Ordinary Meeting

Meeting Date: Tuesday, 26 November, 2019
Location: Council Chambers, City Administrative Building, Bridge Road, Nowra

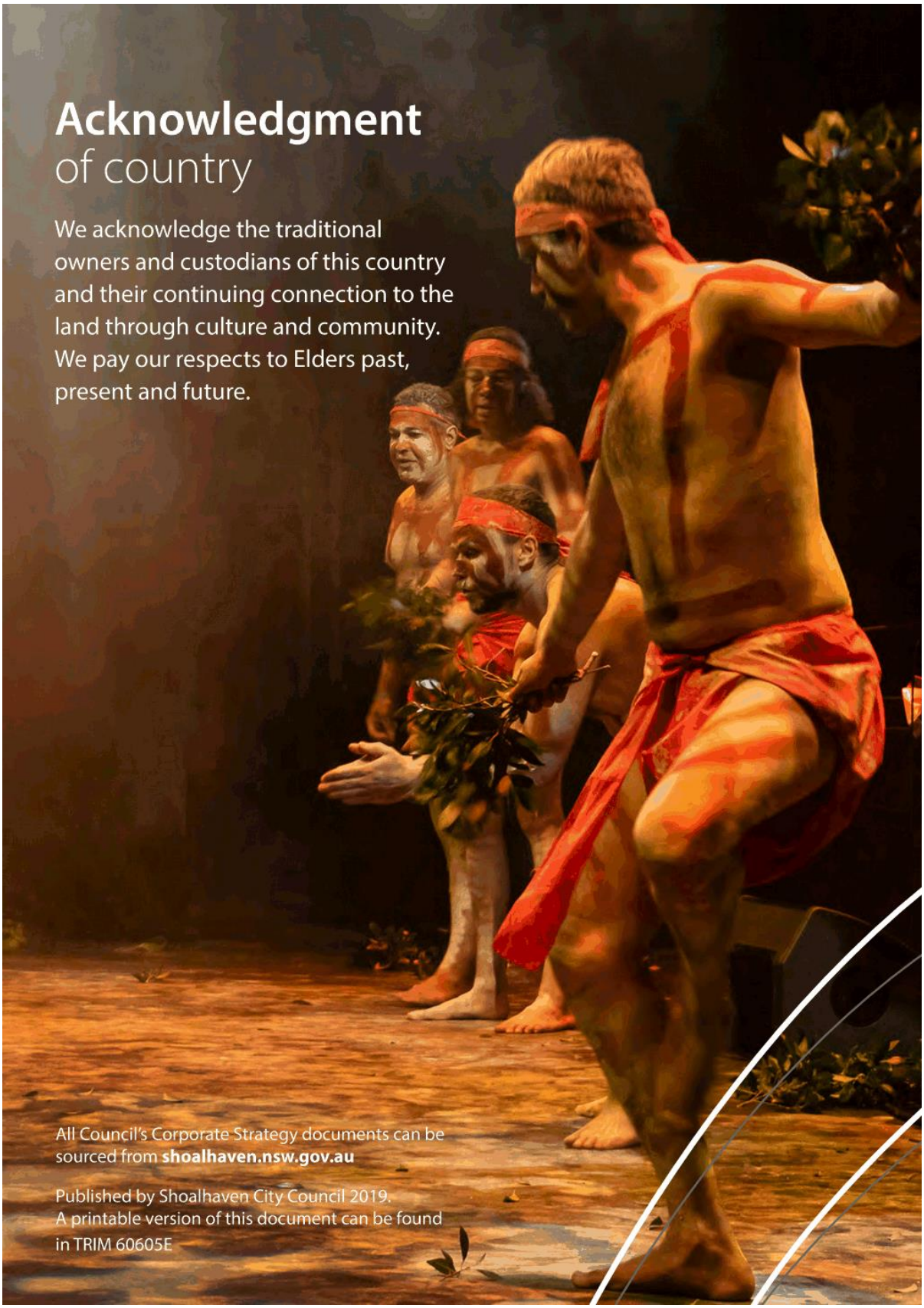
Attachments (Under Separate Cover)

Index

Shoalhaven City Council

Working Draft Community Participation Plan

October 2019


Acknowledgment
of country
We acknowledge the traditional owners and custodians of this country and their continuing connection to the land through culture and community. We pay our respects to Elders past, present and future.
All Council's Corporate Strategy documents can be sourced from shoalhaven.nsw.gov.au
Published by Shoalhaven City Council 2019.
A printable version of this document can be found in TRIM 60605E

Contents

Section 1 - Community **Participation in Planning**

Community engagement is critical in ensuring that the community can participate in the decisions, processes and projects that affect their everyday lives. By informing, engaging and working with the community we can strengthen and enhance our relationship with those that live work and play in the Shoalhaven Local Government Area.

All levels of government (Commonwealth, state and local) have an intention to actively involve the community in planning for the places that affect them and their communities. Participation opportunities include early and upfront engagement during the initial stages of long term strategic planning, as well as opportunities to provide feedback and input throughout the planning process, from draft plans and policies through to development applications and approval.

This Community Participation Plan (CPP) is an invitation to our community to participate and contribute to their future. We are entering a time of growth and change. It is important our community are part of the journey with us. They need to be involved and aware of the opportunities and outcomes that are being established for our City.

What is a Community Participation Plan?

A CPP is designed to make participation in planning clearer for communities. It does this by setting out how and when communities can participate in planning and development proposals to Council.

A CPP also outlines community participation objectives which are used to guide approaches to community engagement. It provides transparency and clarity for the community to clearly understand its role in the planning and development accessment process.

The purpose of this CPP is to provide a planned approach to community engagement practices to ensure a high level of dialogue with target audiences is in place for Council projects. Council recognises the uniqueness of it's diverse and vibrant community. This CPP aims to ensure the area continues to support and provide a rich culture and inclusive community spirit through great regional, urban and rural design.

Although the planning processes differ depending on the size and scale of the development, the opportunities for community participation remain. A CPP provides guidance on how the community can have access and input into different types of planning documents on a general level (i.e. strategic planning documents) and a specific level (i.e. development assessments).

Our CPP also ensures that we are able to meet the requirements that have been set by the State Government via the Environmental Planning and Assessment Act (EP&A Act) and through ongoing reforms in the planning system.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What is included in the Community Participation Plan?

This CPP provides information on both the mandatory and best practice approaches to ensuring appropriate and inclusive community participation in our plans, strategies and projects.

Specifically, this plan focuses on the requirements that are necessary to meet the requirements of the EP& A Act for planning and development processes where Council has delegated authority. The plan also incorporates our submissions policy and requirements for development referred to our Local Planning Panel.

The plan also incorporates the requirements of the Local Government Act that relate to Community Strategic Planning, integrating Council's community engagement and planning functions.

Whilst this plan does not cover all forms of engagement or participation processes undertaken by Council, it does specifically focus on planning functions under the Local Government Act and it is the first step in creating a more integrated and up to date Community Engagement Framework for the organisation. The CPP integrates into this framework and updated Community Engagement Policy.

Included within the plan are the standards we set for ourselves in relation to the requirements we follow for the development of a range of documents and processes under existing planning legislation, the notification of development applications and the management of submissions.

Where Does this Community Participation Plan Apply?

This CPP applies to the City of Shoalhaven Local Government Area (LGA) and planning functions under the EP&A Act.

This plan has been developed in accordance with the requirements of the EP&A Act and the Local Government Act.

It specifically applies to:

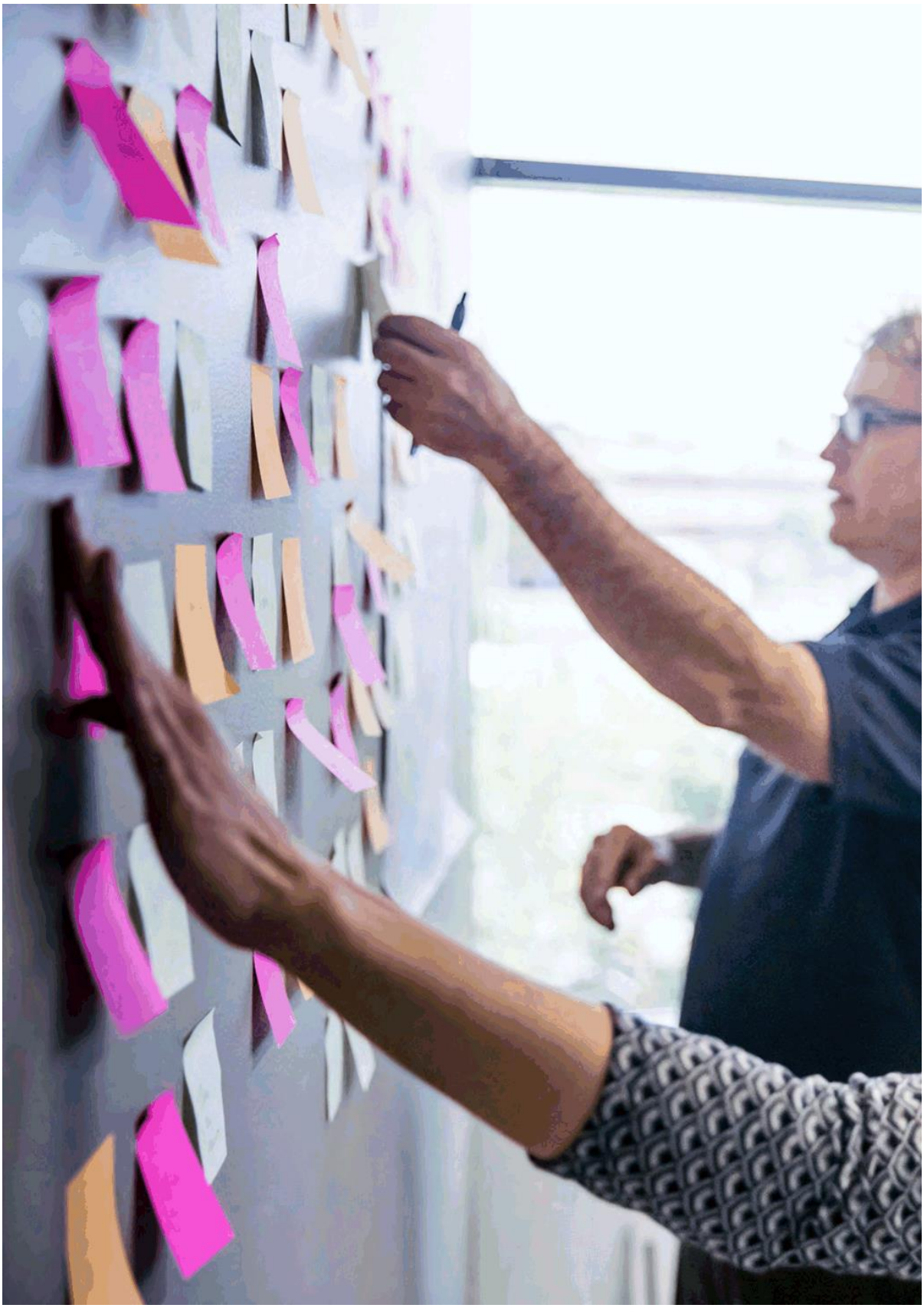
- Plan making and Strategic Planning: this includes Local Strategic Planning Statements, amendments to the Local Environmental Plan, Development Control Plans, Local Infrastructure contributions plans and planning strategies
- Development Applications

The CPP does not apply to exempt and complying development.

How Was this Community Participation Plan Developed?

Our development of the Plan was informed by the requirements of Council's existing policies and requirements relating to engagement, planning and development assessment, in addition to the Local Government Act 1993 (the Act), Local Government (General) Regulation 2005 (Regulation), EP&A Act and the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation).

This review has enabled a draft CPP to be developed drawing upon best practice standards and integrating the legislative requirements into a plan that can be utilised by staff and the community.



Section 2 - What are the **Principles & Values of the CPP ?**

The CPP adheres to the principles outlined in the EP&A Act and the objectives provided in the Department of Planning and Environment's CPP requirements.

This CPP is also built upon the values that Council upholds of Integrity, Respect, Collaboration and Adaptability and the Core Values and Code of Ethics created by the International Association for Public Participation (IAP2).

Community Participation Values
Community has a right to be informed about planning matters that affect it and given opportunities to participate
Encourage effective and ongoing partnerships with the community and provide meaningful opportunities for community participation in planning
Planning information will be in plain language and easily accessible
Opportunities to participate in strategic planning will occur as early as possible to enable views to be considered
Engagement will be inclusive and representative of the community
Planning decisions will be made in an open and transparent way. Reasons for decisions will be provided including how community views have been considered
Methods used and reasons given for planning decisions will be appropriate, having regard to the significance of likely impact of the proposed development

Our Values

Respect
We are mindful of and care about the feelings, wishes and rights of others

Integrity
We are committed to maintain high ethics and standards

Adaptability
We are ready for change and willing to embrace a new situation

Collaboration
We enjoy working together to deliver for our community

Section 3 - What is Council's Approach to **Community Engagement?**

Council engages with the community to ensure they are part of decisions which impact on their lives. By speaking with and seeking feedback from our community, Council can build trust and achieve outcomes reflective of community needs.

Whilst every decision my not be supported, Council provided an opportunity for the community to be involved in the process. Robust and considered conversations with Council about the process and ultimate outcome are welcomed.

The aim of community engagement is to:

- Enable council to obtain a diverse range of views, opinions and ideas on the community's needs and wants
- Identify shared values, benefits and outcomes and how Council and community can work together to realise Council's goals and meets community needs
- Manage risks by understanding and anticipating issues before they escalate
- Enable Council to be open, transparent and accountable
- Create greater community ownership, understanding and acceptance of Council decisions
- Achieve legislative requirements that are set for Council for community engagement and consultation processes.

How Will Council Engage?

A range of community engagement activities are undertaken depending on the type and scope of each project. In most cases a specific community engagement plan will be developed, outlining the specific messaging and engagement approaches to be delivered through the most effective and appropriate mediums.

Engagement can be undertaken in a variety of ways and within a scale ranging from informing (low level of engagement) through to collaboration (high level of engagement). Council adopts the IAP2 spectrum in the development of engagement planning and processes. In most cases, engagement with Council will sit between Inform and Consult. In some cases Council also collaborates directly with the community where the ability to partner in the decision making process can be achieved.

The CPP recognises the importance of understanding the uniqueness of each Council project and identifies the need to utilise a range of engagement techniques to effectively tailor consultation to meet the needs of the various communities throughout the planning process. Engagement techniques used by Council may include letters, surveys, online feedback forms, focus groups and community meetings.


Shoalhaven City Council - Community Participation Plan 2019 | Page 11

Section 4 - **Exhibition & Notification** Requirements

The planning system seeks to utilise local knowledge, ideas and expertise to create sustainable environments, liveable communities and support environmental values.

Engaging with the community and seeking a better understanding of how the community lives in the city, how we connect with each other, what our priorities and needs are for the future is important to ensure that decision making and policy formulation is undertaken in a wider and more informed context.

As part of the development of this plan various scales of development have been considered to ensure that Council applies the appropriate level of participation and opportunities. Council notification must comply with the EP&A regulations, which can be found at **legislation.nsw.gov.au**

It is important to articulate the level of participation and contribution the community can have within the framework and legislative requirements surrounding strategic planning and development. This serves to set detail and explain the expectations.

Development Not Requiring Notification

This document does not apply in respect of any development that is exempt or complying development as listed in:

- State Environmental Planning Policies
- Shoalhaven Local Environmental Plan 2014
- Shoalhaven Development Control Plan 2014

Certain development and/or activities, based on the site's circumstances, are also considered minor in nature if they are unlikely to adversely affect other property owners.

This determination is also at the discretion of the Director Planning, Environment and Development Group. These are outlined in detail in (Appendix 1).

Planning Exhibition Requirements

There are both mandatory and non-mandatory requirements that apply to public exhibition of a planning document or development application.

a. The mandatory requirements legally safeguard the community's right to comment on planning that affects them.

b. The non-mandatory requirements reflect best practice in ensuring that the intention to actively involve the community in planning is honoured (for example, it may be worthwhile for Council to extend the notification distribution and/or exhibition timelines for projects of a sensitive or controversial nature to make sure everyone has a chance to be heard).

Public exhibition of draft planning documents and development applications require a Council resolution before being released for comment. Exhibition requirements are:

Strategic Planning Exhibition Periods

Planning documents	Minimum Mandatory timeframes
Draft Community Participation Plan	28 days
Local Strategic Planning Statement (LSPS)	28 days
Planning proposals	28 days - or as specified by the gateway determination which may find due to the minor nature of the proposal that no public exhibition is required
Draft Development Control Plan	28 days
Draft contributions plans	28 days
Planning Agreement	28 days
Non statutory pregateway exhibition for planning proposals	28 days

Development Matters Exhibition/Notification Timeframes

Planning documents	Minimum Mandatory timeframes
Application for development consent for designated development	30 days
Application for development consent that is required to be publicly exhibited by regulation	28 days
Nominated Integrated Development	30 days
Environmental Impact Statement (under division 5.1 or 5.2)	30 days

Exhibition Timeframes

Planning documents	Minimum Mandatory timeframes
Policy or guidelines	28 days
Plans for urban renewal areas and masterplans	42 days
Re-exhibition of any matter referred to above	As per the original exhibition period

Who Will Be Notified

All property owners and Council's Community Consultative Bodies (CCBs), who in the opinion of Council, may be affected by a development proposal shall be notified in writing, in accordance with Table 1 – Community Consultation Matrix. In certain circumstances, the Assessing Officer may use his/ her discretion to notify beyond the nominated buffer zones. All DA's can be viewed on Council's DA tracking website via **sholhaven.nsw.gov.au**

Property owners to be notified include:

- Those with land within the identified buffer boundary
- An association for a community, precinct or neighbourhood parcel of land
- Where land is accessed by a right-of-carriageway (ROW), all affected landowners will be notified
- Where land is owned by the Crown, the Department of Lands
- Where the land is owned by a State Government Agency, eg National Parks and Wildlife Service but is not occupied for housing purposes, the property/ ownership branch of the relevant State Government Agency

When Will Applications be Notified?

Usually applications will be notified after the registration of the DA. However, if an application is not supported by plans and other necessary documentation as set out in Council's Development Application Guidelines relevant to the proposal, or any other documentation considered necessary by Council for adequate assessment of the application, notification of the application may be delayed.

If an application is notified and the need for an independent specialist report is identified during the assessment process, the application may be re-notified upon receipt of the relevant report/s. Amended plans received during the assessment of an application may also be re-notified. **Re-notification will be at the expense of the applicant.**

Community Consultation Matrix - Development Applications

Degree of Community Consultation	Methods of Consultations	Issues to Consider to Determine Levels of Consultation	Examples
Level 1: Neighbour notification within buffer of 25m radius in urban areas and 100m radius in rural areas.	Notification letters to all property owners located within identified radius. (DAs published on the DA tracking website)	Development: • Is of small to moderate scale • May impact on views or amenity of residents in the neighbourhood • May impact on the character of the neighbourhood; and • Raises environmental issues. • Raises traffic issues	• Additions to existing commercial or industrial premises (only notified where it doesn't meet requirements in appendix 1) • Two-storey dwelling-houses • Two-lot Subdivisions other than the subdivision of existing dual occupancy developments • Secondary dwellings • Bed & Breakfast accommodation in an existing dwelling-house • Dual occupancy development • Development accessed by a right-of-carriageway • New retail, commercial and industrial activities • Home activities with potential for external impacts; and • Purpose-built Bed & Breakfast Accommodation.

Table 1 – Community Consultation Matrix.

Degree of Community Consultation	Methods of Consultations	Issues to Consider to Determine Levels of Consultation	Examples
Level 2: Neighbour notification within buffer of 60m radius in urban areas and 200m radius in rural areas.	Notification letters to all property owners affected within identified radius, see diagrams 2a and 2b. Relevant CCBs and Chambers of Commerce notified. (DAs published on the DA tracking website)	Development: • Is of moderate scale and significance • May impact on views or amenity of residents in the local area • May have impacts concerning the local community; and • Raises significant environmental issues.	• Tourist development • Medium density development up to and including 10 units • Subdivisions of 3-10 lots • Child care centres; and • Commercial and industrial proposals.
Level 3: Neighbour notification within buffer of 120m radius in urban areas and 500m radius in rural areas.	Notification letters to all property owners affected within identified radius, see diagrams 3a and 3b. Relevant CCBs and Chambers of Commerce notified. Newspaper advertisement or other notification method. (DAs published on the DA tracking website)	Development: • Is major • Raises major environmental issues; and • May raise concerns for nearby residents, the wider community and visitors to the area.	• Shopping centres • Medium density development in excess of 10 units • Subdivisions in excess of 10 lots • Icon sites • Major industrial developments • Major community projects, eg cultural centres; public swimming pools, sports facilities/ complexes • Any development of public open space in Council ownership or Crown Land where Council is Trust Manager • Large retail; and • Any development involving the sale of liquor or adult goods or services.

Section 5 - **Submissions**

What are the Submission Requirements?

When making a submission to Council, the submission should:

- Be received by Council on or before the last day of the exhibition timeframe (unless otherwise specified)
- Be in writing and submitted through Council's 'Have Your Say' web page, DA tracking, by email or mail
- Contain the name and email address of the person making the submission. For DA's, the application number and address of the property that is the subject of the development proposal and detail the submission's purpose and all reasons for the submission. Anonymous submissions will not be accepted.

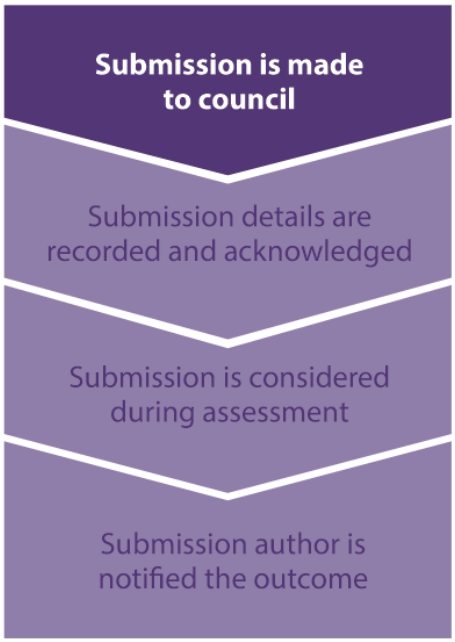


Figure 1: Submission Process

How Long is the Submission Period?

The submission period is the same as the notification period. Submissions are letters or emails, petitions or similar written representations from individuals or groups of people regarding a particular application.

All submissions received within the nominated timeframe will be considered. Submissions received after the nominated timeframe will be considered where possible. Outcomes will not be determined prior to the expiry of the nominated notification period.

If the exhibition period is due to close on a weekend or a public holiday, Council may extend the exhibition to finish on the first available workday. The Christmas period (between 20 December and 10 January, inclusive) is excluded from the calculation of the public exhibition. Other significant religious or cultural festivities may warrant extended consultation where deemed necessary or appropriate.

Note: Council will not respond to each individual submission received during the assessment process due to volume and frequency of DA submissions.

Notifying Assessment Outcomes

It is mandatory for Council to notify the public of the outcomes from the assessment of the application for development or modification consent that was publicly exhibited by letter and/or by posting to the project website. Council will give notice of the determination of an application to each person who makes a written submission. In the case of a petition, the instigator will be advised directly.

Note: Email will be used as much as possible to ensure timeframes are met.

What's Included in the Notification?

Following the assessment of the DA and the submissions received, Council will issue a notice of determination. The notice of determination or Council's assessment report will specifically address matters of concern raised in submissions and give reasons for the determination.

Notifications must include:

- The decision
- The date of the decision
- The reasons behind the determination as required by the Act/Regs
- How community views were considered in making the decision.

Closing the feedback loop involves a variety of techniques. People who are actively involved and are directly affected by the plan are notified of decisions to the relevant matter. For more significant matters, Council **may** publicise a submissions report. The report may outline the scope and issues raised in submissions and how the issues were addressed. When a property joins the boundary of a neighbouring Council a notification letter is sent to the adjoining Council requesting the Council inform its residents/taxpayers of the proposed development.

Section 6 - **Monitoring & Evaluation**

Evaluation is a formal, on going assessment of Council's community engagement activities. This involves the community, staff and Councillors.

Evaluation of engagement techniques will be undertaken throughout the engagement period, to ensure that improvements to the engagement plan can be implemented throughout the process as well as inform future community engagement activities.

Evaluation measures the success of the CPP and includes assessment of:

- The anticipated outcomes
- The success of the community engagement methods utilised
- On going input from participating community groups
- Council feedback from the community.

The evaluation methods that will be used will be selected to best suit the project, program or decision. Evaluation may include the use of quantitative and qualitative evaluation tools. The evaluation process is part of the formal record of the engagement process that is retained by Council. The evaluation process will inform priorities for change and improvement for ongoing and future community engagement .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Section 7 - **Appendix**

Appendix 1:

Development Not Requiring Notification		
Development	**Requirement**	
Dwelling houses (including additions and ancillary structures) • Detached single-storey dwelling house (not including second-storey dwellings, additional/secondary dwellings, managers' residences) • Single storey additions/alterations to detached dwellings approved by Council • Single storey carports, garages and pergolas associated with a detached dwelling house approved by Council • Development ancillary or incidental to a detached dwelling house e.g. an outbuilding with a maximum area or 40m2 or 5m in height. Dual occupancy ancillary structures	Zone Side/Rear Boundary	Zone Side/Rear Boundary
	The setback from any side or rear boundary of the external wall of any structure is equal to, or greater than, the following: Refer also to notes 1 and 2	
	RU1 Primary Production	RU1 Primary Production
	RU2 Rural Landscape 20m	RU2 Rural Landscape 20m
	RU4 Primary Production Small Lots	Lot size up to 1ha =10m Lot size greater than 1ha=20m
	RU5 Village	900mm
	R1 General Residential	900mm
	R2 Low Density Residential	Lot size up to 1999m^2=900mm Lot size between 2000m^2-3999m^2=5m Lot size 4000m^2 or greater = 7.5m
• Single storey carports, garages and pergolas associated with a dual occupancy (attached or detached) approved by Council.	R3 Medium Density Residential	900mm
	R5 Large Lot Residential	Lot size up to 1ha = 10m Lot size greater than 1ha = 20m
	SP3 Tourist	Lot size up to 1999m^2 =900mm Lot size between 2000m^2-3999m^2=5m Lot size 4000m^2 or greater = 7.5m
	E2 Environmental Conservation	20m
	E3 Environmental Management	20m
	E4 Environmental Living	Lot size up to 1ha = 10m Lot size greater than 1ha = 20m

Development Not Requiring Notification	
Development	**Requirement**
Swimming Pools and Outdoor Spa Baths	• On lots over 2000m2 if the pool or outdoor spa bath (with minimum 10m side and rear boundary setback), will be ordinarily ancillary to a dwelling occupied for private use only.
Industrial uses • Minor additions in keeping with surrounding developments and the local environment • Change of use • First occupation	• Existing approved use • Light Industry to light Industry • No significant effect on the surrounding owners or the community.
Commercial Uses • Minor additions in keeping with surrounding developments and the local environment • Change of use • First occupation	• Existing approved use. • No significant effect on the surrounding owners or the community.
Internal Alterations	• Internal alterations that will not have any impact beyond the property boundary.
Tree Preservation Order Applications	• All applications other than those for any tree or stand of trees likely to have direct impact on amenity of adjoining residents.
Subdivision (unless Nominated Integrated Development) • Minor boundary adjustments • Strata subdivisions • Community title subdivisions • 2-lot subdivision for existing dual occupancy developments	• Not requiring physical works • Notification has already been undertaken at the DA stage.
Advertising Signs	• Applications which comply with Chapter G22: Advertising Signs and Structures of Shoalhaven LEP 2014.
Amendments to DA prior to determination	• Requested by Council following preliminary assessment • Requested by State Government Agencies; e.g. Rural Fire Service (RFS) following preliminary assessment. • Made in response to objections received. • If the result of conditions imposed on an application was previously notified.
Construction Certificate, Occupation Certificate and Compliance Certificate Applications	• Made under Part 4A of the EP&A Act 1979.
Exempt and Complying Developments	• As prescribed in SEPP (Exempt and Complying Development Codes) 2008, Part 3 and Schedule 2 of Shoalhaven LEP 2014 and as set out in Shoalhaven DCP 2014.


Shoalhaven City Council
Email: council@shoalhaven.nsw.gov.au
Bridge Road, Nowra (02) 4429 3111
Deering Street, Ulladulla (02) 4429 8999
All communication should be addressed to
The Chief Executive Officer:
PO Box 42, Nowra NSW 2541
DX 5323 Nowra NSW
Fax: (02) 4422 1816
shoalhaven.nsw.gov.au

Shoalhaven City Council

Annual Financial Statements

2018 - 2019

CL19.349 - Attachment 1

Shoalhaven City Council

GENERAL PURPOSE FINANCIAL STATEMENTS

for the year ended 30 June 2019

Shoalhaven City Council

General Purpose Financial Statements
for the year ended 30 June 2019

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Overview
Shoalhaven City Council is constituted under the Local Government Act 1993 (NSW) and has its principal place of business at:

36 Bridge Road
Nowra NSW 2541

Council's guiding principles are detailed in Chapter 3 of the LGA and includes:

- principles applying to the exercise of functions generally by council,
- principles to be applied when making decisions,
- principles of community participation,
- principles of sound financial management, and
- principles for strategic planning relating to the development of an integrated planning and reporting framework.

A description of the nature of Council's operations and its principal activities are provided in Note 2(b).

Through the use of the internet, we have ensured that our reporting is timely, complete and available at minimum cost. All press releases, financial statements and other information are publicly available on our website: www.shoalhaven.nsw.gov.au.

Shoalhaven City Council

General Purpose Financial Statements
for the year ended 30 June 2019

Understanding Council's Financial Statements

Introduction

Each year, individual Local Governments across NSW are required to present a set of audited financial statements to their council and community.

What you will find in the Statements

The financial statements set out the financial performance, financial position and cash flows of Council for the financial year ended 30 June 2019.

The format of the financial statements is standard across all NSW Councils and complies with both the accounting and reporting requirements of Australian Accounting Standards and requirements as set down by the Office of Local Government.

About the Councillor/Management Statement

The financial statements must be certified by senior staff as 'presenting fairly' the Council's financial results for the year and are required to be adopted by Council – ensuring both responsibility for and ownership of the financial statements.

About the Primary Financial Statements

The financial statements incorporate five "primary" financial statements:

1. The Income Statement
Summarises Council's financial performance for the year, listing all income and expenses. This statement also displays Council's original adopted budget to provide a comparison between what was projected and what actually occurred.

2. The Statement of Comprehensive Income
Primarily records changes in the fair value of Council's Infrastructure, property, plant and equipment.

3. The Statement of Financial Position
A 30 June snapshot of Council's financial position indicating its assets, liabilities and "net wealth".

4. The Statement of Changes in Equity
The overall change for the year (in dollars) of Council's "net wealth".

5. The Statement of Cash Flows
Indicates where Council's cash came from and where it was spent. This statement also displays Council's original adopted budget to provide a comparison between what was projected and what actually occurred.

About the Notes to the Financial Statements

The Notes to the Financial Statements provide greater detail and additional information on the five primary financial statements.

About the Auditor's Reports

Council's financial statements are required to be audited by the NSW Audit Office.

In NSW the auditor provides 2 audit reports:

1. an opinion on whether the financial statements present fairly the Council's financial performance and position, and
2. their observations on the conduct of the audit, including commentary on the Council's financial performance and financial position.

Who uses the Financial Statements?

The financial statements are publicly available documents and must be presented at a Council meeting between seven days and five weeks after the date of the audit report.

The public can make submissions to Council up to seven days subsequent to the public presentation of the financial statements.

Council is required to forward an audited set of financial statements to the Office of Local Government.

Financial Statements 2019

Shoalhaven City Council

General Purpose Financial Statements
for the year ended 30 June 2019

Statement by Councillors and Management made pursuant to Section 413(2)(c) of the Local Government Act 1993 (NSW) (as amended)

The attached General Purpose Financial Statements have been prepared in accordance with:

- the *Local Government Act 1993* (NSW) (as amended) and the regulations made thereunder,
- the Australian Accounting Standards and other pronouncements of the Australian Accounting Standards Board
- the *Local Government Code of Accounting Practice and Financial Reporting.*

To the best of our knowledge and belief, these statements:

- present fairly the Council's operating result and financial position for the year
- accord with Council's accounting and other records.

We are not aware of any matter that would render these statements false or misleading in any way.

Signed in accordance with a resolution of Council made on 29 October 2019.

Amanda Findley
Mayor
29 October 2019

Patricia White
Councillor
29 October 2019

Stephen Dunshea
Chief Executive Officer
29 October 2019

Vanessa Phelan
Responsible Accounting Officer
29 October 2019

Shoalhaven City Council

Income Statement

for the year ended 30 June 2019

Original unaudited budget 2019	$ '000	Notes	Actual 2019	Actual 2018 [1]
	Income from continuing operations			
	Revenue:			
139,982	Rates and annual charges	3a	142,417	135,722
74,505	User charges and fees	3b	73,857	76,177
4,676	Interest and investment revenue	3c	7,061	6,339
3,280	Other revenues	3d	4,492	4,167
20,324	Grants and contributions provided for operating purposes	3e,3f	20,170	18,419
18,989	Grants and contributions provided for capital purposes	3e,3f	27,092	31,136
	Other income:			
–	Fair value increment on investment properties	11	135	10
261,756	**Total income from continuing operations**		275,224	271,970
	Expenses from continuing operations			
73,306	Employee benefits and on-costs	4a	83,694	77,712
6,507	Borrowing costs	4b	6,604	5,431
62,172	Materials and contracts	4c	56,320	48,372
61,680	Depreciation and amortisation	4d	63,595	59,412
32,812	Other expenses	4e	32,706	32,022
–	Net losses from the disposal of assets	5	1,283	174
–	Revaluation decrement / impairment of IPP&E	4d	1,574	–
236,477	**Total expenses from continuing operations**		245,776	223,123
25,279	**Operating result from continuing operations**		29,448	48,847
25,279	Net operating result for the year		29,448	48,847
25,279	Net operating result attributable to council		29,448	48,847
6,290	**Net operating result for the year before grants and contributions provided for capital purposes**		2,356	17,711

(1) The Council has not restated comparatives when initially applying AASB 9. The comparative information has been prepared under *AASB 139 Financial Instruments: Recognition and Measurement*

The above Income Statement should be read in conjunction with the accompanying notes.

Shoalhaven City Council

Statement of Comprehensive Income

for the year ended 30 June 2019

$ '000	Notes	2019	2018 [1]
Net operating result for the year (as per Income Statement)		**29,448**	**48,847**
Other comprehensive income:			
Amounts which will not be reclassified subsequently to the operating result			
Gain (loss) on revaluation of IPP&E	10(a)	66,156	41,988
Total items which will not be reclassified subsequently to the operating result		66,156	41,988
Amounts which will be reclassified subsequently to the operating result when specific conditions are met			
Gain(/loss) on revaluation of equity instruments at fair value through other comprehensive income		(393)	–
Other movements		35	19
Total items which will be reclassified subsequently to the operating result when specific conditions are met		(358)	19
Total other comprehensive income for the year		65,798	42,007
Total comprehensive income for the year		95,246	90,854
Total comprehensive income attributable to Council		95,246	90,854

(1) The Council has not restated comparatives when initially applying AASB 9. The comparative information has been prepared under *AASB 139 Financial Instruments: Recognition and Measurement*

The above Statement of Comprehensive Income should be read in conjunction with the accompanying notes.

Shoalhaven City Council

Statement of Financial Position

as at 30 June 2019

$ '000	Notes	2019	Restated 2018 [1]	Restated 1 July 2017
ASSETS				
Current assets				
Cash and cash equivalent assets	6(a)	51,858	61,306	52,103
Investments	6(b)	116,046	114,192	102,949
Receivables	7	20,071	22,124	24,703
Inventories	8a	3,207	2,922	2,372
Other	8b	845	582	864
Non-current assets classified as 'held for sale'	9i	586	2,548	2,845
Total current assets		192,613	203,674	185,836
Non-current assets				
Investments	6(b)	42,665	46,000	50,000
Receivables	7	5,488	5,654	7,120
Inventories	8a	6,687	5,151	6,610
Infrastructure, property, plant and equipment	10(a)	2,829,516	2,726,909	2,596,281
Investment property	11a	1,700	1,565	1,555
Intangible assets	12	5,545	2,927	291
Total non-current assets		2,891,601	2,788,206	2,661,857
TOTAL ASSETS		3,084,214	2,991,880	2,847,693
LIABILITIES				
Current liabilities				
Payables	13	20,779	26,235	26,901
Income received in advance	13	5,633	7,384	4,429
Borrowings	13	13,826	12,223	9,573
Provisions	14	33,204	30,251	29,555
Total current liabilities		73,442	76,093	70,458
Non-current liabilities				
Borrowings	13	138,023	141,900	94,708
Provisions	14	6,751	4,194	3,687
Total non-current liabilities		144,774	146,094	98,395
TOTAL LIABILITIES		218,216	222,187	168,853
Net assets		2,865,998	2,769,693	2,678,840
EQUITY				
Accumulated surplus	15a	1,565,701	1,535,160	1,471,793
Revaluation reserves	15a	1,300,690	1,234,534	1,207,047
Other reserves	15a	(393)	–	–
Council equity interest		2,865,998	2,769,694	2,678,840
Total equity		2,865,998	2,769,694	2,678,840

(1) The Council has not restated comparatives when initially applying AASB 9. The comparative information has been prepared under *AASB 139 Financial Instruments: Recognition and Measurement*

The above Statement of Financial Position should be read in conjunction with the accompanying notes.

Shoalhaven City Council

Statement of Changes in Equity

for the year ended 30 June 2019

$ '000	Notes	2019 Accumulated surplus	2019 IPP&E revaluation reserve	2019 Financial assets at FVOCI	2019 Total equity	2018 [1] Accumulated surplus	2018 [1] IPP&E revaluation reserve	2018 [1] Financial assets at FVOCI	2018 [1] Total equity
Opening balance		1,535,160	1,234,534	–	2,769,694	1,475,975	1,207,047	–	2,683,022
Correction of prior period errors	15b	–	–	–	–	(4,182)	–	–	(4,182)
Adoption of new accounting standards – not retrospective	15c	1,058	–	–	1,058	–	–	–	–
Restated opening balance		1,536,218	1,234,534	–	2,770,752	1,471,793	1,207,047	–	2,678,840
Net operating result for the year		29,448	–	–	29,448	48,847	–	–	48,847
Other comprehensive income									
– Gain (loss) on revaluation of IPP&E	10(a)	–	66,156	–	66,156	–	41,988	–	41,988
– Gain(/loss) on revaluation of equity instruments at fair value through other comprehensive income		–	–	(393)	(393)	–	–	–	–
– Other movements – inclusion of management committees retained earnings		35	–	–	35	19	–	–	19
Other comprehensive income		35	66,156	(393)	65,798	19	41,988	–	42,007
Total comprehensive income		29,483	66,156	(393)	95,246	48,866	41,988	–	90,854
Transfers between equity items		–	–	–	–	14,501	(14,501)	–	–
Equity – balance at end of the reporting year		1,565,701	1,300,690	(393)	2,865,998	1,535,160	1,234,534	–	2,769,694

(1) The Council has not restated comparatives when initially applying AASB 9. The comparative information has been prepared under *AASB 139 Financial Instruments: Recognition and Measurement*

The above Statement of Changes in Equity should be read in conjunction with the accompanying notes.

Shoalhaven City Council

Statement of Cash Flows

for the year ended 30 June 2019

Original unaudited budget 2019	$ '000	Notes	Actual 2019	Actual 2018
	Cash flows from operating activities			
	Receipts			
139,438	Rates and annual charges		142,166	132,938
76,225	User charges and fees		75,823	84,631
4,676	Investment and interest revenue received		6,322	6,589
39,313	Grants and contributions		45,321	49,954
–	Bonds, deposits and retention amounts received		2,316	2,409
3,280	Other		20,299	19,591
	Payments			
(73,306)	Employee benefits and on-costs		(80,486)	(76,576)
(64,356)	Materials and contracts		(70,347)	(67,920)
(6,507)	Borrowing costs		(6,640)	(4,777)
–	Bonds, deposits and retention amounts refunded		(2,669)	(4,054)
(32,812)	Other		(38,990)	(31,750)
85,951	**Net cash provided from (or used in) operating activities**	16b	93,115	111,035
	Cash flows from investing activities			
	Receipts			
–	Sale of investment securities		123,978	134,027
1,600	Sale of real estate assets		821	2,560
2,684	Sale of infrastructure, property, plant and equipment		2,504	3,958
–	Deferred debtors receipts		17	12
	Payments			
–	Purchase of investment securities		(122,695)	(141,251)
(125,630)	Purchase of infrastructure, property, plant and equipment		(100,374)	(150,700)
(5,405)	Purchase of real estate assets		(1,792)	(216)
–	Purchase of intangible assets		(2,696)	–
–	Deferred debtors and advances made		(52)	–
(126,751)	**Net cash provided (or used in) investing activities**		(100,289)	(151,610)
	Cash flows from financing activities			
	Receipts			
9,801	Proceeds from borrowings and advances		9,875	59,262
	Payments			
(12,987)	Repayment of borrowings and advances		(12,149)	(9,484)
(3,186)	**Net cash flow provided (used in) financing activities**		(2,274)	49,778
(43,986)	**Net increase/(decrease) in cash and cash equivalents**		(9,448)	9,203
–	Plus: cash and cash equivalents – beginning of year	16a	61,306	52,103
(43,986)	Cash and cash equivalents – end of the year	16a	51,858	61,306
	Additional Information:			
–	plus: Investments on hand – end of year	6(b)	158,711	160,192
(43,986)	Total cash, cash equivalents and investments		210,569	221,498

The above Statement of Cash Flows should be read in conjunction with the accompanying notes.

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Contents of the Notes accompanying the Financial Statements

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 1. Basis of preparation

These financial statements were authorised for issue by Council on 29 October 2019. Council has the power to amend and reissue these financial statements.

The principal accounting policies adopted in the preparation of these consolidated financial statements are set out below.

These policies have been consistently applied to all the years presented, unless otherwise stated.

These general purpose financial statements have been prepared in accordance with Australian Accounting Standards and Australian Accounting Interpretations, the *Local Government Act 1993 (NSW)* and Regulations, and the Local Government Code of Accounting Practice and Financial Reporting.

Council is a not-for-profit entity.

The financial statements are presented in Australian dollars and are rounded to the nearest thousand dollars.

Unless otherwise indicated, all amounts disclosed in the financial statements are actual amounts. Specific budgetary amounts have been included for comparative analysis (to actuals) in the following reports and notes:

- Income statement
- Statement of cash flows
- Note 21 – Material budget variations

and are clearly marked.

(a) New and amended standards adopted by Council

During the year, Council adopted all standards which were mandatorily effective for the first time at 30 June 2019.

Those newly adopted standards which had an impact on reported position, performance and/or disclosures have been discussed in Note 15.

(b) Historical cost convention

These financial statements have been prepared under the historical cost convention, as modified by the revaluation of certain financial assets and liabilities and certain classes of infrastructure, property, plant and equipment and investment property.

(c) Significant accounting estimates and judgements

The preparation of financial statements requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Council's accounting policies.

Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that may have a financial impact on the Council and that are believed to be reasonable under the circumstances.

Critical accounting estimates and assumptions

Council makes estimates and assumptions concerning the future.

The resulting accounting estimates will, by definition, seldom equal the related actual results.

The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year include:

(i) estimated fair values of investment properties – refer Note 11
(ii) estimated fair values of infrastructure, property, plant and equipment – refer Note 10
(iii) estimated tip remediation provisions – refer Note 14
(iv) employee benefit provisions – refer Note 14.

Significant judgements in applying the council's accounting policies

(i) Impairment of receivables

continued on next page ...

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 1. Basis of preparation (continued)

Council has made a significant judgement about the impairment of a number of its receivables – refer Note 7.

Monies and other assets received by Council

(a) The Consolidated Fund

In accordance with the provisions of Section 409(1) of the Local Government Act 1993 (NSW), all money and property received by Council is held in the Council's Consolidated Fund unless it is required to be held in the Council's Trust Fund.

The Consolidated Fund has been included in the financial statements of Shoalhaven City Council.

Cash and other assets of the following entities have been included as part of the Consolidated Fund:

- general purpose operations
- water service
- sewer service
- domestic waste management
- southern water services
- Council's S355 management committees

(b) The Trust Fund

In accordance with the provisions of Section 411 of the *Local Government Act 1993 (NSW)* (as amended), a separate and distinct Trust Fund is maintained to account for all money and property received by the council in trust which must be applied only for the purposes of, or in accordance with, the trusts relating to those monies.

Trust monies and property subject to Council's control have been included in these reports.

A separate statement of monies held in the Trust Fund is available for inspection at the council office by any person free of charge.

Goods and Services Tax (GST)

Revenues, expenses and assets are recognised net of the amount of associated GST, unless the GST incurred is not recoverable from the taxation authority. In this case it is recognised as part of the cost of acquisition of the asset or as part of the expense.

Receivables and payables are stated inclusive of the amount of GST receivable or payable. The net amount of GST recoverable from, or payable to the taxation authority is included with other receivables or payables in the Statement of Financial Position.

Cash flows are presented on a gross basis. The GST components of cash flows arising from investing or financing activities that are recoverable from, or payable to, the taxation authority are presented as operating cash flows.

New accounting standards and interpretations issued not yet effective

Certain new accounting standards and interpretations have been published that are not mandatory for 30 June 2019 reporting periods (and which have not been early adopted by Council).

Council's assessment of these new standards and interpretations (where they have been deemed as having a material impact on Council's future financial performance, financial position and cash flows) are set out below:

AASB 16 Leases

AASB 16 will result (for YE 19/20 and beyond) in almost all operating leases being recognised on the balance sheet by Council (alongside existing finance leases) with the distinction between operating and finance leases removed.

Under the new standard, a financial liability (ie. a lease liability) and an asset (ie. a right to use the leased item) will be recognised for nearly all arrangements where Council commits itself to paying a rental fee for the use of a specific asset.

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Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 1. Basis of preparation (continued)

The only exceptions are short-term and low-value leases which are exempt from the accounting (but not disclosure) requirements of AASB 16 - Leases.

Council staff have reviewed all of Council's leasing arrangements over the last 12 months taking into consideration the new lease accounting rules in AASB 16 (applicable from 1/7/19).

Council's activities as a lessor are not material and hence Council does not expect any significant impact on the financial statements. However, some additional disclosures will be required from next year.

AASB 15 Revenue from Contracts with Customers and associated amending standards.

AASB15 introduces a five-step process for revenue recognition, with the core principle of the new standard being for entities to recognise revenue to depict the transfer of goods or services to customers in amounts that reflect the consideration (that is, payment) to which the entity expects to be entitled in exchange for those goods or services.

Accounting policy changes will arise in the timing of revenue recognition, treatment of contracts costs and contracts which contain a financing element.

Councils should assess each revenue stream but particular impact is expected for grant income and rates which are paid before the commencement of the rating period.

The changes in revenue recognition requirements in AASB15 may cause changes to the timing and amount of revenue recorded in the financial statements as well as additional disclosures.

The impact of AASB15 had timing adjustments applied this year would have been an increase of operating grant income of $177,410.

AASB 1058 Income of Not-For-Profit Entities

AASB 1058 supersedes all the income recognition requirements relating to councils, previously in AASB 1004 Contributions.

Under AASB 1058 the future timing of income recognition will depend on whether the transaction gives rise to a liability or other performance obligation (a promise to transfer a good or service) related to an asset (such as cash or another asset) received by an entity.

AASB 1058 also applies when a council receives volunteer services or enters into other transactions in which the consideration to acquire an asset is significantly less than the fair value of the asset, and where the council's objective is principally to enable the asset to further the council's objectives.

Upon initial recognition of the asset, this standard requires council to consider whether any other financial statement elements (called 'related amounts') should be recognised in accordance with the applicable accounting standard, such as:

(a) contributions by owners
(b) revenue, or a contract liability arising from a contract with a customer
(c) a lease liability
(d) a financial instrument, or
(e) a provision.

If the transaction is a transfer of a financial asset to enable council to acquire or construct a recognisable non-financial asset to be controlled by council (i.e. an in-substance acquisition of a non-financial asset), the council recognises a liability for the excess of the fair value of the transfer over any related amounts recognised. Council will then recognise income as it satisfies its obligations under the transfer similarly to income recognition in relation to performance obligations under AASB 15.

If the transaction does not enable council to acquire or construct a recognisable non-financial asset to be controlled by council, then any excess of the initial carrying amount of the recognised asset over the related amounts is recognised as income.

The specific impact of AASB1058 for Council had timing adjustments been applied this year would have resulted in a decrease of Capital grant income of $2,617,874.

AASB 2018-8 Amendments to Australian Accounting Standards – Right-of-Use Assets of Not-for-Profit Entities

continued on next page ...

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 1. Basis of preparation (continued)

This Standard provides a temporary option for not-for-profit entities to not apply the fair value initial measurement requirements for right-of-use assets arising under leases with significantly below market terms and conditions, principally to enable the entity to further its objectives (for example, concessionary or peppercorn leases).

The Standard requires an entity that elects to apply the option (i.e. measures a class or classes of such right-of-use assets at cost rather than fair value) to include additional disclosures in the financial statements to ensure users understand the effects on the financial position, financial performance and cash flows of the entity arising from these leases.

As per a NSW Office of Local Government recommendation, Council has elected to measure right-of-use assets (under a concessionary or peppercorn lease) at cost. The standard requires additional disclosures be provided in relation to below market-value leases measured at cost.

The specific impacts of AASB2018-8 for Council are not expected to be Material.

Council has not applied any pronouncements before its operative date in the annual reporting period beginning 1 July 2018.

Apart from those standards listed above, there are no other released standards (with future effective dates) that are expected to have a material impact on Council.

Council has not elected to apply any pronouncements before their operative date in these financial statements.

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 2(a). Council functions/activities – financial information

Income, expenses and assets have been directly attributed to the following functions or activities. Details of those functions or activities are provided in Note 2(b).

$ '000	Income from continuing operations 2019	Income from continuing operations 2018	Expenses from continuing operations 2019	Expenses from continuing operations 2018	Operating result from continuing operations 2019	Operating result from continuing operations 2018	Grants included in income from continuing operations 2019	Grants included in income from continuing operations 2018	Total assets held (current and non-current) 2019	Total assets held (current and non-current) 2018
Functions or activities										
Buildings and Property	1,305	1,275	10,872	8,727	(9,567)	(7,452)	113	91	127,837	118,248
Commercial Undertakings	33,155	30,257	36,119	31,504	(2,964)	(1,247)	–	8	149,309	129,490
Community and Culture	1,644	2,516	6,638	8,422	(4,994)	(5,906)	2,340	1,474	29,910	27,903
Economic Development	204	1,294	604	238	(400)	1,056	–	–	11,719	11,478
Environmental Management	2,067	282	4,235	2,044	(2,168)	(1,762)	2,039	194	86,071	85,362
Fire Protection and Emergency Services	1,270	851	2,811	2,623	(1,541)	(1,772)	1,272	838	19,464	19,381
Governance and Civic	68	25	6,091	5,884	(6,023)	(5,859)	–	–	612	532
Internal Corporate Services	100,352	100,145	15,348	7,195	85,004	92,950	12,785	10,953	127,027	119,836
Land Use Planning	717	971	3,114	3,246	(2,397)	(2,275)	–	–	1,411	1,432
Open Space, Sport and Recreation	3,842	1,502	15,813	14,644	(11,971)	(13,142)	2,880	175	287,985	264,616
Regulatory Services	6,611	6,758	15,862	14,501	(9,251)	(7,743)	170	176	2,965	3,218
Roads and Transport	15,370	18,602	36,998	36,562	(21,628)	(17,960)	11,955	13,596	1,098,322	1,102,567
Waste and Recycling Program	35,886	33,493	30,025	31,368	5,861	2,125	789	397	50,352	41,385
Water and Sewer Services	72,340	73,999	61,246	56,165	11,094	17,834	–	1,031	1,091,230	1,066,433
Total functions and activities	274,831	271,970	245,776	223,123	29,055	48,847	34,343	28,933	3,084,214	2,991,881

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 2(b). Council functions/activities - component descriptions

Details relating to the Council's functions/activities as reported in Note 2(a) are as follows:

Buildings and Property
Management, operations, maintenance and construction of community, residential, commercial and corporate buildings and property.

Commercial Undertakings
Management, operations, maintenance and construction of the category 1 and category 2 business units: bereavement services, entertainment centre, mechanical services, aquatic recreation facilities, holiday haven tourist parks.

Community and Culture
Community services, arts centre operations and maintenance, family day care, library operations, maintenance and capital and tourism and events.

Economic Development
Promotion of economic development within the Shoalhaven and the construction and sale of industrial land.

Environmental Management
Maintenance and capital expenditure on coastal areas, estuaries, floodplains, natural areas and Noxious weeds.

Fire Protection and Emergency Services
Emergency services levy payment, Rural Fire Service maintenance and station construction and emergency events.

Governance and Civic
General manager's duties, customer service, councillors, council meetings, elections, governance and council donations.

Internal Corporate Services
Asset planning and development management, financial planning and management, internal fleet management, human resources and organisation development, information technology, insurance and risk management and other management and support provided to the organisation.

Land Use Planning
Strategic planning for town planning and social and infrastructure planning.

Open Space, Sport and Recreation
Management, operations, maintenance and construction of recreation areas (active and passive), tree management and beach patrol.

Regulatory Services
Development, building, regulatory compliance (including rangers), companion animals, environmental and public health regulations.

Roads and Transport
Management, operations, maintenance and construction of roads, car parks, footpaths, stormwater, street lighting, streetscapes, traffic management and waterway infrastructure.

Waste and Recycling Program
Domestic waste management and land fill and transfer station operation.

Water and Sewer Services
Management, operations, maintenance and construction of water and sewer infrastructure.

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 3. Income from continuing operations

$ '000	2019	2018
(a) Rates and annual charges		
Ordinary rates		
Residential	65,188	61,372
Farmland	2,055	2,071
Business	4,935	4,673
Less: pensioner rebates (mandatory)	(2,140)	(2,141)
Rates levied to ratepayers	70,038	65,975
Pensioner rate subsidies received	1,179	1,178
Total ordinary rates	71,217	67,153
Special rates		
Town improvement	15	14
Town planning	957	952
Rates levied to ratepayers	972	966
Total special rates	972	966
Annual charges (pursuant to s.496, s.496A, s.496B, s.501 & s.611)		
Domestic waste management services	20,015	19,098
Stormwater management services	1,123	1,105
Water supply services	4,597	4,621
Sewerage services	43,851	42,192
Waste management services (non-domestic)	1,284	1,254
Less: pensioner rebates (mandatory)	(2,064)	(2,096)
Annual charges levied	68,806	66,174
Pensioner subsidies received:		
– Water	522	517
– Sewerage	509	515
– Domestic waste management	391	397
Total annual charges	70,228	67,603
TOTAL RATES AND ANNUAL CHARGES	142,417	135,722

Council has used 2018 year valuations provided by the NSW Valuer General in calculating its rates.

Accounting policy for rates and charges
Rates and annual charges are recognised as revenue when the Council obtains control over the assets comprising these receipts.

Pensioner rebates relate to reductions in rates and certain annual charges for eligible pensioners' place of residence in the local government council area that are not subsidised by the NSW Government.

Pensioner rate subsidies are received from the NSW Government to provide a contribution towards the pensioner rebates.

Control over assets acquired from rates and annual charges is obtained at the commencement of the rating year as it is an enforceable debt linked to the rateable property or, where earlier, upon receipt of the rates.

continued on next page ...

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 3. Income from continuing operations (continued)

$ '000	2019	2018
(b) User charges and fees		
Specific user charges		
(per s.502 - specific 'actual use' charges)		
Water supply services	16,848	17,762
Sewerage services	3,308	3,516
Waste management services (non-domestic)	11,059	10,810
Total specific user charges	31,215	32,088
Other user charges and fees		
(i) Fees and charges – statutory and regulatory functions (per s.608)		
Planning and building regulation	4,244	4,684
Private works	1,223	3,545
Section 10.7 certificates (EPA Act)	468	844
Section 603 certificates	199	249
Total fees and charges – statutory/regulatory	6,134	9,322
(ii) Fees and charges – other (incl. general user charges (per s.608))		
Animal charges	171	228
Cemeteries	1,728	1,987
Communication charges	1,408	806
Entertainment centre	1,485	1,532
Family day care	221	220
Food inspection fees	143	141
Health licence fees	199	181
Hire of council property	977	910
Leaseback fees – Council vehicles	1,049	948
Library	91	102
Swimming / leisure centres	4,161	4,229
Tourism	207	520
Tourist parks	24,134	22,842
Other	534	121
Total fees and charges – other	36,508	34,767
TOTAL USER CHARGES AND FEES	73,857	76,177

Accounting policy for user charges and fees

User charges and fees are recognised as revenue when the service has been provided.

continued on next page ...

Shoalhaven City Council

Notes to the Financial Statements
for the year ended 30 June 2019

Note 3. Income from continuing operations (continued)

$ '000	2019	2018
(c) Interest and investment revenue (including losses)		
Interest on financial assets measured at amortised cost		
– Overdue rates and annual charges (incl. special purpose rates)	553	520
– Cash and investments	6,151	5,648
Dividend income (other)	150	155
Fair value adjustments		
– Movements in investments at fair value through profit and loss	203	10
Amortisation of premiums and discounts		
– Interest free (and interest reduced) loans provided	4	6
TOTAL INTEREST AND INVESTMENT REVENUE	7,061	6,339
Interest revenue is attributable to:		
Unrestricted investments/financial assets:		
Overdue rates and annual charges (general fund)	276	294
General Council cash and investments	2,493	2,143
Restricted investments/funds - external:		
Development contributions		
– Section 7.11	976	909
– Section 64	564	516
Water fund operations	962	850
Sewerage fund operations	1,532	1,413
Domestic waste management operations	258	214
Total interest and investment revenue	7,061	6,339

Accounting policy for interest and investment revenue
Interest income is recognised using the effective interest rate at the date that interest is earned.

Dividends are recognised as income in profit or loss unless the dividend clearly represents a recovery of part of the cost of the investment.

continued on next page ...

