 20% unsure, 10% unsupportive)
- Beautifying village centres
(87% supportive, 10% unsure, 3% unsupportive)
- Connection with your community
(87% supportive, 10% unsure, 3% unsupportive)

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Q6: Do you have any other great ideas or comments to add about the draft Character action items?

Answered 35; Skipped 131

Q6 Responses	Comment code
Refer last answer. Residents need the longer term confidence to apply any of your short term veneer, dress up initiatives. Prefer to see investment in items like a pathway between Brandy Hill and Raymond Terrace similar to that from Medowie, which will provide its own character building well into the future.	More information: clearer understanding of role of place plan
Let it grow happen without forcing	More information: clearer understanding of role of place plan
You are asking people to send in their photos. Why not get professional photographers and generate some income for them?	Fits under existing action
Concentrate on the historical details of each area as Port Stephens "Hinterland" dates back to the start of European settlement. The history story should / must include the data of the indigenous people that occupied the areas before European settlements.	Indigenous recognition
More general awareness of the suburbs within the "Hinterland". More signage to the area and within the area (in particularly Suburb introduction). Our Glen Oak sign was removed when the "River Flat" was resurfaced and despite a request for the sign to be returned, it never happened. Please don't forget about little suburbs like ours.	Suggestion, Fits under existing action
I believe especially in our beautiful town of wallalong planting beautiful flowering trees to line our streets or even in Hinton would be beautiful!	Positive comment, Fits under existing action
Also it would be great if in Wallalong where we are to make our playground and tennis courts more usable by having a path to the playground and toilets that kids can use	
A nature walkway connecting Wallalong to Hinton, and Hinton to Morpeth	Fits under existing action
Any change to the area needs to be subtle, low impact and sympathetic	Fits under existing action
The character of the area is largely a quiet, rural setting with koalas, kangaroos, birdlife etc. Any beautification must keep touch with these features and not spoil them.	Fits under existing action
It would be great to have additional accommodation options like caravan parks near water ways and new boat ramps to bring communities together. Hinton would be a great location for this!	Suggestion, Fits under existing action
Giles Road and Croft Road have a very high Wallaby Population.	Suggestion, Fits under existing action
There are Koalas as well. These Need to be Protected. But not made a tourist attraction as high volumes of cars will only endanger their existence.	

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Q6 Responses	Comment code
Signage to identify indigenous place names. Access to our rivers and stream ... pathways, parkland. Bush walks promoted	Suggestion, Indigenous recognition
Include Raymond Terrace please	More information: clearer understanding of role of place plan
Connecting community through a footpath on Italia and stopping Boral and others from ruining our roads	Fits under existing action
Beautifying Town centres is great, but need to make sure the rural / small town charm isn't lost in the process.	Fits under existing action
Prevent sub division of rural areas	More information: clearer understanding of role of place plan
Clean up all the rubbish that is dumped along the roadways	Suggestion, Fits under existing action
Connect with River Heritage by reinstating the load wharf adjacent to the silos along Hunter River	Suggestion
Maybe fix the problems we already have e. g. Stormwater management, poor roads and traffic management before thinking about beatification.	Getting around safely (roads), Suggestion
Council should support established community groups such as VOWWW.	Fits under existing action
No	Miscellaneous
The character of small 'villages' often depends on the way vehicular traffic is routed. Seaham will be difficult to improve while the large number of gravel trucks continues to use Warren Street as a through street.	Getting around safely (roads)
Character should be about the community giving a town life not council using it to profit off. E.g.: making a township nice should be only to attract income it should be for residents to enjoy/bring family and friends to enjoy.	Fits under existing action, More information: clearer understanding of role of place plan
Maintaining a relevant and unified village presence. Allowing the heritage and character of the village to deplete creates eye-sores. Towns like Bright in Victoria, Dungog as well, all have maintained heritage façade and minimalist signage on the village streets which entrances the aesthetic of the town. Planting trees and landscaping will also help improve the impression of the town and maintain a consistent charming feel through the region.	Fits under existing action
No	Miscellaneous
It depends whose idea of beauty we are talking about. Seaham's space, sense of community and land is what makes Seaham, Seaham. Overcrowding wouldn't be beautiful but a few more local businesses would be nice i.e. post office, a cafe etc.	More information: clearer understanding of role of place plan, Fits under existing action
Focus on historical stories of each region and what their names relate to. History of Paterson is well documented and promoted but not as much our region. Lots of stories of people and events that established our original communities	Fits under existing action
No street trees. For years you've been told how silly this idea is. Just stop.	Negative comments

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Q6 Responses	Comment code
Ensure area retains beautiful rural character by not allowing large ugly industrial type developments like battery banks etc.	More information: clearer understanding of role of place plan
'Hinterland' is a very stupid idea	Negative comments
Other than Seaham and Raymond Terrace, we don't have village centres. Is the funding all going to the Terrace?	More information: clearer understanding of role of place plan
We have Woodville shop and Hinton pub, but they are privately owned businesses.	
Beautifying areas should have already occurred. Little things like suburb signs are hit and miss. Some communities don't have businesses so will they be forgotten?	More information: clearer understanding of role of place plan
Not approving quarries in koala habitat (e.g. Brandy Hill) that reduce residents' enjoyment of their place with noise & truck movements. Not approving a giant battery storage industrial area at Seaham.	More information: clearer understanding of role of place plan
Seaham park is a wonderful facility and location. Promotion for picnics would be a suggestion	Fits under existing action
Stop murdering the koalas through poorly thought out mine extensions	More information: clearer understanding of role of place plan

Q6 Comment code summary:

Answered 35; Skipped 131

Code	Percentage	Comment code #'s*
Captured under existing action	48.57%	17
More information required, misinterpretation	31.43%	11
Other suggestion	20%	7
Getting around safely (roads)	5.71%	2
Indigenous recognition	5.71%	2
Miscellaneous	5.71%	2
General negative comments	5.71%	2
General positive comment	2.85%	1

* Note comment code numbers are higher than individual comments received (Q6 = 35) due to multiple comment codes applied

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Q7 What do you think of each of the Management and Safety action items for the Draft Hinterland Place Plan?

Answered: 121; Skipped: 45

	VERY SUPPORTIVE	SUPPORTIVE	NEUTRAL/UNSURE/NEED INFORMATION	OPPOSED	VERY OPPOSED	TOTAL	WEIGHTED AVERAGE
Establish a Hinterland 'Town Team'	28.93% 35	36.36% 44	28.10% 34	3.31% 4	3.31% 4	121	2.16
Connect with neighbours	38.02% 46	43.80% 53	13.22% 16	1.65% 2	3.31% 4	121	1.88
Establish a Community Resilience Network with Hinterland communities	33.88% 41	40.50% 49	19.83% 24	1.65% 2	4.13% 5	121	2.02
Start with yes	28.93% 35	33.06% 40	30.58% 37	4.13% 5	3.31% 4	121	2.20
Has it worked?	21.49% 26	23.97% 29	47.11% 57	4.13% 5	3.31% 4	121	2.44

Key survey findings:

- Majority of responses were supportive of the draft Movement actions:
 - Improving access to interesting places (83% supportive, 11% unsure, 6% unsupportive)
 - Options for connection (79% supportive, 13% unsure, 8% unsupportive)
 - Walking and cycleway paths (82% supportive, 10% unsure, 8% unsupportive)
 - Keeping our kids safe (84% supportive, 9% unsure, 7% unsupportive)

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Q8: Do you have any other great ideas or comments to add about the draft Management and Safety action items?

Answered 31; Skipped 135

Q8 Responses	Comment code(s)
History has shown that many people who join groups like this do so to actually further their own long term interests and not the community. Who will be responsible for vetting and monitoring the members of a Town Team committee?	Captured under existing action
Again, looks like window-dressing. Council has the responsibility to provide long term, confidence building planning, so please get on with the precinct planning job, and allocation of long term investments in pathways etc., to really physically connect the communities as well as provide safe, practical and healthy outcomes. Just look at the continual use of the pathway along Warren St Seaham.	Captured under existing action, More information required; misinterpretation
There are many community teams in place. Maybe council could fund articles in local newspapers to advertise the progress of community project teams. A website posting is a very poor source of this information.	Other suggestions
Community gatherings are a great idea. But street parties in Glen Oak are impossible with no kerb & gutters, no street lights, unfortunately. A park would be nice, we don't have any community facilities.	Other suggestions' Captured
Sounds as if you are wanted to do things without full consideration of the council laws	General negative comments
We already have street get-togethers in Wallalong. We have an annual Christmas party and Easter hunt. An annual Easter hunt at Wallalong park would be awesome and appeal to a lot of people	Captured under existing action
I don't necessarily agree with reducing red tape if it comes at a cost to the feel of the area. Controls MUST be put in place to ensure any development is in-line with the feel of the area. For example a neighbour having a cabin for rent on their property would be okay but a caravan park would not be. It is vital that the area doesn't lose its countryside feel.	More information required; misinterpretation
As above	Captured under existing action
These communities need regular bus services on weekends and outside school hours. People can't get from Wallalong to Morpeth or a train via public bus. That's ridiculous.	Captured under existing action
Include Raymond Terrace please	More information required; misinterpretation
Why does change need to happen? Isn't part of the beauty of the Hinterland that it is what it is? So why are you so keen to change it?	More information required; misinterpretation
A brand serves the product and creates brand recognition. Why is this needed? Unless you are planning to sell our community?	
We can connect with our neighbours just fine without your strategy - thanks but you are like 100 years too late to the party	

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Q8 Responses	Comment code(s)
SAFETY - less trucks in narrow roads, add wider lanes or walking track	Captured under existing action, Getting around safely (roads)
Pot holes in roads are horrible	Getting around safely (roads)
I remain skeptical of long term agendas. Will the distinction of "The Hinterland" group of suburbs be used as a lockdown area for whatever reason is decided upon in the future?	More information required; misinterpretation, General negative comments
Sounds like communitarian agenda - global agenda - smart cities, easy population CONTROL. NO NO NO!	More information required; misinterpretation, General negative comments
Wellness is becoming a community need, meditation locations in key locations would attract community and visitor sector.	Captured under existing action, Other suggestions
We should make out centre cutting all the red tape	Miscellaneous
Fix traffic management and school traffic in Still Street where I live.	Getting around safely (roads)
No	Miscellaneous
Again, change is welcome but continual growth shouldn't be encouraged. Very few of the points so far have emphasised the natural environmental resources we have. Yet the Liveability Index has it front and centre.	Captured under existing action
All of the above should be a council task being we pay high rates, these areas can assist council but should not solely be put back to community to do with the rates etc paid for council to complete as part of their role.	More information required; misinterpretation
No	Miscellaneous
The Town Team would need to be established with good governance to manage conflicts of interest and to ensure it supports progressing initiatives and not slow them down. Chair person would need to have clear agenda and timeline	Captured under existing action
We like living rural, so leave it rural. Sometimes the best thing people can do is not change things. If we wanted to live in cities we would be there.	More information required; misinterpretation
All stupid ideas.	General negative comments
Again, most of the Hinterland doesn't have public spaces like parks unless you are talking about the Terrace or Seaham. If you actually want to involve everyone in the Hinterland I think you will need to develop more public spaces across the region.	Other suggestions
Strict rules when it comes to use of motorbikes on private property. 500m exclusion zone from neighbouring dwellings.	Other suggestions
Add safety by fixing the Butterwick and Duns Creek Road give way intersection, I had a terrible car accident here on Christmas and something needs to be done, to save lives this is not good	Getting around safely (roads)
Bike or walking track on Italia Road would increase safety	Captured under existing action,

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Q8 Responses	Comment code(s)
	Getting around safely (roads)
Community resilience duplicates existing networks. Eight years apart seems a long time for Liveability ratings.	Captured under existing action
Wider publicity	Other suggestions

Q8 Comment code summary:

Answered 31; Skipped 135

Code	Percentage	Comment code #'s*
Captured under existing action	35.48%	11
More information required, misinterpretation	25.81%	8
Other suggestion	19.35%	6
Getting around safely (roads)	16.13%	5
General negative comments	12.9%	4
Miscellaneous	9.68%	3

* Note comment code numbers are higher than individual comments received (Q8 = 31) due to multiple comment codes applied

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Q9 What do you think of each of the Movement actions for the items for the Draft Hinterland Place Plan?

