



Council Agenda

AGENDA

NOTICE OF MEETING

Notice is hereby given that an ordinary meeting of Council will be held in the

**Council Chamber – Glenelg Town Hall
Moseley Square, Glenelg**

Tuesday 10 September 2013 at 7.00pm

Justin Lynch
CHIEF EXECUTIVE OFFICER



Ordinary Council Meeting Agenda

1. OPENING

His Worship the Mayor will declare the meeting open at 7:00pm.

2. KAURNA ACKNOWLEDGEMENT

We acknowledge Kaurna people as the traditional owners and custodians of this land.

We respect their spiritual relationship with country that has developed over thousands of years, and the cultural heritage and beliefs that remain important to Kaurna People today.

3. PRAYER

Heavenly Father, we pray for your presence and guidance at our Council Meeting.

Grant us your wisdom and protect our integrity as we carry out the powers and responsibilities entrusted to us on behalf of the community that we serve.

4. APOLOGIES

4.1 Apologies Received

4.2 Absent

5. ITEMS PRESENTED TO COUNCIL

6. DECLARATION OF INTEREST

If a Council Member has an interest (within the terms of the Local Government Act 1999) in a matter before the Council they are asked to disclose the interest to the Council and provide full and accurate details of the relevant interest. Members are reminded to declare their interest before each item.

7. CONFIRMATION OF MINUTES

Motion

That the minutes of the Ordinary Meeting of Council held on 27 August 2013 be taken as read and confirmed.

Moved Councillor _____, Seconded Councillor _____

Carried

8. QUESTIONS BY MEMBERS

8.1 Without Notice

8.2 With Notice - Nil

9. MEMBER'S ACTIVITY REPORTS - Nil

10. PUBLIC PRESENTATIONS

- 10.1 **Petitions** - Nil
- 10.2 **Presentations** - Nil
- 10.3 **Deputations** - Nil

11. MOTIONS ON NOTICE - Nil**12. ADJOURNED MATTERS**

- 12.1 Adjourned Report – Brighton Oval Telecommunications Site (Report No: 305/13)

13. REPORTS OF MANAGEMENT COMMITTEES, SUBSIDIARIES AND THE DEVELOPMENT ASSESSMENT PANEL

- 13.1 Minutes – Alwyndor Aged Care Committee – 20 August 2013 (Report No: 306/13)
- 13.2 Minutes – Jetty Road Mainstreet Management Committee – 7 August 2013 (Report No: 289/13)

14. REPORTS BY OFFICERS

- 14.1 Items in Brief (Report No: 308/13)
- 14.2 Preliminary 2012/13 Financial Statements and 2012/13 Budgets Carried Forward (Report No: 307/13)
- 14.3 Stormwater Management Plan – Community Consultation (Report No: 310/13)
- 14.4 Resilient South Update – Climate Change Scenarios Report (Report No: 311/13)
- 14.5 Donation of land to Council – Pine Gully (Report No: 309/13)

15. RESOLUTIONS SUBJECT TO FORMAL MOTIONS

Presented for the information of Members is a listing of resolutions subject to formal resolutions, for Council and all Standing Committees, to adjourn or lay on the table items of Council business, for the current term of Council.

16. URGENT BUSINESS – Subject to the Leave of the Meeting**17. CONFIDENTIAL ITEMS**

- 17.1 Ombudsman’s Investigation into Whistleblowers Complaint – Conflict of Interest Provisions Breach (Report No: 312/13)

Motion

- 1. That under provisions of Section 90(2) of the Local Government Act 1999 an order be made that the public be excluded from attendance at this meeting with the exception of the Chief Executive Officer, General Managers and administrative staff in attendance in order to consider in confidence this item.

2. That the Chief Executive Officer is satisfied that it is necessary that the public be excluded to enable the Council to discuss and to consider the matter at the meeting on the following grounds:

- g. matters that must be considered in confidence in order to ensure that the council does not breach any law, order or direction of a court or tribunal constituted by law, any duty of confidence, or other legal obligation or duty.

Moved Councillor _____, Seconded Councillor _____ **Carried/Lost**

Ombudsman's Investigation into Whistleblowers Complaint – Conflict of Interest Provisions Breach (Report No: 312/13)

Order to Retain Documents in Confidence

Motion

1. That an order be made under the provisions of Section 91(7) and (9) of the Local Government Act 1999 that the documents relating to Report No: 312/13 including:

- Minutes
- Report
- Attachment

relating to discussion of the subject matter of that document, having been dealt with on a confidential basis under Section 90 of the Act, should be kept confidential on the grounds of information contained in 90(3)(g).

2. This resolution will be reviewed within 12 months by the Council.

Moved Councillor _____, Seconded Councillor _____ **Carried/Lost**

18. CLOSURE

**JUSTIN LYNCH
CHIEF EXECUTIVE OFFICER**

Item No: **12.1**

Subject: **ADJOURNED REPORT – BRIGHTON OVAL – TELECOMMUNICATIONS SITE**

Date: 10 September 2013

Written By: Strategic Property Officer

General Manager: Corporate Services, Mr I Walker

SUMMARY

On 27 August 2013 Council considered a report recommending the approval be granted for Telstra Corporation to undertake a public consultation process in regard to the construction of a telecommunications facility at the Brighton Oval Complex.

This report was adjourned with Council resolving as follows;

“That the motion be adjourned until it is determined if Council has a policy on this matter and be presented to the next meeting”.

A search has been undertaken of all policies for the City of Holdfast Bay back to approximately the year 2000 and no such policy has been located.

RECOMMENDATION

- 1. That public consultation be undertaken by Telstra Corporation Limited regarding the proposal to erect a telecommunication site on the Brighton Oval.**
 - 2. That a further report be provided to Council detailing the results of the public consultation.**
-

COMMUNITY PLAN

A Place that Values its Natural Environment
A Place that Manages its Environmental Impacts
A Place that is Well Planned

COUNCIL POLICY

Nil

STATUTORY PROVISIONS

Local Government Act, 1999,
Telecommunications Act 1997 (Com)
Retail and Commercial Leases Act, 1995.

REPORT

A copy of the original report presented at the Council meeting on 27 August 2013 is attached for the information of Members.

Refer Attachment 1

A search was undertaken through the following records:

- Trim with various keyword searches and there are no policies on this issue.
- A key word searched the website – minutes and there are no results.
- A key word searched the minutes from 2005 – current – no results.
- A recent policy audit has not revealed a policy exists.

BUDGET

Should this proposal proceed Council will receive an amount of \$25,000 per annum for rental, that has not been budgeted for in the current financial year.

LIFE CYCLE COSTS

All costs of the infrastructure erected on the land will be the responsibility of Telstra Corporation Limited.

Attachment 1 – Original report

Item No: **14.7**

Subject: **BRIGHTON OVAL – TELECOMMUNICATIONS SITE**

Date: 27 August 2013

Written By: Strategic Property Officer

General Manager: Corporate Services, Mr I Walker

SUMMARY

Pro Realty on behalf of Telstra Corporation has approached the City of Holdfast Bay, as land owner, seeking approval to enter into a lease for the purposes of erecting a telecommunications tower with associated infrastructure within the Brighton Oval Complex.

Four possible locations have been identified within the Brighton Oval Complex, being replacing one of the four existing light poles around the football/cricket oval or replace one of the light poles used for the rugby oval.

Depending on which option is preferred negotiations will need to occur with one of the following clubs; Brighton Rugby Club Inc., (option A), Brighton Croquet Club Inc., (option B) or Brighton Sports and Social Club Inc., (options C and D), to amend the current lease.

It is proposed that Telstra Corporation Limited undertake public consultation for each of options A, B C and D regarding a proposal to enter into a lease for an initial term of five years from a dated to be confirmed.

RECOMMENDATION

- 1. That public consultation be undertaken by Telstra Corporation Limited regarding the proposal to erect a telecommunication site on the Brighton Oval.**
 - 2. That a further report be provided to Council detailing the results of the public consultation.**
-

COMMUNITY PLAN

A Place that Values its Natural Environment
A Place that Manages its Environmental Impacts
A Place that is Well Planned

COUNCIL POLICY

Nil

STATUTORY PROVISIONS

Local Government Act, 1999,
Telecommunications Act 1997 (Com)
Retail and Commercial Leases Act, 1995.

BACKGROUND

Pro Realty, on behalf of Telstra has approached the City of Holdfast Bay seeking approval to enter into a lease over portion of the land contained in the Brighton Oval complex for the purposes of erecting a telecommunications tower and associated infrastructure. Four options have been specified and these are detailed in Attachment 1.

Refer Attachment 1

REPORT

Telstra has identified that the suburbs around Hove currently do not have a level of coverage required to supply a standard of service expected. Other sites have been investigated and the Brighton Oval location has been identified as providing the best coverage whilst having the least amount of visual impact on the surrounding residents.

Telstra are proposing to erect a 35m telecommunications tower on the north eastern side of the football oval as indicated in Attachment 2.

Refer Attachment 2

-

To reduce the impact on the site Telstra is proposing that one of the existing light towers be replaced with a telecommunications tower and that the lighting be transferred to the new tower. Telstra have also proposed that they will consider undertaking additional work, such as replacing the existing scoreboard for the Brighton Football Club or undertaking some other identified work to assist the affected club. Should this proposal succeed detailed discussions will be held with the affected club.

At the time of writing this report preliminary discussions have occurred with the Brighton Football Club and the Brighton Croquet Club regarding this proposal. Neither club has any objections in principle to the proposed telecommunications tower.

To facilitate this construction, Telstra are seeking in principle agreement to continue discussions to enter into a lease for a term of up to 10 years from a date to be negotiated. The proposed infrastructure will require Development Approval and this will be sought once any lease negotiations are completed.

As the proposed lease term is more than five years public consultation is required in line with the Local Government Act, 1999. In the first instance it is proposed that Telstra Corporation undertake an initial public consultation process to ascertain the general community interest in this project. It is proposed that this public consultation will be undertaken canvassing all four proposed options

Refer Attachment 3

BUDGET

Should this proposal proceed Council will receive an amount of \$25,000 per annum for rental, that has not been budgeted for in the current financial year.

LIFE CYCLE COSTS

All costs of the infrastructure erected on the land will be the responsibility of Telstra Corporation Limited.

Attachment 1 – Location Options

Attachment 2 – Plan of Proposed Tower

Attachment 3 – Telstra Corporation Limited Consultation Plan

Phase One			Telstra's Comments
	Step 1	Work with decision makers	Council's Elected Members – Telstra have been liaising with Council officers for the past 2.5 years with the intention of putting its proposal out to community consultation. Telstra's Community Engagement Coordination Team will consist of Karyn Sullivan (Telstra), Mark Baade (SK Planning) and Shad Dunlop (ProRealty).
	Step 2	Clarify the decision to be made	Will the Council enter into a commercial lease over a small portion of community land with Telstra on a long term basis for the purpose of Telstra installing and operating a Telecommunications Facility?
	Step 3	Identify key stakeholders	<p><u>Primary Stakeholders:</u> City of Holdfast Bay Council, the football club, Brighton Cricket Club, Brighton Croquet Club, Brighton Lacrosse Club and Brighton Rugby Club</p> <p><u>Secondary Stakeholders:</u> Council officers involved in the redevelopment of the oval, local community including the local schools, Glenelg Pigeon Club, Holdfast Bay Dog Obedience Club, Rotary Club of Brighton.</p>
	Step 4	Consider legislative requirements	Comply with the legislative requirements to consult and follow the prescribed steps as set out in Section 50 of the Local Government Act 1999, Councils Public Consultation Policy, and the Development Act 1993.
	Step 5	Select a level of community engagement	<p>Telstra have stated from the very beginning it wishes to meet with the Elected Members and the key stakeholders in order to discuss the proposal before going out to public consultation.</p> <p>Consult</p> <p>Public Participation Goal:</p>

			<p>To obtain public feedback on analysis, alternatives and/or decisions.</p> <p>We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how input influenced the decision.</p>
	Step 6	Set up and maintain a community engagement record	This should be arranged and maintained by Councils Officers with Telstra's assistance.
	Step 7	Establish evaluation measures.	This should be arranged and maintained by Councils Officers with Telstra's assistance.
Phase Two			
	Step 1	Gather and record background information	Significant amount of background information has previously been supplied to Council Officers.
	Step 2	Define community engagement objectives	<p>Project objectives</p> <p>To initially brief the Elected Members to ascertain the preferred location for a telecommunications facility on the Council owned land.</p> <p>Subject to the outcomes from the above meeting, it is proposed that a meeting with Council Officers and the key stakeholders be arranged within 14 days to further discuss the proposed Telecommunications facility.</p> <p>With reference to both meetings, points raised and discussions recorded Telstra then aims to establish criteria to be used in making the final decision by 16/09/2013. Formal Consultation to commence 16/09/2013 with all stakeholders, consultation open for a period of 21 days, subject to confirmation of proposed location.</p> <p>Engagement objective at the <i>consult</i> level</p>

			To obtain feedback on options for the use of community owned land for the development of a telecommunications facility as documented in the proposed drawings (\$106417) within the timeframes as set out in Section 50 of the Local Government Act 1999 and the Development Act 1993.
	Step 3	Establish community engagement parameters	<p>Legislative – Council will be bound by the requirements of the Development Act 1993 for building development applications and by Section 50, 200 & 202 of the Local Government Act for any proposed changes to use of community land.</p> <p>Geographic –As identified on image A001, B001, B002 & B003.</p> <p>Budget - A nominal amount of \$5,000 has been budgeted for this community engagement process and is subject to Telstra’s final approval.</p> <p>Timelines – In accordance with Phase Two Step 2.</p>
	Step 4	Identify key issues/interests and responses	In consultation with Council.
	Step 5	Select suitable techniques for community engagement	<p>With Phase Two Step 1 in mind and in conjunction with Council Officers Telstra will collate the relevant information and prepare a suitable document to be issued to key stakeholders via mail.</p> <p>Telstra would seek to meet with Elected Members and the key stakeholders to directly discuss the proposed facility and the long term leasing of Community Land. Any queries raised during these meetings will be addressed at that time or as soon as practicably possible after.</p> <p>Any responses received by the key stakeholders will be responded to within a 7 day period.</p>

			Consultation should be led by the Council.
	Step 6	Evaluate Phase Two	This should be arranged and maintained by Council Officers with Telstra's assistance.
Phase Three			
	Step 1	Develop an Action Plan	Appendix 8 of the Community Engagement Handbook.
	Step 2	Complete a Task Breakdown	Appendix 9 of the Community Engagement Handbook.
	Step 3	Evaluate Phase Three	This should be arranged and maintained by Council Officers with Telstra's assistance.
Phase Four			
	Step 1	Collate and analyse information	Representations and queries from the key stakeholders will be tabled by Council Officers with the relevant responses by Telstra / Council noted in an easy to read and consistent format template.
	Step 2	Prepare a Feedback Report for stakeholders	This should be undertaken by Council Officers with Telstra.
	Step 3	Prepare a Report for Council	This should be undertaken by Council Officers.
	Step 4	Implementation of the final decision	This should be undertaken by Council Officers.
	Step 5	Evaluate Phase Four	This should be undertaken by Council Officers.
Phase Five			
	Step 1	Compile final evaluation report	This should be undertaken by Council Officers with Telstra.
	Step 2	Write the final evaluation report	This should be undertaken by Council Officers.

Item No: **13.1**

Subject: **MINUTES – ALWYNDOR MANAGEMENT COMMITTEE –20 AUGUST 2013**

Date: 10 September 2013

Written By: Governance Officer

General Manager: Alwyndor, Mr G Potter

SUMMARY

The Minutes of the Alwyndor Aged Care Management Committee for 20 August 2013 are provided for information.

RECOMMENDATION

That the Minutes of the Alwyndor Aged Care Management Committee for 20 August 2013 be noted by Council.

COMMUNITY PLAN

- A Place with a Quality Lifestyle
- A Place for Every Generation
- A Place that Provides Value for Money
- A Place that Provides Choices and Enhances Life

COUNCIL POLICY

Not applicable

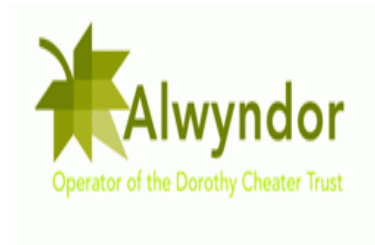
STATUTORY PROVISIONS

Not applicable

BACKGROUND

This report is presented following the Alwyndor Management Committee Meetings.

The Alwyndor Aged Care Management Committee was established to manage the affairs of Alwyndor Aged Care Facility. The Council has endorsed the Committee’s Terms of Reference and given the Committee delegated authority to manage the business of Alwyndor Aged Care Facility.



MEETING RECORD

Of the Alwyndor Management Committee held

Tuesday 20 August 2013 at 6.30pm

AMC MINUTES

Our Vision

*To honour the legacy, vision and intent of the **DOROTHY CHEATER TRUST** by providing high quality community and residential services, offering a viable and flexible mix of personalised care and support services to older people in the local community.*

ALWYNDOR AGED CARE

MANAGEMENT COMMITTEE

MINUTES

of the meeting held in the AAC Meeting Room on

TUESDAY 20 August 2013 at 6.30 pm

- | | | |
|-------------------------|---|---|
| 1. PRESENT | Mr N Hakof
Ms C Cotton
Mr M Bower
Mr I Pratt | Mr T Evans
Cr R Clancy
Mr D Royans
Cr S Lonie
Mr T Bamford |
| 2. IN ATTENDANCE | Mr G Potter
Ms K Field
Mr A Hook | General Manager
Manager Community Services
Act. Manager Residential Care |

3. OPENING

The Chairman, Mr N Hakof declared the meeting open at 6.45 pm and welcomed all in attendance.

4. APOLOGIES

Ms K Stevens

5. DECLARATION OF INTEREST

If a Committee Member has an interest (within the terms of the Local Government Act 1999) in a matter before the AMC, they are asked to disclose the interest to the AMC and provide full and accurate details of the relevant interest. Members are reminded to declare their interest before each item.

6. CONFIRMATION OF MINUTES

6.1 Recommendation:

The minutes of the meeting held on 16 July 2013 were taken as read, approved and confirmed as a true record.

Moved: D Royans

Seconded: C Cotton

CARRIED

7. BUSINESS ARISING FROM THE MINUTES

7.1 Five Year Cash Flow Analysis – Momentum Business Advisors

This item was considered confidential and subsequently deferred to Item 10.1: Urgent Business.

8. REPORTS

8.1 Correspondence Report

8.1.1 Council Resolution – AMC Membership Endorsement of Mr T Bamford

Moved: Cr R Clancy **Seconded:** Cr S Lonie **CARRIED**

8.1.2 Updates AMC Directory

8.1.3 WHS “Officers” Definition – Wallmans Lawyers Update

8.2 The National Report

Issues 310, 311 & 312

8.3 Letters of Thanks

Nil

Information Reports (8.1 to 8.3) were noted by the AMC

9. ITEMS UNDER REVIEW

Item	Responsibility	Due	Status
Instrument Of Delegation	GM	Oct '13	Annual Review
Quality Improvement Plan	Ops Manager	Feb '14	Bi-Annual Review
Strategic Plan Review	GM	Feb '14	Bi-Annual Review
Governance Standard – Prudential Bond Statement	GM	Oct '13	Annual Review
Investment Performance Report	GM + MFA	Oct '13	Annual Review
AAC Investment Policy Review	AMC	Oct '14	Biennial Review
AAC Accommodation Bonds Policy Review	AMC	Oct '14	Biennial Review
AMC Strategic Planning Workshop Discussion	AMC / GM	December '13	Agree a date, focus and content of workshop event, to be held in 2014
Work Health & Safety	GM	Sept '13	<ul style="list-style-type: none"> - Provide relevant training to the members of the Committee in regard to the major Legislative changes to the WHS Act that impact on the role of the AMC. The General Manager to confirm training date and course content (relevant to the role of the AMC), after consultation with the Pinnacle HR Group. - Provide the Committee with key WHS Policies and Procedures for their information and review –The six WHS Cornerstone Policies were tabled at 20TH August AMC meeting: Refer to Agenda Item 11.7 - Review the format / function and minutes of the Alwyndor WHS Committee to ensure that the key objectives of the Alwyndor WHS Operating System are being appropriately reported, recorded and monitored.

ITEMS IN CONFIDENCE

Cr R Clancy moved and I Pratt seconded that, pursuant to Section 90(2), 90(3)(a) and 90(3)(b) of the Local Government Act 1999 the Alwyndor Management Committee order that the public be excluded from attendance at the meeting, with the exception of Alwyndor officers and any other visitors permitted to remain, after taking into account the relevant considerations under Section 90(3), on the basis that it will receive, discuss or consider the following:

- **information or matter the disclosure of which –**
 - (i) could reasonably be expected to confer a commercial advantage on a person with whom the AMC is conducting, or proposing to conduct, business, or to prejudice the commercial position of AAC; and**
 - (ii) would on balance, be contrary to the public interest.**
 - (iii) Information, the disclosure of which, would involve the unreasonable disclosure of information concerning the personal affairs of a person or persons (living or dead).**

CARRIED

10. NEW and URGENT BUSINESS

10.1 Five Year Cash Flow Analysis – Momentum Business Advisors

The five year cash flow analysis was referred to the Finance Sub-Committee meeting held on 20 August 2013, for further analysis and clarification. The Finance Sub –Committee tabled a draft recommendation to the AMC meeting, based on their review of the three options provided within the Momentum Report.

Recommendation:

1. The AMC seek Council approval to commit \$1.6m from the financial reserves of AAC to upgrade the secure dementia unit (Unit 4)
2. The AMC will increase the AAC prudential bond liquidity reserve from \$2m to \$3m from October 2013, in response to the Living Longer Living Better Aged Care financial reforms operative from 1 July 2014.

Moved: I Pratt

Seconded: D Royans

CARRIED

11. CONFIDENTIAL REPORTS

- | | |
|---|---------------------------------------|
| 11.1 Manager Community Service's Verbal Report | August 2013 |
| 11.2 Act Manager Residential Care's Report | August 2013 |
| 11.3 Building Sub Committee Chairman | <i>Refer General Manager's Report</i> |
| 11.4 General Manager's Report | August 2013 |
| 11.5 Finance Reports | July 2013 |
| 11.5.1 Bank Reconciliation for the Month of July 2013 | |
| 11.5.2 "Year to Date" Budget / Actual Comparison by Department as at 31 st July 2013 | |

Recommendations:

1. That the Bank Reconciliation for the Month of July 2013 be confirmed.
2. That the "Year to Date" Budget / Actual Comparison by Department as at 31st July 2013 be confirmed

Moved: I Pratt

Seconded: D Royans

CARRIED

11.6 Formal Complaints

11.6.1 Colmer Family

The General Manager provided a verbal update for the AMC's information

11.7 WH&S Committee

- Minutes of the meeting held 24 July 2013
- The six (6) WHS Cornerstone Policies were tabled for the AMC's information. Pinnacle HR will be engaged to provide an independent review of the suite of policies prior to attendance at the proposed AMC training event regarding the revised WHS Legislation and their role as "Officers" under the Act.

11.8 Quality Improvement Committee - Nil

Confidential Reports 11.1 to 11.8 were noted by the AMC

ORDER TO RETAIN DOCUMENTS IN CONFIDENCE:

C Cotton moved and Cr S Lonie seconded that pursuant to Section 90(2), 90(3)(a) and 90(3)(b) and of the Local Government Act 1999:

1. **The Alwyndor Management Committee orders that the documents and minutes relating to Report No: 11.1 to 11.8 with the exception of the Resolution for going into confidence**

be kept confidential and not available for public inspection on the basis that they deal with information relating to commercial advantage; contrary to public interest; or information involving the unreasonable disclosure of information concerning the personal affairs of a person or persons (living or dead), under Sections 90(2), 90(3)(a) and 90(3)(b) and of the Act.

2. This resolution will be reviewed on or before 30 June 2014 by the Alwyndor Management Committee.

CARRIED

RESUMPTION:

C Cotton moved and D Royans seconded that the Alwyndor Management Committee resume as an open meeting of Alwyndor Aged Care at 8.03 pm

CARRIED

12. DATE OF NEXT MEETING

Next Ordinary Meeting of the AMC will be held 17th September 2013 at 6.30pm

Venue: Alwyndor Meeting Room

Noted by the Alwyndor Management Committee

Apologies:

Ms K Stevens, Cr R Clancy, T Evans

Noted by the AMC

13. ALWYNDOR MANAGEMENT COMMITTEE MEETING DATES FOR 2013

Member	Term Expires	19 Feb	19 March	16 April	21 May	18 June	16 July	20 Aug	17 Sept	15 Oct	19 Nov	17 Dec
N.Hakof	July 2013		AP									
I. Pratt	July 2013			AP								
D.Royans	July 2013											
C.Cotton	July 2014											
T Bamford	July 2015											
K. Stevens	July 2014					AP		AP	AP	AP		
M.Bower	July 2014											
T. Evans	April 2015		AP		AP				AP			
R.Clancy	NA						AP		AP			
S Lonie	NA				AP							

Noted by the AMC

14. MEETING CLOSURE

The Chairman thanked all members for their contribution and declared the meeting closed at 8.05 p.m.

Mr Greg Potter
General Manager

Mr Nick Hakof
Chairman

Distribution:

Mr N Hakof, Ms C Cotton, Mr I Pratt, Cr R Clancy, Cr S Lonie, Mr D Royans, Ms K Stevens, Mr M Bower, Mr T Evans, Mr T Bamford

Others:

General Manager, Manager Residential Care, Manager Community Services, Operations Manager, Chief Executive Officer-City of Holdfast Bay, Governance Officer CHB, Master File.

Item No: **13.2**

Subject: **MINUTES JETTY ROAD MAINSTREET MANAGEMENT COMMITTEE
7 AUGUST 2013**

Date: 10 September 2013

Written By: Manager, Jetty Road Development

General Manager: City Services, Ms R Cooper

SUMMARY

The Minutes of the Jetty Road Mainstreet Management Committee meeting held 7 August 2013 are attached and presented for Council's information.

RECOMMENDATION

That the minutes of the Jetty Road Mainstreet Management Committee held 7 August 2013 be received.

COMMUNITY PLAN

A Place to do Business
A Place that Welcomes Visitors
A Place that Provides Value for Money

COUNCIL POLICY

Not applicable

STATUTORY PROVISIONS

Not applicable

BACKGROUND

The Jetty Road Mainstreet Management Committee (JRMMC) has been established to undertake work to benefit the traders on Jetty Road Glenelg, using the separate rate raised for this purpose. Council has endorsed the Committee's Terms of Reference and given the Committee delegated authority to manage the business of the Committee.

BUDGET

Not applicable

LIFE CYCLE COSTS

Not applicable

CITY OF HOLDFAST BAY

Minutes of the meeting of the Jetty Road Mainstreet Management Committee of the City of Holdfast Bay held in the Glenelg Library Meeting Room, Colley Terrace, Glenelg on Wednesday 7 August 2013 at 6.00 pm.

PRESENT

Elected Members

Mayor K Rollond
Councillor B Patton

Community Representatives

Chairman – Mr M Faulkner, Enve
The Changing Canvas – Mrs G Higgins
Noodle Box – Mr B Martin
Telstra, Ms E Leenaerts

Staff

Manager, Jetty Road Development

1. OPENING

The Chairman declared the meeting open at 6.00 pm.

2. APOLOGIES

2.1 For Absence - Pure Espresso, Mr M Deare
Don Maios Investments, Mr C Maios
Glenelg Florist, Ms V Corbell
Caruso, Mr R Caruso

2.2 Leave of Absence - Nil

3. DECLARATION OF INTEREST

Members were reminded to declare any interest before each item.

4. CONFIRMATION OF MINUTES**Motion**

That the minutes of the Jetty Road Mainstreet Management Committee held on 5 June 2013 be taken as read and confirmed.

Moved by Mr B Martin, Seconded by Ms G Higgins

Carried

5. REPORTS/ITEMS OF BUSINESS**5.1 Lighting Update**

Manager, Jetty Road Development advised that a closed tender is in process for the Jetty Road tree lighting. Four companies have been invited to tender with responses due on 12 August 2013. Contracts to be signed on 30 August 2013 with installation in September 2013.

5.2 Budget Update**Motion**

That the Committee receive and note this report

Moved Ms E Leenaerts, Seconded Mr B Patton

Carried

5.3 Bike SA

Manager, Jetty Road Development advised that a report is going to Council on 13 August 2013 in support of having Glenelg as a node for Bike SA. This will be funded by Council.

Bike SA has requested a letter of support from JRMMC in regard to this scheme.

Motion

That the Manager, Jetty Road Development prepare and submit a letter of support to Bike SA confirming that it is in support of having Glenelg as a node for Bike SA, with council funded support.

Moved Ms E Leenaerts, Seconded Ms G Higgins

Carried

5.4 Treasure Hunt Debrief (Report 261/13)**Motion**

That the Committee receive and note this report

Moved Mr B Martin, Seconded B Patton

Carried

5.5 SALA update

Manager, Jetty Road Development advised that the SALA campaign is now running. A full debrief report will be submitted to Committee at its next meeting.

5.6 Glenelg Christmas Pageant

Manager, Jetty Road Development advised that planning is well underway for this event. Flyers have been distributed to the traders via hand delivery and newsletter inviting entries for the naming rights lottery.

Manager, Jetty Road Development will invite Jennie Bell ink to the next meeting to provide an update.

5.7 Cruise Ships

Manager, Jetty Road Development advised that Council's Economic Development Coordinator has been successful in having a half day Glenelg tour included in the trips offered by Bob Wood Cruise Ships (the main provider of cruise ship tours).

At present there are 39 cruise ships scheduled to come to Adelaide between November 2013 and March 2014.

5.8 Street Cleaning

Manager, Jetty Road Development advised that there is now a new manager in charge of this who took over this position on Monday 5 August 2013. A meeting with the new manager is scheduled for week commencing 12 August 2013 and the Manager, Jetty Road Development will report on outcomes at next meeting.

5.9 Manager Performance

Manager, Jetty Road Development advised that the General Manager, City Services will be sending a performance questionnaire through to Committee members for feedback on the manager's performance.

5.10 Winter Wonderland

As previously approved by Committee out of session, a grant application has been submitted to TRIF for \$75,000 matched funding in order to run the Winter Wonderland campaign. The project will include an ice rink in Moseley Square for the month of July 2014. We will be advised of the outcome of this by end October 2013.

6. URGENT BUSINESS – Subject to the leave of the meeting**6.1 Moseley Square Tram Wall Artwork**

The Project Advisory Group determined that the concepts delivered by the artists were not deemed suitable or of a scale or standard that would enliven or enhance the public space in Moseley Square. Therefore the decision of the Project Advisory Panel was not to select or commission any of the concepts delivered by the artists.

Recommendations

The Project Advisory Group would like to recommend an alternative approach to delivering public art along the Glenelg Precinct and allocating the existing funding towards a series of Urban Art Interventions and Art Installations in innovative, exploratory, temporary or semi-permanent artworks or performances that would enhance and engage the Jetty Road, Glenelg precinct and turn the street into a studio.

Motion

That JRMMC recommend that the Project Advisory Group identify a piece of simple art form to be located in the precinct and not continue with the tram wall.

Moved Ms E Leenaerts, Seconded Ms Higgins

Carried

6.2 Fork in the Road

Council's Events Team has been approached by Fork in the Road to hold a stand-alone event in Glenelg on 21 September 2013. This will involve the Food Truck Revolution with up to 35 self-contained food vendors. The expected number of attendees is between 5000 – 8000.

The rationale behind this is to increase the length of time visitors spend within the precinct and reintroduce the transient target market into Glenelg to explore the surrounds and rediscover what is Glenelg. Intended Target Market 25 – 45 years.

The Events Team seeks the support of JRMMC for this event.

Motion

JRMMC recognize that it is important to create vibrancy within the precinct and to encourage visitation from Gen Y and the inclusion of events such as Fork in the Road Food Truck Revolution will help to achieve this. However, in order to protect the interests of our existing traders we would recommend that this event is located outside of the precinct on Wigley Reserve and not in Moseley Square.