Shoalhaven City Council

Notes to the Financial Statements
for the year ended 30 June 2019

Note 3. Income from continuing operations (continued)

$ '000	Notes	2019	2018
(d) Other revenues			
Commissions and agency fees		29	46
Credit card service fees		71	69
Discounts received		17	16
Fines – other		1,079	995
Fines – parking		575	532
Fuel tax credit		284	304
Insurance claims recoveries		33	69
Insurance rebates		2	52
Legal fees recovery – other		25	55
Legal fees recovery – rates and charges (extra charges)		223	264
Library – other councils		55	63
Miscellaneous sales		5	7
Recovery of Bad Debts Written Off		30	34
Recovery of other costs		410	393
Rental income – investment property	11	117	119
Rental income – other council properties		1,035	1,000
Other		502	149
TOTAL OTHER REVENUE		4,492	4,167

Accounting policy for other revenue
Council recognises revenue when the amount of revenue can be reliably measured, it is probable that future economic benefits will flow to the Council and specific criteria have been met for each of the Council's activities as described below. Council bases its estimates on historical results, taking into consideration the type of customer, the type of transaction and the specifics of each arrangement.

Fines are recognised as revenue when the penalty has been applied paid.

Miscellaneous sales are recognised when physical possession has transferred to the customer which is deemed to be the point of transfer of risks and rewards.

Other revenue is recorded when the payment is due, the value of the payment is notified, or the payment is received, whichever occurs first.

continued on next page ...

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 3. Income from continuing operations (continued)

$ '000	Operating 2019	Operating 2018	Capital 2019	Capital 2018
(e) Grants				
General purpose (untied)				
Current year allocation				
Financial assistance – general component	4,361	4,419	–	–
Financial assistance – local roads component	1,714	1,651	–	–
Payment in advance - future year allocation				
Financial assistance – general component	4,522	4,536	–	–
Financial assistance – local roads component	1,777	1,681	–	–
Total general purpose	12,374	12,287	–	–
Specific purpose				
Bushfire and emergency services	377	796	1,109	42
Community care	1,310	1,179	–	–
Community centres	–	–	21	30
Economic development	120	5	10	2
Environmental programs	1,771	85	50	22
Heritage and cultural	96	5	32	61
Library	300	277	–	–
LIRS subsidy	136	127	–	–
Noxious weeds	240	176	–	–
Recreation and culture	83	23	2,845	175
Storm/flood damage	593	–	–	–
Street lighting	259	254	–	–
Transport (roads to recovery)	–	–	2,261	1,403
Transport (other roads and bridges funding)	–	14	9,362	11,939
Other	213	31	781	–
Total specific purpose	5,498	2,972	16,471	13,674
Total grants	17,872	15,259	16,471	13,674
Grant revenue is attributable to:				
– Commonwealth funding	13,660	10,813	7,925	2,950
– State funding	4,003	4,405	8,542	10,724
– Other funding	209	41	4	–
	17,872	15,259	16,471	13,674

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Shoalhaven City Council

Notes to the Financial Statements
for the year ended 30 June 2019

Note 3. Income from continuing operations (continued)

$ '000	Notes	Operating 2019	Operating 2018	Capital 2019	Capital 2018
(f) Contributions					
Developer contributions: (s7.4 & s7.11 - EP&A Act, s64 of the LGA):					
Cash contributions					
S 7.11 – contributions towards amenities/services		–	–	2,912	5,269
S 64 – water supply contributions		–	–	1,252	2,047
S 64 – sewerage service contributions		–	–	1,487	2,647
Total developer contributions – cash		–	–	5,651	9,963
Total developer contributions	25	–	–	5,651	9,963
Other contributions:					
Cash contributions					
Community services		–	8	–	–
Heritage/cultural		–	2	–	–
Kerb and gutter		–	–	108	65
Recreation and culture		–	10	–	353
Roads and bridges		–	561	–	–
RMS contributions (regional roads, block grant)		2,298	2,252	–	391
Other		–	7	1,028	171
Other emergency event		–	320	–	1,439
Total other contributions – cash		2,298	3,160	1,136	2,419
Non-cash contributions					
Dedications		–	–	–	897
Dedications – subdivisions (other than by s7.11)		–	–	792	–
Sewerage (excl. section 64 contributions)		–	–	1,697	2,947
Water supplies (excl. section 64 contributions)		–	–	1,345	1,236
Total other contributions – non-cash		–	–	3,834	5,080
Total other contributions		2,298	3,160	4,970	7,499
Total contributions		2,298	3,160	10,621	17,462
TOTAL GRANTS AND CONTRIBUTIONS		20,170	18,419	27,092	31,136

Accounting policy for grants and contributions
Control over grants and contributions is normally obtained upon their receipt (or acquittal) and is valued at the fair value of the granted or contributed asset at the date of transfer.

Where grants or contributions recognised as revenues during the financial year were obtained on condition that they be expended in a particular manner, or used over a particular period, and those conditions were un-discharged at reporting date, the unused grant or contribution is disclosed below.

Council has obligations to provide facilities from contribution revenues levied on developers under the provisions of sections 7.4, 7.11 and 7.12 of the *Environmental Planning and Assessment Act 1979*.

While Council generally incorporates these amounts as part of a Development Consents Order, such developer contributions are only recognised as income upon receipt by Council, due to the possibility that individual development consents may not be acted upon by the applicant and, accordingly, would not be payable to Council.

Developer contributions may only be expended for the purposes for which the contributions were required, but the Council may apply contributions according to the priorities established in work schedules.

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Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 3. Income from continuing operations (continued)

A liability is recognised in respect of revenue that is reciprocal in nature to the extent that the requisite service has not been provided at reporting date.

$ '000	2019	2018
(g) Unspent grants and contributions		
Certain grants and contributions are obtained by Council on condition that they be spent in a specified manner:		
Operating grants		
Unexpended at the close of the previous reporting period	931	403
Add: operating grants recognised in the current period but not yet spent	340	746
Add: operating grants received for the provision of goods and services in a future period	–	–
Less: operating grants recognised in a previous reporting period now spent	(602)	(218)
Unexpended and held as restricted assets (operating grants)	669	931
There are 30 operating grants unspent as at 30 June 2019, the largest amount outstanding relates to a three year grant for riverbank restoration.		
Capital grants		
Unexpended at the close of the previous reporting period	1,634	1,508
Add: capital grants recognised in the current period but not yet spent	2,082	1,375
Add: capital grants received for the provision of goods and services in a future period	–	–
Less: capital grants recognised in a previous reporting period now spent	(1,098)	(1,249)
Unexpended and held as restricted assets (capital grants)	2,618	1,634
There are 41 capital grants unspent, with the largest ($417K) for Far North Collector Road land acquisitions, followed by $342K for the shared path bridge at Chris Creek and $209K for drainage and irrigation at six sporting fields.		
Contributions		
Unexpended at the close of the previous reporting period	49,895	45,511
Add: contributions recognised in the current period but not yet spent	–	–
Add: contributions received for the provision of goods and services in a future period	7,191	10,291
Add: contributions recognised as income in the current period obtained in respect of a future rating identified by Council for the purpose of establishing a rate	–	–
Less: contributions recognised in a previous reporting period now spent	(28,203)	(5,907)
Unexpended and held as restricted assets (contributions)	28,883	49,895
The unexpended contributions relate to developer contributions, refer to Note 25 for more details.		

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 4. Expenses from continuing operations

$ '000	2019	2018
(a) Employee benefits and on-costs		
Salaries and wages	64,791	60,335
Employee termination costs	3	58
Travel expenses	103	27
Employee leave entitlements (ELE)	13,337	13,486
Employee leave entitlement discounting adjustment	2,179	(241)
Superannuation	7,834	7,657
Workers' compensation insurance	1,207	992
Workers' compensation provision adjustment	17	(1)
Fringe benefit tax (FBT)	150	143
Payroll tax	889	785
Training costs (other than salaries and wages)	1,292	1,008
Other	435	323
Total employee costs	92,237	84,572
Less: capitalised costs	(8,543)	(6,860)
TOTAL EMPLOYEE COSTS EXPENSED	83,694	77,712

Accounting policy for employee benefits and on-costs
Employee benefit expenses are recorded when the service has been provided by the employee.

Retirement benefit obligations

All employees of the Council are entitled to benefits on retirement, disability or death. Council contributes to various defined benefit plans and defined contribution plans on behalf of its employees.

Superannuation plans

Contributions to defined contribution plans are recognised as an expense as they become payable. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in the future payments is available.

Council participates in a defined benefit plan under the Local Government Superannuation Scheme, however, sufficient information to account for the plan as a defined benefit is not available and therefore Council accounts for its obligations to defined benefit plans on the same basis as its obligations to defined contribution plans, i.e. as an expense when it becomes payable – refer to Note 19 for more information.

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Shoalhaven City Council

Notes to the Financial Statements
for the year ended 30 June 2019

Note 4. Expenses from continuing operations (continued)

$ '000	Notes	2019	2018
(b) Borrowing costs			
(i) Interest bearing liability costs			
Interest on loans		6,406	5,217
Interest on advances		18	32
Total interest bearing liability costs expensed		6,424	5,249
(ii) Other borrowing costs			
Fair value adjustments on recognition of advances and deferred debtors			
– Interest free (or favourable) loans and advances made by Council		56	–
Fair value adjustment on loans (to Council)		–	64
– Remediation liabilities	14	124	118
Total other borrowing costs		180	182
TOTAL BORROWING COSTS EXPENSED		6,604	5,431

Accounting policy for borrowing costs
Borrowing costs incurred for the construction of any qualifying asset are capitalised during the period of time that is required to complete and prepare the asset for its intended use or sale. Other borrowing costs are expensed.

$ '000	2019	2018
(c) Materials and contracts		
Raw materials and consumables	10,564	9,788
Contractor and consultancy costs	41,644	34,713
Auditors remuneration [2]	188	210
Legal expenses:		
– Legal expenses: planning and development	283	709
– Legal expenses: debt recovery	244	290
– Legal expenses: other	684	281
Operating leases:		
– Operating lease rentals: buildings	42	46
– Operating lease rentals: other	27	12
– Operating lease rentals: Motor vehicles [1]	78	3
Fuel	2,566	2,320
Total materials and contracts	56,320	48,372
TOTAL MATERIALS AND CONTRACTS	56,320	48,372

Accounting policy for operating leases
Leases in which a significant portion of the risks and rewards of ownership are not transferred to Council as lessee are classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) are charged to the income statement on a straight-line basis over the period of the lease.

1. Operating lease payments are attributable to:

Buildings	42	46
Motor vehicles	78	3
Other	27	12

2. Auditor remuneration
a. The following fees will be incurred for services provided by the NSW Auditor-General for the Audit of the 2018/19 Financial Statements: $120,600

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Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 4. Expenses from continuing operations (continued)

$ '000	2019	2018
b. During the year, the following fees were incurred for services provided by the auditor of Council, related practices and non-related audit firms		
Auditors of the Council - NSW Auditor-General:		
(i) Audit and other assurance services		
Audit and review of financial statements	139	155
Remuneration for audit and other assurance services	139	155
Total Auditor-General remuneration	139	155
Non NSW Auditor-General audit firms		
(i) Audit and other assurance services		
Other audit and assurance services	–	3
Remuneration for audit and other assurance services	–	3
(ii) Non-assurance services		
Other services	49	52
Remuneration for non-assurance services	49	52
Total remuneration of non NSW Auditor-General audit firms	49	55
Total Auditor remuneration	188	210

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Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 4. Expenses from continuing operations (continued)

$ '000	Notes	2019	2018
(d) Depreciation, amortisation and impairment of intangible assets and IPP&E			
Depreciation and amortisation			
Plant and equipment		5,525	5,127
Office equipment		936	920
Furniture and fittings		267	214
Land improvements (depreciable)		59	59
Infrastructure:			
– Buildings – non-specialised		349	106
– Buildings – specialised		8,449	7,250
– Other structures		1,367	1,322
– Roads		18,915	17,991
– Bridges		950	944
– Footpaths		1,316	1,190
– Stormwater drainage		2,431	2,371
– Water supply network		7,940	7,600
– Sewerage network		9,726	9,303
– Swimming pools		259	259
– Other open space/recreational assets		1,872	1,824
– Other infrastructure		2,757	2,530
Other assets:			
– Library books		371	336
Reinstatement, rehabilitation and restoration assets:			
– Tip assets	10(a),14	28	28
Intangible assets	12	78	38
Total gross depreciation and amortisation costs		63,595	59,412
Total depreciation and amortisation costs		63,595	59,412
Impairment / revaluation decrement of IPP&E			
Land Under Roads (post 01/07/2008)		1,574	–
Total gross IPP&E impairment / revaluation decrement costs / (reversals)		1,574	–
Total IPP&E impairment / revaluation decrement costs / (reversals) charged to Income Statement		1,574	–
TOTAL DEPRECIATION, AMORTISATION AND IMPAIRMENT / REVALUATION DECREMENT FOR INTANGIBLES AND IPP&E		65,169	59,412

Accounting policy for depreciation, amortisation and impairment expenses of intangibles and IPP&E

Depreciation and amortisation
Depreciation and amortisation are calculated using the straight line method to allocate their cost, net of their residual values, over their estimated useful lives. Useful lives are included in Note 10 for IPPE assets and Note 12 for intangible assets.

Impairment of non-financial assets
Council assets held at fair value that are not held primarily for their ability to generate net cash flow, and that are deemed to be specialised, are no longer required to be tested for impairment under AASB 136. This is because these assets are assessed on an annual basis to ensure that the carrying amount is not materially different from fair value and therefore an impairment loss would be captured during this assessment.

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Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 4. Expenses from continuing operations (continued)

Intangible assets that have an indefinite useful life, or are not yet available for use, are tested annually for impairment, or more frequently if events or changes in circumstances indicate that they might be impaired. Other assets that do not meet the criteria above are tested for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use.

For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash inflows that are largely independent of the cash inflows from other assets or groups of assets (cash-generating units). Non-financial assets that suffered an impairment are reviewed for possible reversal of the impairment at each reporting date.

Impairment losses for revalued assets are firstly offset against the amount in the revaluation surplus for the class of asset, with only the excess to be recognised in the Income Statement.

$ '000	2019	2018
(e) Other expenses		
Advertising	1,052	922
Bad and doubtful debts	35	102
Bank charges	672	650
Computer software, equipment and maintenance	2,924	1,880
Contributions/levies to other levels of government		
– NSW fire brigade levy	427	431
– NSW rural fire service levy	978	1,007
– State Emergency Services levy	138	162
– Waste levy	9,316	10,977
– Other contributions/levies	1,385	1,117
Councillor expenses – mayoral fee	42	43
Councillor expenses – councillors' fees	256	251
Councillors' expenses (incl. mayor) – other (excluding fees above)	253	223
Donations, contributions and assistance to other organisations (Section 356)	972	914
Insurance	2,654	2,993
Light, power and heating	5,347	4,036
Motor vehicle registrations	398	370
Postage	388	420
Printing and stationery	771	683
Street lighting	1,931	1,805
Subscriptions and publications	641	1,007
Telephone and communications	1,168	1,057
Valuation fees	572	414
Other	386	558
Total other expenses	32,706	32,022
TOTAL OTHER EXPENSES	32,706	32,022

Accounting policy for other expenses
Other expenses are recorded on an accruals basis as the Council receives the goods or services.

Shoalhaven City Council

Notes to the Financial Statements
for the year ended 30 June 2019

Note 5. Gains or losses from the disposal, replacement and de-recognition of assets

$ '000	Notes	2019	2018
Property (excl. investment property)			
Proceeds from disposal – property		59	869
Less: carrying amount of property assets sold/written off		(2,306)	(2,797)
Net gain/(loss) on disposal		(2,247)	(1,928)
Plant and equipment	10(a)		
Proceeds from disposal – plant and equipment		1,945	2,414
Less: carrying amount of plant and equipment assets sold/written off		(1,751)	(2,610)
Net gain/(loss) on disposal		194	(196)
Real estate assets held for sale	8		
Proceeds from disposal – real estate assets		821	2,560
Less: carrying amount of real estate assets sold/written off		(360)	(833)
Net gain/(loss) on disposal		461	1,727
Investments	6(b)		
Proceeds from disposal/redemptions/maturities – investments		123,978	134,027
Less: carrying amount of investments sold/redeemed/matured		(123,986)	(134,017)
Net gain/(loss) on disposal		(8)	10
Non-current assets classified as 'held for sale'	9		
Proceeds from disposal – non-current assets 'held for sale'		500	675
Less: carrying amount of 'held for sale' assets sold/written off		(165)	(462)
Net gain/(loss) on disposal		335	213
Other (Office Equipment)			
Less: carrying amount of Other (enter details...) assets sold/written off		(18)	–
Net gain/(loss) on disposal		(18)	–
NET GAIN/(LOSS) ON DISPOSAL OF ASSETS		(1,283)	(174)

Accounting policy for disposal of assets
Gains and losses on disposals are determined by comparing proceeds with carrying amount. These are included in the Income Statement.

The gain or loss on sale of an asset is determined when control of the asset has irrevocably passed to the buyer and the asset is de-recognised.

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 6(a). Cash and cash equivalent assets

$ '000	2019	2018
Cash and cash equivalents		
Cash on hand and at bank	16,488	9,975
Cash-equivalent assets		
– Deposits at call	8,945	2,930
– Managed funds	26,425	36,450
– Short-term deposits	–	11,951
Total cash and cash equivalents	51,858	61,306

Accounting policy for cash and cash equivalents
For Statement of Cash Flow presentation purposes, cash and cash equivalents include: cash on hand; deposits held at call with financial institutions; other short-term, highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value; and bank overdrafts. Bank overdrafts are shown within borrowings in current liabilities on the Statement of Financial Position.

Note 6(b). Investments

$ '000	2019 Current	2019 Non-current	2018 Current	2018 Non-current
Investments				
a. 'Financial assets at fair value through profit and loss'				
– 'Held for trading'	46,245	–	33,294	–
b. 'Financial assets at amortised cost' / 'held to maturity' (2018)	69,801	42,000	80,898	46,000
d. 'Financial assets at fair value through other comprehensive income' / 'available for sale financial assets' (2018)	–	665	–	–
Total Investments	116,046	42,665	114,192	46,000
TOTAL CASH ASSETS, CASH EQUIVALENTS AND INVESTMENTS	167,904	42,665	175,498	46,000
Financial assets at fair value through the profit and loss				
Managed funds	–	–	1,841	–
NCD's, FRN's (with maturities > 3 months)	46,245	–	31,453	–
Total	46,245	–	33,294	–
Financial assets at amortised cost / held to maturity (2018)				
Long term deposits	69,801	42,000	80,898	46,000
Total	69,801	42,000	80,898	46,000
Financial assets at fair value through other comprehensive income / available for sale financial assets (2018)				
Unlisted equity securities	–	665	–	–
Total	–	665	–	–

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Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 6(b). Investments (continued)

	Fair value at 30/06/19	Dividend income recognised during 1/7/18 – 30/6/19
Financial assets designated as at fair value through other comprehensive income		
At 1 July 2018, Council designated the investments shown below as financial assets as at fair value through other comprehensive income because these financial assets represent investments that the Council intends to hold for the long-term for strategic purposes. In 2018, these investments were classified as available for sale.		
Equity Securities	665	150
Total	665	150

No strategic investments were disposed of during 2019, and there were no transfers of any cumulative gain or loss within equity relating to these investments.

Accounting policy for investments

Accounting policy under AASB 9 – applicable from 1 July 2018

Financial instruments are recognised initially on the date that the Council becomes party to the contractual provisions of the instrument.

On initial recognition, all financial instruments are measured at fair value plus transaction costs (except for instruments measured at fair value through profit or loss where transaction costs are expensed as incurred).

Financial assets

All recognised financial assets are subsequently measured in their entirety at either amortised cost or fair value, depending on the classification of the financial assets.

Classification

On initial recognition, Council classifies its financial assets into the following categories – those measured at:

- amortised cost
- fair value through profit and loss (FVTPL)
- fair value through other comprehensive income – equity instrument (FVOCI-equity)

Financial assets are not reclassified subsequent to their initial recognition.

Amortised cost

Assets measured at amortised cost are financial assets where:

- the business model is to hold assets to collect contractual cash flows, and
- the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Council's financial assets measured at amortised cost comprise trade and other receivables and cash and cash equivalents in the Statement of Financial Position.

Subsequent to initial recognition, these assets are carried at amortised cost using the effective interest rate method less provision for impairment.

Interest income, impairment and gains or loss on de-recognition are recognised in profit or loss.

Fair value through other comprehensive income – equity instruments

Council has a number of strategic investments in entities over which they do not have significant influence nor control. Council has made an irrevocable election to classify these equity investments as fair value through other comprehensive income as they are not held for trading purposes.

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Shoalhaven City Council

Notes to the Financial Statements
for the year ended 30 June 2019

Note 6(b). Investments (continued)

These investments are carried at fair value with changes in fair value recognised in other comprehensive income (financial asset reserve). On disposal any balance in the financial asset reserve is transferred to accumulated surplus and is not reclassified to profit or loss.

Other net gains and losses excluding dividends are recognised in Other Comprehensive Income.

Financial assets through profit or loss
All financial assets not classified as measured at amortised cost or fair value through other comprehensive income as described above are measured at fair value through profit or loss.

Net gains or losses, including any interest or dividend income, are recognised in profit or loss.

Council's financial assets measured at fair value through profit or loss comprise investments in FRNs and NCDs in the Statement of Financial Position.

Accounting policy under AASB 139 – applicable for 2018 comparatives only

Classification
Council classifies its financial assets in the following categories: financial assets at fair value through profit or loss; loans and receivables; held-to-maturity investments; and available-for-sale financial assets. The classification depends on the purpose for which the investments were acquired. Management determines the classification of its investments at initial recognition and, in the case of assets classified as held-to-maturity, re-evaluates this designation at each reporting date.

(a) Financial assets at fair value through profit or loss
Financial assets at fair value through profit or loss are financial assets held for trading. A financial asset is classified in this category if acquired principally for the purpose of selling in the short-term. Assets in this category are held at fair value with changes in value taken through profit or loss at each reporting period.

(b) Held to maturity investments
Held-to-maturity investments are non-derivative financial assets with fixed or determinable payments and fixed maturities that Council's management has the positive intention and ability to hold to maturity. Assets in this category are measured at amortised cost.

(c) Loans and receivables
Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are included in current assets, except for those with maturities greater than 12 months after the reporting date which are classified as non-current assets. Loans and receivables are included in receivables (Note 7) in the Statement of Financial Position. Receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment. Receivables are generally due for settlement within 30 days.

Cash flows relating to short-term receivables are not discounted if the effect of discounting is immaterial.

(d) Available for sale financial assets
Available-for-sale financial assets are non-derivatives that are either designated in this category or not classified in any of the other categories. Investments are designated as available-for-sale if they do not have fixed maturities and fixed or determinable payments and management intends to hold them for the medium to long term. Assets in this category are held at fair value with changes in fair value taken to other comprehensive income.

Recognition and de-recognition
Regular purchases and sales of financial assets are recognised on trade-date: the date on which Council commits to purchase or sell the asset. Investments are initially recognised at fair value plus transaction costs for all financial assets not carried at fair value through profit or loss. Financial assets carried at fair value through profit or loss are initially recognised at fair value and transaction costs are expensed in the income statement. Investments are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and Council has transferred substantially all the risks and rewards of ownership.

When securities classified as available-for-sale are sold, the accumulated fair value adjustments recognised in equity are included in the Income Statement as gains and losses from investment securities.

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Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 6(b). Investments (continued)

Impairment of financial assets

Council assesses at the end of each reporting period whether there is objective evidence that a financial asset or group of financial assets is impaired. A financial asset or a group of financial assets is impaired and impairment losses are incurred only if there is objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset (a 'loss event') and that loss event (or events) has an impact on the estimated future cash flows of the financial asset or group of financial assets that can be reliably estimated.

Impairment of available for sale investments

In the case of equity investments classified as available-for-sale, a significant or prolonged decline in the fair value of the security below its cost is considered an indicator that the assets are impaired.

Note 6(c). Restricted cash, cash equivalents and investments – details

$ '000	2019 Current	2019 Non-current	2018 Current	2018 Non-current
Total cash, cash equivalents and investments	167,904	42,665	175,498	46,000
attributable to:				
External restrictions	93,821	34,545	122,335	37,863
Internal restrictions	55,039	8,120	35,571	8,137
Unrestricted	19,044	–	17,592	–
	167,904	42,665	175,498	46,000

$ '000	2019	2018
Details of restrictions		
External restrictions – included in liabilities		
Specific purpose unexpended loans – general	11,273	7,896
Specific purpose unexpended loans – sewer	1,797	36,450
Self insurance claims	1,517	1,500
External restrictions – included in liabilities	14,587	45,846
External restrictions – other		
Developer contributions – general	10,241	31,764
Developer contributions – water fund	18,642	18,131
Specific purpose unexpended grants	3,287	2,565
Water supplies	33,542	28,513
Sewerage services	35,867	26,235
Domestic waste management	7,820	4,938
Stormwater management	1,125	683
Other special levies	3,255	1,523
External restrictions – other	113,779	114,352
Total external restrictions	128,366	160,198

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 6(c). Restricted cash, cash equivalents and investments – details

$ '000	2019	2018
Internal restrictions		
Plant and vehicle replacement	2,310	1,818
Employees leave entitlement	8,120	8,137
Deposits, retentions and bonds	3,440	3,841
Arts collection	47	24
Committed capital works	2,441	5,495
Communication towers	1,564	1,509
Critical asset compliance	2,127	2,338
Economic development projects	846	1,022
Financial assistance grant	6,299	6,217
General insurance	409	477
Land decontamination	969	1,532
Land development reserve	6,210	7,362
North Nowra link road	38	468
Plant replacement cemeteries	131	105
S7.11 matching funds	311	340
Sporting facilities	148	205
Strategic projects	1,002	2,082
Strategic property acquisition	1,265	291
Coastal Management	873	445
S7.11 recoupment funds [1]	24,590	–
Jetty Licensing	19	–
Total internal restrictions	63,159	43,708
TOTAL RESTRICTIONS	191,525	203,906

(1) S7.11 recoupment funds are the balances from S7.11 projects that are no longer in the S7.11 contributions plan or contributions received on projects that have already been completed and the works were funded from the General Fund. The S7.11 recoupment funds are used as Council's matching funds on S7.11 construction projects.

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 7. Receivables

$ '000	2019 Current	2019 Non-current	2018 Current	2018 Non-current
Purpose				
Rates and annual charges	7,280	3,226	6,734	3,744
Interest and extra charges	256	1,699	629	1,012
User charges and fees	4,660	490	4,524	810
Accrued revenues				
– Interest on investments	1,553	–	1,335	–
– Other income accruals	370	–	383	–
Deferred debtors	20	73	22	88
Government grants and subsidies	4,321	–	6,214	–
Net GST receivable	1,183	–	1,661	–
Other debtors	831	–	1,034	–
Total	20,474	5,488	22,536	5,654
Less: provision of impairment				
Rates and annual charges	(16)	–	(239)	–
User charges and fees	(387)	–	(173)	–
Total provision for impairment – receivables	(403)	–	(412)	–
TOTAL NET RECEIVABLES	20,071	5,488	22,124	5,654
Externally restricted receivables				
Water supply				
– Rates and availability charges	399	30	412	140
– Other	3,279	810	3,434	766
Sewerage services				
– Rates and availability charges	4,294	827	3,904	1,569
– Other	1,220	403	2,246	136
Domestic waste management	587	530	609	628
Total external restrictions	9,779	2,600	10,605	3,239
Unrestricted receivables	**10,292**	**2,888**	**11,519**	**2,415**
TOTAL NET RECEIVABLES	20,071	5,488	22,124	5,654

$ '000	2019	2018
Movement in provision for impairment of receivables		
Balance at the beginning of the year (calculated in accordance with AASB 139)	412	383
+ new provisions recognised during the year	35	–
– amounts already provided for and written off this year	(11)	(41)
– amounts provided for but recovered during the year	(33)	70
Balance at the end of the period	403	412

Accounting policy for receivables

Recognition and measurement

Receivables are included in current assets, except for those with maturities greater than 12 months after the reporting date which are classified as non-current assets.

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Shoalhaven City Council

Notes to the Financial Statements
for the year ended 30 June 2019

Note 7. Receivables (continued)

Receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment. Receivables are generally due for settlement within 30 days.

Cash flows relating to short-term receivables are not discounted if the effect of discounting is immaterial.

Impairment

Accounting policy under AASB 9 applicable from 1 July 2018
Impairment of financial assets measured at amortised cost is recognised on an expected credit loss (ECL) basis.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition, and when estimating ECL, the Council considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis based on Council's historical experience and informed credit assessment, and including forward-looking information.

When considering the ECL for rates debtors, Council takes into account that unpaid rates represent a charge against the rateable property that will be recovered when the property is next sold. For non-rates debtors, Council uses the presumption that an asset which is more than 30 days past due has seen a significant increase in credit risk.

The Council uses the presentation that a financial asset is in default when:
- the other party is unlikely to pay its credit obligations to the Council in full, without recourse by the Council to actions such as realising security (if any is held) or
- the financial assets (for non-rates debtors) are more than 90 days past due.

Credit losses are measured as the present value of the difference between the cash flows due to the entity in accordance with the contract, and the cash flows expected to be received. This is applied using a probability weighted approach.

On initial recognition of the asset, an estimate of the expected credit losses for the next 12 months is recognised. Where the asset has experienced significant increase in credit risk then the lifetime losses are estimated and recognised.

There has been no change in the estimation techniques or significant assumptions made during the current reporting period.

The Council writes off a trade receivable when there is information indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery.

There were no receivables written off during the reporting period that are still subject to enforcement activity.

Where the Council renegotiates the terms of receivables due from certain customers, the new expected cash flows are discounted at the original effective interest rate and any resulting difference to the carrying value is recognised in profit or loss.

Accounting policy under AASB 139 – applicable for 2018 comparatives only
For loans and receivables, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the financial asset's original effective interest rate. The carrying amount of the asset is reduced and the amount of the loss is recognised in profit or loss.

Collectability of receivables is reviewed on an ongoing basis. Debts that are known to be uncollectable are written off by reducing the carrying amount directly. An allowance account (provision for impairment of receivables) is used when there is objective evidence that the Council will not be able to collect all amounts due according to the original terms of the receivables. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganisation, and default or delinquency in payments (more than 30 days overdue) are considered indicators that the receivable is impaired. When a receivable for which an impairment allowance had been recognised becomes uncollectable in a subsequent period, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against other expenses in the Income Statement.

Rates and annual charges outstanding are secured against the property.

Shoalhaven City Council

Notes to the Financial Statements
for the year ended 30 June 2019

Note 8. Inventories and other assets

$ '000	2019 Current	2019 Non-current	2018 Current	2018 Non-current
(a) Inventories				
(i) Inventories at cost				
Real estate for resale	1,548	6,687	1,264	5,151
Stores and materials	1,655	–	1,658	–
Other	4	–	–	–
Total inventories at cost	3,207	6,687	2,922	5,151
TOTAL INVENTORIES	3,207	6,687	2,922	5,151
(b) Other assets				
Prepayments	845	–	576	–
Other	–	–	6	–
TOTAL OTHER ASSETS	845	–	582	–

Externally restricted assets

$ '000	2019 Current	2019 Non-current	2018 Current	2018 Non-current
Water				
Stores and materials	1,117	–	1,103	–
Prepayments	52	–	3	–
Total water	1,169	–	1,106	–

$ '000	2019 Current	2019 Non-current	2018 Current	2018 Non-current
Total externally restricted assets	1,169	–	1,106	–
Total unrestricted assets	2,883	6,687	2,398	5,151
TOTAL INVENTORIES AND OTHER ASSETS	4,052	6,687	3,504	5,151

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Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 8. Inventories and other assets (continued)

(i) Other disclosures

$ '000	Notes	2019 Current	2019 Non-current	2018 Current	2018 Non-current
(a) Details for real estate development					
Industrial/commercial		1,548	6,687	1,264	5,151
Total real estate for resale		1,548	6,687	1,264	5,151
(Valued at the lower of cost and net realisable value)					
Represented by:					
Acquisition costs		100	180	6	289
Development costs		1,448	6,507	1,258	4,862
Total costs		1,548	6,687	1,264	5,151
Total real estate for resale		1,548	6,687	1,264	5,151
Movements:					
Real estate assets at beginning of the year		1,264	5,151	902	6,610
– Purchases and other costs		978	814	(21)	237
– Transfers in from (out to)	10(a)	–	388	(480)	–
– WDV of sales (expense)	5	(360)	–	(833)	–
– Transfer between current/non-current		(334)	334	1,696	(1,696)
Total real estate for resale		1,548	6,687	1,264	5,151

Accounting policy for inventories and other assets

Raw materials and stores, work in progress and finished goods
Raw materials and stores, work in progress and finished goods are stated at the lower of cost and net realisable value. Costs are assigned to individual items of inventory on the basis of weighted average costs. Costs of purchased inventory are determined after deducting rebates and discounts. Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

Inventory held for distribution
Inventory held for distribution is held at cost, adjusted where applicable for any loss of service potential.

Land held for resale/capitalisation of borrowing costs
Land held for resale is stated at the lower of cost and net realisable value. Cost is assigned by specific identification and includes the cost of acquisition, and development and borrowing costs during development. When development is completed, borrowing costs and other holding charges are expensed as incurred.

Borrowing costs included in the cost of land held for resale are those costs that would have been avoided if the expenditure on the acquisition and development of the land had not been made. Borrowing costs incurred while active development is interrupted for extended periods are recognised as expenses.

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 9. Non-current assets classified as held for sale

(i) Non-current assets

$ '000	2019 Current	2019 Non-current	2018 Current	2018 Non-current
Non-current assets 'held for sale'				
Land	586	–	1,150	–
Buildings	–	–	1,398	–
Total non-current assets 'held for sale'	586	–	2,548	–
TOTAL NON-CURRENT ASSETS CLASSIFIED AS 'HELD FOR SALE'	586	–	2,548	–

(ii) Details of assets

Council has made a decision to sell 3 parcels of land: Broadview Ave, Culburra; Bryces Road, Far Meadow; Island Point Road, St Georges Basin.

(iii) Reconciliation of non-current assets 'held for sale'

$ '000	2019 Assets 'held for sale'	2018 Assets 'held for sale'
Opening balance	2,548	2,845
Less: carrying value of assets/operations sold	(165)	(462)
Balance still unsold after 12 months:	2,383	2,383
Less: assets no longer classified as 'held for sale'	(2,083)	–
Plus new transfers in:		
– Assets 'held for sale'	286	165
Closing balance of 'held for sale' non-current assets	586	2,548

Accounting policy for non-current assets classified as held for sale

Non-current assets (or disposal groups) are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continued use. They are measured at the lower of their carrying amount and fair value less costs to sell, except for assets such as assets arising from employee benefits; financial assets; and investment properties that are carried at fair value.

An impairment loss is recognised for any initial or subsequent write-down of the asset (or disposal group) to fair value less costs to sell. A gain is recognised for any subsequent increases in fair value less costs to sell of an asset (or disposal group), but not in excess of any cumulative impairment loss previously recognised. A gain or loss not previously recognised by the date of the sale of the non-current asset (or disposal group) is recognised at the date of de-recognition.

Non-current assets (including those that are part of a disposal group) are not depreciated or amortised while they are classified as held for sale.

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 10(a). Infrastructure, property, plant and equipment

	as at 30/6/2018			Asset movements during the reporting period											as at 30/6/2019		
$ '000	Gross carrying amount	Accumulated depreciation	Net carrying amount	Additions renewals [1]	Additions new assets	Carrying value of disposals	Depreciation expense	Impairment loss / revaluation decrements (recognised in P/L)	WIP transfers	Adjustments and transfers	Tfrs from/(to) 'held for sale' category	Tfrs from/(to) real estate assets (Note 8)	Revaluation decrements to equity (ARR)	Revaluation increments to equity (ARR)	Gross carrying amount	Accumulated depreciation	Net carrying amount
Capital work in progress	143,396	–	143,396	12,428	41,535	–	–	–	(28,027)	(213)	–	–	–	–	169,119	–	169,119
Plant and equipment	72,438	(34,056)	38,382	5,801	3,173	(1,750)	(5,525)	–	957	1,051	–	–	–	–	79,180	(37,091)	42,089
Office equipment	21,460	(17,629)	3,831	110	829	(19)	(936)	–	17	(1)	–	–	–	–	22,353	(18,522)	3,831
Furniture and fittings	4,487	(2,258)	2,229	247	174	–	(267)	–	9	8	–	–	–	–	4,926	(2,526)	2,400
Land:																	
– Operational land	165,588	–	165,588	–	3,056	(54)	–	–	15	(116)	399	(1,130)	–	–	167,758	–	167,758
– Community land	125,386	–	125,386	–	182	–	–	–	–	(20)	–	–	–	–	125,548	–	125,548
– Land under roads (post 30/6/08)	2,867	–	2,867	–	316	–	–	(1,574)	–	–	–	–	–	–	1,609	–	1,609
Land improvements – non-depreciable	127,740	–	127,740	–	–	–	–	–	–	–	–	–	–	–	127,740	–	127,740
Land improvements – depreciable	1,829	(1,284)	545	–	1	–	(59)	–	–	–	–	–	–	–	1,829	(1,342)	487
Infrastructure:																	
– Buildings – non-specialised	13,865	(5,458)	8,407	1	354	(612)	(349)	–	2	(5,755)	–	–	(13)	–	2,035	–	2,035
– Buildings – specialised	446,621	(230,055)	216,566	1,894	2,726	(646)	(8,449)	–	3,168	2,762	1,398	–	–	54,426	388,954	(115,109)	273,845
– Other structures	36,365	(19,573)	16,792	267	515	–	(1,367)	–	290	1,353	–	–	–	–	38,872	(21,022)	17,850
– Roads	1,060,383	(361,797)	698,586	10,738	1,478	–	(18,915)	–	4,795	–	–	–	–	–	1,077,395	(380,713)	696,682
– Bridges	98,428	(35,799)	62,629	664	365	–	(950)	–	1,547	–	–	–	–	–	101,005	(36,750)	64,255
– Footpaths	70,675	(21,544)	49,131	81	1,039	–	(1,316)	–	363	17	–	–	–	–	72,175	(22,860)	49,315
– Bulk earthworks (non-depreciable)	107,394	–	107,394	617	234	–	–	–	1,429	–	–	–	–	–	109,674	–	109,674
– Stormwater drainage	188,682	(82,310)	106,372	981	405	–	(2,431)	–	862	–	–	198	–	–	191,127	(84,740)	106,387
– Water supply network	635,705	(297,144)	338,561	1,466	2,836	(490)	(7,940)	–	4,200	(43)	–	–	–	5,036	652,961	(309,335)	343,626
– Sewerage network	691,694	(258,397)	433,297	832	2,781	(504)	(9,726)	–	6,717	(35)	–	–	–	6,707	712,351	(272,282)	440,069
– Swimming pools	22,549	(12,722)	9,827	68	–	–	(259)	–	–	–	–	–	–	–	22,618	(12,982)	9,636
– Other open space/recreational assets	39,869	(19,995)	19,874	1,126	757	–	(1,872)	–	251	(172)	–	–	–	–	41,831	(21,867)	19,964
– Other infrastructure	94,061	(45,679)	48,382	2,035	2,087	–	(2,757)	–	3,405	(1,428)	–	544	–	–	100,713	(48,445)	52,268
Other assets:																	
– Library books	8,423	(7,443)	980	–	393	–	(371)	–	–	–	–	–	–	–	8,816	(7,814)	1,002
Reinstatement, rehabilitation and restoration assets (refer Note 14):																	
– Tip assets	2,176	(2,029)	147	–	–	–	(28)	–	–	2,208	–	–	–	–	3,589	(1,262)	2,327
Total Infrastructure, property, plant and equipment	4,182,081	(1,455,172)	2,726,909	39,356	65,236	(4,075)	(63,517)	(1,574)	–	(384)	1,797	(388)	(13)	66,169	4,224,178	(1,394,662)	2,829,516

(1) Renewals are defined as the replacement of existing assets (as opposed to the acquisition of new assets).

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Notes to the Financial Statements

for the year ended 30 June 2019

Note 10(a). Infrastructure, property, plant and equipment (continued)

	as at 30/6/2017			Asset movements during the reporting period									as at 30/6/2018		
$ '000	Restated gross carrying amount [2]	Restated accumulated depreciation [2]	Net carrying amount	Additions renewals	Additions new assets	Carrying value of disposals	Depreciation expense	WIP transfers	Adjustments and transfers	Tfrs from/(to) 'held for sale' category	Tfrs from/(to) real estate assets (Note 8)	Revaluation decrements to equity (ARR)	Restated gross carrying amount [2]	Restated accumulated depreciation [2]	Net carrying amount
Capital work in progress	84,735	–	84,735	23,212	73,796	–	–	(17,659)	(688)	–	–	–	143,396	–	143,396
Plant and equipment	87,927	(31,918)	36,009	1,046	8,983	(2,597)	(5,127)	–	67	–	–	–	72,438	(34,056)	38,382
Office equipment	19,778	(15,710)	4,068	133	400	(14)	(920)	151	13	–	–	–	21,460	(17,629)	3,831
Furniture and fittings	4,106	(2,044)	2,062	284	92	–	(214)	–	4	–	–	–	4,487	(2,258)	2,229
Land:															
– Operational land	136,320	–	136,320	–	1,880	(435)	–	–	(3,921)	(165)	250	31,658	165,588	–	165,588
– Community land	120,368	–	120,368	–	193	(237)	–	–	3,008	–	–	2,053	125,386	–	125,386
– Land under roads (post 30/6/08)	1,147	–	1,147	–	61	–	–	–	1,429	–	230	–	2,867	–	2,867
Land improvements – non-depreciable	127,183	–	127,183	–	557	–	–	–	–	–	–	–	127,740	–	127,740
Land improvements – depreciable	1,829	(1,225)	604	–	–	–	(59)	–	–	–	–	–	1,829	(1,284)	545
Infrastructure:															
– Buildings – non–specialised	12,308	(5,351)	6,957	–	660	–	(106)	–	896	–	–	–	13,865	(5,458)	8,407
– Buildings – specialised	446,556	(227,160)	219,396	944	4,672	(2,110)	(7,250)	884	31	–	–	–	446,621	(230,055)	216,566
– Other structures	35,901	(18,252)	17,649	102	255	–	(1,322)	54	53	–	–	–	36,365	(19,573)	16,792
– Roads	1,033,462	(343,807)	689,655	11,498	4,711	–	(17,991)	10,679	33	–	–	–	1,060,383	(361,797)	698,586
– Bridges	97,856	(34,855)	63,001	–	563	–	(944)	9	–	–	–	–	98,428	(35,799)	62,629
– Footpaths	66,278	(20,354)	45,924	530	1,794	–	(1,190)	1,970	103	–	–	–	70,675	(21,544)	49,131
– Bulk earthworks (non–depreciable)	104,233	–	104,233	1,658	1,503	–	–	–	–	–	–	–	107,394	–	107,394
– Stormwater drainage	186,566	(79,939)	106,627	1,054	816	–	(2,371)	246	–	–	–	–	188,682	(82,310)	106,372
– Water supply network	618,500	(283,757)	334,743	260	2,625	(14)	(7,600)	1,572	36	–	–	5,940	635,705	(297,144)	338,561
– Sewerage network	702,100	(262,283)	439,817	584	3,371	–	(9,303)	237	(2,745)	–	–	1,337	691,694	(258,397)	433,297
– Swimming pools	22,519	(12,463)	10,056	–	30	–	(259)	–	–	–	–	–	22,549	(12,722)	9,827
– Other open space/recreational assets	36,922	(18,169)	18,753	571	1,253	–	(1,824)	1,073	51	–	–	–	39,869	(19,995)	19,874
– Other infrastructure	89,037	(43,149)	45,888	2,467	1,751	–	(2,530)	783	23	–	–	–	94,061	(45,679)	48,382
Other assets:															
– Library books	8,019	(7,107)	912	–	403	–	(336)	–	–	–	–	–	8,423	(7,443)	980
Reinstatement, rehabilitation and restoration assets (refer Note 14):															
– Tip assets	2,176	(2,002)	174	–	–	–	(28)	–	–	–	–	–	2,176	(2,029)	147
Total Infrastructure, property, plant and equipment	4,005,826	(1,409,545)	2,596,281	44,343	110,369	(5,407)	(59,374)	(1)	(1,607)	(165)	480	41,988	4,182,081	(1,455,172)	2,726,909

(1) Renewals are defined as the replacement of existing assets (as opposed to the acquisition of new assets).

(2) Restated balance due to a correction of errors relating to a previous reporting period, refer to Note 15(b) for details

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Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 10(a). Infrastructure, property, plant and equipment (continued)

Accounting policy for infrastructure, property, plant and equipment

Infrastructure, property, plant and equipment are held at fair value. Independent comprehensive valuations are performed at least every five years, however the carrying amount of assets is assessed by Council at each reporting date to confirm that it is not materially different from current fair value.

Water and sewerage network assets are indexed at each reporting period in accordance with the Rates Reference Manual issued by Department of Industry (DoI) - Water.

Increases in the carrying amounts arising on revaluation are credited to the revaluation reserve. To the extent that the increase reverses a decrease previously recognising profit or loss relating to that asset class, the increase is first recognised as profit or loss. Decreases that reverse previous increases of assets in the same class are first charged against revaluation reserves directly in equity to the extent of the remaining reserve attributable to the class; all other decreases are charged to the Income Statement.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to Council and the cost of the item can be measured reliably. All other repairs and maintenance are charged to the Income Statement during the financial period in which they are incurred.

When infrastructure, property, plant and equipment are acquired by Council for nil or nominal consideration, the assets are initially recognised at their fair value at acquisition date.

Land is not depreciated. Depreciation on other assets is calculated using the straight-line method to allocate their cost, net of their residual values, over their estimated useful lives as follows:

Plant and equipment	Years	**Other equipment**	Years
Office equipment	10	Playground equipment	4 to 20
Office furniture	10	Benches, seats etc.	10 to 20
Computer equipment	4		
Vehicles	3 to 5	**Buildings**	
Heavy plant/road making equipment	6	Buildings: heritage	160
Other plant and equipment	10 to 30	Buildings: masonry	60 to 80
		Buildings: other	25 to 60
Water assets			
Dams and reservoirs	100	**Sewer assets**	
Treatment plants	25 to 70	Pipes	40 to 117
Pipes	80	Pumping stations	20 to 100
Other water assets	20 to 80	Treatment works	10 to 50
		Other sewer assets	20 to 100
Transportation assets			
Sealed roads and carparks: surface	12 to 40	**Other infrastructure assets**	
Sealed roads and carparks: pavement	20 to 80	Other Structures	5 to 50
Unsealed roads	20	Swimming pools	50
Bridge	40 to 80	Depreciable land improvements	10 to 50
Traffic facilities	40	Other open space/recreational assets	10 to 20
Bus shelter	20	Other infrastructure	10 to 50
Kerb and gutter	70		
Footpaths	35 to 50	**Stormwater assets**	
Crash barriers and fencing	20 to 40	Various	60 to 80

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at each reporting date.

Gains and losses on disposals are determined by comparing proceeds with carrying amount. These are included in the Income Statement.

Land under roads

Land under roads is land under roadways and road reserves including land under footpaths, nature strips and median strips.

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Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 10(a). Infrastructure, property, plant and equipment (continued)

Council has elected not to recognise land under roads acquired before 1 July 2008 in accordance with AASB 1051 Land Under Roads.

Land under roads acquired after 1 July 2008 is recognised in accordance with AASB 116 Property, Plant and Equipment.

Crown reserves
Crown reserves under Council's care and control are recognised as assets of the council. While ownership of the reserves remains with the Crown, Council retains operational control of the reserves and is responsible for their maintenance and use in accordance with the specific purposes to which the reserves are dedicated.

Improvements on Crown reserves are also recorded as assets, while maintenance costs incurred by Council and revenues relating to the reserves are recognised within Council's Income Statement.

Rural Fire Service assets
Under Section 119 of the *Rural Fire Services Act 1997 (NSW)*, "all firefighting equipment purchased or constructed wholly or from money to the credit of the Fund is to be vested in the council of the area for or on behalf of which the firefighting equipment has been purchased or constructed".

Council's position remains that it controls and recognises the land and buildings but it doesn't control the plant and equipment.

Note 10(b). Externally restricted infrastructure, property, plant and equipment

	2019			2018		
$ '000	Gross carrying amount	Accumulated depn. and impairment	Net carrying amount	Gross carrying amount	Accumulated depn. and impairment	Net carrying amount
Water supply						
WIP	4,850	–	4,850	6,625	–	6,625
Plant and equipment	9,300	4,116	5,184	8,805	3,547	5,258
Office equipment	3,420	2,355	1,065	3,366	2,090	1,276
Furniture and fittings	1,136	382	754	1,106	297	809
Land						
– Operational land	6,826	–	6,826	6,749	–	6,749
– Community land	128	–	128	128	–	128
Buildings	16,706	5,081	11,625	17,818	9,166	8,652
Other structures	1,069	731	338	831	459	372
Infrastructure	652,961	309,335	343,626	635,704	297,145	338,559
Total water supply	696,396	322,000	374,396	681,132	312,704	368,428
Sewerage services						
WIP	133,077	–	133,077	106,475	–	106,475
Plant and equipment	8,903	4,530	4,373	8,848	4,236	4,612
Office equipment	1,310	993	317	1,245	949	296
Furniture and fittings	139	64	75	139	64	75
– Operational land	16,746	–	16,746	15,637	–	15,637
– Community land	1,022	–	1,022	1,022	–	1,022
Buildings	17,659	4,414	13,245	18,035	6,875	11,160
Other structures	119	61	58	19	3	16
Infrastructure	712,351	272,282	440,069	691,694	258,396	433,298
Total sewerage services	891,326	282,344	608,982	843,114	270,523	572,591
TOTAL RESTRICTED I,PP&E	1,587,722	604,344	983,378	1,524,246	583,227	941,019

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 11. Investment property

$ '000	2019	2018
(a) Investment property at fair value		
Investment property on hand	1,700	1,565
Reconciliation of annual movement:		
Opening balance	1,565	1,555
– Net gain/(loss) from fair value adjustments	135	10
CLOSING BALANCE – INVESTMENT PROPERTY	1,700	1,565

(b) Valuation basis

The basis of valuation of investment properties is fair value, being the amounts for which the properties could be exchanged between willing parties in arms length transaction, based on current prices in an active market for similar properties in the same location and condition and subject to similar leases.

The 2019 revaluations were based on independent assessments made by:
Darren Austin AAPI, of Walsh & Monaghan Pty Ltd

(c) Contractual obligations at reporting date

Refer to Note 18 for disclosures relating to any capital and service obligations that have been contracted.

(d) Leasing arrangements – Council as lessor

The investment properties are leased to tenants under long-term operating leases with rentals payable monthly.

Future minimum lease payments receivable under non-cancellable investment property operating leases not recognised in the financial statements are receivable as follows:

Within 1 year	114	109
Later than 1 year but less than 5 years	45	92
Later than 5 years	17	26
Total minimum lease payments receivable	176	227

Council owns six shops, 37 to 43 Kinghorne St Nowra, which are leased. The leases are either for 2 or 3 years with an optional 2 year extension. The collection of rental payments is managed by a real estate agent and are received monthly. Five of the six properties are leased as at 30 June 2019.

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Shoalhaven City Council

Notes to the Financial Statements
for the year ended 30 June 2019

Note 11. Investment property (continued)

$ '000	2019	2018
(e) Investment property income and expenditure – summary		
Rental income from investment property:		
– Minimum lease payments	114	117
– Other income	3	2
Direct operating expenses on investment property:		
– that generated rental income	(24)	(17)
Net revenue contribution from investment property	93	102
plus:		
Fair value movement for year	135	10
Total income attributable to investment property	228	112

Accounting policy for investment property
Investment property, principally comprising freehold retail buildings, is held for long-term rental yields and is not occupied by the Council. Changes in fair values are recorded in the income statement as part of other income.

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 12. Intangible assets

$ '000	2019	2018
Intangible assets are as follows:		
Opening values at 1 July		
Gross book value	2,965	291
Accumulated amortisation	(38)	–
Net book value – opening balance	2,927	291
Movements for the year		
– Purchases	1,021	138
– Development costs	1,675	2,536
– Amortisation charges	(78)	(38)
Closing values at 30 June		
Gross book value	5,660	2,965
Accumulated amortisation	(115)	(38)
TOTAL INTANGIBLE ASSETS – NET BOOK VALUE	5,545	2,927
The net book value of intangible assets represents:		
– Software	5,545	2,927
	5,545	2,927

Accounting policy for intangible assets

IT development and software

Costs incurred in developing products or systems and costs incurred in acquiring software and licenses that will contribute to future period financial benefits through revenue generation and/or cost reduction are capitalised to software and systems.

Costs capitalised include external direct costs of materials and service, direct payroll, and payroll related costs of employees' time spent on the project. Amortisation is calculated on a straight line basis over periods generally ranging from three to five years. IT development costs include only those costs directly attributable to the development phase and are only recognised following completion of technical feasibility, and where Council has an intention and ability to use the asset.

Shoalhaven City Council

Notes to the Financial Statements
for the year ended 30 June 2019

Note 13. Payables and borrowings

$ '000	2019 Current	2019 Non-current	2018 Current	2018 Non-current
Payables				
Goods and services	6,190	–	6,593	–
Accrued expenses:				
– Borrowings	1,543	–	1,635	–
– Salaries and wages	1,781	–	1,617	–
– Other expenditure accruals	7,777	–	12,549	–
Security bonds, deposits and retentions	3,488	–	3,841	–
Total payables	20,779	–	26,235	–
Income received in advance				
Payments received in advance	5,633	–	7,384	–
Total income received in advance	5,633	–	7,384	–
Borrowings				
Loans – secured [1]	13,748	137,644	12,201	141,535
Ratepayers' advances	78	379	22	365
Total borrowings	13,826	138,023	12,223	141,900
TOTAL PAYABLES AND BORROWINGS	40,238	138,023	45,842	141,900

(1) Loans are secured over the general rating income of Council. Disclosures on liability interest rate risk exposures, fair value disclosures and security can be found in Note 20.

$ '000	2019 Current	2019 Non-current	2018 Current	2018 Non-current
(a) Payables and borrowings relating to restricted assets				
Externally restricted assets				
Water	1,886	–	1,349	–
Sewer	14,449	98,140	14,631	57,429
Domestic waste management	157	–	791	–
Payables and borrowings relating to externally restricted assets	16,492	98,140	16,771	57,429
Total payables and borrowings relating to restricted assets	16,492	98,140	16,771	57,429
Total payables and borrowings relating to unrestricted assets	**23,746**	**39,883**	**29,071**	**84,471**
TOTAL PAYABLES AND BORROWINGS	40,238	138,023	45,842	141,900

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Shoalhaven City Council

Notes to the Financial Statements
for the year ended 30 June 2019

Note 13. Payables and borrowings (continued)

(b) Current payables and borrowings not anticipated to be settled within the next twelve months

The following liabilities, even though classified as current, are not expected to be settled in the next 12 months.

Total payables and borrowings	–	–

(c) Changes in liabilities arising from financing activities

$ '000	as at 30/6/2018 Opening Balance	Cash flows	Non-cash acquisitions	Non-cash fair value changes	Other non-cash movements	as at 30/6/2019 Closing balance
Loans – secured	153,736	(2,344)	–	–	–	151,392
Ratepayers' advances	387	70	–	–	–	457
TOTAL	154,123	(2,274)	–	–	–	151,849

$ '000	as at 30/6/2017 Opening Balance	Cash flows	Non-cash acquisitions	Non-cash fair value changes	Other non-cash movements	as at 30/6/2018 Closing balance
Loans – secured	103,934	49,802	–	–	–	153,736
Ratepayers' advances	347	40	–	–	–	387
TOTAL	104,281	49,842	–	–	–	154,123

$ '000	2019	2018
(d) Financing arrangements		
(i) Unrestricted access was available at balance date to the following lines of credit:		
Bank overdraft facilities [1]	–	400
Credit cards/purchase cards [2]	550	1,050
Total financing arrangements	550	1,450
Drawn facilities as at balance date:		
– Credit cards/purchase cards	94	88
Total drawn financing arrangements	94	88
Undrawn facilities as at balance date:		
– Bank overdraft facilities	–	400
– Credit cards/purchase cards	456	962
Total undrawn financing arrangements	456	1,362

Additional financing arrangements information

Breaches and defaults
During the current and prior year, there were no defaults or breaches on any of the loans.

Security over loans

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Shoalhaven City Council

Notes to the Financial Statements
for the year ended 30 June 2019

Note 13. Payables and borrowings (continued)

Loans are secured by a charge on the income of Council pursuant to Section 623 of the Local Government Act and clause 229 of the Local Government Regulations.

(1) The overdraft facility with Council's previous transactional bank was cancelled during the 2018/19 financial year.

(2) Due to the change in transactional banks, there were two credit card facilities open at 30 June 2018. The previous facility was closed during the 2018/19 financial year, Council has one credit card facility open at 30 June 2019.

Accounting policy for payables and borrowings
Council measures all financial liabilities initially at fair value less transaction costs, subsequently financial liabilities are measured at amortised cost using the effective interest rate method.

The financial liabilities of the Council comprise trade payables, bank and other loans and finance lease liabilities.

Payables
These amounts represent liabilities for goods and services provided to the council prior to the end of financial year that are unpaid. The amounts are unsecured and are usually paid within 30 days of recognition.

Borrowings
Borrowings are initially recognised at fair value, net of transaction costs incurred. Borrowings are subsequently measured at amortised cost. Any difference between the proceeds (net of transaction costs) and the redemption amount is recognised in the Income Statement over the period of the borrowings using the effective-interest method. Fees paid on the establishment of loan facilities are recognised as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the drawdown occurs. To the extent that there is no evidence that it is probable that some or all of the facility will be drawn down, the fee is capitalised as a prepayment for liquidity services and amortised over the period of the facility to which it relates.

Borrowings are removed from the Statement of Financial Position when the obligation specified in the contract is discharged, cancelled or expired. The difference between the carrying amount of a financial liability that has been extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognised in other income or finance cost.

Borrowings are classified as current liabilities unless Council has an unconditional right to defer settlement of the liability for at least 12 months after the reporting date.