Answered: 116; Skipped: 50

	VERY SUPPORTIVE	SUPPORTIVE	NEUTRAL/UNSURE/NEED INFORMATION	OPPOSED	VERY OPPOSED	TOTAL	WEIGHTED AVERAGE
Improve access to interesting places	56.90% 66	25.86% 30	11.21% 13	1.72% 2	4.31% 5	116	1.71
Options for connection	51.72% 60	27.59% 32	12.93% 15	2.59% 3	5.17% 6	116	1.82
Walking and cycleway paths	62.93% 73	18.97% 22	10.34% 12	2.59% 3	5.17% 6	116	1.68
Keeping our kids safe	56.03% 65	28.45% 33	8.62% 10	2.59% 3	4.31% 5	116	1.71

Key survey findings:

Q9: Majority of responses were supportive of the draft Management and Safety actions:

- Establish a Hinterland 'Town Team'
(65% supportive, 28% unsure, 7% unsupportive)
- Connect with neighbours
(82% supportive, 13% unsure, 5% unsupportive)
- Establish a Community Resilience Network
(74% supportive, 20% unsure, 6% unsupportive)
- Start with yes
(62% supportive, 31% unsure, 7% unsupportive)
- Has it worked?
(45% supportive, 47% unsure, 7% unsupportive)

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Q10: Do you have any other great ideas or comments to add about the draft Movement action items?

Answered 45; Skipped 121

Responses	Comment code(s)
Pathways need to be visible from roadways to inspire a feeling of security from users. Whilst the use of pipeline access may provide a lower cost solution, any walking use will be inhibited by this lack of visibility.	Suggestion, Captured under existing action
Use easements between Duns creek, Glen Oak and Seaham to provide an alternative to Clarence town road.	Advocacy for use of non-council land for leisure or getting around, Suggestion, Captured under existing action
I have a letter from Council from 2020 advising there will be a walkway the entire length of Brandy Hill. This was one of the conditions of Hanson being allowed to increase opening hours and truck movements. 3 years later and we are yet to have any updates on this matter.	Getting around safely (roads), More information required; misinterpretation
Improve public transport in the "Hinterland" region as it will assist with activity access for teenagers and shopping access for the elderly.	Suggestion
Would love to see some cycleways/walkways in Glen Oak. Would like to see a Give Way sign as you enter Timbertop Rd and cross the water pipeline.	Captured under existing action
More walk ways and bike paths for health and well-being. Hunter River in particular!	Captured under existing action
Our street Rosebank drive, high street and Clarence town road needs a solar panel speed sign or speed humps. It would be amazing if we had more walking paths because there are so many drivers that have bear missed us walking next to the road.	Suggestion, Captured under existing action
We need a walkway throughout Wallalong and Hinton. Along High St in Wallalong and past the bridge in Hinton towards Morpeth. Keeping families, exercisers and pub goers safe. There is a huge disconnect between the suburbs that could easily be remedied with a walkway.	Suggestion, Captured under existing action
Again, it all sounds great but the whole appeal of the area is its remoteness. Will some of the ideas mentioned have a negative impact?	Captured under existing action
Additional accommodation options like caravan parks near water ways, new boat ramps and improved walking/cycling paths to connect towns to bring communities together. Hinton would be a great location for boat ramp and new pedestrian pathway to Morpeth.	Captured under existing action
Timed, Reasonable lighting for early morning and evening use	Suggestion
Seaham Shared Pathways path concept	Captured under existing action
Include Raymond Terrace please	More information required; misinterpretation
Walking and cycle paths would be great!	General positive comment
Cycleways on the regional roads with mil trucks and all the quarry trucks is ridiculous	General negative comment

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Responses	Comment code(s)
Bike track/walking path - can't take children for a walk or ride on my own roads. Dangerous amount of trucks also. Italia Road	General negative comment
Definitely need safe pathways for walking, bike riding and horse riding.	General positive comment
More footpaths. Fenced off leash dog parks.	Suggestion, Captured under existing action
Communicate and campaign hunter water to utilise the tracks disused along Balickera canal for walking / push bike riding and horse riding	Advocacy for use of non-council land for leisure or getting around
Better school bus zones and bus shelters	Getting around safely (roads)
Fix Italia Road. Seal East Seaham Road. Fix New Line Road	Getting around safely (roads)
These are all good, as long people's choice of transportation is never limited for environmental concerns.	General positive comment
Produce trail starting at the vine meandering to conclude at the Hunter River.	General positive comment
As previous, review traffic management and definitely work to provide more walkways and cycle paths so maybe children could walk to school instead of being driven. Work with Hunter Water to improve management of waste water in Still Street so our property is not inundated by stormwater every time it rains.	Getting around safely (roads), More information required; misinterpretation
The lack of connectivity is the greatest obstacle to creating social inclusion. Developing walkways may be complex but should be a priority.	General positive comment
No	Miscellaneous
A couple of safety issues at Seaham. The walkway along the edge of Warren Street near Torrence Street needs a barrier - traffic is too close to pedestrians. The School crossing area is unsafe for pedestrians around the start and finish of school.	Getting around safely (roads), Suggestion
Walking/cycling tracks are absolutely needed! No edge of road to walk along in Brandy Hill. Too dangerous to go for regular walks for exercise without driving an extended distance.	More information required; misinterpretation, Captured under existing action
Improve maintenance of existing pathways and facilities, such as mowing the lawn more reliably and regularly along pathways and parks	Captured under existing action
Reason for delay in delivering the Brandy Hill shared cycle/walkway promised by Hanson (Brandy Hill quarry)? Original proposal seemed economically feasible and satisfactory to meet local needs? The area is still rural so reducing speed limit on Brandy Hill Dr not necessary, just need a space for pedestrians/cyclists please.	More information required; misinterpretation, Captured under existing action
Construct shared walking/bike paths in area - particularly between Hinton and Wallalong. You have kids in Hinton and a skate park at Wallalong and no safe avenue for them to get to and from. Also, do a joint project with Maitland Council for similar shared bike/walking path between Morpeth and Hinton - perhaps with a tourist attraction of a suspension bridge access alongside the Hinton bridge. Hinton hotel is a major draw card and encourage tourists from Morpeth to so the relatively short walk.	Captured under existing action

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Responses	Comment code(s)
Remembering these areas people moved to as RURAL areas, not to have items like concrete paths etc. safe walking spaces would be great. However keep in mind the rural lifestyle our community has and loves. If we want those this we would go to more populated built areas.	More information required; misinterpretation
Family and friends who rely on public transport from Newcastle, Charlestown or anywhere really, are unable to get to Seaham via train or bus which is very sad.	Suggestion
Incorporate the river as much as possible in ideas and approach to engage people. it is a link between so many areas in the region and also the history and why our communities were first developed	Captured under existing action
How about putting a footpath linking both ends of Seaham primary school via Dixon Street before promising the world and failing to deliver, again.	Captured under existing action
Very supportive for access to pathways. That is really missing in this area and it would great if the natural beauty of the river could be capitalised on so we can access these sites safely. The sides of the road are often narrow, very overgrown and unsafe to use for this purpose and there's not much choice but to travel to access safe walking spaces. As a hobby landscape photographer, it would also open up opportunities for me to capture the local area in its full beauty as this is often restricted due to the above mentioned items.	General positive comment, Captured under existing action
Widen Paterson road in between Iona school and Iona Lane	Getting around safely (roads)
Water pipeline not really necessary - out here people have rainwater tanks & this is suffice. In times of drought you could fund water deliveries. This would probably be cheaper than a pipeline.	More information required; misinterpretation
It's a rural area so reviewing speed limits doesn't always mean a reduction. Things maintaining the road or putting in appropriate drains and appropriate gutters (not like at Clarence Town Rd - a silly gutter that took a long time to build that goes nowhere.)	Getting around safely (roads)
Woo definitely to keep both young and old active, I believe a bike or walking track through Italia rod would be of great benefit!	General positive comment
We're already isolated and all the reduced speed limits further isolate us, by making trips take longer. They're also often nonsensical - eg the 80km zone from Wallalong to Hinton - straight road, no houses & 80km	Getting around safely (roads)
Not just kids being kept safe, everyone!	Getting around safely (roads)
To extend the current path from Seaham to Brandon park.	Captured under existing action
Footpaths, curb and gutter and street lights in the western side of Wallalong would be a good start	Captured under existing action
The gravel mines go against everything you are wanting to do. What do they contribute to the community, and do we need them?	More information required; misinterpretation

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

[SQ10 Comment code summary:
Answered 45; Skipped 121

Code	Percentage	Comment code #'s*
Captured under existing action	42.22%	19
Other suggestion	20%	9
Getting around safely (roads)	20%	9
More information required, misinterpretation	17.78%	8
General positive comments	15.56%	7
General negative comments	4.44%	2
Advocacy for use of non-council land	4.44%	2
Miscellaneous	2.22%	1

* Note comment code numbers are higher than individual comments received (Q10 = 45) due to multiple comment codes applied

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Q11 What do you think of the Environment action items for the Draft Hinterland Place Plan?

Answered 114; Skipped 52

	VERY SUPPORTIVE	SUPPORTIVE	NEUTRAL/UNSURE/NEED INFORMATION	OPPOSED	VERY OPPOSED	TOTAL	WEIGHTED AVERAGE
Promote the sustainable conservation of landmarks	53.51% 61	34.21% 39	8.77% 10	2.63% 3	0.88% 1	114	1.63
Preserving the waterways of The Hinterland	58.77% 67	26.32% 30	10.53% 12	3.51% 4	0.88% 1	114	1.61
Protection and enhancement of wildlife corridors	59.65% 68	28.95% 33	7.89% 9	1.75% 2	1.75% 2	114	1.57
Encouraging sustainable gardening	54.39% 62	29.82% 34	11.40% 13	2.63% 3	1.75% 2	114	1.68

Key survey findings:

Q11: Majority of responses were supportive of the draft Environment actions:

- Promote the sustainable conservation of landmarks (87% supportive, 9% unsure, 4% unsupportive)
- Preserving the waters of The Hinterland (85% supportive, 10% unsure, 5% unsupportive)
- Protection and enhancement of wildlife corridors (88% supportive, 8% unsure, 4% unsupportive)
- Encouraging sustainable gardening (84% supportive, 11% unsure, 5% unsupportive)

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Q12: Do you have any other great ideas or comments to add about the draft Environment action items?

Answered 27; Skipped 139

Responses	Comment code(s)
See previous comments - this all falls into only part of the need for long term detailed precinct planning.	More information required; misinterpretation
Organic farming.	Other suggestion
Green wattle creek crown reserve well known to bird watchers.	
The council can do much more. Port Stephens Council should place more emphasis on the protection of all native animals (not just koalas) and native flora when assessing development proposals. The council could also support the management of all forested areas being transferred from the "State Forests" to "National Parks" to increase the level of flora and fauna protection.	Advocacy for the use of non-council lands, Other suggestion
These matters have departments to manage and look after them as it is	More information required; misinterpretation
Make these areas more usable and accessible to increase appreciation and care of the river systems	Advocacy for the use of non-council lands
I love wildlife and gardening and I am trying to create more habitat and gardens but it becomes very expensive so having people donate or reduce the cost of plants or giving us an idea of what to plant would be wonderful.	General positive, Other suggestion, Captured under existing action
IMPORTANT	
The signs around our area telling people to keep dogs on leads and cats inside is barely legible and ALOT of people regardless or reports to council still allow their dogs and cats to wander around Wallalong so it would be great to provide education around this and more signage.	
A nature walkway through Wallalong and Hinton	Other suggestion
This is definitely important especially with the amount of koalas in the area. Another reason why I am opposed to residential development in the area.	Captured under existing action
Not enough is being done to protect and expand koala habitat. Make it a priority	Captured under existing action
Include Raymond Terrace please	More information required; misinterpretation
Protection of rare and endangered species, especially Koalas), is critical.	Captured under existing action
Wildlife corridors are a planning re-zoning and will restrict agriculture	General negative
Sustainable gardening support is already available	
The environment is the area's biggest asset and needs to be preserved and utilised.	Captured under existing action

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Responses	Comment code(s)
Remove cost barriers and encourage participation in local markets	Captured under existing action
Bees worm farms community gardens	Captured under existing action
Need lines	Miscellaneous
Will people's freedom to use natural resources be removed?	Miscellaneous, General negative
Will the "sustainable" gardening be GMO?	
Is this all to score credit on the Agenda 2030 report?	
As previously mentioned look at the wastewater that is being channelled into the Williams due to inadequate stormwater management by the council.	More information required; misinterpretation
Wildlife corridors are incomplete. Are they mapped and is the map available? Gardening education could include identification of local weeds such as African olive.	Other suggestion, Captured under existing action
No	Miscellaneous
Seaham Swamp reserve has some well-maintained tracks. More could be developed and maintained, and some better effort made to restrict/police the use of these tracks by people on motor bikes and with off leash dogs. Free roaming cats in our natural areas are a continuing problem for the conservation of our wildlife.	Other suggestion, Captured under existing action
Perhaps the pot-hole filled dirt road beside Seaham Swamp could become a park, with lots of seating for picnics. Such a beautiful place but nowhere to sit and relax while taking in the beauty and wildlife. Also, we are surrounded by rivers yet where are the picnic areas beside rivers for picnics and families to play and relax. Meeting places like these enhance connectivity between locals.	Advocacy for the use of non-council lands, Captured under existing action
Seaham community would love a sustainable garden down near the river.	Other suggestion
Don't let the area become an industrial region with large ugly industrial type developments such as battery banks etc.	More information required; misinterpretation
500m exclusion zone of use of motorbikes on private property from neighbouring dwellings.	More information required; misinterpretation, Other suggestion
We don't all want increased visitors. Part of the attraction is fewer people. It would be nice though, to have nice places to entice friends to visit. Part of the isolation is that there's nothing between "the Hinterland" (which sounds like its secondary btw) & Newcastle, due to the flood plains around Hexham. MRAG (in Maitland, with its lovely cafe is good).	More information required; misinterpretation, Other suggestion, Captured under existing action
Make the towns safer e.g. Raymond Terrace, by building communities and leave the countryside as farm land	More information required; misinterpretation, Captured under existing action

**ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT
REPORT.**

Q12 Comment code summary:
Answered 27; Skipped 139

Code	Percentage	Comment code #'s*
Captured under existing action	44.44%	12
Other suggestion	33.3%	9
More information required, misinterpretation	29.63%	8
Advocacy for use of non-council land	11.11%	3
Miscellaneous	11.11%	3
General negative comments	7.41%	2
General positive comments	3.7%	1

* Note comment code numbers are higher than individual comments received (Q12 = 27) due to multiple comment codes applied

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Q13 what do you think of the Open space action items for the Draft Hinterland Place Plan?