Moved Ms E Leenaerts, Seconded Ms G Higgins

Carried

7. DATE AND TIME OF NEXT MEETING

The next meeting of the Jetty Road Mainstreet Management Committee will be held on Wednesday 2 September 2013 in the Glenelg Library Meeting Room, Colley Terrace, Glenelg.

8. CLOSURE

The meeting closed at 6.50 pm.

CONFIRMED

CHAIRMAN

Item No: **14.1**
Subject: **ITEMS IN BRIEF**
Date: 10 September 2013
Written By: Personal Assistant
General Manager: Corporate Services, Mr I Walker

SUMMARY

These items are presented for the information of Members.

After noting the report any items of interest can be discussed and, if required, further motions proposed.

RECOMMENDATION

That the report be noted and items of interest discussed.

COMMUNITY PLAN

A Place that Provides Value for Money

COUNCIL POLICY

Not applicable

STATUTORY PROVISIONS

Not applicable

REPORT

14.1.1 Coast Park from Brighton to Seacliff - Funding

A formal notification has been received from the Minister for Planning in regard to two funding applications submitted by Council.

The attached letter is in response to consideration of Councils requests.

Refer Attachment 1

14.1.2 Attendance at Training

The Chief Executive Officer has approved the attendance of Councillor Yates at the Murray Darling Association Annual General Meeting to be held in Goolwa.

The Hon John Rau MP

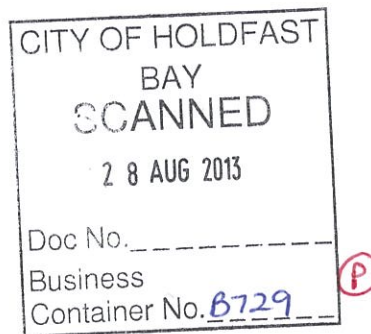


Government
of South Australia

7655583

26 August 2013

Mayor Ken Rollond
City of Holdfast Bay
PO Box 19
BRIGHTON SA 5048



Deputy Premier
Attorney-General
Minister for Planning
Minister for Industrial Relations
Minister for Business Services
and Consumers

45 Pirie Street
Adelaide SA 5000

GPO Box 464
Adelaide SA 5001
DX 336

Tel 08 8207 1723
Fax 08 8207 1736

Dear Mayor Rollond

I refer to Council's applications for funding under the Planning and Development Fund.

After consideration I am pleased to advise Council that I have approved funding for the following project, as outlined in your application:

- \$1,000,000 for the development of Coast Park from Brighton to Seacliff

I wish to advise Council that I have not approved grant funding for your application to implement the Sturt River Linear Park. The grant funding was highly competitive with over \$30 million worth of applications received and I was not able to support projects where council did not allocate a matching funding contribution towards the project.

Council will be contacted in the near future to arrange for the formalisation of the funding agreements between Council and the Department of Planning, Transport and Infrastructure, including the establishment of key outcomes, funding conditions and timelines for progress reports.

If you require any further information please do not hesitate to contact Ms Gabriella Vikor (8303 0703) or Mr Matthew Lang (8303 0728) at the Department of Planning, Transport and Infrastructure.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'John Rau'.

John Rau
Deputy Premier
Minister for Planning

Item No: **14.2**

Subject: **PRELIMINARY 2012/13 FINANCIAL STATEMENTS AND 2012/13 BUDGETS CARRIED FORWARD**

Date: 10 September 2013

Written By: Manager Finance

General Manager: Corporate Services, Mr I Walker

SUMMARY

This report provides preliminary unaudited financial statements for the 2011/12 financial year together with the final details of budget amounts for incomplete projects and programs as at 30 June 2012 to be carried forward.

RECOMMENDATION

That Council:

- 1. Notes the preliminary 2012/13 financial statements and carried forward budgets.**
 - 2. Approves the final amounts carried forward from the 2012/13 budget to the current year 2013/14 being \$71,936 net operating expenditure, \$1,261,722 capital expenditure and \$2,000,000 property sale income.**
-

COMMUNITY PLAN

A Place that Provides Value for Money

COUNCIL POLICY

Not applicable

STATUTORY PROVISIONS

Local Government (Financial Management) Regulations 2011

BACKGROUND

The financial management regulations require an annual report showing the audited results of the Council for the previous financial year compared with the estimated financial results set out in the budget. This report can also be used as a mechanism for Council to approve spending to undertake incomplete projects and programs from the previous year.

Preliminary unaudited financial statements have been prepared in order to inform Council in a timely manner of its budget performance and to finalise the 2012/13 carried forward budgets.

A final 2012/13 budget performance report will be prepared when the financial statements have been finalised and audited in the prescribed format.

At its meeting on 23 July 2013, Council considered the initial 2012/13 carried forward budgets for incomplete projects and programs. Council adopted the recommendation to carry forward capital expenditure up to \$1,422,417 and net operating expenditure of up to \$61,675 from 2012/13 to the 2013/14 budget.

Since July, further invoices relating to 2012/13 have been received and processed which have reduced the overall amounts required to be carried forward. Furthermore an additional carried grant funded Art of Public Spaces project is required to be carried forward. The carried forward amount for operational expenditure has therefore been amended by \$10,261 to \$331,936 and for capital projects reduced by \$170,956 to \$1,261,722.

REPORT

Preliminary 2012/13 Financial Statements

Preliminary financial statements for the year ended 30 June 2013 are provided.

Refer Attachment 1

These statements are still being finalised are subject to audit and exclude:

- Councils equity interest in Southern Region Waste Resource Authority (SRWRA) and Western Region Waste Management Authority (WRWMA).
- The revaluation of asset classes of land, buildings, library books and coastal/open space infrastructure that is currently being finalised. This is likely to affect the carrying value of these assets and depreciation.
- Accounting for the write-off of infrastructure and buildings. This is likely to result in a reduction in the value of various infrastructure assets including Coast Park assets that have been renewed before the remaining useful life of the existing assets had expired. The demolition of buildings at Alwyndor and McFarlane Street property will also need to be accounted for.

- Provision for doubtful debts is currently being revised including a risk analysis of the level and payment of outstanding infringements. It is expected that the provision will need to be increased by \$112,000.

Three budget updates detailing budget variances have been approved by Council during 2012/13 (Reports 479/12, 40/13, 150/13). Additionally monthly financial reports have been noted by Council the most recent being report 213/13 which included a full budget adjustment summary to the end of May 2013.

The following notes are provided to explain and summarise the significant budget variations during the year and the interim end of the year result.

Municipal Activities

Operating Revenue

Note 1 – Statutory Charges

Parking fines income. The original budget was \$1.405m and was revised down to \$1.215m during 2012/13. The final actual amount is \$1.156m.

Planning and encroachment permit fees. The original budget was \$469,000 and was revised down to \$424,000. The final amount is \$444,000.

Dog registrations fines and costs. The original budget was \$155,000 and the final amount is \$165,000.

Rate Search Fees. The original budget was \$54,000 and was revised up to \$77,000. The final amount is \$76,000.

Note 2 – User Charges

Parking ticket machine income. The original budget was \$1.145m and was revised down to \$1.05m due to reduced patronage. The final amount is \$973,000.

Caravan Park income. The original budget was \$774,000 and was revised down to \$714,000 due to reduced patronage. The final amount is \$697,000.

Commercial Leases. The original budget was \$158,000 and the final amount is \$135,000.

Cemetery Fees. The original budget was \$93,000 and was revised up to \$136,000. The final amount is \$164,000.

Note 3 – Operating Grants and Subsidies

Commonwealth Financial Assistance Grant. The original budget was \$1.258m. The budget was revised down to \$628,000 on the understanding that the Commonwealth Government practice of making advance payments would cease in 2012/13. However in June 2013 an advance amount of \$585,608 was received. The final actual amount received in 2012/13 is \$1.213m.

Stormwater Management Plan Grant. The original budget was \$120,000 and when this project is completed the actual grant funds will be received. This item is listed as a carried forward budget.

Healthy Community Initiative Grant. The original budget was \$516,042 and \$376,042 has been received. The remaining funds totalling \$140,000 are due to be received in 2013/14 and this item is listed as a carried forward budget.

Home and Community Care – Variation. This is an additional grant of \$70,000 which was received late in 2012/13. The balance of unspent funds have been listed as a carried forward budget.

Roads to Recovery. The original budget was \$271,300 and the final amount received is \$329,560.

Note 4 – Interest on Investments

Interest on Investments. The original budget was \$251,500 and this was revised down to \$237,500 due to falling interest rates and reduced positive cash flow. The final amount was \$224,669 and the budget variance was offset by savings on finance charges and timing of short-term borrowings.

Note 5 – Reimbursements

Workers Compensation Rebate/Mutual Liability Scheme. The original budget was \$200,000 and was increased by \$37,500 due to a higher rebate received.

Various Other items. Includes increased amounts for training subsidies, fuel tax rebates, contributions for memorial seats.

Note 6 – Employee Costs

Original budget was revised during year to allow for vacancies and temporary staff. Final amount exceeded revised budget by \$425,982 primarily due to an additional fortnight of employee costs allocated to 2012/13 due the timing of the financial year-end date.

Note 7 – Materials, contracts and other expenses

Original budget was increased during the year in accordance with Council resolutions including encroachment fee write-off Liberty Towers \$136,000; Commercial tenancy income write-off Buffalo \$78,000; additional event funding Glenelg Pageant \$10,000 and New Year's Eve \$25,000.

Other major variations approved during the year included public spaces repairs and maintenance \$113,000; asbestos removal Kingston House \$40,000; Boat Lock and foreshore repairs and maintenance \$43,000; professional services support \$93,000; Street Lighting \$58,000. These costs were part offset by savings in insurances, planning legal costs and corporate training \$57,000.

The final amount is \$310,362 (2%) over the revised budget. The major variations have occurred in legal fees \$129,000; temporary staff \$117,000 (part offset by savings in employee costs); final public spaces repairs and maintenance costs \$213,000; final electricity and water costs \$112,000.

Unspent grant funds include the Healthy Communities Initiative \$237,000 and HACC variation \$44,500 which are listed in the carried forward budgets.

Note 8 – Finance Charges

Interest on borrowings is lower than budget due to the timing of drawing down and repaying short-term cash advance debentures when funds permitted.

Note 9 – Depreciation

Budget was revised during year to reflect depreciation on updated asset valuations as at 30 June 2012 and approved changes in the useful lives of infrastructure. The amount is to yet to be finalised for 30 June 2013 due to revaluation of infrastructure, buildings and library lending materials that is currently being undertaken.

Note 10 – Other non-Cash provisions

Net result in long service leave provision is higher than original budget estimate.

Note 11 – Amounts received for new/upgraded assets

Budget was revised during year to allow for capital funding for the following projects; Glenelg Foreshore CCTV \$250,000; sand pumping stations reserve reinstatements and improvements \$190,000; Mike Turtur Bikeway \$762,314; Bus shelters and reserve improvements \$42,860. The majority of this budget has been received.

Note 12 – Proceeds for disposal of assets

Amount refers to the sale of property (Brighton Institute Library) \$425,523 and trade-in of major plant and vehicles throughout the year \$217,712.

Note 13 – Capital Expenditure – Asset Renewal and Replacement.

The classification types of capital expenditure have been reviewed and adjusted. Due to the nature of completed capital works many projects have been reclassified as upgraded asset expenditure. The overall capital expenditure variance is \$1.47m. The amount of capital expenditure to be carried forward is \$1.262m as listed below.

The difference is due to savings on completed projects, project deferrals or minor unspent projects not required to be carried forward.

The original budget for renewed and replaced assets was revised during the year for incomplete projects carried forward to 2012/13 (Report 334/12) and included Lifelinks capital \$50,000, vehicles \$25,000, Colley Terrace Rotunda \$36,000, and building works.

The budget was also increased during the year for new and revised projects including the Hindmarsh Lane Exeloo \$250,000, major plant and vehicles \$255,000, roads reseal program \$153,000 and depot and reserve improvements.

Note 14 – Capital Expenditure – Asset New and Upgraded

The original budget for new and upgraded assets was revised during the year for incomplete projects and included the Coast Park projects \$1.336m, Mike Turtur bikeway \$534,264, foreshore lighting \$338,691, major plant and equipment \$150,000 and various other projects. The budget was increased during the year for extending or created new projects including further funding for the Mike Turtur bikeway \$749,814, Glenelg historic tram shelter \$55,000, sand pumping station surrounding infrastructure \$190,000, and sporting club buildings \$74,000.

Note 15 – Environmental Projects

This environmental capital project budget is fully committed and the balance is listed below as a carried forward.

Note 16 – Capital Expenditure – Work in Progress

This expenditure refers to capital expenditure for projects that have commenced but are yet to be completed. It includes the bike path project \$737,449, Old Gum Tree reserve \$220,000 and various reserve and building projects. They are included in the carried forward list below.

Note 17 – Repayments of Loans by Sporting Groups

This budget variance refers to the additional principal repayment made of \$200,000 by the Somerton Bowling Club less the deferred principal repayments as arranged with the Glenelg Football Club.

Note 18 – New Borrowings

New borrowings are made in accordance with Councils treasury management policy. Loan funds are drawn down only when required. The budget was varied during the year to meet capital projects carried forward from the 2011/12 \$2.78m less proposed funding savings including assets sales during 2012/13 \$2.15m net. As at 30 June 2013 an amount of \$300,000 remained outstanding on a cash advance debenture. There were no major new borrowings during 2012/13 as there was sufficient short term cash available to meet expenditure commitments.

Note 19 – Principal repayments of borrowings

The variance refers to the additional \$200,000 principal repayment by the Somerton Bowling Club.

Alwyndor Activities

Note 1 – User Charges

Budget was increased during the year for income received. Overall client income received for residential care services was over budget due to the nature of fees paid which are means tested and are offset by grants. Community client's income received was over budget due to a reduction in fee waivers. Fee waivers are processed as per the Department of Health and Ageing guidelines.

Note 2 – Operating Grants and Subsidies

Reduction in grants applicable to residential care as determined by the Aged Care Funding Instrument (ACFI).

Note 3 – Investment Income

Additional income received due to improved cash flow as a result of the timing of progress payments toward the facility redevelopment. Interest received on unpaid accommodation bonds also exceeded original estimate.

Note 4 – Reimbursements

The increased amount is the income received for services provided for Consumer Directed Care.

Note 5 – Other

The budget was decreased during the year to allow for the closing of the café and therefore the reduction in sales. Consumer Directed Care administration fees were increased due to a shift of clients from Extended Aged Care at Home to Consumer Directed Care. Final result exceeded revised estimate.

Note 6 – Employee Costs

Budget was increased during the year to provide for wages for services for residential care due to the outcome of Aged Care Funding Instrument (ACFI). The final result reflects is due to an increase in nursing and training wages. A further increase occurred in long service leave paid which is offset by a reduction in provisions.

Note 7 – Materials, contracts and other expenses

Major budget variances occurred in general repairs and maintenance of existing facilities, increased in all utility charges, chemist supplies, registration and licenses, fuel costs, incontinence products, and interest on bonds repaid.

Note 8 – Depreciation

An increase in depreciation is due to the new building (stage 1B) opening December 2012.

Note 9 – Other non-cash provisions

Decrease in end of year employee entitlements.

Note 10 – Proceeds from disposal of assets

Trade-in proceeds from sale of motor vehicles which were replaced during the year.

Note 11 - Capital Expenditure – Asset Renewal and Replacement

The budget variance is due to the upgrade of the Fire Alarm System.

Note 12 – Capital Expenditure – New/Upgraded Assets

Budget result is due to the timing of payments for the major redevelopment. Overall project is currently on budget and due for completion in 2013.

Ratio Analysis

The following tables provide ratio analysis for the interim budget performance. They indicate improved results for both Municipal and Alwyndor activities.

Ratio – Municipal Funds	Target – from Long Term Financial Plan	Original Budget	Revised Budget Forecast	Interim Actual Results
Operating Ratio	≥ 0%	0%	-3%	-3%
Net Financial Liabilities ratio	35%	39%	32%	33%
Asset Sustainability Ratio	90% -110%	43%	57%	48%
Interest Cover Ratio	0 - 5%	3%	3%	2%

Ratio – Alwyndor Funds	Target – from Long Term Financial Plan	Original Budget	Revised Budget Forecast	Interim Actual Results
Operating Ratio	≥ 0%	3%	4%	1%
Net Financial Liabilities ratio	35%	88%	77%	77%
Asset Sustainability Ratio	90% -110%	53%	53%	50%
Interest Cover Ratio	0 - 5%	0%	0%	0%

2012/13 Carried Forward Budgets

Council previously approved \$1,573,831 comprising net operating and capital expenditure and \$2,000,000 property sale income to be carried forward to fund incomplete projects and programs. This was the maximum amount that could be carried forward after reviewing uncommitted budgets during July. The amount has been reduced due to additional July dated invoices being processed. The net operating and capital expenditure amount to be carried forward is \$1,333,658 as listed below:

Project	2012/13 Budget \$	2012/13 Spent \$	2013/14 Carried Forward \$
Jetty Road Mainstreet programs <i>This budget is fully funded from the Jetty Road Precinct Separate rate.</i>	619,947	585,946	34,001
Healthy Communities Initiative <i>This project is fully grant funded. The balance of grant funds is required to be acquitted.</i>	526,360	289,600	236,760
Home and Community Care - Variation <i>This project is fully grant funded. The balance of grant funds is required to be acquitted.</i>	70,000	25,432	44,568
History Centre <i>This carried forward budget is fully grant funded. Projects are nearing completion.</i>	24,727	18,120	6,607
Art for Public Spaces - Mike Turtur Bikeway <i>Grant funds for this project were confirmed in May 2013. The project will be completed in 2013/14.</i>	10,000	0	10,000
Total Operating Expenditure	1,251,034	919,098	331,936
Healthy Communities Initiative - Grant Income <i>This project is fully grant funded. The balance of grant funds are to be received.</i>	516,042	376,042	140,000
Stormwater Management Plan Income <i>To be received from Stormwater Management Authority at project completion.</i>	120,000	0	120,000
Total Operating Income	636,042	376,042	260,000

Major Plant and Equipment <i>Truck ordered in June expect delivery in July/August</i>	343,330	263,994	79,336
John Miller Reserve Shade <i>Project completion delayed subject to appeal by community.</i>	60,000	21,607	38,393
Old Gum Tree Reserve <i>Projected delayed due to environmental audit requirements. Expected October completion date.</i>	270,000	209,702	60,298
Colley Reserve - Rotunda Repairs <i>Project commenced and scope increased. To be funded over two financial years.</i>	66,088	21,657	44,431
Barrage Gates Walkway <i>Project has been funded over two financial years and will commence in 2013/14.</i>	100,000	0	100,000
Street Lighting Jetty Road Glenelg <i>Project completion delayed due to SA Power Networks requirements.</i>	200,000	46,319	153,681
Kingston Park Precinct 7 - Coast Park Design. <i>This project is fully grant funded. Funds have been received design is yet to commence.</i>	91,300	0	91,300
Mike Turtur Bike Path <i>Project commenced and will be completed in early 2013/14.</i>	1,284,078	670,061	614,017
Environmental Projects- formerly HEAT fund <i>All funds are committed</i>	369,670	289,404	80,266
Total Capital Expenditure	2,784,466	1,522,744	1,261,722
McFarlane Street Property Sale <i>Property sale delayed due to environmental audit. Sale will occur during 2013/14.</i>	2,000,000	0	2,000,000
Total Capital Income	2,000,000	0	2,000,000

The following table discloses the carried forward result and effect on cash funding:

	\$
Operating Expenditure	331,936
Less operating grant revenue	(260,000)
Capital Expenditure	1,261,722
Less property sale revenue	(2,000,000)
Total result to be carried forward	(666,342)
<i>To be represented by:</i>	
Increase in general cash funding	(666,342)

BUDGET

This report provides an analysis of Council's 2012/13 preliminary financial statements and recommends total net operating expenditure of \$71,936, capital expenditure of \$1,261,722 and property sale income of \$2,000,000 be carried forward to the 2013/14 budget.

LIFE CYCLE COSTS

This report has no direct implication for full life cycle costs.

**CITY OF HOLDFAST BAY
FINANCIAL STATEMENTS
2012/13 BUDGET FUNDING STATEMENT - MUNICIPAL**

	<u>ORIGINAL</u> <u>FULL YEAR</u> <u>BUDGET</u> \$	<u>CURRENT</u> <u>FULL YEAR</u> <u>FORECAST</u> \$	<u>INTERIM</u> <u>ACTUAL TO</u> <u>30 JUNE</u> \$	<u>NOTE</u>
Rates - General	27,270,400	27,297,100	27,298,304	
Rates - Jetty Road Glenelg	454,872	454,872	454,955	
Rates - Patawalonga Marina	63,600	63,600	63,602	
Rates - NRM Levy	959,380	959,380	959,513	
Statutory Charges	2,320,810	2,109,374	2,073,508	1
User Charges	2,366,893	2,193,893	2,178,180	2
Operating Grants & Subsidies	3,327,599	2,832,340	3,472,665	3
Investment Income	251,500	237,500	224,669	4
Reimbursements	392,002	512,561	596,630	5
Other	549,910	520,764	558,346	
Operating Revenue	37,956,966	37,181,384	37,880,372	
Employee Costs - Salaries & Wages	14,253,871	14,238,697	14,664,679	6
Materials, contracts and other expenses	15,235,095	16,206,117	16,516,479	7
Finance Charges	921,642	907,742	889,077	8
Depreciation	7,871,770	7,319,020	7,233,352	9
Less full cost attribution - % admin costs capitalised	(354,040)	(354,040)	(354,040)	
Less Operating Expenditure	37,928,338	38,317,536	38,949,547	
= Operating Surplus/(Deficit)	28,628	(1,136,152)	(1,069,175)	
Depreciation	7,871,770	7,319,020	7,233,352	
Other non-cash provisions - leave entitlements	199,110	199,110	313,352	10
Plus Non-Cash items in Operating Surplus/Deficit	8,070,880	7,518,130	7,546,704	
= Funds Generated from Operating Activities	8,099,508	6,381,978	6,477,529	
Amounts received for new/upgraded assets	-	1,245,174	1,239,598	11
Proceeds from disposal of assets	-	2,641,490	642,425	12
Plus funds sourced from Capital Activities	-	3,886,664	1,882,023	
Capital Expenditure-Asset Renewal and Replacement	(3,120,124)	(3,884,260)	(3,463,160)	13
Capital Expenditure-New and Upgraded Assets	(2,164,250)	(6,116,863)	(3,942,887)	14
Capital Expenditure-Full Cost Attribution	(354,040)	(354,040)	(354,000)	
Capital Expenditure-Environmental Projects	(300,000)	(262,000)	(223,231)	15
Capital Expenditure-Work in Progress	-	-	(1,162,796)	16
Less total capital expenditure	(5,938,414)	(10,617,163)	(9,146,074)	
Plus: Repayments of loan principal by sporting groups	151,078	151,078	269,923	17
Plus/(less) funds provided (used) by Investing Activities	151,078	151,078	269,923	
= FUNDING REQUIREMENT	2,312,172	(197,443)	(516,599)	
Funded by:				
Increase/(Decrease) in cash and cash equivalents	668,708	(1,211,777)	(1,129,734)	
Non-cash changes in Net Current Assets	-	-	(940,894)	
Less: New Borrowings carried forward 30/6/12 - report 334/12	-	(629,130)	(300,000)	18
Plus: Principal repayments Cash Advance Debentures @ 30/6/12	-	-	-	
Plus: Principal repayments of borrowings	1,643,464	1,643,464	1,854,029	19
	2,312,172	(197,443)	(516,599)	

CITY OF HOLDFAST BAY
INCOME STATEMENT - MUNICIPAL
FOR THE YEAR ENDED 30TH JUNE 2013

	<u>ORIGINAL</u> <u>FULL YEAR</u> <u>BUDGET</u>	<u>CURRENT</u> <u>FULL YEAR</u> <u>FORECAST</u>	<u>INTERIM</u> <u>ACTUAL TO</u> <u>30 JUNE</u>
	\$	\$	\$
REVENUES			
Rates - General	27,270,400	27,297,100	27,298,304
Rates - Jetty Road Glenelg	454,872	454,872	454,955
Rates - Patawalonga Marina	63,600	63,600	63,602
Rates - NRM Levy	959,380	959,380	959,513
Statutory Charges	2,320,810	2,109,374	2,073,508
User Charges	2,366,893	2,193,893	2,178,180
Operating Grants & Subsidies	3,327,599	2,832,340	3,472,665
Investment Income	251,500	237,500	224,669
Reimbursements	392,002	512,561	596,630
Other	549,910	520,764	558,346
TOTAL REVENUES	37,956,966	37,181,384	37,880,372
EXPENSES			
Employee Costs	13,899,831	13,884,657	14,310,639
Materials, contracts and other expenses	15,235,095	16,206,117	16,516,479
Finance Charges	921,642	907,742	889,077
Depreciation	7,871,770	7,319,020	7,233,352
TOTAL EXPENSES	37,928,338	38,317,536	38,949,547
Operating Surplus/(Deficit) - Before Capital Revenue	28,628	(1,136,152)	(1,069,175)
Gain/(loss) on disposal of assets	-	-	386,654
Amounts specifically for new or upgraded assets	-	1,245,174	1,239,598
NET SURPLUS/(DEFICIT)	28,628	109,022	557,077

CITY OF HOLDFAST BAY
BALANCE SHEET
AS AT 30TH JUNE 2013

	<u>ORIGINAL</u> <u>FULL YEAR</u> <u>BUDGET</u> \$	<u># CURRENT</u> <u>FULL YEAR</u> <u>FORECAST</u> \$	<u>INTERIM</u> <u>ACTUAL TO</u> <u>30 JUNE</u> \$
CURRENT ASSETS			
Cash and cash equivalents	7,047,815	2,829,223	2,911,644
Trade and Other Receivables	3,026,000	3,948,000	2,016,205
Inventory	17,000	16,000	12,051
TOTAL CURRENT ASSETS	<u>10,090,815</u>	<u>6,793,223</u>	<u>4,939,900</u>
NON-CURRENT ASSETS			
Financial Assets	1,570,550	1,713,922	1,927,384
Equity accounted investments-Council businesses	1,857,000	1,931,000	1,931,226
Land, Infrastructure, Property, Plant & Equipment	559,494,955	572,352,653	573,395,704
TOTAL NON-CURRENT ASSETS	<u>562,922,505</u>	<u>575,997,575</u>	<u>577,254,314</u>
TOTAL ASSETS	<u>573,013,320</u>	<u>582,790,798</u>	<u>582,194,214</u>
CURRENT LIABILITIES			
Trade and Other Payables	5,758,000	3,967,000	4,902,763
Borrowings	3,364,283	3,499,000	2,027,477
Short-term Provisions	1,603,952	1,350,110	1,180,262
TOTAL CURRENT LIABILITIES	<u>10,726,235</u>	<u>8,816,110</u>	<u>8,110,502</u>
NON-CURRENT LIABILITIES			
Long-term Borrowings	15,273,038	10,978,666	10,583,142
Long-term Provisions	138,000	206,000	268,661
Other Non-current Liabilities	54,000	49,000	49,595
TOTAL NON-CURRENT LIABILITIES	<u>15,465,038</u>	<u>11,233,666</u>	<u>10,901,398</u>
TOTAL LIABILITIES	<u>26,191,273</u>	<u>20,049,776</u>	<u>19,011,900</u>
NET ASSETS	<u>546,822,047</u>	<u>562,741,022</u>	<u>563,182,314</u>
EQUITY			
Accumulated Surplus	149,247,803	151,425,022	152,369,624
Asset Revaluation Reserve	394,818,000	408,583,000	408,576,294
Other Reserves	2,756,244	2,733,000	2,236,396
TOTAL EQUITY	<u>546,822,047</u>	<u>562,741,022</u>	<u>563,182,314</u>

figures updated with 11/12 audited figures

-

-

CITY OF HOLDFAST BAY
STATEMENT OF CHANGES IN EQUITY
FOR THE YEAR ENDED 30TH JUNE 2013

	<u>ORIGINAL</u> <u>FULL YEAR</u> <u>BUDGET</u>	<u>CURRENT</u> <u>FULL YEAR</u> <u>FORECAST</u>	<u>INTERIM</u> <u>ACTUAL TO</u> <u>30 JUNE</u>
ACCUMULATED SURPLUS	\$	\$	\$
Balance at beginning of period	149,219,175	150,995,000	150,995,000
Net Surplus/(Deficit)	28,628	109,022	557,077
Transfers from reserves	-	321,000	817,547
Balance at end of period	<u>149,247,803</u>	<u>151,425,022</u>	<u>152,369,624</u>
ASSET REVALUATION RESERVE	394,818,000	408,583,000	408,576,294
PLANT AND MACHINERY RESERVE			
Balance at beginning of period	321,000	321,000	321,000
Transfers to reserve	-	-	-
Transfers from reserve	-	(321,000)	(321,000)
PLANT AND MACHINERY RESERVE	<u>321,000</u>	<u>-</u>	<u>-</u>
FURNITURE AND EQUIPMENT RESERVE	279,125	310,000	-
PROPERTY DEVELOPMENT RESERVE	53,044	53,000	-
GLENELG ACCESS STRATEGY/OFF ST CARPARK DEV.	2,100,000	2,100,000	2,100,283
BRIGHTON CARAVAN PARK	3,075	134,000	-
COMMITTED EXPENDITURE RESERVE	-	136,000	136,113
TOTAL RESERVES CLOSING BALANCE	<u>397,574,244</u>	<u>411,316,000</u>	<u>410,812,690</u>
TOTAL EQUITY	<u>546,822,047</u>	<u>562,741,022</u>	<u>563,182,314</u>

CITY OF HOLDFAST BAY
BUDGETED STATEMENT OF CASH FLOWS - MUNICIPAL
FOR THE YEAR ENDED 30TH JUNE 2013

	<u>ORIGINAL</u> <u>FULL YEAR</u> <u>BUDGET</u>	<u>CURRENT</u> <u>FULL YEAR</u> <u>FORECAST</u>	<u>INTERIM</u> <u>ACTUAL TO</u> <u>30 JUNE</u>
	\$	\$	\$
	(OUTFLOWS)	(OUTFLOWS)	(OUTFLOWS)
CASH FLOWS FROM OPERATING ACTIVITIES			
<u>Receipts</u>			
Operating Receipts	37,956,966	37,181,384	37,779,926
<u>Payments</u>			
Operating payments to suppliers and employees	(28,935,816)	(29,891,664)	(29,472,426)
Finance Payments	(921,642)	(907,742)	(889,077)
NET CASH PROVIDED BY OPERATING ACTIVITIES	<u>8,099,508</u>	<u>6,381,978</u>	<u>7,418,423</u>
CASH FLOWS FROM INVESTING ACTIVITIES			
<u>Receipts</u>			
Amounts received for new assets	-	1,245,174	1,239,598
Sale of replaced assets	-	216,490	217,172
Sale of surplus assets	-	2,425,000	425,253
Repayments of loans (principal) by community groups	151,078	151,078	269,923
<u>Payments</u>			
Expenditure on renewal/replacement of assets	(3,420,124)	(4,146,260)	(3,496,011)
Expenditure on new/upgraded assets	(2,518,290)	(6,470,903)	(5,650,063)
NET CASH (USED IN) INVESTING ACTIVITIES	<u>(5,787,336)</u>	<u>(6,579,421)</u>	<u>(6,994,128)</u>
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from new borrowings	-	629,130	300,000
Repayments of Borrowings - External	(1,643,464)	(1,643,464)	(1,854,029)
NET CASH PROVIDED BY FINANCING ACTIVITIES	<u>(1,643,464)</u>	<u>(1,014,334)</u>	<u>(1,554,029)</u>
NET INCREASE (DECREASE) IN CASH HELD	668,708	(1,211,777)	(1,129,734)
CASH AND CASH EQUIVALENTS AT BEGINNING OF			
REPORTING PERIOD	6,379,107	4,041,000	4,041,378
CASH AND CASH EQUIVALENTS AT END OF			
REPORTING PERIOD	<u>7,047,815</u>	<u>2,829,223</u>	<u>2,911,644</u>