Shoalhaven City Council

Notes to the Financial Statements
for the year ended 30 June 2019

Note 14. Provisions

$ '000	2019 Current	2019 Non-current	2018 Current	2018 Non-current
Provisions				
Employee benefits				
Annual leave	6,237	–	5,956	–
Sick leave	12,729	–	11,415	–
Long service leave	13,788	928	12,447	703
Sub-total – aggregate employee benefits	32,754	928	29,818	703
Asset remediation/restoration:				
Asset remediation/restoration (future works)	–	4,756	–	2,424
Sub-total – asset remediation/restoration	–	4,756	–	2,424
Other provisions				
Self insurance – workers compensation	450	1,067	433	1,067
Sub-total – other provisions	450	1,067	433	1,067
TOTAL PROVISIONS	33,204	6,751	30,251	4,194

(a) Provisions relating to restricted assets

Externally restricted assets				
Self insurance	450	1,067	433	1,067
Provisions relating to externally restricted assets	450	1,067	433	1,067
Total provisions relating to restricted assets	450	1,067	433	1,067
Total provisions relating to unrestricted assets	**32,754**	**5,684**	**29,818**	**3,127**
TOTAL PROVISIONS	33,204	6,751	30,251	4,194

$ '000	2019	2018
(b) Current provisions not anticipated to be settled within the next twelve months		
The following provisions, even though classified as current, are not expected to be settled in the next 12 months.		
Provisions – employees benefits	21,942	19,215
	21,942	19,215

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Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 14. Provisions (continued)

(c) Description of and movements in provisions

	ELE provisions			
$ '000	Annual leave	Sick leave	Long service leave	Total
2019				
At beginning of year	5,956	11,415	13,150	30,521
Additional provisions	8,085	3,222	2,754	14,061
Amounts used (payments)	(7,804)	(3,294)	(1,981)	(13,079)
Remeasurement effects	–	1,386	793	2,179
Total ELE provisions at end of period	6,237	12,729	14,716	33,682
2018				
At beginning of year	5,625	11,417	12,393	29,435
Additional provisions	6,802	1,514	2,960	11,276
Amounts used (payments)	(6,471)	(1,407)	(2,071)	(9,949)
Remeasurement effects	–	(109)	(132)	(241)
Total ELE provisions at end of period	5,956	11,415	13,150	30,521

	Other provisions		
$ '000	Self insurance	Asset remediation	Total
2019			
At beginning of year	1,500	2,424	3,924
Changes to provision:			
– Revised costs	17	–	17
Other	–	2,332	2,332
Total other provisions at end of period	1,517	4,756	6,273
2018			
At beginning of year	1,501	2,306	3,807
– Revised costs	(1)	–	(1)
Unwinding of discount	–	118	118
Total other provisions at end of period	1,500	2,424	3,924

Nature and purpose of non-employee benefit provisions

Asset remediation
Council has a legal/public obligation to make, restore, rehabilitate and reinstate the council's waste management land fill sites.

Self-insurance
To recognise liabilities for outstanding claims (uninsured losses) arising from Council's decision to undertake self-insurance for certain risks faced.

Accounting policy for provisions

Provisions are recognised when Council has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation, and the amount has been reliably estimated.

Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognised even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

Provisions are measured at the present value of management's best estimate of the expenditure required to settle the present obligation at the reporting date. The discount rate used to determine the present value reflects current market assessments

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Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 14. Provisions (continued)

of the time value of money and the risks specific to the liability. The increase in the provision due to the passage of time is recognised as interest expense.

Employee benefits

Short-term obligations

Liabilities for wages and salaries (including non-monetary benefits, annual leave and accumulating sick leave expected to be wholly settled within 12 months after the end of the period in which the employees render the related service) are recognised in respect of employees' services up to the end of the reporting period and are measured at the amounts expected to be paid when the liabilities are settled. The liability for annual leave and accumulating sick leave is recognised in the provision for employee benefits. All other short-term employee benefit obligations are presented as payables.

Other long-term employee benefit obligations

The liability for long-service leave and annual leave that is not expected to be wholly settled within 12 months after the end of the period in which the employees render the related service is recognised in the provision for employee benefits and measured as the present value of expected future payments to be made in respect of services provided by employees up to the end of the reporting period using the projected unit credit method.

Consideration is given to expected future wage and salary levels, experience of employee departures, and periods of service. Expected future payments are discounted using market yields at the end of the reporting period on national government bonds with terms to maturity and currency that match, as closely as possible, the estimated future cash outflows.

The obligations are presented as current liabilities in the Statement of Financial Position if the Council does not have an unconditional right to defer settlement for at least 12 months after the reporting date, regardless of when the actual settlement is expected to occur.

On-costs

The employee benefit provisions include the aggregate on-cost liabilities that will arise when payment of current employee benefits is made in future periods. These amounts include superannuation, payroll tax and workers compensation expenses which will be payable upon the future payment of certain leave liabilities which employees are entitled to at the reporting period.

Provisions for close-down and restoration, and environmental clean-up costs – tips and quarries

Restoration
Close-down and restoration costs include the dismantling and demolition of infrastructure, and the removal of residual materials and remediation of disturbed areas. Estimated close-down and restoration costs are provided for in the accounting period when the obligation arising from the related disturbance occurs, whether this occurs during the development or during the operation phase, based on the net present value of estimated future costs.

Provisions for close-down and restoration costs do not include any additional obligations which are expected to arise from future disturbance. The costs are estimated on the basis of a closure plan. The cost estimates are calculated annually during the life of the operation to reflect known developments, e.g. updated cost estimates and revisions to the estimated lives of operations, and are subject to formal review at regular intervals.

Rehabilitation
Where rehabilitation is conducted systematically over the life of the operation, rather than at the time of closure, provision is made for the estimated outstanding continuous rehabilitation work at each reporting date, and the cost is charged to the Income Statement.

Provision is made for the estimated present value of the costs of environmental clean-up obligations outstanding at the reporting date. These costs are charged to the Income Statement. Movements in the environmental clean-up provisions are presented as an operating cost, except for the unwinding of the discount which is shown as a borrowing cost.

Remediation procedures generally commence soon after the time the damage, remediation process, and estimated remediation costs become known, but may continue for many years depending on the nature of the disturbance and the remediation techniques.

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Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 14. Provisions (continued)

As noted above, the ultimate cost of environmental remediation is uncertain and cost estimates can vary in response to many factors, including changes to the relevant legal requirements, the emergence of new restoration techniques, or experience at other locations. The expected timing of expenditure can also change, for example in response to changes in rubbish being diverted from landfill. As a result, there could be significant adjustments to the provision for close down and restoration and environmental clean-up, which would affect future financial results.

Other movements in the provisions for close-down and restoration costs, including those resulting from new disturbance, updated cost estimates, changes to the estimated lives of operations, and revisions to discount rates, are capitalised within property, plant and equipment. These costs are then depreciated over the lives of the assets to which they relate.

Close-down and restoration costs are a normal consequence of land fill operations, and the majority of close-down and restoration expenditure is incurred at the end of the life of the operations. Although the ultimate cost to be incurred is uncertain, Council estimates the respective costs based on feasibility and engineering studies using current restoration standards and techniques.

Self-insurance
Council has decided to self-insure for workers compensation.

A provision for self-insurance has been made to recognise outstanding claims. Council also maintains cash and investments to meet expected future claims; refer to Note 6(c).

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 15. Accumulated surplus, revaluation reserves, changes in accounting policies, changes in accounting estimates and errors

(a) Nature and purpose of reserves

Infrastructure, property, plant and equipment revaluation reserve
The infrastructure, property, plant and equipment revaluation reserve is used to record increments / decrements of non-current asset values due to their revaluation.

Fair value through other comprehensive income reserve (FVOCI)
Changes in the fair value of financial assets are taken through the fair value through other comprehensive income revaluation reserve. The accumulated changes in fair value are transferred to profit or loss when the financial asset is derecognised or impaired.

(b) Correction of errors relating to a previous reporting period

A reconciliation of land under roads was carried out for the revaluation, there were parcels of land that were acquired before July 2008 and shouldn't be in the asset register (-$3M)
A reconciliation of operational land and GIS was carried out and two parcels of land were required to be recognised as they were owned at 1st July 2017 but not recorded in the Asset Register ($385K)
A reconciliation of plant and equipment was carried out and it was discovered that Council still had some plant and equipment in the asset register that had previously been disposed before 1st July 2017 (-$258K)
During the preparation for the revaluation of buildings, nine buildings were previously not recorded in the Asset Register ($503K)
Shoalhaven Water is continually reconciling the water and sewer assets with GIS and there were duplicated and abandoned water and sewer infrastructure assets in the Asset Register as at 1st July 2017 (Water -$735K, Sewer -$1M)

Changes to the opening Statement of Financial Position at 1 July 2017

Statement of Financial Position

$ '000	Original Balance 1 July 2017	Impact Increase/ (decrease)	Restated Balance 1 July 2017
Land under roads	4,179	(3,032)	1,147
Operational land	135,935	385	136,320
Plant and equipment	36,266	(258)	36,008
Buildings - specialised	218,893	503	219,396
Water supply network	335,479	(735)	334,744
Sewer network	440,862	(1,045)	439,817
Total assets	**2,851,875**	**(4,182)**	**2,847,693**
Total liabilities	**168,853**	**–**	**168,853**
Accumulated surplus	1,475,975	(4,182)	1,471,793
Revaluation reserve	1,207,047	–	1,207,047
Total equity	**2,683,022**	**(4,182)**	**2,678,840**

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Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 15. Accumulated surplus, revaluation reserves, changes in accounting policies, changes in accounting estimates and errors (continued)

Statement of Financial Position

$ '000	Original Balance 30 June 2018	Impact Increase/ (decrease)	Restated Balance 30 June 2018
Adjustments to the comparative figures for the year ended 30 June 2018			
Land under roads	5,889	(3,032)	2,857
Operational land	165,203	385	165,588
Plant and equipment	3,831	(258)	3,573
Buildings - specialised	216,063	503	216,566
Water supply network	339,297	(735)	338,562
Sewer network	434,343	(1,045)	433,298
Total assets	**2,996,063**	**(4,182)**	**2,991,881**
Total liabilities	**222,187**	**–**	**222,187**
Accumulated surplus	1,539,342	(4,182)	1,535,160
Revaluation reserve	1,234,534	–	1,234,534
Total equity	**2,773,876**	**(4,182)**	**2,769,694**

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Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 15. Accumulated surplus, revaluation reserves, changes in accounting policies, changes in accounting estimates and errors (continued)

(c) Changes in accounting policies due to adoption of new accounting standards (not-retrospective)

During the year, Council adopted a number of new accounting standards. The impact of the adoption and associated transition disclosures are shown below.

The Council has adopted AASB 9 Financial Instruments for the first time in the current year with a date of initial adoption of 1 July 2018. As part of the adoption of AASB 9, the Council adopted consequential amendments to other accounting standards arising from the issue of AASB 9 as follows:

– AASB 101 Presentation of Financial Statements requires the impairment of financial assets to be presented in a separate line item in the income statement. In prior year, this information was presented as part of other expenses.

– AASB 7 Financial Instruments: Disclosures requires amended disclosures due to changes arising from AASB 9. These disclosures have been provided for the current year.

The key changes to Council's accounting policy and the impact on these financial statements from applying AASB 9 are described below.

Changes in accounting policies resulting from the adoption of AASB 9 have been applied retrospectively except Council has not restated any amounts relating to classification and measurement requirements, including impairment, which have been applied from 1 July 2018.

Classification of financial assets
The financial assets of Council have been reclassified into one of the following categories on adoption of AASB 9, based primarily on the business model in which a financial asset is managed and its contractual cash flow characteristics are:

– measured at amortised cost
– fair value through profit or loss
– fair value through other comprehensive income – equity instruments

Measurement of equity instruments
All equity instruments of the Council are measured at fair value under AASB 9 whereas there was a cost exception under AASB 139 that allowed certain unlisted investments to be carried at amortised cost in the absence of a reliable measurement of fair value. Any difference in the previous carrying amount and the fair value is recognised in the opening retained earnings (or other component of equity, as appropriate) at 1 July 2018.

Equity instruments are no longer subject to impairment testing and therefore all movements on equity instruments, classified as fair value through other comprehensive income, are taken to the relevant reserve.

Impairment of financial assets
The incurred loss model from AASB 139 has been replaced with an expected credit loss model in AASB 9 for assets measured at amortised cost. This has resulted in the earlier recognition of credit loss (bad debt provisions).

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Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 15. Accumulated surplus, revaluation reserves, changes in accounting policies, changes in accounting estimates and errors (continued)

Statement of Financial Position

$ '000	Opening Balance 1 July 2018	Impact Increase/ (decrease)	Restated Balance 1 July 2018
Adjustments to the current year figures for the year ended 30 June 2019			
Equity securities	–	1,058	1,058
Total assets	**2,991,881**	**1,058**	**2,992,939**
Total liabilities	**222,187**	**–**	**222,187**
Accumulated surplus	1,535,160	1,058	1,536,218
Revaluation reserve	1,234,534	–	1,234,534
Total equity	**2,769,694**	**1,058**	**2,770,752**

Transition adjustments

The impacts to reserves and retained earnings on adoption of AASB 9 at 1 July 2018 are shown below:

$ '000	Available for sale investment revaluation reserve	FVOCI reserve	Retained earnings	Non-controlling interests	Total
Reclassify Equity Securities from Amortised Cost to Fair Value through Other Comprehensive Income	–	–	1,058	–	1,058

Increase in equity securities - Council has made an irrevocable election to classify these equity investments as fair value through other comprehensive income as they are not held for trading purposes. The valuation was carried out by Ernst and Young with a value of $1,058,100 as at 30th June 2018.

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Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 15. Accumulated surplus, revaluation reserves, changes in accounting policies, changes in accounting estimates and errors (continued)

Transition adjustments

The table below illustrates the classification and measurement of financial assets and liabilities under AASB 9 and AASB 139 at 1 July 2018.

$ '000	Classific-ation under AASB 139	Classific-ation under AASB 9	Carrying amount under AASB 139	Reclassi-fication	Remeasu-rements	Carrying amount under AASB 9
Financial assets						
Cash and cash equivalents - managed funds	FVTPL	FVTPL	36,450	–	–	36,450
Term deposits	Held to maturity	Amortised cost	126,898	–	–	126,898
Managed funds	FVTPL	FVTPL	1,842	–	–	1,842
Floating rate notes	FVTPL	FVTPL	31,453	–	–	31,453
Equity securities	Available for Sale	FVOCI - equity	–	1,058	–	1,058
Debt securities	FVTPL	FVTPL	110	–	–	110
Trade and other receivables	Loans and receivables	Amortised cost	26,007	–	–	26,007
Total financial assets under AASB 9 at 1 July 2018			222,760	1,058	–	223,818
Financial liabilities						
Secured bank loans	Other financial liabilities	Other financial liabilities	153,736	–	–	153,736
Trade payables	Other financial liabilities	Other financial liabilities	17,283	–	–	17,283
Other payables	Other financial liabilities	Other financial liabilities	5,476	–	–	5,476
Unsecured other loans	Other financial liabilities	Other financial liabilities	387	–	–	387
Total financial liabilities under AASB 9 at 1 July 2018			176,882	–	–	176,882

Notes to the table above

Reclassify investments from 'available for sale' to FVOCI–equity

Council previously classified investments as 'available for sale' with changes in value being taken through a financial asset reserve. On adoption of AASB 9, investments with a fair value of $1,058,100 were reclassified from the 'available for sale investment revaluation reserve' to the 'financial asset at fair value through other comprehensive income reserve' since they are not held for trading.

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 16. Statement of cash flows - additional information

$ '000	Notes	2019	2018
(a) Reconciliation of cash assets			
Total cash and cash equivalent assets	6(a)	51,858	61,306
Balance as per the Statement of Cash Flows		51,858	61,306
(b) Reconciliation of net operating result to cash provided from operating activities			
Net operating result from Income Statement		29,448	48,847
Adjust for non-cash items:			
Depreciation and amortisation		63,595	59,412
Net losses/(gains) on disposal of assets		1,283	174
Non-cash capital grants and contributions		(3,834)	(5,080)
Losses/(gains) recognised on fair value re-measurements through the P&L:			
– Investments classified as 'at fair value' or 'held for trading'		(203)	(10)
– investment property		(135)	(10)
– Fair valuation adjustment (re–measurement) of existing loans to Council		–	64
– Interest-free advances made by Council (deferred debtors)		56	–
– Revaluation decrements / impairments of IPP&E direct to P&L		1,574	–
– Other (Management Committees)		35	19
Amortisation of premiums, discounts and prior period fair valuations			
– Financial asset at fair value through other comprehensive income / available for sale (2018)		1,058	–
– Interest on all fair value adjusted interest free advances made by Council		(4)	(6)
Unwinding of discount rates on reinstatement provisions		–	118
+/– Movement in operating assets and liabilities and other cash items:			
Decrease/(increase) in receivables		2,211	4,010
Increase/(decrease) in provision for impairment of receivables		(9)	29
Decrease/(increase) in inventories		(1)	(188)
Decrease/(increase) in other current assets		(263)	282
Increase/(decrease) in payables		(403)	(2,660)
Increase/(decrease) in accrued interest payable		(92)	472
Increase/(decrease) in other accrued expenses payable		(4,608)	3,167
Increase/(decrease) in other liabilities		(2,104)	1,310
Increase/(decrease) in provision for employee benefits		3,161	1,086
Increase/(decrease) in other provisions		2,349	(1)
Net cash provided from/(used in) operating activities from the Statement of Cash Flows		93,114	111,035
(c) Non-cash investing and financing activities			
Other dedications		3,834	5,080
Total non-cash investing and financing activities		3,834	5,080

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 17. Interests in other entities

$ '000	Council's share of net income 2019	Council's share of net income 2018	Council's share of net assets 2019	Council's share of net assets 2018
Controlled Entities	19	104	886	809

Controlled entities (subsidiaries) – being entities and operations controlled by Council

Council's consolidated financial statements incorporate the assets, liabilities and results of the following subsidiaries in accordance with AASB 10 and the accounting policy described below.

Name of Operation/Entity	Principal activity
Southern Water Services Pty Ltd	Provision of water, sewerage and related services

Interests in Subsidiary $ '000	Ownership 2019	Ownership 2018	Voting rights 2019	Voting rights 2018
Council's interest in Subsidiary	100%	100%	100%	100%

The nature and extent of significant restrictions relating to the Subsidiary
Southern Water Services is limited by shares under the Corporations Act (2001)
As sole shareholder Council controls full voting rights over Southern Water Services.
Dividends paid by Southern Water Services to Council are restricted by S254T of Corporations Act (2001)

The nature of risks associated with Council's interests in the Subsidiary
Council's liability is limited to the value of its fully paid shares.

Summarised financial information for the Subsidiary

$ '000	2019	2018
Summarised statement of comprehensive income		
Revenue	6	6
Expenses	(1)	(1)
Profit for the period	5	5
Total comprehensive income	5	5
Summarised statement of financial position		
Current assets	458	453
Total assets	458	453
Net assets	458	453
Summarised statement of cash flows		
Cash flows from operating activities	5	5
Net increase (decrease) in cash and cash equivalents	5	5

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Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 17. Interests in other entities (continued)

Name of Operation/Entity	Principal activity
Shoalhaven City Council Management Committees	Use and management of community land and assets

Interests in Subsidiary $ '000	Ownership 2019	Ownership 2018	Voting rights 2019	Voting rights 2018
Council's interest in Subsidiary	100%	100%	100%	100%

The nature and extent of significant restrictions relating to the Subsidiary
Established under S355 of the Local Government Act (1993). Management Committees have delegated authority to use and manage community land under S377 of the Local Government Act (1993).

Council retains full access to management committee cash, investments and other assets.

The nature of risks associated with Council's interests in the Subsidiary
Council is exposed to the risks and rewards of management committee activities.
Council provides low interest loans to management committees in order to fund capital projects.
Council provides subsidies in order to maintain committee operations.

Summarised financial information for the Subsidiary

$ '000	2019	2018
Summarised statement of comprehensive income		
Revenue	710	880
Expenses	(696)	(781)
Profit for the period	14	99
Total comprehensive income	14	99
Summarised statement of financial position		
Current assets	472	407
Non-current assets	4	6
Total assets	476	413
Current liabilities	39	44
Non-current liabilities	9	13
Total liabilities	48	57
Net assets	428	356
Summarised statement of cash flows		
Cash flows from operating activities	62	134
Cash flows from investing activities	1	(1)
Cash flows from financing activities	(9)	(7)
Net increase (decrease) in cash and cash equivalents	54	126

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Shoalhaven City Council

Notes to the Financial Statements
for the year ended 30 June 2019

Note 17. Interests in other entities (continued)

Accounting policy for subsidiaries
Subsidiaries are all entities (including structured entities) over which the Council has control. Control is established when the Council is exposed to, or has rights to variable returns from its involvement with the entity and has the ability to affect those returns through its power to direct the relevant activities of the entity.

These consolidated financial statements include the financial position and performance of controlled entities from the date on which control is obtained until the date that control is lost. Intragroup assets, liabilities, equity, income, expenses and cash flows relating to transactions between entities in the consolidated entity have been eliminated in full for the purpose of these financial statements. Appropriate adjustments have been made to a controlled entity's financial position, performance and cash flows where the accounting policies used by that entity were different from those adopted by the consolidated entity. All controlled entities have a June financial year end.

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 18. Commitments

$ '000	2019	2018
(a) Capital commitments (exclusive of GST)		
Capital expenditure committed for at the reporting date but not recognised in the financial statements as liabilities:		
Property, plant and equipment		
Buildings	545	1,102
Plant and equipment	1,377	1,550
Swimming pools	51	458
Roads	5,007	6,383
Water assets	1,237	1,276
Sewer assets	8,053	26,263
Other	3,864	6,593
Total commitments	20,134	43,625
These expenditures are payable as follows:		
Within the next year	20,134	43,625
Total payable	20,134	43,625
Sources for funding of capital commitments:		
Unrestricted general funds	2,529	2,324
Future grants and contributions	2,617	3,789
Section 7.11 and 64 funds/reserves	52	107
Unexpended grants	–	60
Externally restricted reserves	9,608	2,634
Internally restricted reserves	3,849	8,001
Unexpended loans	1,479	26,710
Total sources of funding	20,134	43,625

Details of capital commitments
Below is a list of projects with large capital commitments
Reclaimed Water Management Scheme (REMS1B) Construction - $6.5M
Verons Estate Road Construction - $1.1M

(b) Operating lease commitments (non-cancellable)

a. Commitments under non-cancellable operating leases at the reporting date, but not recognised as liabilities are payable:		
Within the next year	76	45
Later than one year and not later than 5 years	117	25
Total non-cancellable operating lease commitments	193	70

b. Non-cancellable operating leases include the following assets:
Leased office and workshop in Bomaderry for the Northern Maintenance Unit - expires in November 2019
Carpark and toilets in Ulladulla - expires February 2021 and December 2022
Leased office in Bomaderry for Assets & Works - expires in May 2022

Conditions relating to finance and operating leases:
– All operating agreements are secured only against the leased asset.
– No lease agreements impose any financial restrictions on Council regarding future debt etc.

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 19. Contingencies and other assets/liabilities not recognised

The following assets and liabilities do not qualify for recognition in the Statement of Financial Position, but their knowledge and disclosure is considered relevant to the users of Council's financial report.

LIABILITIES NOT RECOGNISED

1. Guarantees

(i) Defined benefit superannuation contribution plans
Council participates in an employer-sponsored defined benefit superannuation scheme, and makes contributions as determined by the superannuation scheme's trustees.

Member councils bear responsibility of ensuring there are sufficient funds available to pay out the required benefits as they fall due.

While the scheme's most recent full actuarial review indicated that the net assets of the scheme were sufficient to meet the accrued benefits of the scheme's defined benefit member category, member councils are required to make contributions in future years where the scheme goes into deficit (as has occurred in previous years).

The Local Government Superannuation Scheme however is unable to provide Council with an accurate estimate of any share of the net deficit and accordingly Council has not recorded any net liability from its defined benefit scheme obligations in accordance with AASB 119.

Future planned contributions made to the defined benefit scheme to rectify past (and projected) deficit positions will be recognised as an expense when they become payable – similar to the accounting for defined contributions plans.

Member councils are treated as Pooled Employers for the purpose of AASB119. Pooled Employers are required to pay future service employer contributions and past service employer contributions to the Fund.

The future service employer contributions were determined using the new entrant rate method under which a contribution rate sufficient to fund the total benefits over the working life-time of a typical new entrant is calculated. The current future service employer contribution rates are:

Division B	1.9 times member contributions for non-180 Point Members; Nil for 180Point Members*
Division C	2.5% salaries
Division D	1.64 times employee contributions

*For 180 Point members, Employers are required to contribute 7% of salaries to these members' accumulation accounts, which are paid in addition to members defined benefits.

The past service contribution for each Pooled Employer is a share of the total past service contributions of $40.0 million for 1 July 2018 to 30 June 2021, apportioned according to each employer's share of the accrued liabilities as at 30 June 2018. These past service contributions are used to maintain the adequacy of the funding position for the accrued liabilities.

The adequacy of contributions is assessed at each triennial actuarial investigation and monitored annually between triennials.

As stated above, each sponsoring employer is exposed to the actuarial risks associated with current and former employees of other sponsoring employers and hence shares in the associated gains and losses.

However, there is no relief under the Fund's trust deed for employers to walk away from their defined benefit obligations. Under limited circumstances, an employer may withdraw from the plan when there are no active members, on full payment of outstanding past service contributions. There is no provision for allocation of any surplus which may be present at the date of withdrawal of the entity.

There are no specific provisions under the Fund's trust deed dealing with deficits or surplus on wind-up.

There is no provision for allocation of any surplus which may be present at the date of withdrawal of an employer.

The plan is a defined benefit plan. However, each sponsoring employer is exposed to the actuarial risks associated with current and former employees of other sponsoring employers and hence shares in the associated gains and losses (to the extent that they are not borne by members). As such, there is not sufficient reliable information to allow each sponsoring employer to

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Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 19. Contingencies and other assets/liabilities not recognised (continued)

account for its proportionate share of the defined benefit obligation, sub-group assets and costs associated with the sub-group in the same way as it would for a single employer sponsored defined benefit plan.

The amount of Council employer contributions to the defined benefit section of the Fund and recognised as an expense and disclosed as part of superannuation expenses at Note 4 (a) for the year ending 30 June 2019 was $ 1,345,529

The last valuation of the Fund was performed by the actuary Mr Richard Boyfield FIAA (AFS Licence # 411770) on 31 December 2018 relating to the period ended 30 June 2018.

Council's expected contribution to the Fund for the next annual reporting period is $1,471,349

The estimated employer reserves financial position for the Pooled Employers at 30 June 2019 is:

Employer reserves only *	$millions	Asset Coverage
Assets	1798.7	
Past Service Liabilities	1784.2	100.8%
Vested Benefits	1792.0	100.4%

* excluding member accounts and reserves in both assets and liabilities.

The key economic long term assumptions used to calculate the present value of accrued benefits are:

Investment return	5.75% per annum
Salary inflation	3.5% per annum
Increase in CPI	2.5% per annum

The contribution requirements may vary from the current rates if the overall sub-group experience is not in line with the actuarial assumptions in determining the funding program; however, any adjustment to the funding program would be the same for all sponsoring employers in the Pooled Employers group.

Please note that the estimated employer reserves financial position above is a preliminary calculation, and once all the relevant information has been received by the Funds Actuary, the final end of year review will be completed around December 2019.

Council's past service contribution per annum is around 2.0% as a percentage of the total past service contributions for all Pooled Employers (of $40m each year from 1 July 2018 to 30 June 2021) provides an indication of the level of participation of Council compared with other employers in the Pooled Employer sub group.

(ii) Statewide Limited

Council is a member of Statewide Mutual, a mutual pool scheme providing liability insurance to local government.

Membership includes the potential to share in either the net assets or liabilities of the fund depending on its past performance. Council's share of the net assets or liabilities reflects Council's contributions to the pool and the result of insurance claims within each of the fund years.

The future realisation and finalisation of claims incurred but not reported to 30/6 this year may result in future liabilities or benefits as a result of past events that Council will be required to fund or share in respectively.

(iii) Potential Insurance Losses

Council is a multi-purpose organisation providing a large range of building, parks, infrastructure, playgrounds and other facilities accessible to the public. At any time, it is likely that claims will have been made against Council that remain unsettled. Council insures against all known insurable risks using a range of insurance policies, each of which is subject to a deductible insurance excess, the amount of which varies according to the class of insurance.

(iv) Other guarantees

Council has provided no other guarantees other than those listed above.

2. Other liabilities

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Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 19. Contingencies and other assets/liabilities not recognised (continued)

(i) Legal Expenses

Council is the planning consent authority for its area under the Environmental Planning and Assessment Act (as amended). Pursuant to that Act, certain persons aggrieved by a planning decision of the Council may appeal to the Land and Environmental Court. It is the Court's normal practice that parties bear their own legal costs. At the date of these reports, Council had notice of three appeals against planning decisions made prior to the reporting date. All known costs have been recognised, but the amount of further costs cannot be known until the appeals are determined.

(ii) Third party claims

The Council is involved from time to time in various claims incidental to the ordinary course of business including claims for damages relating to its services.

Council believes that it is appropriately covered for all claims through its insurance coverage and does not expect any material liabilities to eventuate.

(iii) S7.11 and S64 Developer Contributions Plans

Council levies Section 7.11 and Section 64 Contributions upon various developments across the Council area through the required Contributions Plans. As part of these Plans, Council has received funds for which it will be required to expend the monies in accordance with those Plans. As well, these Plans indicate proposed future expenditure to be undertaken by Council, which will be funded by making levies and receipting funds in future years or where a shortfall exists by the use of Council's General, Water or Sewer Funds. These future exposures do not qualify as liabilities as of the Reporting Date, but represents Council's intention to spend funds in the manner and timing set out in those plans.

ASSETS NOT RECOGNISED

(i) Land under roads

As permitted under AASB 1051, Council has elected not to bring to account land under roads that it owned or controlled up to and including 30/6/08.

(ii) Infringement notices/fines

Fines and penalty income, the result of Council issuing infringement notices is followed up and collected by the Infringement Processing Bureau. Council's revenue recognition policy for such income is to account for it as revenue on receipt. Accordingly, at year end, there is a potential asset due to Council representing issued but unpaid infringement notices. Due to the limited information available on the status, value and duration of outstanding notices, Council is unable to determine the value of outstanding income.

(iii) Rural Fire Fighting Assets

Council has vested title to, and is the registered owner of rural fire appliances and associated fire fighting equipment. These assets are under the control of the Rural Fire Services to enable that Department to provide the bushfire protection defences set out in their Service Level Agreement with Council, and accordingly have not been recognised in these reports.

(iv) S7.11 and S64 Developer Contributions

Council calculates the amount of the Developer Contributions applicable for each Development Application at the time of application. Due to the uncertainty of the timing of the payment and the indexation of the contributions, Council recognises this revenue upon receipt.

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 20. Financial risk management

Risk management

Council's activities expose it to a variety of financial risks including **(1)** price risk, **(2)** credit risk, **(3)** liquidity risk and **(4)** interest rate risk.

The Council's overall risk management program focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the financial performance of the Council.

Council does not engage in transactions expressed in foreign currencies and is therefore not subject to foreign currency risk.

Financial risk management is carried out by Council's finance section under policies approved by the Council.

The fair value of Council's financial assets and financial liabilities approximates their carrying amount.

$ '000	Carrying value 2019	Carrying value 2018	Fair value 2019	Fair value 2018
Financial assets				
Measured at amortised cost				
Receivables	24,376	26,117	24,376	26,117
Investments				
– 'Financial assets at amortised cost' / 'held to maturity' (2018)	111,801	126,898	111,801	126,898
Fair value through other comprehensive income				
Investments				
– 'Financial assets at fair value through other comprehensive income' / 'available for sale financial assets' (2018)	665	–	665	–
Fair value through profit and loss				
Cash and cash equivalents	26,425	36,450	26,425	36,450
Investments				
– 'Held for trading'	46,245	33,294	46,245	33,294
Total financial assets	209,512	222,759	209,512	222,759
Financial liabilities				
Payables	17,029	22,758	17,029	22,758
Loans/advances	151,849	154,123	151,849	154,123
Total financial liabilities	168,878	176,881	168,878	176,881

Fair value is determined as follows:

- **Cash** and **cash equivalents, receivables, payables** – are estimated to be the carrying value that approximates market value.
- **Borrowings** and **held-to-maturity investments** – are based upon estimated future cash flows discounted by the current mkt interest rates applicable to assets and liabilities with similar risk profiles, unless quoted market prices are available.
- Financial assets classified (i) **'at fair value through profit and loss'** or (ii) **'available-for-sale'** – are based upon quoted market prices (in active markets for identical investments) at the reporting date or independent valuation.

Council's objective is to maximise its return on cash and investments whilst maintaining an adequate level of liquidity and preserving capital.

Council's finance area manages the cash and Investments portfolio with the assistance of independent advisors.

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Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 20. Financial risk management (continued)

Council has an investment policy which complies with the Local Government Act 1993 and Minister's investment order 625. This policy is regularly reviewed by Council and it's staff and an investment report is tabled before Council on a monthly basis setting out the portfolio breakup and its performance as required by Local Government regulations.

The risks associated with the instruments held are:

- **Price risk** – the risk that the capital value of Investments may fluctuate due to changes in market prices, whether there changes are caused by factors specific to individual financial instruments or their issuers or are caused by factors affecting similar instruments traded in a market.
- **Interest rate risk** – the risk that movements in interest rates could affect returns and income.
- **Liquidity risk** – the risk that Council will not be able to pay its debts as and when they fall due.
- **Credit risk** – the risk that the investment counterparty will not complete their obligations particular to a financial instrument, resulting in a financial loss to Council – be it of a capital or income nature.

Council manages these risks (amongst other measures) by diversifying its portfolio and only purchasing investments with high credit ratings or capital guarantees.

Council also seeks advice from independent advisers before placing any funds in cash equivalents and investments.

(a) Market risk – price risk and interest rate risk

The impact on result for the year and equity of a reasonably possible movement in the price of investments held and interest rates is shown below. The reasonably possible movements were determined based on historical movements and economic conditions in place at the reporting date.

	Increase of values/rates		Decrease of values/rates	
$ '000	Profit	Equity	Profit	Equity
2019				
Possible impact of a 10% movement in market values	4,625	4,625	(4,625)	(4,625)
Possible impact of a 1% movement in interest rates	2,095	2,095	(2,095)	(2,095)
2018				
Possible impact of a 10% movement in market values	6,975	6,975	(6,975)	(6,975)
Possible impact of a 1% movement in interest rates	2,215	2,215	(2,215)	(2,215)

(b) Credit risk

Council's major receivables comprise (i) rates and annual charges and (ii) user charges and fees.

Council manages the credit risk associated with these receivables by monitoring outstanding debt and employing stringent debt recovery procedures.

The credit risk for liquid funds and other short-term financial assets is considered negligible, since the counterparties are reputable banks with high quality external credit ratings.

There are no significant concentrations of credit risk, whether through exposure to individual customers, specific industry sectors and/or regions.

The level of outstanding receivables is reported to Council monthly and benchmarks are set and monitored for acceptable collection performance. The balances of receivables that remain within initial terms (as detailed in the table) are considered to be of high credit quality.

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Shoalhaven City Council

Notes to the Financial Statements
for the year ended 30 June 2019

Note 20. Financial risk management (continued)

The maximum exposure to credit risk at the reporting date is the carrying amount of each class of receivable in the financial statements.

Council makes suitable provision for doubtful receivables as required and carries out credit checks on most non-rate debtors.

There are no material receivables that have been subjected to a re-negotiation of repayment terms.

Credit risk profile

Receivables – rates and annual charges

Credit risk on rates and annual charges is minimised by the ability of Council to secure a charge over the land relating to the debts – that is, the land can be sold to recover the debt. Council is also able to charge interest on overdue rates and annual charges at higher than market rates which further encourages the payment of debt.

$ '000	Not yet overdue	< 1 year overdue	1 - 2 years overdue	2 - 5 years overdue	> 5 years overdue	Total
2019						
Gross carrying amount	2,893	4,587	883	1,156	987	10,506
2018						
Gross carrying amount	3,555	3,953	817	1,177	976	10,478

Receivables - non-rates and annual charges

Council applies the simplified approach for non-rates and annual charges debtors to provide for expected credit losses prescribed by AASB 9, which permits the use of the lifetime expected loss provision. To measure the expected credit losses, non-rates and annual charges debtors have been grouped based on shared credit risk characteristics and the days past due.

The loss allowance provision as at 30 June 2019 is determined as follows. The expected credit losses incorporate forward-looking information.

$ '000	Not yet overdue	0 - 30 days overdue	31 - 60 days overdue	61 - 90 days overdue	> 91 days overdue	Total
2019						
Gross carrying amount	11,814	584	163	196	2,699	15,456
Expected loss rate (%)	0.00%	0.00%	0.00%	0.00%	14.34%	2.50%
ECL provision	–	–	–	–	387	387
2018						
Gross carrying amount	14,065	845	463	127	2,212	17,712
Expected loss rate (%)	0.11%	0.82%	1.72%	25.48%	3.68%	0.81%
ECL provision	15	7	8	32	81	143

(c) Liquidity risk

Payables and borrowings are both subject to liquidity risk – the risk that insufficient funds may be on hand to meet payment obligations as and when they fall due.

Council manages this risk by monitoring its cash flow requirements and liquidity levels and maintaining an adequate cash buffer.

Payment terms can (in extenuating circumstances) also be extended and overdraft facilities utilised as required.

Borrowings are also subject to interest rate risk – the risk that movements in interest rates could adversely affect funding costs and debt servicing requirements. Council manages this risk through diversification of borrowing types, maturities and interest rate structures. The finance team regularly reviews interest rate movements to determine if it would be advantageous to refinance or renegotiate part or all of the loan portfolio.

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Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 20. Financial risk management (continued)

The timing of cash flows presented in the table below to settle financial liabilities reflects the earliest contractual settlement dates. The timing of expected outflows is not expected to be materially different from contracted cashflows.

The amounts disclosed in the table are the undiscounted contracted cash flows and therefore the balances in the table may not equal the balances in the statement of financial position due to the effect of discounting.

$ '000	Weighted average interest rate	Subject to no maturity	payable in: ≤ 1 Year	1 - 5 Years	> 5 Years	Total cash outflows	Actual carrying values
2019							
Trade/other payables	0.00%	3,488	13,541	–	–	17,029	17,029
Loans and advances	4.27%	–	12,875	43,674	85,714	142,263	151,849
Total financial liabilities		3,488	26,416	43,674	85,714	159,292	168,878
2018							
Trade/other payables	0.00%	3,841	22,394	–	–	26,235	26,235
Loans and advances	4.31%	–	12,223	47,882	94,329	154,434	154,123
Total financial liabilities		3,841	34,617	47,882	94,329	180,669	180,358

Loan agreement breaches

There have been no breaches in loan agreements during the 2018/19 financial year.

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 21. Material budget variations

Council's original financial budget for 18/19 was adopted by the Council on 26/06/2018 and is unaudited.

While the Income Statement included in this General Purpose Financial Statements must disclose the original budget adopted by Council, the Local Government Act 1993 requires Council to review its financial budget on a quarterly basis, so that it is able to manage the various variations between actuals versus budget that invariably occur throughout the year.

This note sets out the details of **material variations** between Council's original budget and its actual results for the year as per the Income Statement – even though such variations may have been adjusted for during each quarterly budget review.

Material variations represent those variances between the original budget figure and the actual result that amount to **10%** or more.

Variation Key: **F** = Favourable budget variation, **U** = Unfavourable budget variation.

$ '000	2019 Budget	2019 Actual	2019 Variance		
REVENUES					
Rates and annual charges	139,982	142,417	2,435	2%	F
User charges and fees	74,505	73,857	(648)	(1)%	U
Interest and investment revenue	4,676	7,061	2,385	51%	F
The favourable variation to the adopted budget is due to a higher investment base for water and sewer resulting in additional interest income of $657K for Water, $477K for Sewer, $139K for Section 94 and $681K for General Fund.					
Other revenues	3,280	4,492	1,212	37%	F
The areas where income exceeded budget were: additional regulatory fees $232K, Tourism $203K, Library and Arts revenue $173K, property rental revenue and recovery of related costs of $161K, Recycling cost recovery $143K and $89K Fuel Tax Credit.					
Operating grants and contributions	20,324	20,170	(154)	(1)%	U
Capital grants and contributions	18,989	27,092	8,103	43%	F
Capital grants and contributions are budgeted according to the known projects at the start of the financial year, during the year new grants become available, Council received $9.5M in new grants offered during the year, there is also grants included in the original budget that haven't been received. There was also $2.9M worth of contributed water/sewer assets recognised.					
Fair value increment on investment property	–	135	135	∞	F
EXPENSES					
Employee benefits and on-costs	73,306	83,694	(10,388)	(14)%	U
This variance is due to the allocation of budget for maintenance programs between employee costs and materials. When the total operating expenditure result is compared to budget the variance is 3.9%.					
Borrowing costs	6,507	6,604	(97)	(1)%	U
Materials and contracts	62,172	56,320	5,852	9%	F
Depreciation and amortisation	61,680	63,595	(1,915)	(3)%	U
Other expenses	32,812	32,706	106	0%	F
Net losses from disposal of assets	–	1,283	(1,283)	∞	U
Revaluation decrement / impairment of IPP&E	–	1,574	(1,574)	∞	U
STATEMENT OF CASH FLOWS					

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Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 21. Material budget variations (continued)

$ '000	2019 Budget	2019 Actual	2019 Variance		
Net cash provided from (used in) operating activities	85,951	93,115	7,164	8%	F
Net cash provided from (used in) investing activities	(126,751)	(100,289)	26,462	(21)%	F
The variance to due to capital works not being completed. There were 10 large projects in 2018/19 that are currently in progress and contribute to $32M of the unspent funds.					
Net cash provided from (used in) financing activities	(3,186)	(2,274)	912	(29)%	F
This variance is due to the internal loan between the Water and General Funds not being eliminated in the budget.					

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 22. Fair Value Measurement

The Council measures the following asset and liability classes at fair value on a recurring basis:

– Infrastructure, property, plant and equipment
– Investment property
– Financial assets
– Non-current assets classified as 'held for sale'

The fair value of assets and liabilities must be estimated in accordance with various accounting standards for either recognition and measurement requirements or for disclosure purposes.

AASB 13 Fair Value Measurement requires all assets and liabilities measured at fair value to be assigned to a 'level' in the fair value hierarchy as follows:

Level 1: Unadjusted quoted prices in active markets for identical assets or liabilities that the entity can access at the measurement date.

Level 2: Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3: Inputs for the asset or liability that are not based on observable market data (unobservable inputs).

Cost Approach: A valuation technique that reflects the amount that would be required to replace the service capacity of an asset (current replacement cost)

Income Approach: Valuation technique that converts future amounts (cash inflows/outflows) to signal the current (i.e. discounted) amount. The fair value measurement is determined on the basis of the value indicated by current market expectations about these future amounts.

Market Approach: A valuation technique that uses prices and other relevant information, generated by market transactions involving identical or comparable (similar) assets, liabilities or a group of assets and liabilities such as business.

(1) Assets and liabilities that have been measured and recognised at fair values

			Fair value measurement hierarchy			
2019	Notes	Date of latest valuation	Level 1 Quoted prices in active mkts	Level 2 Significant observable inputs	Level 3 Significant unobserv-able inputs	Total
Recurring fair value measurements						
Financial assets						
Investments	6(b)					
– 'Fair value through profit and loss' / 'Held for trading (2018)'		30/06/19	–	–	46,245	46,245
– 'Financial assets at fair value through other comprehensive income' / 'Available for sale (2018)'		30/06/19	–	–	665	665
Total financial assets			–	–	46,910	46,910
Investment property	11					
Shops, 37-43 Kinghorne Street, Nowra		30/06/19	–	1,700	–	1,700
Total investment property			–	1,700	–	1,700
Infrastructure, property, plant and equipment	10(a)					
Plant and equipment		30/06/19	–	–	42,089	42,089
Office equipment		30/06/19	–	–	3,831	3,831
Furniture and fittings		30/06/19	–	–	2,400	2,400
Operational land		30/06/18	–	–	167,758	167,758
Community land		30/06/18	–	–	125,548	125,548
Land under roads (post 30/06/08)		30/06/19	–	–	1,609	1,609

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Shoalhaven City Council

Notes to the Financial Statements
for the year ended 30 June 2019

Note 22. Fair Value Measurement (continued)

2019	Notes	Date of latest valuation	Fair value measurement hierarchy: Level 1 Quoted prices in active mkts	Level 2 Significant observable inputs	Level 3 Significant unobserv-able inputs	Total
Land improvements – non-depreciable		30/06/16	–	–	127,740	127,740
Land improvements – depreciable		30/06/16	–	–	487	487
Buildings – non-specialised		30/06/19	–	2,035	–	2,035
Buildings – specialised		30/06/19	–	–	273,845	273,845
Other structures		30/06/16	–	–	17,850	17,850
Roads		30/06/15	–	–	696,682	696,682
Bridges		30/06/15	–	–	64,255	64,255
Footpaths		30/06/15	–	–	49,315	49,315
Bulk earthworks (non-depreciable)		30/06/15	–	–	109,674	109,674
Stormwater drainage		30/06/15	–	–	106,387	106,387
Water supply network		30/06/19	–	–	343,626	343,626
Sewerage network		30/06/19	–	–	440,069	440,069
Swimming pools		30/06/16	–	–	9,636	9,636
Other open space / recreational assets		30/06/16	–	–	19,964	19,964
Other infrastructure		30/06/16	–	–	52,268	52,268
Library books		30/06/19	–	–	1,002	1,002
Tip asset		30/06/19	–	–	2,327	2,327
Total infrastructure, property, plant and equipment			–	2,035	2,658,362	2,660,397
Non-current assets classified as 'held for sale'	9					
Operational Land		30/06/19	–	–	586	586
Total NCA's classified as 'held for sale'			–	–	586	586

2018	Notes	Date of latest valuation	Fair value measurement hierarchy: Level 1 Quoted prices in active mkts	Level 2 Significant observable inputs	Level 3 Significant unobserv-able inputs	Total
Recurring fair value measurements						
Financial assets						
Investments	6(b)					
– 'Fair value through profit and loss' / 'Held for trading (2018)'		30/06/18	–	–	33,295	33,295
Total financial assets			–	–	33,295	33,295
Investment property	11					
Shops, 37-43 Kinghorne Street, Nowra		30/06/18	–	1,565	–	1,565
Total investment property			–	1,565	–	1,565
Infrastructure, property, plant and equipment	10(a)					
Plant and equipment		30/06/18	–	–	38,381	38,381
Office equipment		30/06/18	–	–	3,831	3,831
Furniture and fittings		30/06/18	–	–	2,229	2,229
Operational land		30/06/18	–	–	165,588	165,588
Community land		30/06/18	–	–	125,386	125,386
Land under roads (post 30/06/08)		30/06/14	–	–	2,867	2,867
Land improvements – non-depreciable		30/06/16	–	–	127,740	127,740
Land improvements – depreciable		30/06/16	–	–	545	545
Buildings – non-specialised		30/06/14	–	8,407	–	8,407
Buildings – specialised		30/06/14	–	–	216,566	216,566

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Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 22. Fair Value Measurement (continued)

2018	Notes	Date of latest valuation	Level 1 Quoted prices in active mkts	Level 2 Significant observable inputs	Level 3 Significant unobserv-able inputs	Total
Other structures		30/06/16	–	–	16,792	16,792
Roads		30/06/15	–	–	698,586	698,586
Bridges		30/06/15	–	–	62,629	62,629
Footpaths		30/06/15	–	–	49,131	49,131
Bulk earthworks (non-depreciable)		30/06/15	–	–	107,394	107,394
Stormwater drainage		30/06/15	–	–	106,372	106,372
Water supply network		30/06/18	–	–	338,561	338,561
Sewerage network		30/06/18	–	–	433,298	433,298
Swimming pools		30/06/16	–	–	9,827	9,827
Other open space / recreational assets		30/06/16	–	–	19,874	19,874
Other infrastructure		30/06/16	–	–	48,382	48,382
Library books		30/06/18	–	–	979	979
Tip asset		30/06/12	–	–	147	147
Total infrastructure, property, plant and equipment			–	8,407	2,575,105	2,583,512
Non-current assets classified as 'held for sale'	9					
Operational Land		30/06/18	–	–	1,150	1,150
Buildings		30/06/14	–	–	1,398	1,398
Total NCA's classified as 'held for sale'			–	–	2,548	2,548

Note that capital WIP is not included above since it is carried at cost.

(2) Transfers between level 1 and level 2 fair value hierarchies

During the year, there were no transfers between level 1 and level 2 fair value hierarchies for recurring fair value measurements.

(3) Valuation techniques used to derive level 2 and level 3 fair values

Where Council is unable to derive fair valuations using quoted market prices of identical assets (ie. level 1 inputs) Council instead utilises a spread of both observable inputs (level 2 inputs) and unobservable inputs (level 3 inputs).

The fair valuation techniques Council has employed while utilising level 2 and level 3 inputs are as follows:

Financial assets

Cash and cash equivalents is represented by the TCorp IM Cash Fund. Council obtains valuations from TCorp on a monthly basis and at the end of each reporting period to ensure that the financial statements reflect the most up-to-date valuation.

Investments - "At fair value through profit or loss" is represented by Floating Rate Notes. Council obtains valuations from its Safe Custody Operations on a monthly basis and at the end of each reporting period to ensure that the financial statements reflect the most up-to-date valuation.

There has been no change to the valuation process during the reporting period.

Investment property

Council obtains independent valuations every year for all investment properties. The valuation for this financial year was undertaken by Mr Darren Austin, AAPI, of Walsh & Monaghan Pty Ltd as at 30 June 2019.

The valuation has been determined by the "capitalisation of net rental" approach where the net market rental of the property is capitalised at an appropriate market rate determined from the analysis of comparable sales.

This result was compared to the "rate per square metre of building area" method of similar building sales.

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Shoalhaven City Council

Notes to the Financial Statements
for the year ended 30 June 2019

Note 22. Fair Value Measurement (continued)

There has been no change to the valuation process during the reporting period.

Infrastructure, property, plant and equipment (IPP&E)

Plant & Equipment, Office Equipment and Furniture & Fittings are valued at cost but are disclosed at fair value in the notes. The carrying amount of these assets is assumed to approximate fair value due to the nature of the items.

Examples of assets within these classes are as follows:

- Plant and Equipment - Graders, trucks, rollers, tractors and motor vehicles.
- Office Equipment - Computers, photocopiers, calculators, etc.
- Furniture & Fittings - Chairs, desks and display boards.

There has been no change to the valuation process during the reporting period.

Operational Land

This asset class comprises all of Council's land and Council managed land classified as Operational Land under the NSW Local Government Act 1993. The key unobservable input to the valuation is the price per square metre.

The last valuation was undertaken by Mr James Sharpe, FAPI CPV, of Opteon Property Group Pty Ltd effective 30th June 2018.

Generally, fair value is the most advantageous price reasonably obtainable by the seller and the most advantageous price reasonably obtained by the buyer. This is not necessarily the market selling price of the asset, rather, it is regarded as the maximum value that Council would rationally pay to acquire the asset if it did not hold it, taking into account quoted market price in an active and liquid market, the current market price of the same or similar asset, the cost of replacing the asset, if management intend to replace the asset, the remaining useful life and condition of the asset; and cash flows from the future use and disposal.

There has been no change to the valuation process during the reporting period.

Community Land

Valuations of all Council's Community Land and Council managed land were based on either the land values provided by the Valuer-General or an average unit rate based on the land values for similar properties where the Valuer-General did not provide a land value having regard to the highest and best use for this land. As these rates were not considered to be observable market evidence they have been classified as level 3.

The last valuation was undertaken effective 30th June 2018.

There has been no change to the valuation process during the reporting period.

Land Under Roads

Council has elected to recognise Land Under Roads where the road was acquired on or after 1 July 2008. 'Land under Roads' have been valued using the square metres rates applicable for all of the valued land within the Shoalhaven local government area and a discount for restricted use applied. This was the first year that the discount has been applied and has resulted in a revaluation decrement to the income statement.

Land Improvements - depreciable and non-depreciable

This asset class comprises land improvements such as spectator mounds, swales, berms, gardens, mulched areas, streetscaping and landscaping. These assets may be located on parks, reserves and also within road reserves.

'Land Improvements' were valued in-house using the cost approach by experienced Council engineers and asset management staff.

The cost approach has been utilised whereby the replacement cost was estimated for each asset by taking into account a range of factors. Inputs such as estimates of pattern of consumption, residual value, asset condition and useful life required

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Shoalhaven City Council

Notes to the Financial Statements
for the year ended 30 June 2019

Note 22. Fair Value Measurement (continued)

extensive professional judgement and impacted significantly on the final determination of fair value. As such these assets were all classified as having been valued using level 3 valuation inputs.

There has been no change to the valuation process during the reporting period.

Buildings – Non specialised and Specialised

The fair value of buildings were determined by independent valuer, APV Valuers and Asset Management effective 30 June 2019. Where there is a market for Council building assets, fair value has been derived from the sales prices of comparable properties after adjusting for differences in key attributes such as property size. The most significant inputs into this valuation approach were price per square metre.

Where Council buildings are of a specialist nature and there is no active market for the assets, fair value has been determined on the basis of replacement cost of the modern equivalent (or cost of reproduction where relevant) and then adjusting for the level of consumed future economic benefit and impairment. To assess the level of remaining service potential, the separate components of the building are assessed considering both holistic factors (functionality, capacity, utilisation, obsolescence) and component specific factors such as physical condition.

The gross current values have been derived from reference to market data for recent projects and costing guides issued by the Australian Institute of Quantity Surveyors, Rawlinson's (Australian Construction Handbook). Where a depth in market can be identified, the net current value of a building asset is the difference between the market value of the asset as a whole (including land) and the market value of the land component. Where there is no depth of market, the net current value of a building asset is the gross current value less accumulated depreciation to reflect the consumed or expired service potential of the asset.

In determining the level of accumulated depreciation the asset has been disaggregated into significant components which exhibit useful lives. Allowance has been made for the typical asset life cycle and renewal treatments of each component, residual value at the time the asset is considered to be no longer available for use and the condition of the asset. Condition was assessed taking into account both physical characteristics as well as holistic factors such as functionality, capability, utilisation and obsolescence.

There has been no change to the valuation process during the reporting period.

Other Structures

This asset class comprises Boardwalks, Viewing platforms, Floodlighting Systems, Pedestrian bridges and fencing.

The cost approach has been utilised whereby the replacement cost was estimated for each asset by taking into account a range of factors. Inputs such as estimates of pattern of consumption, residual value, asset condition and useful life required extensive professional judgement and impacted significantly on the final determination of fair value. As such these assets were all classified as having been valued using level 3 valuation inputs.

There has been no change to the valuation process during the reporting period.

Roads

Roads comprise road carriageway, roadside shoulders & kerb & gutter. The cost approach using level 3 inputs was used to value this asset class. Valuations for this asset class were undertaken in-house based on actual costs and assumptions from Council's Engineering Department. No market based evidence (level 2) inputs are available therefore level 3 valuation inputs were used for this asset class.

The last full valuation of road infrastructure was undertaken effective 30 June 2015.

There has been no change to the valuation process during the reporting period.

Bridges

The last full valuation of bridges was undertaken effective 30th June 2015.

Each bridge was assessed individually, with the valuation varying according to the material type used for construction, the deck area, condition and size. Construction estimates were determined on a similar basis to roads.

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Shoalhaven City Council

Notes to the Financial Statements
for the year ended 30 June 2019

Note 22. Fair Value Measurement (continued)

There has been no change to the valuation process during the reporting period.

Footpaths

Council's footpath register consists of all pedestrian walkways and cycleways within the Council area.

Council's Engineering Department completed the valuation of the Footpath assets internally based on actual costs and assumptions and the last valuation was completed effective 30th June 2015.

There has been no change to the valuation process during the reporting period.

Bulk earthworks (non-depreciable)

The 'Cost Approach' estimated the replacement cost for each asset. Council's Engineering Department completed the valuation internally based on actual costs and assumptions and the last valuation was completed effective 30th June 2015.

There has been no change to the valuation process during the reporting period.

Stormwater Drainage

Assets within this class comprise pits, pipes, open channels, headwalls and various types of water quality devices.

The cost approach estimated the replacement cost for each asset by componentising the assets into significant parts with different useful lives and taking into account a range of factors. While the unit rates based on linear metres of certain diameter pipes and prices per pit or similar could be supported from market evidence (level 2) other inputs (such as estimates of pattern of consumption, residual value, asset condition and useful life) required extensive professional judgement and impacted significantly on the final determination of fair value. Additionally due to limitations in the historical records of very long lived assets there is uncertainty regarding the actual design, specifications and dimensions of some assets.

Council's Engineering Department completed the valuation internally based on actual costs and assumptions and the last valuation was completed effective 30th June 2015.

There has been no change to the valuation process during the reporting period.

Water Supply Network

Assets within this class comprise dams, treatment works, pumping stations and water mains.

The cost approach estimated the replacement cost for each asset by componentising the assets into significant parts with different useful lives and taking into account a range of factors. While the unit rates based on linear metres of certain diameter pipes and prices per pit or similar may be supported from market evidence (level 2) other inputs (such as estimates of pattern of consumption and useful life) required extensive professional judgement and impacted significantly on the final determination of fair value. Additionally due to limitations in the historical records of very long lived assets there is uncertainty regarding the actual design, specifications and dimensions of some assets. These assets are indexed each year in line with the NSW Reference Rates Manual as publish by the Office of Water (Department of Primary Industries). According to this manual, the calculation of sewerage projects within NSW, supplemented by published rates for water supply, sewerage and stormwater works and also rates obtained from a number of Local Water Utilities and other agencies".

The last full valuation of the water supply network was undertaken effective 30 June 2018.

There has been no change to the valuation process during the reporting period.

Sewerage Network

Assets within this class comprise treatment works, pumping stations and, sewerage mains.

The cost approach estimated the replacement cost for each asset by componentising the assets into significant parts with different useful lives and taking into account a range of factors. While the unit rates based on linear metres of certain diameter pipes and prices per pit or similar may be supported from market evidence (level 2) other inputs (such as estimates of pattern of consumption and useful life) required extensive professional judgement and impacted significantly on the final determination of fair value. Additionally due to limitations in the historical records of very long lived assets there is uncertainty regarding the actual design, specifications and dimensions of some assets. These assets are indexed each year in line with the NSW

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Shoalhaven City Council

Notes to the Financial Statements
for the year ended 30 June 2019

Note 22. Fair Value Measurement (continued)

Reference Rates Manual as publish by the Office of Water (Department of Primary Industries). According to this manual, the calculation of reference rates is based on "competitive contract prices obtained by NSW Public Works for water supply and sewerage projects within NSW, supplemented by published rates for water supply, sewerage and stormwater works and also rates obtained from a number of Local Water Utilities and other agencies".

The last full valuation of the sewerage network was undertaken effective 30 June 2018.

There has been no change to the valuation process during the reporting period.

Swimming Pools

Assets within this class comprise Council's rock pools, outdoor swimming pools and indoor swimming pools (component of Aquatic Centre). The swimming pools were valued in-house by experienced staff in Council's Engineering Department using the cost approach. The approach estimated the replacement cost for each pool by componentising its significant parts.