Answered 114; Skipped 52

	VERY SUPPORTIVE	SUPPORTIVE	NEUTRAL/UNSURE/NEED INFORMATION	OPPOSED	VERY OPPOSED	TOTAL	WEIGHTED AVERAGE
Where the rivers run	50.00% 57	33.33% 38	11.40% 13	2.63% 3	2.63% 3	114	1.75
A shared space for a better place	49.12% 56	26.32% 30	16.67% 19	5.26% 6	2.63% 3	114	1.86

Key survey findings

Q13: Majority of responses were supportive of the draft Open Space actions:

- Where the rivers run
(83% supportive, 11% unsure, 6% unsupportive)
- A shared space for a better place
(75% supportive, 17% unsure, 8% unsupportive)

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Q14: Do you have any other great ideas or comments to add about the draft Open space action items?

Answered 33; Skipped 133

Responses	Comment code(s)
See previous comments.	More information: required, misinterpretation
Reduce speed of boats on Williams river to eliminate wash and erosion	Advocate for use of non-Council controlled land for leisure
Entry & easier access to the Williams River on the "River Flat" border of Seaham & Glen Oak for kayaks, fishing, etc. More open spaces in Glen Oak. Love to know more about the history of Glen Oak.	Advocate for use of non-Council controlled land for leisure
Work on what is already there	Fits under existing action
Making the river lands more open and accessible increases appreciation. More signals and places to enjoy are crucial.	Advocate for use of non-Council controlled land for leisure, Fits under existing action
Would love more walking trails!!	Advocate for use of non-Council controlled land for leisure, Fits under existing action
Walkway connecting Wallalong to Hinton. Along High St in Wallalong. There is no area for kids to safely travel to skate park or playground in Wallalong. There is no opportunity for families to be out walking without a safe walkway. Also, the awesome skate park in Wallalong has drawn so many families to the area. It makes sense to put in walkways and update the playground in Hinton and Wallalong.	Fits under existing action
Care must be taken to protect the waterways from the impact of human activity.	Fits under existing action
Improved pathways for "park runs" 2km-5km options would be great! Finish at a connecting town to support local small businesses in Morpeth or Paterson. New boat ramp at Hinton. More cafes and camping options locally too	Fits under existing action
More focus on the state forests and national parks for space, bbqs, tables, maps, mountain biking, hiking	Advocate for use of non-Council controlled land for leisure
Include Raymond Terrace please	More information: required, misinterpretation
promote jet skiing, water skiing etc on the river	Advocate for use of non-Council controlled land for leisure

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Responses	Comment code(s)
No mention of Indigenous history or dual names for important places.	Indigenous recognition
Land along the estuaries is Crown land and owned by the people of NSW. Council may be a CL manager but not always an owner. Riparian is not plain English and you should use this in a survey as the majority of people won't understand what you are asking. This question is therefore misleading	Advocate for use of non-Council controlled land for leisure
Riverside activities and camping space would be very well used.	Advocate for use of non-Council controlled land for leisure, Fits under existing action
A dog area at Bowthorne Park- everyone ignores the no dog signage	Fits under existing action
Create a pathway along east Seaham road along the river to link the park to the wetland s	Fits under existing action
Much better public transport needed. It's very car-dependent.	Getting around safely (roads)
As long as people keep their freedoms intact and council do not harm a few "for the greater good".	More information: required, misinterpretation
As I live on the Williams I would like to be consulted on these issues.	More information: required, misinterpretation, Advocate for use of non-Council controlled land for leisure
Connecting us would benefit all	Fits under existing action
Harry Boyle reserve at Hinton could be developed as a heritage/environmental space.	Fits under existing action
No	Miscellaneous
Oops I jumped the gun. All my ideas I wrote for the previous question would go in here. :)	Advocate for use of non-Council controlled land for leisure, Fits under existing action
Improve maintenance of existing open space on council-owned property	Fits under existing action
Having improved public access to the waterways that allow for sustainable eco-tourism like kayaking and cruises, boat hire etc.	Advocate for use of non-Council controlled land for leisure, Fits under existing action
More street lighting along walking path of Seaham. There is nowhere for families to gather at Seaham boat area. It would be nice if the area was cleared of the tall grass and rubbish and opened up for families to fish and have a picnic with friends and family. A BBQ, public toilet, fish cleaning table and taps would be amazing.	Advocate for use of non-Council controlled land for leisure, Fits under existing action
Seaham boat ramp area needs a major upgrade and a general tidy up could be more family friendly area to gather for bbqs and picnics	Advocate for use of non-Council

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Responses	Comment code(s)
	controlled land for leisure, Fits under existing action
I think the waterways are key to the success of community engagement with broader community	Advocate for use of non-Council controlled land for leisure
Bring back access to areas that have been closed, e.g. Seaham Weir, Hunter/Paterson River Junction.	Advocate for use of non-Council controlled land for leisure
Public access to Paterson river at Woodville.	Advocate for use of non-Council controlled land for leisure
Absolutely love the idea of more connection with rivers. Allow canoe hire business, Segway tours along the levee, a place where people could swim their horses, cafes & picnic spots with water views. Maybe an annual (novelty) raft race from Seaham to Raymond Terrace.	Advocate for use of non-Council controlled land for leisure, Fits under existing action
Improve boat ramp and encourage cafes by water	Advocate for use of non-Council controlled land for leisure, Fits under existing action

Q14 Comment code summary:

Answered 27; Skipped 139

Code	Percentage	Comment code #'s*
Advocacy for use of non-council land	54.55%	18
Captured under existing action	54.55%	18
More information required, misinterpretation	12.12%	4
Indigenous recognition	3.03%	1
Other suggestion	3.03%	1
Miscellaneous	3.03%	1

* Note comment code numbers are higher than individual comments received (Q14 = 27) due to multiple comment codes applied

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Q15 Do you have any final comments about the Draft Hinterland Place Plan?

Answered 43; Skipped 123

Responses	Comment code(s)
The plan speaks loudly of maintaining the small villages' character of this area. Is one to assume then that council is averse to allowing the development of large scale residential areas close to these villages?	More information required, misinterpretation
Please make this more than a window dressing, and commit to the long term nature of detailed planning for these precincts, and the controls necessary to achieve results and build resident confidence.	More information required, misinterpretation
Wonderful to see great initiatives and community engagement being encouraged.	General positive comments
It all sounds a bit like putting lipstick on a pig. Fix up the roads first. East Seaham Road and Italia Road are horrendous. If you want people to come, they need to be able to drive their cars without losing their diff.	Getting around safely (roads)
I hope that the protection of native flora and fauna is approved. I also note there was no set plan for the routine inspection and repair of the "Hinterland" roads to better protect rate payers and visitors to the areas.	Getting around safely (roads), Comments fit under existing action
Look forward to promoting our "Rural West" as the new "Hinterland" and raising community awareness about our little rural townships to show Port Stephens that there is more to our shire than just "the Bay". Even people from Raymond Terrace are totally unfamiliar with the suburbs of Glen Oak, Duns Creek, etc and yet we are not far from their doorstep!	General positive comments
This sounds amazing as long as it's done properly and money is not wasted on putting things in that are not needed.	General positive comments
Please, we desperately need a walkway in Wallalong and Hinton. It is a really unsafe road for people that love to walk and care for the outdoors. We want our kids to live their lives outdoors, and to be able to walk together on the weekends. We also really need a playground refresh for the area as it is so well populated but so dated.	Comments fit under existing action
As a regular visitor to the Hinterland, it would be nice to have some places to walk in the natural surroundings and have clean, decent seating and/or bbqs maintained so we can enjoy the day. While there are plenty of benches around, they are usually surrounded by long grass or are filthy.	Comments fit under existing action
Whilst I understand that there is a need for more housing I strongly believe that this area is not the right place. We must protect the natural habitat from further degradation and preserve our koala population. Woodville, Seaham, Hinton and Wallalong are often cut-off due to flooding, our roads are already overused by quarry trucks and I am very concerned that our area is losing its' country appeal.	Clearer understanding of function of a place plan
Improve Italia Rd to suit the ever-increasing amount and types of traffic using it. Large numbers of trucks, boats, caravans. The road is too narrow. All these suggestion in the hinterland plan will only increase the use of the road. It's a logical entry from the highway to the hinterland.	Getting around safely (roads)
While preserving wildlife, flora and fauna, please consider more options for: Outdoor activities via new boat ramps, cycle/walking paths, cafes,	Comments fit under existing action, Advocate for access to non-council land for leisure activities

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

accommodation options both caravan/camping/cabins with close proximity to water ways	
Emphasis should be on enhancing and protecting the environment that is the priority for the area. Improving existing parkland, tidying up some of the streetscapes with tree plantings etc. I have some concern about impact on neighbouring properties when allowing commercial enterprises with the risk of destroying the existing character through noise etc.	More information required, misinterpretation; Comments fit under existing action
Keep it simple...less is more!!	Comments fit under existing action
Keep in mind the varying ages within the community and disabilities	
Preserve rural communities and environments. Limit urban subdivision. Protect floodplains so they can do their natural work.	More information required, misinterpretation
Include Raymond Terrace please	More information required, misinterpretation
On Dangar's map of the Hunter River (1838) there is a notation to a locality known as 'Terrigat Hills' which roughly coincides with the proposed 'hinterland'. I assume this is an Indigenous name for the locality and if that can be verified, I feel it would be an appropriate name. Consultation with the Worimi land council would also be mandatory as would be their approval to use the name. The name "hinterland" is meaningless and could be applied to millions of places.	Indigenous recognition
This is great	General positive comments
Yes, by making contact details compulsory in your survey you are not affording us anonymity.	Miscellaneous
There are no terms and conditions attached with this survey outlining how you are handling this information and what is published. Additionally you do not have a privacy collection notice	
Please increase safety and places for physical activity and exercise	Comments fit under existing action
Great to see some attention - slashing or beautifying High Street Wallalong would be good. More footpaths to reduce pedestrian risk on roads	Comments fit under existing action
Fix the roads	Getting around safely (roads)
Sounds great, but is this just dressing up the implementation of the "15 minute smart city" initiative? Will this make it easier to remove people's freedom of movement in the future? The way the C19 pandemic was conducted has made me very wary of future lockdown initiatives and after reading Agenda 21, this sounds like you are conforming, are you aware of the long term agenda?	Clearer understanding of function of a place plan
I am opposed, it's a precursor to herding the people into an isolated area that's easily controlled and locked down at the whim of government... 'climate concerns' - lockdown, 'pandemic scare' - lockdown, place bogus reason 'here' - lockdown. It's a gulag with flowers.	More information required, misinterpretation
I'll lend my support to a well planned plan that delivers value to the community	General positive comments
Heading in the right direction	General positive comments