CITY OF HOLDFAST BAY
UNIFORM PRESENTATION OF FINANCES - MUNICIPAL FUNDS
FOR THE YEAR ENDED 30TH JUNE 2013

	<u>ORIGINAL</u> <u>FULL YEAR</u> <u>BUDGET</u> \$	<u>CURRENT</u> <u>FULL YEAR</u> <u>FORECAST</u> \$	<u>INTERIM</u> <u>ACTUAL TO</u> <u>30 JUNE</u> \$
Operating Revenues	37,956,966	37,181,384	37,880,372
less Operating Expenses	(37,928,338)	(38,317,536)	(38,949,547)
Operating Surplus/(Deficit) before Capital Amounts	28,628	(1,136,152)	(1,069,175)
Less net outlays on Existing Assets			
Capital Expenditure on renewal & replacement of existing assets	3,420,124	4,146,260	3,496,011
Less Depreciation	(7,871,770)	(7,319,020)	(7,233,352)
Less Proceeds from Sale of Replaced Assets	-	-	(217,172)
	(4,451,646)	(3,172,760)	(3,954,513)
Less outlays on New and Upgraded Assets			
Capital Expenditure on new & upgraded assets	2,518,290	6,470,903	5,650,063
Less Amounts received for new/upgraded assets	-	(1,245,174)	(1,239,598)
	2,518,290	5,225,729	4,410,465
Net lending/(borrowing) for financial year	<u>1,961,984</u>	<u>(3,189,121)</u>	<u>(1,525,127)</u>

FINANCIAL INDICATORS
FOR THE YEAR ENDED 30TH JUNE 2013

	<u>ORIGINAL</u> <u>FULL YEAR</u> <u>BUDGET</u> \$	<u>CURRENT</u> <u>FULL YEAR</u> <u>FORECAST</u> \$	<u>INTERIM</u> <u>ACTUAL TO</u> <u>30 JUNE</u> \$
OPERATING SURPLUS RATIO (Operating surplus/(deficit) before capital amounts as % of general revenue and other rates, net of NRM Levy)	0%	-3%	-3%
NET FINANCIAL LIABILITIES - (Total liabilities less financial assets)	14,546,908	11,558,631	12,156,667
NET FINANCIAL LIABILITIES RATIO (Total liabilities less financial assets as % of total operating revenue, net of NRM Levy)	39%	32%	33%
INTEREST COVER RATIO (Net interest expense as % of total operating revenue less NRM Levy less investment income)	3%	3%	2%
ASSET SUSTAINABILITY RATIO (Capital expenditure on renewal/replacement of existing assets, excluding new capital expenditure as % of depreciation expense)	43%	57%	48%

CITY OF HOLDFAST BAY
FINANCIAL STATEMENTS
2012/13 BUDGET FUNDING STATEMENT - ALWYNDOR

	<u>ORIGINAL</u> <u>FULL YEAR</u> <u>BUDGET</u> \$	<u>CURRENT</u> <u>FULL YEAR</u> <u>FORECAST</u> \$	<u>INTERIM</u> <u>ACTUAL TO</u> <u>30 JUNE</u> \$	<u>NOTE</u>
User Charges	3,070,652	3,164,531	3,339,233	1
Operating Grants & Subsidies	9,556,447	9,399,447	9,165,571	2
Investment Income	219,087	581,787	690,023	3
Reimbursements	248,955	248,955	297,158	4
Other	580,544	557,227	564,536	5
Operating Revenue	13,675,685	13,951,947	14,056,521	
Employee Costs - Salaries & Wages	9,467,286	9,644,241	9,756,794	6
Materials, contracts and other expenses	3,368,166	3,324,658	3,639,962	7
Depreciation	431,125	431,125	530,367	8
Less Operating Expenditure	13,266,577	13,400,024	13,927,123	
= Operating Surplus/(Deficit)	409,108	551,923	129,398	
Depreciation	431,125	431,125	530,367	
Other non-cash provisions	194,264	194,264	145,273	9
Plus Non-Cash items in Operating Surplus/Deficit	625,389	625,389	675,640	
= Funds Generated from Operating Activities	1,034,497	1,177,312	805,038	
plus proceeds from disposal of assets	-	-	64,727	10
Capital Expenditure-Asset Renewal and Replacement	(226,625)	(226,625)	(265,473)	11
Capital Expenditure-New and Upgraded Assets	(6,184,605)	(5,842,605)	(5,690,333)	12
Less total capital expenditure	(6,411,230)	(6,069,230)	(5,955,806)	
= FUNDING REQUIREMENT	(5,376,733)	(4,891,918)	(5,086,041)	
Funded by:				
Increase/(Decrease) in cash and cash equivalents	(5,376,733)	(4,891,918)	(5,086,041)	
Non-cash changes in Net Current Assets	-	-	-	
	(5,376,733)	(4,891,918)	(5,086,041)	

**CITY OF HOLDFAST BAY
INCOME STATEMENT - ALWYNDOR
FOR THE YEAR ENDED 30TH JUNE 2013**

	<u>ORIGINAL</u> <u>FULL YEAR</u> <u>BUDGET</u>	<u>CURRENT</u> <u>FULL YEAR</u> <u>FORECAST</u>	<u>INTERIM</u> <u>ACTUAL TO</u> <u>30 JUNE</u>
	\$	\$	\$
REVENUES			
User Charges	3,070,652	3,164,531	3,339,233
Operating Grants & Subsidies	9,556,447	9,399,447	9,165,571
Investment Income	219,087	581,787	690,023
Reimbursements	248,955	248,955	297,158
Other	580,544	557,227	564,536
TOTAL REVENUES	13,675,685	13,951,947	14,056,521
EXPENSES			
Employee Costs	9,467,286	9,644,241	9,756,794
Materials, contracts and other expenses	3,368,166	3,324,658	3,639,962
Depreciation	431,125	431,125	530,367
TOTAL EXPENSES	13,266,577	13,400,024	13,927,123
Operating Surplus/(Deficit) - Before Capital Revenue	409,108	551,923	129,398
Gain/(loss) on disposal of assets	-	-	(22,530)
NET SURPLUS/(DEFICIT)	409,108	551,923	106,868

**CITY OF HOLDFAST BAY
BALANCE SHEET- ALWYNDOR
AS AT 30TH JUNE 2013**

	<u>ORIGINAL</u> <u>FULL YEAR</u> <u>BUDGET</u>	<u># CURRENT</u> <u>FULL YEAR</u> <u>FORECAST</u>	<u>INTERIM</u> <u>ACTUAL TO</u> <u>30 JUNE</u>
	\$	\$	\$
CURRENT ASSETS			
Cash and cash equivalents	5,102,390	10,423,367	10,176,383
Trade and Other Receivables	4,008,527	2,524,395	4,788,610
TOTAL CURRENT ASSETS	9,110,917	12,947,762	14,964,993
NON-CURRENT ASSETS			
Land, Infrastructure, Property, Plant & Equipment	38,936,999	37,690,816	37,390,891
TOTAL NON-CURRENT ASSETS	38,936,999	37,690,816	37,390,891
TOTAL ASSETS	48,047,916	50,638,578	52,355,884
CURRENT LIABILITIES			
Trade and Other Payables	20,439,724	22,838,409	24,676,649
Short-term Provisions	621,020	660,786	999,928
TOTAL CURRENT LIABILITIES	21,060,744	23,499,195	25,676,577
NON-CURRENT LIABILITIES			
Long-term Provisions	119,347	160,722	145,701
TOTAL NON-CURRENT LIABILITIES	119,347	160,722	145,701
TOTAL LIABILITIES	21,180,091	23,659,917	25,822,278
NET ASSETS	26,867,825	26,978,661	26,533,606
EQUITY			
Accumulated Surplus	17,445,149	17,685,448	11,863,660
Asset Revaluation Reserve	8,488,306	8,358,843	8,358,843
Other Reserves	934,370	934,370	6,311,103
TOTAL EQUITY	26,867,825	26,978,661	26,533,606

figures updated with 11/12 audited figures

CITY OF HOLDFAST BAY
STATEMENT OF CHANGES IN EQUITY - ALWYNDOR
FOR THE YEAR ENDED 30TH JUNE 2013

	<u>ORIGINAL</u> <u>FULL YEAR</u> <u>BUDGET</u>	<u>CURRENT</u> <u>FULL YEAR</u> <u>FORECAST</u>	<u>INTERIM</u> <u>ACTUAL TO</u> <u>30 JUNE</u>
	\$	\$	\$
ACCUMULATED SURPLUS			
Balance at beginning of period	11,659,308	11,756,792	11,756,792
Net Surplus/(Deficit)	409,108	551,923	106,868
Transfers from reserves	5,376,733	5,376,733	-
Transfers (to) reserves	-	-	-
Balance at end of period	<u>17,445,149</u>	<u>17,685,448</u>	<u>11,863,660</u>
ASSET REVALUATION RESERVE	8,488,306	8,358,843	8,358,843
ALWYNDOR RESERVE			
Balance at beginning of period	6,311,103	6,311,103	6,311,103
Transfers to reserve	-	-	-
Transfers from reserve	(5,376,733)	(5,376,733)	-
Balance at end of period	<u>934,370</u>	<u>934,370</u>	<u>6,311,103</u>
TOTAL RESERVES CLOSING BALANCE	<u>9,422,676</u>	<u>9,293,213</u>	<u>14,669,946</u>
TOTAL EQUITY	<u>26,867,825</u>	<u>26,978,661</u>	<u>26,533,606</u>

CITY OF HOLDFAST BAY
BUDGETED STATEMENT OF CASH FLOWS ALWYNDOR
FOR THE YEAR ENDED 30TH JUNE 2013

	<u>ORIGINAL</u> <u>FULL YEAR</u> <u>BUDGET</u>	<u>CURRENT</u> <u>FULL YEAR</u> <u>FORECAST</u>	<u>INTERIM</u> <u>ACTUAL TO</u> <u>30 JUNE</u>
	\$	\$	\$
	(OUTFLOWS)	(OUTFLOWS)	(OUTFLOWS)
CASH FLOWS FROM OPERATING ACTIVITIES			
<u>Receipts</u>			
Operating Receipts	13,675,685	13,951,947	14,461,895
<u>Payments</u>			
Operating payments to suppliers and employees	(12,641,188)	(12,774,635)	(13,622,355)
NET CASH PROVIDED BY OPERATING ACTIVITIES	<u>1,034,497</u>	<u>1,177,312</u>	<u>839,540</u>
CASH FLOWS FROM INVESTING ACTIVITIES			
<u>Receipts</u>			
Sale of replaced assets	-	-	64,727
<u>Payments</u>			
Expenditure on renewal/replacement of assets	(226,625)	(226,625)	(265,473)
Expenditure on new/upgraded assets	(6,184,605)	(5,842,605)	(6,499,844)
Contribution to associated entity - WRWMA	-	-	-
Net purchase investments - Internal Loan	-	-	-
NET CASH (USED IN) INVESTING ACTIVITIES	<u>(6,411,230)</u>	<u>(6,069,230)</u>	<u>(6,700,590)</u>
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from Aged Care Facility Deposits	-	-	5,992,342
Repayments of Aged Care Facility Deposits	-	-	(5,270,194)
NET CASH PROVIDED BY FINANCING ACTIVITIES	<u>-</u>	<u>-</u>	<u>722,148</u>
NET INCREASE (DECREASE) IN CASH HELD	<u>(5,376,733)</u>	<u>(4,891,918)</u>	<u>(5,138,902)</u>
CASH AND CASH EQUIVALENTS AT BEGINNING OF			
REPORTING PERIOD	10,479,123	15,315,285	15,315,285
CASH AND CASH EQUIVALENTS AT END OF			
REPORTING PERIOD	<u>5,102,390</u>	<u>10,423,367</u>	<u>10,176,383</u>

CITY OF HOLDFAST BAY
UNIFORM PRESENTATION OF FINANCES - ALWYNDOR
FOR THE YEAR ENDED 30TH JUNE 2013

	<u>ORIGINAL</u> <u>FULL YEAR</u> <u>BUDGET</u> \$	<u>CURRENT</u> <u>FULL YEAR</u> <u>FORECAST</u> \$	<u>INTERIM</u> <u>ACTUAL TO</u> <u>30 JUNE</u> \$
Operating Revenues	13,675,685	13,951,947	14,056,521
less Operating Expenses	<u>(13,266,577)</u>	<u>(13,400,024)</u>	<u>(13,927,123)</u>
Operating Surplus/(Deficit) before Capital Amounts	409,108	551,923	129,398
Less net outlays on Existing Assets			
Capital Expenditure on renewal & replacement of existing assets	226,625	226,625	265,473
Less Depreciation	<u>(431,125)</u>	<u>(431,125)</u>	<u>(530,367)</u>
	<u>(204,500)</u>	<u>(204,500)</u>	<u>(264,894)</u>
Less outlays on New and Upgraded Assets			
Capital Expenditure on new & upgraded assets	6,184,605	5,842,605	6,499,844
Less Amounts received for new/upgraded assets	<u>-</u>	<u>-</u>	<u>-</u>
	<u>6,184,605</u>	<u>5,842,605</u>	<u>6,499,844</u>
Net lending/(borrowing) for financial year	<u><u>(5,570,997)</u></u>	<u><u>(5,086,182)</u></u>	<u><u>(6,105,552)</u></u>

FINANCIAL INDICATORS - ALWYNDOR
FOR THE YEAR ENDED 30TH JUNE 2013

	<u>ORIGINAL</u> <u>FULL YEAR</u> <u>BUDGET</u> \$	<u>CURRENT</u> <u>FULL YEAR</u> <u>FORECAST</u> \$	<u>INTERIM</u> <u>ACTUAL TO</u> <u>30 JUNE</u> \$
OPERATING SURPLUS RATIO (Operating surplus/(deficit) before capital amounts as % of general revenue and other rates, net of NRM Levy)	3%	4%	1%
NET FINANCIAL LIABILITIES - (Total liabilities less financial assets)	12,069,174	10,712,155	10,857,285
NET FINANCIAL LIABILITIES RATIO (Total liabilities less financial assets as % of total operating revenue, net of NRM Levy)	88%	77%	77%
INTEREST COVER RATIO (Net interest expense as % of total operating revenue less NRM Levy less investment income)	0%	0%	0%
ASSET SUSTAINABILITY RATIO (Capital expenditure on renewal/replacement of existing assets, excluding new capital expenditure as % of depreciation expense)	53%	53%	50%

Item No: **14.3**

Subject: **STORMWATER MANAGEMENT PLAN – COMMUNITY CONSULTATION**

Date: 10 September 2013

Written By: Manager Contracts and Strategic Projects

General Manager: City Assets, Mr S Hodge

SUMMARY

The development of a Stormwater Management Plan is a requirement of the Local Government Amendment Act and requires Councils within the catchment area to develop a plan to manage stormwater.

The Cities of Marion and Holdfast Bay have been working collaboratively since 2010 on this plan. The recommendations of this plan are far reaching (flood protection, water quality improvements and recommended changes to the Development Plan) and will require both Councils to continue to work together and commit significant financial resources to deliver these outcomes.

This report provides a summary of the recent community consultation undertaken with respect to the joint Stormwater Management Plan (SMP) between the Cities of Marion and Holdfast Bay and details the next step in the endorsement of this document.

RECOMMENDATION

- 1. Council notes the feedback received from the community with respect to the Stormwater Management Plan and based on this feedback and proposed minor changes endorse the current draft plan for submission to the State Government for approval.**
 - 2. The adopted plan be forwarded to the Department Natural Resources Adelaide Mount Lofty Ranges for comment and then to the Stormwater Management Authority for approval.**
 - 3. That the Chief Executive Officer be delegated the authority to negotiate a joint agreement between the Cities of Marion and Holdfast Bay for the progression of the recommendations detailed in the Stormwater Management Plan.**
 - 4. That an allocation of \$15,000 be considered in the next budget review to fund cost already incurred for brochures and flood plain mapping associated with community consultation of the plan and expected costs to gain approval of the plan from the State Government.**
-

COMMUNITY PLAN

A Place for every generation
A Place that is safe and secure
A Place that values its natural environment
A place that provides value for money

COUNCIL POLICY

N/A

STATUTORY PROVISIONS

Local Government Act 1999 and the Local Government (Stormwater Management) Amendment Act 2007

BACKGROUND

On the 9 July 2013 the Cities of Marion and Holdfast Bay considered a report on the draft Stormwater Management Plan (SMP) which is a requirement of the Local Government (Stormwater Management) Amendment Act 2007.

This Act requires Councils that share a common catchment to develop SMP for the catchment and after consultation seek approval from the State Government's authority (Stormwater Management Authority) for this plan. On the 2 July 2013 a joint presentation was undertaken to both Councils and subsequently a report was tabled on the 9 July 2013 (report No 229/13) that:

1. *That Council note the report.*
2. *Council endorses the Draft Stormwater Management Plan, Coastal Catchments between Glenelg and Marino for joint community consultation.*
3. *Following public consultation the Plan be reviewed and a final Plan and a report be provided to Council for endorsement.*

Following endorsement of the plan community consultation has been undertaken and this report will summarise the outcomes of that consultation plus any changes that have been suggested by the community.

REPORT

The Local Government Act (1999) and the Local Government (Stormwater Management) Amendment Act 2007 requires Council to consult on the draft SMP prior to it being considered by the State Government for endorsement as a catchment plan for the management of stormwater.

Consultation process

To comply with this requirement both Marion and Holdfast Bay have undertaken the following consultation with its community.

Since the endorsement of the draft SMP on the 9 July 2013 (by both Councils) have undertaken a program of consultation that commenced on the 10 July and concluded on 2 August 2013. This program included:

- Briefing of local media (Messenger) which resulted in a page 3 article on the 17 July 2013.
- Public Notice in the Messenger detailing where additional information on the SMP can be gained.
- Mail out to all residents on the SMP (56,200 brochures delivered to every household in Marion and Holdfast Bay refer Attachment 1).
- On line website with interactive maps and information created.
- A total of 24 hours of public meetings (including 2 at Marion Council and one each at Brighton and Glenelg).
- Ability to comment online or by written submission.

The above information has ensured that Council has not only meet the minimum requirement with respect to the Act as it relates to consultation but has also allowed the community ample opportunity to be informed and make comment on the draft SMP.

Refer Attachment 1

Outcomes or comments from the community consultation

Following the information provided to the community (media and letter to residents) a total of eight open information sessions were conducted:

Location	Afternoon session	Evening session
24 July at Marion Civic Centre	2-5pm	6-9pm
25 July at Brighton Civic Centre	2-5pm	6-9pm
29 July at Marion Civic Centre	2-5pm	6-9pm
30 July at Glenelg Town hall	2-5pm	6-9pm

These sessions resulted in a total of 75 people attending and seeking information. The main area of concern or interest raised by those attending was related to individual properties and what affect a significant rainfall event would have on their individual property.

At each of the information sessions Council also arranged for the SES (FloodSafe unit) to be present to inform residents in flood prone areas of simple ways to protect individual properties from flood damage. The SES will also offer similar education sessions to residents as part of its

community education program in the coming months and years. This education is part funded by both Councils as part of an annual contribution to SES Floodsafe program.

In addition to the public meeting Council also received a number of direct calls from residents (while not logged it is expected that around 20 enquires across both Councils were received and dealt with over the consultation period).

From this process Council only recorded one written submission (refer Attachment 2).

This submission was received from Minda. The submission raised a number of concerns with respect to:

- The perceived inundation of the Minda land with stormwater from the catchment by Council.
- The need to change wording in the draft SMP to better reflect discussions held between Minda and City Holdfast Bay on potential joint stormwater infrastructure objectives.
- A more detailed description of what catchment wide approaches that Council may take to mitigate inflow to the Minda site in a 1:100 year Average Rainfall Intensity (ARI).
- A review of the hazard rating of the Minda site in relation to the cost and potential injury as a result of a 1:100 year ARI event

While the comments raised by Minda are acknowledged (the land is located in one of the lowest points within the catchment and stormwater is blocked from discharge to the sea by the existing sand dunes) and as such will be subject to flooding in a 1:100 year ARI event. Council does not intentionally discharge any stormwater on to the Minda site however in a 1:100 year rainfall event water will not be able to be contained within existing infrastructure (pipes and roadway) and will find its way onto the Minda site as a result of the natural typography of the land.

In relation to the redevelopment of Minda (including proposed wetlands) Council sees considerable benefit in working with Minda on the proposed wetland as it not only reduces flooding to properties to the north of Minda but also provides an integrated catchment solution that is cost effective and provides the potential for reuse of stormwater. This integrated solution should also reflect the potential upstream catchment opportunities to reduce the volume of water that accumulates in Minda in a 1:100 year ARI event.

The changes suggested by Minda to the draft SMP are consistent with discussions that have been held between the parties and are considered appropriate and subject to Council's endorsement of this report the wording within the SMP will be changed to reflect comments submitted by Minda.

In summary all those members of the community that have engaged with Council through the consultation process have expressed overwhelming support for the plan and indicated a desire for, both Councils to progress the implementation of the SMP.

Refer Attachment 2

Next steps

Once both Councils have endorsed the draft SMP the plan needs to be submitted to the Department of Environment, Water and Natural resources (Natural Resources Adelaide and Mt Lofty Ranges) for comment. Once recommended the plan will then be forwarded to Stormwater Management Authority for approval. This process will take some months to obtain the necessary approvals but should be completed by early 2014.

In the meantime there are a number of key issues identified in the SMP that need to be progressed including:

- Development of a formal agreement between the two catchment Councils that will define the objectives, the works and the funding model.
- Reflect within each Council's Long Term Financial Plan (LTFP) the cost of implementing the works identified in the SMP such that the works are aligned with each Council's LTFP and delivered so as not to exacerbate stormwater issues downstream.
- Work collaboratively with Marion to discuss with the State Government the need to implement planning and development approval measures that reduce the impact of urban infill on stormwater discharge.
- Work to ensure a common approach within each Council's Development Plan with respect to the management of stormwater.
- Approach the Stormwater Management Authority in respect to future funding of projects and the likely timelines for that funding.

BUDGET

The draft SMP envisages expenditure across the two Councils of around \$23 million. These works will need to be reflected in the respective Council's Long Term Financial Plan. At this time the City Holdfast Bay does not have its share of funds reflected in its LTFP but is expected to consider a report shortly on the projects identified in the SMP and the prioritisation of these projects based on practicality and risk. Once this report has been considered by both Councils it is envisaged that the City Holdfast Bay's LTFP will be upgraded to reflect that of Marion and available funding from the State Government.

While Council has not allocated any funds in the current financial year 2013/14 for progressing the physical outcomes of the SMP it does need to cover cost that have been incurred in communicating the plan to the community as part of the consultation process (community flyer to each house, development of flooding maps for web site, other promotional material and printing) the cost to date for these items has been \$6,100 (in the current financial year) in addition to these costs there will be future expenditure in gaining approval of the SMP from the State Government. It is therefore recommended that an allocation of \$15,000 be considered in Budget Review 1.

LIFE CYCLE COSTS

Given that the cost of implementing the SMP will be significant for all Councils there will be a need to ensure that funding is set aside in each Council's LTFP. While these funds will enable construction of the assets identified in the plan there are other cost associated with the creation of new assets that Council needs to be aware of and budget for in future operational and capital budgets. These include additional cost for maintenance and depreciation to fund the eventual replacement of these assets. While these costs will be significant the expected life of stormwater assets (80-100 years) will enable replacement funds to be accumulated at a rate that will not have a dramatic impact on depreciation.



STORMWATER PLANNING

BE INFORMED. BE ASSURED. BE WATER SENSITIVE.

THE CITIES OF HOLDFAST BAY AND MARION ARE COMMITTED TO BECOMING 'WATER SENSITIVE CITIES', WHICH BROADLY MEANS MINIMISING THE RISK OF FLOODING, HARNESSING THE POTENTIAL OF STORMWATER TO OVERCOME WATER SHORTAGES AND IMPROVING THE HEALTH OF OUR WATERWAYS.

Together, we have developed a long-term plan to reduce the risk of flooding to homes and businesses across our shared coastal catchment area.

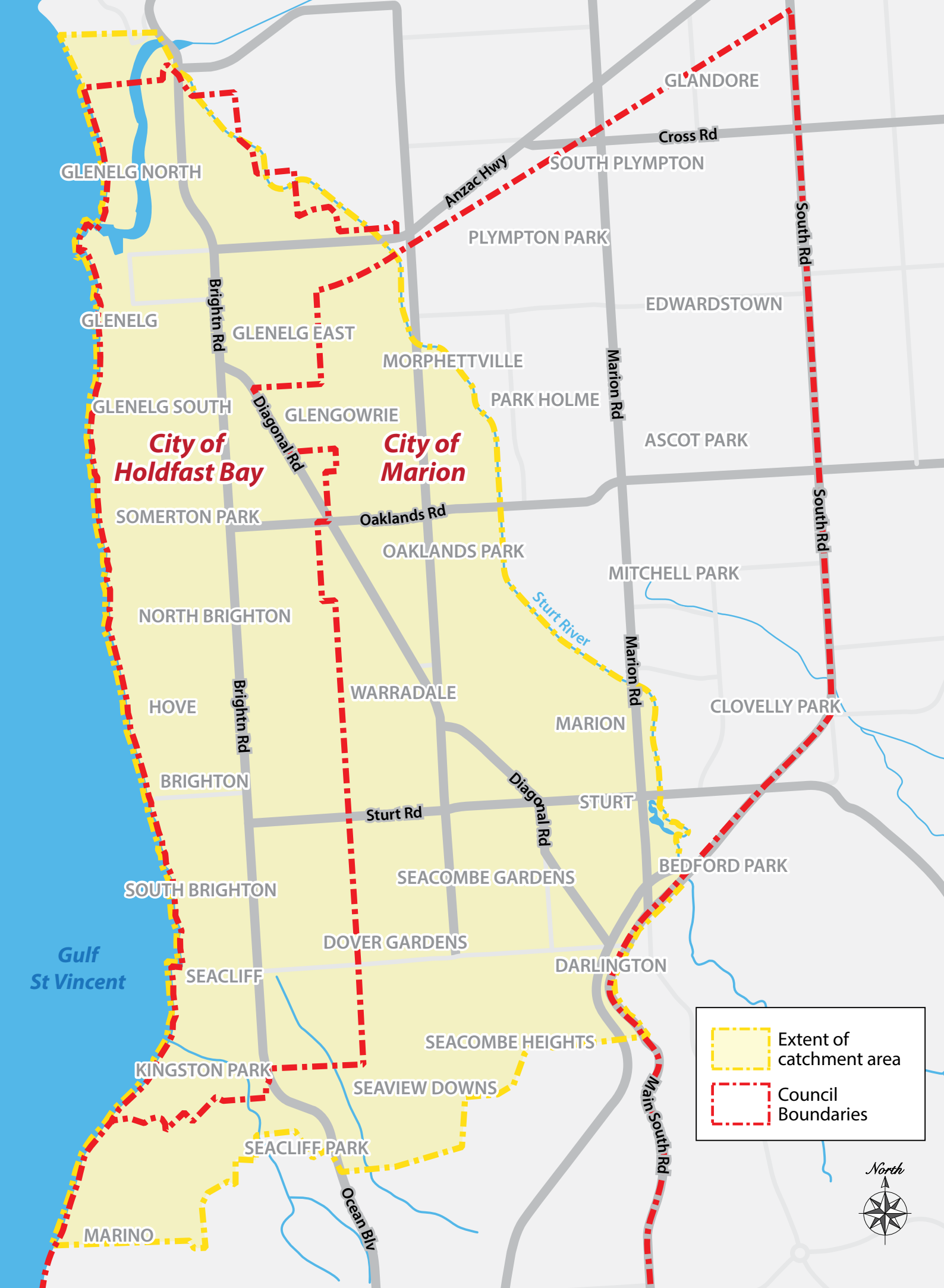
Our joint Stormwater Management Plan involves investing about \$23 million to progressively:

- upgrade the drainage system to manage stormwater from unusually severe rain events
- improve the planning system
- improve the quality of stormwater
- use stormwater more effectively.

High-tech data has enabled us to create detailed flood-modelling maps for our catchment area. These maps help us estimate the potential impact of unusually severe rain events – and to know where we need to upgrade our drainage system.



Both councils have agreed to start implementing the plan, some elements of which will be subject to external funding.

We invite you to consider our joint Stormwater Management Plan and assess your home and/or business with our detailed flood-modelling maps, which are now available for you to view online, at our Drop-in Information Sessions or via your council (see the back page of this flyer for more information and contact details).



**City of
Holdfast Bay**

**City of
Marion**

	Extent of catchment area
	Council Boundaries



QUESTIONS AND ANSWERS

HOW WAS THE PLAN DEVELOPED?

The plan was developed in conjunction with the Stormwater Management Authority, the Adelaide and Mount Lofty Natural Resources Management Board and leading stormwater management and drainage system company Tonkin Consulting.

WHAT IS THE COASTAL CATCHMENT AREA?

Our cities' shared coastal catchment area is about 35 square kilometres and stretches from Glenelg to Marino. It is bordered in the north and east by the Sturt River. The map opposite shows the extent of the catchment area.

WHAT DOES THE STORMWATER MANAGEMENT PLAN ADDRESS FIRST AND WHEN WILL WORK START?

The plan outlines a large amount of work (an investment of about \$23 million), and this work will be staged over the next few years according to priority. Areas that have been identified as prone to flooding now, or at risk in the future, will be addressed first.

We will soon begin work on detailed designs to upgrade our drainage system. We will also be developing ways to improve our rainfall monitoring, and undertaking the supportive work that will enable the plan to proceed.

We expect construction on the drainage system to start within two years. Both councils will work with the State Government to implement the plan, and we will keep you informed about the plan's progress.

HOW CAN I FIND OUT HOW MY HOME OR BUSINESS PREMISES MIGHT BE AFFECTED BY SEVERE RAIN EVENTS?

Our flood-modelling maps allow you to see whether your home or business premises is currently at high or low risk of flooding in the event of an unusually severe rain event. You can view the maps at one of our Drop-in Information Sessions, by visiting your council's website or, if you don't have access to the internet, by contacting your local council. See the back page of this flyer for contact details.

WHAT DO THE FLOOD-MODELLING MAPS SHOW?

The flood-modelling maps have been created using high-tech data. They show the anticipated impact of a one-in-100 year rain event in our shared catchment area today (ie, before the plan is implemented) and a forecast of what it might look like in 30 years if we were to do nothing (ie, if this plan was not implemented). These maps have enabled us to identify where we need to improve existing drainage system or build new infrastructure.

WHAT IS A ONE-IN-100-YEAR RAIN EVENT?

This 'worst case scenario' is used by technical experts to model the potential impact of unusually severe rain events. (The plan also looks at one-in-five-year rain events.) Each scenario is calculated on the intensity of rain falling over a certain period of time. For example, in this catchment area, 82mm of rain falling over a six-hour period would be considered a one-in-100-year event – that's almost as much rain as we'd typically expect in the whole month of June.

It's important to understand that planning for a one-in-100-year rain event does not mean that this kind of event will occur once in every hundred years: it may happen more or less, or not at all. The plan aims to ensure that if it does happen, we are all well prepared.

HOW DO I KNOW IF MY PROPERTY IS CONSIDERED 'AT RISK'?

We encourage you to look at the plan and our flood-modelling maps online and/or attend one of our Drop-in Information Sessions, where our technical experts can explain the plan to you and help you locate your property on our flood maps. You are also welcome to contact us by mail, email, phone or in person (see your council's contact details on the back page of this flyer).

WHAT WOULD HAPPEN IF NO ACTION WAS TAKEN TO IMPROVE THE DRAINAGE SYSTEM?

The flood-modelling maps have indicated that some sections of the stormwater drainage system in the cities of Holdfast Bay and Marion require significant upgrading in order to cope well in a worst case scenario.

If the planned work is not done, the level of flood protection for properties will continue to reduce. Continuing development in both our council areas is resulting in an increase of roof coverage and hard surfaces such as paving and concrete. This reduces the rate in which water can seep naturally into the ground and increases the volume of stormwater run-off. The cumulative effect of development over many years is expected to worsen the impact of severe rain events, as are the effects of climate change, so we must plan now for the long-term.