While some elements of gross replacement values may be supported from market evidence (level 2 input) other inputs (such as estimates of pattern of consumption, residual value, asset condition and useful life) required extensive professional judgement and impacted significantly on the final determination of fair value.

There has been no change to the valuation process during the reporting period.

Other Open Space / Recreational Assets

Assets within this class include playground equipment, BBQs and outdoor fitness facilities.

These were valued in-house by experienced staff in Council's Engineering Department using the cost approach. The approach estimated the replacement cost for asset by componentising its significant parts.

While some elements of gross replacement values may be supported from market evidence (level 2 input) other inputs (such as estimates of pattern of consumption, residual value, asset condition and useful life) required extensive professional judgement and impacted significantly on the final determination of fair value.

There has been no change to the valuation process during the reporting period.

Other Infrastructure

Assets within this class include jetties, boat ramps, sea/rock/retaining walls.

These were valued in-house by experienced staff in Council's Engineering Department using the cost approach. The approach estimated the replacement cost for asset by componentising its significant parts.

While some elements of gross replacement values may be supported from market evidence (level 2 input) other inputs (such as estimates of pattern of consumption, residual value, asset condition and useful life) required extensive professional judgement and impacted significantly on the final determination of fair value.

There has been no change to the valuation process during the reporting period.

Library Books

Library Books are valued at cost but are disclosed at fair value in the notes. The carrying amount of these assets is assumed to approximate fair value due to the nature of the items.

Council reviews the value of these assets against quoted prices for the gross current replacement cost of similar assets and by taking account of the pattern of consumption, estimated remaining useful life and the residual value.

There has been no change to the valuation process during the reporting period.

Non-current assets classified as 'held for sale'

This comprises operational land.

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Shoalhaven City Council

Notes to the Financial Statements
for the year ended 30 June 2019

Note 22. Fair Value Measurement (continued)

There has been no change to the valuation process during the reporting period.

(4) Fair value measurements using significant unobservable inputs (level 3)

a. The following tables present the changes in level 3 fair value asset classes.

$ '000		Investments	IPP&E	Held for Sale	Total
2018					
Opening balance		39,608	2,524,589	2,845	2,567,042
Transfers from/(to) another asset class		–	(1,499)	165	(1,334)
Purchases (GBV)		9,333	74,702	–	84,035
Disposals (WDV)		(15,656)	(5,407)	(462)	(21,525)
Depreciation and impairment		–	(59,268)	–	(59,268)
FV gains – Income Statement [1]		10	–	–	10
Asset revaluation reserve		–	41,988	–	41,988
Rounding		–	1	–	1
Closing balance		33,295	2,575,106	2,548	2,610,949
2019					
Opening balance		33,295	2,575,106	2,548	2,610,949
Adoption of AASB 9		1,058	–	–	1,058
Transfers from/(to) level 2 FV hierarchy	23 4(b)	–	5,755	–	5,755
Transfers from/(to) another asset class		–	1,238	(1,797)	(559)
Purchases (GBV)		17,600	78,300	–	95,900
Disposals (WDV)		(4,853)	(3,463)	(165)	(8,481)
Depreciation and impairment		–	(63,168)	–	(63,168)
FV gains – other comprehensive income		(393)	–	–	(393)
FV gains – Income Statement [1]		203	(1,574)	–	(1,371)
Asset revaluation reserve		–	66,169	–	66,169
Rounding		–	(1)	–	(1)
Closing balance		46,910	2,658,362	586	2,705,858

(1) FV gains recognised in the Income Statement relating to assets still on hand at year end total

b. Information relating to the transfers into and out of the level 3 fair valuation hierarchy (as disclosed in the table above) includes:

During the 2018/19 financial year 67 buildings ($6.5m) were transferred from non-specialised (Level 2 inputs) to specialised (level 3 inputs) and were valued in 2018/19 using level 3 inputs. Additionally, 2 buildings ($663K) were transferred from specialised (level 3 inputs) to non-specialised (level 2 inputs) and were valued in 2018/19 using level 2 inputs.

c. Significant unobservable valuation inputs used (for level 3 asset classes) and their relationship to fair value.

The following table summarises the quantitative information relating to the significant unobservable inputs used in deriving the various level 3 asset class fair values.

$ '000	Fair value (30/6/19)	Valuation technique/s	Unobservable inputs
Financial assets			
Investments	46,245	Advisor Reports	• Unit price
Infrastructure, property, plant and equipment			

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Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 22. Fair Value Measurement (continued)

$ '000	Fair value (30/6/19)	Valuation technique/s	Unobservable inputs
Plant and equipment	42,089	Cost used to approximate fair value	• Gross replacement cost • Remaining useful life • Residual value
Office equipment	3,831	Cost used to approximate fair value	• Gross replacement cost • Remaining useful life • Residual value
Furniture and fittings	2,400	Cost used to approximate fair value	• Gross replacement cost • Remaining useful life • Residual value
Operational land	167,758	External Valuer	• Land value (price per square metre)
Community land	125,548	Land values obtained from the NSW Valuer - General and External Valuer where Valuer- General values were not available	• Land value (price per square metre)
Land under roads (post 30/06/08)	1,609	Valuation of road segments at the average unit value of valued land within the Shoalhaven local government area with a discount for restricted use	• Average value of valued land within the Shoalhaven local government area • discount rate for restricted use
Land improvements and other infrastructure	200,459	Replacement Cost used to approximate fair value	• Gross replacement cost • Remaining useful life • Residual value • Asset condition
Buildings – specialised	273,845	External Valuer - Replacement Cost used to approximate fair value	• Gross replacement cost • Remaining useful life • Residual value • Asset condition
Other structures	17,850	Replacement Cost used to approximate fair value	• Gross replacement cost • Remaining useful life • Residual value • Asset condition
Roads	696,682	Replacement Cost used to approximate fair value	• Gross replacement cost • Remaining useful life • Residual value • Asset condition
Bridges	64,255	Replacement Cost used to approximate fair value	• Gross replacement cost • Remaining useful life • Residual value • Asset condition
Footpaths	49,315	Replacement Cost used to approximate fair value	• Gross replacement cost • Remaining useful life • Residual value • Asset condition
Bulk earthworks (nondepreciable)	109,674	Cost approach	• Replacement cost
Stormwater drainage	106,387	Unit rate per m2 or length	• Gross replacement cost • Remaining useful life • Residual value • Asset condition
Water supply network	343,626	Unit rate per m2 or length	• Gross replacement cost • Remaining useful life
Sewerage network	440,069	Unit rate per m2 or length	• Gross replacement cost • Remaining useful life
Swimming pools – other open space / recreational assets	9,636	Replacement Cost used to approximate fair value	• Gross replacement cost • Remaining useful life • Residual value • Asset condition

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Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 22. Fair Value Measurement (continued)

$ '000	Fair value (30/6/19)	Valuation technique/s	Unobservable inputs
Library books	1,002	Cost used to approximate fair value	• Gross replacement cost • Remaining useful life • Residual value • Asset condition
Tip asset	2,327	Present value of future expenditures expected to be incurred on waste depot sites restoration	• Estimated restoration costs
Non-current assets classified as 'held for sale'			
Operational Land	586	External Valuer	• Land value (price per square metre)
Buildings	–	External Valuer - Replacement Cost used to approximate fair value	• Gross replacement cost • Remaining useful life • Residual value • Asset condition

d. The valuation process for level 3 fair value measurements

Valuation Decision

– the whole valuation process is undertaken with all the relevant staff consulted. This includes: Asset Management Units (Assets and Works and Shoalhaven Water) , Finance and the Asset Custodians

– each asset class is investigated as to whether there is any evidence to suggest that the carrying value does not materially reflect the fair value at the reporting date.

– an asset class will be revalued if there is evidence identified or if the asset class is required to be revalued due to it being more than five years since the previous revaluation.

Valuation Process

– obtain a full list of assets to be valued, in consultation with the Asset Management Units, Finance and the Asset Custodians

– decide if the valuation will be performed internally or externally, this is dependant if Council has the resources, knowledge, skills and measurement base available.

External Valuations
– request a quotation or tender based on the expected cost of the valuation, following Council's procurement procedure
– evaluate and engage to successful valuer
– meet the valuer to discuss their approach and inspection schedule
– receive weekly updates from the valuer during the process
– Finance receives and reviews the valuation report and working papers with the relevant Council staff
– any concerns are communicated back to the valuer
– the values in the asset registers are amended according to the final reports received

Internal Valuations
– review unit rates, considering cost of constructing new assets since the previous revaluation
– apply these unit rates to the assets and amend the value accordingly in the asset registers

– the valuation movements are analysed by the Asset Accountant, Finance Manager and other staff with expertise in that Asset category

(5) Highest and best use

All of Council's non-financial assets are considered as being utilised for their highest and best use.

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 23. Related Party Transactions

(a) Key management personnel

Key management personnel (KMP) of the council are those persons having the authority and responsibility for planning, directing and controlling the activities of the council, directly or indirectly.

The aggregate amount of KMP compensation included in the Income Statement is:

$ '000	2019	2018
Compensation:		
Short-term benefits	4,342	4,359
Post-employment benefits	269	296
Other long-term benefits	303	212
Termination benefits	43	82
Total	4,957	4,949

(b) Other transactions with KMP and their related parties

Council has determined that transactions at arm's length between KMP and Council as part of Council delivering a public service objective (e.g. access to library or Council swimming pool by KMP) will not be disclosed.

Nature of the transaction $ '000	Ref	Value of transactions during year	Outstanding balance (incl. loans and commitments)	Terms and conditions	Provisions for impairment of receivables outstanding	Expense recognised for impairment of receivables
2019						
Council rates	3(a)	14	6	Due 30th June 2019	–	–
Water rates	3(a)	1	–	30 days	–	–
Development applications	3(b)(i)	16	–	On application	–	–
Additional/relocated metered service	3(b)	–	–	On application	–	–
Amend a condition of consent	3(b)(i)	1	–	On application	–	–
Travel & accommodation	3(a)	7	–	30 days end of month	–	–
Memberships	3(a)	2	1	30 days end of month	–	–
2018						
Council rates	3(a)	1	–	Due 30th June 2018	–	–

continued on next page ...

Notes to the Financial Statements

for the year ended 30 June 2019

Note 23. Related Party Transactions (continued)

Nature of the transaction $ '000	Ref	Value of transactions during year	Outstanding balance (incl. loans and commitments)	Terms and conditions	Provisions for impairment of receivables outstanding	Expense recognised for impairment of receivables
Water rates	3(a)	1	–	30 days	–	–
Development applications	3(b)(i)	4	–	On application	–	–
Additional/relocated metered service	3(b)	1	–	On application	–	–
Amend a condition of consent	3(b)(i)	1	–	On application	–	–
Travel & accommodation	3(a)	–	–		–	–
Memberships	3(a)	–	–		–	–

(c) Other related party transactions

$ '000	Ref	Value of transactions during year	Outstanding balance (incl. loans and commitments)	Terms and conditions	Provisions for impairment of receivables outstanding	Expense recognised for impairment of receivables
2019						
Management committee subsidy		127	18	Management Committees are paid a subsidy to assist in operating and maintaining the facility they are managing	–	–
2018						
Management committee subsidy		164	–	Management Committees are paid a subsidy to assist in operating and maintaining the facility they are managing	–	–

Note 24. Events occurring after the reporting date

Council is unaware of any material or significant 'non-adjusting events' that should be disclosed.

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 25. Statement of developer contributions

Under the *Environmental Planning and Assessment Act 1979*, Council has significant obligations to provide Section 7.11 (contributions towards provision or improvement of amenities or services) infrastructure in new release areas.

It is possible that the funds contributed may be less than the cost of this infrastructure, requiring Council to borrow or use general revenue to fund the difference.

Summary of contributions and levies

	as at 30/6/2018						as at 30/6/2019	
		Contributions received during the year						
$ '000	Opening Balance	Cash	Non-cash	Interest earned in year	Expenditure during year	Internal borrowing (to)/from	Held as restricted asset	Cumulative internal borrowings due/(payable)
Drainage	309	9	–	17	(161)	–	174	–
Roads	4,284	648	–	206	(1,170)	–	3,968	–
Parking	977	344	–	32	(349)	–	1,004	–
Open space	2,438	179	–	79	(946)	–	1,750	–
Community facilities	10,096	570	–	298	(7,927)	–	3,037	–
Other	422	358	–	3	(481)	–	302	–
Active recreation	13,238	804	–	341	(14,377)	–	6	–
S7.11 contributions – under a plan	31,764	2,912	–	976	(25,411)	–	10,241	–
Total S7.11 and S7.12 revenue under plans	31,764	2,912	–	976	(25,411)	–	10,241	–
S64 contributions	18,131	2,739	–	564	(2,792)	–	18,642	–
Total contributions	49,895	5,651	–	1,540	(28,203)	–	28,883	–

(1) The adoption of the new contributions plan resulted in $24M of contributions received on deleted projects being transferred to S7.11 recoupment

continued on next page ...

Notes to the Financial Statements

for the year ended 30 June 2019

Note 25. Statement of developer contributions (continued)

$ '000	as at 30/6/2018 Opening Balance	Contributions received during the year Cash	Non-cash	Interest earned in year	Expenditure during year	Internal borrowing (to)/from	as at 30/6/2019 Held as restricted asset	Cumulative internal borrowings due/(payable)
S7.11 Contributions – under a plan								
Shoalhaven Contributions Plan								
Drainage	309	9	–	17	(161)	–	174	–
Roads	4,284	648	–	206	(1,170)	–	3,968	–
Parking	977	344	–	32	(349)	–	1,004	–
Open space	2,438	179	–	79	(946)	–	1,750	–
Community facilities	10,096	570	–	298	(7,927)	–	3,037	–
Active recreation	13,238	804	–	341	(14,377)	–	6	–
Other	422	358	–	3	(481)	–	302	–
Total	31,764	2,912	–	976	(25,411)	–	10,241	–

(1) The adoption of the new contributions plan resulted in $24M of contributions received on deleted projects being transferred to S7.11 recoupment

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 26. Financial result and financial position by fund

$ '000	General [1] 2019	Water 2019	Sewer 2019
Income Statement by fund			
Income from continuing operations			
Rates and annual charges	94,352	5,267	44,006
User charges and fees	63,617	22,883	5,403
Interest and investment revenue	5,756	1,935	1,532
Other revenues	4,361	638	1,266
Grants and contributions provided for operating purposes	20,170	–	–
Grants and contributions provided for capital purposes	21,283	2,597	3,214
Other income			
Net gains from disposal of assets	85	–	–
Fair value increment on investment property	135	–	–
Total income from continuing operations	209,759	33,320	55,421
Expenses from continuing operations			
Employee benefits and on-costs	71,790	8,806	11,086
Borrowing costs	1,973	–	5,040
Materials and contracts	50,141	5,971	6,811
Depreciation and amortisation	43,282	9,617	10,665
Other expenses	29,068	4,275	5,770
Net losses from the disposal of assets	–	536	830
Revaluation decrement /impairment of IPPE	1,574	–	–
Total expenses from continuing operations	197,828	29,205	40,202
Operating result from continuing operations	11,931	4,115	15,219
Net operating result for the year	11,931	4,115	15,219
Net operating result attributable to each council fund	11,931	4,115	15,219
Net operating result for the year before grants and contributions provided for capital purposes	(9,352)	1,518	12,005

NB. All amounts disclosed above are gross – that is, they include internal charges and recoveries made between the funds.

(1) General fund refers to all of Council's activities except for its water and sewer activities which are listed separately.

continued on next page ...

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 26. Financial result and financial position by fund (continued)

$ '000	General [1] 2019	Water 2019	Sewer 2019
Statement of Financial Position by fund			
ASSETS			
Current assets			
Cash and cash equivalents	29,661	12,892	9,305
Investments	66,373	28,850	20,823
Receivables	10,879	4,608	5,514
Inventories	2,090	1,117	–
Other	793	52	–
Non-current assets classified as 'held for sale'	586	–	–
Total current assets	110,382	47,519	35,642
Non-current assets			
Investments	24,687	10,442	7,536
Receivables	3,418	5,190	1,230
Inventories	6,687	–	–
Infrastructure, property, plant and equipment	1,841,301	374,396	613,819
Investment property	1,700	–	–
Intangible assets	3,346	2,154	45
Total non-current assets	1,881,139	392,182	622,630
TOTAL ASSETS	1,991,521	439,701	658,272
LIABILITIES			
Current liabilities			
Payables	10,446	998	9,335
Income received in advance	4,745	888	–
Borrowings	8,712	–	6,044
Provisions	33,204	–	–
Total current liabilities	57,107	1,886	15,379
Non-current liabilities			
Borrowings	39,883	–	102,490
Provisions	6,751	–	–
Total non-current liabilities	46,634	–	102,490
TOTAL LIABILITIES	103,741	1,886	117,869
Net assets	1,887,780	437,815	540,403
EQUITY			
Accumulated surplus	928,647	229,507	407,547
Revaluation reserves	959,526	208,308	132,856
Other reserves	(393)	–	–
Council equity interest	1,887,780	437,815	540,403
Total equity	1,887,780	437,815	540,403

NB. All amounts disclosed above are gross – that is, they include internal charges and recoveries made between the funds. Assets and liabilities shown in the water and sewer columns are restricted for use for these activities.

(1) General fund refers to all of Council's activities except for its water and sewer activities which are listed separately.

continued on next page ...

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 26. Financial result and financial position by fund (continued)

Details of individual internal loans for the year ended 30 June 2019

(in accordance with s410(3) of the *Local Government Act 1993*)

Details of individual internal loans	Min9/542	Min9/542
Borrower (by purpose)	General Fund	Sewer Fund
Lender (by purpose)	Water Fund	Water Fund
Date of minister's approval	11/06/2009	11/06/2009
Date raised	30/06/2009	30/06/2009
Term (years)	10	15
Dates of maturity	30/06/2019	30/06/2024
Rate of interest	6.07%	6.28%
Amount originally raised	5,895	12,000
Total repaid during year (principal and interest)	807	1,247
Principal outstanding at end of year	0	5,280

Shoalhaven City Council

Notes to the Financial Statements

for the year ended 30 June 2019

Note 27(a). Statement of performance measures – consolidated results

$ '000	Amounts 2019	Indicator 2019	Prior periods 2018	Prior periods 2017	Benchmark
1. Operating performance ratio					
Total continuing operating revenue excluding capital grants and contributions less operating expenses [1, 2]	4,875	1.97%	7.42%	2.61%	>0.00%
Total continuing operating revenue excluding capital grants and contributions [1]	247,794				
2. Own source operating revenue ratio					
Total continuing operating revenue excluding all grants and contributions [1]	225,023	81.86%	80.82%	77.70%	>60.00%
Total continuing operating revenue [1]	274,886				
3. Unrestricted current ratio					
Current assets less all external restrictions	87,844	2.54x	1.76x	2.02x	>1.50x
Current liabilities less specific purpose liabilities	34,558				
4. Debt service cover ratio					
Operating result before capital excluding interest and depreciation/impairment/amortisation [1]	75,074	4.00x	5.55x	3.70x	>2.00x
Principal repayments (Statement of Cash Flows) plus borrowing costs (Income Statement)	18,753				
5. Rates, annual charges, interest and extra charges outstanding percentage					
Rates, annual and extra charges outstanding	12,445	8.16%	8.16%	8.90%	<10.00%
Rates, annual and extra charges collectible	152,472				
6. Cash expense cover ratio					
Current year's cash and cash equivalents plus all term deposits	163,659	9.30 mths	11.61 mths	9.90 mths	>3.00 mths
Monthly payments from cash flow of operating and financing activities	17,607				

(1) Excludes fair value adjustments, reversal of revaluation decrements, net gain on sale of assets, and net loss of interests in joint ventures and associates.

(2) Excludes impairment/revaluation decrements, net loss on sale of assets, and net loss on share of interests in joint ventures and associates

Shoalhaven City Council

Notes to the Financial Statements
for the year ended 30 June 2019

Note 27(b). Statement of performance measures – by fund

$ '000	General Indicators [3] 2019	General Indicators [3] 2018	Water Indicators 2019	Water Indicators 2018	Sewer Indicators 2019	Sewer Indicators 2018	Benchmark
1. Operating performance ratio							
Total continuing operating revenue excluding capital grants and contributions less operating expenses [1, 2] / Total continuing operating revenue excluding capital grants and contributions [1]	**(4.36)%**	0.35%	**6.69%**	15.98%	**24.58%**	28.23%	>0.00%
2. Own source operating revenue ratio							
Total continuing operating revenue excluding capital grants and contributions [1] / Total continuing operating revenue [1]	**79.45%**	78.65%	**90.64%**	88.93%	**93.28%**	88.94%	>60.00%
3. Unrestricted current ratio							
Current assets less all external restrictions / Current liabilities less specific purpose liabilities	**2.48x**	1.70x	**25.20x**	16.70x	**2.32x**	1.99x	>1.50x
4. Debt service cover ratio							
Operating result before capital excluding interest and depreciation/impairment/amortisation [1] / Principal repayments (Statement of Cash Flows) plus borrowing costs (Income Statement)	**4.32x**	5.45x	**∞**	∞	**2.48x**	2.98x	>2.00x
5. Rates, annual charges, interest and extra charges outstanding percentage							
Rates, annual and extra charges outstanding / Rates, annual and extra charges collectible	**6.51%**	5.81%	**11.48%**	13.87%	**11.05%**	12.10%	<10.00%
6. Cash expense cover ratio							
Current year's cash and cash equivalents plus all term deposits / Payments from cash flow of operating and financing activities	**7.15 mths**	7.62 mths	**23.48 mths**	48.84 mths	**10.39 mths**	9.21 mths	>3.00 mths

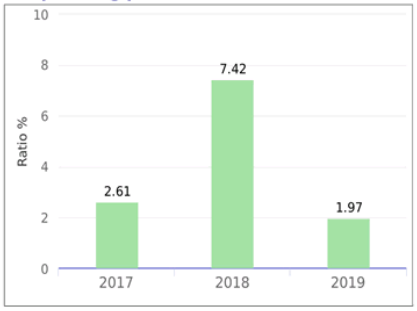
(1) - (2) Refer to Notes at Note 27a above.
(3) General fund refers to all of Council's activities except for its water and sewer activities which are listed separately.

Shoalhaven City Council

Notes to the Financial Statements
for the year ended 30 June 2019

Note 27(c). Statement of performance measures – consolidated results (graphs)

1. Operating performance ratio



Purpose of operating performance ratio

This ratio measures Council's achievement of containing operating expenditure within operating revenue.

Commentary on 2018/19 result

2018/19 ratio 1.97%

Council's operating performance ratio is above the benchmark of 0% but has deteriorated on the previous year due to the discounting for the leave provision, an increase in contractor costs for the repair of the flood levee, Jerberra Estate works not able to capitalise and a decrease in water charges.

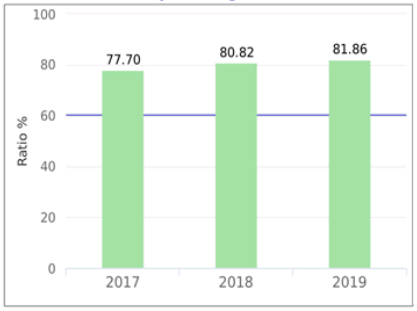
Benchmark: — > 0.00%

Source of benchmark: Code of Accounting Practice and Financial Reporting #27

Ratio achieves benchmark

Ratio is outside benchmark

2. Own source operating revenue ratio



Purpose of own source operating revenue ratio

This ratio measures fiscal flexibility. It is the degree of reliance on external funding sources such as operating grants and contributions.

Commentary on 2018/19 result

2018/19 ratio 81.86%

Council's Own Source Operating Revenue ratio has remained above the benchmark of >60%. Council has sufficient level of fiscal flexibility, in the event of being face with unforeseen events.

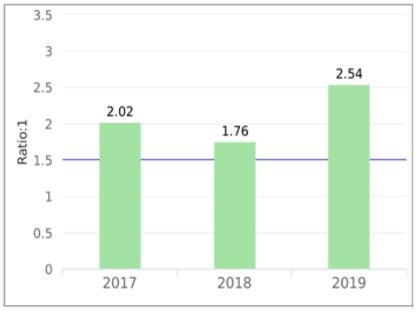
Benchmark: — > 60.00%

Source of benchmark: Code of Accounting Practice and Financial Reporting #27

Ratio achieves benchmark

Ratio is outside benchmark

3. Unrestricted current ratio



Purpose of unrestricted current ratio

To assess the adequacy of working capital and its ability to satisfy obligations in the short term for the unrestricted activities of Council.

Commentary on 2018/19 result

2018/19 ratio 2.54x

This ratio indicated that Council currently projects to have $2.54 (excluding restricted funds such as developer contributions, Water, Sewer and grant monies) available to service every $1 of debt as it falls due at the end of the year. This ratio has improved due to the revision of the developer contributions plan with funds from the deleted projects moving to an internally restricted reserve.

Benchmark: — > 1.50x

Source of benchmark: Code of Accounting Practice and Financial Reporting #27

Ratio achieves benchmark

Ratio is outside benchmark

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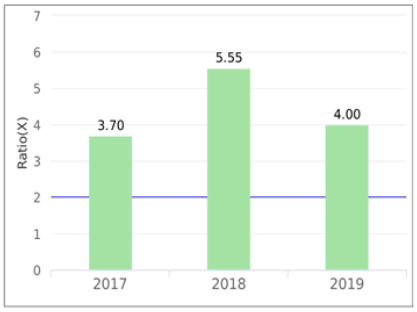
Shoalhaven City Council

Notes to the Financial Statements
for the year ended 30 June 2019

Note 27(c). Statement of performance measures – consolidated results (graphs)

4. Debt service cover ratio



Purpose of debt service cover ratio	Commentary on 2018/19 result
	2018/19 ratio 4.00x
This ratio measures the availability of operating cash to service debt including interest, principal and lease payments	With a ratio of 4.00x, Council's ability to generate sufficient cash to cover its debt is sound and in excess of the benchmark of 2x.

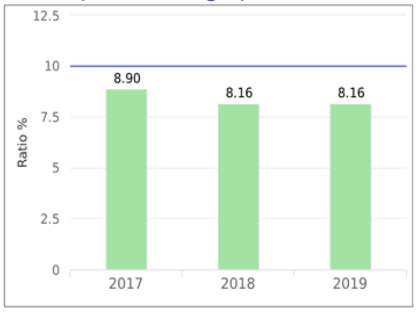
Benchmark: — > 2.00x

Source of benchmark: Code of Accounting Practice and Financial Reporting #27

Ratio achieves benchmark

Ratio is outside benchmark

5. Rates, annual charges, interest and extra charges outstanding percentage



Purpose of rates, annual charges, interest and extra charges outstanding	Commentary on 2018/19 result
	2018/19 ratio 8.16%
To assess the impact of uncollected rates and annual charges on Council's liquidity and the adequacy of recovery efforts.	The percentage of outstanding rates and annual charges has slightly decreased to 8.16% and is under the benchmark of 10%.

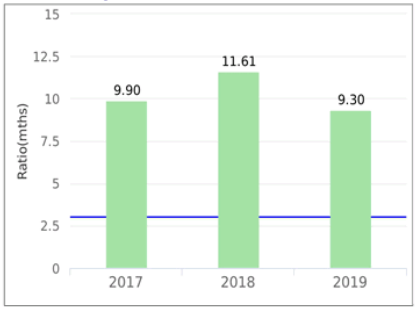
Benchmark: — < 10.00%

Source of benchmark: Code of Accounting Practice and Financial Reporting #27

Ratio achieves benchmark

Ratio is outside benchmark

6. Cash expense cover ratio



Purpose of cash expense cover ratio	Commentary on 2018/19 result
	2018/19 ratio 9.30 mths
This liquidity ratio indicates the number of months a Council can continue paying for its immediate expenses without additional cash inflow.	Council's Cash Expense Ratio is again above the benchmark, indicating Council's ability to pay for its immediate expenses without additional cashflow. Council has enough cash to fund 9.30 months of operating expenditure, this is above the benchmark of 3 month.

Benchmark: — > 3.00mths

Source of benchmark: Code of Accounting Practice and Financial Reporting #27

Ratio achieves benchmark

Ratio is outside benchmark

INDEPENDENT AUDITOR'S REPORT

Report on the general purpose financial statements

Shoalhaven City Council

To the Councillors of the Shoalhaven City Council

Opinion

I have audited the accompanying financial statements of Shoalhaven City Council (the Council), which comprise the Income Statement and Statement of Comprehensive Income for the year ended 30 June 2019, the Statement of Financial Position as at 30 June 2019, the Statement of Changes in Equity and Statement of Cash Flows for the year then ended, notes comprising a summary of significant accounting policies and other explanatory information, and the Statement by Councillors and Management. The financial statements include the consolidated financial statements of the Council and the entities it controlled at the year's end or from time to time during the year.

In my opinion:

- the Council's accounting records have been kept in accordance with the requirements of the *Local Government Act 1993*, Chapter 13, Part 3, Division 2 (the Division)
- the financial statements:
  - have been presented, in all material respects, in accordance with the requirements of this Division
  - are consistent with the Council's accounting records
  - present fairly, in all material respects, the financial position of the Council as at 30 June 2019, and of its financial performance and its cash flows for the year then ended in accordance with Australian Accounting Standards
- all information relevant to the conduct of the audit has been obtained
- no material deficiencies in the accounting records or financial statements have come to light during the audit.

My opinion should be read in conjunction with the rest of this report.

Basis for Opinion

I conducted my audit in accordance with Australian Auditing Standards. My responsibilities under the standards are described in the 'Auditor's Responsibilities for the Audit of the Financial Statements' section of my report.

I am independent of the Council in accordance with the requirements of the:

- Australian Auditing Standards
- Accounting Professional and Ethical Standards Board's APES 110 'Code of Ethics for Professional Accountants' (APES 110).

I have fulfilled my other ethical responsibilities in accordance with APES 110.

Parliament promotes independence by ensuring the Auditor-General and the Audit Office of New South Wales are not compromised in their roles by:

- providing that only Parliament, and not the executive government, can remove an Auditor-General
- mandating the Auditor-General as auditor of councils
- precluding the Auditor-General from providing non-audit services.

I believe the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

Other Information

The Council's annual report for the year ended 30 June 2019 includes other information in addition to the financial statements and my Independent Auditor's Report thereon. The Councillors are responsible for the other information. At the date of this Independent Auditor's Report, the other information I have received comprise the special purpose financial statements and Special Schedules (the Schedules).

My opinion on the financial statements does not cover the other information. Accordingly, I do not express any form of assurance conclusion on the other information. However, as required by the *Local Government Act 1993*, I have separately expressed an opinion on the special purpose financial statements and Special Schedule - Permissible income for general rates.

In connection with my audit of the financial statements, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work I have performed, I conclude there is a material misstatement of the other information, I must report that fact.

I have nothing to report in this regard.

The Councillors' Responsibilities for the Financial Statements

The Councillors are responsible for the preparation and fair presentation of the financial statements in accordance with Australian Accounting Standards and the *Local Government Act 1993*, and for such internal control as the Councillors determine is necessary to enable the preparation and fair presentation of the financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Councillors are responsible for assessing the Council's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting except where the Council will be dissolved or amalgamated by an Act of Parliament, or otherwise cease operations.

Auditor's Responsibilities for the Audit of the Financial Statements

My objectives are to:

- obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error
- issue an Independent Auditor's Report including my opinion.

Reasonable assurance is a high level of assurance, but does not guarantee an audit conducted in accordance with Australian Auditing Standards will always detect material misstatements. Misstatements can arise from fraud or error. Misstatements are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions users take based on the financial statements.

A description of my responsibilities for the audit of the financial statements is located at the Auditing and Assurance Standards Board website at: www.auasb.gov.au/auditors_responsibilities/ar3.pdf. The description forms part of my auditor's report.

My opinion does not provide assurance:

- that the Council carried out its activities effectively, efficiently and economically
- on the Original Budget information included in the Income Statement, Statement of Cash Flows, and Note 21 Material budget variations
- on the Special Schedules. A separate opinion has been provided on Special Schedule - Permissible income for general rates
- about the security and controls over the electronic publication of the audited financial statements on any website where they may be presented
- about any other information which may have been hyperlinked to/from the financial statements.

Dominika Ryan
Director, Financial Audit Services

Delegate of the Auditor-General for New South Wales

31 October 2019
SYDNEY

Councillor Amanda Findley
Mayor
Shoalhaven City Council
PO Box 42
NOWRA NSW 2541

Contact: Dominika Ryan
Phone no: 02 9275 7336
Our ref: D1924241/1785

31 October 2019

Dear Mayor

Report on the Conduct of the Audit

for the year ended 30 June 2019

Shoalhaven City Council

I have audited the general purpose financial statements (GPFS) of the Shoalhaven City Council (the Council) for the year ended 30 June 2019 as required by section 415 of the *Local Government Act 1993* (the Act).

I expressed an unmodified opinion on the Council's GPFS.

This Report on the Conduct of the Audit (the Report) for the Council for the year ended 30 June 2019 is issued in accordance with section 417 of the Act. This Report should be read in conjunction with my audit opinion on the GPFS issued under section 417(2) of the Act.

INCOME STATEMENT

Operating result

	2019 $m	2018 $m	Variance %
Rates and annual charges revenue	142.4	135.7	4.9
Grants and contributions revenue	47.3	49.6	4.6
Operating result for the year	29.4	48.8	39.8
Net operating result before capital grants and contributions	2.4	17.7	86.4

Rates and annual charges revenue ($142.4 million) increased by $6.7 million mainly due to the increase in the special rate variation from 10.3 per cent in 2017–18 to 17.1 per cent in 2018–19.

Council's operating result of $2.4 million includes the effect of depreciation and amortisation expense of $63.6 million. The result, excluding capital grants, is $19.4 million lower than 2017–18. This was driven by:

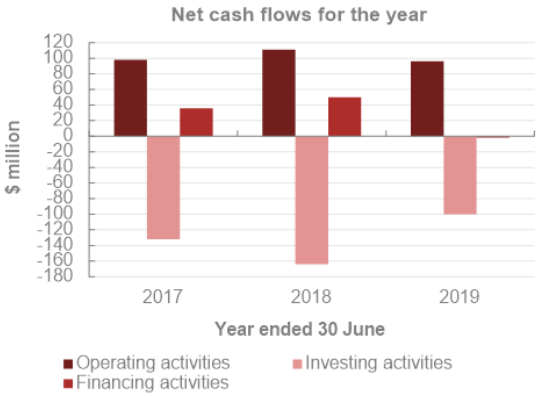
- increase of $7.9 million in materials and contracts expense due to flood levee repairs and Jerberra Estate asset maintenance and management
- increase of $6.0 million in employee benefits and on-costs due to increased on-costs from leave entitlements and additional staff employed to carry out works resulting from 2018–19 special rate variation (956 full time equivalent staff in 2018–19 compared to 936 FTE in 2017–18)
- decrease in grants and contributions of $2.3 million and user charges and fees of $2.3 million primarily due to reduced developer cash contributions received by Council from s7.11 and s64 and lower private works and water meter installations respectively.

STATEMENT OF CASH FLOWS

While payments by the Council increased by 7.6 per cent to $199 million, receipts remained generally steady in the past two years. This resulted to decrease in net cash provided by operating activities.

Net cash used in investing activities was lower by $51.3 million due to $50.3 million decrease in purchase of infrastructure, property, plant and equipment and $18.6 reduction in purchase of investment securities.

The Council's proceeds from borrowings and advances returned to a lower level, decreasing by $49.4 million significantly reducing net cash provided by financing activities.



FINANCIAL POSITION

Cash and investments

Cash and investments	2019	2018	Commentary
	$m	$m	
External restrictions	128.4	160.2	Council's cash and investments at 30 June 2019 was lower by $10.9 million compared to previous year largely because of $57.7 million in advances from TCorp in 2017–18. These loans were for various capital works including Reclaimed Effluent Management Scheme Stage 1B. Externally restricted balances, which include unexpended specific loans, developer contributions, water supplies and sewerage services, decreased by $31.8 million mainly due to significantly lower developer contributions and unexpended specific loans particularly for sewer. Balances are internally restricted due to Council policy or decisions for forward plans including works program. They were higher than last year because of $24.6 million section 7.11 recoupment funds used by the Council as matching funds for section 7.11 related construction projects. Unrestricted balances provide liquidity for day-to-day operations.
Internal restrictions	63.2	43.7	
Unrestricted	19.0	17.6	
Cash and investments	210.6	221.5	

Debt

At 30 June 2019, Council had external borrowings of $151 million (30 June 2018: $154 million). The loans are secured over Council's general rating income.

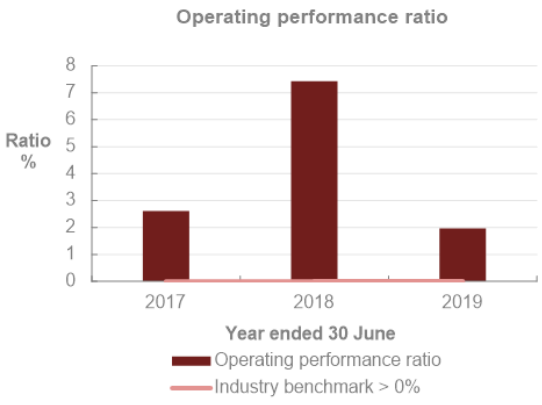
It had unrestricted access to a $550,000 line of credit through credit or purchase cards. Total drawdowns at the end of the year amounted to $94,000.

PERFORMANCE

Operating performance ratio

Council's operating performance ratio exceeded the industry benchmark over the past three years. It decreased in 2018–19 mainly due to increase in materials and contracts expense and employee benefits and on-costs. User charges and fees also decreased.

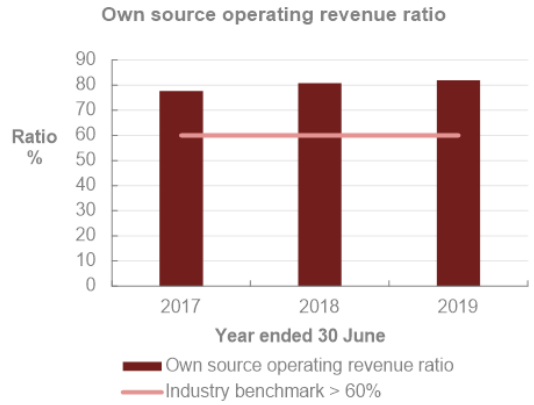
The 'operating performance ratio' measures how well council contained operating expenditure within operating revenue (excluding capital grants and contributions, fair value adjustments, and reversal of revaluation decrements). The benchmark set by the former Office of Local Government (OLG) is greater than zero per cent.



Own source operating revenue ratio

Council's own source operating revenue ratio exceeded the industry benchmark over the past three years. The current year ratio of 81.9 per cent is largely consistent with the previous reporting periods.

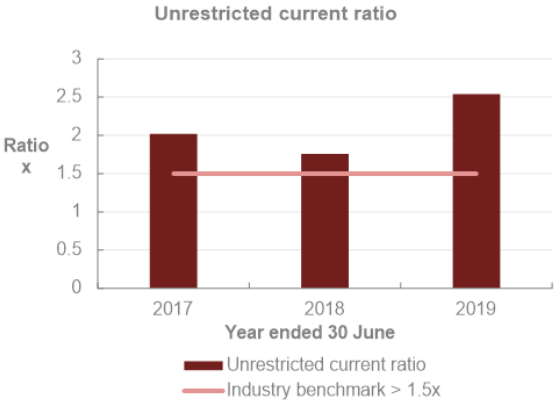
The 'own source operating revenue ratio' measures council's fiscal flexibility and the degree to which it relies on external funding sources such as operating grants and contributions. The benchmark set by the former OLG is greater than 60 per cent.



Unrestricted current ratio

Council's unrestricted current ratio exceeded the industry benchmark over the past three years. The ratio increased due to the revision of the developer contributions plan with funds from the deleted projects moving to an internally restricted reserve.

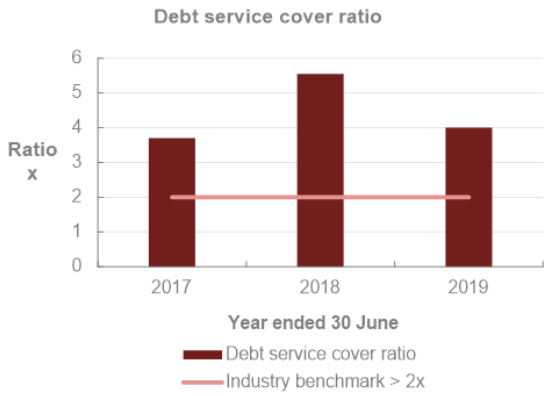
The 'unrestricted current ratio' is specific to local government and represents council's ability to meet its short-term obligations as they fall due. The benchmark set by the former OLG is greater than 1.5 times.



Debt service cover ratio

Council's debt service cover ratio exceeded the industry benchmark over the past three years. Its ratio decreased from 5.5 to 4.0 at 30 June 2019. A higher ratio indicates Council has greater capacity to take on, and service additional debt.

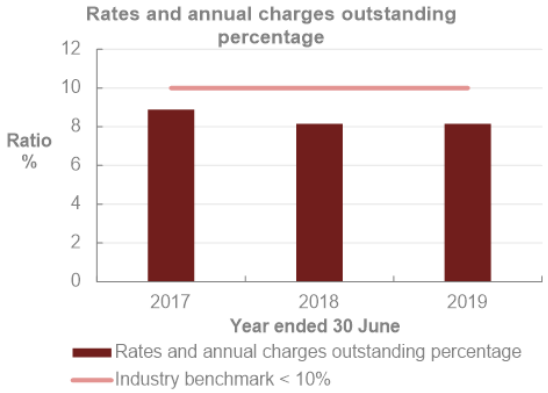
The 'debt service cover ratio' measures the operating cash to service debt including interest, principal and lease payments. The benchmark set by the former OLG is greater than two times.



Rates and annual charges outstanding percentage

Council's outstanding rates and charges percentage met the benchmark for non-metropolitan councils in the past three years.

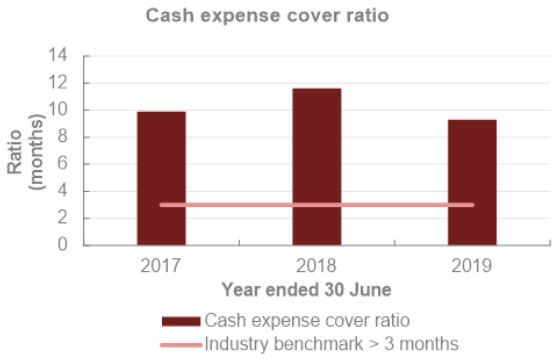
The 'rates and annual charges outstanding percentage' assesses the impact of uncollected rates and annual charges on council's liquidity and the adequacy of debt recovery efforts. The benchmark set by the former OLG is less than 10 per cent for regional and rural councils.



Cash expense cover ratio

Council's cash expense cover ratio in 2018–19 was 9.3. It's lower than last year due to lower cash and cash equivalents and term deposits and higher payments from operating and financing activities. Despite this, it is still well above the benchmark.

This liquidity ratio indicates the number of months the council can continue paying for its immediate expenses without additional cash inflow. The benchmark set by the former OLG is greater than three months.



Infrastructure, property, plant and equipment renewals

Infrastructure, property, plant and equipment renewals for 2018–19 amounted to $39.4 million (2018: $44.3 million). The decrease was mainly caused by:

- decrease in capital work in progress of $10.8 million
- increase in plant and equipment of $4.8 million.

OTHER MATTERS

New accounting standards implemented

Application period	Overview
AASB 9 'Financial Instruments' and revised AASB 7 'Financial Instruments: Disclosures'	
For the year ended 30 June 2019	AASB 9 replaces AASB 139 'Financial Instruments: Recognition and Measurement' and changes the way financial instruments are treated for financial reporting. Key changes include: • a simplified model for classifying and measuring financial assets • a new method for calculating impairment • a new type of hedge accounting that more closely aligns with risk management. The revised AASB 7 includes new disclosures as a result of AASB 9. Council's disclosure of the impact of adopting AASB 9 is disclosed in Note 15.

Legislative compliance

My audit procedures did not identify any instances of non-compliance with legislative requirements or a material deficiency in the Council's accounting records or financial statements. The Council's:

- accounting records were maintained in a manner and form to allow the GPFS to be prepared and effectively audited
- staff provided all accounting records and information relevant to the audit.

DRyan

Dominika Ryan
Director, Financial Audit Services

Delegate of the Auditor-General for New South Wales

cc: Mr Stephen Dunshea, Chief Executive Officer
Mr Peter McLean, Chair of Audit, Risk and Improvement Committee
Jim Betts, Secretary of the Department of Planning, Industry and Environment

Shoalhaven City Council

SPECIAL PURPOSE FINANCIAL STATEMENTS
for the year ended 30 June 2019

Shoalhaven City Council

Special Purpose Financial Statements
for the year ended 30 June 2019

Contents Page

Background

i. These Special Purpose Financial Statements have been prepared for the use by both Council and the Office of Local Government in fulfilling their requirements under National Competition Policy.

ii. The principle of competitive neutrality is based on the concept of a 'level playing field' between persons/entities competing in a market place, particularly between private and public sector competitors.

Essentially, the principle is that government businesses, whether Commonwealth, state or local, should operate without net competitive advantages over other businesses as a result of their public ownership.

iii. For Council, the principle of competitive neutrality and public reporting applies only to declared business activities.

These include **(a)** those activities classified by the Australian Bureau of Statistics as business activities being water supply, sewerage services, abattoirs, gas production and reticulation, and **(b)** those activities with a turnover of more than $2 million that Council has formally declared as a business activity (defined as Category 1 activities.

iv. In preparing these financial statements for Council's self-classified Category 1 businesses and ABS-defined activities, councils must **(a)** adopt a corporatisation model and **(b)** apply full cost attribution including tax-equivalent regime payments and debt guarantee fees (where the business benefits from Council's borrowing position by comparison with commercial rates).

Special Purpose Financial Statements 2019

Shoalhaven City Council

Special Purpose Financial Statements

for the year ended 30 June 2019

Statement by Councillors and Management made pursuant to the Local Government Code of Accounting Practice and Financial Reporting

The attached Special Purpose Financial Statements have been prepared in accordance with:

- the NSW Government Policy Statement *'Application of National Competition Policy to Local Government'*,
- the Division of Local Government Guidelines *'Pricing and Costing for Council Businesses – A Guide to Competitive Neutrality'*,
- the Local Government *Code of Accounting Practice and Financial Reporting*,
- the NSW Office of *Water Best-Practice Management of Water and Sewerage Guidelines.*

To the best of our knowledge and belief, these statements:

- present fairly the operating result and financial position for each of Council's declared business activities for the year, and
- accord with Council's accounting and other records.
- present overhead reallocation charges to the water and sewerage businesses as fair and reasonable.

We are not aware of any matter that would render these statements false or misleading in any way.

Signed in accordance with a resolution of Council made on 29 October 2019.

Amanda Findley
Mayor
29 October 2019

P.K. White

Patricia White
Councillor
29 October 2019

Stephen Dunshea
Chief Executive Officer
29 October 2019

V Phelan

Vanessa Phelan
Responsible Accounting Officer
29 October 2019

Shoalhaven City Council

Income Statement – Water Supply Business Activity

for the year ended 30 June 2019

$ '000	2019	2018
Income from continuing operations		
Access charges	5,267	4,336
User charges	17,047	18,415
Fees	5,836	5,814
Interest	1,935	1,872
Grants and contributions provided for non-capital purposes	–	517
Other income	638	80
Total income from continuing operations	30,723	31,034
Expenses from continuing operations		
Employee benefits and on-costs	8,806	8,505
Materials and contracts	5,971	4,903
Depreciation, amortisation and impairment	9,617	8,783
Loss on sale of assets	536	45
Calculated taxation equivalents	112	114
Other expenses	4,275	3,769
Total expenses from continuing operations	29,317	26,119
Surplus (deficit) from continuing operations before capital amounts	1,406	4,915
Grants and contributions provided for capital purposes	2,597	3,282
Surplus (deficit) from continuing operations after capital amounts	**4,003**	**8,197**
Surplus (deficit) from all operations before tax	**4,003**	**8,197**
Less: corporate taxation equivalent (27.5%) [based on result before capital]	(387)	(1,352)
SURPLUS (DEFICIT) AFTER TAX	3,616	6,845
Plus accumulated surplus	227,723	212,288
Plus/less: prior period adjustments	(737)	8,694
Plus adjustments for amounts unpaid:		
– Taxation equivalent payments	112	114
– Corporate taxation equivalent	387	1,352
Less:		
– Tax equivalent dividend paid	(114)	(84)
– Surplus dividend paid	(1,480)	(1,486)
Closing accumulated surplus	229,507	227,723
Return on capital %	0.4%	1.3%
Subsidy from Council	3,536	4,794
Calculation of dividend payable:		
Surplus (deficit) after tax	3,616	6,845
Less: capital grants and contributions (excluding developer contributions)	(2,597)	(2,046)
Surplus for dividend calculation purposes	**1,019**	**4,799**
Potential dividend calculated from surplus	**510**	**2,400**

Shoalhaven City Council

Income Statement – Sewerage Business Activity

for the year ended 30 June 2019

$ '000	2019	2018
Income from continuing operations		
Access charges	44,006	41,893
User charges	2,961	3,044
Liquid trade waste charges	364	487
Fees	2,078	2,244
Interest	1,532	1,413
Grants and contributions provided for non-capital purposes	–	515
Other income	1,266	28
Total income from continuing operations	52,207	49,624
Expenses from continuing operations		
Employee benefits and on-costs	11,086	10,545
Borrowing costs	5,040	3,989
Materials and contracts	6,811	6,109
Depreciation, amortisation and impairment	10,665	9,855
Loss on sale of assets	830	31
Calculated taxation equivalents	329	311
Other expenses	5,770	4,805
Total expenses from continuing operations	40,531	35,645
Surplus (deficit) from continuing operations before capital amounts	11,676	13,979
Grants and contributions provided for capital purposes	3,214	5,594
Surplus (deficit) from continuing operations after capital amounts	**14,890**	**19,573**
Surplus (deficit) from all operations before tax	**14,890**	**19,573**
Less: corporate taxation equivalent (27.5%) [based on result before capital]	(3,211)	(3,844)
SURPLUS (DEFICIT) AFTER TAX	11,679	15,729
Plus accumulated surplus	393,332	361,220
Plus/less: prior period adjustments	(844)	12,373
Plus adjustments for amounts unpaid:		
– Taxation equivalent payments	329	311
– Corporate taxation equivalent	3,211	3,844
Less:		
– Tax equivalent dividend paid	(160)	(145)
Closing accumulated surplus	407,547	393,332
Return on capital %	2.7%	3.1%
Subsidy from Council	–	–
Calculation of dividend payable:		
Surplus (deficit) after tax	11,679	15,729
Less: capital grants and contributions (excluding developer contributions)	(3,214)	(2,647)
Surplus for dividend calculation purposes	**8,465**	**13,082**
Potential dividend calculated from surplus	**4,233**	**6,541**

Shoalhaven City Council

Income Statement – Holiday Haven Tourist Parks

for the year ended 30 June 2019

$ '000	2019 Category 1	2018 Category 1
Income from continuing operations		
User charges	24,146	22,855
Other income	1,661	1,674
Total income from continuing operations	25,807	24,529
Expenses from continuing operations		
Employee benefits and on-costs	1,222	1,288
Borrowing costs	253	303
Materials and contracts	8,389	7,814
Depreciation, amortisation and impairment	2,849	2,326
Loss on sale of assets	135	301
Calculated taxation equivalents	67	70
Other expenses	3,693	6,062
Total expenses from continuing operations	16,608	18,164
Surplus (deficit) from continuing operations before capital amounts	9,199	6,365
Surplus (deficit) from continuing operations after capital amounts	**9,199**	**6,365**
Surplus (deficit) from all operations before tax	**9,199**	**6,365**
Less: corporate taxation equivalent (27.5%) [based on result before capital]	(2,530)	(1,750)
SURPLUS (DEFICIT) AFTER TAX	6,669	4,615
Plus accumulated surplus	38,428	34,069
Plus/less: prior period adjustments	–	2,379
Plus adjustments for amounts unpaid:		
– Taxation equivalent payments	67	70
– Corporate taxation equivalent	2,530	1,750
Less:		
– Dividend paid	(6,670)	(4,455)
Closing accumulated surplus	41,024	38,428
Return on capital %	13.9%	13.9%

Shoalhaven City Council

Income Statement – Bereavement Services

for the year ended 30 June 2019

$ '000	2019 Category 1	2018 Category 1
Income from continuing operations		
User charges	1,723	1,984
Other income	19	24
Total income from continuing operations	1,742	2,008
Expenses from continuing operations		
Employee benefits and on-costs	947	862
Borrowing costs	7	8
Materials and contracts	241	276
Depreciation, amortisation and impairment	271	254
Loss on sale of assets	–	1
Calculated taxation equivalents	63	65
Other expenses	332	424
Total expenses from continuing operations	1,861	1,890
Surplus (deficit) from continuing operations before capital amounts	(119)	118
Surplus (deficit) from continuing operations after capital amounts	**(119)**	**118**
Surplus (deficit) from all operations before tax	**(119)**	**118**
Less: corporate taxation equivalent (27.5%) [based on result before capital]	–	(32)
SURPLUS (DEFICIT) AFTER TAX	(119)	86
Plus accumulated surplus	718	535
Plus adjustments for amounts unpaid:		
– Taxation equivalent payments	63	65
– Corporate taxation equivalent	(33)	32
Closing accumulated surplus	629	718
Return on capital %	(0.9)%	1.0%
Subsidy from Council	278	194

Shoalhaven City Council

Income Statement – Mechanical Services

for the year ended 30 June 2019

$ '000	2019 Category 1	2018 Category 1
Income from continuing operations		
User charges	34	40
Other income	3,139	3,045
Total income from continuing operations	3,173	3,085
Expenses from continuing operations		
Employee benefits and on-costs	1,945	1,732
Materials and contracts	485	468
Depreciation, amortisation and impairment	17	18
Loss on sale of assets	–	6
Calculated taxation equivalents	106	94
Other expenses	699	705
Total expenses from continuing operations	3,252	3,023
Surplus (deficit) from continuing operations before capital amounts	(79)	62
Surplus (deficit) from continuing operations after capital amounts	**(79)**	**62**
Surplus (deficit) from all operations before tax	**(79)**	**62**
Less: corporate taxation equivalent (27.5%) [based on result before capital]	–	(17)
SURPLUS (DEFICIT) AFTER TAX	(79)	45
Plus accumulated surplus	2,304	2,143
Plus/less: prior period adjustments	–	5
Plus adjustments for amounts unpaid:		
– Taxation equivalent payments	106	94
– Corporate taxation equivalent	(22)	17
Closing accumulated surplus	2,309	2,304
Return on capital %	(1.4)%	8.5%
Subsidy from Council	153	–

Shoalhaven City Council

Income Statement – Shoalhaven Entertainment Centre

for the year ended 30 June 2019

$ '000	2019 Category 2	2018 Category 2
Income from continuing operations		
User charges	1,481	1,532
Profit from the sale of assets	–	1
Other income	149	350
Total income from continuing operations	1,630	1,883
Expenses from continuing operations		
Employee benefits and on-costs	1,438	1,219
Borrowing costs	275	320
Materials and contracts	821	896
Depreciation, amortisation and impairment	699	676
Calculated taxation equivalents	121	109
Other expenses	1,047	1,125
Total expenses from continuing operations	4,401	4,345
Surplus (deficit) from continuing operations before capital amounts	(2,771)	(2,462)
Surplus (deficit) from continuing operations after capital amounts	**(2,771)**	**(2,462)**
Surplus (deficit) from all operations before tax	**(2,771)**	**(2,462)**
SURPLUS (DEFICIT) AFTER TAX	(2,771)	(2,462)
Plus accumulated surplus	–	2,278
Plus adjustments for amounts unpaid:		
– Taxation equivalent payments	121	109
Add:		
– Subsidy paid/contribution to operations	2,650	75
Closing accumulated surplus	–	–
Return on capital %	(9.3)%	(7.6)%
Subsidy from Council	2,851	2,885

Shoalhaven City Council

Income Statement – Aquatic Recreation Facilities

for the year ended 30 June 2019

$ '000	2019 Category 1	2018 Category 1
Income from continuing operations		
User charges	4,168	4,212
Grants and contributions provided for non-capital purposes	–	8
Other income	–	2
Total income from continuing operations	4,168	4,222
Expenses from continuing operations		
Employee benefits and on-costs	4,553	4,268
Borrowing costs	109	126
Materials and contracts	1,285	1,003
Depreciation, amortisation and impairment	1,295	1,245
Loss on sale of assets	3	21
Calculated taxation equivalents	279	263
Other expenses	1,215	1,859
Total expenses from continuing operations	8,739	8,785
Surplus (deficit) from continuing operations before capital amounts	(4,571)	(4,563)
Surplus (deficit) from continuing operations after capital amounts	**(4,571)**	**(4,563)**
Surplus (deficit) from all operations before tax	**(4,571)**	**(4,563)**
SURPLUS (DEFICIT) AFTER TAX	(4,571)	(4,563)
Plus/less: prior period adjustments	–	697
Plus adjustments for amounts unpaid:		
– Taxation equivalent payments	279	263
Add:		
– Subsidy paid/contribution to operations	4,292	3,603
Closing accumulated surplus	–	–
Return on capital %	(12.3)%	(12.0)%
Subsidy from Council	4,941	5,407

Shoalhaven City Council

Statement of Financial Position – Water Supply Business Activity
as at 30 June 2019

$ '000	2019	2018
ASSETS		
Current assets		
Cash and cash equivalents	12,892	12,986
Investments	28,850	12,907
Receivables	4,608	5,492
Inventories	1,117	1,103
Other	52	3
Total current assets	47,519	32,491
Non-current assets		
Investments	10,442	20,751
Receivables	5,190	6,186
Infrastructure, property, plant and equipment	374,396	368,428
Intangible assets	2,154	272
Total non-current assets	392,182	395,637
TOTAL ASSETS	439,701	428,128
LIABILITIES		
Current liabilities		
Payables	998	970
Income received in advance	888	379
Total current liabilities	1,886	1,349
TOTAL LIABILITIES	1,886	1,349
NET ASSETS	437,815	426,779
EQUITY		
Accumulated surplus	229,507	226,987
Revaluation reserves	208,308	199,792
TOTAL EQUITY	437,815	426,779

Shoalhaven City Council

Statement of Financial Position – Sewerage Business Activity
as at 30 June 2019

$ '000	2019	2018
ASSETS		
Current assets		
Cash and cash equivalents	9,305	16,671
Investments	20,823	44,515
Receivables	5,514	6,150
Total current assets	35,642	67,336
Non-current assets		
Investments	7,536	1,500
Receivables	1,230	1,705
Infrastructure, property, plant and equipment	613,819	572,591
Intangible assets	45	33
Total non-current assets	622,630	575,829
TOTAL ASSETS	658,272	643,165
LIABILITIES		
Current liabilities		
Payables	9,335	7,812
Income received in advance	–	348
Borrowings	6,044	7,345
Total current liabilities	15,379	15,505
Non-current liabilities		
Borrowings	102,490	110,225
Total non-current liabilities	102,490	110,225
TOTAL LIABILITIES	117,869	125,730
NET ASSETS	540,403	517,435
EQUITY		
Accumulated surplus	407,547	392,489
Revaluation reserves	132,856	124,946
TOTAL EQUITY	540,403	517,435

Shoalhaven City Council

Statement of Financial Position – Holiday Haven Tourist Parks
as at 30 June 2019

$ '000	2019 Category 1	2018 Category 1
ASSETS		
Current assets		
Receivables	141	110
Total current assets	141	110
Non-current assets		
Infrastructure, property, plant and equipment	67,966	48,114
Other	6,134	4,919
Total non-current assets	74,100	53,033
TOTAL ASSETS	74,241	53,143
LIABILITIES		
Current liabilities		
Payables	2,783	1,894
Borrowings	1,232	1,193
Total current liabilities	4,015	3,087
Non-current liabilities		
Borrowings	4,931	6,163
Total non-current liabilities	4,931	6,163
TOTAL LIABILITIES	8,946	9,250
NET ASSETS	65,295	43,893
EQUITY		
Accumulated surplus	41,025	38,428
Revaluation reserves	24,270	5,465
TOTAL EQUITY	65,295	43,893

Shoalhaven City Council

Statement of Financial Position – Bereavement Services

as at 30 June 2019

$ '000	2019 Category 1	2018 Category 1
ASSETS		
Current assets		
Receivables	136	192
Total current assets	136	192
Non-current assets		
Inventories	176	–
Infrastructure, property, plant and equipment	12,578	12,178
Total non-current assets	12,754	12,178
TOTAL ASSETS	12,890	12,370
LIABILITIES		
Current liabilities		
Payables	2	7
Borrowings	27	26
Total current liabilities	29	33
Non-current liabilities		
Borrowings	195	85
Other Liabilities	9,292	9,071
Total non-current liabilities	9,487	9,156
TOTAL LIABILITIES	9,516	9,189
NET ASSETS	3,374	3,181
EQUITY		
Accumulated surplus	662	718
Revaluation reserves	2,712	2,463
TOTAL EQUITY	3,374	3,181

Shoalhaven City Council

Statement of Financial Position – Mechanical Services

as at 30 June 2019

$ '000	2019 Category 1	2018 Category 1
ASSETS		
Current assets		
Receivables	23	11
Total current assets	23	11
Non-current assets		
Infrastructure, property, plant and equipment	5,623	728
Other	–	1,571
Total non-current assets	5,623	2,299
TOTAL ASSETS	5,646	2,310
LIABILITIES		
Current liabilities		
Payables	3	6
Total current liabilities	3	6
Non-current liabilities		
Other Liabilities	753	–
Total non-current liabilities	753	–
TOTAL LIABILITIES	756	6
NET ASSETS	4,890	2,304
EQUITY		
Accumulated surplus	2,331	2,304
Revaluation reserves	2,559	–
TOTAL EQUITY	4,890	2,304

Shoalhaven City Council

Statement of Financial Position – Shoalhaven Entertainment Centre

as at 30 June 2019

$ '000	2019 Category 2	2018 Category 2
ASSETS		
Current assets		
Receivables	113	145
Total current assets	113	145
Non-current assets		
Receivables	21	–
Infrastructure, property, plant and equipment	26,906	28,258
Total non-current assets	26,927	28,258
TOTAL ASSETS	27,040	28,403
LIABILITIES		
Current liabilities		
Payables	386	335
Borrowings	676	631
Total current liabilities	1,062	966
Non-current liabilities		
Borrowings	3,357	4,033
Other Liabilities	22,621	23,076
Total non-current liabilities	25,978	27,109
TOTAL LIABILITIES	27,040	28,075
NET ASSETS	–	328
EQUITY		
Revaluation reserves	–	328
TOTAL EQUITY	–	328

Shoalhaven City Council

Statement of Financial Position – Aquatic Recreation Facilities
as at 30 June 2019

$ '000	2019 Category 1	2018 Category 1
ASSETS		
Current assets		
Receivables	175	243
Total current assets	175	243
Non-current assets		
Inventories	2	–
Infrastructure, property, plant and equipment	36,287	36,897
Total non-current assets	36,289	36,897
TOTAL ASSETS	36,464	37,140
LIABILITIES		
Current liabilities		
Payables	308	117
Borrowings	481	468
Total current liabilities	789	585
Non-current liabilities		
Borrowings	2,690	3,171
Other Liabilities	27,964	27,856
Total non-current liabilities	30,654	31,027
TOTAL LIABILITIES	31,443	31,612
NET ASSETS	5,021	5,528
EQUITY		
Revaluation reserves	5,021	5,528
TOTAL EQUITY	5,021	5,528

Shoalhaven City Council

Notes to the Special Purpose Financial Statements

for the year ended 30 June 2019

Note 1. Significant Accounting Policies

A statement summarising the supplemental accounting policies adopted in the preparation of the Special Purpose Financial Statements (SPFS) for National Competition Policy (NCP) reporting purposes follows.