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Please look after the roads better and more regularly, there's a lot of pot holes and they take forever to get fixed, and when they do they're usually a pretty bad still, feels like rushed jobs. There's also some roads that don't have any tarmac such as the end of East Seaham road, it's all gravel and potholes there	Getting around safely (roads)
Great idea	General positive comments
Support for revegetation programs on council land and on private land would be good. Landcare could be encouraged to look at Seaham Swamp surrounds.	Comments fit under existing action
Keep planning and improving! So much beauty to see while driving but hardly any access to stop and soak it up.	Comments fit under existing action
Changes to planning approvals/planning incentives does not have a good history in the hinterland. We're proud of the natural and rural feel, and do not want that to change. Anything that lessens the rural appeal will not be supported, and given the relative lack of transparency and complicated nature of DAs, I do not support anything that would make it easier to increase developments beyond existing controls	More information required, misinterpretation, Comments fit under existing action
Suggested initiatives sound good. Since multiple suggested 'committees' would likely have shared interests, why not combine them?	Comments fit under existing action, General positive comments
More shared walking/bike paths between Hinton/Wallalong and joint project between Hinton/Morpeth. This is a must to improve bike access/pedestrian traffic. Dangerous ATM due to number of heavy vehicle movements in and around centres.	Comments fit under existing action
Please remember we live in this area for a rural lifestyle close to the city. We don't need to be a busy, have everything community/tourism space. Simple is what the area has been and I hope it continues to allow the rural lifestyle I had for future generations. Average style property with neighbours far enough to relax and enjoy our beautiful location. That's the attraction to the area, not tourism, paths etc. if we wanted that we would move to Chisholm or the likes. Please consult the long term residents who have lived and breather the community.	More information required, misinterpretation
It would be beneficial to reach out to landowners/residents who have potential business ideas and work with them to develop grants and business mentoring for them to engage in eco-tourism. The visitor numbers and accommodation is very limited in these regions and current businesses would be revolving around local and day tripping patrons. This makes the ability for small businesses to stay viable. I'd be keen to see more holiday parks, Farm stays and eco retreats in the area.	Comments fit under existing action
Seaham Park and Playground! The old plastic play equipment is used every day by families but our children would benefit by a bigger, natural playground that provides risky play and opportunities for problem solving and movement. The Park itself is often left unmowed for long periods of time and there is no bike path for us to teach our children to ride a bike. We would benefit from businesses or resources such as a post office, an ATM, butchers, a food option that delivers I.e. Domino's Pizza, a cafe or bakery with all-weather seating,	Comments fit under existing action
Family oriented events and activities required in these areas.	Comments fit under existing action
Totally support the development, promotion and maintenance of the unique peaceful rural environment that the area encompasses, Can't	More information required, misinterpretation,

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

afford to lose that due short sighted opportunistic developments that provide no true benefit to the area and long term degradation of the area	Comments fit under existing action
Just to make sure it actually includes the rural towns and not just Raymond terrace and Seaham because they are suburban areas.	More information required, misinterpretation
Improve rules on offensive noise on private property. 500m exclusion zone for use of motorbikes on private property from neighbouring dwellings to improve liveability for hinterland residents.	Comments fit under existing action
Please fix our roads, we don't need more tourists or traffic before this is done	Getting around safely (roads)
Some good ideas and directions It's not clear how much council will do or will its role be to just make a plan & expect community volunteers to do the rest? Stop approving massive mounds in Nelson's Plains, buy the land & returns it to wetlands - would be a spectacular wide life viewing attraction & good for the environment. Less emphasis on "branding" & "signage" and more action on actual infrastructure. Also, the roads need fixing.	Getting around safely (roads), More information required, misinterpretation, General positive comments
It needs to be supported by council, as there seems to be a massive collaboration between the council and Le Motte, which does not make me feel as though it is a fair process	More information required, misinterpretation

Q15 Comment code summary:

Answered 43; Skipped 123

Code	Percentage	Comment code #'s*
Comments fit under existing action	41.86%	18
More information required, misinterpretation	32.56%	14
General positive comment	20.93%	9
Getting around safely (roads)	16.28%	7
Indigenous recognition	2.33%	1
Advocacy for use of non-council land	2.33%	1
Miscellaneous	2.33	1

* Note comment code numbers are higher than individual comments received (Q15 = 43) due to multiple comment codes applied

Q16 Contact information

Answered 98 Skipped 68

- Data collected for administrative purposes only

Q17 Town Teams Interest

Answered 60; Skipped 106

- 60 people indicated that there were interested in learning more the Hinterland Town Teams

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Appendix E - Phase 3 Comments from drop-ins/online mapping tool

Comments received: 53

Comment	Comment code
Footpath along Brandy Hill Drive	Comments fit under existing action
Help with management of lantana near roadworks at Duns Creek	Comments fit under existing action
Roads and lantana management	Comments fit under existing action
Nature play equipment for variety of ages	Comments fit under existing action
We have been asked to put our bins on opposite side of our road to our house. There isn't a lot of room and bins regularly are hit meaning they have to be replaced and maybe more concerning... bins and rubbish are strewn across the road causing potential dangers. Please consider / review	Miscellaneous; Getting around safely (roads)
State of roads - Iona and Patterson Roads	Getting around safely (roads)
Owners in and around Butterwick entertain people currently using their own backyard so that bike riders don't have to break the natural connection of the trip. Would be great to formalise this loop. Also talk to Ride Dungog etc for inspiration.	Suggestion
LLS – lantana removal – paperwork is so intense, consider grants for pastoral improvement, Davidson Moth to replace bee pollination	Comments fit under existing action
Les Darcy – great history in the Hinterland – use that to our advantage by creating trails for people to use / visit Natural history – particularly around Seaham – bird watching / watchers or twitchers are knowledgeable and would love the opportunity to get involved People history and buildings – need signposting that explains heritage of the Hinterland - consistency around signage	Comments fit under existing action
Dangerous position for bus stop in its' current position (Forest Road)	Getting around safely (roads)
Rural rating for Hinterland rates? Questions terminology	Miscellaneous
Weed maintenance - Are we spraying for alligator weed?	Miscellaneous
Flood mounds - why are these being approved? please discuss	More information required, misinterpretation
Look at private land owners / reserve and working with the likes of HWC to open up corridors for people to us so they can get bikes, people and horses off the roads (80KM zone etc)	Advocacy for use of non-council land
Love that I can put my boat in at the ramp - and have access to the water - would be good to see other places have this opportunity in the Hinterland	Comments fit under existing action
I am moving from Sydney - I love the open space, freedom, fresh air and donkeys that we have in the Hinterland! Don't want to see 15 min cities in Hinterland and don't want to see housing developments destroying the character of the rural lifestyle	More information required, misinterpretation

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Comment	Comment code
Love our community, friendly neighbours, rally together when things happen ie floods and natural disasters - would be good to support people and places who stand up during crisis and provide information to smaller communities ie The Woodville Store	Comments fit under existing action
Like most residents in the Butterwick area, we moved here for quite rural living. We don't want housing estates on our door step or a neighbour 2 meters away, much prefer to see wildlife or the neighbours horses etc.	Comments fit under existing action
Connect Brandy Hill to Seaham with a shared pathway.	Comments fit under existing action
Italia Road is narrow with a damaged surface. It has become increasingly dangerous to drive along the road, to walk to catch a bus, to ride a bike for commuting or for fitness or walk to visit a neighbour. We are more isolated from each other. This is therefore becoming a very unhealthy place to live. As incidental exercise is fundamental to well-being for life long healthy habits, Italia Road is no longer a healthy place to reside. We are more socially more at risk. Solution: Cycleway	Comments fit under existing action
We desperately need a walkway down High street. The street and neighbourhood is full of young families and exercise enthusiasts that risk the narrow and bushy side of the road for their daily walk. It is a busy road full of big trucks during the week and especially on the weekend. There are kids that walk the side of the road every day to catch their school bus, as well as pub goers walking home from Hinton Pub, that risk their necks every time they walk home. It is in dire need of a walkway.	Comments fit under existing action
1354 and 1356 Clarence Town Road – needs a rail apparently the customer was assured they were getting one after road works were completed – can't get their caravan over the dip and doesn't feel safe.	Miscellaneous
Destination Park - Nature / action park	Suggestion
Oakdale Farm – with walking and cycling from Brandy Hill – Wallalong	Comments fit under existing action
3 months waiting for concrete pads for 3 x picnic tables	Miscellaneous
More rural road maintenance	Getting around safely (roads)
We want a pub!	Comments fit under existing action; suggestion
Access to public transport is a key issue	Suggestion
Mowing and other maintenance needs to be done	Comments fit under existing action
New developments should be known by indigenous names	Indigenous recognition
Consider all native animals – not just koalas – trees too!	Comments fit under existing action
No housing developments <ul style="list-style-type: none"> • Flood prone • Koala habitat • Impact on lifestyle • Increase in traffic • Impact on roads 	More information required, misinterpretation

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

Comment	Comment code
No industrial development – RES battery storage shed site aesthetics has raised concerns	More information required, misinterpretation
Seaham Park – explain grant status, plantings and maintenance	Comments fit under existing action
Communication, lack of action – it feels as though councillors don't visit or are as interested as they used to be – we need connection	Comments fit under existing action
Lions members and more broadly volunteer groups – how to we engage younger people to help take over the reins? Numbers just aren't there after COVID and older people getting too old to continue to do the manual labour	Comments fit under existing action
Baiting in the bush on land around Seaham has killed 7 dogs	Miscellaneous
Speed limits – 60km zone outside Nelson Plains preschool	Getting around safely (roads)
Why do you destroy forest habitat to build homes or quarries when there's cleared land available?	More information required, misinterpretation
Local and speed limit – Wighton Street 5 vehicle roll overs in 15 years	Getting around safely (roads)
Weeds maintenance needs to be more frequent Seaham park. We also used to have availability to access soil whenever we needed it - why doesn't this happen anymore?	Comments fit under existing action
Local projects have lost priority since Councillor Ken Jordan left – we don't see councillors anymore	Comments fit under existing action
What's to stop new planning reforms allowing multiple granny flats across rural properties to end up populating and destroying the rural feeling of the Hinterland? We could end up with mini cities under the "new opportunity"	Comments fit under existing action
What can be done about the truck movement and danger to our community – we went from 47 trucks to over 150 trucks each year – the issue is getting worse and no one is doing anything about it ie. Brandy Hill quarry, Seaham Battery etc	Getting around safely (roads)
<ul style="list-style-type: none"> • 30 driveways on Seaham Road • No turning bays into pre school • Speed limits 100 / 80 • 600 trucks per day from Hansen Dangerous on the roads	Getting around safely (roads)
Footpaths along Seaham Road as needed Safety concerns for children	Comments fit under existing action
Brandy Hill Drive – Brandon Park 2km of footpath required for safety	Comments fit under existing action
Love our riding opportunity - Hinterland annual road cycle event	General positive comment
Historic trail for The Hinterland Needs historical signs	Comments fit under existing action
Would love more access to our unique environment - Boardwalk in sections around Seaham Swamp	Comments fit under existing action
Rural access above and below the weir – ie jetty, parking More use of history of river use	Comments fit under existing action

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT REPORT.