IF COUNCIL FIXES THE DRAINAGE SYSTEM, WILL ALL 'AT RISK' PROPERTIES BE FREE OF RISK?

When the plan has been implemented (ie, the drainage system is improved), it will reduce the likelihood of flooding for most properties identified as 'at risk' in our shared catchment area. It is, however, extremely difficult to eliminate the risk entirely.

WHAT IMPACT WILL THE FLOOD-MODELLING MAPS HAVE ON FUTURE DEVELOPMENT?

Both councils will consider how to apply the information from the flood-modelling maps to the assessment process for future development applications. For properties identified as 'at risk', this might include a number of measures, such as increased floor heights or ensuring that driveways allow for the flow of stormwater towards the road and not back towards the property.

WHAT IMPACT WILL THE COST OF IMPLEMENTING THE PLAN HAVE ON COUNCIL RATES?

Both councils are factoring the cost of implementing the plan into our long-term financial plans and looking at every option to minimise the impact on council rates. This includes seeking funds from the State Government. Ultimately, both councils' budgets are determined by your elected members.

WHAT IMPACT WILL THE PLAN HAVE ON MY HOUSEHOLD INSURANCE?

You will need to check with your insurance company whether the Stormwater Management Plan has any implications for any policies you might hold.



PROTECTING YOUR PROPERTY FROM A FLOOD

It is important that we, councils and the community, work together to reduce the risk of flooding.

While essential long-term improvements to our stormwater drainage system will reduce the likelihood of flooding for most properties identified as 'at risk' in our shared catchment area, it is extremely difficult to eliminate the risk entirely.

We encourage you to assess the risk to your property with the information available, and make your own preparations for a flood (big or small). It's a similar strategy to people living in bushfire-prone areas planning their own ways to prepare for the high fire-risk seasons.

WHERE CAN I GET INFORMATION ABOUT HOUSEHOLD FLOOD PREPARATION?

You can find information regarding flood hazard advice, including an Emergency Flood Plan, on the State Emergency Service website at ses.sa.gov.au.

NEXT STEPS

This is a long-term project, and some elements depend on our ability to secure State Government funding. We will keep you informed about the plan's progress.

In the meantime, you are welcome to ask questions about the plan. (See adjacent details on this page.)



HOW TO ACCESS THE PLAN*, SEE THE FLOOD-MODELLING MAPS OR ASK QUESTIONS

CITY OF HOLDFAST BAY DROP-IN INFORMATION SESSIONS

You can access the plan, see the flood-modelling maps and talk to expert technical staff at a Drop-in Information Session at:

2-5pm Thursday 25 July
Brighton Civic Centre,
24 Jetty Rd, Brighton

6-9pm Thursday 25 July
Brighton Civic Centre,
24 Jetty Rd, Brighton

2-5pm Tuesday 30 July
Glenelg Council Chambers, Glenelg
Town Hall, Moseley Square, Glenelg

6-9pm Tuesday 30 July
Glenelg Council Chambers, Glenelg
Town Hall, Moseley Square, Glenelg

You can also access the plan, see the flood-modelling maps or ask questions by:

visiting yourviewholdfast.com
or holdfast.sa.gov.au

emailing mail@holdfast.sa.gov.au

visiting Brighton Civic Centre,
Holdfast Bay Library (Brighton),
20 Jetty Rd, Brighton or
Holdfast Bay Library (Glenelg),
2 Colley Tce, Glenelg

calling the City of Holdfast Bay
on 8229 9999.

CITY OF MARION DROP-IN INFORMATION SESSIONS

You can access the plan, see the flood-modelling maps and talk to expert technical staff at a Drop-in Information Session at:

2-5pm Wednesday 24 July
City of Marion, 245 Sturt Rd, Sturt

6-9pm Wednesday 24 July
City of Marion, 245 Sturt Rd, Sturt

2-5pm Monday 29 July
City of Marion, 245 Sturt Rd, Sturt

6-9pm Monday 29 July
City of Marion, 245 Sturt Rd, Sturt

You can also access the plan, see the flood-modelling maps or ask questions by:

visiting makingmarion.com.au
or marion.sa.gov.au/stormwater

emailing communityengagement@marion.sa.gov.au

visiting City of Marion Administration
Building, libraries and
neighbourhood centres

calling the City of Marion
on 8375 6600.

** See a copy of the full plan at our Drop-in Information Sessions and the council locations (listed above), and an executive summary of the plan online.*





Respect | Inclusion | Choice

9 August 2013

Justin Lynch
Chief Executive Officer
City of Holdfast Bay Council
PO Box 19
BRIGHTON SA 5048

Email: mail@holdfast.sa.gov.au

Dear Justin

**RE: CITY OF HOLDFAST BAY – DRAFT STORMWATER MANAGEMENT PLAN
STAKEHOLDER SUBMISSION**

We refer to the City of Holdfast Bay's draft Stormwater Management Plan (draft Plan) which was released on 9 July 2013 for public consultation and the meeting held with Mr. Steve Hodge, Mr. Peter Smith and Mr. Justin Hensgen on 30 July 2013.

Due to the extent of information and technical data provided in the draft Plan and the limited timeframe to provide feedback, Minda's comments on the draft Plan are necessarily preliminary. Nonetheless, we have reached a number of definite conclusions which are outlined below.

At the outset, Minda wishes to make it clear that the flood plain mapping contained within the draft Plan "paints" a sobering and concerning picture for Minda. Put simply, it demonstrates that presently an enormous amount of stormwater is being discharged onto Minda's land from Council's adjacent streets and, in particular, from King George Avenue and Gladstone Road. That stormwater in turn, the flood plain mapping reveals, covers the vast majority of Minda's land and in places at a **depth exceeding 1m** at a depth exceeding 1m that is totally unacceptable.

Minda is a not for profit charity whose primary purpose is to provide accommodation and support services for people with an intellectual disability. We provide permanent accommodation on the Minda site for 250 people with an intellectual disability and a further 260 who attend the site on a daily basis. These people are some of the most vulnerable people in the community and are at far greater risk of a catastrophic injury or death than the general community from the enormous quantities of uncontrolled surface stormwater that the flood mapping shows would enter the Minda site in a major flood event.

Due to the significant risk the current situation presents to Minda's residents, operations, staff and visitors it is requested that this matter is given the highest level of attention and priority by Council, and acted upon post haste.

ABN 37 020 000 711

King George Ave

PO Box 5, Brighton SA 5048

Ph 08 8422 6200 Fax 08 8422 6330

www.minda-inc.com.au

We Can Do It

Upon review of the draft Plan, Minda is disappointed and alarmed with the absence of any reference to the extensive discussions and consultation that has taken place over the last few years between Minda and Council. At the start of the planning process for Minda's Master Plan, Council provided Minda with a copy of the flood mapping contained in the draft Plan (Figure 7.2) in confidence and prior to public gazetting.

At that time Minda recognised the extent of unnatural external flows entering the site from King George Avenue and Gladstone Road, and took a proactive approach and agreed to work cooperatively and in collaboration with Council to investigate options available to resolve this hazard / risk.

In August 2012, after a series of lengthy site investigations and design option studies, which were carried out in conjunction with Council and Council's Consultant Tonkin's, a joint in-principle solution was achieved. This solution would require capital investment from both Minda and Council in the form of;

1. Council - development of upstream detention measures to reduce the extent and velocity of flood waters entering Minda's Land from King George Avenue. This included detention measures at Bowker Oval, Good Neighbour Gardens, Quandong Street and Brighton High School. Council confirmed through Tonkin's assessment that these measures could reduce the velocity of flood water entering Minda's Northern boundary (i.e. from King George Avenue) from 5.11m³/s to 4.08m³/s, a reduction of 1.03m³/s or 20%;
2. Council – upgraded infrastructure on Walsh Street, Holder Road, Cross Street, Downing Street including an upgraded outflow to sea. Council confirmed through Tonkin's assessment that these measures could reduce the velocity of flood water entering Minda's Southern boundary (i.e. from Gladstone Road) from 1.15m³/s to 0.88m³/s, a reduction of 0.27m³/s or 23%;
3. Minda – development of bio-detention drainage swales and wide road corridors throughout the site, vastly oversized to channel the 4.96m³/s of external flood waters through Minda's land,
4. Minda – development of sedimentation ponds, wetlands and detention basin, vastly oversized to be able to manage these external flows and the flows created internally within Minda's land. The land area alone required to develop this scheme is approximately 16,400m².
5. Minda – development of a box culvert (2.7m x 0.9m), vastly oversized to provide an outflow from the detention basin to Minda's property boundary at Repton Rd, and
6. Council – combination of new and upgraded infrastructure from Repton Road, along Prior Road to an outflow at Harrow road.

Subsequent to these discussions and consultation, Minda proceeded in good faith and finalised the Master Plan and Stormwater Management Plan for the Brighton site, as well as lodging a Planning Application for the Wetlands.

The Master Plan and Stormwater Management Plan were submitted to Council on 7 November 2012 and clearly show the extent of internal infrastructure proposed by Minda and the associated works required to be developed by Council in order to resolve the flooding hazard / risks on Minda's land. All of which was in line with the discussions and consultation referenced above.

We were therefore surprised and disappointed to read Section 7.1.1 “Upgrades to the Major Drainage System” of the draft Plan which states;

“Minda Homes Site

The pattern of flooding around the Minda Homes site is shown in Figure 7.2. Floodwaters enter the site along the eastern and southern boundaries, pond within the site and flow further to the north.

Development of the site is currently being planned. This development will need to cater for the identified flows to ensure that:

- *flow paths are provided through the development so as not to back flood waters up into surrounding properties; and*
- *new allotments within the development are sited above the predicted 1 in 100 year flood level.*

The possibility of constructing an outfall to intercept floodwaters either on the northern or southern boundaries of the site was considered as part of the development of this plan. However, a high ridge of dunes immediately to the west will prevent the construction of such an outfall.

It is understood that Minda Homes are considering the construction of a wetland/flood storage area within the site as part of the proposed development in combination with a new outfall connecting to the Harrow Road drain which lies to the north of the site. The possibility of utilising the wetland area to store floodwaters and prevent them spilling further to the north should be further investigated.”

This is obviously of great concern to Minda as it is contrary to what has been discussed previously and implies that Minda, a not for profit charity will be solely responsible to rectify the major flooding risk that is prevalent on our land. A risk which we believe is largely attributed to the increased density of development up stream from Minda without the appropriate development of stormwater infrastructure to adequately support it.

Minda is therefore concerned about:

1. The absence of any reference to the extensive discussions and consultation that have taken place over the last few years between Minda and the Council about a possible option open to Minda and the Council to resolve the flooding issues affecting Minda’s land and other land through a joint solution;
2. The absence of any discussion in the draft Plan about possible additional flood mitigation measures (eg, upstream detention by the Council and upgrade works on Gladstone Road); and
3. The reference in the draft Plan, when discussing the Minda site, to Minda “... *considering the construction of a wetland/flood storage area within the site as part of the proposed development in combination with a new outfall connecting to the Harrow Road drain ...*”. That reference, expressed as it is, clearly infers, if not states, that the funding of those works will be entirely Minda’s responsibility.

These concerns were raised at the meeting on 30 July 2013, which Roddy Clark, Karl Sampson and Minda's Consultant Aurecon attended. At that time Council identified the following four locations which Minda were advised would mitigate the flows however, upon further review we are unable to determine how this could possibly occur given;

- Location 16: College Road, Somerton Park – These upgrade works are down stream of Minda's land and as such, would not be able to reduce the external flows or depths of flood water entering our site,
- Location 17: Byre Avenue, Somerton Park – Again, these upgrade works are down stream of Minda's land and as such, would not be able to reduce the external flows or depths of flood water entering our site,
- Location 18: Cecella Street, North Brighton – These upgrade works are located to the South / East of the Minda site and therefore the reduction in flows (if any) is questionable, given Figure 7.2 only identifies external flow rates of 0.32m³/s entering the site from this direction. The remaining 5.94m³/s of external flows entering our site remains at large and uncontrolled.
- Location 19: Caroon Street, Hove – These upgrade works are located outside the catchment area within which Minda is located and would not be able to reduce the external flows or depths of flood water entering our site.

Figure 7.2 contained in the draft Plan clearly demonstrates the extent and volumes (6.26m³/s) of external flooding that is discharged onto Minda's land in a major flood event. To put this into context, this would equate to almost **Ten (10) Olympic Sized Swimming Pools being discharged onto Minda's land every hour.**

A copy of Figure 7.2 is provided overleaf with following highlighted;

- Minda's property boundary;
- The extent of flood water entering and moving through the site that presents an Extreme Risk to Minda; and
- The nineteen (19) facilities that would be impacted in a major flood event.

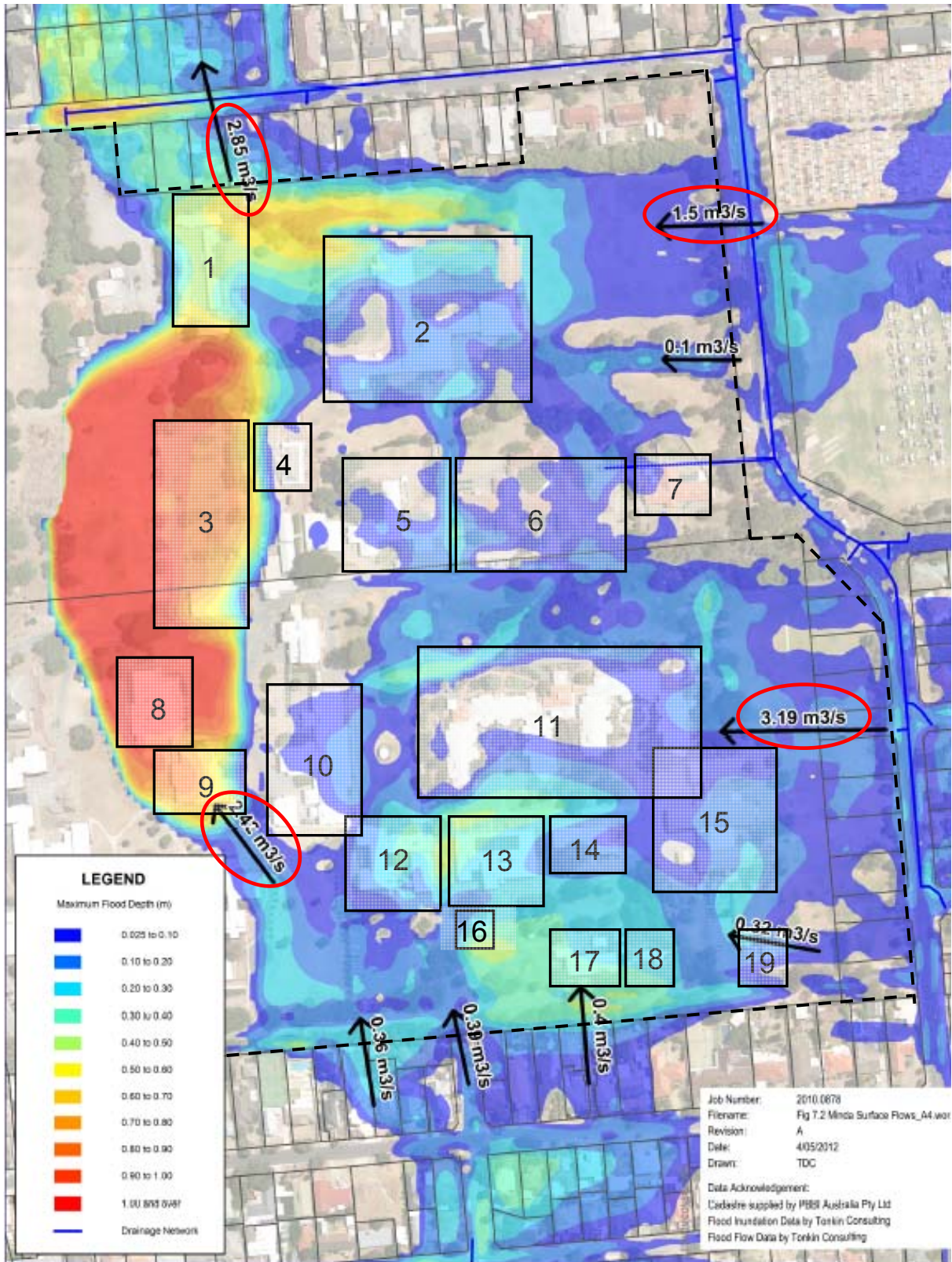


Figure 7.2

Section 4.4 “Flood Damages Assessment” of the draft Plan provides a Council wide assessment of the costs of damage associated with a major flood event. Due to the wide ranging scope of this assessment and the extent of risk connected with Minda’s land, Minda seeks clarification from Council on the following matters;

1. Which zone(s) in Table 4.10 (i.e. residential, historic, commercial, business or institution) were used to assess Minda's land against, and
2. What was the cost estimate of damage calculated relevant to Minda's land in each of the flood event scenarios in Table 4.11.

The flood mapping in Figure 7.2 clearly demonstrates that;

1. Approximately **6.26m³/s** of flood water will be discharged onto Minda's land in a major flood event. As stated previously, this would equate to almost **ten (10) Olympic Sized Swimming Pools being discharged onto Minda's land every hour.**
2. The vast majority of Minda's land will be inundated with external flood waters ranging from 200mm up to, and **exceeding 1m in depth** in certain areas; and
3. **Nineteen (19)** of Minda's facilities and critical services would be adversely affected in a major flood event.

Whilst Section 4.4 of the draft plan gives some regard to the cost of damage to property, we are obviously keen to understand the true extent of damage that would affect Minda's property. In order to gain a more accurate understanding of this risk, the table below lists each of the nineteen (19) buildings that would be adversely affected in a major flood event and provides asset values which are merely calculated at the limit of liability and do not include any improvements or unfixed assets. As you can see from the table below, the total asset value of the properties affected in a major flood event is **approximately \$42,000,000.**

Furthermore, whilst the draft plan gives some regard to the damage to property, we are obviously greatly concerned with the risk to other aspects of the site and our core operations. Minda's head office is based on this site and employs over 360 staff and 100 supported employees (people with and intellectual disability) many of whom work in buildings that would be adversely affected in a major flood event. Over 250 people with an intellectual disability are permanently accommodated on this site many of whom live in buildings that would also be adversely affected in a major flood event. A further 260 people with an intellectual disability also regularly attend the site for respite and day activities, again many of whom would be located in buildings that would be adversely affected in a major flood event. This equates to over 900 people on this site at any one point in time, 600 of which have an intellectual disability and are extremely vulnerable

In order to provide Council with greater visibility of the risks associated with a major flood event on our site, the table overleaf also provides;

- An overview of the operations of each of the buildings, the number of staff, supported employees and residents with an intellectual disability that would be affected
- The depth of flooding (inundation levels) at each of the affected buildings that has been extracted from Figure 7.2.
- The asset value, and
- A preliminary risk assessment based on the above aspects.

No.	Building	Description of Operations	Inundation levels	Asset Value	Risk Rating
1	Maintenance Compound	This compound has a number of storage facilities and offices. On average 17 staff and 44 supported employees (people with an intellectual disability) work in this area. All plant and equipment is also stored in this compound.	≤ 800mm	\$0.470m	Extreme
2	Telethon	This building is used for accommodation and day options. On average 8 staff and 14 residents with an intellectual disability permanently live in this building. On average 5 staff and 25 people with an intellectual disability accommodate this building for day options.	≤ 400mm	\$3.550m	High
3	Store & Fleet Car Park	This building is used to store all the consumables used on the Minda Campus. On average 5 staff and 7 supported employees (people with an intellectual disability) work in this building. Minda park over 100 fleet vehicles in the car park adjacent to the store, along with numerous other staff vehicles.	≤ 1m	\$0.365m	Extreme
4	Brighton House	A State heritage Listed building dating back to the early 1840's which is used for an arts and crafts programme. On average 2 staff and 18 people with an intellectual disability accommodate this building.	≤ 600mm	\$2.120m	Extreme
5	Burnell	This building is used for accommodation. On average 8 staff and 17 residents with an intellectual disability permanently live in this building.	≤ 400mm	\$1.760m	High
6	Bonython	This building is used for accommodation. On average 9 staff and 28 residents with an intellectual disability permanently live in this building.	≤ 400mm	\$3.315m	High
7	Redman	This building is used for secure accommodation. On average 5 staff and 7 residents with an intellectual disability permanently live in this building.	≤ 200mm	\$0.870m	Moderate
8	Laundry	This building is used as a commercial Laundry to service the Brighton operations and external contracts. On average 17 staff and 45 supported employees (people with an intellectual disability) work in this building.	≥ 1m	\$1.640m	Extreme

No.	Building	Description of Operations	Inundation levels	Asset Value	Risk Rating
9	Kitchen	This building is used as a commercial Kitchen and provides essential special dietary meals (breakfast, lunch and dinner) to over 250 residents living at the site with an Intellectual disability. On average 7 staff and 11 supported employees (people with an intellectual disability) work in this building. The ability to feed these residents would be jeopardised in the event that this building was not operational.	≥ 1m	\$1.755m	Extreme
10	Rogerson Building	A State heritage Listed building dating back to the early 1900's which is used as a Registered Training Office (RTO) and Administration. On average 45 staff and numerous students accommodate this building.	≤ 300mm	\$4.855m	Moderate
11	PKC Aged Care Facility	PKC is our Aged Care Facility. On average 35 staff and 60 residents with an intellectual disability permanently live in this building.	≤ 300mm	\$7.855m	Moderate
12	Verco Building	A State heritage Listed building dating back to the early 1900's which is used as for Day Options and Administration. On average 37 staff and 47 people with an intellectual disability accommodate this building.	≤ 600mm	\$6.165m	Extreme
13	Hydrotherapy Pool & Gym	This building is used as a hydrotherapy pool, gymnasium and physiotherapy. On average 12 staff and numerous residents with an intellectual disability, community residents and other stakeholders use these facilities.	≤ 600mm	\$3.285m	Extreme
14	Building Abilities	This building is used as a Day Options facility. On average 6 staff and 23 people with an intellectual disability accommodate this building.	≤ 300mm	\$0.340m	Moderate
15	Leverington	This building is used as a Day Options facility. On average 12 staff and 53 people with an intellectual disability accommodate this building	≤ 400mm	\$2.350m	High
16	Dentist	This building is used by numerous residents with an intellectual disability, community residents and other stakeholders.	≤ 600mm	\$0.214m	High
17	Chuaninga	This building is used as a Day Options facility. On average 6 staff and 20 people with an intellectual disability accommodate this building	≤ 500mm	\$0.395m	High
18	Opshop	This building is used numerous residents with an intellectual disability, community residents and other stakeholders.	≤ 500mm	\$0.285m	High

No.	Building	Description of Operations	Inundation levels	Asset Value	Risk Rating
19	Storage Sheds	This compound has a number of storage facilities which is used to store FFE, plant and equipment.	≤ 400mm	\$0.085m	High
N/A	Brighton Land	Minda's Brighton site permanently accommodates over 250 people with an intellectual disability. Over 260 individuals with an intellectual disability also attend the site for respite and day activities. Over 100 individuals with an intellectual disability are employed by Minda in various commercial enterprise businesses. Over 360 staff work on this site at any one time.	0.1 - ≥ 1m	N/A	Extreme
Overall Assessment			0.6 - ≥ 1m	\$41.674	Extreme

Note 1. Asset value is merely calculated at the limit of liability and does not include any improvements or unfixed assets
 2. Risk rating is a preliminary assessment of the risk of damage to property, staff and residents, as well as the loss of critical and essential services.

Section 4.3 "Inundation and Hazard maps" of the draft Plan also provides an assessment of the hazard rating of affected areas in accordance with the SCARM Report 73 and Figure 4.2 "Hazard Categories", a copy of which is provided below.

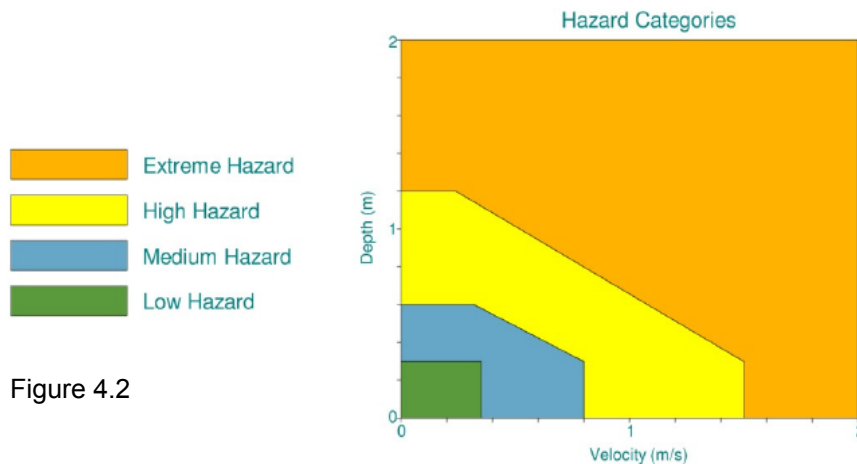
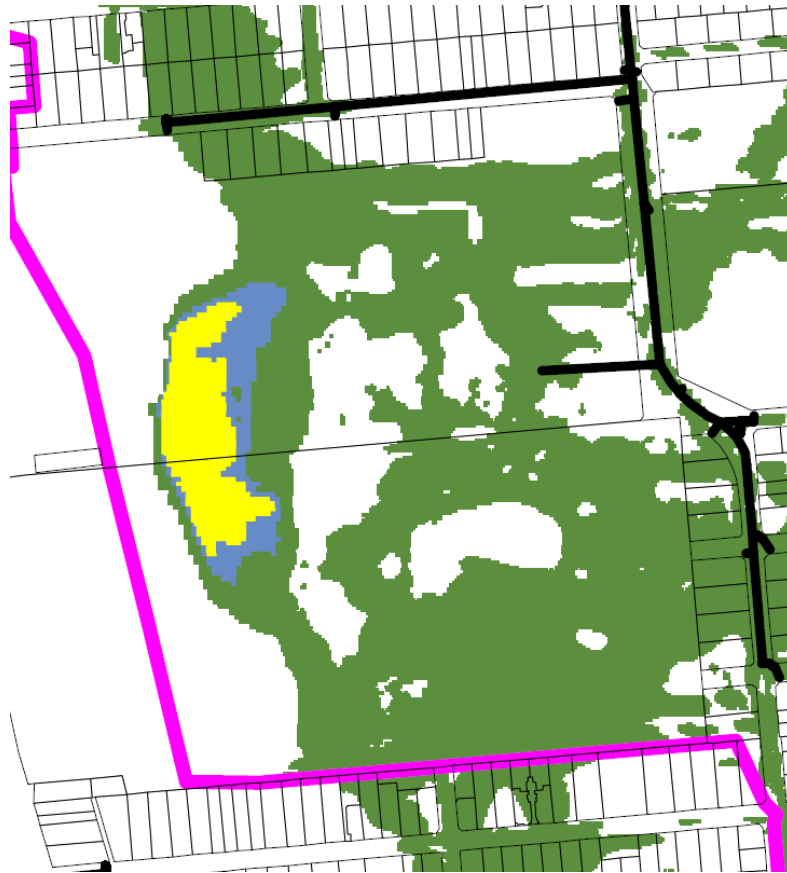


Figure 4.2

Appendices A, B, C and D provide the Hazard Mapping which indicates that Minda's land has been categorised as a combination of "Low", "Medium" and "High" hazard areas. This is illustrated on the extract of the map relevant to Minda's Land overleaf.



Minda believes the Hazard rating which is mapped above is inaccurate. The hazard rating is at significant variance to the depths of flooding demonstrated in Figure 7.2 and more importantly, misrepresents the magnitude of the hazard / risk associated with Minda's land for the following reasons;

1. The criterion for assessment of "Low" hazards includes flooding to a depth of 0mm - 300mm. The Hazard map above which shows this criterion in Green is therefore at variance to the flood mapping (Figure 7.2) which clearly demonstrates flooding in these areas of up to 500mm and 600mm deep. Based on the criteria of Hazard Categories (Figure 4.2), the vast majority of these areas should therefore be classified as a Medium Hazard.
2. Similarly, the criterion for assessment of "Medium" hazards includes flooding to a depth of 300mm - 600mm. The Hazard map above which shows this criterion in Blue is therefore also at variance to the flood mapping (Figure 7.2) which clearly demonstrates flooding in these areas of up to 800mm deep. Based on the criteria of Hazard Categories (Figure 4.2), these areas should therefore be classified as a High Hazard area.
3. Again, the criterion for assessment of "High" hazards includes flooding to a depth of 600mm – 1.2m. The Hazard map above which shows this criterion in Yellow is therefore also at variance to the flood mapping (Figure 7.2) which clearly demonstrates flooding in these areas in excess of 1m deep. Whilst the flood mapping does not delineate the actual depth beyond 1m, from surveys we have recently undertaken there is a significant area adjoining the Laundry building which would be in excess of 1.4m deep. Based on the criteria of Hazard Categories (Figure 4.2), this area should therefore be classified as an Extreme Hazard area.

We would therefore request that Council reassess the Hazard mapping to accurately map the true extent and classification of the hazards connected with Minda's land. Whilst this request may appear to be pedantic, the reason for this becomes apparent when reading Section 6.3.2 "Acceptable Level of Protection of the Community for Both Private and Public Assets from Flooding" of the draft Plan which states;

"The floodplain mapping developed for the study area shows a number of areas where the 100 year ARI flood breaks out of the road network and flows into properties. Mostly this floodwater is shallow, that is less than about 100 or 200 mm deep. Water of this depth will not necessarily cause flooding above the floors of buildings.....There are however some isolated areas in the floodplain where water depths are deeper. It is considered appropriate that works should be considered due where floodwaters are predicted to exceed 300 mm in depth."

Minda supports Council implementing this objective however, we were seriously disappointed that the draft Plan fails to identify any Major or Minor Drainage Upgrade works that will mitigate the hazard and risks connected with Minda's land, given the vast majority of the site would be inundated with flood waters in excess of 300mm deep in a major flood event.

Minda has a duty of care to its residents, staff and services users, and since receipt of the draft Plan it has sought and obtained legal advice relating to the lawfulness of the discharge by the Council of the abovementioned stormwater onto our land. The advice received is to the effect that it is unlawful for the Council to do that without our permission. That permission, of course, has not been granted by Minda. Put differently, it is Minda's contention that the discharge by Council of stormwater onto its land in the volumes depicted and described in the draft Plan is clearly well beyond volumes that could be said to constitute water naturally falling onto our land from adjacent land. It amounts, in our view, to, at least an actionable nuisance. It follows that Council therefore has a responsibility to take appropriate and swift action to prevent this from continuing.

Indeed, unless the matter can be resolved collaboratively, Minda may have no alternative but to take direct action to abate the nuisance by putting in place measures to mitigate the extent of external stormwater flows entering our site from King George Avenue and Gladstone Road. This scenario would also necessitate a review of the size and function of the internal stormwater infrastructure and wetlands currently being contemplated by Minda.

Whilst the above is not Minda's preferred solution, Minda remains prepared to work collaboratively with the Council in investigating appropriate flood mitigation options. The joint solution that was referred to earlier in this letter could well be a "win", "win" "win" result for the Council, Minda and other affected land owners in the area. I must stress, however, that for those discussions to be fruitful, they must advance on the basis of a collaborative approach between the Council and Minda, both in a design sense and in a funding sense.

In all of the circumstances, we respectfully believe, and therefore request, the Council to amend the draft Plan before its endorsement for any further formal consultation in at least the following respects:

1. Include appropriate references in the draft Plan to the effect that additional flood mitigation measures such as upstream Council detention and upgrade works on Gladstone Road may well also assist with mitigating the impact of flooding within the area and are therefore to be considered;

2. Remove altogether that section of the draft Plan that deals specifically with the Minda site in which it is stated that:

“It is understood that Minda Homes are considering the construction of a wetland/flood storage area within the site as part of the proposed development in combination with a new outfall connecting to the Harrow Road drain which lies to the north of the site.”