These financial statements are SPFS prepared for use by Council and the Office of Local Government. For the purposes of these statements, the Council is a non-reporting not-for-profit entity.

The figures presented in these Special Purpose Financial Statements have been prepared in accordance with the recognition and measurement criteria of relevant Australian Accounting Standards, other authoritative pronouncements of the Australian Accounting Standards Board (AASB) and Australian Accounting Interpretations.

The disclosures in these Special Purpose Financial Statements have been prepared in accordance with the Local Government Act 1993 (NSW), the *Local Government (General) Regulation 2005*, and the Local Government Code of Accounting Practice and Financial Reporting.

The statements are prepared on an accruals basis. They are based on historic costs and do not take into account changing money values or, except where specifically stated, current values of non-current assets. Certain taxes and other costs, appropriately described, have been imputed for the purposes of the National Competition Policy.

The Statement of Financial Position includes notional assets/liabilities receivable from/payable to Council's general fund. These balances reflect a notional intra-entity funding arrangement with the declared business activities.

National Competition Policy

Council has adopted the principle of 'competitive neutrality' in its business activities as part of the National Competition Policy which is being applied throughout Australia at all levels of government.

The framework for its application is set out in the June 1996 NSW government policy statement titled 'Application of National Competition Policy to Local Government'.

The *Pricing and Costing for Council Businesses, A Guide to Competitive Neutrality* issued by the Office of Local Government in July 1997 has also been adopted.

The pricing and costing guidelines outline the process for identifying and allocating costs to activities and provide a standard for disclosure requirements.

These disclosures are reflected in Council's pricing and/or financial reporting systems and include taxation equivalents, Council subsidies, return on investments (rate of return), and dividends paid.

Declared business activities

In accordance with Pricing and Costing for Council Businesses – A Guide to Competitive Neutrality, Council has declared that the following are to be considered as business activities:

Category 1

(where gross operating turnover is over $2 million)

a. Shoalhaven Water
Water Supply
b. Shoalhaven Water
Sewer Services
c. Holiday Haven Tourist Parks
Caravan Park Operations
d. Shoalhaven Mechanical Services
Mechanical Services
e. Aquatic Recreation Facilities
Swimming Pools and Aquatic Centres

Category 2

(where gross operating turnover is less than $2 million)

a. Bereavement Services
Cemetery and Crematorium Services

continued on next page ...

Shoalhaven City Council

Notes to the Special Purpose Financial Statements

for the year ended 30 June 2019

Note 1. Significant Accounting Policies (continued)

b. Shoalhaven Entertainment Centre
Venue for entertainment, hire and community activities

Monetary amounts

Amounts shown in the financial statements are in Australian dollars and rounded to the nearest one thousand dollars.

(i) Taxation equivalent charges

Council is liable to pay various taxes and financial duties. Where this is the case, they are disclosed as a cost of operations just like all other costs.

However, where Council does not pay some taxes which are generally paid by private sector businesses, such as income tax, these equivalent tax payments have been applied to all Council-nominated business activities and are reflected in Special Purpose Finanncial Statements.

For the purposes of disclosing comparative information relevant to the private sector equivalent, the following taxation equivalents have been applied to all Council-nominated business activities (this does not include Council's non-business activities):

Notional rate applied (%)

Corporate income tax rate – **27.5%**

Land tax – the first $692,000 of combined land values attracts **0%**. For the combined land values in excess of $692,001 up to $4,231,000 the rate is **1.6% + $100**. For the remaining combined land value that exceeds $4,231,000 a premium marginal rate of **2.0%** applies.

Payroll tax – **5.45%** on the value of taxable salaries and wages in excess of $850,000.

In accordance with the Department of Industry (DoI) – Water guidelines, a payment for the amount calculated as the annual tax equivalent charges (excluding income tax) must be paid from water supply and sewerage business activities.

The payment of taxation equivalent charges, referred to in the DoI – Water guidelines as a 'dividend for taxation equivalent', may be applied for any purpose allowed under the *Local Government Act, 1993*.

Achievement of substantial compliance to the DoI – Water guidelines is not a prerequisite for the payment of the tax equivalent charges, however the payment must not exceed $3 per assessment.

Income tax

An income tax equivalent has been applied on the profits of the business activities.

Whilst income tax is not a specific cost for the purpose of pricing a good or service, it needs to be taken into account in terms of assessing the rate of return required on capital invested.

Accordingly, the return on capital invested is set at a pre-tax level - gain/(loss) from ordinary activities before capital amounts, as would be applied by a private sector competitor. That is, it should include a provision equivalent to the corporate income tax rate, currently 27.5%.

Income tax is only applied where a gain/ (loss) from ordinary activities before capital amounts has been achieved.

Since the taxation equivalent is notional – that is, it is payable to Council as the 'owner' of business operations - it represents an internal payment and has no effect on the operations of the Council. Accordingly, there is no need for disclosure of internal charges in the SPFS.

The rate applied of 27.5% is the equivalent company tax rate prevalent at reporting date. No adjustments have been made for variations that have occurred during the year.

continued on next page ...

Shoalhaven City Council

Notes to the Special Purpose Financial Statements
for the year ended 30 June 2019

Note 1. Significant Accounting Policies (continued)

Local government rates and charges
A calculation of the equivalent rates and charges payable on all category 1 businesses has been applied to all land assets owned or exclusively used by the business activity.

Loan and debt guarantee fees

The debt guarantee fee is designed to ensure that council business activities face 'true' commercial borrowing costs in line with private sector competitors.

In order to calculate a debt guarantee fee, Council has determined what the differential borrowing rate would have been between the commercial rate and Council's borrowing rate for its business activities.

(ii) Subsidies

Government policy requires that subsidies provided to customers, and the funding of those subsidies, must be explicitly disclosed.

Subsidies occur when Council provides services on a less-than-cost-recovery basis. This option is exercised on a range of services in order for Council to meet its community service obligations.

Accordingly, 'subsidies disclosed' (in relation to National Competition Policy) represents the difference between revenue generated from 'rate of return' pricing and revenue generated from prices set by Council in any given financial year.

The overall effect of subsidies is contained within the Income Statement of each reported business activity.

(iii) Return on investments (rate of return)

The NCP policy statement requires that councils with Category 1 businesses 'would be expected to generate a return on capital funds employed that is comparable to rates of return for private businesses operating in a similar field'.

Such funds are subsequently available for meeting commitments or financing future investment strategies.

The actual rate of return achieved by each business activity is disclosed at the foot of each respective Income Statement.

The rate of return is calculated as follows:

$$\frac{\text{Operating result before capital income + interest expense}}{\text{Written down value of I,PP\&E as at 30 June}}$$

As a minimum, business activities should generate a return equal to the Commonwealth 10 year bond rate which is 1.32% at 30/6/19.

(iv) Dividends

Council is not required to pay dividends to either itself (as owner of a range of businesses) or to any external entities.

Local government water supply and sewerage businesses are permitted to pay an annual dividend from its water supply or sewerage business surplus.

Each dividend must be calculated and approved in accordance with the Department of Industry – Water guidelines and must not exceed:

- 50% of this surplus in any one year, or
- the number of water supply or sewerage assessments at 30 June 2019 multiplied by $30 (less the payment for tax equivalent charges, not exceeding $3 per assessment).

In accordance with the Department of Industry – Water guidelines a Dividend Payment form, Statement of Compliance, Unqualified Independent Financial Audit Report and Compliance Audit Report are required to be submitted to the Department of Industry – Water.

INDEPENDENT AUDITOR'S REPORT

Report on the special purpose financial statements

Shoalhaven City Council

To the Councillors of the Shoalhaven City Council

Opinion

I have audited the accompanying special purpose financial statements (the financial statements) of Shoalhaven City Council's (the Council) declared business activities, which comprise the Income Statement of each declared business activity for the year ended 30 June 2019, the Statement of Financial Position of each declared business activity as at 30 June 2019, Note 1 Significant accounting policies for the business activities declared by Council, and the Statement by Councillors and Management.

The declared business activities of the Council are:

- water supply
- sewerage
- Holiday Haven tourist parks
- bereavement services
- mechanical services
- Shoalhaven Entertainment Centre
- aquatic recreation facilities.

In my opinion, the financial statements present fairly, in all material respects, the financial position of the Council's declared business activities as at 30 June 2019, and its financial performance for the year then ended, in accordance with the Australian Accounting Standards described in Note 1 and the Local Government Code of Accounting Practice and Financial Reporting – update number 27 (LG Code).

My opinion should be read in conjunction with the rest of this report.

Basis for Opinion

I conducted my audit in accordance with Australian Auditing Standards. My responsibilities under the standards are described in the 'Auditor's Responsibilities for the Audit of the Financial Statements' section of my report.

I am independent of the Council in accordance with the requirements of the:

- Australian Auditing Standards
- Accounting Professional and Ethical Standards Board's APES 110 'Code of Ethics for Professional Accountants' (APES 110).

I have fulfilled my other ethical responsibilities in accordance with APES 110.

Parliament promotes independence by ensuring the Auditor-General and the Audit Office of New South Wales are not compromised in their roles by:

- providing that only Parliament, and not the executive government, can remove an Auditor-General
- mandating the Auditor-General as the auditor of councils
- precluding the Auditor-General from providing non-audit services.

I believe the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

Emphasis of Matter - Basis of Accounting

Without modifying my opinion, I draw attention to Note 1 to the financial statements which describes the basis of accounting. The financial statements have been prepared for the purpose of fulfilling the Council's financial reporting responsibilities under the LG Code. As a result, the financial statements may not be suitable for another purpose.

Other Information

The Council's annual report for the year ended 30 June 2019 includes other information in addition to the financial statements and my Independent Auditor's Report thereon. The Councillors are responsible for the other information. At the date of this Independent Auditor's Report, the other information I have received comprise the general purpose financial statements and Special Schedules (the Schedules).

My opinion on the financial statements does not cover the other information. Accordingly, I do not express any form of assurance conclusion on the other information. However, as required by the *Local Government Act 1993*, I have separately expressed an opinion on the general purpose financial statements and Special Schedule 'Permissible income for general rates'.

In connection with my audit of the financial statements, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work I have performed, I conclude there is a material misstatement of the other information, I must report that fact.

I have nothing to report in this regard.

The Councillors' Responsibilities for the Financial Statements

The Councillors are responsible for the preparation and fair presentation of the financial statements and for determining that the accounting policies, described in Note 1 to the financial statements, are appropriate to meet the requirements in the LG Code. The Councillors' responsibility also includes such internal control as the Councillors determine is necessary to enable the preparation and fair presentation of the financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Councillors are responsible for assessing the Council's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting, unless it is not appropriate to do so.

Auditor's Responsibilities for the Audit of the Financial Statements

My objectives are to:

- obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error
- issue an Independent Auditor's Report including my opinion.

Reasonable assurance is a high level of assurance, but does not guarantee an audit conducted in accordance with Australian Auditing Standards will always detect material misstatements. Misstatements can arise from fraud or error. Misstatements are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions users take based on the financial statements.

A description of my responsibilities for the audit of the financial statements is located at the Auditing and Assurance Standards Board website at: www.auasb.gov.au/auditors_responsibilities/ar4.pdf. The description forms part of my auditor's report.

My opinion does not provide assurance:

- that the Council carried out its activities effectively, efficiently and economically
- about the security and controls over the electronic publication of the audited financial statements on any website where they may be presented
- about any other information which may have been hyperlinked to/from the financial statements.

Dominika Ryan
Director, Financial Audit Services

Delegate of the Auditor-General for New South Wales

31 October 2019
SYDNEY

CL19.349 - Attachment 1

Shoalhaven City Council

SPECIAL SCHEDULES
for the year ended 30 June 2019

Shoalhaven City Council

Special Schedules
for the year ended 30 June 2019

Contents Page

Shoalhaven City Council

Permissible income for general rates

$ '000		Calculation 2019/20	Calculation 2018/19
Notional general income calculation [1]			
Last year notional general income yield	a	73,335	69,190
Plus or minus adjustments [2]	b	610	541
Notional general income	c = a + b	**73,945**	**69,731**
Permissible income calculation			
Special variation percentage [3]	d	5.00%	17.10%
Less expiring special variation amount	g	–	(7,113)
Plus special variation amount	h = d x (c + g)	3,697	10,708
Sub-total	k = (c + g + h + i + j)	**77,642**	**73,326**
Plus (or minus) last year's carry forward total	l	22	31
Sub-total	n = (l + m)	**22**	**31**
Total permissible income	o = k + n	77,664	73,357
Less notional general income yield	p	77,640	73,335
Catch-up or (excess) result	q = o – p	**24**	**22**
Less unused catch-up [5]	s	(22)	–
Carry forward to next year [6]	t = q + r + s	**2**	**22**

Notes

(1) The notional general income will not reconcile with rate income in the financial statements in the corresponding year. The statements are reported on an accrual accounting basis which include amounts that relate to prior years' rates income.

(2) Adjustments account for changes in the number of assessments and any increase or decrease in land value occurring during the year. The adjustments are called 'supplementary valuations' as defined in the Valuation of Land Act 1916.

(3) The 'special variation percentage' is inclusive of the rate peg percentage and where applicable Crown land adjustment.

(5) Unused catch-up amounts will be deducted if they are not caught up within 2 years. Usually councils will have a nominal carry forward figure. These amounts can be adjusted for in setting the rates in a future year.

(6) Carry forward amounts which are in excess (an amount that exceeds the permissible income) require ministerial approval by order published in the NSW Government Gazette in accordance with section 512 of the Local Government Act 1993. The OLG will extract these amounts from Council's Permissible income for general rates Statement in the financial data return (FDR) to administer this process.

INDEPENDENT AUDITOR'S REPORT

Special Schedule - Permissible income for general rates

Shoalhaven City Council

To the Councillors of Shoalhaven City Council

Opinion

I have audited the accompanying Special Schedule – Permissible income for general rates (the Schedule) of Shoalhaven City Council (the Council) for the year ending 30 June 2020.

In my opinion, the Schedule is prepared, in all material respects in accordance with the requirements of the Local Government Code of Accounting Practice and Financial Reporting – update number 27 (LG Code), and is in accordance with the books and records of the Council.

My opinion should be read in conjunction with the rest of this report.

Basis for Opinion

I conducted my audit in accordance with Australian Auditing Standards. My responsibilities under the standards are described in the 'Auditor's Responsibilities for the Audit of the Schedule' section of my report.

I am independent of the Council in accordance with the requirements of the:

- Australian Auditing Standards
- Accounting Professional and Ethical Standards Board's APES 110 'Code of Ethics for Professional Accountants' (APES 110).

I have fulfilled my other ethical responsibilities in accordance with APES 110.

Parliament promotes independence by ensuring the Auditor-General and the Audit Office of New South Wales are not compromised in their roles by:

- providing that only Parliament, and not the executive government, can remove an Auditor-General
- mandating the Auditor-General as auditor of councils
- precluding the Auditor-General from providing non-audit services.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

Emphasis of Matter - Basis of Accounting

Without modifying my opinion, I draw attention to the special purpose framework used to prepare the Schedule. The Schedule has been prepared for the purpose of fulfilling the Council's reporting obligations under the LG Code. As a result, the Schedule may not be suitable for another purpose.

Other Information

The Council's annual report for the year ended 30 June 2019 includes other information in addition to the Schedule and my Independent Auditor's Report thereon. The Councillors are responsible for the other information. At the date of this Independent Auditor's Report, the other information I have received comprise the general purpose financial statements, special purpose financial statements and Special Schedule 'Report on infrastructure assets as at 30 June 2019'.

My opinion on the Schedule does not cover the other information. Accordingly, I do not express any form of assurance conclusion on the other information. However, as required by the *Local Government Act 1993*, I have separately expressed an opinion on the general purpose financial statements and the special purpose financial statements.

In connection with my audit of the Schedule, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the Schedule or my knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work I have performed, I conclude there is a material misstatement of the other information, I must report that fact.

I have nothing to report in this regard.

The Councillors' Responsibilities for the Schedule

The Councillors are responsible for the preparation of the Schedule in accordance with the LG Code. The Councillors' responsibility also includes such internal control as the Councillors determine is necessary to enable the preparation of the Schedule that is free from material misstatement, whether due to fraud or error.

In preparing the Schedule, the Councillors are responsible for assessing the Council's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting, unless it is not appropriate to do so.

Auditor's Responsibilities for the Audit of the Schedule

My objectives are to:

- obtain reasonable assurance whether the Schedule as a whole is free from material misstatement, whether due to fraud or error
- issue an Independent Auditor's Report including my opinion.

Reasonable assurance is a high level of assurance, but does not guarantee an audit conducted in accordance with Australian Auditing Standards will always detect material misstatements. Misstatements can arise from fraud or error. Misstatements are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions users take based on the Schedule.

A description of my responsibilities for the audit of the Schedule is located at the Auditing and Assurance Standards Board website at: www.auasb.gov.au/auditors_responsibilities/ar8.pdf. The description forms part of my auditor's report.

My opinion does not provide assurance:

- that the Council carried out its activities effectively, efficiently and economically
- about the security and controls over the electronic publication of the audited Schedule on any website where it may be presented
- about any other information which may have been hyperlinked to/from the Schedule.

Dominika Ryan
Director, Financial Audit Services

Delegate of the Auditor-General for New South Wales

31 October 2019
SYDNEY

Shoalhaven City Council

Report on Infrastructure Assets

as at 30 June 2019

Asset Class	Asset Category	Estimated cost to bring assets to satisfactory standard	Estimated cost to bring to the agreed level of service set by Council	2018/19 Required maintenance [a]	2018/19 Actual maintenance	Net carrying amount	Gross replacement cost (GRC)	Assets in condition as a percentage of gross replacement cost 1	2	3	4	5
(a) Report on Infrastructure Assets												
Buildings	Buildings	3,674	913	12,550	11,153	275,880	390,989	25.0%	40.0%	32.0%	3.0%	0.0%
	Sub-total	**3,674**	**913**	**12,550**	**11,153**	**275,880**	**390,989**	**25.0%**	**40.0%**	**32.0%**	**3.0%**	**0.0%**
Other structures	Other structures	631	361	400	291	17,850	38,872	48.0%	29.0%	17.0%	5.0%	1.0%
	Sub-total	**631**	**361**	**400**	**291**	**17,850**	**38,872**	**48.0%**	**29.0%**	**17.0%**	**5.0%**	**1.0%**
Roads	Sealed roads	14,345	1,520	5,840	5,208	479,759	739,400	41.0%	22.0%	30.0%	7.0%	0.0%
	Unsealed roads	828	107	1,480	1,346	3,748	10,680	40.0%	35.0%	20.0%	4.0%	1.0%
	Bridges	4,040	3,030	1,410	866	64,255	101,005	26.0%	38.0%	23.0%	10.0%	3.0%
	Footpaths	5,052	5,052	650	338	49,315	72,175	21.0%	33.0%	25.0%	14.0%	7.0%
	Other road assets	11,456	13,093	5,080	4,543	213,175	327,315	26.0%	39.0%	25.0%	6.0%	4.0%
	Bulk earthworks	548	1,097	–	–	109,674	109,674	99.0%	0.0%	0.0%	0.0%	1.0%
	Sub-total	**36,269**	**23,899**	**14,460**	**12,301**	**919,926**	**1,360,249**	**39.9%**	**26.2%**	**25.5%**	**6.8%**	**1.6%**
Water supply network	Water supply network	6,530	65	11,380	11,375	343,626	652,961	18.0%	59.0%	20.0%	2.0%	1.0%
	Sub-total	**6,530**	**65**	**11,380**	**11,375**	**343,626**	**652,961**	**18.0%**	**59.0%**	**20.0%**	**2.0%**	**1.0%**
Sewerage network	Sewerage network	7,124	71	16,120	16,115	440,069	712,351	18.0%	59.0%	20.0%	2.0%	1.0%
	Sub-total	**7,124**	**71**	**16,120**	**16,115**	**440,069**	**712,351**	**18.0%**	**59.0%**	**20.0%**	**2.0%**	**1.0%**
Stormwater drainage	Stormwater drainage	5,136	–	3,010	1,462	106,387	191,127	43.0%	21.0%	25.0%	11.0%	0.0%
	Sub-total	**5,136**	**–**	**3,010**	**1,462**	**106,387**	**191,127**	**43.0%**	**21.0%**	**25.0%**	**11.0%**	**0.0%**
Open space / recreational assets	Swimming pools	4,011	4,239	1,750	1,360	9,636	22,618	38.0%	3.0%	7.0%	33.0%	19.0%
	Other open space / Recreational Assets	869	900	3,800	2,626	19,964	41,831	27.0%	38.0%	29.0%	4.0%	2.0%
	Sub-total	**4,880**	**5,139**	**5,550**	**3,986**	**29,600**	**64,449**	**30.9%**	**25.7%**	**21.3%**	**14.2%**	**7.9%**
Other infrastructure assets	Other infrastructure assets	2,013	2,545	5,060	3,997	52,268	100,713	27.0%	22.0%	45.0%	3.0%	3.0%
	Sub-total	**2,013**	**2,545**	**5,060**	**3,997**	**52,268**	**100,713**	**27.0%**	**22.0%**	**45.0%**	**3.0%**	**3.0%**
	TOTAL - ALL ASSETS	**66,257**	**32,993**	**68,530**	**60,680**	**2,185,606**	**3,511,711**	**29.4%**	**40.1%**	**24.5%**	**4.7%**	**1.3%**

(a) Required maintenance is the amount identified in Council's asset management plans.

continued on next page ...

Shoalhaven City Council

Report on Infrastructure Assets (continued)

as at 30 June 2019

Infrastructure asset condition assessment 'key'

1	**Excellent/very good**	No work required (normal maintenance)
2	**Good**	Only minor maintenance work required
3	**Satisfactory**	Maintenance work required
4	**Poor**	Renewal required
5	**Very poor**	Urgent renewal/upgrading required

continued on next page ...

Shoalhaven City Council

Report on Infrastructure Assets (continued)
as at 30 June 2019

$ '000	Amounts 2019	Indicator 2019	Prior periods 2018	Prior periods 2017	Benchmark
Infrastructure asset performance indicators (consolidated) *					
Buildings and infrastructure renewals ratio [1]					
Asset renewals [2]	33,148	58.85%	94.44%	71.69%	>=100.00%
Depreciation, amortisation and impairment	56,331				
Infrastructure backlog ratio [1]					
Estimated cost to bring assets to a satisfactory standard	65,709	3.17%	3.38%	3.05%	<2.00%
Net carrying amount of infrastructure assets	2,075,932				
Asset maintenance ratio					
Actual asset maintenance	60,680	88.55%	88.18%	88.45%	>100.00%
Required asset maintenance	68,530				
Cost to bring assets to agreed service level					
Estimated cost to bring assets to an agreed service level set by Council	32,993	0.94%	1.00%	1.51%	
Gross replacement cost	3,511,711				

(*) All asset performance indicators are calculated using classes identified in the previous table.

(1) Excludes Work In Progress (WIP)

(2) Asset renewals represent the replacement and/or refurbishment of existing assets to an equivalent capacity/performance as opposed to the acquisition of new assets (or the refurbishment of old assets) that increases capacity/performance.

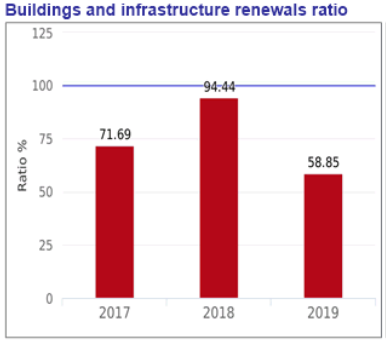
continued on next page ...

Shoalhaven City Council

Report on Infrastructure Assets (continued)

as at 30 June 2019

Buildings and infrastructure renewals ratio



Buildings and infrastructure renewals ratio	Commentary on result
	18/19 ratio 58.85%
To assess the rate at which these assets are being renewed relative to the rate at which they are depreciating.	Council's budgeted Buildings and Infrastructure Renewals Ratio for 2018/19 was 66.3%. The actual ratio was lower due to a 7% increase in depreciation resulting from found building assets as well as water and sewer asset revaluations, together with carried forward renewal expenditure into 2019/20 relating to bridge and other significant renewal projects.

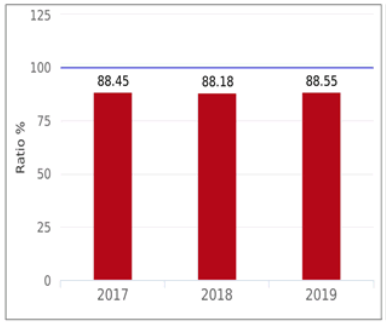
Benchmark: — >= 100.00%

Source of benchmark: Code of Accounting Practice and Financial Reporting #27

Ratio achieves benchmark

Ratio is outside benchmark

Asset maintenance ratio



Asset maintenance ratio	Commentary on result
	18/19 ratio 88.55%
Compares actual vs. required annual asset maintenance. A ratio above 1.0 indicates Council is investing enough funds to stop the infrastructure backlog growing.	Council's Asset Maintenance Ratio has remained constant but is lower than the benchmark of 1.00% indicating that the level of expenditure on the maintenance of infrastructure assets is not sufficient to prevent the infrastructure backlog from growing.

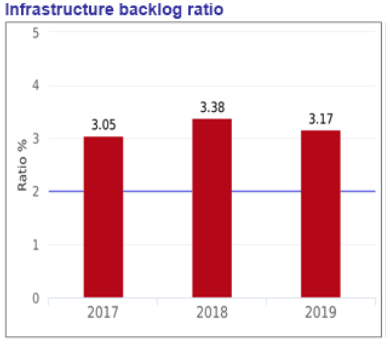
Benchmark: — > 100.00%

Source of benchmark: Code of Accounting Practice and Financial Reporting #27

Ratio achieves benchmark

Ratio is outside benchmark

Infrastructure backlog ratio



Infrastructure backlog ratio	Commentary on result
	18/19 ratio 3.17%
This ratio shows what proportion the backlog is against the total value of a Council's infrastructure.	Council's Infrastructure Backlog Ratio has marginally improved however is it still above the benchmark 2.00%. Council is continuing to focus on appropriate asset standards for renewal and maintenance.

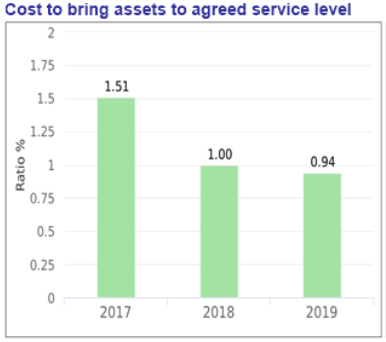
Benchmark: — < 2.00%

Source of benchmark: Code of Accounting Practice and Financial Reporting #27

Ratio achieves benchmark

Ratio is outside benchmark

Cost to bring assets to agreed service level



Cost to bring assets to agreed service level	Commentary on result
	18/19 ratio 0.94%
This ratio provides a snapshot of the proportion of outstanding renewal works compared to the total value of assets under Council's care and stewardship.	The Cost to Bring Assets to Agreed Service Level has decreased due to the renewal of assets previously with a condition of 5 - primarily in the buildings asset class.

continued on next page ...

Shoalhaven City Council

Report on Infrastructure Assets (continued)
as at 30 June 2019

$ '000	General fund 2019	General fund 2018	Water fund 2019	Water fund 2018	Sewer fund 2019	Sewer fund 2018	Benchmark
Infrastructure asset performance indicators (by fund)							
Buildings and infrastructure renewals ratio [1]							
Asset renewals [2] / Depreciation, amortisation and impairment	**55.85%**	76.59%	**32.53%**	64.22%	**92.79%**	187.62%	>=100.00%
Infrastructure backlog ratio [1]							
Estimated cost to bring assets to a satisfactory standard / Net carrying amount of infrastructure assets	**4.11%**	4.30%	**1.85%**	1.21%	**1.57%**	2.57%	<2.00%
Asset maintenance ratio							
Actual asset maintenance / Required asset maintenance	**80.41%**	78.85%	**99.93%**	99.97%	**99.99%**	100.00%	>100.00%
Cost to bring assets to agreed service level							
Estimated cost to bring assets to an agreed service level set by Council / Gross replacement cost	**1.55%**	1.63%	**0.03%**	0.00%	**0.01%**	0.00%	

(1) Excludes Work In Progress (WIP)

(2) Asset renewals represent the replacement and/or refurbishment of existing assets to an equivalent capacity/performance as opposed to the acquisition of new assets (or the refurbishment of old assets) that increases capacity/performance.

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Monthly Report

Shoalhaven City Council

October 2019

CPG Research & Advisory Pty Ltd

25th ANNIVERSARY YEAR

Market Review

International Markets

Stocks rose in October, with hopes of derisking Brexit and the US-China trade war. S&P 500, NASDAQ and Dow Jones finished +2.17% (including a record), +3.71% and +0.59% respectively. MSCI World ex-AUS finished +1.93% in local terms. Emerging Markets rose +4.22% in $US, with Frontier Markets up +0.81%. US 10-year bond yields finished +1bp higher at 1.69%. High yield was +13bp wider.

A House vote formalised impeachment enquiry rules, but still faced Republican criticism. The US is moving forward towards privatising the mortgage guarantors.

The Federal Reserve cut 25bp in October, removing further easing bias language.

US Q3 GDP was +1.9% p.a. (1st est.), *vs* Q2's +2.0. Inflation was steady at 1.7% but core CPI ominously hit a decade-high 2.4%. Retail sales fell -0.3%. The FY19 deficit of $984bn was the highest since 2012 as spending soared +8.2%. Non-farm payrolls increased just +114k in September, but unemployment fell to a 50-year low 3.5%.

China's GDP of 6.0% YoY, the slowest in decades, was the minimum level to meet promises. China questioned US claims about a "partial trade deal" despite a delay in planned US tariffs. Hong Kong plunged into deep recession, as protests saw GDP plunge -3.2% in Q3.

UK and Germany are expected to report a mild recession at Q3. Germany is debating stimulus *vs* adhering to balanced budgets – with balanced budgets common in the EU. Draghi's term heading the ECB has ended, replaced by Christine Lagarde (formerly of the IMF).

Brexit was deferred until March despite an Irish border and customs agreement that saw the EUR firm to $US1.12. PM Johnson called another election, as Canada returned PM Trudeau but in minority.

India announced a surprise tax cut stimulus package, sending markets briefly soaring.

Domestic

The ASX200 fell -0.35%. The 10-year bond weakened +13bp to 1.14%.

The RBA cut 25bp in October to a record 0.75%, and remains on easing bias. They feel a turning point has passed, but considers consumption an ongoing weak point.

Q3 inflation of 0.5% was dominated by travel and "sin taxes" but YoY 1.7% is still below RBA target. Import prices rose +1.2% YoY. Headline unemployment declined to 5.2% (-0.1%) on +14k jobs (+26.2k full time). Underemployment was 8.3% (-0.2%). These reversed August losses.

August's trade surplus was $5.97 billion (-18%).

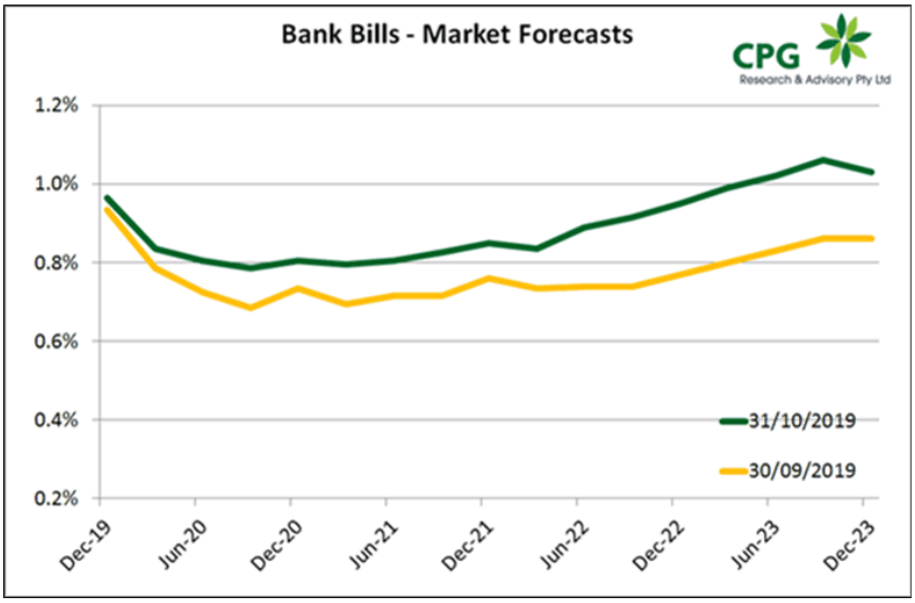
YoY lending is down -9.2% to households, and -7.4% to businesses. Building approvals bounced +7.6% (but are still -21% YoY) as rate cuts saw prices recover. This followed Q2's -5.5% slump in construction, which may be a cyclical low point. New consumer credit was -17.8% YoY after -2.2% in August, although dwelling lending recovered +3.2% in August. Retail sales gained +0.2% (*vs* +0.4%).

Other Markets

WTI oil closed $54.18/bbl (-0.59%). Gold rose to $1,511 (+2.84%) while iron ore slid to $82.75 (-6.86%).

Base metals were mixed: Tin (+4.24%), Copper (+1.68%), Aluminium (+2.29%) and Zinc (+7.01%) rose, while Nickel (-4.16%) fell. The $A gained to US68.93c (+2.62%) against a weaker USD.

Australian bank bill futures reacted to data beating expectations, and signs that the property sector is recovering:

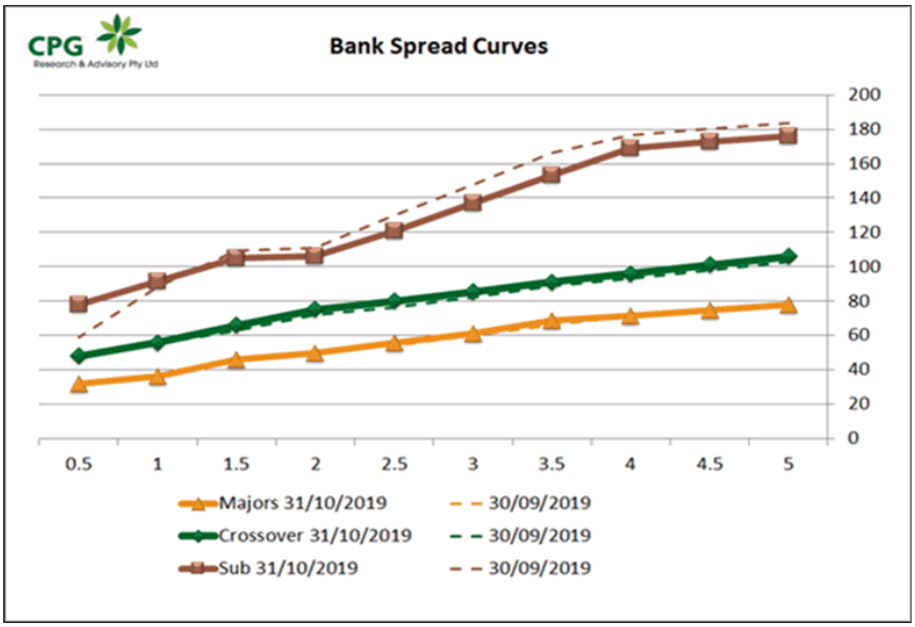


Credit Market

Positive newsflow took some risk out of Brexit and US-China trade war downside cases. Australia benefitted from another rate cut, as investors increasingly believed the cyclical low has probably passed. **Spreads rallied in all major indices:**

Credit Indices	31 Oct 19	30 Sep 19	31 Oct 18
iTraxx Australia 5 Yr CDS	*59bp*	*67bp*	*75bp*
iTraxx European 5 Yr CDS	52bp	55bp	68bp
CDX IG North American 5 Yr CDS	55bp	60bp	60bp
CDX HY North American 5 Yr CDS	338bp	350bp	332bp

Senior bank FRNs were minimally changed in October. **Sub debt tightened** with banks choosing to issue offshore rather than flood the local market as feared. New 5-year BBB's provided some price discovery for second-tier banks, wider than previously marked:



Physical high yield was wider**, out from +402bp to +415bp** (*BoAMLHY Index, option-adjusted*).

We expect heavy bank issuance after the current reporting season. 3 of the 4 major banks emerge from their blackouts and are likely to try to beat the year-end lull.

10-year bond yields rose for the second month, closing at 1.14%. ***Deposits yields were mixed, with rates lower at the short end as the RBA cut again.***

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ESG and Divestment

The highlighted list of current fossil fuel lenders is as follows:

Fossil Fuel Counterparties	Exposure $M	FCS	Net	Rating	Policy Limit	Gross	Invested in Fossils
ANZ	$10.50M	$0.00M	$10.50M	AA-	30%	5%	Yes
CBA	$17.26M	$0.25M	$17.01M	AA-	30%	9%	Yes
NAB	$49.80M	$0.25M	$49.55M	AA-	30%	25%	Yes
Westpac**	$15.00M	$0.25M	$14.75M	AA-	30%	7%	Yes
AMP*	$7.60M	$0.25M	$7.35M	BBB+	15%	4%	Yes*
Macquarie Bank	$7.00M	$0.00M	$7.00M	A	15%	3.4%	Yes
ING	$4.00M	$0.25M	$3.75M	Split A	15%	2%	Yes
TCorpIM Cash Fund	$13.13M	$0.00M	$13.13M	AAA	40%	6%	Yes
	$124.29M		$123.04M			61%	
Total	$202.91M		$202.91M				

* Note also AMP Life, AMP Capital have investments in coal and gas companies

**Westpac reflecting net exposure excluding green deposit

As at October 2019, the institutions totalled 61% of Council's investment portfolio (-1% from last month, this is after netting out Westpac Green deposits, TCorpIM continuing to contribute materially.

Fossil Fuels Exposure Trend	
May 2017	50%
June 2017	48%
July 2017	48%
August 2017	44%
September 2017	43%
October 2017	42%
November 2017	44%
December 2017	43%
January 2018	41%
February 2018	45%
March 2018	59%
April 2018	59%
May 2018	62%
June 2018	61%
July 2018	58%
August 2018	61%
September 2018	57%
October 2018	56%
November 2018	59%
December 2018	56%
January 2019	56%
February 2019	56%
March 2019	57%
April 2019	58%
May 2019	61%
June 2019	62%
July 2019	60%
August 2019	63%
September 2019	62%
October 2019	61%

TCorpIM flows reversed what had previously been a significant reduction from 50% to 41%. The allocation to named counterparties has largely tracked the spending of the TCorpIM Cash balance. In

fact, **over a third of the exposure is in at-call or Notice accounts**, and could be almost immediately redeemed.

This issued was covered by a recent Council workshop. Councils that have made progress towards "full divestment" have done so through:

- Treating NSW TCorp and TCorpIM as "green" (it is not listed by Market Forces) despite the State being heavily dependent on extraction royalties and the funds being – in our view, this is a fiction.
- Overwhelming purchasing certified green bonds and comparable products on the rare occasions they are available (and they are very rare and completely unable to support the entire Local Government sector).

Westpac have extended the "green bond" certification programme to deposits. The margins have fallen, and are now generally below regular TD margins.

Council has invested total $8.0m in "green bond" certified Westpac 5-year floating rate deposit, and a separate adjustment for certified Green bonds and deposits (taking them out of "fossil fuel" investments) is reflected.

Given that certifiable purposes represent a small fraction of bank lending, **there will only be a limited tranche of these deposits available**, although the bank (and possibly other banks) are likely to have recurring offerings.

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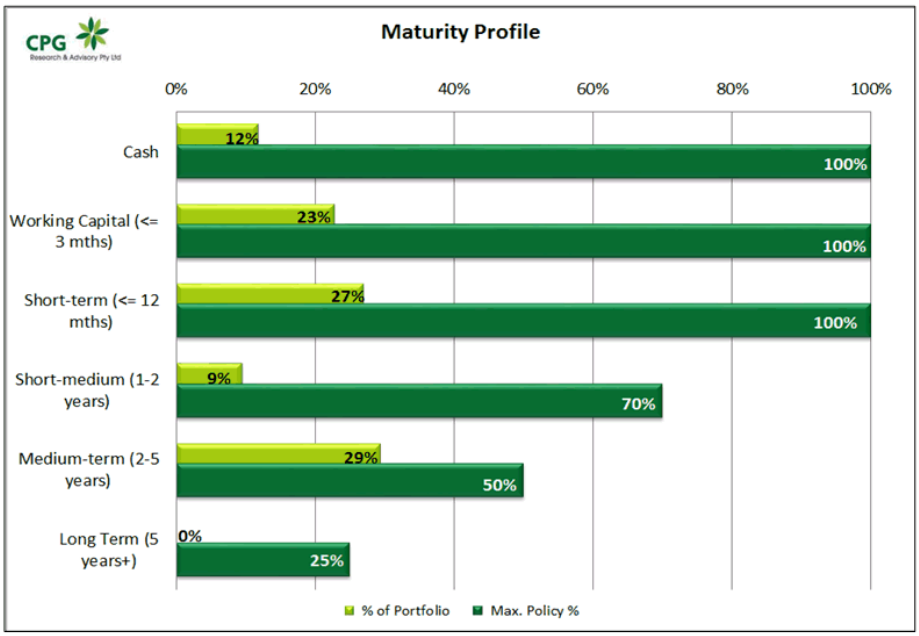
Council's Portfolio

The portfolio has high liquidity, reflecting the TCorpIM cash as well as other short-term deposits. 12% of investments are available at-call and a further 23% of assets mature within 3 months. Another 27% of assets mature within 3-12 months, with relatively little in the short-medium term duration allocation at 9%.

Excluding the specific TCorpIM investment, the portfolio is fully invested.

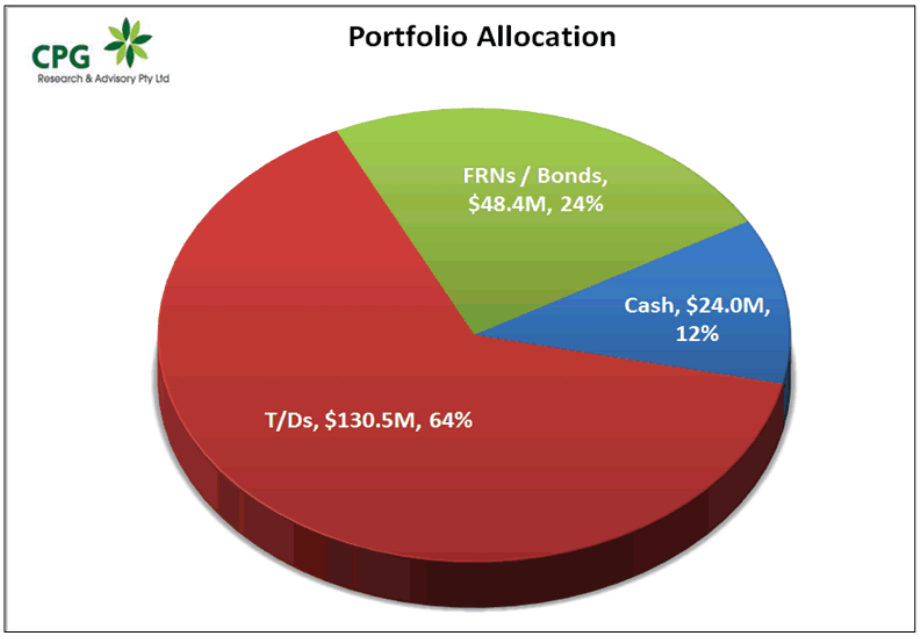
All investments are within the current Minister's Order. Direct credit investments have, as we expected, outperformed the pooled credit funds after fees and cash-drag. Switching from the last credit fund to direct assets had the effect of **lengthening duration ahead of a strong credit rally**.



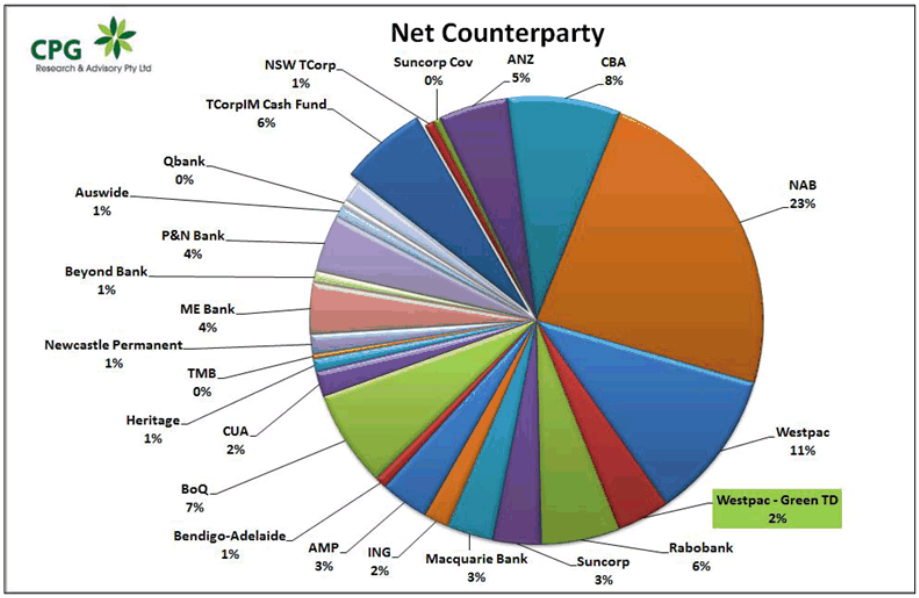
Investments are diversified across the eligible fixed interest universe and well spread across maturities. Available capacity exists in all terms, with medium term particularly relevant to new issues.

In previous months, we have looked to maximise credit allocations as capacity allows; looking to sell maturing FRNs to take up new FRNs. *Having downgraded our credit view to Neutral on price gains, we prioritise the wider margins in deposits, with deposit rates in the process of converging*.

Council's portfolio remains well balanced between liquid securities and deposits (still the majority, at 64% of the total assets). Cash was reduced from last month but held at a relatively high 12% (including AMP 31-day Notice Account).



The investment portfolio is well diversified in complying assets across the entire credit spectrum; with NAB dominant, followed by Westpac and CBA.



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Returns - Accrual

Actual

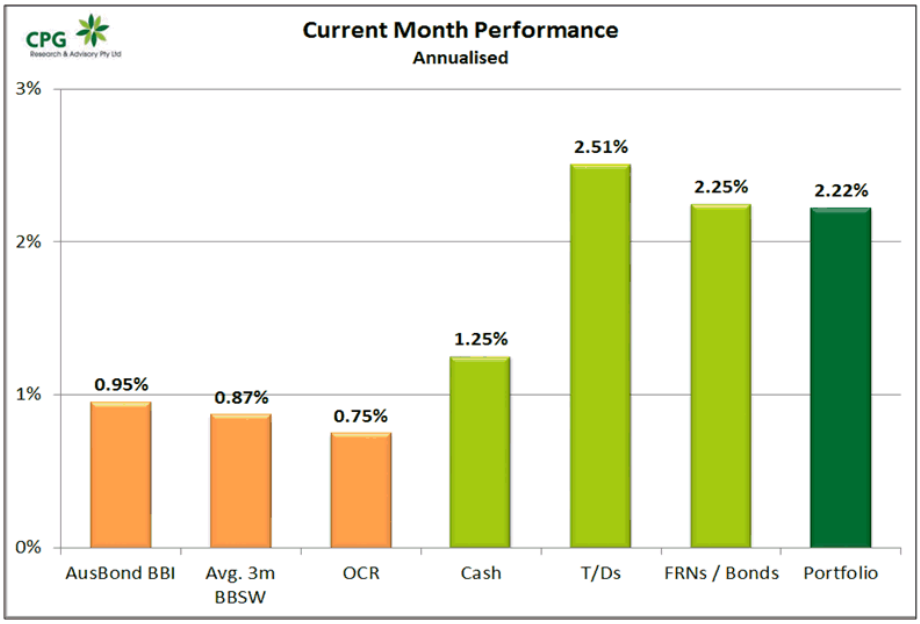
	1 month	3 months	6 months	FYTD	1 year	2 years	3 years	4 years	5 years
Official Cash Rate	0.06%	0.23%	0.54%	0.31%	1.29%	1.39%	1.43%	1.53%	1.66%
Avg. 3m BBSW	0.07%	0.24%	0.57%	0.33%	1.52%	1.72%	1.73%	1.81%	1.92%
AusBond Bank Bill Index	0.08%	0.25%	0.65%	0.37%	1.65%	1.77%	1.77%	1.86%	1.98%
Council Cash	0.11%	0.30%	0.81%	0.48%	1.86%	1.95%	2.03%	2.12%	2.26%
Council T/Ds	0.21%	0.67%	1.44%	0.92%	3.06%	3.13%	3.23%	3.34%	3.45%
Council FRNs / Bonds	0.19%	0.57%	1.25%	0.78%	2.86%	3.06%	3.08%	3.14%	-
Council Total Portfolio	0.19%	0.56%	1.24%	0.78%	2.72%	2.79%	2.87%	3.01%	3.15%

Annualised

	1 month	3 months	6 months	FYTD	1 year	2 years	3 years	4 years	5 years
Official Cash Rate	0.75%	0.92%	1.08%	0.94%	1.29%	1.39%	1.43%	1.53%	1.66%
Avg. 3m BBSW	0.87%	0.94%	1.13%	0.98%	1.52%	1.72%	1.73%	1.81%	1.92%
AusBond Bank Bill Index	0.95%	0.99%	1.30%	1.10%	1.65%	1.77%	1.77%	1.86%	1.98%
Council Cash	1.25%	1.22%	1.61%	1.42%	1.86%	1.95%	2.03%	2.12%	2.26%
Council T/Ds	2.51%	2.68%	2.88%	2.75%	3.06%	3.13%	3.23%	3.34%	3.45%
Council FRNs / Bonds	2.25%	2.27%	2.49%	2.33%	2.86%	3.06%	3.08%	3.14%	-
Council Total Portfolio	2.22%	2.26%	2.47%	2.34%	2.72%	2.79%	2.87%	3.01%	3.15%

*The Investment portfolio returned a satisfactory **2.22%** p.a. for the month of October 2019, exceeding the benchmark AusBond Bank Bill Index (0.95% p.a.) by **+127bp. This reflects the deposits rolling over at lower rates, FRN quarterly rates reset and the cash drag.*** The benchmark BBI is now reflecting the third RBA rate cuts to October. **Given a long deposit duration, Council's relative outperformance will tend to be elevated in long-term investment sectors.**

TCorpIM Cash was in line-with its typical spread to benchmark with 0.10% net returns. It is an extremely dilute exposure to FRNs, and participated in improving credit conditions, and so well below longer-term asset returns. The liquid FRN portfolio performed 100bp ahead of TCorpIM.



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Credit Quality

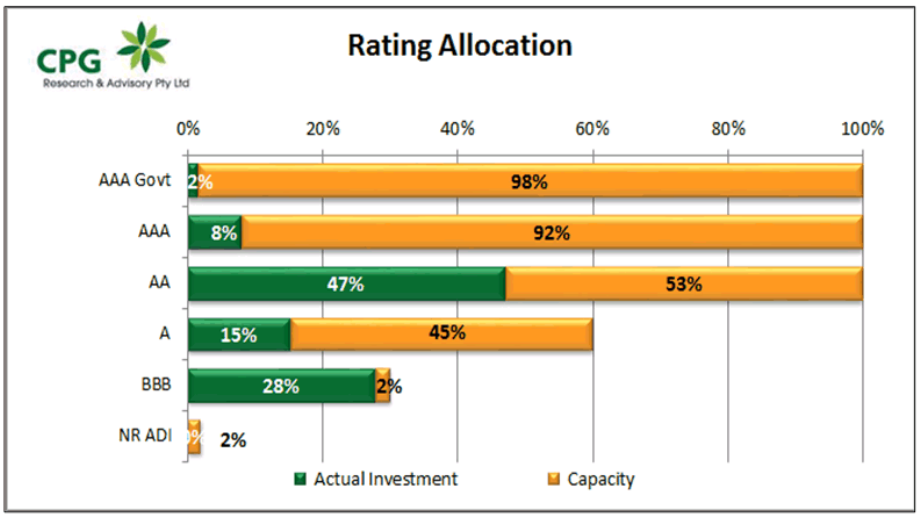
The aggregate limit for BBB is 30% and in NR is now 2% (over-riding single-name limits). Allocations were very conservative in any case.

We have tested the portfolio provided against Council's current Investment Policy and report the following:

Aggregate credit limits are in compliance:

Rating Category	Actual	Per C/Party	Aggregate	Rating Category	Actual Investment	Capacity
AAA Govt	2%	100%	100%	AAA Govt	2%	98%
AAA	8%	40%	100%	AAA	8%	92%
AA	47%	30%	100%	AA	47%	53%
A	15%	15%	60%	A	15%	45%
BBB	28%	10%	30%	BBB	28%	2%
NR ADI	0%	5%	2%	NR ADI	0%	2%

Credit quality is mostly directed towards the higher rated ADIs, with capacity levels full in investment grade BBB rated in accordance with Council, opens a very small capacity for future investment opportunities.



AMP was downgraded one notch from A- to BBB+ by S&P in late August. This has resulted in the BBB allocation being relatively full, but within TCorp's targets.

We note that TCorp have relaxed their limits to now allow for 5% in BBB- and unrated ADI deposits. This will be the subject of an upcoming paper.

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Other Compliance

We have tested the portfolio provided against Council's current investment policy and report the following:

All counterparties comply, and all are rated.