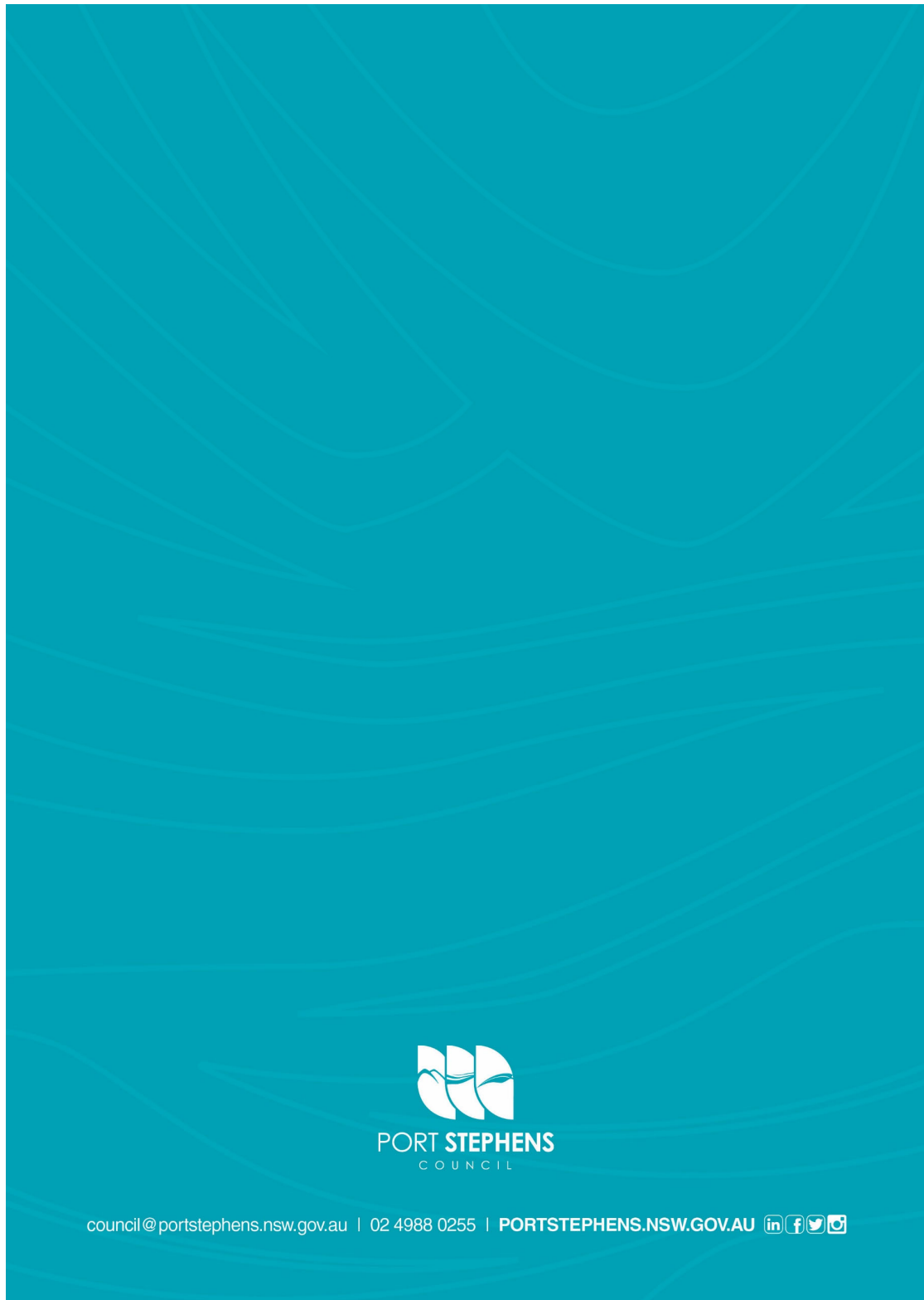
Comment	Comment code
Grading of levy road between Woodville and Wallalong	Getting around safely (roads)
Create a shared pathway along Clarence Town Road to connect Seaham, Brandy Hill, Wallalong and Woodville. Clarence Town Road is extremely busy and hazardous to cyclists walkers, horse riders etc.	Comments fit under existing action

Online Mapping Tool

Comment code summary (53 total)

Code	Comment code #'s*
Comments fit under existing action	28
Getting around safely (roads)	8
Miscellaneous	6
More information required, misinterpretation	5
Advocacy for use of non-council land	1
Indigenous recognition	1
General positive comment	1

ITEM 3 - ATTACHMENT 1 HINTERLAND PLACE PLAN ENGAGEMENT
REPORT.



Hinterland Place Plan



Hinterland Place Plan – July 2023

Guudji Yiigu

(Goo-jee ik-koo)

We welcome you to
Port Stephens – part of
the Worimi Aboriginal
Nation who speak the
Gathang language.



We acknowledge the Worimi
as the original Custodians and
inhabitants of Port Stephens.

May we walk the road to
tomorrow with mutual respect
and admiration as we care
for the beautiful land and
waterways together.

Contents

What is a Place Plan?	4
Our place planning approach	5
About the Hinterland	6
Character principles	6
Protecting our place	7
Reference map	8
We've been listening	9
Community engagement	9
How you value your place	10
Emerging themes for the Hinterland	11
Economy: New experiences and distinct business opportunities	11
Movement: Connection and access for all to enjoy	12
Open Space: Creating quality open space	12
Environment: Protection and conservation of our environment	12
Management and Safety: Safe and resilient communities	14
Character: The Hinterland and our unique identity	14
A shared responsibility for our place	16
Look and feel for the Hinterland	18
Creating better places and spaces in the Hinterland	20
Actions	22



What is a Place Plan?

Place plans are a way of planning for the growth of unique towns and villages across Port Stephens. Place plans provide a local filter on the Port Stephens Community Strategic Plan and other important planning documents to create actions which improve the liveability and wellbeing of our communities.

Actions

The actions in our local place plans create alignment in the way we plan for future land use, invest in infrastructure, attract investment and bring life to our streets. Place plans recognise the importance of our public spaces in creating great places to live, work and play.

Community

Most importantly, the development of place plans starts with talking to our community. They respond to the community's values and priorities for their place aspirations; they enable collaborative partnerships between residents, business and Council to deliver great place outcomes.



Our place planning approach



Local values

Through the Port Stephens Liveability Index, we know the values and priorities of our individual communities. This information provides the foundations of our place plans and helps guide planning and decision making across our community.



Start with yes

A culture that supports innovation and ideas is critical to the success of our place plans. By starting with yes, we can encourage new thinking, new ideas and attract more people to share in creating great places.



Test and trial

Great places don't appear by accident – they take time, effort and a shared understanding that not every project will work every time. By testing and trialling low cost, short term ideas, we learn by doing and create the stepping stones to bigger and better things.



Civic pride

The Port Stephens community is abundant with energy and expertise and people who want to be involved in planning and creating for their place. Place plans provide opportunities for collaboration, foster pride and create meaningful community connection.



Measure and benchmark

When we trial a new idea, launch a new program or invest in our public spaces, we need to understand what works and what doesn't. Measuring the success of our projects and comparing them to the best possible examples we can find will help build amazing places where people will want to live, work and play.



About the Hinterland

This Hinterland is known for its rural landscape and fertile agricultural lands. Connected by three rivers: the Williams River, the Paterson River and the Hunter River, the Hinterland encompasses a collection of small villages and rural communities stretching from Raymond Terrace through to Duns Creek and Woodville to Balickera and Eagleton.

The Worimi People are the Traditional Custodians of this region. European settlers colonised the area in the 1820s. The fertile soils of the Hinterland supported agricultural pursuits including vegetable farming, barley, oats, corn and winemaking. As time passed, small settlements emerged introducing new industries and residents and among these, dairy farming emerged as the predominant sector. Today, approximately 6,000 people call the Hinterland their home.

The Hinterland strengths include its distinctive visual character, comfortable living environment and natural beauty, all of which contribute to the liveability and wellbeing of the residents. As the region continues to grow,

there are opportunities to further enhance liveability by connecting communities through the development of walking paths and cycling trails, new visitor experiences and further investment and support for local business.

This Place Plan is not imposed from the top down. It's been created together with residents and prioritises opportunities for community led initiatives and ideas that align with the Hinterland's competitive advantages. This plan will provide the roadmap to link the community's goals with the people and places that have the power to transform these visions into reality. By doing so, together we'll improve the liveability and wellbeing of those that live, work and visit the region.

Character principles

- The highly valued natural environment is celebrated and protected.
- Future development respects the local history and unique character of each village.
- Communities with a shared history and sense of place are better connected.
- Local stories are shared, with a strong focus on supporting new and innovative businesses.
- Sharing the Hinterland with visitors is supported and developed. This includes collaboration to deliver new events, touring itineraries and community activities.

ITEM 3 - ATTACHMENT 2 DRAFT HINTERLAND PLACE PLAN.

Protecting our place

Rural communities around Australia are changing and the Hinterland is no exception. The increasing impacts of major weather events, land fragmentation and global economic issues are continuing to challenge rural land owners and fundamentally changing our Hinterland communities.

As this change continues, so do the needs and expectations of those that live and work in these communities. Landowners are looking to diversify the use of their properties to build resilience to this change and new residents are seeking opportunities to showcase their history, lifestyle and local produce.

In 2022, The Department of Planning and Environment (DPE) implemented changes to simplify the planning process and approval pathways for small business activities and low-impact agricultural development on NSW farms. The changes were designed to respond to natural disasters such as droughts and bushfires, as well as the impacts of COVID-19, by supporting the recovery of regional communities by encouraging industries that

are supplementary to, or based on, agriculture, such as agritourism.

At the same time, Council reviewed its planning controls in the RU1 and RU2 zoned land to maximise the economic potential of rural land, without restricting agricultural uses. The Port Stephens Local Environmental Plan 2013 (LEP) was amended to include an increased number of bedrooms for farm stay accommodation and new land uses including artisan food and drink industries, restaurants and cafes, function centres, secondary dwellings (granny flats), and recreation facilities.

This Place Plan will support the delivery of these LEP changes. Its actions support a diversified economy, encourages new points of sale for local produce, and supports agritourism while respecting the history and lifestyle of Hinterland communities.

This plan doesn't consider housing in our rural communities. Housing and its future in the Hinterland will be determined in consultation with the community through the 2024 review of the Port Stephens Housing Strategy.

The residents of the Hinterland are unique. Knowing who they are helps us understand their values and priorities.



Population
5,883

4.81%

Aboriginal &
Torres Strait
Islander
population



5,178
Families

616 Active
Businesses trading in
the Hinterland



Most common age cohort
55 to 59 years

Sources REMPLAN Community 2021 and
Economy 2023

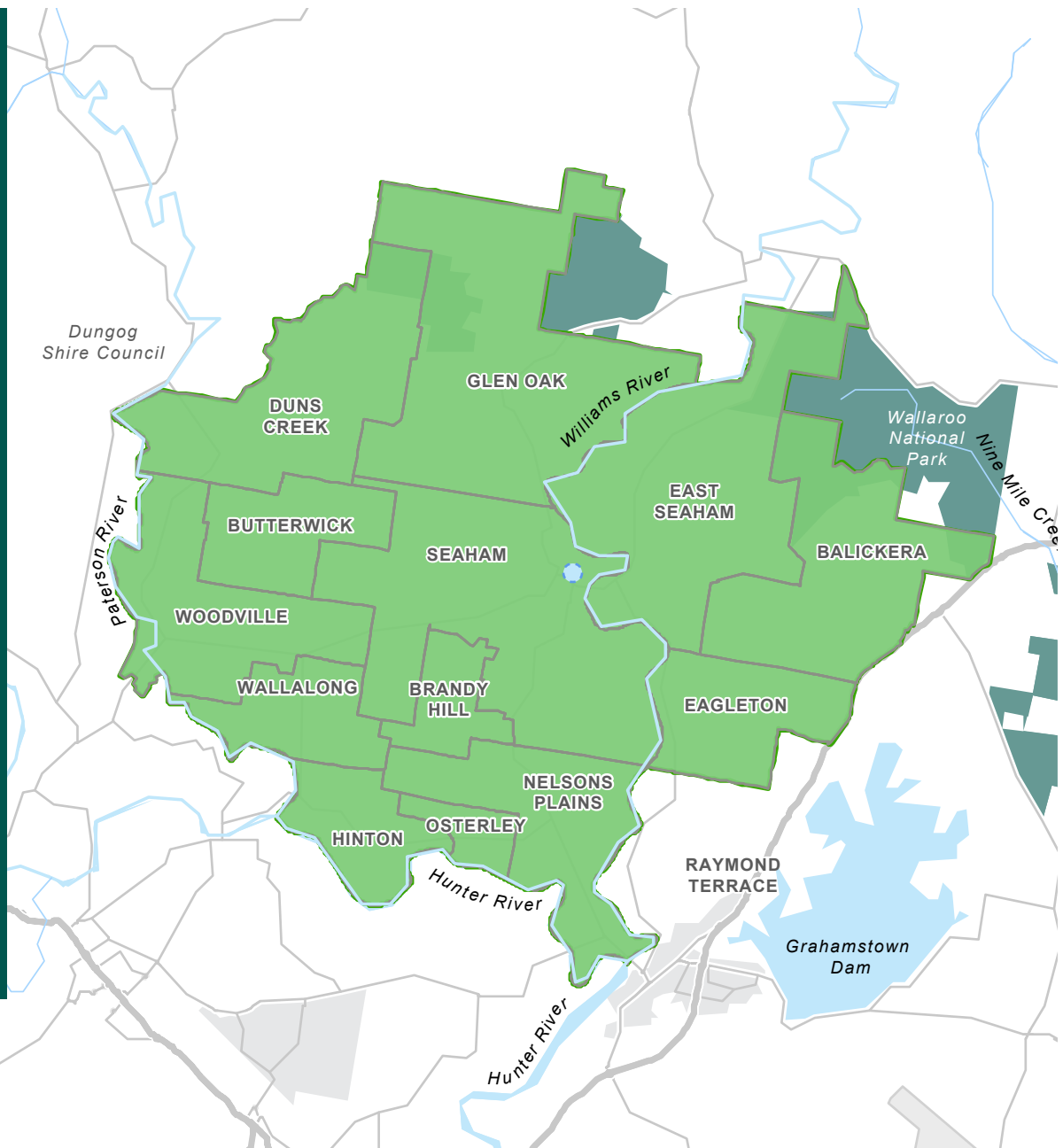
ITEM 3 - ATTACHMENT 2 DRAFT HINTERLAND PLACE PLAN.