That sentence, at least, needs to be replaced with a sentence to the effect that Minda and Council are jointly investigating the possibility of constructing on a shared cost basis a wetland/flood storage area within the site in combination with a new outfall to the Harrow Road drain which lies to the north of the site, in an endeavour to resolve flooding issues in this and the surrounding areas;

3. Reassess the Hazard rating and Hazard mapping of Minda’s land in accordance with Figure 4.2 and 7.2 to identify Minda as high risk priority area;

As you know, these matters are of serious concern to Minda. As such, I look forward to hearing from you in response to this letter. We would welcome the opportunity to meet with you to discuss our concerns and how these may be addressed in the final Plan.

Yours Sincerely,



Catherine Miller
Chief Executive Officer

Cc Roddy Clark (Executive Project Director) Minda

Item No: **14.4**

Subject: **RESILIENT SOUTH UPDATE – CLIMATE CHANGE SCENARIOS REPORT**

Date: 10 September 2013

Written By: Manager Contracts and Strategic Projects

General Manager: City Assets, Mr S Hodge

SUMMARY

The Resilient South Project is a joint initiative between the Cities of Marion, Mitcham, Onkaparinga and Holdfast Bay and aims for the development of a Regional Action Plan for adaptation to Climate Change.

One of the key initial stages of this project was the research and development of a report that identifies the various climate change scenarios that can be expected in the coming years within the Southern Region if climate change continues to increase at the current and projected rates. This report forms the basis of future planning for the project and it is recommended for endorsement by Council as a key focus document in adapting to climate change.

RECOMMENDATION

- 1. That Council endorse the Climate Change Scenarios Report, which forms Attachment 1 to this report.**
 - 2. That Council notes the Resilient South project's completed and upcoming stakeholder engagement activities.**
-

COMMUNITY PLAN

A Place with a Quality Lifestyle
A Place for Every Generation
A Place that is Safe and Secure
A Place that Manages its Environmental Impacts
A Place to do Business
A Place that is Well Planned

COUNCIL POLICY

N/A

STATUTORY PROVISIONS

N/A

BACKGROUND

The Resilient South Project will develop a Regional Climate Change Adaptation Plan for the southern Adelaide region (covering the Cities of Holdfast Bay, Marion, Mitcham and Onkaparinga, jointly referred to as the 'Resilient South project partner councils'). Preparation of the adaptation action plan is informed by the outcomes of stakeholder engagement activities, an updated local climate change scenario and a regional integrated climate change risk and vulnerability assessment. This report seeks council endorsement of the updated climate change scenario that has been prepared by the project sub consultants SKM and reviewed by the Bureau of Meteorology, state agencies and the project partners.

This project is one of six regional climate change adaptation planning projects that are being completed in the state under South Australia's Climate Change Adaptation Framework.

REPORT

The Climate Change Scenarios Report outlines climate projections for the southern Adelaide region for the years 2030 and 2070 to provide a foundation for the Integrated Vulnerability Assessment (IVA) process scheduled for later this year. A summary of those projections is provided in Attachment 1. Of particular interest to the City Holdfast Bay are projections suggesting:

- Available winter time water run off (May-August excess of rainfall over evaporation) to decrease by 12% by 2030 and by up to 40% by 2070.
- Mean sea levels rise of 15 cm by 2030 and 47 cm by 2070, resulting in more frequent storm surge events (a doubling or tripling of storm surge frequency can be expected with every 10 cm rise in mean sea levels).
- Heatwaves which trigger the SES's Extreme Heat Warning (3 day sequences with average temperature $\geq 32^{\circ}\text{C}$) to become approximately 4 times more frequent by 2030 and 20 times more frequent by 2070.

Refer Attachment 1

Climate change impacts are expected to affect particularly strongly sectors such as water resources, food and wine, emergency management, coastal management and natural resource management. The Resilient South project is in the process of engaging representatives of organisations and groups from these and other sectors to accurately assess their climate adaptation needs and support them in increasing their resilience to key projected climate change impacts.

The project's key stakeholder engagement activities to date include:

- A receptivity survey (completed) – a phone survey assessing stakeholders' attitudes towards the issue of climate change and their perceptions of its relevance to their respective organisations.
- Four newsletters (the first issue delivered in June 2013) - providing updates on the project and maintaining regular contact with its stakeholders.
- A dedicated website ([www. resilientsouth.com](http://www.resilientsouth.com)) – acting as the project's public face.
- A project launch, on 31 July – the launch included a signing of the Southern Region Climate Change Sector Agreement by the Mayors of the four Resilient South project partner councils, all of whose Elected Members, CEOs and Senior Leadership Teams were invited to attend.
- Values workshops (conducted in July – August 2013) – 30 workshops establishing the potential links between stakeholders' priorities in the region and the projected impacts of climate change.
- Vulnerability assessment workshops (scheduled for October 2013) – designed to assess the degree to which various sectors in the region are vulnerable to certain projected climate impacts.
- Adaptation action workshops (scheduled for February 2014) – designed to collaboratively formulate potential actions to manage and reduce climate change vulnerabilities across the region.

BUDGET

The Resilient South project has received funding and resources from:

- The Natural Disaster Resilience Grants Scheme (NDRS), contributed to by both Commonwealth and State Governments (\$320,000)
- The Department of Environment, Water and Natural Resources (DEWNR) (\$50,000)
- The Cities of Marion, Mitcham and Holdfast Bay (\$40,000 each) and the City of Onkaparinga (\$80,000).

The City of Holdfast Bay's commitment to this project was funded in the 2012/13 financial year and there are no other known costs associated with the delivery of the project.

LIFE CYCLE COSTS

While the project recommendations may produce some major recommendations these are unknown at this early stage of the project. Once this becomes clearer and further reports are presented to Council for endorsement an overall picture of future budget requirements and therefore future life cycle cost will be known. However given that this project is about adaption it is unlikely that the projects that come from its recommendations will have a project focus with high capital costs.



Resilient South

Strengthening the Southern Region
for changes in our climate

Climate Change Scenarios Report

04/07/2013



Australian Government
Attorney-General's Department



Government of South Australia
South Australian Fire and
Emergency Services Commission

Executive summary

Overview

The Resilient South project seeks to build the resilience of the southern Adelaide region to natural hazards associated with climate change. The project's first stage will establish the climate change risk context for the southern Adelaide region by reviewing climate change scenarios and associated risks and by developing regional profiles for three domains: environment and natural resources, social and community and economy and infrastructure.

This report has been prepared by Sinclair Knight Merz as part of the Resilient South consultancy led by URPS and contributes to the project's first stage. It describes the historical climate of the southern Adelaide region and how it may change in response to climate change. It also reviews analyses of how sea level rise may affect the region's coasts and estuaries.

The report is supported by a data library that contains historical climate records for four representative meteorological stations, as well as climate change projections based on these records. The climate change projections are based on four scenarios, as follows:

- 2030 medium and high emissions scenarios – which correspond, respectively, with the A1B and A1FI scenarios defined by the Intergovernmental Panel on Climate Change (IPCC);
- 2070 medium (A1B) and high (A1FI) emissions scenarios.

Historical climate of the southern Adelaide region

The southern Adelaide region has a Mediterranean-type climate, with cool, moist winters and warm, dry summers. Annual rainfall totals are strongly influenced by the presence of the Mt Lofty Ranges, with rainfall increasing from north to south in the region and inland from the coast. Year-to-year variability in rainfall is driven by atmospheric circulation patterns, sea surface temperatures and pressure systems in the Pacific, Indian and Southern Oceans.

Historical climate of the southern Adelaide region was characterised using four meteorological stations with long-term and largely continuous rainfall records. Those stations are:

- Adelaide Airport: although located just to the north of the Resilient South project area, it is the only relevant meteorological station with long-term rainfall and temperature records. Average annual rainfall is 443 mm and average maximum and minimum temperatures are 21.5°C and 11.4°C, respectively;
- Clarendon: representative of mid to higher rainfall areas in the east of the project area. Average annual rainfall is 816 mm;
- Mt Bold Reservoir: similar to Clarendon and representative of mid to higher rainfall areas in the east and south-of the project area. Mt Bold also has long term records of potential evaporation. Average annual rainfall is 791 mm and annual average evaporation is 1614 mm;
- Willunga: representative of coastal and coastal plains areas in the southern part of the project area. Average rainfall is 643 mm.

For all of the meteorological stations except Mt Bold Reservoir, rainfall since 1960 has trended downwards at 4.4 to 9.2 mm/decade. Rainfall at Mt Bold Reservoir has increased at 10.8 mm/decade over this period. Average, maximum and minimum temperatures have been rising over the period of record at Adelaide Airport, with each of these increasing by over 0.5°C since 1956. The period since 2000 has been particularly warm, with monthly temperature records set in seven of 12 months in that time.

Climate change projections

Climate change projections for the southern Adelaide region are based on climate modelling undertaken for the IPCC's *Fourth Assessment Report* and published on the *Climate change in Australia* web site (www.climatechangeinaustralia.gov.au). The climate model outputs presented in this report are the median

values for the ensemble of models used for the *Fourth Assessment Report* – for the selected emissions scenarios.

Climate change projections are useful tools to guide decision-making about climate risks. They indicate the expected trend in climate variables under various emissions scenarios and the likely quantum of change. Their reliability varies between climate variables. In general, global projections are more certain than regional projections and temperature projections are more certain than those for rainfall. Changes in average conditions are also more certain than changes in extremes. While climate model projections have improved in recent years, some important climatic influences, including the El Niño Southern Oscillation (ENSO), are currently not well represented.

Rainfall

Annual average rainfall is projected to decrease throughout South Australia during the 21st century: by 2-5% by 2030 and by 5-20% by 2070. Some climate models suggest that average annual rainfall in the Adelaide region may decline by as much as 20-40% by 2070. A minority of models project small increases in average annual rainfall. Annual average rainfall is projected to decline (by 2070) to 379-395 mm at Adelaide Airport and 676-704 mm at Mt Bold Reservoir.

Equations that describe atmospheric processes suggest that for each degree of global warming, extreme daily rainfall may increase by 7%. If these equations apply to the southern Adelaide region (and they do not appear to apply in all regions), the 100 year average recurrence interval daily rainfall event may increase from about 75 mm historically to over 90 mm at Adelaide Airport and from about 104 mm currently to about 122 mm at Mt Bold Reservoir (under the 2070 high emissions scenario).

Temperature

Annual temperatures are projected to increase throughout South Australia during the 21st century in each of the climate change scenarios considered. The median projection for the southern Adelaide region is for average temperatures to increase by 0.6-1.0°C by 2030 and by 1.0-2.5°C by 2070. Under the most extreme emissions scenario for 2070, average temperature is projected to increase by 3.0-4.0°C by 2070.

The frequency, intensity and duration of heatwaves in the southern Adelaide region are projected to increase and the incidence of frost and freezing conditions is projected to decrease. Maximum temperatures are projected to increase, as are the incidences of consecutive days of very high maximum and average temperatures and the length of such sequences of hot days. The incidence of freezing conditions at Adelaide Airport is projected to decline from 0.7 days per year in 1980-1999 to 1 day in 20 years in 2070.

Evaporation

Climate models project that average annual potential evaporation will increase by 2-4% under medium and high emissions scenarios in 2030 and by 4-8% in 2070. Evaporation is projected to increase most (in percentage terms) in autumn and winter, particularly under the 2070 high emissions scenario. Annual average potential evaporation at Mt Bold Reservoir is projected to increase from 1617 mm in 1980-1999 to 1639 mm in 2070. With the projected increase in evaporation and decrease in rainfall, the winter excess of rainfall over evaporation (which drives catchment water flows and soil water accumulation) is projected to decline from 175 mm in 1980-1999 to 154 mm in 2070 (under the high emissions scenario).

Forest fire danger

Forest Fire Danger Index (FFDI) is calculated from daily temperature, humidity and wind speed and (longer-term) changes in soil and fuel dryness. High FFDI values are currently recorded through summer and autumn. Values in the extreme range (≥ 50) are indicative of the potential for extreme and difficult to control behaviour in fires that become established. The incidence of such days, based on Adelaide Airport's weather, is projected to increase from 2 per year in 1980-1999 to 10 per year in 2070 (under high emissions scenarios).

Coastal climate change hazards

In its *Fourth Assessment Report*, the IPCC found that warming of the atmosphere and oceans could lead to global mean sea levels rising by up to 0.79 m by 2100. These estimates remain uncertain and end of century sea level rises of more than 1.0 m and even as high as 1.5 m are considered to be plausible. In areas with sandy or other erodible shorelines, rising sea levels may lead to the loss of beaches and the inland retreat of coastlines. Tide gauges at Port Adelaide show that sea levels in St Vincent Gulf have risen at over 2mm/y for some decades. The Port Stanvac tide gauge recorded average sea level rises of approximately 4 mm/y from the 1990s.

There has only been limited analysis of the extent to which the southern Adelaide coast is exposed to sea level rise. The main areas that are likely to experience increased frequency and depth of inundation by sea waters during storms are the beaches and the estuary of the Onkaparinga River and other coast-flowing streams. Without intervention, more frequent inundation and coastal erosion are likely to result in the loss of, or loss of use of, most of the region's beaches. This may occur with the approximately 20 cm of sea level rise that is projected for 2030. Sections of the Resilient South project area's coastline that are not defended with sea walls or other structures are likely to gradually retreat in response to sea level rise.

Climate change projection summary

Climate variable	Reference period conditions (1980-1999)	2030 projections (medium & high emissions)	2070 projections (medium-high emissions)
Rainfall			
Annual average:			
<ul style="list-style-type: none"> Adelaide Airport Clarendon Mt Bold Willunga 	451 mm 763 mm 809 mm 598 mm	424 mm 716 mm 759 mm 560 mm	395-379 mm 667-641 mm 704-676 mm 522-502 mm
Extreme daily rainfall (100 year average recurrence interval event):			
<ul style="list-style-type: none"> Adelaide Airport Clarendon Mt Bold Willunga 	76 mm 89 mm 104 mm 96 mm	80 mm 94 mm 110 mm 101 mm	85-90 mm 101-106 mm 116-122 mm 108-113 mm
Temperature			
Annual average:			
<ul style="list-style-type: none"> Maximum Minimum 	21.4°C 11.5°C	22.2°C 12.3°C	23.3-23.9°C 13.4-14.0°C
Heatwave:			
<ul style="list-style-type: none"> Incidences of 2 days \geq 40°C # 3 day sequences with average temperature \geq 32°C 	0.09 per year 0.02 per year	0.35 per year 0.15 per year	0.7-1.3 per year 0.20-0.65 per year
Potential evaporation	1617 mm/y	1639 mm/y	1714-1761 mm/y
May-August excess of rainfall over potential evaporation	175 mm/y	154 mm/y	115-105 mm/y
Forest Fire Danger Index (extreme FFDI days per year)			
<ul style="list-style-type: none"> Adelaide Airport 	2.0 days/y	3.6 days/y	6.1-10.1 days/y
Mean sea level		+0.15 m (from 1980-1999)	+0.47 m (from 1980-1999, high emissions only)

Contents

Glossary	1
1. Introduction	3
1.1 The Resilient South project	3
1.2 The southern Adelaide region	3
1.3 About this report.....	3
2. Climate change	5
2.1 Global-scale influences on climate	5
2.2 Drivers of regional climate variability	6
2.3 Climate change.....	6
2.4 Climate change projections	7
3. Historical climate of the southern Adelaide region	9
3.1 Introduction	9
3.2 Rainfall	10
3.3 Temperature	12
3.4 Relative humidity	14
3.5 Wind.....	14
3.6 Potential evaporation	15
3.7 Forest fire danger	16
4. Climate change scenarios and projections	17
4.1 Climate change analysis	17
4.2 Uncertainty in climate change projections	18
4.3 Rainfall	18
4.4 Temperature	21
4.5 Heatwaves	23
4.6 Relative humidity	24
4.7 Wind speed	25
4.8 Evaporation.....	25
4.9 Forest fire danger	27
4.10 Summary	27
5. Coastal climate change hazards	29
5.1 Introduction	29
5.2 Climate change coastal hazard impacts in the southern Adelaide region.....	31
6. References	34

Appendix A. Resilient South climate data library

Appendix B. Climate change factors for the southern Adelaide region.

Appendix C. Sea level rise modelling for the northern reaches of the southern Adelaide region’s coastline

Glossary

Adaptation	Adjustment in natural or human systems that are taken in response to actual or expected climatic [and other] stimuli or their effects, which moderates harm or exploits beneficial opportunities [19]. Adaptation is concerned with managing the unavoidable impacts of climate change (and variability) and considers what needs to be done differently – both more and better – to cope with the change
ARI	Average Recurrence Interval. The long-term average time interval between events (e.g. rainfall, floods, extreme temperatures) of a particular size.
BoM	Australian Bureau of Meteorology
Bruun rule	The Bruun Rule of coastal erosion is a rule of thumb that applies an understanding of the dynamics of the coastal zone where substrate moves according to offshore/on shore patterns. It is particularly applied in estimating the recession of erodible coastlines in response to climate change.
Climate	A statistical description of “average” weather in terms of the mean and variability of relevant quantities over time scales ranging from months to millennia. It is influenced by factors that operate at various time and spatial scales, including: atmospheric energy balance, atmospheric composition and ocean and atmospheric circulation patterns [6].
Climate change	Refers to a change in the state of the climate that can be identified by changes in the mean and/or variability of its properties, and that persists for an extended period, typically decades or longer. Climate change may occur because of internal changes within the climate system or in interaction between its components, or because of changes in external forcings either for natural reasons or because of human activities. It is generally not possible to clearly make attribution between these causes. Projections of future climate change generally consider only the influence of climate on anthropogenic increases in greenhouse gases and other human-related factors [3].
Climate change factors	The percentage or absolute change in rainfall, temperature or other climate variable that results from climate change under a particular scenario. Climate change factors describe the change from averages during the 1980-1990 reference period.
Coastal hazard	In this report, consideration of coastal hazards is largely confined to temporary or permanent inundation (or coastal flooding) and coastal erosion and recession. Estuary closure and related flooding may be linked to these hazards.
FFDI	Forest Fire Danger Index. An index of forest fire danger and potential fire behaviour. It is based on daily temperature conditions (temperature, relative humidity and wind speed) and longer term soil and forest fuel litter drying. FFDI values ≥ 25 reflect very high fire danger. FFDI values ≥ 50 reflect extreme fire danger. FFDI values correspond to Fire Danger Ratings provided by fire services for forest areas.
GCM	General Circulation Model or Global Climate Model. Computer models that run mathematical representations of the global climate system. They are used to project the influence of emissions or other global change scenarios on climate. Climate change projections are typically based on an ensemble or groups of models rather than the results of an individual GCM.
Heat wave	An event with at least two consecutive days of high temperature. In this report, three heat wave measures were considered: consecutive days with maximum temperature $\geq 35^{\circ}\text{C}$ or 40°C ; and three consecutive days with average of the daily maximum and minimum temperatures $\geq 32^{\circ}\text{C}$.
Ice sheet dynamics	The melting of ice caps and continental ice sheets in response to climate change. Sea level rise is largely driven by thermal expansion of water as oceans warm and the melting of Greenland and Antarctic ice sheets.
IPCC	Intergovernmental Panel on Climate Change
Permanent inundation	The daily or sub-daily inundation of low-lying land by typical astronomical tides.
ppm	Parts per million – a measure of the concentration, in the case of this report, of greenhouse gases in the atmosphere. CO_2 concentration in the atmosphere prior to the industrial revolution was 280 ppm. It is currently approaching 400 ppm.
Recession	The retreat of a coastline under the influence of wind and wave action and potentially resulting from sea level rise. Movement of sediment may also result in some sections of coasts advancing.

Resilience	The ability of a social or ecological system to absorb disturbances while retaining the same basic structure and ways of functioning, the capacity for self-organisation, and the capacity to adapt to stress and change [26].
Risk	The potential for realisation of unwanted, adverse consequences; usually based on the likelihood of an event occurring multiplied by the consequence of the event, given that it has occurred.
Scenario	A coherent, plausible but often simplified description of a possible future state. Scenarios capture a range of future possibilities and allow decision makers to consider changes that might otherwise be ignored.
Talus	Rock debris found at the base of a cliff or steep slope.
Temporary inundation	Or episodic inundation, which occurs as a result of storm surges, catchment flood events, estuary closure and/or seasonal high tides that increase water levels and inundate land outside the typical diurnal tidal range
Vulnerability	Vulnerability is the degree to which a system is susceptible to, and unable to cope with, adverse effects of climate change, including climate variability and extremes. Vulnerability is a function of the character, magnitude, and rate of climate change and variation to which a system is exposed, its sensitivity, and its adaptive capacity [25].

1. Introduction

1.1 The Resilient South project

Resilient South is a collaborative climate change adaptation project involving the Cities of Holdfast Bay, Marion, Mitcham and Onkaparinga (see Figure 1), as well as the South Australian and Australian governments. The project seeks to help build the resilience of the southern Adelaide region to natural hazards associated with climate change. Its objectives are to:

- Improve hazard management and minimise risks associated with climate change impacts;
- Improve emergency response capabilities relevant to climate change impacts;
- Increase the region's understanding of climate change risks, vulnerability and adaptation responses.

The project is being undertaken in three stages [23]. The first stage will establish the risk context for the project by reviewing climate change scenarios and associated risks and by developing regional profiles for three domains: environment and natural resources, social and community and economy and infrastructure. The project's second stage will comprise a vulnerability assessment for each of these domains and the sectors they include. Its final stage will involve the development of an Adaptation Action and Implementation Plan and a Regional Sector Agreement to guide future responses to climate change.

A consortium led by URPS has been commissioned by the City of Onkaparinga, on behalf of the partner councils, to undertake the Resilient South project.

1.2 The southern Adelaide region

The southern Adelaide region comprises the Cities of Holdfast Bay, Marion, Mitcham and Onkaparinga and extends southwards from Adelaide's southern outskirts. The 663 km² region is bounded by St Vincent Gulf in the west and extends inland into the Adelaide Hills in the east. The Cities of Holdfast Bay and Marion, much of the City of Mitcham and the northern and western sections of the City of Onkaparinga are urbanised. The majority of the remainder of the region supports rural residential land uses, agriculture, forestry production and nature conservation. McLaren Vale, in the south of the City of Onkaparinga is one of Australia's most valuable food and wine regions.

The Resilient South region's total population was over 340,000 in 2011 [2], which is approximately 23% of South Australia's population.

1.3 About this report

This *Climate change scenarios report* contributes to the Resilient South project's first stage. It provides a description of the historical climate of the southern Adelaide region (Chapter 3) and of how it may change in response to climate change (Chapter 4). It also provides a review of analyses of how sea level rise may affect the region's coasts and estuaries (Chapter 5). The report establishes the current and potential future climatic

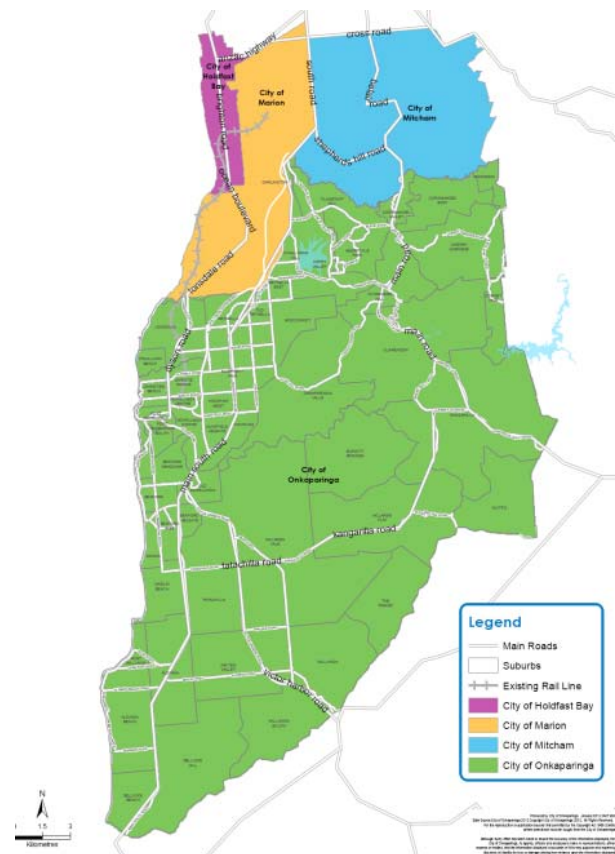


Figure 1 The Southern Adelaide region: Cities of Holdfast Bay, Marion, Mitcham and Onkaparinga

context for the vulnerability assessment that will be undertaken in the second stage of the project. It describes the climate conditions to which the region's environment, natural resources, community, economy and infrastructure must adapt if the region is to be the "Resilient South".

Some brief background information on human-induced climate change is given in Chapter 2 to set the context for this report.

2. Climate change

2.1 Global-scale influences on climate

Climate is a statistical description of “average” weather in terms of the mean and variability of relevant quantities over time scales ranging from months to millennia. It is influenced by factors that operate at various time and spatial scales, including: atmospheric energy balance, atmospheric composition and ocean and atmospheric circulation patterns.

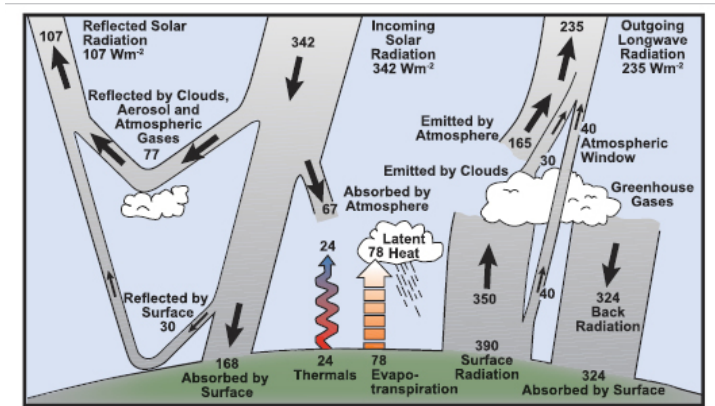


Figure 2 Earth’s radiation balance (reproduced from Kiehl and Trenberth 1997 [18])

Energy balance

Solar radiation is the major source of the energy that drives the global climate system. There is a balance between incoming solar radiation and radiation that is either reflected back into space or absorbed through warming of the earth’s surface and atmosphere (see Figure 2). The global radiation balance is influenced by the albedo of the earth’s surface (the degree to which solar radiation is reflected or absorbed), cloudiness and atmospheric composition (including gases and the presence of dust or aerosols).

Increased concentrations of gases such as water, carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O) reduce the amount of long wave radiation radiated back from Earth into space and contribute to warming of the atmosphere and earth’s surface. This is the so-called greenhouse effect. Volcanic eruptions and industrial pollution increase the concentration of particulates in the atmosphere, lead to more solar radiation being reflected back into space and may lead to global or regional cooling. Land use change and the contraction of sea ice cover can change surface albedo, regional energy balances and hence the global climate.

Ocean and atmospheric circulation

Regional climate is influenced by inter-connected oceanic and atmospheric circulation systems (see Figure 3). The rotational velocity of the Earth gives rise to the Coriolis force, which in turn influences the direction of air flow in each hemisphere. Low pressure systems rotate clockwise in the southern hemisphere and anticlockwise in the northern hemisphere. This phenomenon directs the flow of trade winds in the tropics and the belts of westerlies in mid-latitude areas in each hemisphere. These in turn influence ocean currents, precipitation patterns and temperature.

The thermohaline circulation is the circulation of ocean waters between the poles and equator and the ocean surface and its bottom. It is driven by water density gradients that result from changes in temperature and salinity. Cool surface waters sink in Arctic regions, move southwards and upwell (rise from very low levels in the ocean) in Antarctic circumpolar regions. This water mixes

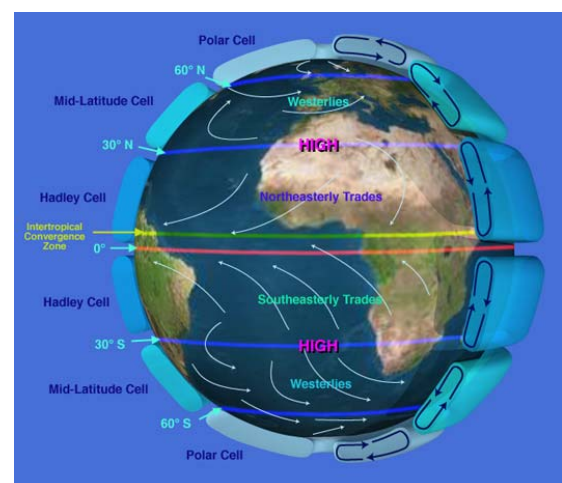


Figure 3 Atmospheric circulation patterns.
<http://sealevel.jpl.nasa.gov/overview/climate-climatic.html>

with fresher melt water to form less dense surface water, which then circulates back towards the Arctic (see Figure 4). The currents created also drive heat circulation in the ocean and atmosphere and influence temperature and rainfall regimes.

2.2 Drivers of regional climate variability

Year-to-year variations in sea surface temperatures (SSTs) and air pressure in oceans surrounding Australia and variations in atmospheric circulation exert powerful influences on Australia's climate (see Figure 5). They contribute to the significant inter-annual variability in climate and recurring drought cycles.

The El Niño and La Niña phases of the El Niño-Southern Oscillation (ENSO) are associated with contrasting patterns of rainfall and air temperature in eastern Australia. The El Niño phase of ENSO is associated with marked reductions in rainfall and increased air temperatures. La Niña events are typically associated with enhanced rainfall and cooler air temperatures [19, 27]. SST fluctuations in the Indian Ocean (related to the Indian Ocean Dipole, IOD) have similar influences and are correlated with rainfall variability between August and April in South Australia [26]. The Southern Annular Mode (SAM) controls the passage of westerlies and embedded frontal weather systems across the Southern Ocean. Its modes influence the latitude of these weather systems, which bring cool season rain to southern Australia.

Eastwards moving high and low pressure systems that cross the continent and Great Australian Bight are the dominant weather influences in South Australia, particularly the Adelaide region [1]. Continental and tropical influences, including the rain-bearing north-west cloud bands (see Figure 5) also influence South Australia's weather.

Winter rains in the Adelaide region occur when the sub-tropical high pressure belt (the sub-tropical ridge [STR]; see Figure 5) is displaced to the north and allows low pressure systems and cold frontal activity to penetrate further north [1]. The Mt Lofty Ranges intercepts moist air passing from the Great Australian Bight, leading to relatively moist winter conditions at high elevations on their western fall. The STR moves to the south during summer, which displaces frontal systems to the south and contributes to the relatively dry weather through this time of year.