Counterparties	Exposure $M	FCS	Net	Rating	Policy Limit	Actual	Capacity
TCorpIM Cash Fund	$13.13M	$0.00M	$13.13M	AAA	40%	6%	$68.03M
NSW TCorp	$1.52M	$0.00M	$1.52M	AAA	40%	1%	$79.65M
Suncorp Cov	$1.00M	$0.00M	$1.00M	AAA	36%	0%	$72.91M
ANZ	$10.50M	$0.00M	$10.50M	AA-	30%	5%	$50.37M
CBA	$17.26M	$0.25M	$17.01M	AA-	30%	8%	$43.86M
NAB	$49.80M	$0.25M	$49.55M	AA-	30%	24%	$11.32M
Westpac	$23.00M	$0.25M	$22.75M	AA-	30%	11%	$46.12M
Westpac - Green TD	-$8.00M	$0.00M	-$8.00M	AA-	30%	-4%	
Rabobank	$12.00M	$0.25M	$11.75M	A	15%	6%	$18.69M
Suncorp	$7.50M	$0.25M	$7.25M	A+	15%	4%	$23.19M
Macquarie Bank	$7.00M	$0.00M	$7.00M	A	15%	3%	$23.44M
ING	$4.00M	$0.25M	$3.75M	A	15%	2%	$26.69M
AMP	$7.60M	$0.25M	$7.35M	BBB+	10%	4%	$12.94M
Bendigo-Adelaide	$2.00M	$0.25M	$1.75M	BBB+	10%	1%	$18.54M
BoQ	$15.00M	$0.25M	$14.75M	BBB+	10%	7%	$5.54M
CUA	$3.85M	$0.00M	$3.85M	BBB	10%	2%	$16.44M
Heritage	$1.95M	$0.00M	$1.95M	BBB+	10%	1%	$18.34M
TMB	$0.70M	$0.00M	$0.70M	BBB	10%	0%	$19.59M
Newcastle Permanent	$3.00M	$0.00M	$3.00M	BBB	10%	1%	$17.29M
ME Bank	$8.10M	$0.25M	$7.85M	BBB	10%	4%	$12.44M
Beyond Bank	$2.00M	$0.25M	$1.75M	BBB	10%	1%	$18.54M
P&N Bank	$9.00M	$0.25M	$8.75M	BBB	10%	4%	$11.54M
Auswide	$2.00M	$0.25M	$1.75M	BBB-	10%	1%	$18.54M
Qbank	$1.00M	$0.00M	$1.00M	BBB-	10%	0%	$19.29M
	$202.91M		$199.66M			98%	
C'Wealth Govt		$3.3M	$3.25M	AAA	100%	2%	
Total	$202.91M		$202.91M			100%	

Spending the working capital in TCorpIM would tend to increase exposures proportionately by around 6% (it had once been 25%). This has resulted in conservative allocations through FY18 and FY19, but is now unlikely to materially impact any compliance data given the relatively modest allocation.

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25th ANNIVERSARY YEAR

We have also tested Council's current investment exposure against the lower rated counterparties' net assets as Council's Policy prescribes maximum concentration. We report the following:

Only P&N Bank is larger than the net assets % threshold for individual counterparty, and will be run down over time.

Counterparties	Exposure $M	Rating	Max port %	Actual	Net Assets $M	Max allowed % of net assets	Net Exposure	
AMP	$7.60M	BBB+	10%	4%	$6,791	2%	0.112%	1.89%
Bendigo-Adelaide	$2.00M	BBB+	10%	1%	$5,632	2%	0.036%	1.96%
BoQ	$15.00M	BBB+	10%	7%	$3,885	2%	0.386%	1.61%
CUA	$3.85M	BBB	10%	2%	$1,037	2%	0.371%	1.63%
Heritage	$1.95M	BBB+	10%	1%	$487	2%	0.400%	1.60%
TMB	$0.70M	BBB	10%	0%	$493	2%	0.142%	1.86%
Newcastle Permanent	$3.00M	BBB	10%	1%	$925	2%	0.324%	1.68%
ME Bank	$8.10M	BBB	10%	4%	$1,485	2%	0.545%	1.45%
P&N Bank	$9.00M	BBB	10%	4%	$291	2%	3.097%	-1.10%
Qbank	$1.00M	BBB-	10%	0%	$78	2%	1.278%	0.72%
Beyond Bank	$2.00M	BBB	10%	1%	$487	2%	0.411%	1.59%
Auswide	$2.00M	BBB-	10%	1%	$237	2%	0.845%	1.16%

We note that these are before application of the government insurance scheme (FCS).

P&N Bank's investments are longer dated than the other investments in smaller ADIs.

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25th ANNIVERSARY YEAR

Term Deposits

At month-end, deposits accounted for approximately 64% of the total investment portfolio. The weighted average duration of the deposit portfolio is approximately **1.1 years, down slightly from last month. It is significantly longer than the peer group average**. This places Council in an excellent position through FY20.

Maintaining a longer duration has produced a measurable uplift in yield at a time when deposit rates have plunged. The current average yield of **2.47%** ***is far above any deposit of all terms following the fall in rates to record lows,*** at around +163bp over benchmark. This is a very satisfactory level, given the current interest rate environment, **as the yield curve inverts and deposit rates set new record lows throughout FY20**.

Investors continue to be rewarded for 1 year deposits; increasingly less so at longer durations. **Short deposit rates are likely to fall somewhat further, but they have largely adjusted to bond yields at the longer end.**

Short-end margins were extremely wide, albeit dominated by newcomer Judo Bank. 2 years are poor value, with long-term recovery now contemplated.

The RBA reduced rates further by -25bp to a record low of 0.75% at their October board meeting. This will inevitably cause a further hit to income from reinvestments.

Relevant portfolio data follows:

Term Deposit Statistics

Percentage of total portfolio	64%
Weighted Average Yield	2.47%
Weighted Average Duration	1.1 yrs

Credit Quality of Deposits

AAA^	1%
AA	47%
A	20%
BBB	29%
Unrated ADI	0%
Total	**97%**

^ *Calculation excludes the Financial Claims Scheme (FCS)*

We refer to the detailed analysis in our October ***Fixed Interest Analytics***.

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Credit: FRNs & Fixed Bonds

Senior major FRN spreads were little changed. Recent new issuance provided some price discovery, and the market is now clearing well in the high 70s.

We expect significant issuance activity now that banks are reporting their half-year or full year results. Investors should prepare to deploy any spare liquidity.

Certainty on the regulatory environment has allowed investors to confidently price in far stronger major banks, with 8% capital going to 11% over 4 years. Banks have issued sub debt into global markets, avoiding flooding the local market. While this resulted in a buying frenzy in July, pricing slipped back to around previous trend levels. Even now, they are around the post-GFC tights prior to APRA's announcement.

US bonds again sold off intra-month, on hope that the US and China might reach some agreement on the trade war, before closing just +1bp higher. Australian 10-year bond weakened +13bp to 1.14%. With substantial bond losses over 2 months, there are signs that a bond bubble may have popped at the end of August.

Additional Tier 2 and possible lack of "bail-in senior" **prompted S&P to remove the Negative Outlook and affirm major bank ratings to AA- Stable**. ***We expect Fitch to follow***.

Tier 3 has been used elsewhere, and may comply with the Minister's Order. APRA's directives for capital concentrate on Tier 2, despite industry fears that the required volume may be impossible for the market to support.

We refer to the detailed analysis in our October ***Fixed Interest Analytics***.

At the start of CY19, we considered AA rated FRNs the best fit for Council's current circumstances. ***As bonds yields fell and deposits lagged, this brought 6 months of expectation that deposit yields had further to fall. This tilt to deposits in our recommendations has now largely completed.***

We consider FRNs spreads *Fair Value*. With deposit margins back to the 90-100bp area (somewhat distorted by extraordinary spreads from Judo Bank) deposit normalisation is largely completed.

As FRNs issue post-reporting season, ***we recommend participation*** where Council is looking to deploy excess cash.

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25th ANNIVERSARY YEAR

TCorpIM Funds

TCorpIM Cash returned +0.10% in October, +2bp above the AusBond Bank Bill Index of +0.08%. This excess margin is in line with typical running yields, and follows marginally weaker months.

Council's investment balance in TCorpIM was further reduced by ~-$3.4m in October at ~6.4% of the portfolio. The Fund is not competitive with Notice Accounts. It accounts for a moderate proportion of total assets – **solely utilised for the purpose of planned expenditures**.

We note that future returns will likely be far below those reported in 1H19, with a further rate cut during the month hitting all floating rate assets again.

TCorpIM Cash is a diluted exposure to bank FRNs, with the majority in State paper. Notably, Council's liquid FRN portfolio outperformed TCorp Cash by ~100bp during October.

BBSW was 0.92% at month end, with the running yield close to 1% for the fund. BBSW has reset down towards the RBA's current Official Rate, and should now stabilise if the RBA is on hold. (They maintain an easing bias, although would be likely to pause for some time to assess the impact of their last three cuts.)

The TCorpIM fund works only as a substitute for daily liquidity – it does not have any merit as a strategic allocation.

Other sector funds besides Cash have been withdrawn from broad-based offer by TCorpIM. The majority of investors were in Cash and the multi-sector funds (Medium Term Growth and Long Term Growth). Few "middle market" investors made specific allocations. Therefore, notwithstanding previous representations and the Minister's Order allowing it, **Councils are no longer welcomed into Sector Funds following personnel changes**.

There may be opportunities opened up down the track for Councils to participate in other asset classes.

Over time, TCorp expected to migrate its equity-dominated portfolio risks towards more stable CPI-plus returns – akin to the absolute return mandate of the Future Fund. Indeed, they have hired from the Future Fund to pursue this evolution.

Meanwhile, investors face the question of whether to take on more risk or to accept ultra-low earning rates on effectively riskless assets for the foreseeable future.

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Fixed Interest Outlook

The Reserve Bank cut the Official cash rate to a new record 0.75% at the October meeting. They remain on easing bias, at what used to be considered the "lower bound" at 0.75%.

That said, the market had been extrapolating down to 0.25%; the RBA is reluctant to use its entire policy flexibility before any future recession. They **all-but ruled out following Europe into** negative interest rates, even in extreme cases – describing negative rates as "*extraordinarily unlikely*."

The US Fed also made its third rate cut for 2019. It too is reluctant to indulge markets extrapolating cuts towards zero – it removed easing bias language from the statement, implying neutral outlook. Economic data has been satisfactory despite recession fears.

US bonds again sold off intra-month, on hope that the US and China might reach some agreement on the trade war. They closed flat. Formalisation of impeachment hearings threatens further government instability. However, increasing signs that the Chinese also want to deal may be derailing the case for bonds.

The first estimate of Q3 GDP was +1.9%, in line with trend and inconsistent with inflation fears. Core CPI reached a recent high of +2.4%, potentially troubling for the Fed after its recent easings – **this may be a brief tariff impact, or it may be a nascent inflation breakout**. If inflation really does break out after Fed easing, ***this could generate much greater upside risk than the market is currently prepared for – with global impacts***.

Australian bonds weakened +13bp after unemployment eased marginally to 5.2% and building permits jumped +7.6%. Headline inflation also spiked to +1.8%, *vs* +1.3% in Q2:

High yield weakened slightly, from +402bp to +415bp, and distressed credit also widened slightly.

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Portfolio Listing

Shoalhaven City Council as at 31/10/2019						
Authorised Deposit-Taking Institution (ADI)	ST Rating	Security Type	Principal/ Current MF Value	Term	Interest Rate	Maturity Date
Rabobank	A-1	TD	$2,000,000.00	180	2.50%	4-Nov-19
Members Equity Bank	A-2	TD	$2,000,000.00	269	2.70%	25-Nov-19
Suncorp Metway Ltd Bank	A-1	TD	$2,000,000.00	271	2.60%	25-Nov-19
AMP Bank	A-2	TD	$1,000,000.00	180	2.65%	26-Nov-19
Bendigo Bank	A-2	TD	$2,000,000.00	198	2.40%	27-Nov-19
National Australia Bank	A-1+	TD	$4,000,000.00	162	2.07%	27-Nov-19
Macquarie Bank	A-1	TD	$3,000,000.00	90	1.80%	28-Nov-19
Beyond Bank Australia	A-2	TD	$2,000,000.00	182	2.40%	2-Dec-19
Commonwealth Bank Australia	A-1+	TD	$25,000.00	183	2.06%	4-Dec-19
Bank of Qld	A-2	TD	$2,000,000.00	231	2.35%	18-Dec-19
Members Equity Bank	A-2	TD	$2,000,000.00	204	2.28%	18-Dec-19
National Australia Bank	A-1+	TD	$2,000,000.00	294	2.62%	18-Dec-19
National Australia Bank	A-1+	TD	$3,000,000.00	292	2.63%	18-Dec-19
National Australia Bank	A-1+	TD	$2,000,000.00	282	2.58%	18-Dec-19
National Australia Bank	A-1+	TD	$2,000,000.00	254	2.50%	18-Dec-19
National Australia Bank	A-1+	TD	$2,000,000.00	211	2.32%	18-Dec-19
Macquarie Bank	A-1	TD	$4,000,000.00	127	1.80%	7-Jan-20
Auswide Bank	A-2	TD	$2,000,000.00	224	2.23%	29-Jan-20
National Australia Bank	A-1+	TD	$3,000,000.00	154	1.67%	29-Jan-20
National Australia Bank	A-1+	TD	$2,000,000.00	212	2.01%	29-Jan-20
National Australia Bank	A-1+	TD	$2,000,000.00	204	1.97%	29-Jan-20
Suncorp Metway Ltd Bank	A-1	TD	$3,000,000.00	152	1.65%	3-Feb-20
ING Bank (Australia) Ltd	A-1	TD	$2,000,000.00	728	2.87%	12-Feb-20
National Australia Bank	A-1+	TD	$4,000,000.00	184	1.70%	21-Feb-20
ING Bank (Australia) Ltd	A-1	TD	$2,000,000.00	728	2.85%	26-Feb-20
National Australia Bank	A-1+	TD	$3,000,000.00	201	1.80%	26-Feb-20
National Australia Bank	A-1+	TD	$2,000,000.00	192	1.75%	20-Mar-20
National Australia Bank	A-1+	TD	$2,000,000.00	152	1.62%	23-Mar-20
National Australia Bank	A-1+	TD	$5,000,000.00	148	1.56%	25-Mar-20
Westpac Bank	A-1+	TD	$2,000,000.00	734	2.86%	9-Jun-20
Commonwealth Bank Australia	A-1+	TD	$2,000,000.00	1094	2.77%	11-Jun-20
National Australia Bank	A-1+	TD	$5,000,000.00	239	1.53%	24-Jun-20
AMP Bank	A-2	TD	$5,000,000.00	366	2.45%	24-Jul-20
Westpac Bank	A-1+	TD	$4,000,000.00	365	1.73%	3-Sep-20
Bank of Qld	A-2	TD	$2,000,000.00	751	2.90%	23-Sep-20
State Insurance Regulatory Authority	A-1+	TD	$1,517,000.00	365	1.45%	15-Oct-20
Police and Nurses Bank	A-2	TD	$2,000,000.00	1459	3.50%	18-Dec-20
Rabobank	A-1	TD	$2,000,000.00	1464	3.00%	16-Jun-21
Bank of Qld	A-2	TD	$2,000,000.00	1821	3.85%	15-Dec-21
Bank of Qld	A-2	TD	$5,000,000.00	1827	3.80%	21-Feb-22
Police and Nurses Bank	A-2	TD	$5,000,000.00	1825	3.74%	22-Feb-22
Westpac Bank	A-1+	TD	$6,000,000.00	1826	3.00%	2-Mar-22
Bank of Qld	A-2	TD	$2,000,000.00	1826	3.80%	22-Mar-22
Westpac Bank	A-1+	TD	$2,000,000.00	1826	2.83%	24-Aug-22
Westpac Bank	A-1+	TD	$2,000,000.00	1826	3.00%	24-Aug-22
Rabobank	A-1	TD	$2,000,000.00	1826	3.39%	13-Sep-22
Police and Nurses Bank	A-2	TD	$2,000,000.00	1836	3.51%	28-Sep-22
Rabobank	A-1	TD	$2,000,000.00	1828	3.40%	23-Aug-23
Rabobank	A-1	TD	$2,000,000.00	1826	3.13%	21-Feb-24
Westpac Bank	A-1+	TD	$4,000,000.00	1827	2.21%	19-Jun-24
Total Term Deposits			**$130,542,000.00**			

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Authorised Deposit-Taking Institution (ADI)	ST Rating	Security Type	Principal/ Current MF Value	Term	Interest Rate	Maturity Date
Credit Union Australia	A-2	FRN	$2,250,000.00	1096	2.50%	20-Mar-20
Members Equity Bank	A-2	FRN	$1,000,000.00	1096	2.38%	6-Apr-20
Newcastle Permanent Building Society	A-2	FRN	$2,000,000.00	1827	2.48%	7-Apr-20
Newcastle Permanent Building Society	A-2	FRN	$500,000.00	1064	2.48%	7-Apr-20
Heritage Bank	A-2	FRN	$1,250,000.00	1096	2.29%	4-May-20
Suncorp Metway Ltd Bank	A-1	FRN	$2,000,000.00	1827	2.36%	20-Oct-20
Bank of Qld	A-2	FRN	$1,000,000.00	1461	2.21%	26-Oct-20
Members Equity Bank	A-2	FRN	$1,500,000.00	1096	2.22%	9-Nov-20
Qbank	A-2	FRN	$1,000,000.00	1096	2.88%	6-Dec-20
Newcastle Permanent Building Society	A-2	FRN	$500,000.00	731	2.06%	26-Feb-21
Rabobank	A-1	FRN	$2,000,000.00	1826	2.89%	4-Mar-21
Heritage Bank	A-2	FRN	$700,000.00	1096	2.43%	29-Mar-21
Members Equity Bank	A-2	FRN	$1,600,000.00	1095	2.39%	16-Apr-21
National Australia Bank	A-1+	FRN	$1,000,000.00	1826	2.14%	12-May-21
Bank of Qld	A-2	FRN	$1,000,000.00	1826	2.45%	18-May-21
Suncorp Metway Ltd Bank	A-1	FRN	$1,000,000.00	1826	2.29%	22-Jun-21
Teachers Mutual Bank Limited	A-2	FRN	$700,000.00	1,096	2.55%	2-Jul-21
Commonwealth Bank Australia	A-1+	FRN	$1,000,000.00	1826	2.34%	12-Jul-21
ANZ	A-1+	FRN	$1,000,000.00	1826	2.10%	16-Aug-21
Credit Union Australia	A-2	FRN	$600,000.00	1096	2.63%	6-Sep-21
AMP Bank	A-2	FRN	$1,500,000.00	1096	2.45%	10-Sep-21
Credit Union Australia	A-2	FRN	$1,000,000.00	1096	2.62%	4-Mar-22
ANZ	A-1+	FRN	$1,000,000.00	1826	2.37%	7-Mar-22
Suncorp Metway Ltd Bank	A-1	FRN	$500,000.00	1826	1.94%	16-Aug-22
Westpac Bank	A-1+	FRN	$2,000,000.00	1826	2.21%	6-Mar-23
Commonwealth Bank Australia	A-1+	FRN	$1,000,000.00	1916	1.85%	25-Apr-23
ANZ	A-1+	FRN	$1,000,000.00	1826	1.87%	9-May-23
Commonwealth Bank Australia	A-1+	FRN	$500,000.00	1826	1.90%	16-Aug-23
National Australia Bank	A-1+	FRN	$1,500,000.00	1826	2.11%	26-Sep-23
ANZ	A-1+	FRN	$4,000,000.00	1826	2.41%	16-Dec-23
Commonwealth Bank Australia	A-1+	FRN	$2,000,000.00	1826	2.26%	11-Jan-24
National Australia Bank	A-1+	FRN	$2,300,000.00	1826	2.00%	26-Feb-24
National Australia Bank	A-1+	FRN	$2,000,000.00	1827	2.18%	19-Jun-24
Westpac Bank	A-1+	FRN	$1,000,000.00	1919	1.87%	16-Aug-24
ANZ	A-1+	FRN	$3,500,000.00	1827	1.74%	29-Aug-24
Total Senior Securities			**$48,400,000.00**			
			$178,942,000.00			
Shoalhaven City Council as at 31/10/2019						
Grandfathered	**STRating**	**SecurityType**	**Current Valuation**			**Maturity Date**
Macquarie Global Income Opportunities	NR	MF	$0.00			T+3
TCorpIM Cash Fund	AAAm	MF	$13,129,771.43			T+0
			$13,129,771.43			
Product	**STRating**	**SecurityType**	**Current Valuation**			**Maturity Date**
AMP At Call	A-2	Cash	$726.78		1.40%	At-Call
AMP Notice Account	A-2	Cash	$100,758.75		1.65%	31 Days
NAB Transaction Account	A-1+	Cash	$0.00		1.00%	At-Call
CBA Operating Account	A-1+	Cash	$3,628,885.61		1.00%	At-Call
CBA Business Online Saver	A-1+	Cash	$7,104,133.99		1.35%	At-Call
			$10,834,505.13			
Total Investment Portfolio			**$202,906,276.56**			

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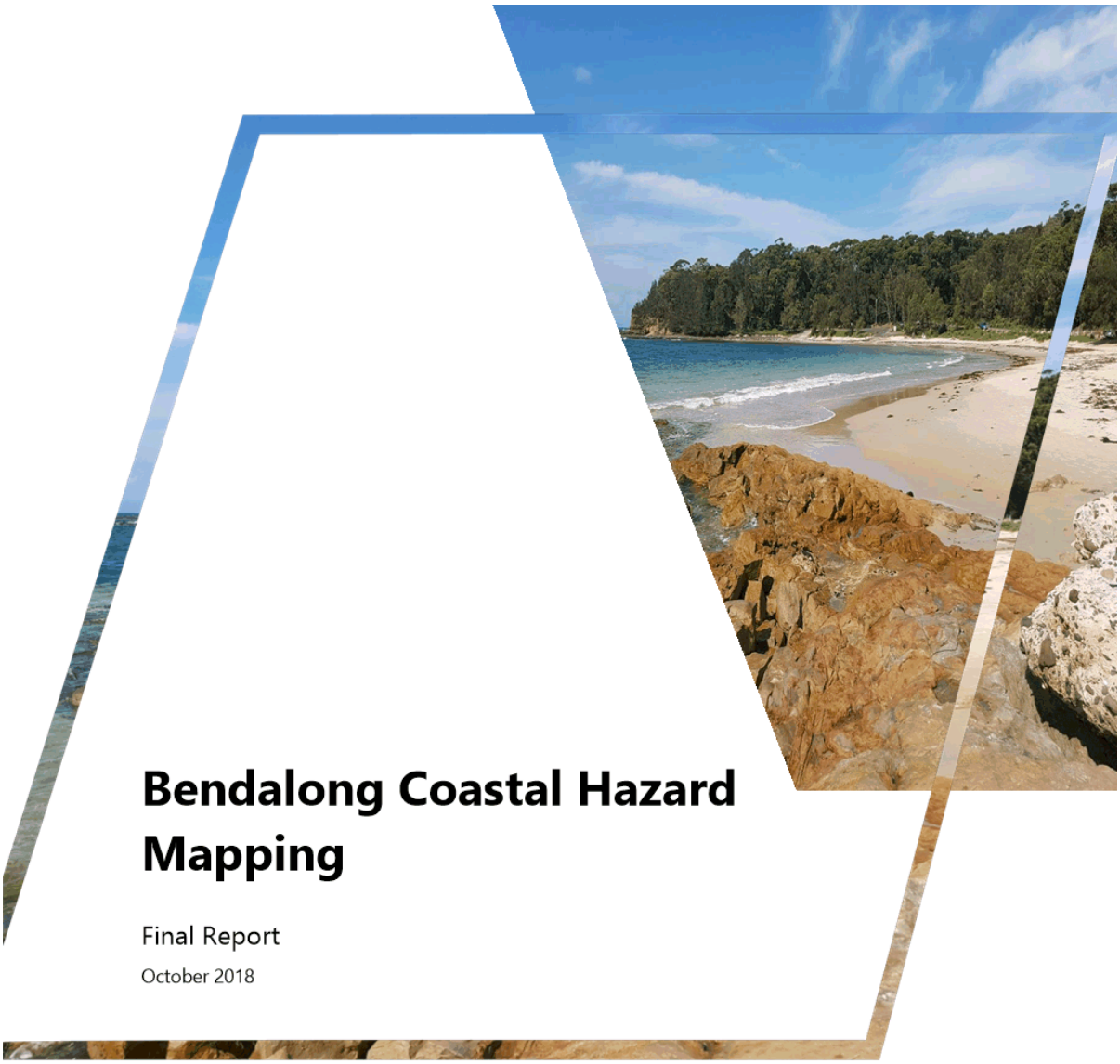

Bendalong Coastal Hazard Mapping

Final Report

October 2018

Level 17, 141 Walker St
North Sydney NSW 2060
Australia

301311-13501-002

www.advisian.com

Advisian
WorleyParsons Group

Synopsis

This report describes the derivation of the coastal hazard for Bendalong Boat Harbour beach, based on survey information and Council's Sea Level Rise projections.

Disclaimer

Project No: 301311-13501-002 – Bendalong Coastal Hazard Mapping: Final Report

Rev	Description	Author	Review	Advisian Approval	Date
A	Draft for Internal Review	C Adamantidis	A Nielsen		7/9/17
B	Draft for Customer Review	C Adamantidis	A Nielsen	C Adamantidis	11/9/17
0	Final	C Adamantidis	A Nielsen	C Adamantidis	3/10/18

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Appendix List

1 Introduction

Coastal hazards of the Shoalhaven coastline were mapped and identified based on coastal engineering studies undertaken as part of the risk assessment for the current Shoalhaven Coastal Zone Management Plan (Umwelt Australia, 2012). That mapping took into account sea level rise benchmarks under the previous NSW Government Sea Level Rise Policy Statement (Department of Environment Climate Change and Water, DECCW 2009). However, it did not include the beach at Bendalong Boat Harbour.

Following an East Coast Low that occurred in June 2016, Bendalong Beach (together with other north-facing embayments along the Shoalhaven coastline) experienced severe erosion. In light of the severe erosion experienced at Bendalong, the revised sea level rise projections adopted by Council, and a new Landscape Master Plan for the area, Council has undertaken bathymetric and beach surveys of Bendalong in December 2016, to enable a coastal hazard assessment for Bendalong to be carried out and understand the level of risk to public infrastructure along the Bendalong beachfront.

This report presents the derivation of the refined coastal hazards at Bendalong Boat Harbour based on the latest available data and Council's adopted sea level rise projections. It describes the coastal processes and the impact of these processes on the areas where infrastructure is at risk. The assessment quantifies the observed long-term beach changes with reference to updated beach survey transects, LiDAR data, as well as estimating the beach recession that may be caused by sea-level rise as a result of climate change. The risk to infrastructure is defined in terms of the present day risk, the risk by 2030, the risk by 2050 and the risk by 2100. Simple, practical measures for dealing with the beach erosion risk are provided also.

2 Study Area

The study area for this investigation covers Bendalong Boat Harbour Beach, the location of which is shown in Figure 2-1. An aerial photograph of the site is shown in Figure 2-2.

Site visits were undertaken on 20 March 2017 and 3 August 2017. A major east coast low occurred on June 5 – 6, 2016, the effects of which could still be seen in the erosion escarpment along the back of the beach area in March 2017, despite beach scraping works which were undertaken in November 2016. Immediately prior to the site visit in March 2017, 117 mm of rainfall was recorded at the nearest Bureau of Meteorology weather station at Bendalong STP within a single day on 17 March (which was the highest daily rainfall total recorded since the June 2016 East Coast Low). This rainfall event resulted in severe localised erosion on the beach caused by runoff from overland flow cascading down the road and the embankment behind the road, as well as severe scour in the vicinity of the beach stormwater outlets.

A brief description of the coastal compartments of the Shoalhaven coast, a description of the beach, as well as a summary of available data for hazard analysis is provided below.

2.1 Shoalhaven Coastal Sediment Compartments

Carvallo and Woodroffe (2015) have undertaken a study of the coastal compartments of the eastern coast of NSW. They considered sediment compartments as subdivisions of the coast separated by major obstacles such as headlands, which interrupt the transport of littoral drift alongshore. Compartments were delineated based on physical characteristics as well as a review and interpretation of hydrologic, geomorphic and sedimentological data. The following primary sediment compartments were identified for the Shoalhaven coast:

- A compartment centred on the Shoalhaven River estuary
- A compartment centred on Jervis Bay
- A compartment between Bannisters Point and Jervis Bay, encompassing Bendalong Boat Harbour beach
- A compartment between Warden Head and Bannisters Point, encompassing Ulladulla Harbour, Collers and Mollymook beaches.

These compartments have been subdivided further into secondary and tertiary sediment compartments by the presence of smaller headlands, as based on sediment characteristics and transport.

McPherson *et al.* (2015) have delineated the coastline into similar sediment compartments when compared with those presented in Carvallo and Woodroffe (2015) – they identified secondary sediment compartments centred on the Shoalhaven River, Jervis Bay and a compartment between Ulladulla and Jervis Bay based on baseline reference data sets and a workshop with coastal experts.

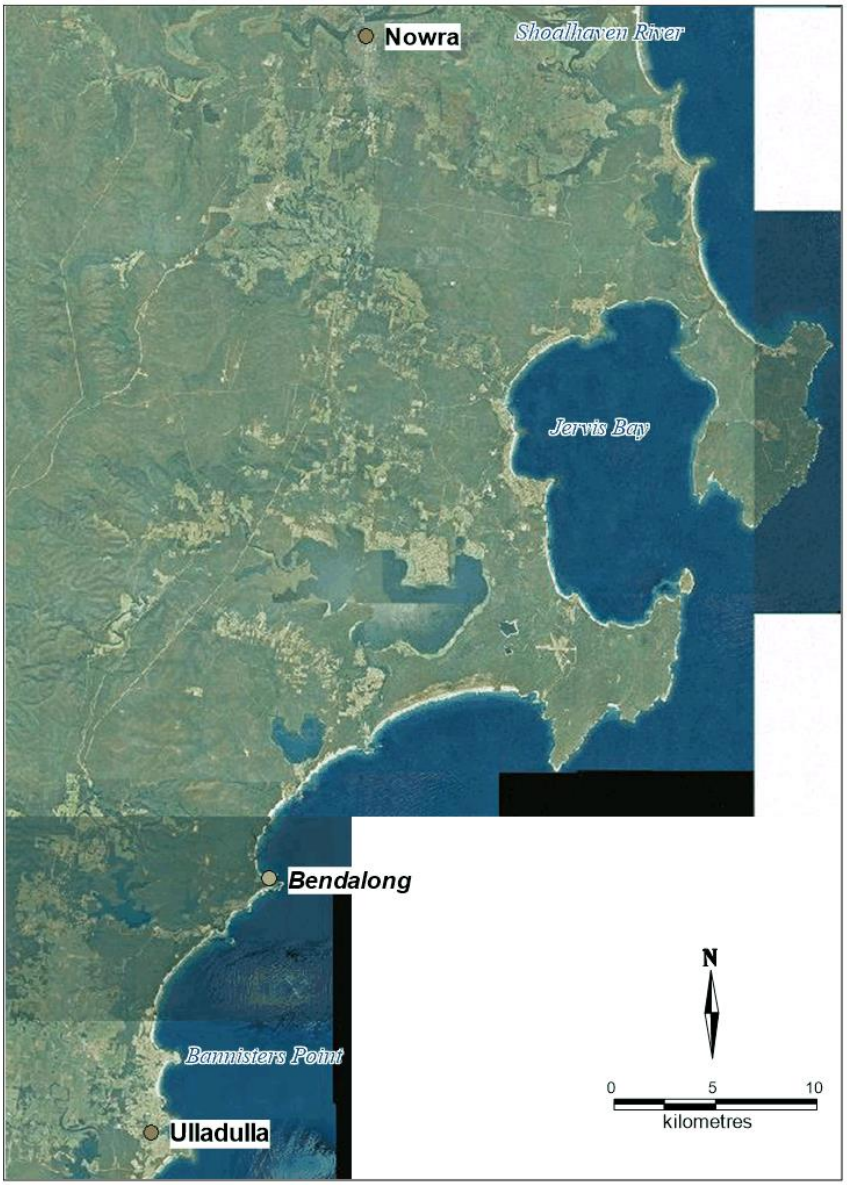

Figure 2-1 – Location of Bendalong Boat Harbour Beach

Figure 2-2 – Bendalong Boat Harbour Beach, aerial photo

2.2 Bendalong Boat Harbour Beach

Bendalong Boat Harbour Beach is located on the northern side of Red Point. The beach is approximately 300 metres long and is flanked by Red Point to the east and a rocky point on the west, separating the embayment from Washerwoman Beach. The beach includes a range of facilities including a boat ramp, picnic areas, car parking, children's play area, a toilet block and is a very popular destination for boating, fishing and other ocean based recreation.

The eastern end of the beach, east of the boat ramp, was subject to erosion in the storms of June 2016. Exposed boulders and bedrock were visible in this area during the site inspection on 17 March 2017 (Figure 2-3). This area of the beach is used for fishing activities and facilities are available for cleaning fish.

The western end of the beach contains important historic remains associated with early 20th Century silica mining and timber getting, and Aboriginal shell middens have been identified within the back-beach area there (Feary, 2017).

The beach is largely protected from southerly and south-easterly swell waves as it has a northerly aspect. Easterly and east-northeasterly swell waves can refract around Red Point and reach

Bendalong Boat Harbour, but the beach is protected from north-easterly swell by St Georges Head. The planform of the beach is controlled by the rock shelf on the eastern side and a rocky point on the west.

Red Point Road runs immediately landward of the beach. A concrete boat ramp near the central-eastern portion of the beach acts to interrupt alongshore sediment transport. Three stormwater drains, which are in very poor condition, discharge directly onto the beach (Figure 2-4). On the landward side of the road is a steep embankment, which appears to comprise clay soils, approximately 10 m high, with the Bendalong Point Tourist Park occupying the land at the top of the embankment. Areas of this embankment were observed to be devoid of vegetation, with these areas coinciding with locations along the beach where significant scour due to overland flow was observed (Figure 2-11). It is postulated that rainwater flows from the top of the embankment would have been concentrated at these locations during the major rainfall event of 17 March 2017, with flow moving over the road and onto the beach, causing scour on the beach face.

Figure 2-3 – Erosion at eastern end of Bendalong Boat Harbour Beach. Note fish cleaning table, exposed rock boulders and underlying bedrock, and boat ramp at background

Figure 2-4 – Stormwater outlet to west of boat ramp – note poor condition, exposure of geotextile and concrete reinforcement and scour on the beach berm

Figure 2-5 – Beach erosion caused by overland sheet flow from road, west of boat ramp (20 March 2017)

Figure 2-6 – Scour and beach erosion at playground area caused by overland stormwater flows from the road

Figure 2-7 – Western end of Boat Harbour Beach. Note undermining of embankment toe by wave action and back beach area overgrown with exotic weeds (20 March 2017)

Figure 2-8 – Western end of Bendalong Boat Harbour Beach – note weeds on back-beach area, ad-hoc access paths from picnic area and erosion/scour caused by rainwater flow over escarpment

Figure 2-9 – Erosion of back-beach escarpment on western end of beach. Note collapse of steep embankment face exposing shell deposits within escarpment (March 20 2017)

Figure 2-10 – Bendalong Boat Harbour Beach looking east from the rocky headland at the western end. Note buildup of sand on the eastern side of the rock reef, which is acting as a natural groyne and controls the plan-form of the beach (20 March 2017).

Figure 2-11 – Embankment behind road to west of boat ramp. Note area devoid of vegetation where rainwater flows appear to have concentrated from the top of the embankment on 17 March 2017, flowing directly over the road and onto the beach (20 March 2017)

Figure 2-12 – Overland flow onto beach and playground area from steep approach roadway from the west, causing erosion on the beach near the existing playground area

2.3 Available data

The following data were available to allow an assessment of the coastal processes and hazards at Bendalong Boat Harbour:

- A land survey of the beach face provided by Council, dated December 2016
- Soundings of Bendalong Boat Harbour provided by Council, dated February 2017
- Historical aerial photos of the beach and surrounding coastline in digital format, dated February 1944, November 1959, April 1964, June 1970, May 1971, June 1972, July 1977, January 1979, June 1979, June 1981, July 1986, October 1987 and November 1991
- Historical photographs of the beach provided by Council dating from the 1960's as well as photographs taken immediately following the storm event of June 2016
- A plan identifying works undertaken by Council to rectify the storm erosion from the June 2016 storm event
- Plans indicating the proposed works to be undertaken as part of the Bendalong Boat Harbour Landscape Master Plan.

There is no photogrammetric data or historical survey information available for Bendalong Boat Harbour Beach from which to make an assessment of long term beach recession or short term erosion. Storm erosion demand has been assessed based on wave energy considerations. Should pre-storm LiDAR data be made available, an assessment of the storm erosion demand for the beach based on the impact of the June 2016 storm event could be undertaken to refine or confirm the storm erosion demand assumed for the hazard assessment.

3 Coastal Hazard Assessment Methodology

The principal hazards induced by the coastal processes that are relevant for a coastal hazard risk assessment of Bendalong Boat Harbour include:

- short-term coastal erosion from severe storms and consequent slope instability
- long term coastline recession resulting from imbalances in the sediment budget, such as aeolian (wind-driven) sand transport, climate change and beach rotation
- oceanic inundation of low lying areas.

The hydrodynamic forcing controlling the rate of these processes and hazards comprises the prevailing wave climate and water levels.

3.1 Short Term Coastal Erosion

Typically a beach comprises unconsolidated sands that can be mobilised under certain meteorological conditions (Nielsen 1994). The dynamic nature of beaches is witnessed often during storms when waves remove the sand from the beach face and the beach berm and transport it, by a combination of longshore and rip currents, beyond the breaker zone where it is deposited in the deeper waters as sand bars. During severe storms, comprising long durations of severe wave conditions, the erosion continues into the frontal dune, which is attacked, and a steep erosion escarpment is formed. This erosion process usually takes place over several days to a few weeks.

Dune vegetation has an important role to play in the stabilisation of the beach dune prior to a storm event. Where significant human disturbance is absent, distinctive zonation of plants in the dune system may be observed, reflecting the increasingly protected / sheltered environment which is created with increasing distance from the shoreline (Figure 3-1). Three plant zones usually are recognised, extending landward from the backbeach: primary, secondary and tertiary. Primary zone species (grasses and creepers) colonise lower parts of the beach and trap abrasive sand particles forming a "foundation". Transient beach vegetation is generally dominated by grasses (e.g. *Spinifex sericus* and *Festuca littoralis*) which aid in the creation of incipient foredunes. The foredune represents an elevated "wall" that can be colonised by secondary zone species (semi-permanent populations of herbs, shrubs and trees) to provide a wind deflecting "shutter" near the shoreline. These stabilise the foredune sand mass. Finally a "roof" forms from the growth of tertiary species (taller shrubs and trees), further elevating the wind and providing increased shelter to vegetation further inland.

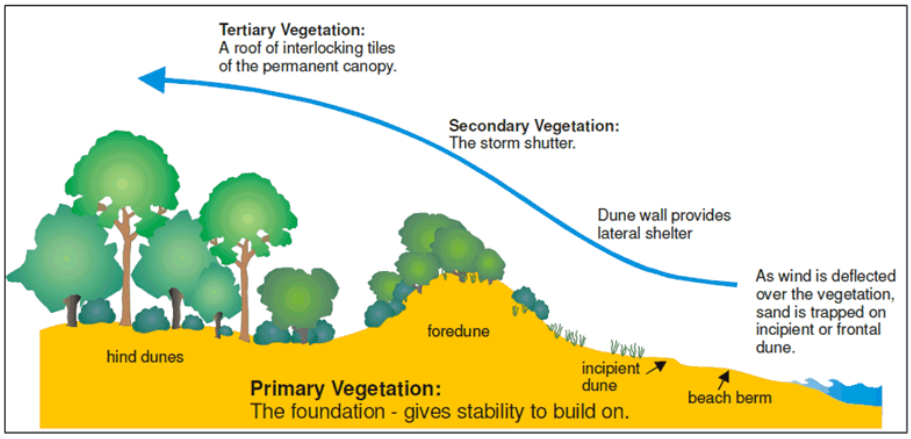

Figure 3-1 - Typical zonation of dune vegetation (DLWC 2001).

The amount of sand eroded from the beach during a severe storm will depend on many factors including the state of the beach when the storm begins, the storm intensity (wave height, period and duration), direction of wave approach, the tide levels during the storm and the occurrence of rips (Nielsen et al., 1992). Storm cut is the volume of beach sand that can be eroded from the subaerial (visible) part of the beach and dunes during a design storm. Usually, it has been defined as the volume of eroded sand as measured above mean sea level (~ 0 m AHD datum). For a particular beach, the storm cut (or storm erosion demand) may be quantified empirically with data obtained from photogrammetric surveys, or it may be quantified analytically using a verified numerical model.

For Bendalong Boat Harbour beach, the storm cut (or storm erosion demand) has been estimated based on wave energy considerations as assessed through numerical wave modelling, as there was no historical pre-storm data available to enable the erosion to be quantified empirically with data obtained photogrammetrically or through ground survey. An equivalent storm erosion volume has been estimated based on the schema presented in Nielsen et al. (1992) and storm erosion volumes estimated based on wave energy considerations derived from numerical wave modelling for the June 2016 East Coast Low.

Should pre-storm LIDAR data be made available, this would allow a reasonable estimate of the beach state prior to the storm event of June 2016 – comparing this against post-storm ground survey data (taken in December 2016) would enable the estimate of the storm erosion demand for Bendalong Boat Harbour to be validated. The only storm event that would be able to be documented in detail from such an assessment at Bendalong Boat Harbour Beach is the June 2016 East Coast Low. The June 2016 East Coast Low was particularly damaging for Bendalong Boat

Harbour and other north-east facing beaches in the Shoalhaven, (such as Currarong), due to the storm approach direction.

The east-northeast approach direction of the June 2016 East Coast Low made that event particularly significant for Bendalong Boat Harbour – due to the approach direction, that storm event is likely to have resulted in higher erosion than for other notable storm events that caused significant erosion at other beaches in the Shoalhaven (such as the May-June 1974 storm events, which had a more southerly approach direction). This makes the June 2016 East Coast Low a suitable design storm event for estimation of storm erosion demand at Bendalong Boat Harbour.

It should be noted that it is difficult to ascribe a probability of exceedance to the storm erosion demand values presented in this report, as storm erosion depends on multiple variables including wave height, water level at the time of the storm, wave direction, beach slope and rip locations. However, an assessment of the annual exceedance probability of the June 2016 storm event that caused the erosion at Bendalong Boat Harbour has been undertaken and is presented in Section 4.1. Such a storm event, when combined with the probability of occurrence of the offshore wave direction, would likely have a 1% risk of being exceeded in any 1 year (i.e., it is equivalent to a 100 year Average Recurrence Interval event).

Following storm cut the dune face dries out and may slump. This results from the dune sediments losing their apparent cohesive properties that come from the negative pore pressures induced by the water in the soil mass (Nielsen *et al.* 1992). This subsequent slumping of the dune face causes further dune recession.

Dune slumping is treated as a slope instability hazard and can be quantified with stability computations, which can serve as a guide to determining safe setback distances on frontal dunes that are prone to wave attack and slumping during storms.

Assuming that the subsurface material in the beach dunes is composed entirely of sand, based on Nielsen et al (1992), a number of coastline hazard zones can be delineated at the beaches in the study area as shown in Figure 3-2.

The *Zone of Wave Impact* delineates an area where any structure or its foundations would suffer direct wave attack during a severe coastal storm. It is that part of the beach that is seaward of the beach erosion escarpment.

A *Zone of Slope Adjustment* is delineated to encompass that portion of the seaward face of the beach that would slump to the natural angle of repose of the beach sand following removal of sand by wave erosion.

A *Zone of Reduced Foundation Capacity* for building foundations is delineated to take account of the reduced bearing capacity of the sand adjacent to the storm erosion escarpment. Nielsen *et al.* (1992) recommended that structural loads should only be transmitted to soil foundations outside of this zone (i.e., landward or below), as the factor of safety within the zone is less than 1.5 during extreme scour conditions at the face of the escarpment.

In general (without the protection of a terminal structure such as a seawall), dwellings/structures not piled[1] (or otherwise founded to an adequate depth) and located with the *Zone of Reduced Foundation Capacity* would be considered to have an inadequate factor of safety.

The schema for calculating the various zones is shown in Figure 3-2.

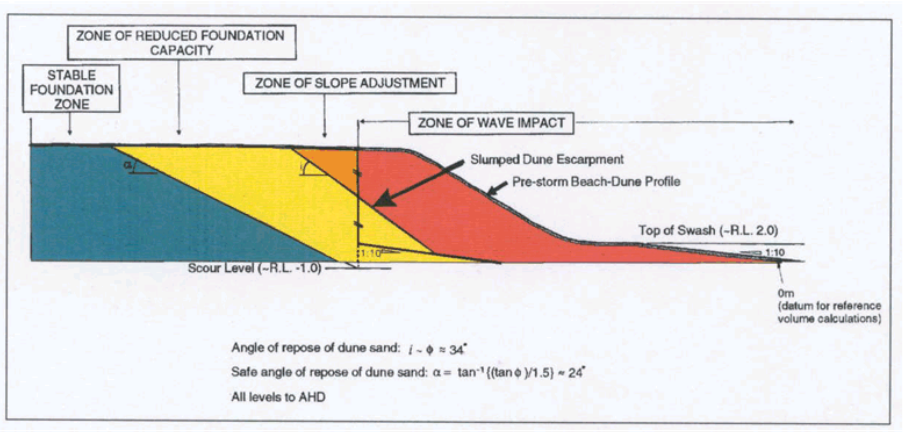

Figure 3-2 - Schematic representation of coastline hazard zones (after Nielsen et al, 1992)

The storm demand at a particular beach can be estimated by comparing "pre-storm" and "post-storm" beach volumes obtained from analysis of photogrammetry data, or it can be estimated based on wave energy considerations as determined from the results of a numerical wave model. If the required data were available, volume change (above 0 m AHD and landward of the 2 m AHD contour) would be able to be assessed for the analysis periods before and after known major storm events to estimate the storm erosion demand attributable to the June 2016 storm event. For this project, an estimate of storm erosion demand has been obtained from the results of numerical wave modelling. Results of this analysis are presented in Section 4.

It should be noted that the measured survey data follows the storm event by approximately six months and, therefore, does not necessarily reflect precise volume changes during the June 2016 storm event. Some beach recovery would have occurred prior to the survey being taken. Further, if "pre-storm" LiDAR data were to be used to estimate storm erosion demand, this would likely have been captured several months or years prior to the storm event and is likely to be somewhat different from the actual pre-storm beach profiles. As such, the actual storm erosion experienced at the beach during the 2016 storm event may have been higher or lower than the results provided herein.

[1] A pile is a structural member that is driven, screwed, jacked, vibrated, drilled or otherwise installed in the ground so as to transmit loads to the surrounding soil or rock (refer to Australian Standard AS 2159–1995, "Piling – Design and installation").

To estimate the position of the *Zone of Reduced Foundation Capacity*, a Digital Terrain Map was created based on ground survey data provided by Shoalhaven Council. It was assumed that the natural angle of repose of the dune sand was 33°, defining the landward limit of the *Zone of Slope Adjustment*. The landward limit of the *Zone of Reduced Foundation Capacity* was defined by a line at slope of 23°, that is $\{\tan^{-1}(\tan 33°/1.5)\}$, where 1.5 is the Factor of Safety (Nielsen et al, 1992).

The top of the swash zone for the beach at low tide was assumed to be at a level of 2.0 m AHD, with a scour level of 0.0 m AHD (as per Nielsen et al, 1992). Scour is likely to have been limited by the presence of bedrock on the beach, and due to the beach being relatively sheltered, would be expected to be less than the values (approximately -1.0 m AHD) commonly adopted for open coast beaches.

3.1.1 Creek entrance instability

Short term beach fluctuations can be enhanced at natural estuary entrances. Natural entrances tend to migrate along the beach in response to freshwater flooding and coastal storm effects (NSW Government, 1990). As there are no estuary entrances at or nearby to Bendalong Boat Harbour, this hazard is not applicable for the study area.

3.2 Long Term Coastline Recession

Processes such as sea level rise, aeolian processes and the differential transport of littoral drift are natural loss components of the sediment budget of a beach. Biogenic production of sand from the shells of benthic fauna, and sediment transported into the littoral zone from nearby estuaries are natural sources of sediment for a beach. If, in the long term, the losses of sediment from a beach are greater than the gains, then a gradual beach recession will result.

An assessment of the long term beach recession rate has not been able to be carried out for Bendalong Boat Harbour, due to the lack of historical survey or photogrammetry data. Examination of historical aerial photography and ground photos has shown that the beach planform has been similar to that observed in recent times (i.e. just prior to the June 2016 East Coast Low), and ground photos taken in the 1960's (Figure 3-3) illustrate that, despite the former presence of beach shacks along the back beach escarpment, the eastern end of the beach appears similar to today, with beach cobbles visible on the eastern side of the boat ramp.

At the western end of the beach, the presence of the concrete footings of the former wharf and the concrete remains of the ore crushing plant are still visible today – these features can be seen in a photograph dated prior to 1968 (Figure 3-4) which shows the beach escarpment location in a similar location to today, and the beach width being similar to the present day. Examination of the available historical aerial photography shows that the beach has not changed appreciably since the 1940's, although the beach width appears quite narrow in some photographs (e.g. 1991) and wider in other photographs (e.g. June 1981, March 2016). It was not possible to obtain the location of the dune escarpment from the available aerial photography, as the photographs were not available at a suitable scale or resolution. However, anecdotal evidence from historical ground photographs

shows that the beach is likely to have been relatively stable over time, except for the visible erosion that has been the result of the June 2016 storm event.

There is evidence that Washerwoman Beach to the west has experienced long term beach recession, with undermining of mature trees visible. Based on the available evidence, the long term coastline recession at Bendalong Boat Harbour is assessed to be very low.

Figure 3-3 – Top – Area east of the boat ramp in the 1960's (Shoalhaven City Council). Bottom – Same area in March 2017. Note presence of beach cobbles in both photographs.

Figure 3-4 – Top – Boat Harbour Beach looking west, prior to 1968 (note presence of timber jetty that was demolished in 1968). Bottom – similar perspective in March 2017. Note location of former concrete ore crushing plant and relative location of beach escarpment.

3.3 Future Beach Recession - Sea Level Rise

A progressive rise in sea level may result in shoreline recession through two mechanisms: first, by drowning low lying coastal land and, second, by shoreline readjustment to the new coastal water levels. The second mechanism is the more important since deeper offshore waters expose the coast to attack by larger waves, the nearshore refraction and diffraction behaviour of waves may change and a significant volume of sediment may move offshore as the beach seeks a new equilibrium profile (NSW Government 1990).

(Bruun 1962; 1983) proposed a methodology to estimate shoreline recession due to sea level rise, the so-called "Bruun Rule". Bruun (1962, 1983) investigated the long term erosion along Florida's beaches, which was assumed to be caused by a long term sea level rise. The Bruun Rule is based on the concept that sea level rise will lead to erosion of the upper shoreface, followed by re-establishment of the original equilibrium profile. This profile is re-established by shifting it landward and upward.

Figure 3-5 illustrates the concept of the Bruun Rule. The Bruun Rule equation is given by:

$$R = \frac{S}{(h_c + B)/L}$$

where:
- R = shoreline recession due to sea level rise;
- S = sea level rise (m)
- hc = closure depth
- B = berm height; and
- L = length of the active zone.

The Bruun model assumes that the beach profile is in equilibrium with the prevailing wave climate.

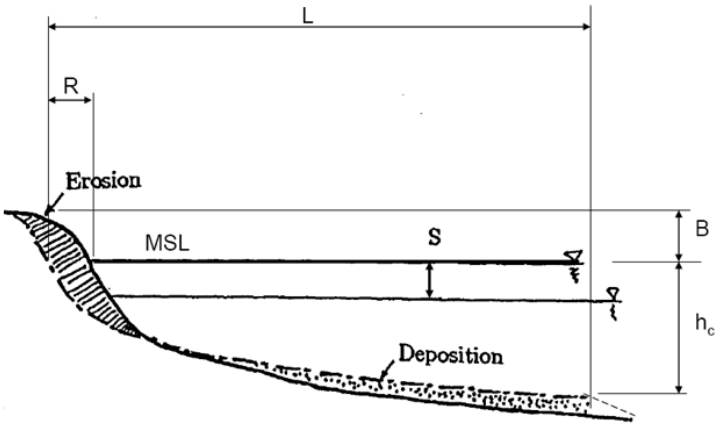

Figure 3-5 – Concept of shoreline recession due to sea level rise

Berm height (B) is taken to be the level of wave runup on the dune and closure depth is the depth at the seaward extent of measurable cross-shore sand transport. The length of the active zone is the distance offshore along the profile in which cross-shore sand transport occurs.

3.3.1 Estimation of Closure Depth

Bruun (1962) states that the depth of closure is *"the outer limit for the nearshore littoral drift and exchange zone of littoral material between the shore and the offshore bottom area"*. According to Bruun, the depth of closure is the water depth beyond which repetitive profile surveys (collected over several years) do not detect vertical sea bed changes, generally considered to be the seaward limit of littoral transport. According to Bruun & Schwartz (1985), the depth can be determined from repeated cross-shore profile surveys, changes in sediment characteristics or estimated using formulas based on wave statistics. It is noted that the depth of closure does not imply the lack of sediment motion beyond this depth.

Several methods have been used in this assessment to estimate the depth of closure for use in the Bruun Rule. These include:

- Analytical methods based on wave characteristics and sediment grain size characteristics
- Field methods based on survey data
- Field methods based on sedimentological data.

3.3.1.1 Analytical Methods

Bruun (1988) suggested a depth of closure of $3.5H_b$, where H_b is actual breaker height of the highest waves within a certain time period, namely 50 to 100 years according to Dubois (1992).

However, Bruun (1988) also noted that a closure depth of $2H_b$ was appropriate for a Danish case study. For a 100 year ARI significant wave height of 7.2 m, this is equivalent to closure depths of 14 m to 25 m.

Hallermeier (1981, 1983) defined three profile zones, namely the littoral zone, shoal or buffer zone[2], and offshore zone. These zones were defined by two depths, namely:

- an "inner" (closer to shore) depth at the seaward limit of the littoral zone, termed d_i by Hallermeier (1981) and d_s by Hallermeier (1983), and d_{inner} herein; and,
- an "outer" or "lower" (further from shore) depth at the seaward limit of the shoal/buffer zone, termed d_i by Hallermeier (1981) and d_o by Hallermeier (1983), and d_{outer} herein.

From Hallermeier (1983):

$$d_{inner} = \frac{2.9H_e}{\sqrt{S-1}} - 110\left(\frac{H_e^2}{(S-1)gT_e^2}\right) \quad (1)$$

where H_e is the effective significant wave height exceeded for 12 hours per year (that is, the significant wave height with a probability of exceedance of 0.137%) and T_e is similarly defined for wave period. Based on measured Sydney wave data, H_e is about 5.6 m and T_e is about 17 s. From the results of SWAN wave transformation modelling, the wave refraction coefficient is around 0.5. From Equation 1 the inner closure depth is thus about 6.5 m.

From Hallermeier (1983):

$$d_{outer} = 0.018 H_m T_m \sqrt{\frac{g}{D(s-1)}} \quad (2)$$

where H_m and T_m are the median wave heights and periods respectively, D is the median sediment diameter and S is the specific gravity of sand (about 2.65). Based on measured Sydney offshore wave data, H_m is about 1.6 m, T_m is about 9.6 s and the wave refraction coefficient for Bendalong Boat Harbour is around 0.5. For a grain size of around 0.3 mm, from Equation 2 the depth to the outer shoal zone is around 19 m.

In the *Coastal Risk Management Guide*, DECCW (2010) recommended the use of the depth to the outer shoal zone (termed by OEH the lower limit of profile closure) when using the Bruun Rule in the absence of readily available information on active profile slopes at a location under consideration. However, according to Hallermeier (1981), "The middle zone is a buffer region where surface wave effects on a sand bed have an intermediate significance. This region is named the shoal zone primarily because the sand transport processes considered here result in deposition of sand from the flanking zones: extreme waves can carry some littoral-zone sand into the

[2] Shoal zone in Hallermeier (1981) and buffer zone in Hallermeier (1983).

landward section of the shoal zone and common waves can carry some offshore-zone sand into the seaward section". That is, the limit of cross-shore transport of littoral sand does not extend far past the inner limit of the shoal zone.

Rijkswaterstaat (1987), approximating the work of Hallermeier (1978, 1981, 1983), found the following simplified estimate for the effective depth of closure, d_c, namely:

$$d_c = 1.75 H_e \quad (3)$$

Therefore, the predicted closure depth from Equation 3 is about 5.5 m.

The beach profiles at Bendalong Boat Harbour have been examined against the basic Bruun Rule assumption of the *wave-equilibrium* profile. Where beach profiles are steeper than the *equilibrium profile* (the characteristic beach profile shape formed in response to the prevailing wave climate) then the profile slope to the limit of littoral drift transport has been adopted for the application of the Bruun Rule. Where the beach profile generally is flatter than the equilibrium profile then the profile slope to the point of profile diversion has been adopted for the application of the Bruun Rule.

The Bruun rule assumes that the beach profile is in an equilibrium state with the prevailing wave climate. A beach that is in equilibrium with the wave climate will develop a beach profile that has been described variously by Bruun (1954, 1962) and Dean (1991) as:

$$h = Ax^{2/3}$$

where h is the water depth at a distance x offshore.

The parameter, A, is dependent on the sediment fall velocity, w, thus (Dean, 1987):

$$A = 0.067w^{0.44}$$

And the fall velocity, w, can be related to the sediment grain size diameter, d, thus (Hallermeier, 1981):

$$w = 14d^{1.1}$$

Note that the relationship between sediment grain size diameter and fall velocity is not very well defined because this depends on factors including, *inter alia*, the shape of the sand grains and proportion of shell in the profile. For this reason, the value of the parameter A was varied slightly (taking account of the sediment grain size which was adopted to be around 0.3 mm) to achieve a fit to the nearshore beach profile which is most likely to be in equilibrium with the wave climate.

3.3.2 Sea Level Rise Projections

Since 2012, the NSW Sea Level Rise Policy no longer applies. The State Government, through its Stage 1 Coastal Reforms, which came into effect in January 2013, stipulated that "Councils should

consider information on historical and projected future sea level rise which is widely accepted by competent scientific opinion." In response, Council in partnership with Eurobodalla Council engaged expert consultants to develop a South Coast Regional Sea Level Rise Policy and Planning Framework. That document was not adopted by Council. However, part of it together with submissions from the Nongovernmental International Panel on Climate Change (NIPCC) and a local civil engineer were used by Councillors to adopt the following sea level rise projections on 10 February 2015.