Reference map

The Hinterland area of Port Stephens that is the focus of this draft Place Plan is outlined in the map below.

It includes the areas of:

- Balickera
- Brandy Hill
- Butterwick
- Duns Creek
- Eagleton
- East Seaham
- Glen Oak
- Hinton
- Nelsons Plains
- Osterley
- Seaham
- Wallalong
- Woodville



We've been listening

The community explored the future of the Hinterland through an extensive community engagement process. Here's a snapshot of the **Hinterland Place Plan Engagement Report**.



Community Engagement

What makes the Hinterland a great place to live? That's the question we asked our community in September 2020. More than 3,700 people across Port Stephens told us what they value about their neighbourhood and shared their thoughts on how its performing as a place to live, work, and play.

This data was tested and refined during our Hinterland community engagement sessions in November 2021 and again in April/May 2023. Once collected, feedback from our Hinterland communities has been used to develop a vision for the Hinterland, as well as the short, medium and long-term actions that will help deliver it.

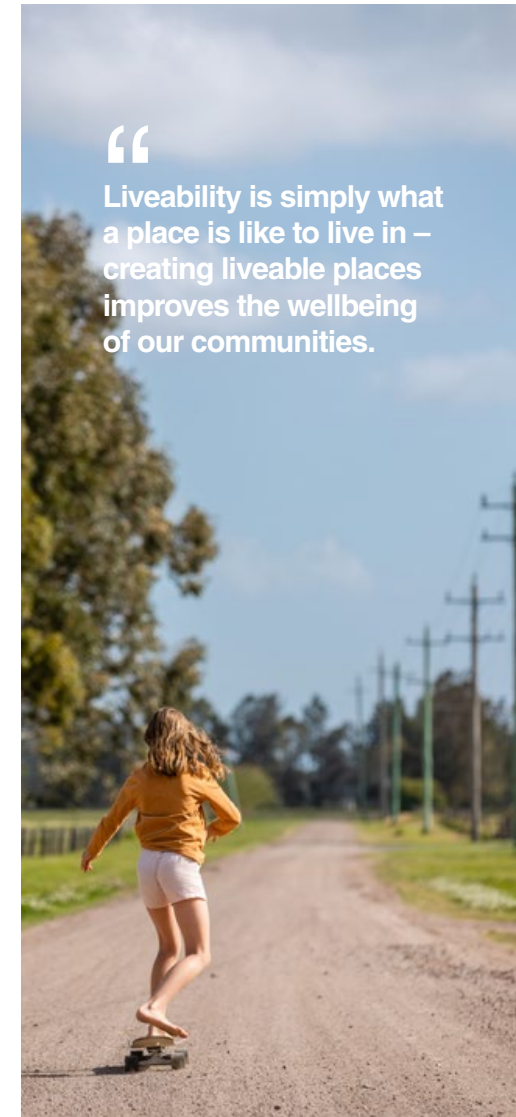
Key themes

The Liveability survey results indicate that the 6 most important themes of liveability for the people of the Hinterland are:

- Economy**
- Movement**
- Open Space**
- Environment**
- Management and Safety**
- Character**

“

Liveability is simply what a place is like to live in – creating liveable places improves the wellbeing of our communities.



ITEM 3 - ATTACHMENT 2 DRAFT HINTERLAND PLACE PLAN.


In the Hinterland, you most value

These are the things most important to you in your ideal neighbourhood.

-  Elements of natural environment
-  Overall visual character of the neighbourhood
-  Physical comfort
-  Sense of neighbourhood safety
-  Locally owned and operated businesses

Hinterland's top strengths are

These are the things you care about most and which you say are performing well. We'll continue to celebrate and protect these.

-  Sense of personal safety
-  Overall visual character of the neighbourhood
-  Physical comfort
-  Elements of natural environment
-  Sense of neighbourhood safety

Hinterland's top priorities are

These are the things most important to you, but you believe they're underperforming. We'll work together to improve these.

-  Walking/jogging/bike paths that connect housing to communal amenity
-  Spaces suitable for specific activities or special interests
-  General condition of public open space
-  Protection of the natural environmental
-  Landscaping and natural elements

Liveability Index – how does the Hinterland compare?



Emerging themes for the Hinterland

Economy: New experiences and distinct business opportunities

Port Stephens attracts over 1.6M visitors per year, who stay and experience the wonders of our beautiful nature based playground. Over the past few years, as the visitor economy has grown, new products have emerged and investment has been made in infrastructure, improving both the visitor experience and increasing visitor dispersal across Port Stephens.

In May 2021, the Federal Government announced \$66 million in funding to allow Newcastle Airport to enable longer range domestic and international flights and increased freight capabilities for the region.

This investment will be a game changer for the region, generating new jobs and attracting new visitors.

With increased visitation to Port Stephens, it'll become even more important to expand our experiences.

Visitors will expect immersive, authentic and unique experiences that showcase the region. The Hinterland is ideally positioned to leverage this growing visitor economy.

Across the Hinterland, there's strong support in the community to improve access to outdoor recreation areas such as rivers and nature corridors, providing areas for activities such as riverside camping, picnicking, mountain biking and canoeing.

Additionally, farm gate experiences, farm stays and low impact events can showcase the Hinterland's history, lifestyle and local produce while increasing vibrancy, community connection and economic outcomes.

Recent planning reforms at both a state and a local level have created the ideal environment for these new economic activities to flourish.

Balancing this growth while maintaining the character of the place will be key to the long term success and sustainability of the visitor economy across the Hinterland.



ITEM 3 - ATTACHMENT 2 DRAFT HINTERLAND PLACE PLAN.

Movement: Connection and access for all to enjoy

In rural areas like the Hinterland, we need to explore innovative ways to create connection. Connected communities are important for social inclusion and environmental sustainability. By prioritising pedestrians and cyclists over cars, the liveability and appeal of the area can be enhanced. This can be achieved by slowing down vehicle traffic, improving the connectivity of shared pathways, and providing amenities such as bike racks. This approach applies to areas such as Hinton, Woodville, Wallalong, and Seaham.

To connect these towns, existing networks like the Hunter Water easement or electricity easements can be explored for the development of walking, horse riding, or mountain biking trails. The community sees these links as a potential way to experience the local environment and provide access paths between the villages in the Hinterland area.

Establishing a unique rural access trail could attract visitors to local farm stays or bed and breakfasts and lay the foundation for future walking and cycling events.

Open Space: Creating quality open space

Open space is an important feature of healthy communities. Accessible and well designed open spaces are integral to a town's character and promote healthier lifestyles, attract tourism, support diversity and improve wellbeing.

Improvements to open spaces within village centres may include beautification through street planting, shade, seating, use of lighting, celebration of local history and creating a sense of arrival through signage.

In the Hinterland, improvements to open space also relates to linking smaller villages, quality public spaces such as nature playgrounds and improved access to rivers.

Quality open space needs to be multifunctional, enable group or community activities, provide gathering places, create areas suitable for play and adventure, and encourage wildlife through the provision and maintenance of natural habitats.

Improving the general condition of public spaces is a top priority for the Hinterland and a key aspect of this is to improve access

to the rivers. The Seaham Boat Ramp and Canoe Launch provides access for smaller vessels and paddlecraft from public land, however much of the river frontage is privately owned, which limits options for public access. Exploring potential access points with landowners and state based agencies would be a necessary first step to unlocking this opportunity.

Environment: Protection and conservation of our environment

Hinterland communities place a high value on their local natural environment, in fact it's the thing they care most about. The natural surroundings, including the rivers, wetlands, native bushland and agricultural farmlands are why people love living in this part of Port Stephens.

Many areas throughout the Hinterland provide important habitat for native wildlife and the area is home to a diverse range of flora and fauna.

Key sites such as Seaham Swamp Nature Reserve and Bird Hide are truly special, offering bird watchers and nature based

ITEM 3 - ATTACHMENT 2 DRAFT HINTERLAND PLACE PLAN.

visitors a unique experience. The thoughtful management of these assets will help preserve and educate on the importance of the environment as well as provide opportunity to leverage off these natural assets for greater outdoor recreational and commercial opportunities.

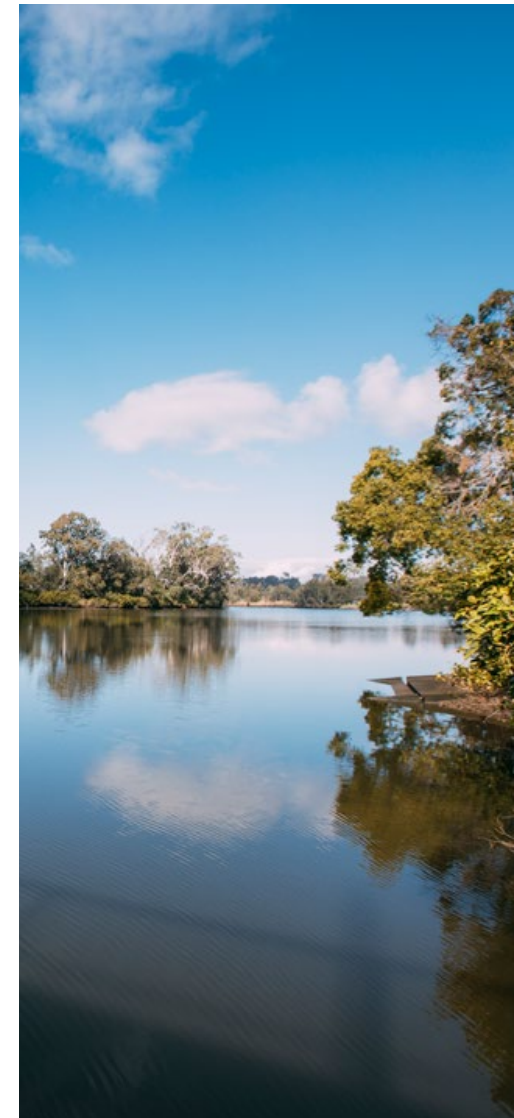
The Hinterland provides key habitat corridors for a number of native species, including Koala, Brush-tailed Phascogale, Squirrel Glider and Powerful Owl. The Hinterland contains important vegetation, including Endangered Ecological Communities, like Hunter Lowland Redgum Forest and Freshwater Wetlands on Coastal Floodplains. To ensure the long term protection of these plants and animals, these corridors need to be maintained, strengthened, and where possible, rehabilitated.

Overdevelopment and clearing is a concern for residents, specifically the disposal of waste from housing fill, destruction of koala habitat, air quality and flooding. When planning for future land use, existing legislation and policy aims to ensure the protection of these valuable habitats.

There are opportunities for the community and Council to work together to ensure that these areas are not only protected but

also celebrated. Leveraging these natural assets for greater recreational opportunities, education, visitor experiences and all abilities access would serve to safeguard unique environmental sites into the future.

Success in achieving these actions requires strong partnerships between landholders, community groups, schools, Council, National Parks and Wildlife Service, Hunter Water Corporation and other state agencies.



ITEM 3 - ATTACHMENT 2 DRAFT HINTERLAND PLACE PLAN.

Management and Safety: Safe and resilient communities

The community's resilience is an important asset in the Hinterland. We know that both locals and visitors appreciate the stunning vistas and farmlands, but it's the genuine nature and hospitality of the people that really sets it apart.

Smaller, more intimate villages across the Hinterland offer a strong sense of familiarity and safety, while the countryside offers a laid back and peaceful lifestyle. Even though areas of the Hinterland have had their challenges with floods and fire, the community has consistently demonstrated that they can rally to help support each other in times of need.

Regular community events, produce swaps as well as utilisation of community halls as shared spaces offer opportunities to meet, build resilience and facilitate community connection.

The community has expressed concern around road safety and lack of public transport for moving children to and from school. There are ongoing opportunities to advocate for the review of speed limits, construction of natural pathways and the implementation of other safety measures to assist in the safety and wellbeing of our kids.

When we visit a place we like to feel comfortable, safe and welcome. Creating a sense of security is a shared responsibility. It needs ownership from the community, business and Council to create long term improvement.

Council can impact design and development through planning controls and the maintenance of public spaces.

Residents and business can align and work together to grow pride and ownership through volunteering, improved shopfronts, preservation of historical sites and stories, as well as hosting events and activations to enhance this sense of safety.

Character: The Hinterland and our unique identity

Character is what makes an area distinctive and shapes the identity of a place. It encompasses the land, people, the built environment, history, culture and tradition.

These elements create a specific look and feel, and a sense of belonging that a person feels for that place.