2.3 Climate change

Carbon dioxide is a vital gas for photosynthesis and global climate regulation. As CO₂ and other

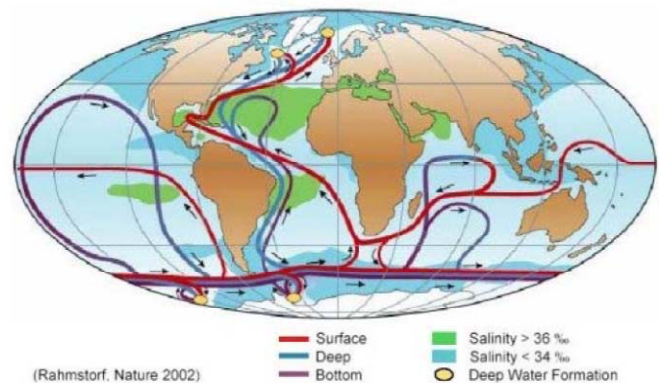


Figure 4 Thermohaline circulation. http://www.pik-potsdam.de/~stefan/thc_fact_sheet.html

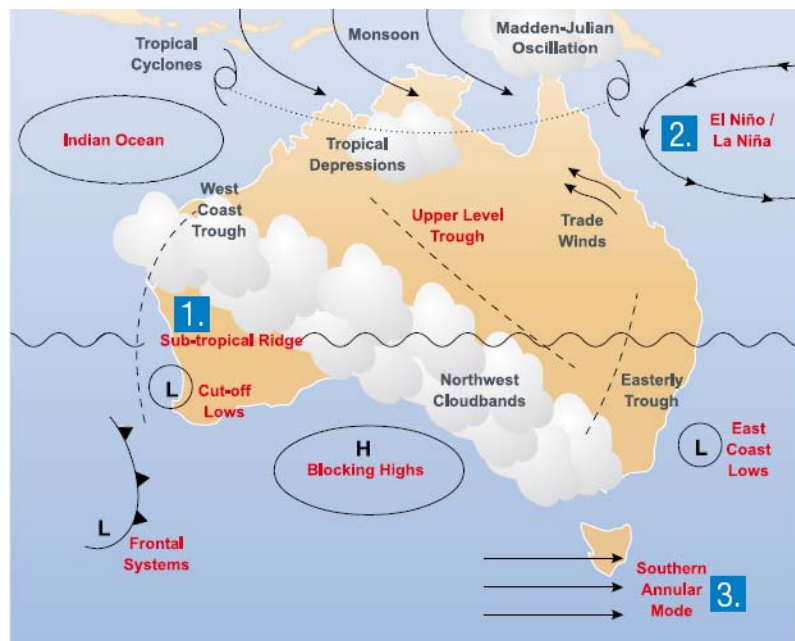


Figure 5 Influences on climatic variability in Australia. Rainfall in southern Australia (south of the sub-tropical ridge) is influenced by frontal and low pressure systems in the Southern Ocean, pressure systems that move southwards along the east and west coasts and cloud bands extending from the north-west of the continent. (Source: Bureau of Meteorology, www.bom.gov.au/watf/about-weather-and-climate/australian-climate-influences.htm)

greenhouse gases “trap” long wave radiation, changes in their concentrations in the atmosphere will influence the Earth’s radiation balance and contribute to the warming of both the atmosphere and the Earth’s surface. This phenomenon is known as the “greenhouse effect”.

Atmospheric CO₂ varies annually, reflecting seasonal photosynthetic activity, release or uptake from the ocean and fires in forests and tropical savannahs. In the past 650,000 years, CO₂ concentrations have varied between 180 and 300 ppm. Since the industrial revolution, concentrations have risen from about 280 ppm to over 390 ppm. This includes an increase of about 37 ppm between 1990 and 2011.

The combined radiative forcing (the effect of greenhouse gases on global radiation balance) of CO₂, CH₄ and N₂O between 1960 and 1999 is reported to be five times greater than for any other 40 year period in the previous two millennia [21]. This is considered to have contributed to the observed increase in global mean temperature of 0.7°C during the period of good quality instrumental records (which are available from 1880 onwards).

2.4 Climate change projections

Climate change projections are derived using general circulation models (often referred to as global climate models or GCMs), which simulate the ocean, atmospheric and land surface processes that influence climate. The models are run under historical conditions and with scenarios representing long-term sequences of future greenhouse gas emissions.

GCMs simulate climate at a global scale, typically with a grid resolution of 200-300 km¹. Regional climate models (RCMs) use ‘down-scaling’ techniques to provide climate projections at much finer resolution and better account for topographic and other local climatic influences. RCMs depend on the outputs of GCMs and while their outputs have better spatial resolution they do not necessarily produce more accurate projections than GCMs.

Emissions scenarios

Climate modelling is framed around a series of emissions scenarios that incorporate potential mitigation efforts, population and economic growth trajectories. Modelling for the Intergovernmental Panel on Climate Change’s (IPCC’s) *Fourth Assessment Report* [14] on climate change is based on scenarios from its Special Report on Emissions Scenarios (SRES [16]). Those scenarios include:

- A1: scenarios representing rapid economic growth, with A1FI representing a fossil fuel intensive economy, A1T representing a scenario where energy resources are not based on fossil fuels and A1B representing a global economy in which there is a balance between the use between fossil and non-fossil fuel energy resources.
- B1: representing a similar future to A1 but with a service/technology focused global economy.
- B2: representing a more sustainable and moderated growth focus.
- A2: representing high population growth but slow technological change.

Under these scenarios atmospheric CO₂ concentrations are projected to range between 500 and almost 1000 ppm by 2100. Global mean temperatures are projected to increase by between 2 and 4°C during that time (see Figure 6; [14]). Global greenhouse gas emissions are currently tracking close to the A1FI scenario, which is closed to the upper range of SRES emissions scenarios [21].

¹ The entire southern Adelaide region sits within a single GCM grid cell.

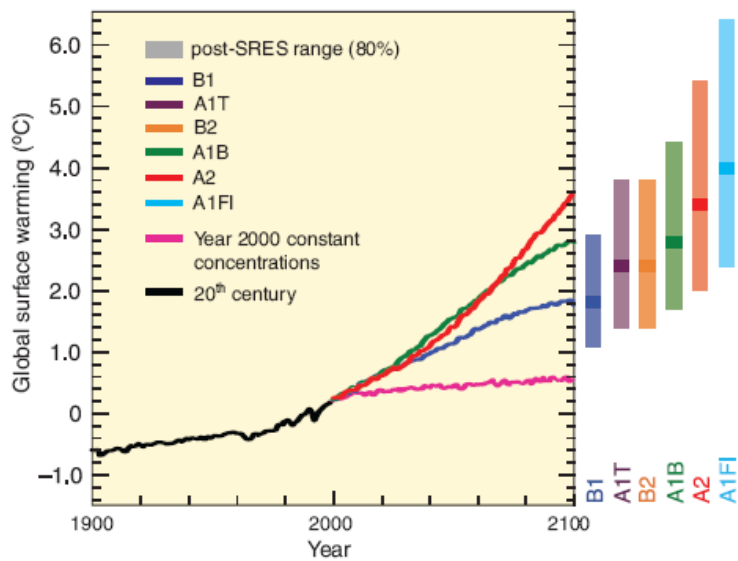


Figure 6 Global warming projections under various SRES scenarios. Bars on the right hand side show the variation in estimates across the full ensemble of 23 GCMs. Source: IPCC 2007 [3]

The IPCC is currently preparing its *Fifth Assessment Report*, parts of which to be published from 2013 onwards. Climate modelling for this report will be based on “radiative concentration pathways”, which are plausible emissions pathways resulting in various levels of radiative forcing (warming due to the trapping of long wave radiation by greenhouse gases) by the end of the 21st century.

Climate change projections

Depending on the scenario and GCM used, global mean temperature is projected to increase by 1.1°C to 6.4°C by 2090-2099 (relative to 1980-1999; see Figure 6). The projected change in mean temperature at any particular location may differ significantly from this due to local and regional climatic influences. Warming is projected to be several degrees greater than the global mean

across high latitude areas and most of the land mass in the northern hemisphere.

Global warming is already contributing to an expansion of the tropics towards the poles, resulting in changes in weather patterns and the increased availability of moisture in the atmosphere.

Thermal expansion of sea water resulting from global warming is projected to lead to sea levels rising by 0.18 m to 0.59 m by 2090-2099 and by up to 0.8 m if ice sheet dynamics (the melting of Greenland and Antarctic ice sheets in response to global warming) are included. Precipitation patterns are also projected to change, with some areas receiving more rainfall and others receiving less. Global mean precipitation is projected to increase overall. Extreme weather events may become more severe, with more frequent and severe heat waves. Although cyclones may become less frequent in some regions, a greater proportion of cyclones are projected to be in the more damaging categories. Extreme rainfall events may also become more intense.

3. Historical climate of the southern Adelaide region

3.1 Introduction

Understanding natural climatic variability and projected climate change are important inputs into the assessment of climate change vulnerability and the development of effective strategies to strengthen climate resilience. This chapter provides an overview of the historical climate and climatic variability of the southern Adelaide region. It is based on climate records for four Bureau of Meteorology (BoM) meteorological stations that are located in or near the region. The stations (see Figure 7) were selected because they have high quality, long-term records² and are broadly representative of the different climatic zones within the region. At least one of the selected stations was required to have records for temperature as well as rainfall.

Characteristics of the selected meteorological stations are summarised in Table 1. Adelaide Airport is located several kilometres north of the region, but was the only representative station with long-term temperature records³.

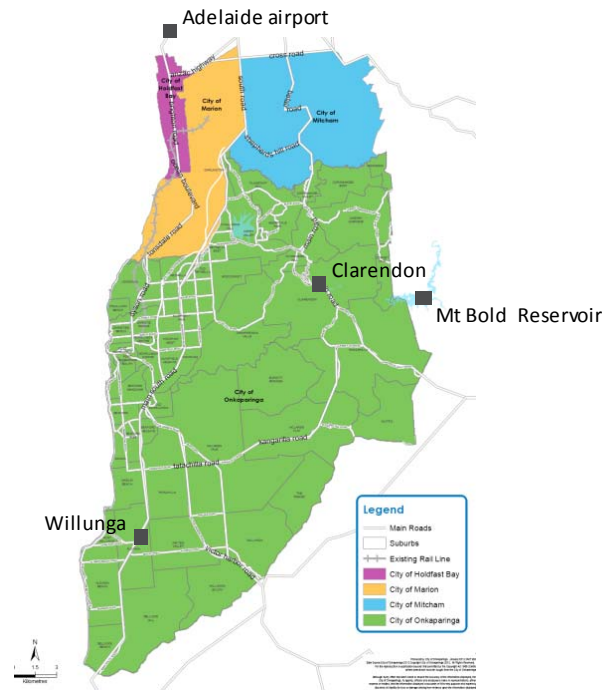


Figure 7 Location of meteorological stations included in analysis of historical climate of the southern Adelaide region

Table 1 Characteristics of meteorological stations included in the analysis of the historical climate of the southern Adelaide region

Location	Elevation	Duration of record	Climate data collected
Adelaide Airport (BoM station 023034) <i>Rainfall representative of urban areas in north of region. Temperature broadly representative of whole region.</i>	2 m	1955-present	Rainfall, temperature, wind speed, relative humidity,
Clarendon (BoM station 023710) <i>Representative of mid to higher rainfall areas in the east of the region</i>	267 m	1861-present	Rainfall
Mt Bold Reservoir (BoM station 023734) <i>Representative of mid to higher rainfall areas in the east and south of the region</i>	251 m	1951-present	Rainfall, evaporation
Willunga (BoM station 023753) <i>Representative of coastal and coastal plain areas in south of region</i>	104 m	1862-present	Rainfall

² Thirty years of meteorological observations are typically required to provide an accurate representation of local climate [6]. Climate change projections from GCMs are typically based on changes (in absolute or percentage terms) relative to a 1980-1999 reference period [7]. The meteorological stations selected were required to have largely complete records of climate extending back to at least 1980.

³ The Noarlunga BoM station (02885) has daily temperature records from September 2000. Monthly average maximum temperatures at Noarlunga for 2001-2012 are between 0.3°C and 0.6°C lower than Adelaide airport for the corresponding period. Average maximum temperatures for 2001-2012 for Mt Barker (BoM station 023734, also outside of the Resilient South region) ranged between 0.2°C and 1.8°C cooler than Adelaide Airport (in February and June, respectively)

The remainder of this chapter provides an overview of the southern Adelaide region’s climate, based on analyses of data from the four selected meteorological stations.

3.2 Rainfall

Annual rainfall

Rainfall patterns across the southern Adelaide region are strongly influenced by the Mt Lofty Ranges. Rainfall increases from north to south and from the coast into the hills (see Table 2). Average annual rainfall on the Adelaide plains (at Adelaide Airport) is 443 mm/y. This increases to 643 mm/y at Willunga in the south of the region. Average annual rainfall totals at Clarendon and Mt Bold Reservoir, in the Mt Lofty Ranges, are 816 mm/y and 791 mm/y, respectively⁴.

Table 2 Summary of historical annual rainfall for southern Adelaide region

Station	Average annual rainfall (mm)					Trend (1960-2012)
	Full record	1980-1999	2000-2012	Maximum	Minimum	
Adelaide Airport	443 (1955-2012)	451	416	731 (1992)	235 (2006)	-8.1 mm/decade
Clarendon	816 (1861-2012)	763	804	1254 (1889)	384 (1914)	-9.2 mm/decade
Mt Bold Reservoir	791 (1951-2012)	809	802	1181 (1992)	437 (1959)	10.8 mm/decade
Willunga	643 (1862-2012)	598	634	1068 (2012)	339 (1914)	-4.4 mm/decade

Rainfall during the reference period for climate change projections (1980-1999) is similar to the long-term historical average (see Table 2). It was slightly higher for Adelaide Airport and Mt Bold Reservoir (with records commencing in the 1950s) and lower for Clarendon and Willunga (with records commencing in the 1880s). Annual rainfall during the 2000s has generally been lower than average.

Annual rainfall totals exceeding 1000 mm have been recorded for all of the meteorological stations except Adelaide Airport (Table 2). Annual rainfall totals of 1000 mm or more have been recorded 20 times (since 1884) at Clarendon and five times (since 1951) at Mt Bold Reservoir. The lowest recorded annual rainfall totals range between 235 mm at Adelaide Airport and 437 mm at Clarendon.

The long-term trend in rainfall⁵ varies between meteorological stations. Rainfall has declined by 4.4 mm/decade and 9.2 mm/decade at Adelaide Airport and Willunga meteorological stations (between

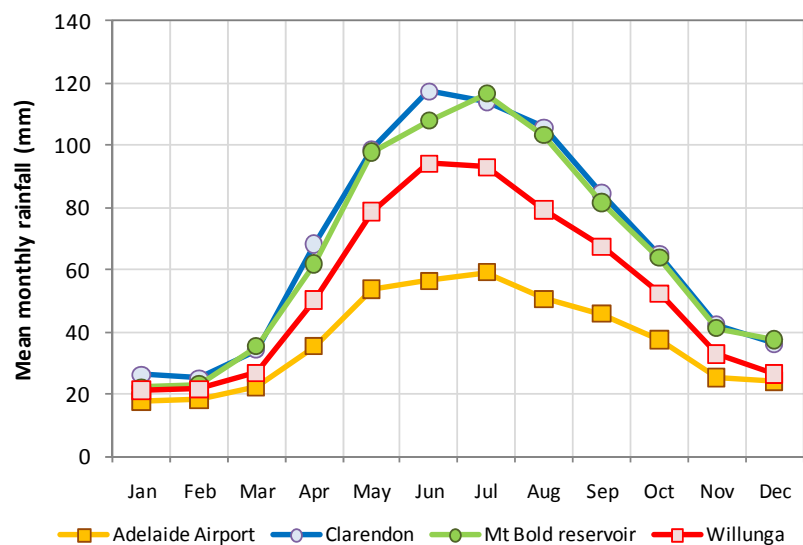


Figure 8 Average monthly rainfall for representative meteorological stations in the southern Adelaide region. Averages are calculated over the full period of record for each meteorological station.

⁴ Note that these averages are for the full period of record for the respective meteorological station and are not for identical periods.

⁵ Determined from 1960-2012, since all stations have records over this period.

1960 and 2012). While rainfall at Clarendon trended downwards over this period, at the nearby Mt Bold Reservoir, annual rainfall increased by an average of 10.8 mm/decade.

Monthly rainfall

Rainfall patterns in the southern Adelaide region are consistent with those expected of a Mediterranean region (see Figure 8). Monthly totals are typically low between late spring and early autumn and high the remainder of the year.

Summer rainfall totals are consistently low across the region, varying between 60 and 87 mm at Adelaide Airport and Clarendon, respectively. The influence of the Mt Lofty Ranges is most pronounced during the “winter” growing season (notionally May-October). Rainfall increases from 303 and 464 mm in coastal areas (at Adelaide Airport and Willunga, respectively, to over 570 mm at Mt Bold Reservoir and at Clarendon (see Figure 8).

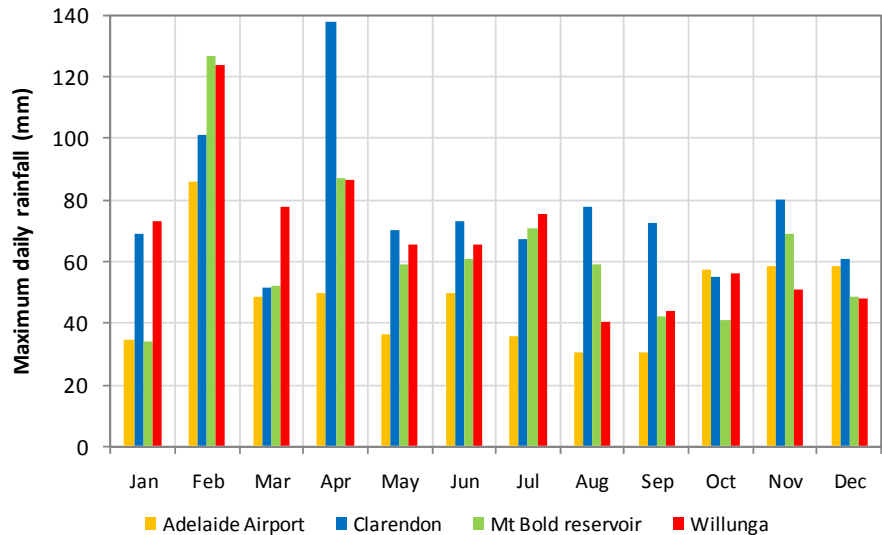


Figure 9 Maximum recorded daily rainfall for representative meteorological stations in the southern Adelaide region over full length of record for each location

Extreme daily rainfall

Extreme daily rainfall totals (see Figure 9) show two peaks, the first coinciding with summer thunderstorm activity (in February) and the second with strong autumn breaks (in April). Maximum daily rainfall is typically greater for the meteorological stations receiving the most rainfall (Clarendon, Mt Bold), although this is not always the case.

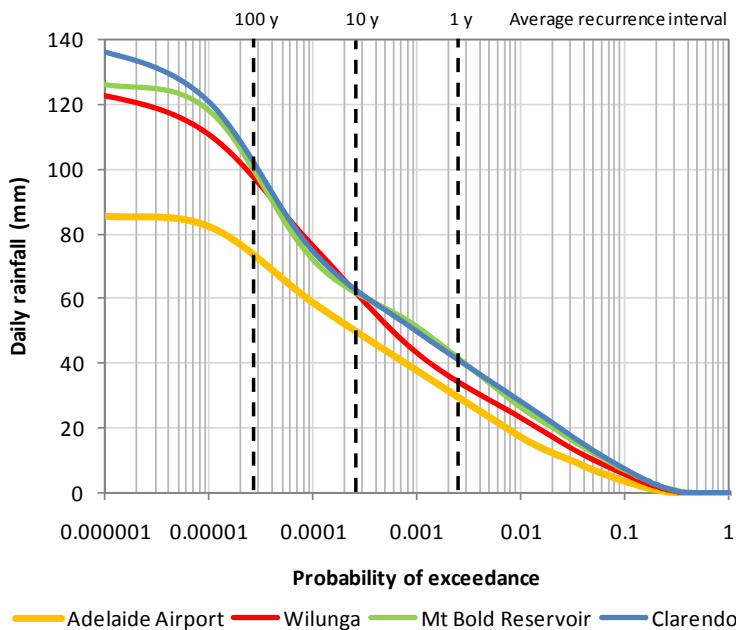


Figure 10 Exceedance curve for daily rainfall for meteorological stations in the southern Adelaide region. Graph shows the probability of daily rainfall being exceeded and the daily rainfall with average recurrence intervals (ARIs) of 1, 10 and 100 years. The logarithmic scale is used to highlight extreme rainfall events.

The highest recorded daily rainfall was 137.9 mm at Clarendon on 17th April 1889. Daily rainfall totals exceeding 100 mm have been recorded at three of the four stations (not Adelaide Airport) and in February and April.

Historical records suggest that daily rainfall totals exceeding 30-40 mm occur, on average, about once each year (see Figure 10). Daily totals exceeding 50-60 mm recur, on average, at 10 yearly intervals. Daily rainfall exceeding 100 mm recurs, on average, at 100 year intervals at Mt Bold. The 100 year Average Recurrence Interval (ARI) daily rainfall events for Adelaide Airport, Clarendon and Willunga are approximately 75 mm, 89 mm and 96 mm, respectively.

3.3 Temperature

Long-term temperature records are only available for the Adelaide Airport meteorological station.

Annual average, maximum and minimum temperature

Annual average maximum and minimum temperatures recorded at the Adelaide Airport meteorological station are 21.5°C and 11.4°C, respectively (see Figure 11a). Both annual average temperatures have increased over the period of record (since 1956), by 0.16°C and 0.22°C per decade, respectively. Year to year variability in average maximum and minimum temperatures is relatively small, with a range of just 2.7°C and 2.2°C, respectively.

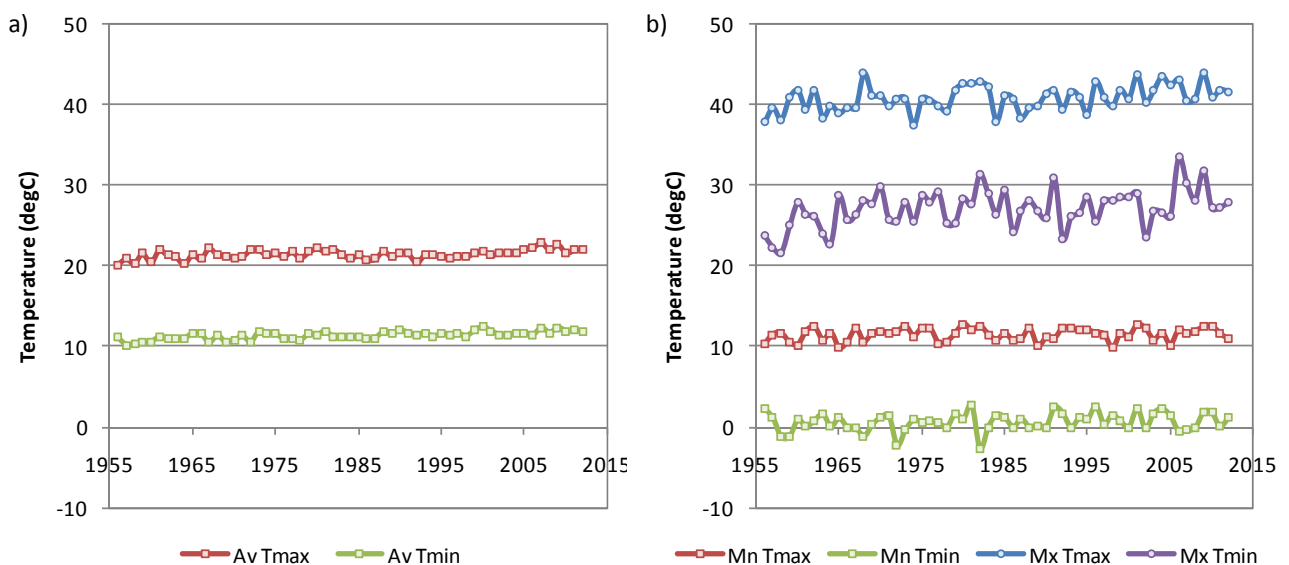


Figure 11 Annual average, maximum and minimum temperatures for Adelaide Airport meteorological station. a) Average maximum and minimum temperatures; b) Annual highest maximum and minimum temperatures (Mx Tmax, Mx Tmin) and annual lowest maximum and minimum temperatures (Mn Tmax, Mn Tmin).

The maximum temperature recorded each year has exceeded 40°C in 37 of the 57 years of record (65% of years; see Figure 11b). The highest temperature of 44°C was recorded on both 30th January 1968 and 28th January 2009.

Monthly temperatures

Seasonal temperature patterns for Adelaide Airport show the pattern expected for the Mediterranean climate of the Adelaide region. Maximum and minimum temperatures are higher in summer and early autumn and lower through the remainder of the year. Average maximum temperature ranges between 28.1°C in January and February and 14.9°C in July. Average minimum temperatures range between 7.0°C in July and 16.1°C in February (see Figure 12).

Extreme daily maximum and minimum temperatures follow a similar pattern. Temperatures in excess of 40°C have been recorded in each month between November and March. Minimum temperatures below 0°C have been recorded between May and August. The incidence of freezing conditions is expected to be greater in inland and more elevated parts of the southern Adelaide region than is indicated in the temperature record for Adelaide Airport, due to the latter's coastal location.

Average temperatures since 2000 have generally been higher than those recorded over the full length of record at Adelaide Airport. The average maximum temperature between 2000 and 2012 was higher than the average for the full record in 11 of 12 months, with June as the exception. The difference in the average maximum temperatures for the two periods was as much as 1.5°C (in November). The average minimum temperatures were also higher during 2000-2012 than during the full length of record. Differences were as large as 1.2°C, also in November.

The highest (or equal highest) temperatures recorded in seven of the 12 months of the year were recorded between 2000 and 2012.

Heatwaves

Heatwaves are typically described as a prolonged period of 'excessive heat', although there is no single definition of what constitutes a heatwave. Many studies consider heatwaves as consecutive days of over 35°C or 40°C [5]. In South Australia, the trigger point for Extreme Heat Plans (which are developed to manage risks from heatwaves to vulnerable members of the community) is three or more consecutive days where the average of daily maximum and minimum temperatures is at least 32°C [24]. This latter measure and consecutive days with maximum temperatures over 40°C are used to represent heatwave events in this report.

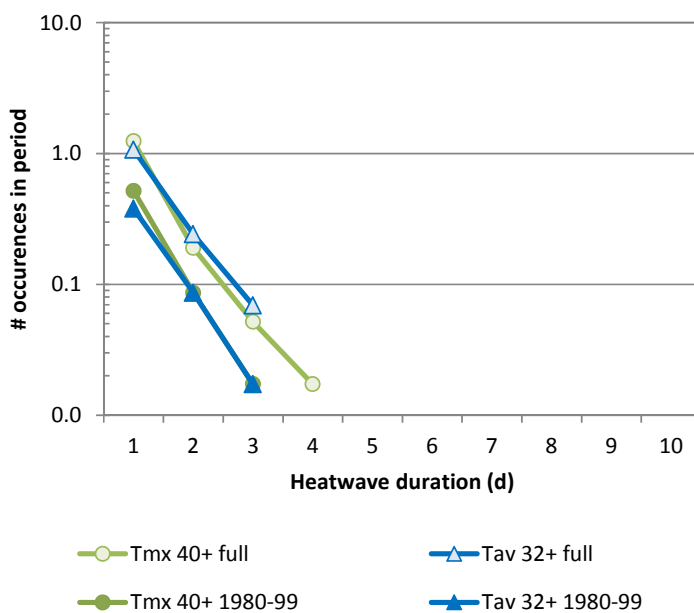


Figure 13 Severity and duration of heatwave events: Adelaide Airport meteorological station. Average number of consecutive days per year with maximum temperatures (Tmx) of 40°C or more and average temperature (Tav) of 32°C or more. Data presented for the full period of record (1955-2012) and for the climate change projection reference period (1980-1999).

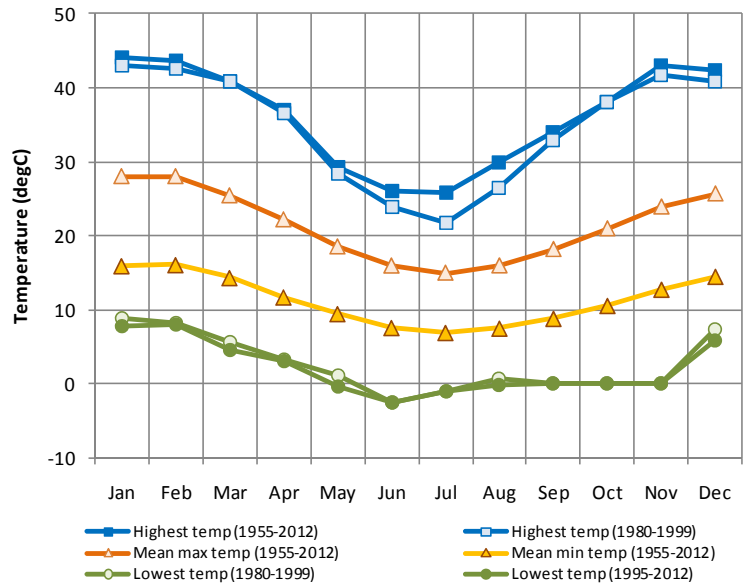


Figure 12 Monthly temperature patterns for Adelaide Airport meteorological station. Highest and average maximum monthly temperatures and average minimum and lowest monthly temperatures for period of record (1956-2012). Highest and lowest monthly temperatures for 1980-1999 climate change reference period are included for comparison. Average monthly maximum and minimum temperatures are similar for both periods.

Consecutive days with temperature maxima of 40°C or higher are not common at Adelaide Airport and occur every 5 years on average (see Figure 13). The longest sequence of days over 40°C was four days in January 2009.

Heatwaves that trigger Extreme Heat Plans in South Australia are uncommon at Adelaide Airport and only occur, on average, every 15 years (see Figure 13).

The frequency of heatwaves is greater over the historical record than during the climate change projection reference period (1980-1999). Most recorded long-duration heatwave events in the historical record have occurred since 2000. Over half of the 15 incidences with two consecutive days exceeding 40°C have been recorded since 2000.

Frost

Freezing conditions are relative uncommon at Adelaide Airport, which is consistent with its location near the coast. Daily minimum temperatures less than 0°C have only been recorded between May and August, although minima of 0°C have been recorded through to November (see Figure 12). Light frosts (with temperature minima lower than 2°C) are more common, but have only been recorded between May and November.

The number of days per year with minimum temperatures of 2°C or lower varies from year to year (see Figure 14), ranging between 0 days (in 6 years between 1956 and 2012) and as much as 16 days (in 1958). The incidence of such days appears to have declined since temperature records began at the Adelaide Airport. Minimum temperatures of 2°C or less were recorded on over 5 d/y in the 1950s, 1960s and 1970s. However they were recorded on 3 d/y or fewer in the 1990s and 2000s.

There is a reasonable correlation between annual rainfall and the incidence of frost. Most of the years with at least 6 days of minimum temperatures of 2°C or less coincided with years of below average rainfall. Average annual rainfall at Adelaide Airport for the 10 years with at least 6 days of 2°C or lower temperature is 371 mm, compared with 443 mm for the full period of record.

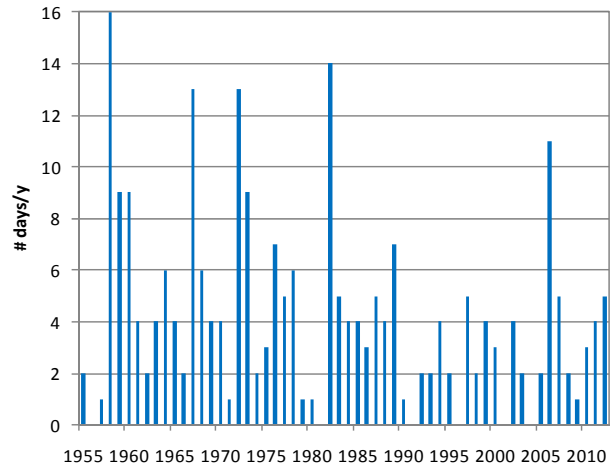


Figure 14 Numbers of days with minimum temperatures of 2°C or less at Adelaide Airport.

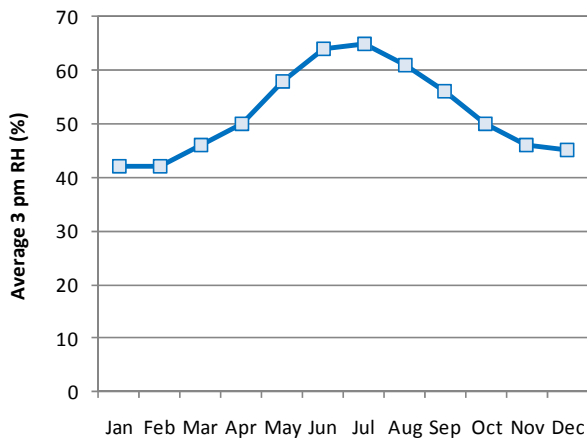


Figure 15 Average monthly 3 pm relative humidity at Adelaide Airport meteorological station. Data are the average for 1955-2010.

Frosts and freezing conditions are more common in inland and higher elevation locations in the southern Adelaide region⁶.