- 100mm for 2030;
- 230mm for 2050 and
- 350mm for 2100.

These numbers correspond to the sea level rise projections associated with the IPCC's Representative Concentration Pathways RCP6.0 (mid-range greenhouse gas emissions scenario, from IPCC Assessment Report 5, 2013). The adopted 2030 and 2050 projections have a 15% chance (high probability line) of being exceeded while the 2100 projection of 360mm has a 85% chance of being exceeded (low probability line).

It should be noted that there is considerable uncertainty regarding these values, and future sea level rise could be smaller or larger than predicted.

3.3.3 Future Recession due to Sea Level Rise

Due to the presence of rock reef in the nearshore zone as defined by GIS layers of OEH mapping of NSW coastal nearshore reef extent (OEH 2017), the active beach slope covers only the area above minus 2.5 m AHD, due to the presence of a rock shelf in the nearshore below this level (Figure 3-6). This gives an active beach slope of 1V:17H for the assessment of beach recession due to sea level rise. Analysis of bathymetric soundings and beach dune survey confirms this beach slope, as shown in Figure 3-7 below.

Sea level rise is projected to cause recession of only the active portion of the profile of Bendalong Boat Harbour beach. For sea level rises of 0.10 m (2030), 0.23 m (2050) and 0.35 m (2100), shoreline recession of 1.7 m, 3.9 m and 6.0 m (respectively) are projected.

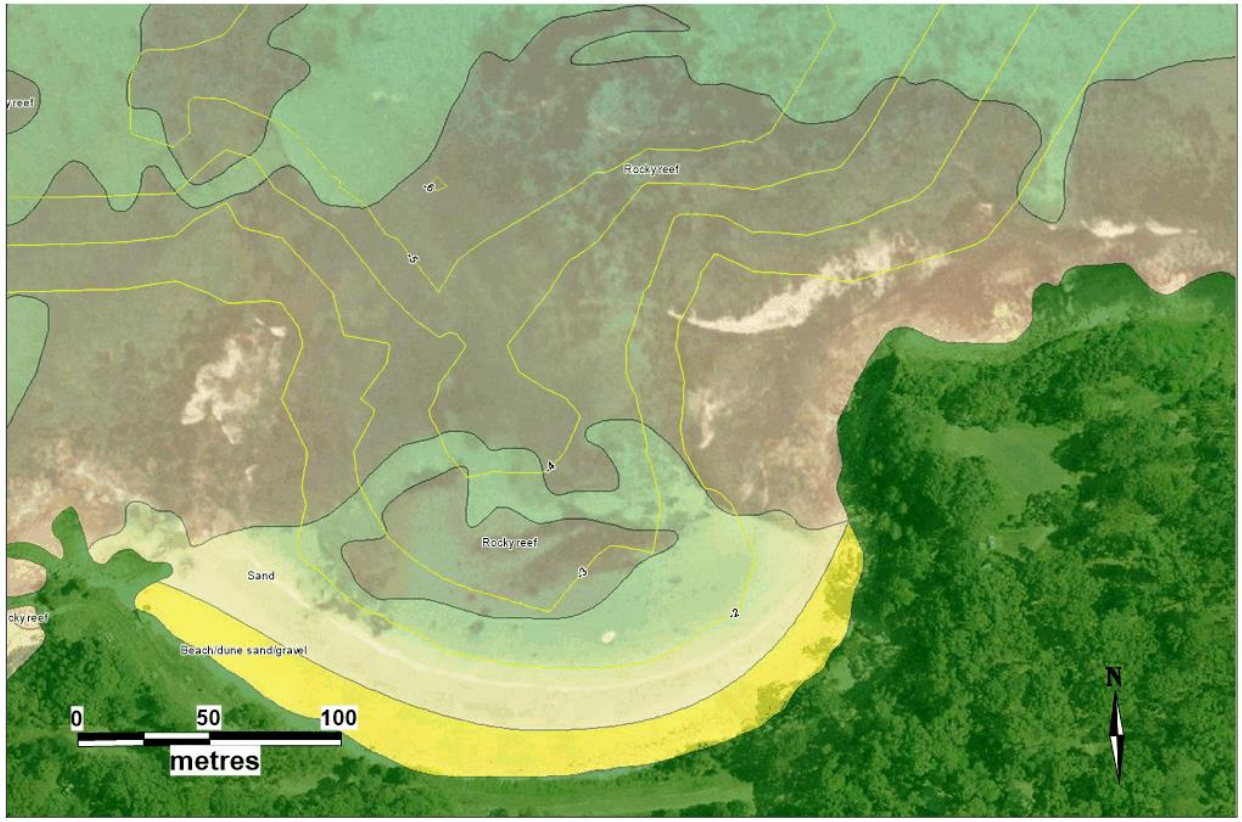

Figure 3-6 – OEH nearshore reef mapping (OEH 2017) overlaid with isobaths illustrating presence of rock reef below -3m AHD

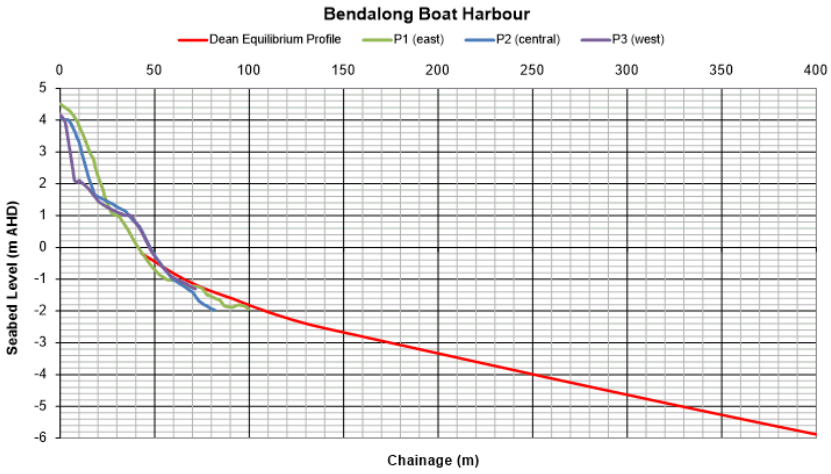

Figure 3-7 – Characteristic beach profile vs. wave equilibrium profile, Bendalong Boat Harbour (P1 = east of boat ramp, P2 = central section of beach, P3 = western end of beach)

3.3.4 Discussion on application of the Bruun Rule

The Bruun Rule is based on rational coastal engineering principles and has been applied in the 2009 hazard assessment (and subsequently in this re-assessment) in cognizance of the fundamental assumptions upon which it was based, to estimate projected long-term recession due to sea level rise. The methodology is in common use and has been applied in numerous other coastal hazard assessments throughout NSW in recent years.

It is noted that the Bruun Rule has been questioned in the scientific literature. However, the criticism often has been inappropriate, made contrary to Bruun's stated assumptions, no alternative tool for practical application in the engineering community has yet been presented and few widely-accepted alternatives to the Bruun Rule are available for assessing the impact of sea level rise on shoreline recession. Sea level rise recession has been assessed using techniques accepted by the scientific community, taking into account Bruun's assumptions, careful interpretation of the offshore active beach slopes, local wave climate at each beach and sedimentology of the seabed.

With additional bathymetric data, changes in sea level rise projections and known locations of rocky reefs, the best available data has been used to calculate the nearshore equilibrium slope for a correct and careful application of the Bruun Rule.

It is acknowledged that the Bruun rule has several limitations but these limitations have been considered in its application to Bendalong Boat Harbour beach. While the rule does not account

for longshore interactions, this limitation does not apply for Bendalong Boat Harbour, due to the beach compartment being a 'closed system' and not subject to significant longshore sediment transport. A further limitation is that the Bruun Rule assumes the wave climate is steady and hence the equilibrium profile remains the same - simply translated the beach profile will move landwards and upwards with the rise in mean sea level. The rule has been applied only to the portion of the beach profiles shown by bathymetric and sedimentological data to be in equilibrium with the wave climate and, therefore, a rise in sea level (under current coastal processes) will result in a corresponding recession relative to that rise and in maintaining the equilibrium.

It is noted that the Bruun Rule is one tool used to address prediction of coastal response due to sea level rise and that the current coastal hazard assessment also includes the incorporation of historical beach behaviour information, knowledge of local coastal processes and local geomorphology.

3.4 Inundation

3.4.1 Coastal Inundation

Coastal inundation is the flooding of coastal lands by ocean waters, which is caused by large waves and elevated water levels associated with severe storms. Severe inundation is an infrequent event and, normally, is of short duration, but it can result in significant damage to both public and private property (NSW Government 1990).

The components that give rise to elevated still water levels at times of storms include storm surge (including wind setup and barometric setup) and wave setup. This increased water level may persist for several hours to days and can inundate low lying beach areas and coastal creeks.

Wave runup relates to the rush of water up the beach on the breaking of a wave. The amount of run-up is the vertical height above still water level to which the rush of water reaches. Wave runup is site specific but, typically, reaches a maximum level of about 7 m AHD on the open NSW coast at present. The height of wave runup on beaches depends on many factors, including:

- wave height and period;
- the slope, shape and permeability of the beach;
- the roughness of the foreshore area (i.e. whether the foreshore area comprises a smooth sandy beach or a rocky foreshore with boulders); and
- wave regularity.

Wave runup can be difficult to predict accurately due to the many factors involved. Anecdotal evidence and the surveying of debris lines following a storm event usually provide the best information on wave runup levels.

Hanslow & Nielsen (1995) plotted the field experiments by Holman (1986) together with their own data (Figure 3-8), which showed that, for exposed sites, the near maximum wave runup limit, $R_{2\%}$, on natural beaches can be given by:

$$R_{2\%} = [25.273 \tan\beta^3 - 12.547 \tan\beta^2 + 2.2674 \tan\beta] \times (H_s L_o)^{0.5} + SWL \quad (1)$$

where:

$R_{2\%}$	is the 2% exceedance run-up height;
H_s	is the incident significant wave height in 6m depth;
ß	is the beach face slope near the still water line;
SWL	is the still water level (excluding wave setup).

Wave runup has been calculated using beach survey data provided by Shoalhaven Council and the results of the two-dimensional SWAN wave transformation modelling undertaken specifically for this assessment (which takes into account the effects of wave refraction and the degree of exposure of the site to waves from different offshore directions). Runup has been determined at Bendalong Boat Harbour beach using the wave height coefficient calculated from the offshore-to-nearshore SWAN wave transformation analysis as documented herein for each offshore wave direction, using the 100 year ARI significant wave height from that direction (refer Figure 3-9 for offshore significant wave heights at the Sydney Waverider buoy). The 6 hour duration wave height was chosen for this analysis, to ensure that it had a high chance of occurring on the high tide. The maximum level of runup was adopted.

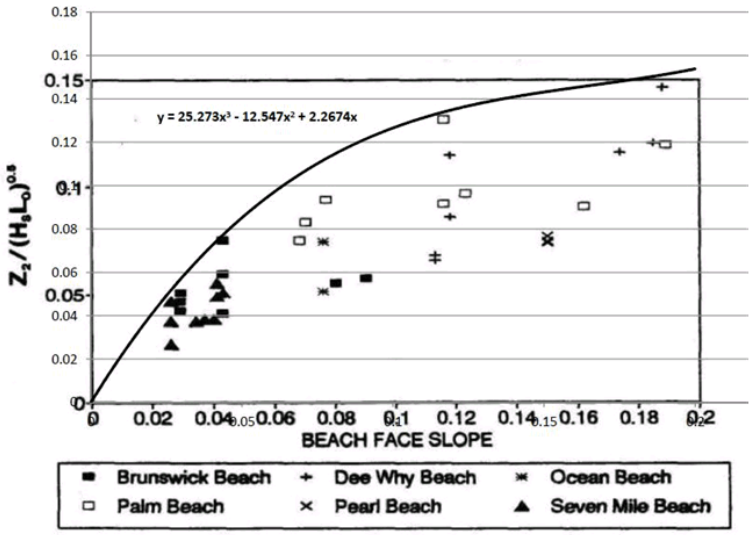

Figure 3-8 – Beach runup as a function of beach slope (modified after Hanslow & Nielsen, 1995)

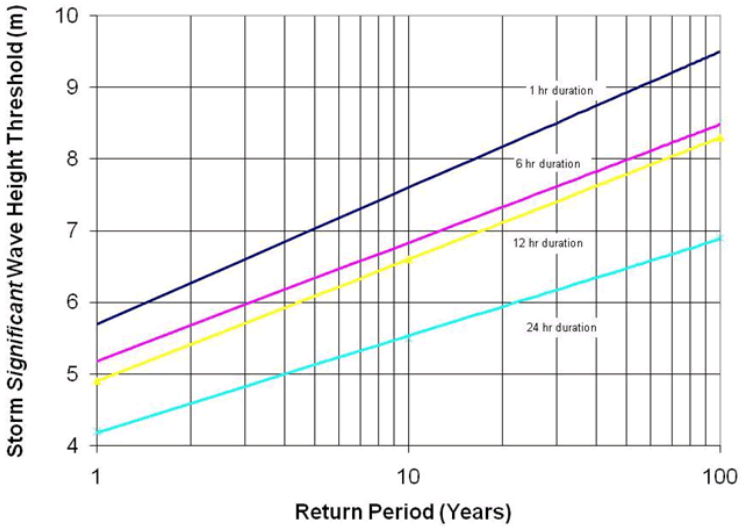

Figure 3-9 - Storm Wave Height Duration return periods for all directions (modified from Kulmar et al., 2005)

3.4.2 Wave Transformation Modelling

Wave transformation modelling has been undertaken to derive nearshore wave coefficients for assessing the incident wave energy at the Bendalong foreshore for dune erosion analysis and to determine the "unrefracted" offshore deep water significant wave height for wave runup and inundation calculations. This step was considered necessary for the site, because the area has not been covered previously by wave transformation studies undertaken for the Shoalhaven Coastal Zone Management Plan.

The wave model was developed using the SWAN (acronym for Simulating WAves Nearshore) wave transformation program to provide wave transformation coefficients for offshore to nearshore waves at Bendalong.

SWAN is a third generation phase averaged two-dimensional (horizontal – 2D(H)) wind wave model and is capable of simulating a range of physical processes such as:

- Wave generation by wind
- Shoaling
- Refraction due to current and depth

- Diffraction
- Three and four wave interactions
- Wave dissipation due to white capping, bottom friction, and depth induced breaking.

Wave diffraction around Red Point is expected to be an important process in the transformation of offshore waves to the site. While diffraction is not able to be modelled explicitly in phase averaged wave models such as SWAN, which has been applied to this study, recent advances include diffraction by utilising a phase-decoupled refraction-diffraction approximation. This approach has been shown to give realistic approximations to wave diffraction around large obstacles such as headlands as is considered here. The diffraction approximation has been applied to the SWAN modelling described in this section.

To transform the offshore waves to the site, three separate computational grids were used, these being a fairly coarse grid covering a large area with a grid spacing of 200 metres and two nested grids with resolutions of 100 m and 20 m respectively.

The extent of these grids overlaid on the model bathymetry is depicted in Figure 3-10. The finest resolution grid of 20 m is sufficiently fine to represent the scale of the wave transformation processes, given that the wavelength of the waves being simulated is greater than 100 m.

Bathymetric data used in the model was sourced from navigational charts of the area, bathymetric surveys and the Geoscience Australia Australian Bathymetry and Topography Grid (2009), depicted in Figure 3-11 and Figure 3-12.

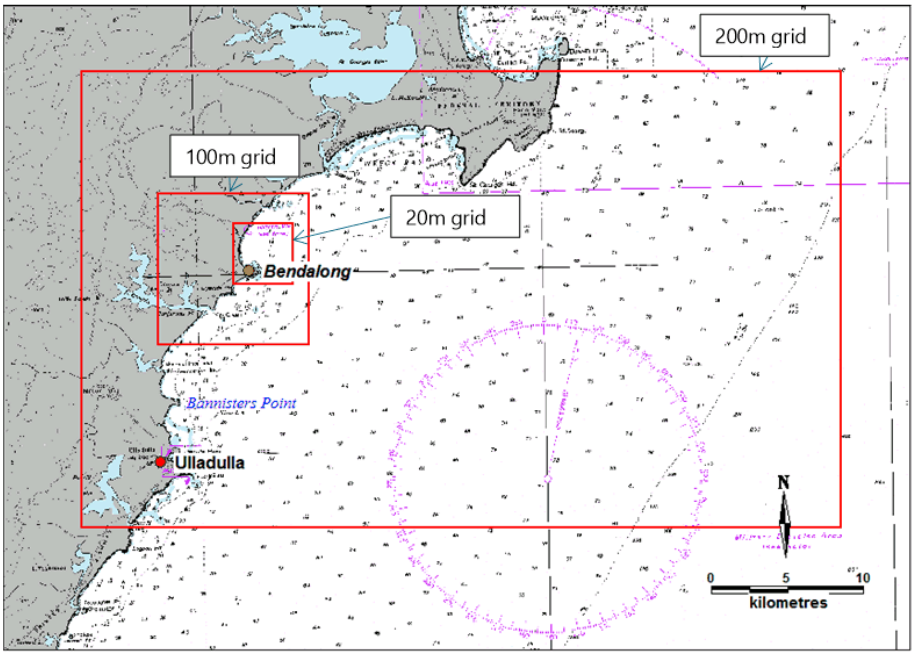

Figure 3-10 – Model bathymetry and extent of model grids

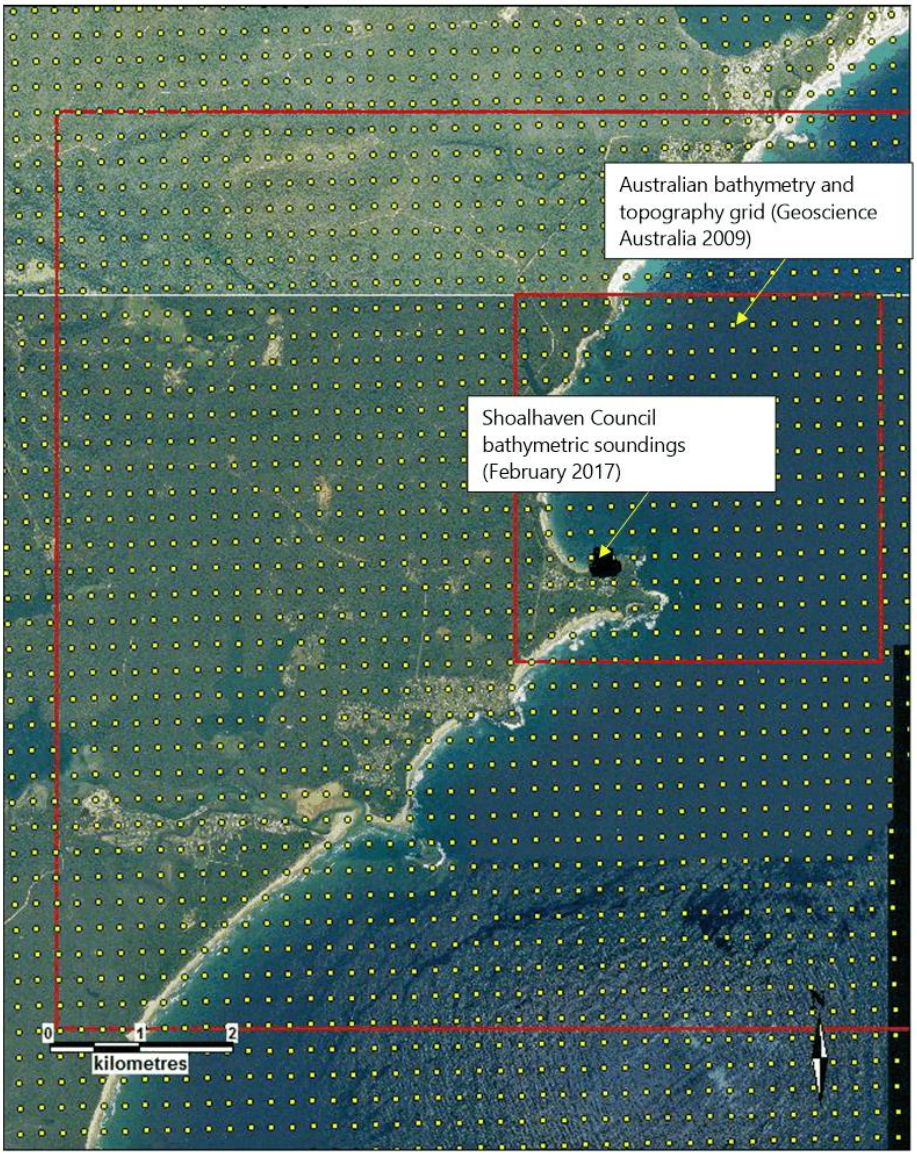

Figure 3-11 – Second level SWAN grid and data sources

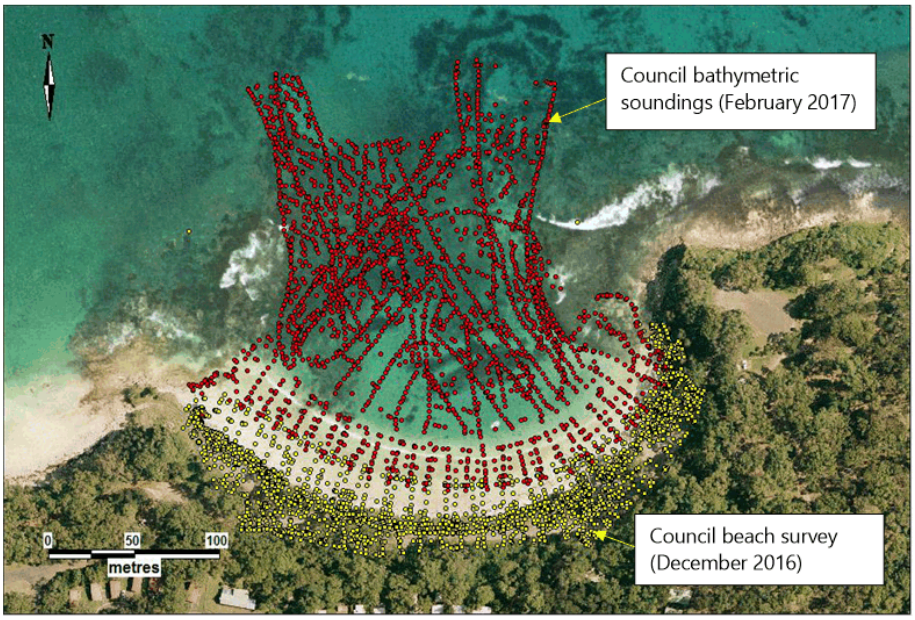

Figure 3-12 - Extent of Shoalhaven Council bathymetric soundings and beach survey

3.4.3 Boundary Conditions

To transform the offshore wave climate to the site, 280 unique combinations of wave height, direction and period were defined based upon the offshore design storm wave conditions and applied as boundary conditions to the model.

The different combinations of forcing applied to the model is described in Table 1 and the model has been run in a steady-state mode for each combination of offshore wave height, period and direction.

This has enabled a matrix of offshore to nearshore wave transformation coefficients to be derived for Bendalong, for the purpose of obtaining the "unrefracted" offshore deep water significant wave height for wave runup and inundation calculations.

3.4.4 Model Validation

No site-specific validation of the wave transformation model was possible due to a lack of suitable nearshore and offshore wave measurements. However, Nielsen and Adamantidis (2003) have validated successfully the SWAN numerical algorithms for the NSW coast *via* a comparison of numerical results with a comprehensive field data set obtained at Broken Bay, north of Sydney.

Table 1 - Applied offshore wave conditions

Sector	H_{m0} (m)	T_P (s)	Offshore Wave direction (°TN)
NE	0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4	4, 6, 8, 10, 12, 14, 16	30
ENE	0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4	4, 6, 8, 10, 12, 14, 16	60
E	0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4	4, 6, 8, 10, 12, 14, 16	90
ESE	0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4	4, 6, 8, 10, 12, 14, 16	120
SE	0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4	4, 6, 8, 10, 12, 14, 16	150

3.4.5 Model Results

The SWAN model was run for the scenarios referred to in Table 1. For a peak wave period of 12 seconds, it was found that the largest wave transformation coefficients within the study area occur when the offshore wave direction is from the east (Figure 3-13).

The modelled wave transformation coefficients for an easterly offshore wave direction are shown in Figure 3-14.

It can be seen that a significant proportion of wave energy reaches the eastern end of the beach, which appears to have experienced more erosion than the beach further to the west.

The results of the modelling have allowed the maximum equivalent 6 hour duration 100 year ARI significant deep water wave height to be determined and have allowed wave runup levels to be calculated along the entire foreshore.

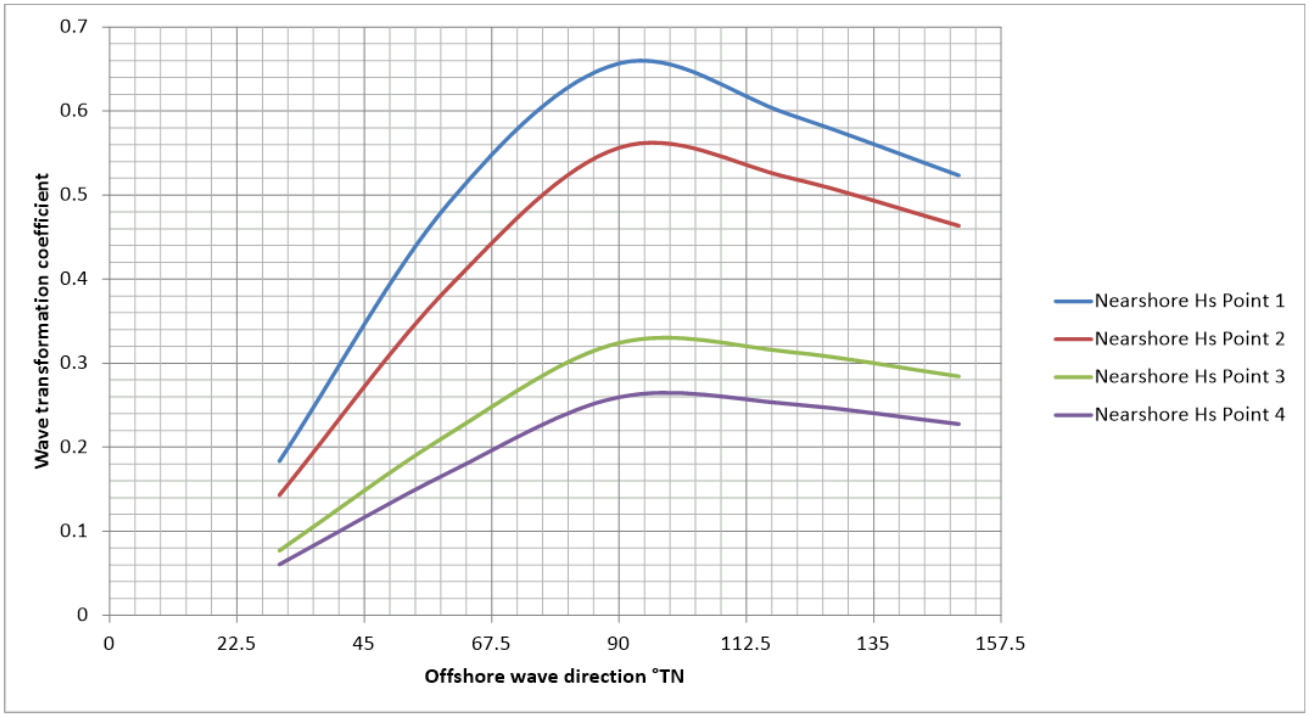

Figure 3-13 – SWAN model results at Bendalong – offshore to nearshore wave transformation coefficient vs. offshore wave direction (refer Figure 3-14 for measurement locations)

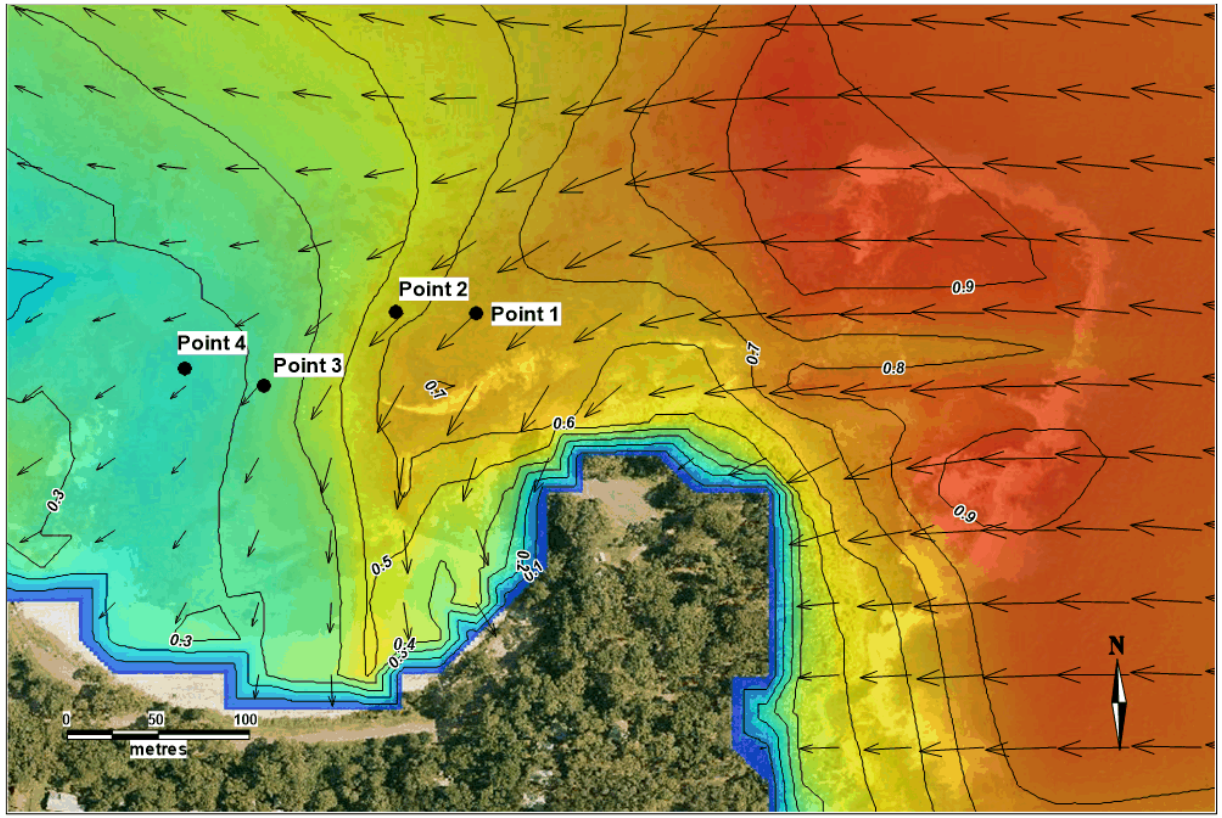

Figure 3-14 – SWAN model results – wave transformation coefficients and wave direction vectors, offshore wave direction = East, Tp = 12s

4 Coastal Hazard Assessment Results

The results of the coastal hazard assessment for Bendalong Boat Harbour beach are documented below, including short term erosion, long term recession, recession due to sea level rise and coastal inundation. The coastal hazard results have been mapped using the most recent available ground survey data as a base for the mapping.

4.1 June 2016 storm event

The June 2016 East Coast Low was particularly damaging for Bendalong Boat Harbour and other north-east facing beaches in the Shoalhaven, (such as Currarong), due to the storm approach direction.

The east-northeast approach direction of the June 2016 East Coast Low made that event particularly significant for Bendalong Boat Harbour – due to the approach direction, that storm event is likely to have resulted in higher erosion than for other notable storm events that caused significant erosion at other beaches in the Shoalhaven (such as the May-June 1974 storm events, which had a more southerly approach direction).

At the Botany Bay offshore Waverider buoy which provides wave data representative of the region, offshore significant wave heights reached a maximum of 7.2 m, from the east during the June 2016 event. The 6-hour duration offshore significant wave height was 6.15 m, with an offshore direction of 87°TN. From Table 2, the 100 year ARI significant wave height for waves from the East is 7.0 m – this means that the June 2016 East Coast Low is in excess of a 1 in 100 year ARI event for storms from the easterly direction. The storm coincided with the maximum spring tide of the year, making this storm particularly damaging for beaches worst affected by swells from the east, such as Bendalong.

The combined probability of the storm approach direction, wave height and period makes the June 2016 East Coast Low a suitable design storm event for estimation of storm erosion demand at Bendalong Boat Harbour with an annual exceedance probability of less than 1%.

Table 2: 100 Year ARI 1 hour Significant Wave Heights and Periods for Sydney

Direction	NE	ENE	E	ESE	SE	SSE	S	WSW
H_s (m)	4.4	6.0	7.0	7.3	8.5	9.3	8.8	5.5
T_p (s)	9.2	10.7	11.6	11.8	12.7	13.3	13.0	10.2

Wave conditions close to the shore are depth limited, with a sharp drop in wave heights close to the shore. In effect, this means that the 1 year ARI wave heights are almost as high as the 100 year ARI wave heights at the back beach area. This is because the largest waves in the wave train break

offshore in deeper water, so the height of the waves that are able to reach the shore and break onto the beach embankment is limited by the bathymetry and the nearshore water depth.

4.2 Short Term Erosion

Short term erosion at Bendalong Boat Harbour Beach was assessed with reference to available wave transformation information and ground survey information from December 2016. No other ground survey or photogrammetry data has been made available to enable an assessment of the impact of historical storm events, such as the May-June 1974 storm event. However, a well-documented storm event, the East Coast Low of June 2016, has since occurred with ground survey available post-storm.

Advisian (2016) assessed storm erosion demand for other beaches within the Shoalhaven using a range of pre and post-storm survey and photogrammetry data that was available for those beaches, including at Currarong which is a north-east facing embayment with similar wave climate and nearshore characteristics as Bendalong Boat Harbour. Analysis of the survey data for June 2016 resulted in an estimated storm erosion demand of 40 m^3/m for the June 2016 storm for Currarong.

SMEC (2011) undertook wave transformation modelling for Currarong Beach using SWAN and REF/DIF 1, which takes account of wave diffraction as well as refraction processes. It was found that the western end of Currarong Beach was more exposed than the eastern end, with that end of the beach experiencing wave transformation coefficients of up to 0.53 for swell waves, depending on offshore swell wave direction (ENE offshore waves produced the highest wave transformation coefficients in the nearshore at Currarong). This result is similar to, albeit slightly lower than, the wave transformation coefficient for swell waves for Bendalong Boat Harbour, which receives similar wave energy as Currarong under similar offshore wave heights and directions.

In comparing the wave transformation modelling results obtained for Bendalong Boat Harbour with those for Currarong (SMEC 2011), a storm erosion demand of 40 m^3/m is assessed for Bendalong Boat Harbour for the June 2016 storm event, which is the same as that measured at Currarong for the same event. Note that should pre-storm LiDAR data become available for analysis, the storm erosion demand value could be refined or validated by direct comparison between the pre-storm and post-storm beach volumes. Note also that the assessed storm erosion demand is deemed to be a conservative estimate, due to the presence of rock boulders in the nearshore area at Bendalong.

4.3 Long Term Recession

An assessment of the long term beach recession rate has not been able to be carried out for Bendalong Boat Harbour, due to the lack of historical survey or photogrammetry data. However, examination of historical aerial photography and ground photos has shown that the beach planform has been similar to that observed in recent times (i.e. just prior to the June 2016 East Coast Low), and ground photos taken in the 1960's (Figure 3-3) illustrate that, despite the former presence of beach shacks along the back beach escarpment, the eastern end of the beach appears similar to today, with beach cobbles visible on the eastern side of the boat ramp.

Based on this and other anecdotal evidence as discussed in Section 3.2, long term recession has been assumed to be zero for Bendalong Boat Harbour. However, it is possible that there has been a low underlying rate of long term recession. Long term future measurements of the beach profiles would be required to ascertain the long term trends in beach movement and whether there is an underlying trend of recession or accretion.

The assumed long term recession rate of zero does not include that which would be expected due to sea level rise that may have already occurred or would be expected to occur in the future.

4.4 Inundation - Wave Runup Calculation

SWAN wave transformation coefficients in 6 m water depth immediately offshore from Bendalong Boat Harbour Beach are approximately 0.30 to 0.65 (Figure 3-13). The maximum equivalent 6 hour duration 100 year ARI significant deepwater wave height at the eastern end of the beach occurs when wave direction is from the east and is 4.0 m. This wave height was used in Equation 1 to estimate the 2% wave runup level for the site.

At Bendalong Boat Harbour beach, based on the most recent ground survey data at the site, wave runup was calculated to reach elevations of around 3.6 m – 3.8 m AHD (Figure 4-1) under present day conditions. This indicates that the waves are likely to overtop the bank and run onto the road at the low points along the foreshore.

Wave runup levels with future sea level rise would increase by approximately the quantum of the sea level rise – for 2050, wave runup levels would be approximately 4.0 m AHD and approximately 4.15 m AHD by 2100. The estimated extent of the inundation, based on the most recent available survey information can be seen in Figure 4-2. It can be seen that the road is expected to be overtopped by wave runup at the low points, which correspond to the locations where stormwater outlets are located on the beach.

4.5 Summary

The results of the coastal hazard assessment for Bendalong Boat Harbour, are provided in Table 3, below. Mapping of the coastal hazard extent has been carried out using WaterRIDE™ Coastal and is presented in Appendix A. Apart from the road and immediate beachside infrastructure, no buildings have been assessed to be at risk from erosion or inundation from the design storm event to 2100.

Table 3 – Summary of hazard assessment for Bendalong Boat Harbour, 1% AEP storm event

Coastal Hazard Parameter	Assessment
Short term storm erosion demand	40 m^3/m
Long term beach recession	Zero
Sea level rise recession 2030	1.7 m
Sea level rise recession 2050	3.9 m
Sea level rise recession 2100	6.0 m
2% wave runup level (present day)	3.8 m AHD
2% wave runup level (2100)	4.15 m AHD

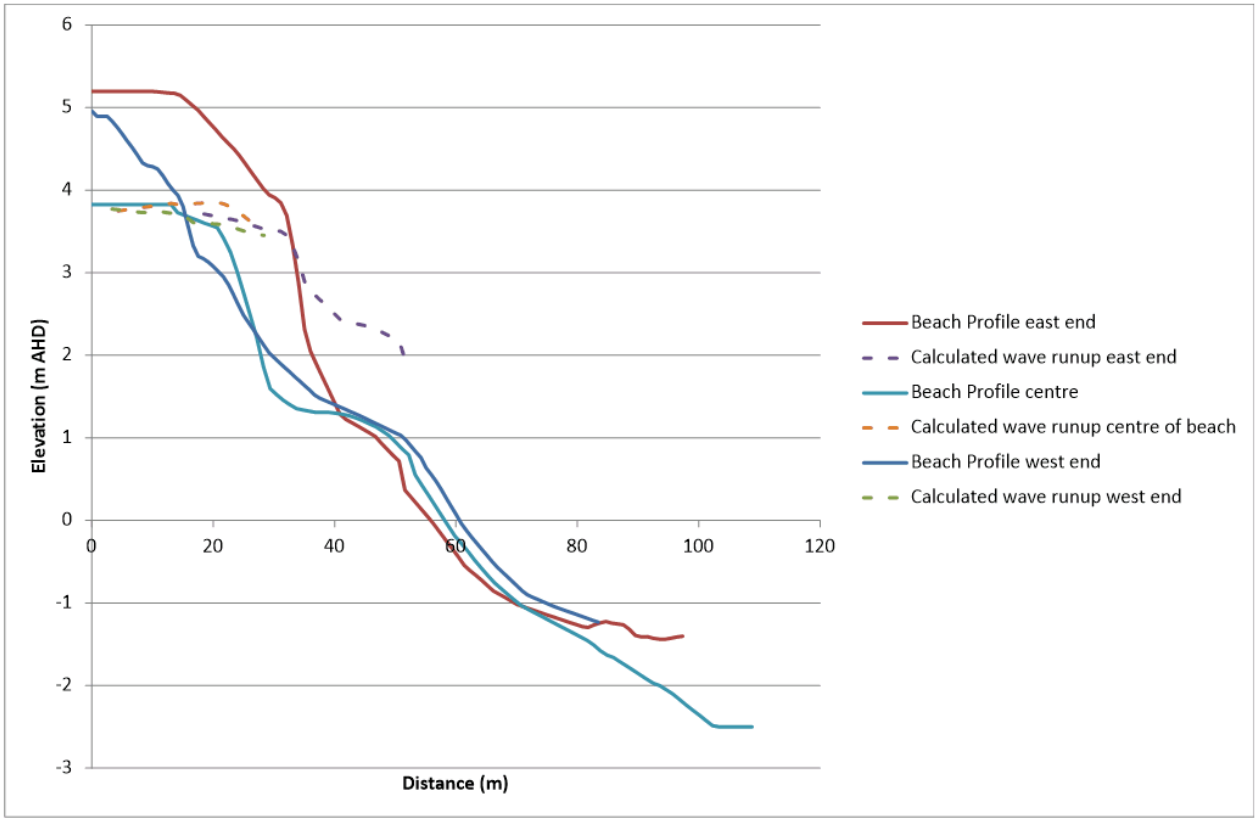

Figure 4-1 – Calculated wave runup levels at east, centre and western ends of Bendalong Boat Harbour Beach and corresponding beach profiles

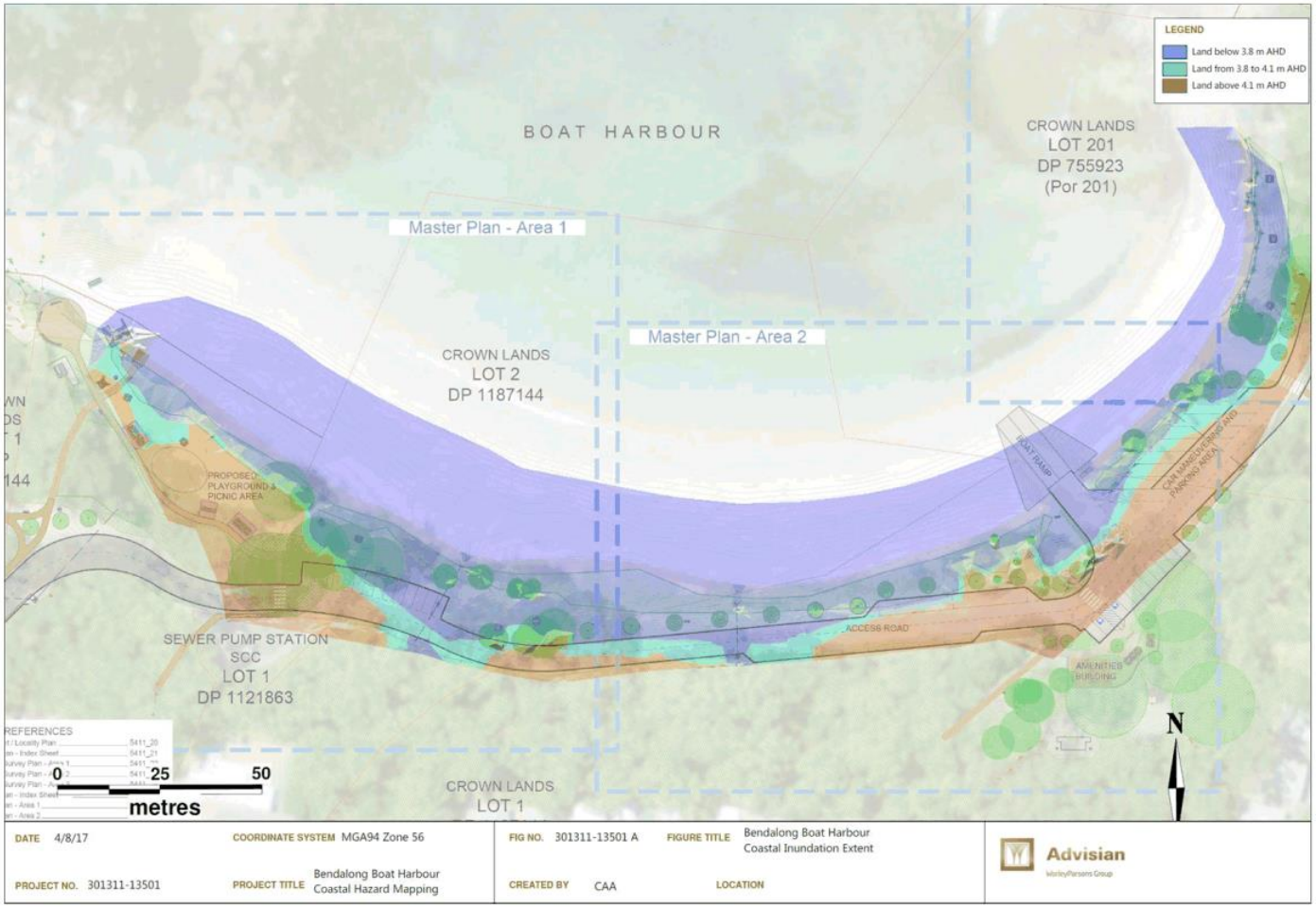

Figure 4-2 – Estimated wave inundation extent – present day and 2100, superimposed onto Draft Bendalong Masterplan (dark blue = present day inundation extent, light blue = 2100 inundation extent)

5 Discussion on Management Measures

An on-site meeting was held between Shoalhaven Council, Council's stormwater consultant (MIE Engineers) and Advisian on 3 August 2017 to discuss potential management measures for Bendalong Boat Harbour Beach. As there was major observed erosion of the beach caused by overland flow from heavy rainfall events, management of local stormwater flows is a major focus of any management strategy for Bendalong Boat Harbour.

Indicative management measures for dealing with erosion at Bendalong Boat Harbour are discussed below.

5.1 Stormwater Management

MIE Engineers have developed a detailed strategy for management of stormwater flows from the local catchment areas, which is documented in a separate report. However, the main elements of the strategy include the following:

- Re-construction of the road surface with a 3% cross-fall away from the foreshore, and a rock-lined dish drain along the landward road verge – this would deal with the flows from minor storm events. In a major storm event, the road itself would act as on-site detention, reducing the overflow onto the beach.
- Cascading rock catch-weirs on the embankment on the landward side of the road opposite the existing stormwater outlets to reduce the flow velocities reaching the catch-drain.
- Diversion of the flows from a major sub-catchment on the western side of the beach towards Washerwoman Beach and inclusion of speed humps along the access road to reduce the volume of overland flow reaching the beach from the road on the western side.
- Inclusion of scour protection and flow dissipation at the stormwater outlets to reduce the magnitude of scour on the beach at the outlets.

These measures would reduce the erosion of the beach caused by overland flow.

Other potential measures were discussed on site, including the following:

- Shortening of stormwater outlets – this would require significant volumes of excavation of a formalised stormwater detention area landward of the existing beach (e.g. within the existing playground area which is proposed to be relocated under the Bendalong Boat Harbour Management Plan), with the outlet(s) discharging to this detention area.
- Inclusion of additional boulders (which are currently used as bollards) to provide dissipation of overland flows and assist in creating an on-site detention area within the proposed carpark and road – it was considered, however, that additional boulders may increase erosion potential due to increased flow velocities between adjacent boulders.

5.2 Coastal Erosion Management

For management of the coastal erosion at Bendalong Boat Harbour, beach scraping is approved as a management measure. An Aboriginal cultural heritage due diligence assessment (Feary 2016) was carried out to assess the impact of proposed erosion control works at Bendalong Boat Harbour.

Works were carried out in late 2016 which included *beach scraping* – or pushing sand up against the eroding embankment. The Aboriginal Cultural Heritage Due Diligence Assessment (Feary 2016) found that two middens are located within the sand dunes west of the boat ramp and concluded that:

- Beach scraping and remediation east of the boat ramp will not cause harm to Aboriginal objects.
- Remediation works [pushing sand against the sand dune] west of the boat ramp may cause harm to Aboriginal site 58-2-0231 if they occur within the area identified as being within the Aboriginal midden. However, harm may not occur if works are confined to the lower sections of the dune, as the midden occurs at the top of the dune.
- OEH should consider, as an urgent matter, the protection of site 58-3-0231 through active stabilisation of the dune face and top and fencing the top of the dune to keep people and cars off the midden. This could be done in conjunction with the remediation works.

The beach scraping theory and methodology are described below, together with specific recommendations for Bendalong Boat Harbour.

5.2.1 Beach Scraping

Beach scraping is a technique used for accelerating beach recovery following erosion by changing the slope of a beach, periodically, to allow the energy of the sea to bring additional sand onshore. This is achieved by removing a small amount of sand from the beach berm at low tide and adding the sand to the dune system. This process serves to assist nature in beach enhancement by systematically speeding up the natural dune recovery process (Nature Assisted Beach Enhancement or NABE).

Beach scraping comprises a soft engineering technique of responsible beach sand management. The technique has been used successfully at many places. For example, Byron Shire Council has been using the beach scraping technique at New Brighton for many years. Figure 5-1 shows such beach scraping activity.

It is recognised that the restoration works proposed would not, *per se*, form a permanent solution to an erosion problem and scraping may need to be done again at some future time. However, such soft engineering techniques are encouraged as they do not interfere with the natural processes and they have minimal adverse impacts on the environment. It should be noted also that

beach scraping is best suited to beaches subject to a long, low swell wave climate such as Bendalong Boat Harbour.

Beach scraping has higher uncertainty as a protection measure than other coastal management options, so should only be undertaken in conjunction with a comprehensive monitoring program (Carley et al., 2010).

The impact of removing sand from around the low tide mark is to lower the upper part of the sub-aqueous beach profile and, thereby, to flatten that portion of the beach slope. A flatter slope would tend to induce onshore transport of sand under wave action from the nearshore zone, thereby replacing the sand that was won to reinforce the dune by scraping. As the low tide zone is replenished by the natural onshore movement of sand, more sand can be won from this zone and transferred to the dune. In this way, therefore, the dune can be reinforced at an accelerated rate to provide a sand buffer to future storm erosion.

Figure 5-1 – Example of Beach Scraping at Callala Bay, NSW.

The process is schematised in Figure 5-2. With the scraping of sand from the lower beach face at low tide to be deposited on the dune, when the tide rises the waves find a hole that was not there before, and the effective nearshore beach slope is reduced. This will accelerate the onshore rate of sand movement to a level higher than that it would have been had the hole not been created. The hole fills in faster than the otherwise natural rate and it does this over the higher stages of the tide. When it is low tide again the operation is repeated, winning more sand and accelerating the onshore sand movement rate at the next high tide and so on.

It is important to note here that in building up the upper beach face or dune, while it is causing it to be steeper, this has no effect on the beach recovery rate because it is beyond the reach of the waves and, therefore, outside the active beach system under the lower wave climate.

A photograph of the completed works for Bendalong Boat Harbour is provided in Figure 5-3. It is considered, however, that the effectiveness of these works has been reduced due to the adverse impact of overland stormwater flows on beach erosion.

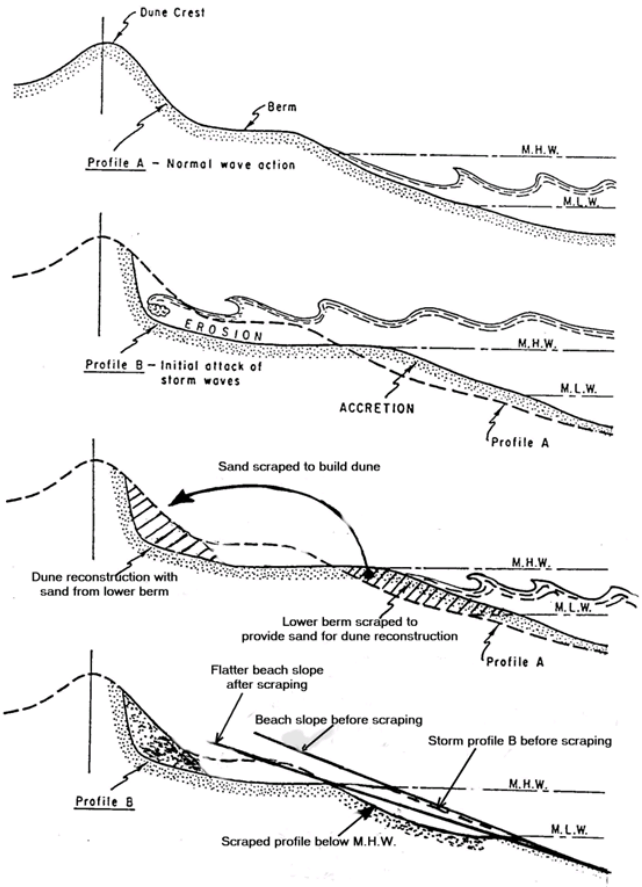

Figure 5-2 - Schematic diagram illustrating the application of beach scraping (source: A.F. Nielsen in Carley et al., 2010)

Figure 18: eastern end of beach showing results of sand replenishment

Figure 5-3 – Completed beach scraping works at Bendalong Boat Harbour, late 2016.

5.2.2 Specific Recommendations for Bendalong Boat Harbour

Remediation works for Bendalong Boat Harbour should be consistent with the recommendations in the Aboriginal Cultural Heritage Due Diligence Assessment (Feary 2016) such that they can be carried out without the need to obtain an Aboriginal Heritage Impact Permit (AHIP).

The existing works have not been very effective, generally because their effectiveness has been reduced by the impact of scour from overland flows. It is recommended, therefore, that the measures to improve stormwater management and reduce overland flow volumes are implemented prior to implementing beachside works to improve the coastal erosion.

Specific recommendations are generally in-line with previous advice provided by OEH and include:

- For the area east of the boat ramp, this area has been found to not contain an Aboriginal midden (Feary 2016) and contains a rock-boulder beach. It is recommended to temporarily pull back the existing boulders, re-grade the existing embankment to a 1V:4H slope, lay a geotextile fabric onto the slope (to prevent wash-out of fine material through the rock boulders), and push-back or scrape the existing rock boulders onto the slope to provide erosion protection for the area east of the ramp. Any available beach sand can then be pushed up onto the toe of the rock-boulder beach (refer Figure 5-4). A recommended sequence for this work is illustrated in Figure 5-5.

- For the area west of the boat ramp, provide erosion protection and energy dissipation to the stormwater outlets as per standard Council engineering designs.
- Scrape beach sand onto the lower portion of the dunes (below the layer where the midden occurs), to provide toe protection to the eroding dune and prevent further damage to the midden (Figure 5-6).
- Implement the recommendation of the Aboriginal Cultural Heritage Due Diligence report for the protection of site 58-3-0231 through active stabilisation of the dune face and top and fencing the top of the dune to keep people and cars off the midden. This should be done using standard dune stabilisation techniques as per the NSW Dune Management Manual (DLWC 2001) and providing formalised beach access in this area to avoid damage to the midden.

While the long-term effectiveness of the beach scraping and the use of existing natural beach boulders to protect against erosion cannot be guaranteed to be effective against a storm event similar to the June 2016 East Coast Low, it is considered a low-impact solution which does not involve construction of structures, does not require import of foreign material on the beach and is consistent with existing environmental approvals. Should further erosion occur in the future, the beach scraping exercise could be repeated as per the recommendations above, as the boulders would not be expected to be lost from the beach, and their exposure following storm events can be considered to be a natural process for this beach.

Should erosion recur in the future at a frequency considered to be unacceptable in terms of maintenance costs and community impact, construction of a small vertical seawall at the rear of the beach for the section of beach east of the boat ramp, using rectangular sandstone blocks sized for depth-limited breaking waves and arranged in a rough brickwork-type fashion could be considered. Such a wall would require environmental assessment, would need to allow for drainage through the wall and would need to be founded onto the underlying bedrock. However, as the natural character of the eastern section of the beach can be maintained using beach scraping with the natural rock boulders (which will provide some degree of erosion protection), construction of a specifically designed erosion protection structure is not considered necessary at this time.

Figure 5-4 - East of Boat ramp, Top – existing; bottom – proposed (photo digitally altered). Proposed steps for remediation numbered on figure.

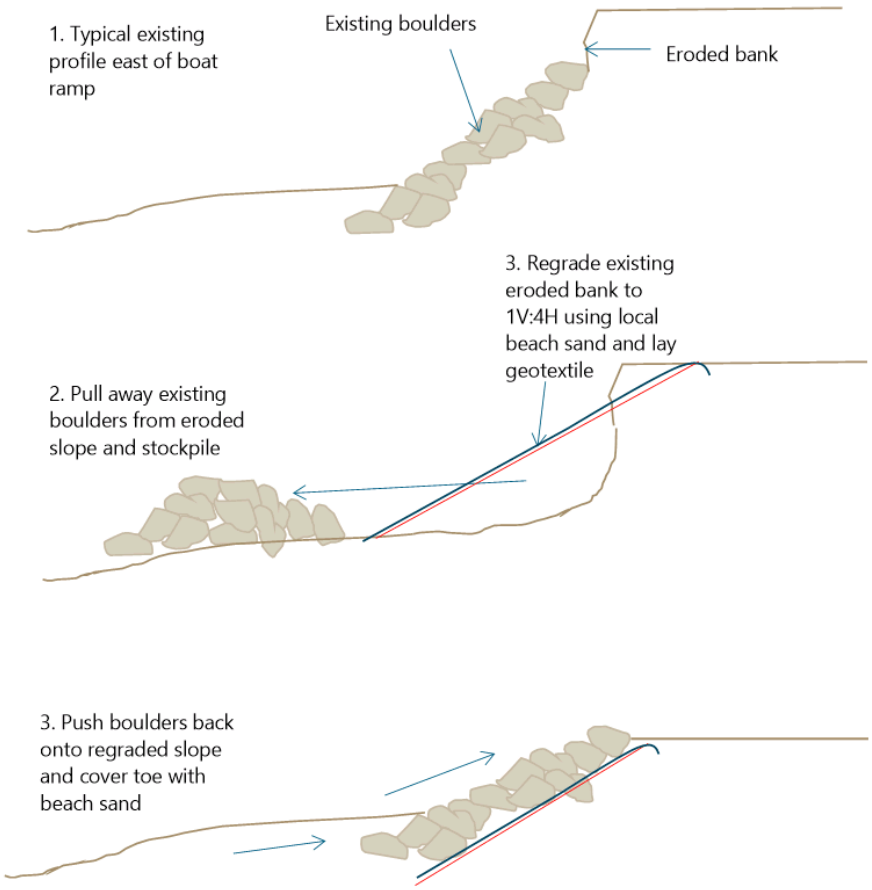

Figure 5-5 – Recommended remediation sketch for area east of boat ramp (NOT TO SCALE)

Figure 5-6 – Recommended management scheme for area west of boat ramp (bottom photo digitally altered)

6 Conclusion

This report has presented a coastal hazard assessment for Bendalong Boat Harbour Beach. The assessment has been based on wave modelling of the impacts of the June 2016 East Coast Low, for which the combined Annual Exceedance Probability for wave direction and wave height for this specific beach has been demonstrated to be equivalent to a 1% AEP storm event.