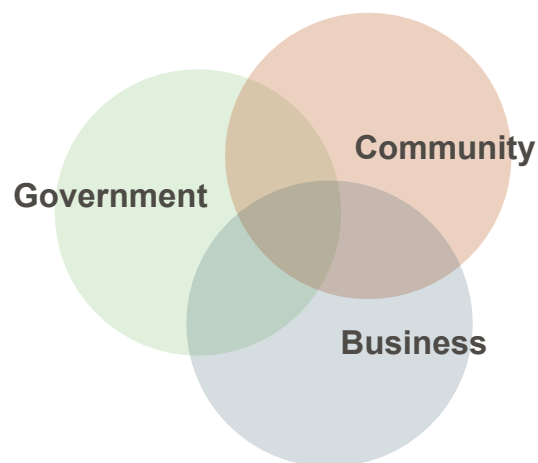
The Hinterland's character is defined by its working farms and its beautiful natural

landscape that features rolling hills, deep rivers, views of mountain ranges and a feeling of open space. The community values the unique identity of the villages that make the Hinterland. The community want to protect this for future generations through careful management of land, appropriate planning controls and the protection of habitat corridors.

The area's character is defined by a number of significant heritage buildings and places, each with their own stories to tell. Locals are eager to enhance and preserve the historical character of the area with new signage and the protection of heritage sites. There's a drive to reinvigorate and nurture heritage buildings and places, such as Foundation Houses, Broom Factory and historical sites at Seaham and Hinton for new uses like cafes, galleries or by developing an interactive historical trail, further expanding the appeal of the Hinterland.



A shared responsibility for our place



Individual responsibilities but opportunities for partnerships



Residents

Residents make an important contribution to their place through individual or collective efforts. The impact on the look and feel of a place is through the diversity of people; their rich heritage, lived experience and their sense of ownership of public and private space. Place making activities are developed in partnership with the residents and reflect strong cultural values, in particular with the Traditional Owners of the Land, the Worimi people.



Local workers

Local workers contribute to a place in many ways, and have a connection to a place even if they don't live there. Their presence activates a place and makes it vibrant and they support local business. Some workers even volunteer their time to activities that improve the place.



Visitors

Visitors and tourists, including day trippers, overnight visitors, or those just passing through, play an important role in a place. They provide a customer base that may result in new local business like cafés and restaurants, or key attractions that also benefit residents by offering a larger variety of things to see and do.



Business

Businesses have many opportunities to contribute to placemaking. These could include funding and supporting community projects, collaborating with other businesses, sharing resources or training local workers. Businesses make a vital contribution to the character of the place. Maintaining an attractive shopfront that presents positively to the streetscape contributes to an appealing and welcoming town and village centres.

ITEM 3 - ATTACHMENT 2 DRAFT HINTERLAND PLACE PLAN.

**Port Stephens Council**

Council has 4 different roles in implementing place plans – as a coordinator by providing guidance and assistance for a project; as a supporter by providing permission, inspiration or project funding; as a partner that works with community groups and business to undertake projects; or as the primary organisation that funds and delivers the project.

**Town Teams**

Town Teams are a group of positive and proactive people that work collaboratively to improve a place or area. The Town Team model is inclusive and open to everyone – businesses, residents, community groups and anyone keen to have a go.

Contact Town Teams about how you can create a Hinterland Town Team and connect with other ambitious community members to start delivering outcomes for your town or village.

**Community groups and volunteers**

Community groups and volunteers with a can-do and proactive attitude are vital for placemaking projects. They include sporting clubs, schools, charities, churches, clubs, social groups and environmental custodians. Community groups and volunteers contribute significantly to their community.

**State Government**

State Government has 3 roles in placemaking – as an authority, a strategic visionary and a funding body. Importantly, they have a significant role in the management of roads and other infrastructure, parks and heritage, which are all essential contributors to the identity of a place.

Working together

Creating great places requires a collaborative approach and ownership from all those that live, work and play in the place. By working together we can harness people-power to achieve more, and best of all, create lasting connections that improve liveability and increase the wellbeing of the Hinterland communities.

Look and feel for the Hinterland

Creating an attractive streetscape brings people into town and compels people to stay and linger. The use of a consistent colour palette and materials can help to create a beautiful town with its own, unique 'look and feel'.

Small projects such as shop front renovations, fence replacements and street furniture may all present opportunities to create a more cohesive town centre and a sense of belonging to the community.

The colour palette of natural and earthy tones represent the many attributes of the Hinterland and celebrate the diversity of the broader Port Stephens West Ward region.



Green for the diverse vegetation of wide spanning pastures and grassy river banks.

C: 41% **M:** 0% **Y:** 58% **K:** 0%

R: 91 **G:** 208 **B:** 230

Hex: 5BD0E6



Deep Green for Hinterland's native bushland and pockets of wetland.

C: 91% **M:** 44% **Y:** 66% **K:** 35%

R: 0 **G:** 86 **B:** 78

Hex: 00554D



Deep Blue for the Williams, Hunter, and Paterson Rivers that define the Hinterland.

C: 50% **M:** 20% **Y:** 10% **K:** 0%

R: 127 **G:** 174 **B:** 204

Hex: 7FAECC



Clear-finished timber for the rural outlook and natural environment of the Hinterland and West Ward region.



Grey for the beautiful shrouds of mist that blanket the hills and pastures.

C: 35% **M:** 28% **Y:** 32% **K:** 0%

R: 171 **G:** 170 **B:** 165

Hex: ABAAA5



Deep brown for the rich and fertile soil that supports the crops and agricultural land.

C: 40% **M:** 60% **Y:** 70% **K:** 40%

R: 109 **G:** 77 **B:** 60

Hex: 6D4D3B



Brown for the timber and other natural materials found within the Hinterland and surrounds.

C: 29% **M:** 41% **Y:** 56% **K:** 3%

R: 181 **G:** 146 **B:** 117

Hex: B59275



Creating better places and spaces in the Hinterland

In the next 5 years Council expects a range of projects, as shown on the map, to commence.

These projects will improve liveability in the Hinterland and include improvements or replacement of existing roads, additional pedestrian and cycle infrastructure, and a range of community and recreational facilities.

Balickera

- Rehabilitation Italia Road Seg 120 (2023/24: \$750,000)

Brandy Hill

- Brandy Hill pathway (Date TBC: estimated \$2,500,000)
- Provision of Brandy Hill bus stops (Date TBC: \$120,000)

Duns Creek

- Completed: Rehabilitation Duns Creek Road (North of Wallaby Close) including blackspot and sealing works (2022/23: \$1,149,000)
- Rehabilitation Seaham Road, including

intersection upgrade at Hinton Road

- First seal Duns Creek Road from Forest Road to 291 Duns Creek Road (2024/2025 – \$805,000)

Eagleton

- Completed: Six Mile Road sealing (2022/2023: \$1,068,000)

East Seaham

- Completed: Newline Road, East Seaham (2022/2023: \$1,415,000)
- Completed: East Seaham Rd gravel Roads resheeting (2022/2023: \$47,000)
- Completed: East Seaham Rd rockwall and guardrail (2022/2023: \$95,000)
- Black spot funding for East Seaham Road (2023/2024: \$998,000)
- East Seaham Road stage 5. Install new seal, guardrail, signage and linemarking from No.474 to 829 East Seaham Road (2023/2024: \$1,000,000)

Glen Oak

- Replacement of Notts Creek Bridge on Oakendale Road (2022/23/24: \$469,000)
- Completed: Rehabilitation of Clarence Town Road from Wattle Creek Bridge to Langlands Road (2022/23: \$1,203,000)

Hinton

- Completed: Upgrades to Stuart Park, including a new sports amenities building, kiosk (2019/20: \$1,300,000)
- Rehabilitation Hinton Road Segment 10 (2033/2034: \$275,000)
- Renovating Hinton School of Arts (2030/31: \$45,000)

Nelsons Plains

- Completed: Rehabilitation Seaham Road intersection upgrade at Hinton Road (2022/23: \$960,000)

ITEM 3 - ATTACHMENT 2 DRAFT HINTERLAND PLACE PLAN.

Seaham

- Completed: Rehabilitating Warren Street (2020/21: \$965,043)
- Completed: Rehabilitating Clarence Town Road at Croft Road (2021/22: \$580,944)
- Completed: Widening Clarence Town Road and correcting alignment from Mooghin Road to Dixon Street (2022/23: \$1,864,000)
- Completed: Upgraded Brandon Park, Seaham to include a multi-sport court upgrade, floodlight upgrade, tiered seating and accessible toilet (2023/24: \$830,000)
- Upgrading Seaham School of Arts, including driveway, disabled access and renovation (2023/24: \$60,000)
- Replacing playground equipment Seaham Park (2026/27: \$180,000)

Wallalong

- Completed: New spectator seating at Bowthorne Park (2019/20: \$100,000)
- Improving drainage under High Street (2026/27: \$400,000)
- Replacing playground equipment at Bowthorne Park (2030/31: \$80,000)

Woodville

- Rehabilitation Paterson Road Seg 70 (2025/26: \$600,000)
- Rehabilitation Paterson Road Seg 50 (2027/28: \$375,000)

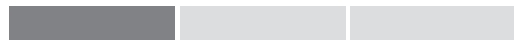


Actions

Timeframe

This Place Plan has a planning horizon of 5 years. Timeframes denote when delivery of an action is expected to start.

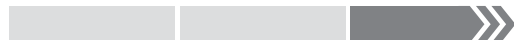
Short term – 0 to 2 years



Medium term – 2 to 4 years



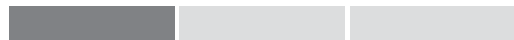
Long term – 4 to 5+ years



Cost

Cost indicates whether an action is a relatively cheap or a costly undertaking.

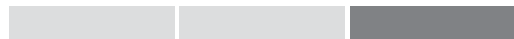
Low



Medium



High



Lead

Each action will be lead by Council or a specific group associated with the action.

Council role

The Hinterland's Liveability Index results have inspired a series of action items. Port Stephens Council has 4 roles in delivering these actions:

- **Coordinate** – As a coordinator, we'll provide guidance on how to start your project, help by identifying approvals required, advise you about funding opportunities, get you in touch with other organisations, or advocate for your project.
- **Support** – As a supporter, we may provide support, permission, inspiration or funding.
- **Deliver** – In delivering, we'll fund and deliver the project.
- **Partner** – As a partner, we'll work with the community, business, developers, and state agencies to undertake projects or programs.

Emerging themes

- Economy
- Movement
- Open Space
- Environment
- Management and Safety
- Character

IMPORTANT NOTE

Cost estimates and delivery timeframes are indicative only and subject to further investigation.

The order for commencement of actions is flexible and will be based on timing and availability of funding and resources, and community initiative.

ITEM 3 - ATTACHMENT 2 DRAFT HINTERLAND PLACE PLAN.

1. Create pop-up experiences

Do you have a great idea that can bring people together in the Hinterland? Community halls, parks, and village centres provide unique places where you can organise short-term events that showcase what makes the Hinterland special.

These events, known as pop-ups, may be art displays, interactive story projects, or new business experiences. They can transform a location, create an interesting experience, and catch people's attention. They also help assess the demand for new services, try out different experiences and small businesses.

For example, you could try running a coffee cart or selling local produce on a main street. Alternatively, you could use the kitchen facilities in a local School of Arts hall to create a special dinner featuring local ingredients.

Timeframe

--	--	--

Cost

--	--	--

Lead: Community and Business

Council role: Support

2. We're here to help

Changes to planning laws have made it easier for locals to diversify their rural businesses and increase income. If you're interested in exploring these types of options, it's a good idea to check in with Council.

Council will provide guidance on what activities are allowed on your land and discuss the possibility of converting unused sheds, cottages, or other structures into accommodations.

Council recognise that starting a new project and understanding the required approvals can be challenging, so fact sheets and a campaign will be developed to provide assistance and information.

Timeframe

--	--	--

Cost

--	--	--

Lead: Council

Council role: Deliver



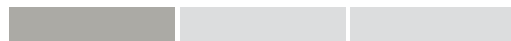
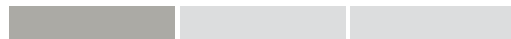
ITEM 3 - ATTACHMENT 2 DRAFT HINTERLAND PLACE PLAN.

3. Support local – small business, big impact

In today's world, where people have more options for shopping online or at major shopping centers in Newcastle and Maitland, it's important to ensure that both residents and visitors support local shops whenever possible.

The community can take steps to raise awareness about small, specialised businesses by organising community market days, produce swaps, or even creating dedicated Facebook pages to spread the word.

Campaigns promoting the idea of 'Support Local' will be promoted within the Hinterland, along with additional business mentoring assistance.

Timeframe**Cost**

Lead: Council

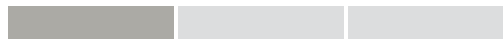
Council role: Coordinate

4. Our bright future

Although this plan isn't focused on housing outcomes, there's still a significant demand for housing opportunities in Port Stephens.