3.4 Relative humidity

Adelaide Airport is the only meteorological station in or adjacent to the southern Adelaide region with long-term records of relative humidity. The seasonal pattern in humidity follows that expected for a Mediterranean climate (see Figure 15), with lower values during the warmer and dry summer months and higher values during the cooler months of winter.

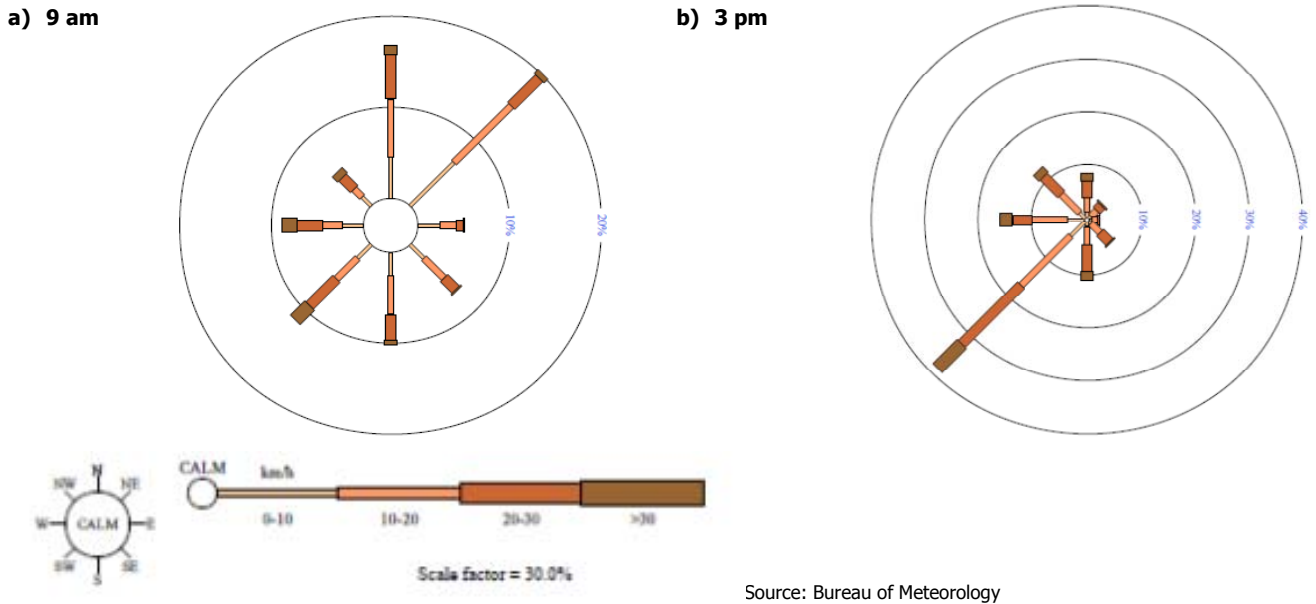
Adelaide Airport's coastal location is likely to moderate relative humidity values during summer. Inland areas of the southern Adelaide region are likely to experience somewhat lower values during summer than are experienced at Adelaide Airport.

3.5 Wind

Adelaide Airport is also the only meteorological station in or adjacent to the southern Adelaide region with long-term records of wind patterns. Wind speeds are typically lower in the morning than in the afternoon (see Figure 16) and most commonly originate from the north and north-east. Afternoon winds are commonly the result of

⁶ At Mt Barker, which is located in the Adelaide Hills, to the east of the Resilient South project area, minimum temperatures of 2°C or lower have been recorded on approximately 28 days/y on average, compared with 4 days/y on average at Adelaide Airport.

sea breezes, are fresher than those in the morning and are mostly directed from the south-west. Average 3 pm wind speeds are slightly stronger during summer (average 23 km/h) than during autumn and winter (19 km/h).



Source: Bureau of Meteorology

Figure 16 Annual average 9 am and 3 pm wind speed and direction for Adelaide Airport meteorological station. Data are the average for 1955-2004.

3.6 Potential evaporation

Potential evaporation data are available for Mt Bold Reservoir from 1968 onwards. The seasonal pattern in evaporation (see Figure 17) is as expected for a Mediterranean climate region. Evaporation is highest during summer (>200 mm/month), with its long days and warmer and drier weather. Evaporation falls to relatively low levels through winter (~50 mm/month).

Average monthly rainfall exceeds average monthly evaporation during the cool season between May and August. The excess of average rainfall over average evaporation during this period is 177 mm (1968-2012). It is this difference that drives streamflows into Mt Bold reservoir and in other waterways draining the Mt Lofty Ranges.

Over the period of record, average annual evaporation is 1614 mm. The average for the climate change reference period (1980-1999) is almost identical at 1617 mm. While the climate has generally been warmer than the historical average during the 2000s, the average rate of evaporation has been lower at 1494 mm. Differences in average evaporation were observed in every month (see Figure 17).

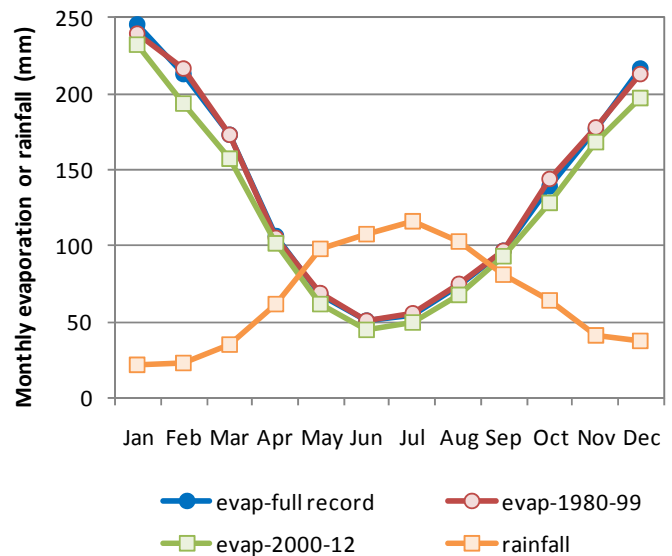


Figure 17 Monthly average evaporation and rainfall at Mt Bold Reservoir. Evaporation (evap) data are for: the full period of record, the climate change reference period (1980-1999) and 2000-2012. Monthly rainfall data is for the full period of record.

3.7 Forest fire danger

The level of fire risk can be represented by the Forest Fire Danger Index (FFDI⁷) which incorporates variables contributing to fire danger that reflect fire weather conditions and longer-term drying of soils and of coarse fuels [12]. Fires that are ignited on days of extreme fire danger (FFDI ≥ 50) are less likely to be controlled by first attack suppression efforts and, once established are likely to exhibit more extreme and difficult to control fire behaviour [13]. Bradstock and Gill [3] found that virtually all fires that become established on days with FFDI in the extreme range becoming destructive of houses and other property.

Historical values of FFDI were calculated for Adelaide Airport, using 3 pm wind speed and relative humidity, daily maximum temperature and daily rainfall as inputs [12]. FFDI values were only calculated for Adelaide Airport because there are no long-term temperature, wind speed or humidity data available for other stations in the Resilient South region.

Days with FFDI values in the very high range (≥ 25) are experienced throughout summer and early autumn (until late April) in most years in the southern Adelaide region. Between 1956 and 2012 the number of days with FFDI in the very high range has been between 57 and 234 days/y at Adelaide Airport (see Figure 18).

Days with FFDI values in the extreme range (≥ 50) are uncommon and do not occur in all years (see Figure 18). They mostly occur in January and February and occasionally in December and March. Up to 11 days/y with extreme FFDI values have been recorded at Adelaide Airport.

The incidence of days with very high FFDI has increased over the period of record. The number of day per year in the very high range has increased by 3.2 days/y/decade and the annual incidence of days with extreme FFDI values has increased by 0.6 days/y/decade. This corresponds to an approximately 30% increase in the frequency of days of extreme fire danger per decade.

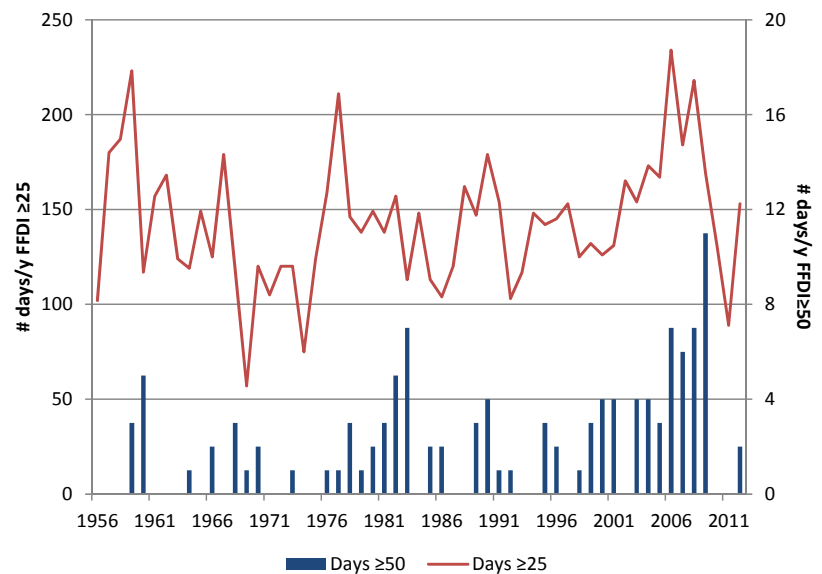


Figure 18 Forest Fire Danger Index values calculated for Adelaide Airport: numbers of days per year with FFDI in the very high (≥ 25) or extreme (≥ 50) range. Days with FFDI ≥ 25 plotted against left hand axis. Days with FFDI ≥ 50 plotted on right hand axis.

⁷ A similar index can be calculated for grassland fire danger. FFDI is equivalent to the Fire Danger Rating (FDR) for forest areas.

4. Climate change scenarios and projections

4.1 Climate change analysis

The IPCC's Fourth Assessment Report [14] provides a synthesis of climate change modelling undertaken by leading international climate research organisations. Outputs from this work for Australia are available on websites managed by CSIRO and BoM (www.climatechangeinaustralia.gov.au and www.ozclim.gov.au). They consolidate projections from GCM runs (from up to 23 models) for the 21st century under a range of greenhouse gas emissions scenarios and include data for a wide range of climate parameters, including rainfall, temperature, wind speed and relative humidity.

Variability in climate projections reflects several important influences, as follows:

- **Greenhouse gas emissions scenario:** climate change projections for the IPCC's Fourth Assessment Report were based on the SRES scenarios (see section 2.4; [16]). These scenarios provide a narrative of future change in the global economy and society and a trajectory for future greenhouse gas emissions. There are 40 different scenarios, although only a few are commonly used in modelling studies. GCM outputs available from www.climatechangeinaustralia.gov.au are framed around low (B1), medium (A1B) and high (A1FI) emissions scenarios. Global temperatures are projected to increase more rapidly and to a greater extent under the higher emissions scenarios.
- **Sensitivity of the global climate system to increased greenhouse gas concentrations:** GCMs may incorporate varying degrees of sensitivity of global climate to increasing greenhouse gas emissions, with greater sensitivity resulting in a more rapid increase in temperature per unit increase in greenhouse gas concentrations.
- **GCM representation of the global climate system:** the various climate models include differing mathematical representations of the global climate system and may produce quite different results for the same timeframe, emissions scenario and climate sensitivity. Data available from www.climatechangeinaustralia.gov.au represent this variability by providing the 10th, 50th and 90th percentile results from the full ensemble of models for which data are available.

Not all of the 23 GCMs used in the ensemble results presented on the Climate change in Australia web site have good predictive skill for South Australia. Suppiah *et al.* [25] identified that only 13 provided reliable estimates of historical climate. While there is some variance between these models (see Figure 19), they tend to project that climate for the Adelaide-Mt Lofty Natural Resource Management (NRM) Board region (including the southern Adelaide region) will become warmer and drier over the course of this century. That warming and drying trend is anticipated to strengthen over time.

GCM outputs are reported as *climate change* factors, which are an amount or percentage of

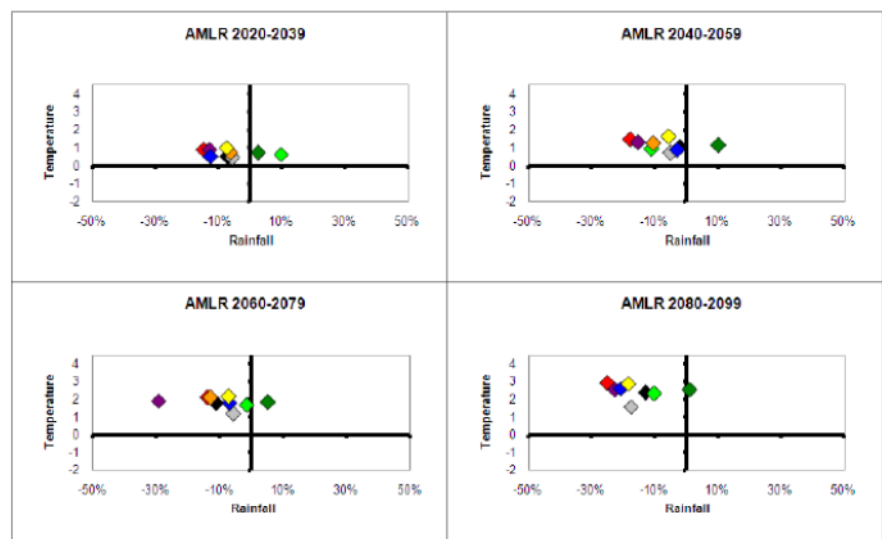


Figure 19 Projected changes in average annual rainfall (%) and temperature (°C) for the Adelaide and Mt Lofty Ranges NRM region during the 21st century. The graphs show the results for 11 of the 13 GCMs (different coloured shapes) identified as having the best predictive skill for South Australia for four twenty year time slices centred on 2030, 2050, 2070 and 2090. Source: [10]

change in a particular climate variable for a given time and emissions scenario for a single model or ensemble of models. They represent change from a baseline or reference period, which is typically 1980-1999. Climate change factors are typically the average change from the reference period over a 20 year period that is centred on the reported year⁸. They may be used to adjust or perturb an historical sequence of climate variables over the reference period to develop a new climate sequence or climate change projection.

Climate change projections were developed for the four meteorological stations used to characterise the climate of the southern Adelaide region. Climate change factors from the *Regional climate change projections for Adelaide and Mt Lofty Ranges* report [9] and historical meteorological data for 1980-1999 were used by SKM to develop projections for four scenarios, namely 2030 and 2070 medium and high emissions scenarios. The selected scenarios were agreed with the Resilient South Project Management Committee⁹. Climate change factors for each scenario are given in Appendix B.

4.2 Uncertainty in climate change projections

Climate change projections are useful tools to guide decision-making about climate risks. They indicate the expected trend in climate variables under various emissions scenarios and the likely quantum of change. While probabilities may be provided for GCM projections for given emissions scenarios, no probabilities may be attached to the scenarios themselves as they are "storylines" about the future, rather than predictions based on numerical analyses.

As noted in section 4.1, climate change projections reported here for the southern Adelaide region have not been produced by "downscaling". Climate change factors have simply been used to perturb or adjust historical climate change records for the 1980-1999 reference period. Various other methods (e.g. use of regional-scale climate models or statistical downscaling techniques) may be used to produce climate change projections with much finer resolution than those derived solely from GCMs. While this may be useful, such projections are subject to the uncertainties inherent in the GCMs, as well as the additional uncertainties inherent in their own methodologies. While the increased spatial resolution that may be achieved conveys an impression of greater accuracy, this is not necessarily the case.

The reliability of climate change projections varies between climate variables. In general, global projections are more certain than regional projections and temperature projections are more certain than those for rainfall. Changes in average conditions are also more certain than changes in extremes. While climate model projections have improved in recent years, some important climatic influences, including ENSO, are currently not well represented. While an overall drying trend for South Australia is projected and is robust, there is still significant uncertainty about the amount of projected changes in rainfall, particularly in spring and summer, over coming decades.

4.3 Rainfall

Rainfall projections

Annual average rainfall is projected to decrease throughout South Australia during the 21st century (Figure 20). The median projection is for rainfall to decline by 2-5% by 2030 and by 5-20% by 2070. The more extreme dry GCMs suggest that average annual rainfall in the Adelaide region may decline by 20-40% by 2070. Several GCMs project small increases in average annual rainfall.

Rainfall is projected to decrease most in winter and spring in both percentage and absolute terms. Drying trends that have been observed in autumn in recent decades may also continue. Spring rainfall changes are less certain due to uncertainties about how ENSO is represented by GCMs and in the impact of climate change on the phenomenon.

⁸ Climate change factors for 2030 are the difference in the relevant climate variable between the 1980-1999 average and the projected average for 2020-2039 (for a given emissions scenario).

⁹ In February 2013.

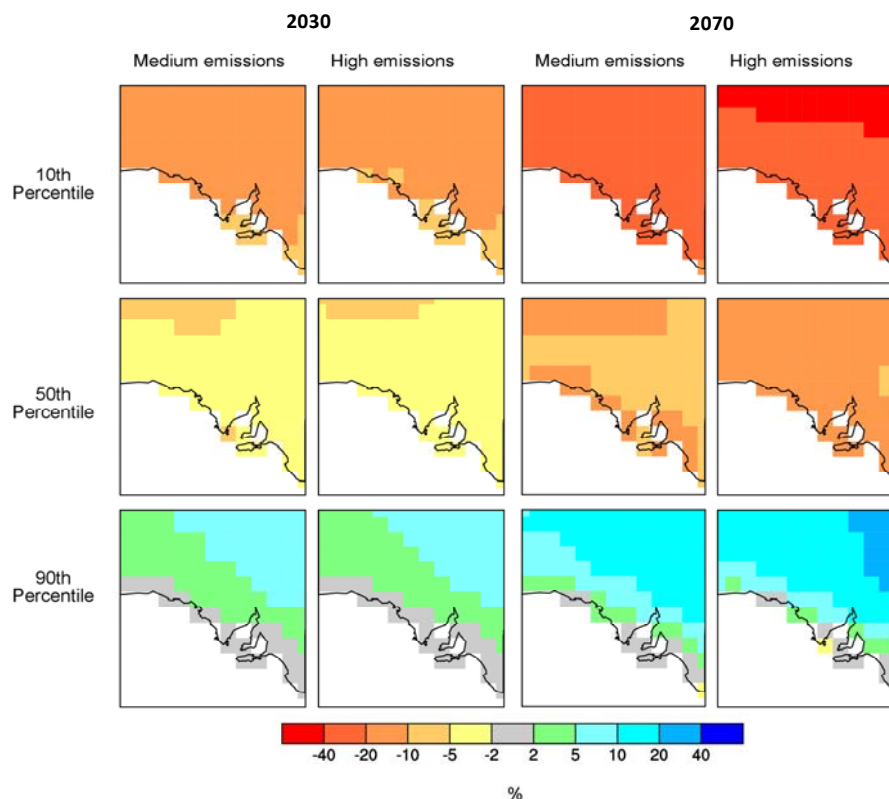


Figure 20 Projected change in annual average rainfall for South Australia under medium and high emissions scenarios, expressed as % change from 1980-1999. Results provided for 10th, 50th and 90th percentile of GCM outputs for 2030 and 2070. Source: www.climatechangeinaustralia.gov.au

Annual rainfall

Average annual rainfall is projected to decline by 27-43 mm/y by 2030 for both medium and high emissions scenarios (see Table 3). It is projected to fall by a further 29-83 mm/y by 2070 (56-126 mm in total), depending on location and emissions scenario. While the emissions scenario has no influence on average annual rainfall in 2030, the high emissions scenario leads to substantially lower annual average rainfall in 2070 than the 2070 medium emissions scenario.

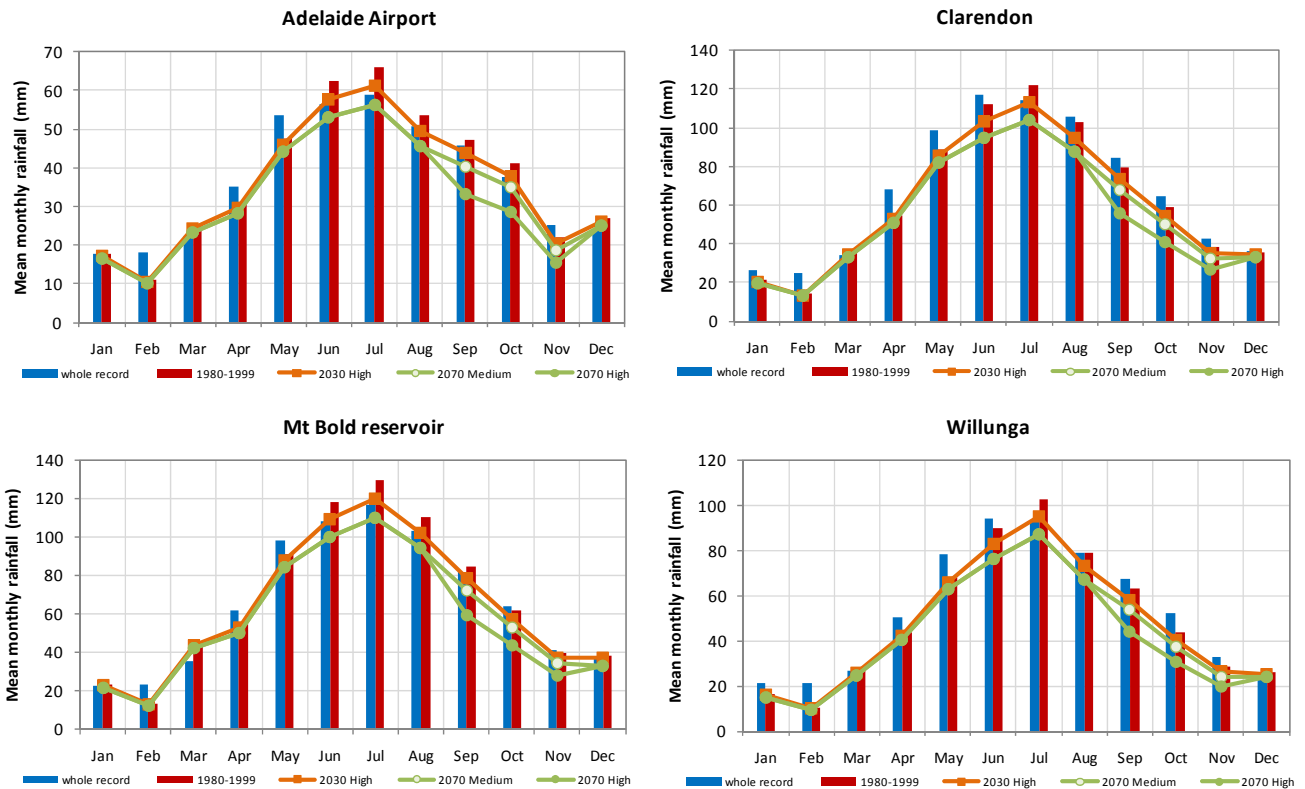
Table 3 Summary of annual rainfall projections for southern Adelaide region for 2030 and 2070 under medium and high emissions scenarios

Station	Full record	1980-1999	2030		2070	
			Medium	High	Medium	High
Adelaide Airport	443	451	424	424	395	379
Clarendon	816	763	716	716	667	641
Mt Bold Reservoir	791	809	759	759	704	676
Willunga	643	598	560	560	522	502

Monthly rainfall

Projected average monthly rainfall is shown for each meteorological station in Figure 21. Projected average rainfall is lower during the months of winter and spring than during the corresponding months in the reference period. Medium and high emissions scenarios for 2070 differ in the scale of the projected rainfall reduction

during spring, with the former showing a 15% decrease in average rainfall (relative to 1980-1999), compared with a 30% decrease for the high emissions scenario.



Note: Data for 2030 medium emissions scenario are not presented as they are identical to those for the 2030 high emissions scenario.

Figure 21 Projected average monthly rainfall for southern Adelaide region under climate change scenarios for 2030 and 2070, with comparisons for entire record for each meteorological station and the 1980-1999 reference period.

Extreme daily rainfall

The Clausius-Clapeyron equation, which relates changes in water vapour pressure to temperature, may be used to project the influence of climate change on extreme rainfall. The equation suggests that for each degree of global warming, extreme daily rainfall may increase by 7% [28]¹⁰, although it may not apply in every circumstance.

The Clausius-Clapeyron equation was used to recalculate the daily rainfall exceedance curves for each of the four southern Adelaide meteorological stations included in this analysis (see Figure 22). Three emissions scenarios were considered: 2030 high emissions¹¹ and 2070 medium and high emissions. Extreme daily rainfall events are projected to increase under all scenarios. For Adelaide Airport, 100 year ARI daily rainfall is projected to increase from 76 mm to over 90 mm under the 2070 high emissions scenario. This event is projected to increase from 89 mm to over 106 mm at Clarendon, from 104 mm to 122 mm at Mt Bold Reservoir and 96 mm to about 113 mm at Willunga (2070 high emissions).

¹⁰ The influence of climate change on extreme rainfall conditions is quite uncertain and is the subject of considerable research effort. The Clausius-Clapeyron equation is used here to indicate the scale of change in extreme rainfall that may occur in response to climate change. However, rainfall projections based on this equation should not be considered to be definitive. Changing circulation patterns in southern South Australia may mean that extreme rainfall intensity does not increase in line with the Clausius-Clapeyron relationship. Observational evidence does not at this stage show any increase in annual maximum daily rainfall.

¹¹ 50th percentile projections of changes in temperature for the 2030 medium and high emissions scenarios are identical.

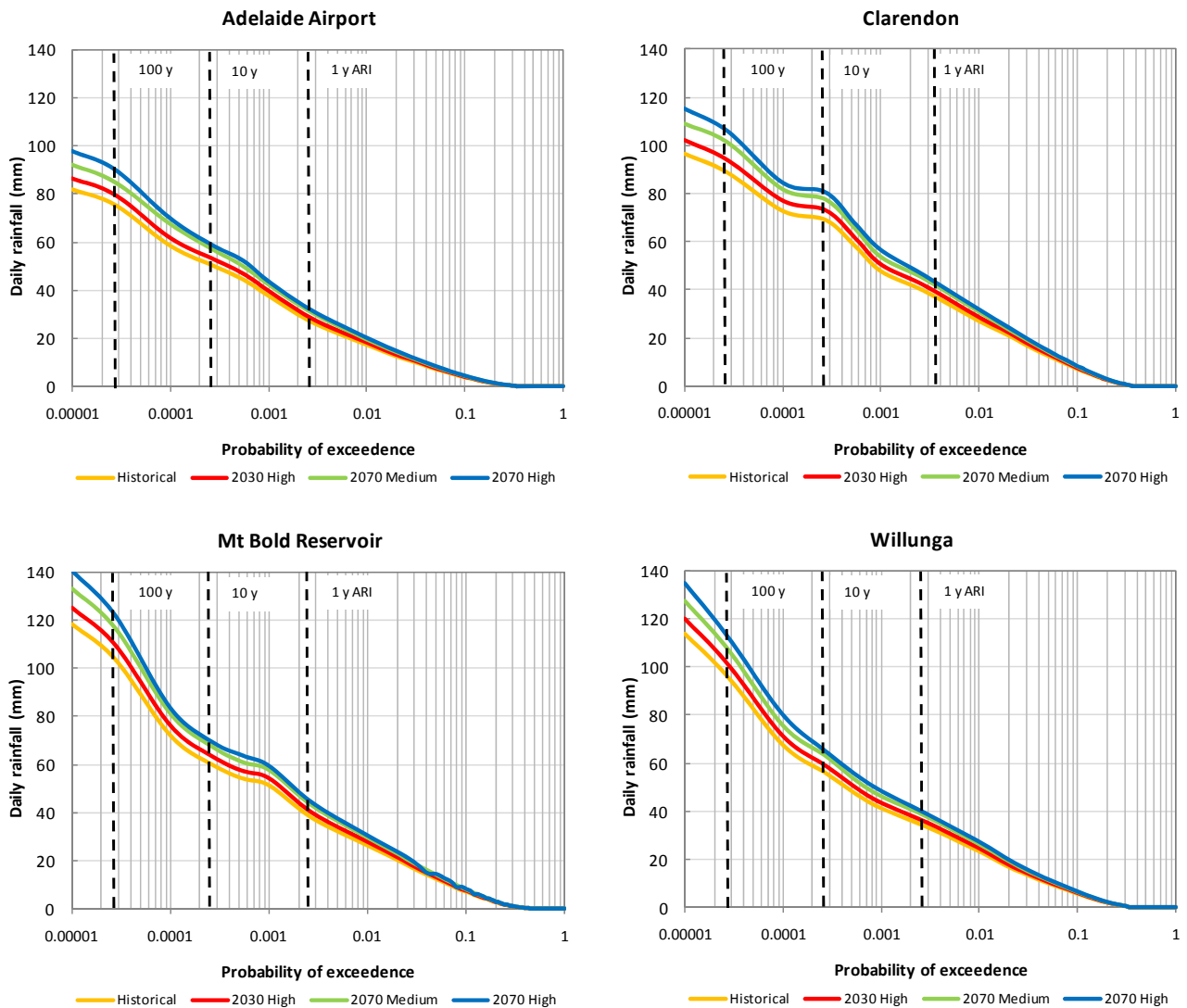


Figure 22 Exceedance curve for daily rainfall for meteorological stations in the southern Adelaide region. Graph shows the probability of daily rainfall being exceeded and the daily rainfall with average recurrence intervals (ARIs) of 1, 10 and 100 years under 2030 high emissions and 2070 medium and high emissions scenarios. The logarithmic scale is used to highlight extreme rainfall events.

4.4 Temperature

Temperature projections

Annual temperatures are projected to increase throughout South Australia during the 21st century in each of the climate change scenarios considered (see Figure 23). The median projection for the southern Adelaide region is for temperature to increase by 0.6-1.0°C by 2030 and by 1.0-2.5°C by 2070, compared with the 1980-1999 reference period. Under the most extreme scenario for 2070 (90th percentile GCMs, high emissions), average temperature is projected to increase by 3-4°C by 2070.

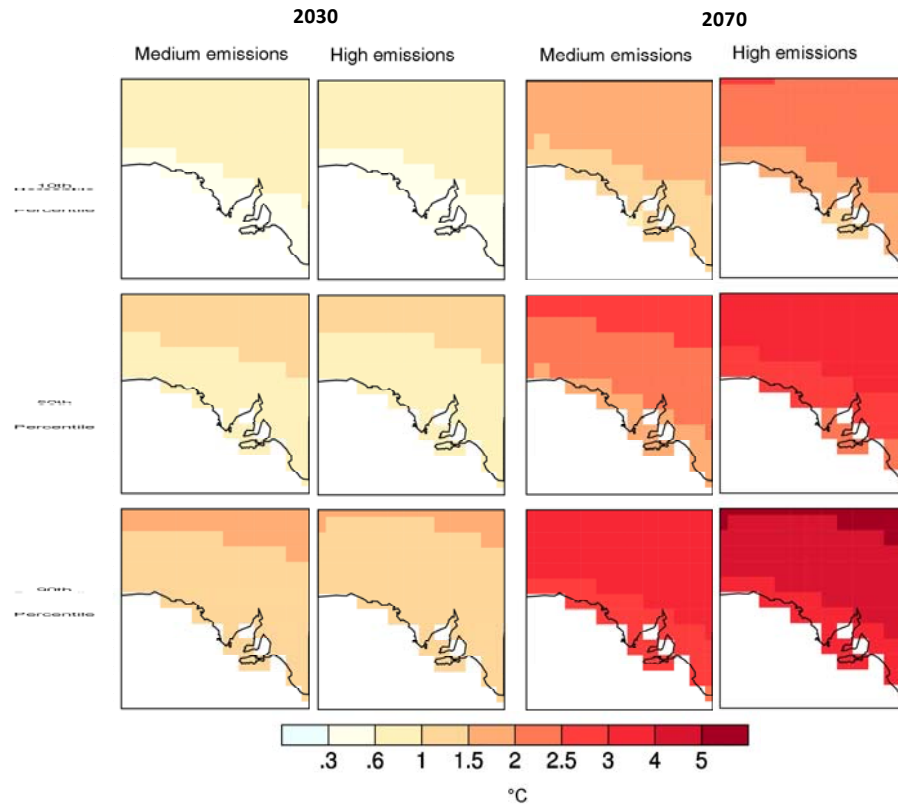


Figure 23 Projected change in annual average temperature for South Australia under medium and high emissions scenarios, expressed as % change from 1980-1999. Results provided for 10th, 50th and 90th percentile of GCM outputs for 2030 and 2070. Source: www.climatechangeinaustralia.gov.au

Monthly temperature patterns

Average maximum temperatures are projected to increase to 27-29°C in summer (from 26-28°C) and 16-17°C in winter (from 15-16°C) under 2030 medium and high emissions scenarios. This is projected to increase to 29-31°C in summer and 17-18°C in winter under the 2070 high emissions scenario (see Figure 24).