It was found that apart from the road and immediate beachside infrastructure, no buildings have been assessed to be at risk from erosion or inundation from the design coastal storm event to 2100. Assessment of LiDAR data would provide a means to validate the estimated storm erosion demand.

Indicative management measures to deal with the observed erosion have been presented. An important issue for management of erosion risk at Bendalong Boat Harbour is the management of stormwater flows. An overview of a proposed stormwater management regime has been provided.

Practical, low cost measures to deal with the coastal erosion have been suggested, which are consistent with existing environmental approvals and the natural values/character of Bendalong Boat Harbour. These include using the natural rock boulders at the eastern end of the beach to provide protection against erosion for the area east of the boat ramp, dune vegetation and access management at the western end of the beach, and beach scraping to provide toe protection for areas of the Aboriginal midden along the western end of the beach to prevent this area from being undermined and damaged by ad-hoc beach access and stormwater runoff. Future works to provide greater erosion protection may be considered in the future but are not considered to be warranted at this time.

Future data collection including post-storm LiDAR data collection to assess the impact of future storms is recommended, to further refine the coastal hazard assessments in the future and assess the impact of measures taken to reduce the coastal hazards.

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Appendix A Coastal Hazard Maps

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03/10/18

Alasdair Stratton
Natural Resources and Floodplain Unit Manager
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PO Box 42
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Dear Alasdair

BENDALONG COASTAL HAZARD/EROSION ADVICE

Further to our Proposal of 20 April 2018, please find documented further coastal hazard and erosion advice relating to Bendalong, in particular, relating to the erosion control at the eastern end of the beach, and coastal hazard/erosion implications of building a rock revetment as per a concept design discussed with community representatives on 13 April.

Background

The coastal hazard mapping report (Advisian 2017) recommended specific management actions for coastal erosion at Bendalong Boat Harbour, including:

- For the area east of the boat ramp, temporarily pull back the existing boulders, re-grade the existing embankment to a 1V:4H slope, lay a geotextile fabric onto the slope, and push-back or scrape the existing rock boulders onto the slope to provide erosion protection for the area east of the ramp.
- For the area west of the boat ramp, provide erosion protection and energy dissipation to the stormwater outlets as per standard Council engineering designs.
- Scrape beach sand onto the lower portion of the dunes (below the layer where the midden occurs), to provide toe protection to the eroding dune and prevent further damage to the midden.
- Implement the recommendation of the Aboriginal Cultural Heritage Due Diligence report for the protection of site 58-3-0231 through active stabilisation of the dune face and fencing the top of the dune to keep people and cars off the midden. This should be done using standard dune stabilisation techniques as per the NSW Dune Management Manual (DLWC 2001) and providing formalised beach access in this area to avoid damage to the midden.

The recommended actions were designed to be a low-impact solution which does not involve construction of structures, does not require import of foreign material on the beach and is consistent with existing environmental approvals.

However, the community representatives have expressed concerns that the existing rock boulders on the beach are too small in size to use as erosion control structure that would be adequate. They have also expressed concern that the rock revetment erosion control structure was only identified in the report for the far eastern end of the beach and they believed that that this should be expanded to include both sides of each boat ramp and west up to the second storm water outlet (see Figure 1).

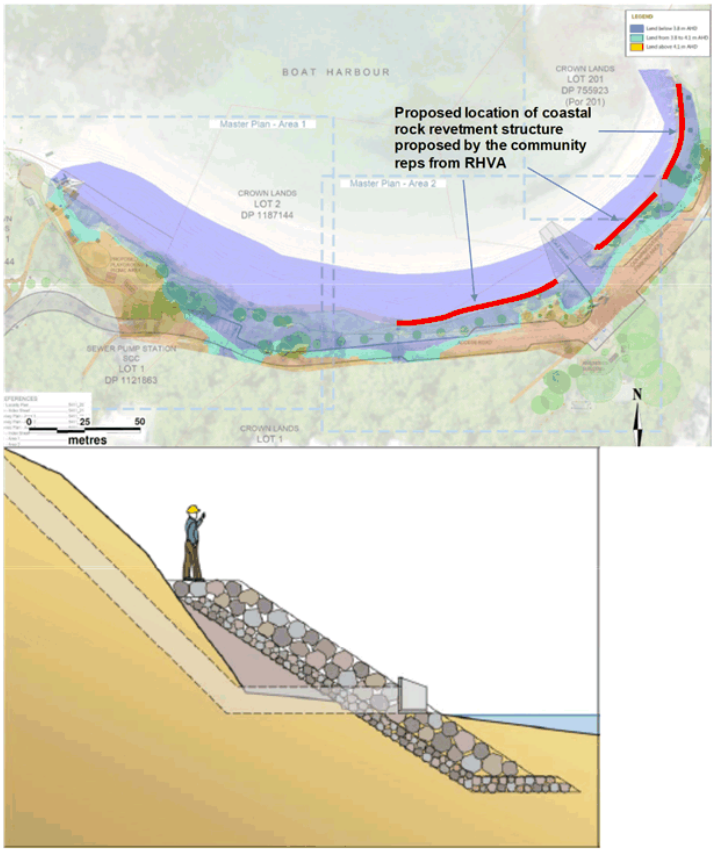


Figure 1 – Extent and conceptual cross-section of erosion protection proposed by RHVA

Shoalhaven Council has requested the following advice:

1. What level of coastal erosion protection will the existing rock cobbles sizes provide to the eastern end of the beach?

2. What the coastal hazard or erosion implications would be if a rock revetment (as per the attached concept design) was built along the back of the beach from the eastern end of the beach up to the second storm water outlet (as shown in Figure 1), specifically assessing the impact on the beach in relation to sediment/sand movement and "end effects"?

This report documents the above advice.

Assessment of the level of coastal erosion protection that would be provided by the existing rock – Site Visit

Advisian undertook a site visit to the beach at Bendalong Boat Harbour on 17 May 2018, and undertook detailed measurements and visual characterisation of the existing natural rock boulders on the beach on the eastern side of the boat ramp that were proposed to be used for erosion protection as per the concept outlined in the Bendalong Boat Harbour Coastal Hazard Mapping report (Advisian 2017).

The site visit was conducted at low tide, to enable a full characterisation of the existing rock and cobbles available at the eastern end of the beach. The following observations were made:

- The area to the east of the small boat ramp at the eastern end of the beach is backed by an erosion escarpment approximately 0.7 m high, and increasing to 1.1 m high at the eastern end. The soil here appears to be clay.
- The length of beach east of the boat ramp is approximately 30 m between the boat ramp and the rock platform at the eastern end (Figure 2). This area is fronted by natural boulders along the entire length of frontage, over a width of 4 m (i.e. area of boulders = 120 m^2). The thickness of the rock layer was not able to be ascertained on site.
- The boulders appeared to be igneous rock rather than sandstone. Approximately 50% of the boulders, especially the smaller boulders, had smooth edges due to weathering, with some of the larger boulders still having an angular, though slightly abraded appearance. The measured size of the boulders varied from a diameter of 100 mm for the smaller, smoother cobbles up to 450 mm across the narrowest dimension for the larger boulders on the beach. The median size of the boulders appeared to be approximately 250 mm from measurements carried out during the site inspection (Figure 3). The estimated size distribution of the boulders from visual observations is provided in Table 1.
- Boulders generally had a shape ratio whereby the width dimension was similar to the length dimension – *i.e.* the individual stones were generally not elongated in appearance.
- It was estimated that the height of the section of the beach covered with boulders was approximately 0.8 m and the slope of this section was 1V:5H. The width of the beach below this to the shoreline was approximately 18 m. The tidal level at the time of this measurement was 0.51 m above Chart Datum (equates to approximately 0.42 m below Mean Sea Level).
- Boulders were seen outcropping for quite some distance below the water line, indicating that the beach profile below the water level is relatively flat. Aerial

photography shows that the adjacent rock platform extends into the nearshore area immediately adjacent to this section of beach and nearshore bathymetric survey indicates that the level of this platform is approximately 0.5 m below Australian Height Datum (AHD, equates approximately to Mean Sea Level).

Table 1 – Estimated size distribution of boulders on site

Estimated dimension along shortest axis (mm)	% of boulders larger than
100	80
250	60
450	10

The area between the two boat ramps is backed by an eroded escarpment approximately 1 m high. The soil here appears to be largely clay also. Immediately to the east of the small boat ramp, a stormwater outlet discharges through the embankment. The stormwater outlet is surrounded by a concrete/rock matrix on the embankment, and a concrete apron has been installed in front of this outlet over approximately 5 m length of beach. Immediately adjacent to the main boat ramp, large boulders with a median diameter of approximately 800 mm have been placed to protect the edge of the boat ramp. These boulders are at the site of a number of plaques dedicated to local members of the fishing community and it is assumed will be of cultural significance.

West of the main boat ramp, a small incipient foredune appears to have formed since Advisian's previous site visit to the beach in May 2017. However, this foredune appears to be partially covered in weeds and appears to have suffered some damage due to scour caused by local overland drainage and trampling due to informal pedestrian access.

Figure 2 – Study area and overview of available rock – Top looking landward from beach; Bottom – looking west from top of-eroded bank

Figure 3 – Representative sample for estimated diameter of existing rock on site, annotated with estimated diameter

Offshore Directional Wave Climate

WorleyParsons (2014) estimated directional extreme waves for the 1, 50 and 100 year return periods for the Sydney region (which is representative of the study area), based primarily on the analysis of the directional Sydney Waverider Buoy data collected from 1992 to 2008. Extreme value analysis was conducted, with a set of 340 peak storm wave heights derived from the available data. Care was taken to ensure that each storm event selected was from an independent synoptic event. A number of candidate probability distribution functions were fitted to the peak storm data sample following the method recommended by Goda (2000).

Directional factors were calculated based on a review of the 1 year, 100 year, 0.1% and 0.01% exceedence directional distribution for each dataset. The directional extreme significant wave height values that have been quoted are based on comparison of results from all data sources, taking into account the inherent merit and limitations of each data source, as well as judgement based on knowledge of the general meteorology and oceanography of the area. The extreme peak periods were estimated using standard empirical relationships based on a typical range of significant wave steepness.

The Weibull 3 parameter distribution (maximum likelihood estimator, peak over threshold of 3m) was found to provide the best fit to the data, with the resulting 1 year, 50 year and 100 year ARI H_s and T_p values from each offshore wave direction listed in Table 2. The *significant* wave height likely to occur or be exceeded, on average, every 100 years was estimated to be 9.3 m. This value compares well with previously reported values for the 100 year return *significant* wave height for the Sydney region.

Table 2 – Offshore Directional Extreme Waves for study region (WorleyParsons 2014)

Return Period	Direction							
	NE	ENE	E	ESE	SE	SSE	S	SSW
1-year								
Significant Wave Height (H_s) (m)	3.0	4.2	4.8	5.0	5.8	6.4	6.1	3.8
Peak energy period (T_p) (s)	7.6	8.9	9.6	9.8	10.5	11.1	10.8	8.5
50-year								
Significant Wave Height (H_s) (m)	4.1	5.7	6.6	6.9	8.0	8.8	8.4	5.2
Peak energy period (T_p) (s)	8.9	10.5	11.2	11.4	12.4	13.0	12.6	10.0
100-year								
Significant Wave Height (H_s) (m)	4.4	6	7	7.3	8.5	9.3	8.8	5.5
Peak energy period (T_p) (s)	9.2	10.7	11.6	11.8	12.7	13.3	13.0	10.2
Relative wave energy	0.11	0.27	0.43	0.48	0.76	1.00	0.86	0.21

Louis *et al.* (2016) presented a directional extreme value analysis for waves from the Sydney Waverider buoy covering 24 years of data from 1992 to 2016, although they caution that the directional wave statistics for Sydney should not be used given very few major events being recorded for several directions which may be due to inter-decadal dependencies not yet experienced during the time of directional records. The results of their analysis is provided in Table 3 and Figure 4. It can be seen that the results from Table 2 compare quite well with those in Table 3.

Table 3 – Offshore directional extreme waves for Sydney (Louis *et al.* 2016)

	Direction				
	NE – E	**E – SE**	**SE – S**	**S – SW**	**All Directions**
1-year					
Significant Wave Height (H_s) (m)	3.0	4.0	5.5	4.3	5.9
10-year					
Significant Wave Height (H_s) (m)	3.7	6.0	7.5	6.0	7.7
100-year					
Significant Wave Height (H_s) (m)	6.0	7.5	9.0	7.5	9.0

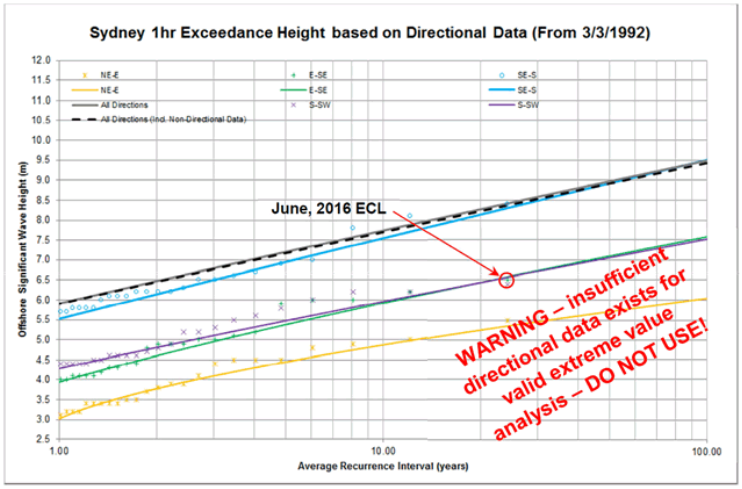


Figure 12: Directional extreme value analysis for Sydney buoy (1992-2016) – Caution: insufficient data exists for reliable results

Figure 4 – Louis *et al* (2016) – Directional extreme value analysis for Sydney.

Nearshore Wave Climate

Wave transformation modelling has been undertaken to derive nearshore wave coefficients for assessing the incident wave energy at the Bendalong foreshore for the dune erosion and wave inundation analysis undertaken by Advisian (2017). The wave model is described in Advisian (2017) and was developed using the SWAN (acronym for Simulating WAves Nearshore) wave transformation program to provide wave transformation coefficients for offshore to nearshore waves at Bendalong.

Wave diffraction around Red Point is an important process in the transformation of offshore waves to the site. While diffraction is not able to be modelled explicitly in phase averaged wave models such as SWAN, which has been applied to this study, recent advances include diffraction by utilising a phase-decoupled refraction-diffraction approximation. This approach has been shown to give realistic approximations to wave diffraction around large obstacles such as headlands as is considered here. The diffraction approximation has been applied to the SWAN modelling.

To transform the offshore wave climate to the site, 280 unique combinations of wave height, direction and period were defined based upon the offshore design storm wave conditions and applied as boundary conditions to the model.

The different combinations of forcing applied to the model is described in Table 4 and the model has been run in a steady-state mode for each combination of offshore wave height, period and direction.

This has enabled a matrix of offshore to nearshore wave transformation coefficients to be derived for Bendalong, for the purpose of obtaining the "unrefracted" offshore deep water significant wave height for wave runup and inundation calculations.

Table 4 - Applied offshore wave conditions

Sector	H_{m0} (m)	T_P (s)	Offshore Wave direction (°TN)
NE	0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4	4, 6, 8, 10, 12, 14, 16	30
ENE	0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4	4, 6, 8, 10, 12, 14, 16	60
E	0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4	4, 6, 8, 10, 12, 14, 16	90
ESE	0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4	4, 6, 8, 10, 12, 14, 16	120
SE	0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4	4, 6, 8, 10, 12, 14, 16	150

For a peak wave period of 12 seconds, it was found that the largest wave transformation coefficients within the study area occur when the offshore wave direction is from the east (Figure 5). The modelled wave transformation coefficients for an easterly offshore wave direction are shown in Figure 6.

It can be seen that a significant proportion of wave energy reaches the eastern end of the beach, which appears to have experienced more erosion than the beach further to the west.

Wave conditions close to the shore are depth limited, with a sharp drop in wave heights close to the shore. In effect, this means that the 1 year ARI wave heights are almost as high as the 100 year ARI wave heights at the back beach area. This is because the largest waves in the wave train break offshore in deeper water, so the height of the waves that are able to reach the shore and break onto the beach embankment is limited by the bathymetry and the nearshore water depth.

To determine the maximum breaking wave height at the foreshore escarpment, nearshore survey provided by Shoalhaven Council was used to determine the nearshore beach profile slopes and depths. In a large storm event, wave breaking would likely occur on the reef immediately to the east, which has an elevation of approximately -0.5 m AHD according to the Shoalhaven Council survey. The extent of the survey information and the approach path for easterly swell waves as derived from the SWAN modelling is shown in Figure 7.

Adopting the wave transformation coefficients derived from the SWAN modelling for the various wave directions for the eastern end of the beach (Point 2 in Figure 5, and Figure 6), and applying these to the directional offshore significant wave height from Table 3, the equivalent unrefracted deepwater significant wave height for Bendalong is provided in Table 5.

Table 5 – Unrefracted deepwater significant wave height at east end of Bendalong Boat Harbour Beach

Return Period	Direction			
	NE – E	E – SE	SE – S	S – SW
Offshore to nearshore wave transformation coefficient	0.38	0.54	0.46	0.4
1-year				
Offshore Significant Wave Height (H_s) (m)	3	4	5.5	4.3
Equivalent unrefracted deepwater H_s (m)	1.14	2.16	2.53	1.72
10-year				
Significant Wave Height (H_s) (m)	3.7	6	7.5	6
Equivalent unrefracted deepwater H_s (m)	1.406	3.24	3.45	2.4
100-year				
Significant Wave Height (H_s) (m)	6	7.5	9	7.5
Equivalent unrefracted deepwater H_s (m)	2.28	4.05	4.14	3

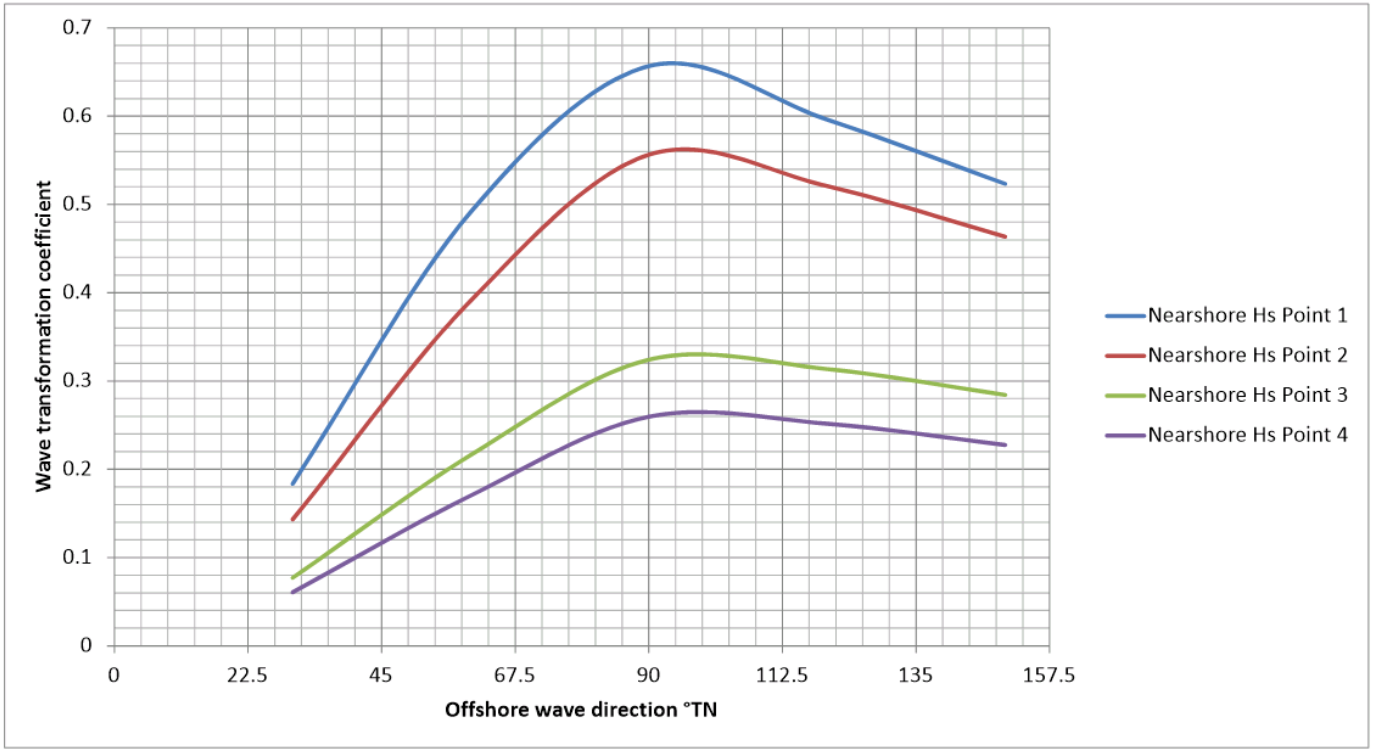


Figure 5 – SWAN model results at Bendalong – offshore to nearshore wave transformation coefficient vs. offshore wave direction (refer Figure 6 for measurement locations)

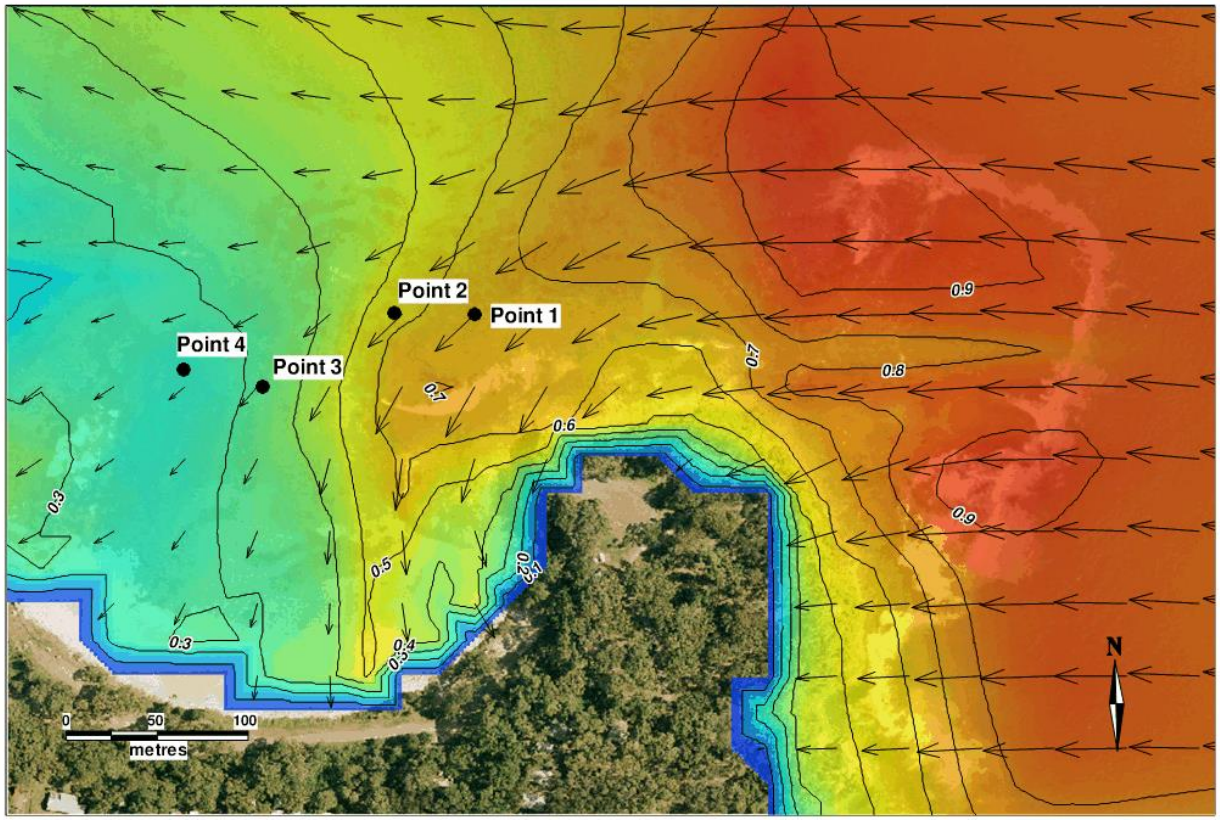


Figure 6 – SWAN model results – wave transformation coefficients and wave direction vectors, offshore wave direction = East, Tp = 12s

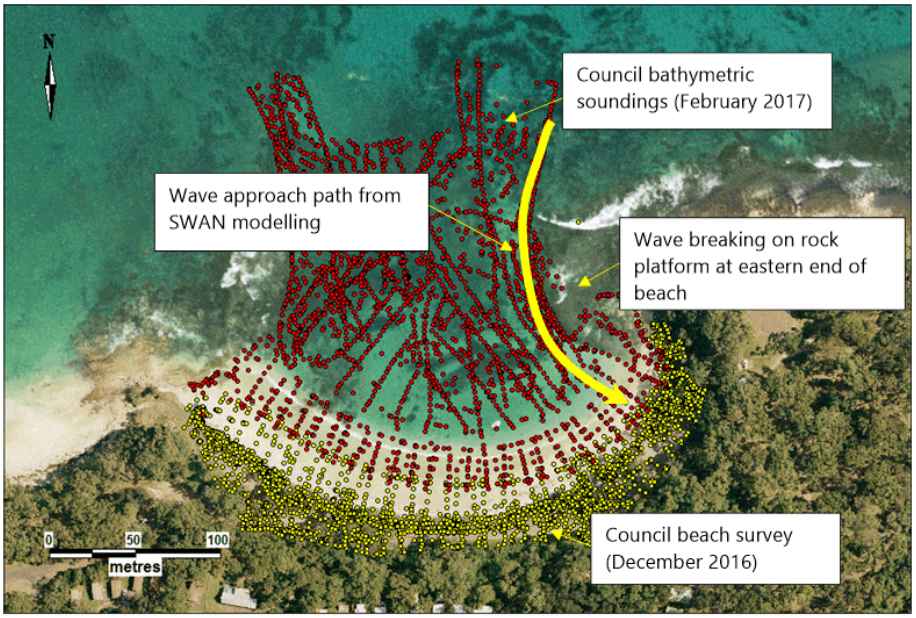


Figure 7 - Extent of Shoalhaven Council bathymetric soundings and beach survey

Derivation of Nearshore breaking wave height

In a large storm event, breaking waves at the reef to the east of the site would generate wave setup which would increase the water level in the nearshore, where waves would break and cause erosion. In addition, during a storm, the beach berm will be subject to scour.

As the wave conditions are depth limited, the design wave for the embankment would be the largest wave that breaks on the beach. This corresponds to the largest wave which is half a wavelength seaward of the erosion escarpment. The largest possible wave that can occur at the site is dependent on the water depth locally, approximately half a wave length in front of the embankment.

Watson and Lord (2008) undertook an extremal water level analysis for Fort Denison, which is representative of the study area (Figure 8). From that analysis, the offshore extreme water levels can be summarised as per below:

- 1 year ARI – 2.16 m ISLW (approximately 1.2 m AHD)
- 10 year ARI – 2.28 m ISLW (approximately 1.32 m AHD)
- 100 year ARI – 2.36 m ISLW (approximately 1.4 m AHD).

To understand the local wave setup and scour and hence water depth for wave breaking in front of the erosion escarpment at the eastern end of the beach, the SBEACH wave transformation model (Rosati *et al.*, 1993) was used. SBEACH simulates beach profile change, including the formation and movement of major morphologic features such as longshore

bars, troughs, and berms, under varying storm waves and water levels. The model is empirically based and was developed originally from a large data set of net cross-shore sand transport rates and beach profile change observed in large tanks. Along with beach profile changes SBEACH is able to simulate depth induced wave breaking, shoaling, wave generation due to wind and wave induced setup.

The model is founded on extensive large wave tank and field data measurements and analysis (Rosati *et al.*, 1993; CERC, 1984). The model accepts as data:

- surveyed beach profiles
- time-varying water levels
- regular or irregular wave heights and periods
- wave angles
- wind speeds and wind directions
- an arbitrary grain size in the fine-to-medium sand range.

There are no site wave and beach profile change data within the study area with which to validate the program. However, the SBEACH algorithms have been validated for the Australian eastern seaboard at numerous sites (Adamantidis *et al.* 2005, Carley, 1992; Carley *et al.*, 1998).

The beach profile for the SBEACH model was derived from the nearshore survey data provided by Shoalhaven Council, along the wave approach path derived from the SWAN model. This profile is shown in Figure 9.

The 1 year ARI wave conditions were run in the first instance to understand the conditions that would exist at the erosion escarpment. The local in-shore water levels and wave heights calculated by the model vary, due to the assumed beach profiles used in the model and the location of the structures on the beach profiles.

The SBEACH model uses linear wave theory to determine wave characteristics across-shore from deep water or a specified water depth offshore to the break point. Shoreward of the break point, a slightly generalized form of the wave decay model of Dally, Dean, and Dalrymple (1984, 1985) calculates the wave height distribution.

The calculated water levels and significant wave height along the beach profile adjacent to the erosion escarpment are provided in Figure 9 and summarised in Table 6 below for a location half a wavelength seaward of the erosion escarpment.

To estimate the breaking wave height, the parameters from Table 6 were used in conjunction with the ACES program (CERC 1984). From the analysis, the 1 year ARI breaking wave height, H_b, is 1.6 m (Table 7).

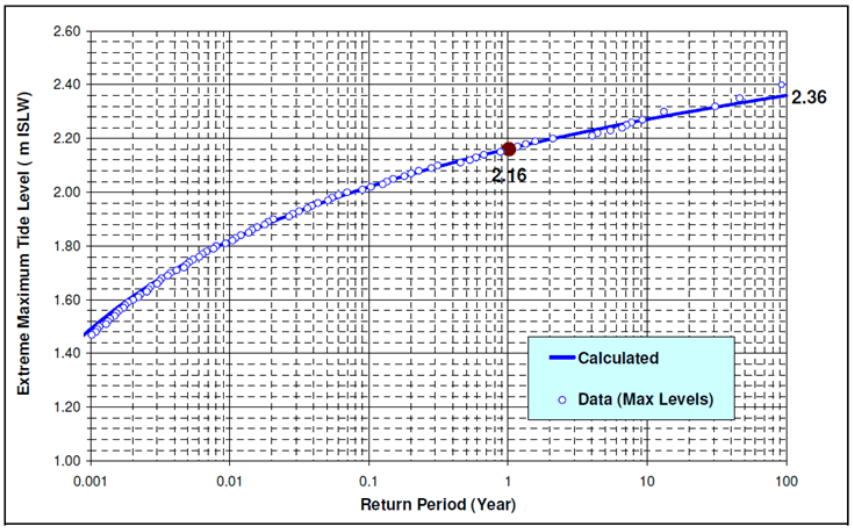


Figure 8 – Extreme water levels (on Chart Datum) at Fort Denison (after Watson and Lord 2008)

Table 6 – Relevant parameters for assessment of existing rock protection at half a wavelength in front of the eroded embankment

Parameter	1 year ARI value
Scour level	-0.5 m AHD (SBEACH model and known beach profile data)
Local water level	1.5 m AHD
Local water depth	2.0 m
Profile slope	1:150 (from bathymetric soundings)
Local significant wave height	1.1 m (from SBEACH model)

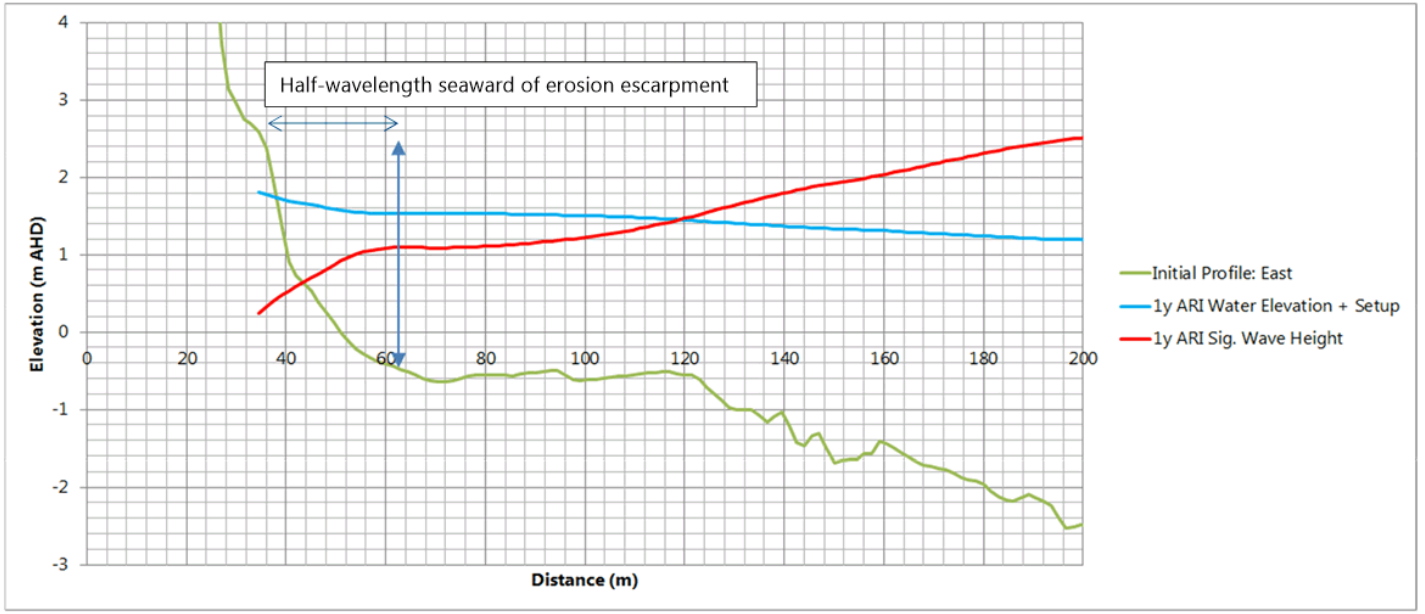
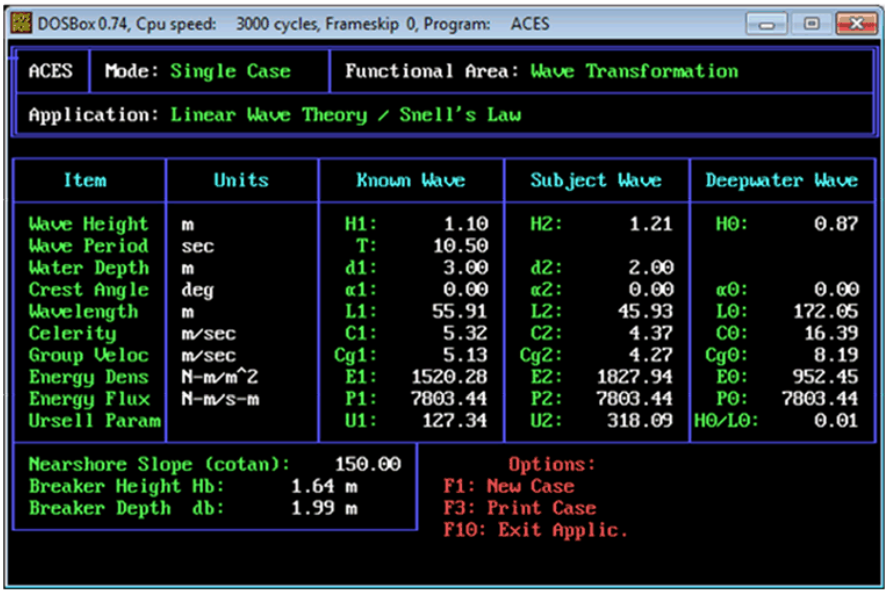


Figure 9 – SBEACH profile, local significant wave height and local water elevation including wave setup, 1 year ARI storm event

Table 7 – ACES calculated breaking wave height, 1 year ARI



Assessment of expected damage for 1 year ARI

The stability of the existing rock against wave attack has been assessed using the Hudson equation. Another commonly used formulation for rock armour sizing is the Van der Meer equation. This equation, however, is only applicable for deep water conditions (*i.e.*, where the depth in front of the structure is greater than three times the significant wave height in front of the structure, CIRIA, CUR, CETMEF 2007). The conditions at the eroded embankment east of the boat ramp are shallow water conditions and the area will be subject to breaking waves. Hence, the van der Meer formulae are inappropriate for use in the design and the Hudson formula has been used to assess the adequacy of the existing rock for erosion protection.

The Hudson equation is given by:

$$W = \frac{w_r H^3}{K_D (S_r - 1)^3 \cot\theta}$$

where:

- W = Weight of an individual armour unit in the primary cover layer, kg;
- w_r = unit saturated surface dry density, kg/m^3
- H = design wave height at the structure site, m (corresponding to H_{max})
- S_r = specific gravity of armour unit, relative to the water density at the structure
- θ = angle of the structure slope, measured in degrees

K_D = stability coefficient which depends primarily on the shape of the armour units, roughness of the armour unit surface, sharpness of edges and the degree of interlocking achieved during placement

The above formula is based on comprehensive physical model investigations at the U.S. Army Corps of Engineers.

The variable w_r depends on the properties of the available rock. A flatter slope or higher stability coefficient (K_D) value leads to a decrease in required armour stone weight, *W*.

Armour units that consist of rough quarried stone will have a higher K_D value than smooth, rounded armour stones. A higher K_D value can be achieved by special placement of the armour stones to achieve a high degree of interlocking. Random placement of the stones leads to a lower value of K_D, which requires the use of a larger armour stone size *W*.

Incorporated within the K_D value are variables such as the angle of incidence of wave attack, size and porosity of the underlayer material, revetment crest width and the extent of the revetment slope below the still water level. Table 8 gives recommended values of K_D to use for different situations (after CERC, 1984).

Table 8 - K_D values for Determining Quarrystone Weight*

Armour Units (Quarrystone)	Number of layers 'n'	Placement	Slope Cotangent	Structure Trunk		Structure Head	
				Breaking Wave	Non-breaking Wave	Breaking Wave	Non-breaking Wave
Smooth rounded	2	Random	1.5 – 3.0	1.2	2.4	1.1	1.9
Smooth rounded	>3	Random		1.6	3.2	1.4	2.3
Rough Angular	1	Random			2.9		2.3
Rough Angular	2	Random	1.5	2.0	4.0	1.9	3.2
			2.0			1.6	2.8
			3.0			1.3	2.3
Rough Angular	>3	Random		2.2	4.5	2.1	4.2
Rough Angular	2	Special		5.8	7.0	5.3	6.4
Parallelpiped	2	Special		7.0 – 20.0	8.5 – 24.0		
Graded Angular		Random		2.2	2.5		

*After CERC, 1984

The results from the Hudson analysis assume that no damage to the profile is allowed (static design). This means that there is no difference in the cross-sectional profile of the rock before and after a storm. If 0 – 5% of the armour stones are displaced between the crest and a level of one wave height below still water, this corresponds to "no damage" according to the Hudson formulation and would be acceptable for design (CIRIA, CUR, CETMEF 2007).

In forming the embankment protection, it is assumed that the existing rock will be pushed up against the embankment, and that the rock would not be sorted into requisite sizes. With reference to Table 8, the rock would best resemble a graded riprap which represents a mixture of all the available rock sizes, corresponding to a K_D value of 2.2 for breaking waves. The calculation of the required stone diameter from the weight depends on the bulk density of the available stone. From visual inspection the boulders appear to be igneous rock and it has been assumed that they would have a bulk density of 2600 kg/m^3.

The results of the Hudson analysis are provided in Table 9, which shows the calculated median primary armour diameter needed for hydraulic stability against wave attack for the 1 year ARI breaking wave height. The analysis indicates that:

- If the existing rock were piled up against the bank then this rock protection would be expected to suffer up to 40 % damage in a 1 year ARI storm event
- To suffer no damage in a 1 year ARI storm event, the median boulder diameter would need to be 600 mm, or a mass of 330 kg. To provide protection against more extreme storm events, larger rock would be required.

Table 9 - Hudson Analysis for rock erosion protection

Armour type	% Damage	K_D	Average Slope 1V:XH	H_b(m)	Factor of Safety[1]	Median Boulder diameter D_{50} (mm)	Median Boulder mass M_{50} (kg)
Igneous Rock Armour (2600 kg/m^3)	0 - 5	2.2	4	1.6	1.0	580	330
	20 - 30	2.2	4	1.6	1.0	420	130
Existing Rock	0 – 5	2.2	4	0.75	1.0	260	31
	20 – 30	2.2	4	1.05	1.0	260	31
	30 – 40	2.2	4	1.15	1.0	260	31

[1] The Factor of Safety allows for uncertainty in the wave height parameters and the possibility of superposition of wind and vessel waves and is applied as a multiplication factor to the design wave height used in the Hudson analysis.

Discussion on performance/implementation of proposed rock protection

The Hudson analysis has shown that the existing rock is of insufficient size to provide engineered rock protection to the eroding embankment for storms equivalent to or larger than a 1 year ARI.

However, it may be possible to stockpile the rock and undertake some sorting of material on site (i.e. stockpile the larger of the available rocks, which have a diameter of up to 500 mm) and use these larger rocks as a cover layer, or alternatively place them individually to maximise the degree of interlocking. This would create a more robust bank protection that would likely undergo some re-shaping in a 1 year ARI storm event but would still provide some erosion protection to the bank. It is estimated that the proposed solution would need to undergo post-storm maintenance every 1 – 2 years on average, with the rock protection needing to be pushed up against the bank and covered in sand during the maintenance event. The maintenance can be done by trained Council staff with minimal resources, without importing additional material onto the beach and with the use of light-weight earthmoving equipment.

It is emphasised that use of the existing rock is not an engineered solution *per se* but can be considered to make best use of the naturally available material on the beach, and is consistent with existing environmental approvals as it can be considered to be "beach scraping". The same lightweight earthmoving equipment used for maintaining the rock protection could be

used to enhance the recovery of the foredune west of the boat ramp after a large storm event. As part of the beach enhancement works, the incipient foredune can be encouraged to develop using beach scraping and planting of appropriate foreshore vegetation as well as more controlled beach access, in conjunction with works to minimise the impact of erosion due to overland drainage. The non-engineered nature of these works can be considered to be in balance with the natural values and uses of the area as a passive recreational zone, as well as a solution that can reduce the impact of erosion while accepting some risk that the public assets in the area may need to be repaired or replaced in a major storm event.

A geotextile layer between the rock armour and underlying substrate would be required to reduce the loss of fine substrate material through the rock armour.

The performance of the rock protection could be improved if larger rock were imported to act as a cover layer. Such rock would need to have a median diameter of approximately 600 mm to provide adequate protection in a 1 year ARI storm event, or larger for protection against a larger storm event. However, importing of additional rock is likely to require additional environmental approvals, and the nature of the activity may change from "beach scraping" to "construction of engineered coastal protection works".

It is estimated that the available volume of rock is only sufficient to provide erosion protection for the area east of the eastern boat ramp. From site measurements, there is existing rock armour within the embankment adjacent to the main boat ramp with a median diameter of 800 mm, which would likely provide sufficient protection against breaking waves up to the 100 year ARI for the immediate surrounds of the boat ramp (Figure 10).

Figure 10 – Existing rock protection immediately east of main boat ramp, measured on site to have a median diameter of 800 mm (17 May 2018).

Assessment of Coastal Hazard Implications of conceptual rock revetment

A review of the coastal hazard implications of providing a rock revetment to the west of the boat ramp up to the second stormwater outlet at the centre of the beach as shown in Figure **1** has been provided below.

To enable construction of the proposed revetment along the full length of revetment east of the stormwater outlet at the centre of the beach, additional rock would need to be imported to the site, as there is insufficient volume of rock available on site. While a design has not been carried out at this stage, it is envisaged that the primary armour would need to have a median diameter of approximately 800 mm and approximately 400 mm for the secondary armour layer. The revetment would need to extend for an alongshore distance of approximately 87 m west of the main boat ramp and approximately 80 m to the east of the boat ramp.

To provide an acceptable level of protection, the structure would likely need to be of a scale and bulk that would encroach some distance onto the beach – based on the likely feasible footprint some beach scour would be expected to occur in front of the structure. It has been assumed that in a storm, scour could occur at the toe of the revetment down to -1 m AHD. For a crest level of 4 m AHD and a toe level of -1 m AHD, with a slope of 1V:2H, the horizontal width of the structure would be at least 10 m. The approximate footprint of the structure is indicated in Figure 12.

Dean (1987) presents a qualitative assessment of some of the more commonly expressed concerns in relation to coastal armouring (CERC 2003). He found that while some of these concerns may be valid, others were found to be probably false. His assessment of the statement that "*Coastal armouring placed in an area of existing erosional stress causes increased erosional stress on the region adjacent to the armouring*" was that this was true and the mechanism he proposed was "*by preventing the upland from eroding, the beaches adjacent to the armouring share a greater portion of the same erosional stress*". However, this applies to beaches suffering erosion due to differential rates of littoral drift transport, which is not the case for Bendalong Boat Harbour which is a pocket beach that mainly suffers erosion due to cross-shore transport during storms.

As the structure alignment would likely be proud of the embankment alignment further west, a key environmental concern is how the seawall would affect the neighbouring beach to the west with no armouring, and if the wall would create end-of-wall or flanking effects. Two studies are often cited to demonstrate flanking effects. Walton and Sensabaugh (1979) provide post hurricane Eloise field observations (14 data points) of additional bluff (contour) recession adjacent to seawalls in Florida. McDougal, Sturtevant, and Komar (1987) and Komar and McDougal (1988) present small scale, equilibrium beach, laboratory measurements (nine data points) for 7-14-cm waves at 1.1-sec periods normal to a median grain-size, sandy beach. The 23 data points are then combined to demonstrate the excess flanking erosion. The extent and length of the excess erosion is related to seawall length and is explained in terms of the seawall denying sand to the littoral system (e.g., Dean 1987).

However, other mechanisms may be responsible. The Coastal Engineering Manual (CERC 2003) cites a number of studies that analyse the causes of potential end effects. Plant (1990) and Plant and Griggs (1992) observed rip currents at interior sections and at the ends of armoured sections. McDougal, Sturtevant, and Komar (1987) also observed rip currents in their model tests previously described and from field evidence in Oregon. They concluded that this mechanism may be more responsible for end-of-wall, flanking effects than the sand

trapping theory of Dean (1987). If the seawall extends seaward, it may act like a groyne to cause downdrift impacts.

Carley *et al.* (2010) undertook a literature review on the physical impacts of seawalls and also reviewed data on the alongshore impact of a number of seawalls along the NSW coast. They found that in many cases, no additional erosion was observed at seawall ends, even for large storm events. They offer possible explanations for this including sand levels against the wall prior to the storm; the extent of water level elevation; and the degree of longshore sand transport within the storm event in combination with offshore transport, which may be a function of nearshore wave angle.

From review of the available data, an end effect at the proposed seawall at Bendalong Boat Harbour may result if seawall overtopping leads to adjacent rip-current development.

It is considered by Advisian that there is no appropriate "one-size fits all" method to estimate the extent of any potential flanking effect of seawalls on the adjacent beach that may result if a rip current were to form at the end of the seawall. However, there are schema that have been proposed by some researchers to enable an estimate of the extent of erosion caused by edge effects from hard structures. One such schema is presented by Komar and McDougal (1988) to approximate additional alongshore erosion and additional lateral erosion induced by a structure subject to wave attack. The Komar and McDougal schema is illustrated in Figure 11. They proposed that the length of additional longshore erosion that would be expected adjacent to a structure would be equivalent to 70% of the length of the structure, and that the maximum cross-shore extent of this additional erosion would be 10% of the length of the structure (Figure 11). The additional erosion predicted by the Komar and McDougal schema for the proposed revetment extents been explored below.

Table 10 – Dean (1987) assessment of commonly expressed concerns relating to coastal armouring (after CERC 2003)

Table V-3-3
Assessment of Commonly Expressed Concerns Related to Coastal Armoring (Dean 1987)

No.	Concern		Assessment
1	Coastal armoring placed in an area of existing erosional stress causes increased erosional stress on the beaches adjacent to the armoring.	True	By preventing the upland from eroding, the beaches adjacent to the armoring share a greater portion of the same total erosional stress.
2	Coastal armoring placed in an area of existing erosional stress will cause the beaches fronting the armoring to diminish.	True	Coastal armoring is designed to protect the upland, but does not prevent erosion of the beach profile waterward of the armoring. Thus, an eroding beach will continue to erode. If the armoring had not been placed, the width of the beach would have remained approximately the same, but with increasing time, would have been located progressively landward (see 2b).
2a	Beaches on eroding coastlines will diminish in front of fixed dune positions.	True	An eroding beach continues to erode relative to a fixed dune position. The width of the beach must diminish if the shoreline is eroding (Figure 1).
2b	Natural beaches on retreating barriers maintain the same beach width.	True	Relative to a retreating duneline, a shoreline eroding at the same rate results in a stable beach width.
3	Coastal armoring causes an acceleration of beach erosion seaward of the armoring.	Probably False	No known data or physical arguments support this concern.
4	An isolated coastal armoring can accelerate downdrift erosion.	True	If an isolated structure is armored on an eroding beach, the structure will eventually protude into the active beach zone and will act to some degree as a groin, interrupting longshore sediment transport and thereby causing downdrift erosion.
5	Coastal armoring results in a greatly delayed poststorm recovery.	Probably False	No known data or physical arguments support this concern.
6	Coastal armoring causes the beach profile to steepen dramatically.	Probably False	No known data or physical arguments support this concern.
6a	Coastal armoring destroys foreshore bar and trough features.	Probably False	No known data or physical arguments support this concern.
7	Coastal armoring placed well-back from a stable beach is detrimental to the beach and serves no useful purpose.	False	In order to have any substantial effects to the beaches, the armoring must be acted upon by the waves and beaches. Moreover, armoring set well-back from the normally active shore zone can provide "insurance" for upland structures against severe storms.
8	Seawalls increase the longshore sediment transport.	Unknown	No known data exists, physical arguments can support or discredit this concern. Needs research.
9	Seawalls cause sand transport a far distance offshore.	Probably False	No known data or physical arguments support this concern.
10	Other		

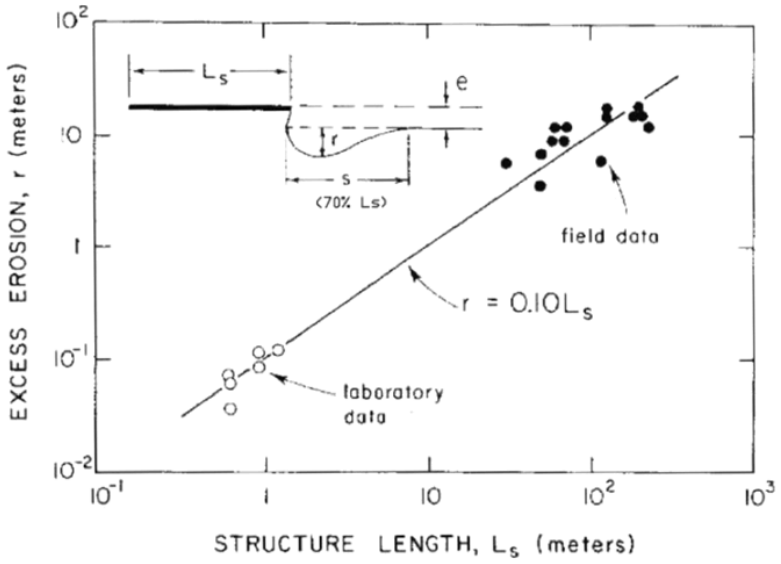


Figure 11 – Estimated back-beach erosion due to coastal structures after Komar and McDougal (1988)

With reference to Figure 11 and Figure 12, the longshore extent of the revetment structure that may cause additional erosional stress (L_s) to the west is 87 m, representing the length of revetment west of the boat ramp. The area east of the boat ramp is not considered to contribute to the erosional stress as the presence of the boat ramp separates the back beach escarpment into two discrete compartments.

From Figure 11, the extent of erosion, *e*, is represented by the present day *Zone of Slope Adjustment* line, which indicates the extent of erosion that could be expected for a 100 year ARI storm event in accordance with the assessment in Advisian (2017). According to the schema in Figure 11 (Komar and McDougal 1988), the alongshore extent of erosion, *s*, is 0.7 x 87 = 61 m, and the additional landward extent of erosion, *r*, is 0.1 X 87 = 8.7 m. The predicted additional extent of erosion according to the schema is illustrated in Figure 12.

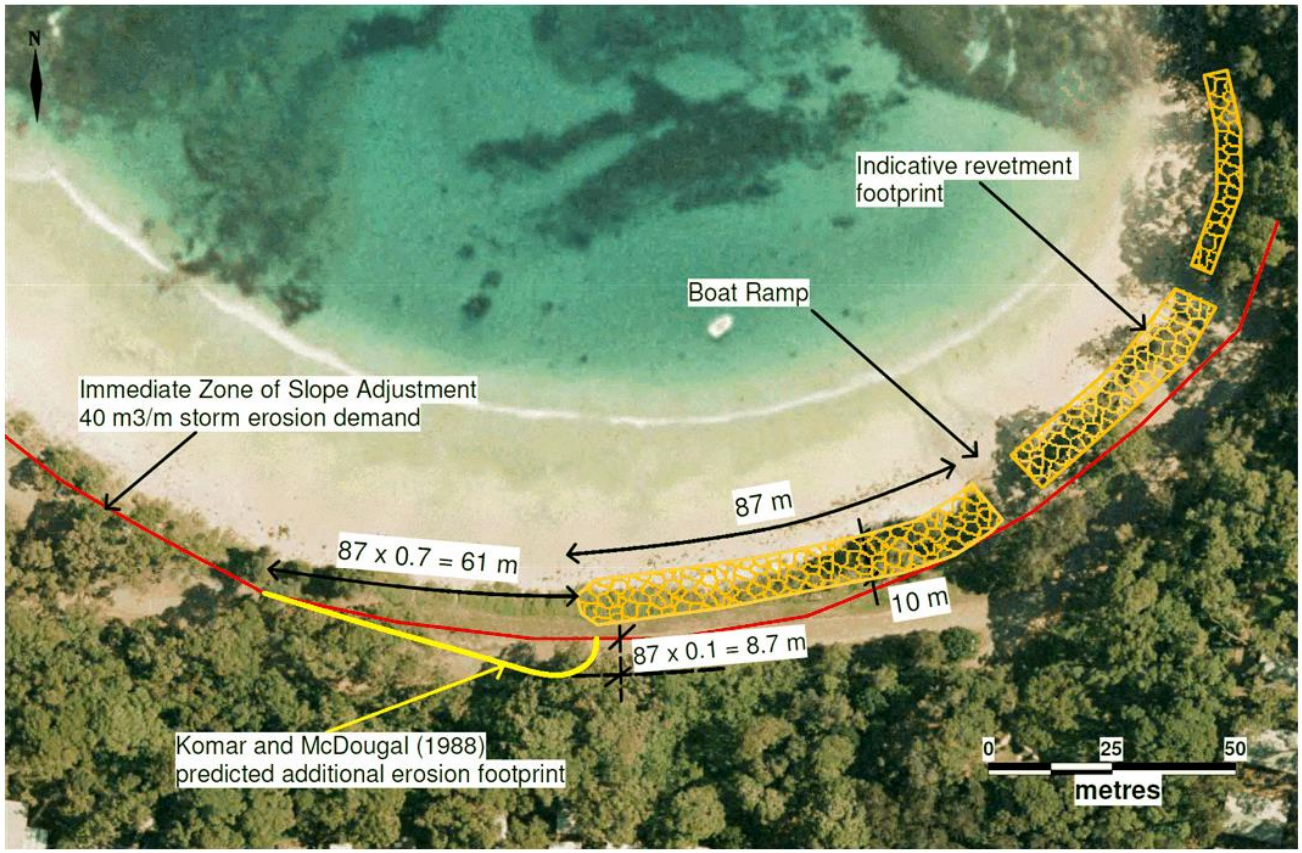


Figure 12 – Predicted additional erosion according to Komar and McDougal (1988) schema

Concluding Remarks

This report has explored the efficacy of using the existing rock available on the beach to act as bank protection for the area east of the boat ramp, as well as the potential impacts of a proposed revetment on the beach further to the west. It was found that:

- There is only sufficient rock to provide erosion protection for the area east of the smaller ramp where erosion has been most evident;
- The size of the rock has been assessed to provide adequate protection against breaking waves of up to around 0.7 m. However, waves larger than this would be expected to occur on average once a year at the embankment east of the boat ramp.
- To provide better protection it may be possible to sort the existing rock and use the larger available rock as a cover layer, and individually place the rock to provide maximum interlocking. However, it is emphasised that this rock protection is not designed to act as an engineered structure - it would be expected that the rock would need post-storm maintenance by "scraping" the rock up against the bank approximately once every 1 – 2 years. This could be done at low cost in conjunction with beach scraping of the adjacent beach to the west to assist faster post-storm beach recovery, using existing Council resources and under existing approvals.
- To provide adequate engineered protection, rock with a median diameter of 800 mm for the primary armour would likely be required. The total length of revetment would be approximately 160 m and would extend for a footprint width of at least 10 m onto the beach. A significant volume of rock would be required to be imported, environmental approvals would be required and the cost of construction would likely exceed the replacement or repair cost of the landside infrastructure in the event of a significant storm.
- The postulated alongshore impacts of an engineered revetment structure are poorly understood. Recent field data (*e.g.* Carley *et al.* 2010) have shown that in many cases, no additional erosion was observed at seawall ends, even for large storm events. It is considered, therefore, by Advisian that there is no appropriate "one-size fits all" method to estimate the extent of any potential flanking effect of seawalls on the adjacent beach. For beaches where a flanking effect has been observed, the mechanism for this may be the formation of a rip-current due to wave overtopping at the end of the seawall. Schema to estimate the "end effect" of a seawall have been proposed by some researchers, (*e.g.* Komar and McDougal, 1988). The schema estimates that the proposed revetment structure could lead to additional erosion effects over a 60 m length of foreshore to the west, with additional landward erosion of up to 8 m.

We trust that this suits your requirements. Should you require clarification about any aspect of this report, please feel free to contact Chris Adamantidis on 02 8456 7319.

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