Council has already taken steps to provide increased housing options in the Hinterland by allowing secondary dwellings. This means that older farmers can now semi-retire on their working farms while still being able to mentor and live with the next generation of family farmers. It also opens up additional income opportunities for hosting people looking for unique accommodation options.

The supply of housing will be considered during the review of the Local Housing Strategy and Housing Supply Plan Port Stephens.

Timeframe**Cost**

Lead: Council

Council role: Coordinate

5. Agritourism mentoring program

Recent planning reforms have made it easier for rural land owners to diversify their incomes and provide new things to do and places to visit in the Hinterland. Council, together with Destination Port Stephens and Destination Sydney Surrounds North will establish a Hinterland mentoring program.

This will assist rural land owners to gain further insight and a better understanding of the visitor economy and how to leverage the opportunity to diversify their agribusiness.

Timeframe**Cost**

Lead: Council and Destination Port Stephens

Council role: Deliver

ITEM 3 - ATTACHMENT 2 DRAFT HINTERLAND PLACE PLAN.

6. Deliver an annual event

Once the region establishes its identity and increases its available accommodations, local residents could organise an annual festival that showcases the area's local produce, heritage, waterways, and lifestyle.

Prioritise events that connect residents with their heritage and make better use of local facilities including School of Arts halls, parks and businesses.

To generate ideas, it's recommended locals research what similar communities are doing. Initiating discussions with local businesses, neighbours, Town Teams, or Council can help identify funding opportunities to turn these ideas into reality.

Timeframe**Cost**

Lead: Community and Business

Council role: Partner

7. Improve access to interesting places

The Hinterland has many fascinating locations worth exploring. For instance, Seaham was home to some of the earliest vineyards in the Hunter Valley.

To celebrate the history and character of the region, a Town Team or a local working group can collaborate with landowners to identify sites of significance. These sites can be enhanced by things like walking tours, education sessions, open days, art and signage.

Timeframe**Cost**

Lead: Community

Council role: Support

8. Improve safety for pedestrians

The Hinterland has an extensive network of rural roads with varying speeds. Ensuring the safety of our children on these roads is a top priority for the Hinterland community.

Council can collaborate with the community to advocate for changes in speed limits in high-risk areas. This can involve reviewing and adjusting speed limits, installing solar panel speed message boards at important entry points, exploring alternatives to reduce heavy vehicle traffic, and conducting road safety campaigns through community groups and schools.

Timeframe**Cost**

Lead: Council and NSW Government

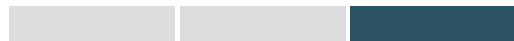
Council role: Coordinate

ITEM 3 - ATTACHMENT 2 DRAFT HINTERLAND PLACE PLAN.

9. Increase walking, riding and cycle pathways

If you enjoy walking, biking, or horseback riding, the Council will review the Pathways Plan to find ways to connect villages and population centers using existing corridors. To help accomplish this, a local action group or a future Town Team could start conversations with landowners or businesses about creating safe pathways for pedestrians, cyclists, and horse riders.

Further investigation would be needed to determine the specific locations, design elements, and funding sources for these pathways.

Timeframe**Cost**

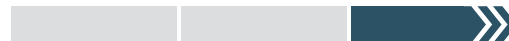
Lead: Council

Council role: Coordinate

10. Options for connection

There's a strong interest in improving the connections between village centres, particularly Seaham, Brandy Hill and Hinton. Linking these villages via the Hunter Water pipeline and existing easements would be a complex, long-term and transformational project that would add huge value for the community.

In partnership with Hunter Water Corporation, Council will explore the potential opportunities to create pathways within these easements to connect the Hinterland villages.

Timeframe**Cost**

Lead: Council and Hunter Water

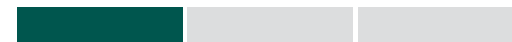
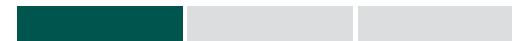
Council role: Partner

11. Keeping our people and rivers safe

The Hinterland has a tri-river system that offers many recreational opportunities for boaters and anglers to explore. It's crucial to prioritise the health of the rivers and the safety of people using them.

Agencies like Maritime NSW play a vital role in patrolling and promoting safe boating practices on our rivers.

Council will collaborate with Transport for NSW to promote the creation and execution of safety campaigns and events that emphasise responsible behavior and pollution prevention.

Timeframe**Cost**

Lead: Council

Council role: Partner

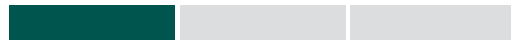
ITEM 3 - ATTACHMENT 2 DRAFT HINTERLAND PLACE PLAN.

12. Better access to waterways

Providing better access to the riverbank has strong recreational and economic value. A Hunter Estuary Coastal Management Program is being developed, aiming to identify key issues of the Hunter Estuary and enhance the liveability and accessibility of the river.

Council will also continue collaborating with state and local agencies to explore opportunities and advocate for better access to waterways, state forests, and national parks.

We encourage the community to do the same by advocating for access to waterways with private landowners and agencies like Local Land Services, as well as seeking easier entry to state forests and national parks for activities such as hiking and biking.

Timeframe**Cost**

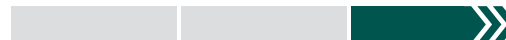
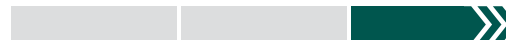
Lead: Council

Council role: Support

13. Celebrate the riverfronts

The Paterson, Williams and Hunter Rivers define the Hinterland. Public space that fronts these rivers could be enhanced to better connect communities with their waterways.

Council's Boating and Fishing Infrastructure Plan makes a number of recommendations for the improvement and maintenance of these local assets.

Timeframe**Cost**

Lead: Council

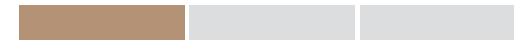
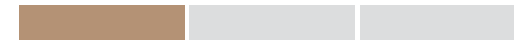
Council role: Coordinate

14. Preserving the Waterways of the Hinterland

The residents and visitors of the Hinterland highly value the tri-river system, which includes the Williams, Patterson, and Hunter Rivers.

To ensure the long-term health and vitality of these waterways, the Hunter Estuary Coastal Management Program is being developed. This program aims to protect and enhance the area, considering the overall well-being of the rivers, and will outline specific management actions for the future.

Engagement sessions will be conducted, and community involvement is encouraged to contribute to the development of the plan.

Timeframe**Cost**

Lead: Council

Council role: Coordinate

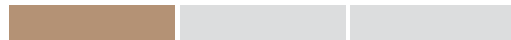
ITEM 3 - ATTACHMENT 2 DRAFT HINTERLAND PLACE PLAN.

15. Encouraging sustainable gardening

More and more people are becoming interested in sustainable gardening, but they often lack the knowledge to get started. To address this, the Council plans to collaborate with experts to develop educational programs and a sustainable planting guide.

These resources will help residents learn about sustainable gardening practices, including the use of suitable plant varieties, bush tucker, edible species, and shade-loving plants.

Community members could also consider establishing a community garden or a native edible garden with like-minded individuals, providing a space to practice and share their gardening skills.

Timeframe**Cost**

Lead: Community and Council

Council role: Support

16. Sustainable conservation of landmarks

The Hinterland boasts several remarkable natural features and landscapes. Places like Seaham Conservation Area have the potential to attract more visitors to the region, opening up opportunities for new services and unique experiences.

In collaboration with the National Parks and Wildlife Service, Council and the community will champion the sustainable conservation of these important environmental sites. One way to enhance these sites is by improving access through the creation of an interpretive loop walk, complete with wayfinding signage that includes cultural stories.

Timeframe**Cost**

Lead: Community, NPWS, Council

Council role: Partner

17. Protection and enhancement of wildlife corridors

The Hinterland provides key habitat corridors for a number of native species and important vegetation. To ensure the long term protection of these plants and animals, vegetation corridors need to be maintained, strengthened, and where possible, rehabilitated.

Community members are encouraged to work together with groups such as Landcare to plant native trees, shrubs and grasses to enhance the natural environment.

Council will also continue to work with agencies such as Local Land Services to combat regional priority weeds and Council will work with landowners to provide advice and support group funding applications for projects that align with the wildlife corridor protection and enhancement.

Timeframe**Cost**

Lead: Community, Council

Council role: Partner

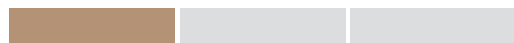
ITEM 3 - ATTACHMENT 2 DRAFT HINTERLAND PLACE PLAN.

18. Improve flood management

The Hinterland covers a diverse number of catchments, generally flowing to the Hunter Estuary. The area has a number of creeks, rivers, estuaries, stormwater channels and drains which are impacted by flooding, sometimes with little or no warning.

Council will continue to work with the community and key stakeholders to develop drainage solutions, improve the floodplain risk management policy and areas impacted by flooding.

Council will also continue to work with NSW Governments to implement findings from the NSW independent flood enquiry.

Timeframe**Cost**

Lead: NSW Government, Council

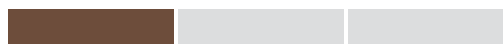
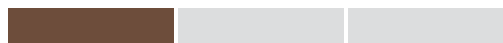
Council role: Partner

19. Establish a Hinterland 'Town Team'

To bring together the aspirations of residents and local businesses, it's suggested to create a local group that can achieve small victories and advance larger ideas. One possible approach is to establish a Hinterland Town Team.

This group would serve as a platform for local change-makers to connect with each other and deliver projects that enhance the area.

A Town Team could lead efforts to beautify village centres by planting street trees, creating gardens, establishing heritage walks, or installing art displays.

Timeframe**Cost**

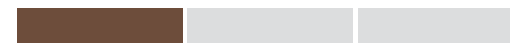
Lead: Community

Council role: Coordinate

20. Connect with neighbours

Community connection is important to the vitality of a place. In rural areas like the Hinterland it's important to provide opportunities for people to get together, share experiences and build networks.

Strengthening these connections through shared experience could include creating and hosting events and activations, hosting open houses, farm and garden days and other community-led initiatives.

Timeframe**Cost**

Lead: Community and Business

Council role: Support

ITEM 3 - ATTACHMENT 2 DRAFT HINTERLAND PLACE PLAN.

21. Establish a Community Resilience Network

The Hinterland has experienced several instances of flooding and other disasters, causing significant disruptions in recent years.

To address these challenges, it's proposed to establish a Community Resilience Network.

This network, developed with Local Emergency Services, will enable residents and landowners to adopt a localised and focused approach to assist and support the wider community before, during, and after a disaster. The aim is to enhance community preparedness, response, and recovery efforts in the face of future emergencies.

Timeframe**Cost**

Lead: Council

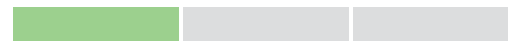
Council role: Deliver

22. Documenting local character

Are you interested in photography? Why not begin capturing the unique essence of the Hinterland by taking pictures of interesting locations and people? You could even sell or share your images with local businesses, Destination Port Stephens, and other groups.

This will contribute to building an image library that can support a strong and consistent identity for the Hinterland as other initiatives unfold.

Additionally, you might consider organising a photography competition or exhibition to be held at one of the community halls in the Hinterland. It's a great way to showcase local talent and further celebrate the beauty of the region.

Timeframe**Cost**

Lead: Community

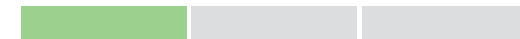
Council role: Support

23. Recognition of the indigenous history and culture of the area

The Worimi people are the traditional landowners of the Hinterland. The most authentic and insightful cultural storytelling comes from the original custodians of the land.

Cultural education sessions, held at Murrook, provide a great starting point to understand Worimi Aboriginal Culture. In collaboration with Destination Port Stephens and the Aboriginal community, Council will continue to identify and celebrate Aboriginal experiences at significant visitor sites.

There's funding opportunities available for community projects that aim to empower and raise the profile of local Aboriginal and Torres Strait Islander people. If you have ideas, reach out to Council's Vibrant Places team to discuss and explore your ideas.

Timeframe**Cost**

Lead: Worimi Local Aboriginal Land Council

Council role: Support

24. Create a brand and identity

Creating an identity improves the economic value and opportunities in the Hinterland.

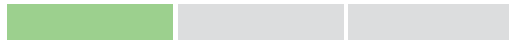
Locals and businesses could collaborate with Destination Port Stephens and Council to develop a unique brand and identity for the Hinterland.

The community and Council can the work together to improve or install signage and interpretive panels that enhance the sense of place and provide guidance for visitors.

Timeframe



Cost



Lead: Council, Destination Port Stephens, Community

Council role: Support