Average minimum temperatures are projected to increase by similar amounts from the 1980-1999 reference period (see Figure 24). By 2070, under the high emissions scenario, average minimum temperatures are projected to range between 9 and 10°C, compared with 7 and 8°C in 1980-1999.

Climate change is projected to significantly reduce the incidence of freezing conditions at Adelaide Airport. Under the 2070 medium and high emissions scenario, freezing conditions are projected to be confined only to June, compared with June

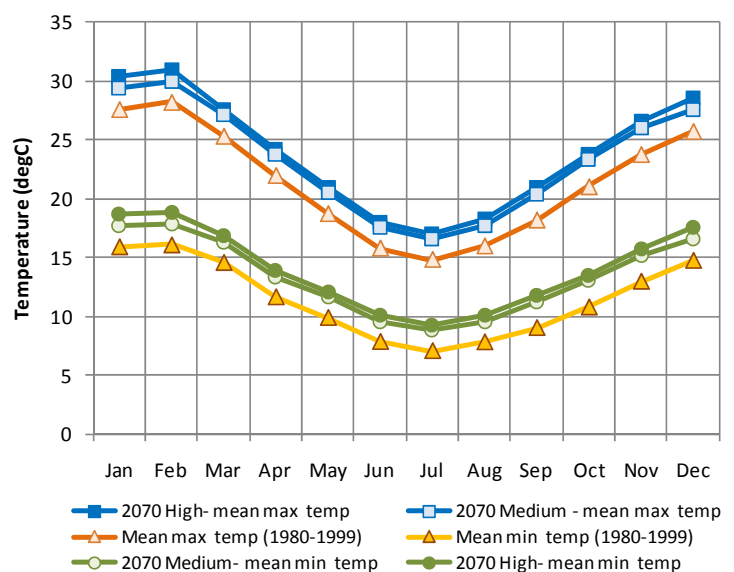


Figure 24 Projected average maximum and minimum temperatures during climate change reference period (1980-1999) and under 2070 medium and high emissions scenarios. 2030 high and medium emissions scenario temperature projections sit mid-way between 1980-99 temperatures and the 2070 medium emissions scenario.

and July in the 1980-1999 reference period and May-August for the full historical record (see Figure 25a). For most months, minimum monthly temperatures recorded in 2000-2012 exceed those projected for 2030 under the high emissions scenario. They exceed the projected values for 2070 medium and high emissions scenarios in October and November.

Maximum temperatures during January and February are projected to exceed 45°C, up from 43°C in 1980-1999 and 44°C in 2000-2012 (see Figure 25b). Highest temperatures during winter are projected to increase to as much as 24-29°C under the 2070 high emissions scenario, compared with 21-27°C in 1980-1999. Maximum temperatures recorded during 2000-2012 actually equalled or exceeded those projected for 2070 in some months.

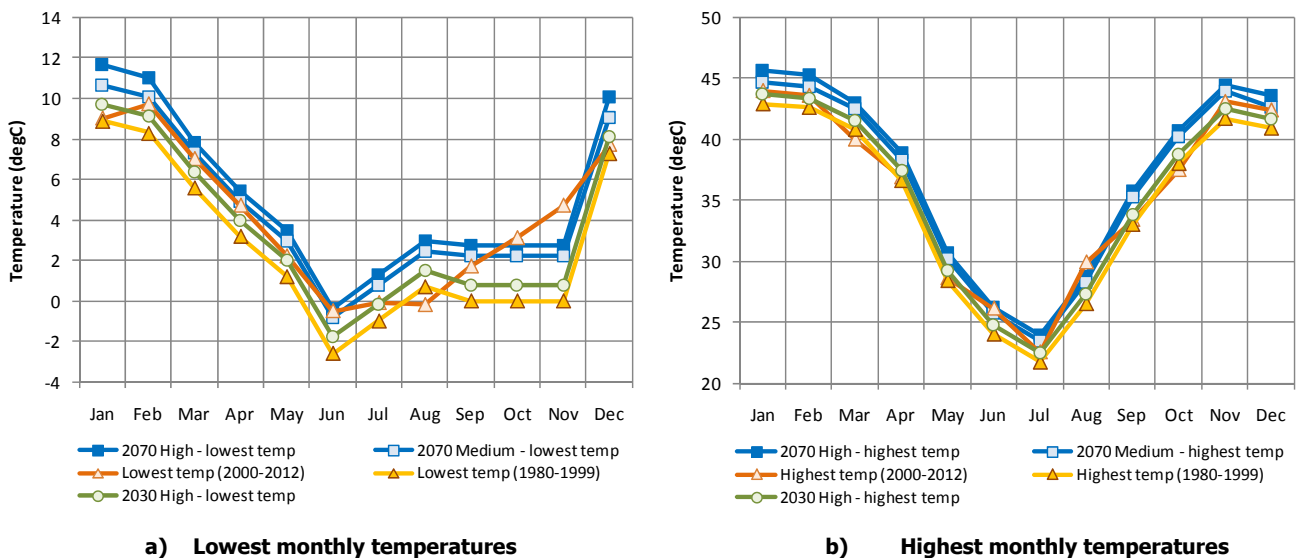


Figure 25 Projected highest and lowest monthly temperatures under 2030 high emissions and 2070 medium and high emissions scenarios. Lowest and highest monthly temperatures for 1980-1999 and 2000-2012 are included for comparison.

4.5 Heatwaves

The influence of climate change on the incidence, duration and intensity of heatwaves has been determined for both heatwave measures considered in this report (see Figure 26). The frequency of days with maximum temperatures greater than 40°C is projected to increase as a result of climate change, particularly for sequences of two or more days (see Figure 26a). Under the 2070 high emissions scenario, there are projected to be sequences of up to seven consecutive days with this maximum temperature, up from a maximum of three days in 1980-1999 and four days in 2000-2012.

Sequences of three or more consecutive days with average temperatures of at least 32°C are projected to remain uncommon, even under the 2070 high emissions scenario. However their average frequency is projected to increase from once every 5 years in 1980-1999 to once every 1.5 years under the 2070 high emissions scenario (see Figure 26d). There is no recorded sequence of more than three days with average temperature of 32°C or more at Adelaide Airport. However, sequences of up to 6 days are projected to occur under the 2070 high emissions scenario.

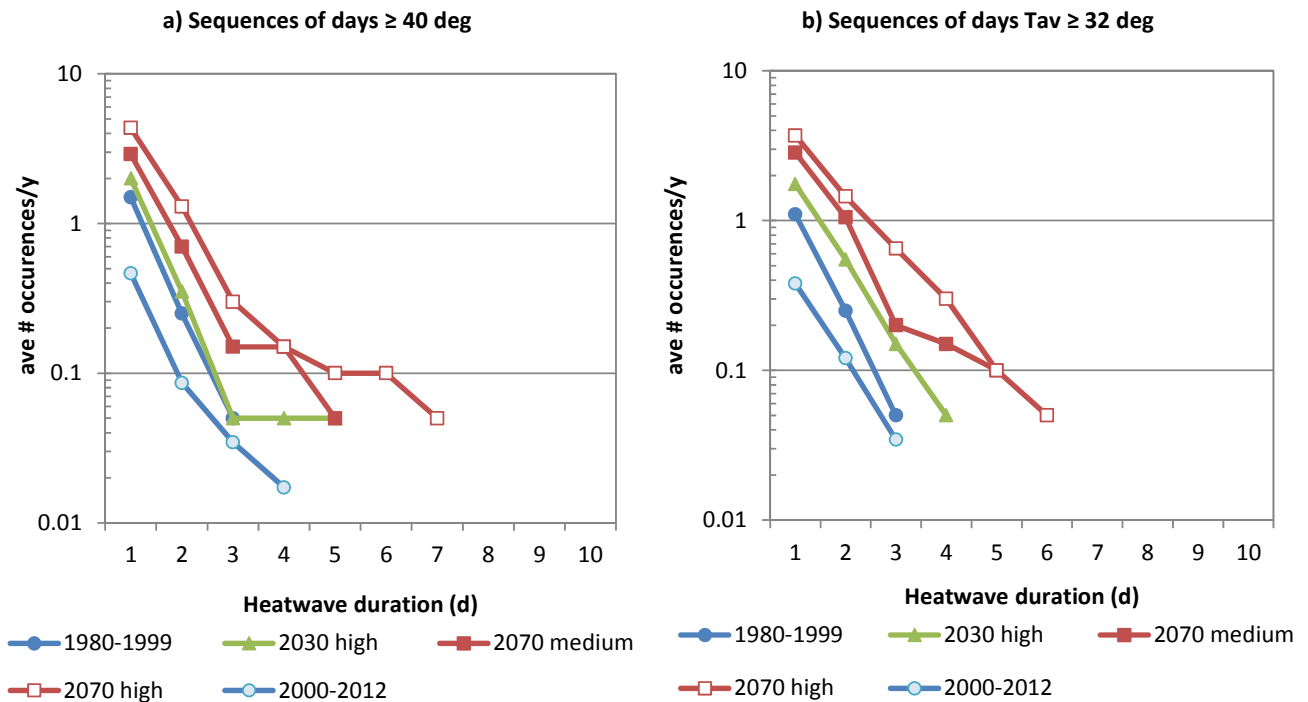


Figure 26 Projected severity and duration of heatwave events for Adelaide Airport meteorological station. Average number of consecutive days per year with maximum temperatures (T_{mx}) of 35 or 40°C or more and average temperature (T_{av}) of 32°C or more. Data presented for the climate change projection reference period (1980-1999), 2000-2012 and 2030 high emissions and 2070 medium and high emissions scenarios.

Frost

Based on the projected change in average temperature, the incidence of frost and freezing conditions in the southern Adelaide region is anticipated to decline in response to climate change (see Table 4). The incidence of freezing conditions (with minimum temperatures [T_{min}] of 0°C or less) is projected to decline from 0.70 days/y in 1980-1999 to just 0.05 days/y (1 day in 20 years) under the 2070 medium and high emissions scenarios. Daily minimum temperatures of 2°C or less are projected to decline from 3.5 days/y in 1980-1999 to 0.4 days/y (one day in 2.5 years) under the 2070 high emissions scenario.

Table 4 The influence of projected climate change on the incidence of frost and freezing conditions for Adelaide Airport meteorological station.

Emissions scenario	Average # days/y	
	T _{min} ≤ 2°C	T _{min} ≤ 0°C
1980-1999	3.5	0.70
2030 medium and high emissions	1.6	0.15
2070 medium emissions	0.7	0.05
2070 high emissions	0.4	0.05

4.6 Relative humidity

Projections of change in relative humidity for South Australia are presented in Figure 27. Average annual relative humidity is projected to decrease marginally in the Adelaide region under 2030 high and medium emissions scenarios (by 0.5–1.0%, compared with 1980-1999) and by a slightly greater amount (1-2%) under the 2070 emissions scenarios. Relative humidity is projected to decline to a slightly greater extent in spring than at other times of the year.

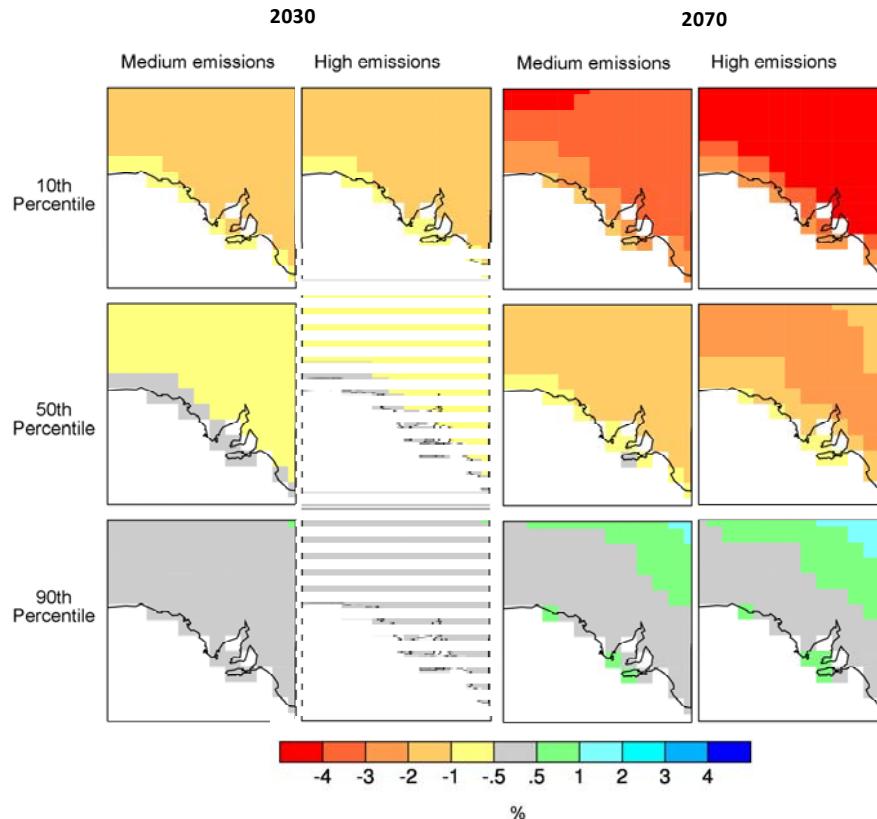


Figure 27 Projected changes in average annual relative humidity for Adelaide Airport meteorological station in response to climate change. Source: www.climatechangeinaustralia.gov.au

4.7 Wind speed

Projections of change in wind speed for South Australia are presented in Figure 28. Average annual wind speed is not projected to change significantly under either the medium or high emissions scenarios for 2030 or 2070. Projected seasonal changes in wind speed are marginal in 2030. Under 2070 emissions scenarios, average wind speed is projected to increase in summer (by 3.5% or 8% for medium and high emissions scenarios, respectively) and decrease at other times of year (by 3.5%).

4.8 Evaporation

Projections of change in potential evaporation for South Australia are presented in Figure 29. Average annual potential evaporation is projected to increase by 2-4% under medium

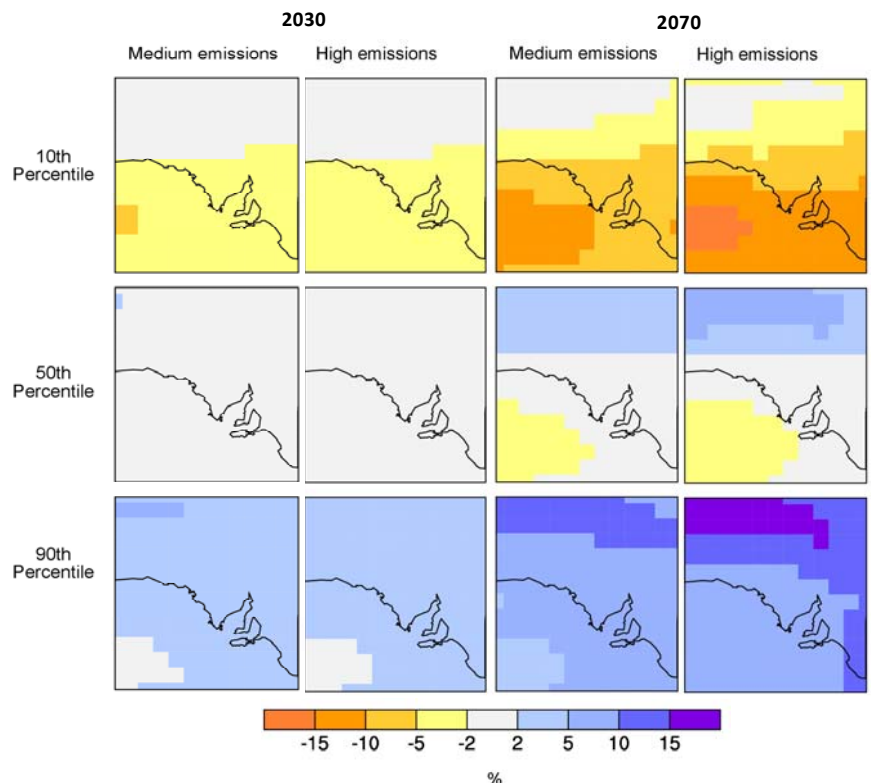


Figure 28 Projected changes in average annual wind speed for Adelaide Airport meteorological station in response to climate change. Source: www.climatechangeinaustralia.gov.au

and high emissions scenarios by 2030 and by 4-8% under these scenarios by 2070. Evaporation is projected to increase most (in percentage terms) in autumn and winter, particularly under the 2070 high emissions scenario.

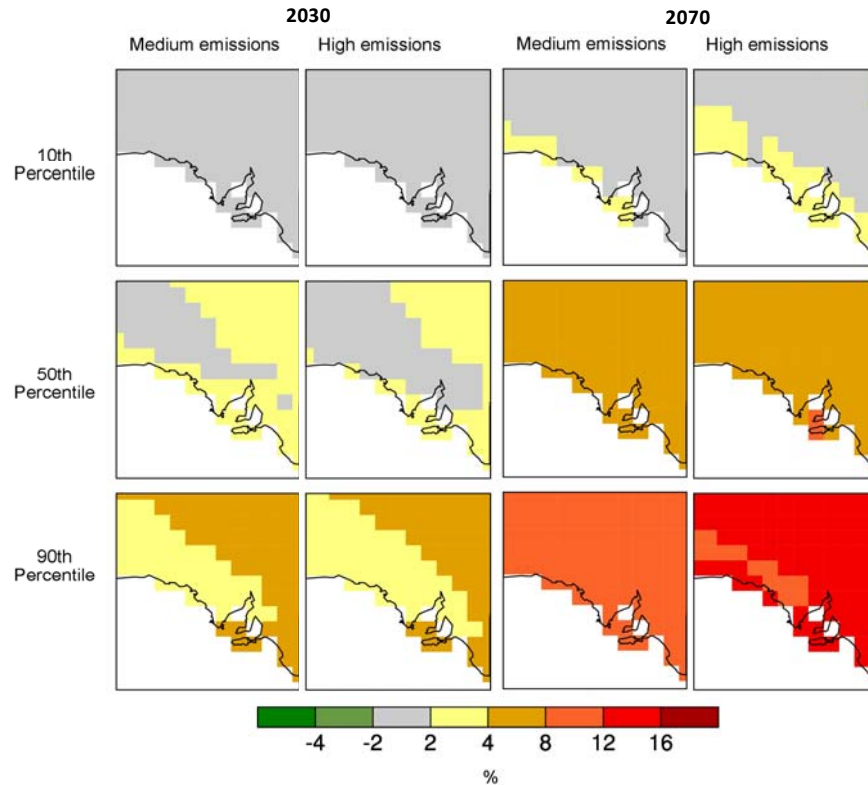


Figure 29 Projected changes in average annual potential evaporation for Adelaide Airport meteorological station in response to climate change. Source: www.climatechangeinaustralia.gov.au

Potential evaporation is projected to be only marginally influenced by climate change under the 2030 medium and high emissions scenarios (see Figure 30a; note that the medium and high emissions scenarios are identical). Average annual evaporation is projected to increase from 1617 mm in 1980-1999 to 1639 mm by 2030. The excess of cool season (May-August) rainfall over evaporation is projected to decline from 175 mm to 154 mm.

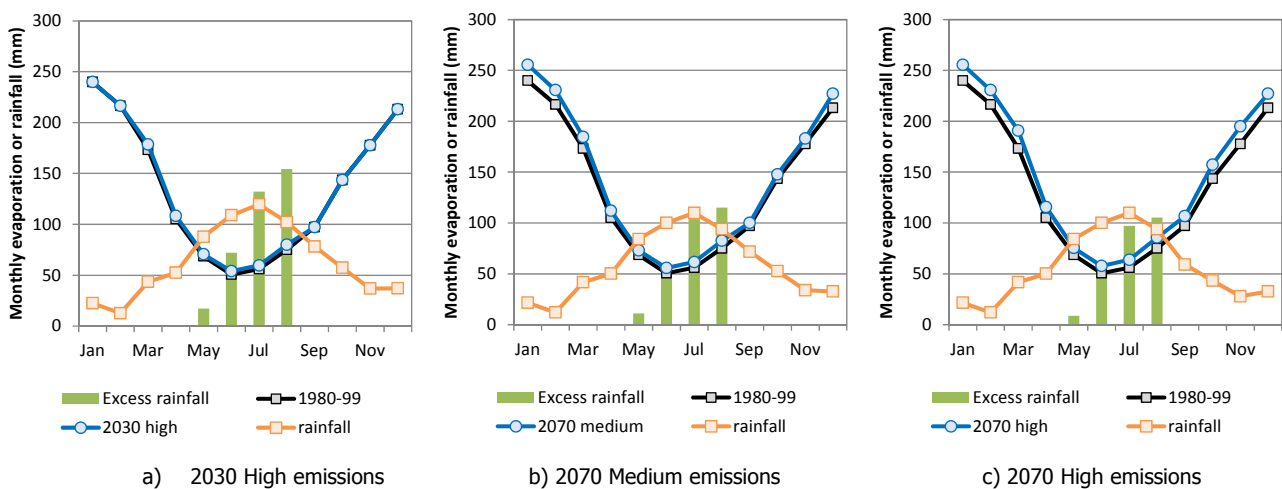


Figure 30 Projected influence of climate change on potential evaporation and rainfall at Mt Bold Reservoir meteorological station under 2030 high emissions and 2070 medium and high emissions scenarios. Rainfall figures shown are the projected monthly averages rainfall for the given scenarios. Excess rainfall is the accumulating excess of rainfall over potential evaporation during the cool season months between May and August.

The projected effect of climate change on monthly evaporation patterns is more pronounced for the 2070 medium and high emissions scenarios than for 2030 (see Figure 30 b and c). Annual evaporation is projected to increase to 1714 mm and 1761 mm, respectively. Total cool season excess rainfall is projected to decline to 115 and 105 mm, respectively. This will reduce the amount of water available for run-off or to recharge aquifers by 40%, compared with the climate change projection reference period.

4.9 Forest fire danger

FFDI integrates many of the key influences of climate change. Consistent with the projected increase in temperature and wind speed and reduction in rainfall and relative humidity, FFDI is projected to increase in response to climate change (see Figure 31). For Adelaide Airport, days with very high FFDI are projected to increase in frequency from an average of 141 days/y in 1980-99 to 218 days/y under the 2070 high emissions scenario. Days with FFDI ratings in the extreme category, in which fires are difficult to control and, once established, are likely to be destructive of property, are projected to increase fivefold from 2 days/y in 1980-1999 to 10 days/y under the 2070 high emissions scenario.

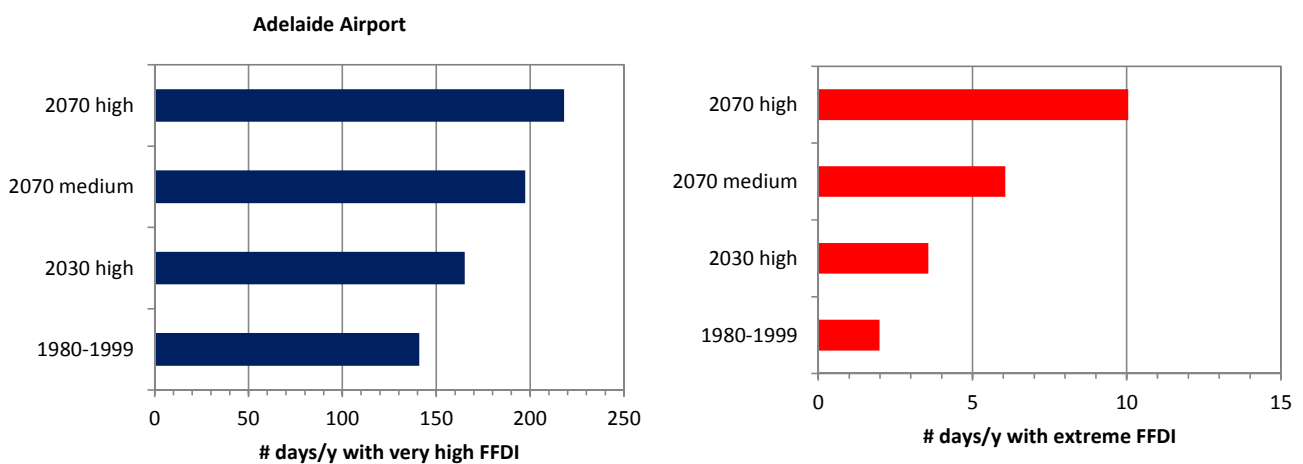


Figure 31 Influence of climate change scenarios on incidence of very high and extreme FFDI (≥25 and ≥50, respectively) for Adelaide Airport.

4.10 Summary

The influence of human-induced climate change on the southern Adelaide region was explored using four climate change scenarios: 2030 medium and high emissions and 2070 medium and high emissions. Medium and high emissions scenarios refer, respectively, to the IPCC's A1B and A1FI scenarios. Differences in climate between the two 2030 scenarios are negligible.

The climate of the southern Adelaide region is projected to become warmer and drier in response to climate change, with those impacts strengthening over time and with increased atmospheric greenhouse gas concentrations. The greatest change in both percentage and amount of rainfall is projected to occur in winter and spring, although the strongest observed drying trend has been in autumn. Temperature changes are projected to be greatest in spring and summer (Table 5).

The incidence, duration and intensity of heatwaves are projected to increase in response to climate change, compared with the 1980-1999 reference period. The number of days with maximum temperatures of 40°C or more and average temperatures of 32°C or more is projected to increase as is the frequency of events with two or more consecutive days of such temperatures.

Consistent with increased temperatures, the intensity of extreme daily rainfall events is projected to increase. At Clarendon, for example, the 100 year ARI daily rainfall event is projected to increase from about 90 mm historically to almost 110 mm under the 2070 high emissions scenario.

Projected changes in average wind speed and relative humidity are relatively small, even to 2070. Projected changes in rainfall and evaporation are likely to significantly reduce the volume of water available for run-off and groundwater recharge. The amount of cool season excess rainfall (i.e. the excess of rainfall over evaporation during the cooler months of May-August) at Mt Bold Reservoir is projected to fall from 202 mm in 1980-1999 to between 105 mm and 115 mm in 2070.

The combined effect of increased temperatures, reduced rainfall and increased evaporation is projected to significantly increase the incidence of days with extreme FFDI ratings. At Adelaide Airport, the incidence of days with weather conditions likely to result in uncontrollable and destructive fire behaviour should a fire occur is projected to increase up to fivefold, from 2.0 days/y to 6.1-10.1 days/y by 2070.

The climate change analysis is based on climate modelling undertaken for the IPCC's *Fourth Assessment Report*, which was published in 2007. Results of modelling undertaken for the IPCC's *Fifth Assessment Report* will be released later in 2013.

Table 5 Summary of climate change projections for the Resilient South project area

Climate variable	Reference period conditions (1980-1999)	2030 projections (medium & high emissions)	2070 projections (medium-high emissions)
Rainfall			
Annual average:			
• Adelaide Airport	451 mm	424 mm	395-379 mm
• Clarendon	763 mm	716 mm	667-641 mm
• Mt Bold	809 mm	759 mm	704-676 mm
• Willunga	598 mm	560 mm	522-502 mm
Extreme daily rainfall (100 year average recurrence interval event):			
• Adelaide Airport	76 mm	80 mm	85-90 mm
• Clarendon	89 mm	94 mm	101-106 mm
• Mt Bold	104 mm	110 mm	116-122 mm
• Willunga	96 mm	101 mm	108-113 mm
Temperature			
Annual average:			
• Maximum	21.4°C	22.2°C	23.3-23.9°C
• Minimum	11.5°C	12.3°C	13.4-14.0°C
Heatwave:			
• Incidences of 2 days ≥ 40°C	0.09 per year	0.35 per year	0.7-1.3 per year
• # 3 day sequences with average temperature ≥ 32°C	0.02 per year	0.15 per year	0.20-0.65 per year
Potential evaporation	1617 mm/y	1639 mm/y	1714-1761 mm/y
May-August excess of rainfall over potential evaporation	175 mm/y	154 mm/y	115-105 mm/y
Forest Fire Danger Index (extreme FFDI days per year)			
• Adelaide Airport	2.0 days/y	3.6 days/y	6.1-10.1 days/y
Mean sea level		+0.15 m (from 1980-1999)	+0.47 m (from 1980-1999, high emissions only)

5. Coastal climate change hazards

5.1 Introduction

Coastal processes

Various geological, atmospheric, marine and terrestrial processes continually interact to shape coastal landforms and conditions. Wind, waves, tides and storms are the primary driving forces of change in coastal landforms and conditions, as follows:

- **Wind:** the intensity of pressure systems, their distribution and passage across the Southern Ocean and Australian continent determine wind strength and direction. Winds generate waves and currents, which directly shape coastal landforms.
- **Waves:** develop in response to wind and are the main source of energy for most coastal systems. Waves colliding with the coast provide the energy needed to move sediment and reshape shorelines.
- **Tides:** are the vertical movements of the water level that result from the gravitational forces of the moon and sun acting on ocean waters. Tides are responsible for the inundation of low-lying coastal land at sub-daily to seasonal timescales. They also provide energy that shapes coastal landforms and plays an important role in the transport of coastal sediments.
- **Storms:** cold fronts and intense low pressure systems that pass across the Southern Ocean and Great Australian Bight generate strong winds and high waves and may lead to erosion of sensitive coastal landforms. Lower air pressure and wind-generated waves may also lead to elevated water levels (storm surges) and inundation of low-lying coastal land as storm systems pass. Depending on timing, tides may exacerbate storm surge flooding.

Energy from waves, tides and storms is responsible for the erosion of beaches and cliffs and the movement of sediment on and off-beaches and along the coast.

Coastal hazards

Coastal processes, such as wind, waves, tides and storms may create 'coastal hazards' that adversely affect life, property, built infrastructure and the natural environment. The two hazards that are typically considered in climate change assessments are inundation and recession.

- **Coastal inundation:** the flooding of land adjacent to coasts and estuaries by ocean waters or river catchments. Coastal inundation may occur either as 'permanent' inundation - the daily or sub-daily inundation of low-lying land by typical astronomical tides or 'temporary' inundation, which occurs as a result of storm surges, catchment flood events, estuary closure and/or seasonal high tides that increase water levels and inundate land outside the typical diurnal tidal range. While temporary coastal inundation is rarely prolonged, it has the potential to significantly damage affected natural and built assets.

Tide gauge records for Outer Harbour show that the tidal range (between the lowest astronomical tide [LAT] and mean high water springs [MHWS]) is approximately 2.4 m [9]. Storm surges may add as much as 1.5 m to sea levels and wave set up may add a further 0.2 m [9]. Storm surges are most pronounced on the Adelaide coast when winds persist in a north-westerly to westerly direction. Such winds force water into St Vincent Gulf by deflection from Kangaroo Island. Significant storms typically occur between May and August, with most storms occurring in May and June [9].
- **Coastal recession:** coastal recession is the landward retreat of the shoreline as a result of erosion. It can occur naturally in areas with unstable landforms and erodible sediments (e.g. sandy beaches, mudflats, limestone or unconsolidated sedimentary cliffs) and may be exacerbated by rising sea levels. Coastal recession may occur in response to the repeated removal of sediments by waves during storms or in circumstances where there is continuing unreplaced loss of sediment from a beach compartment, such as when an engineered structure impedes longshore sediment movement. Sandy beaches and sandy and

muddy shorelines are most susceptible to the effects of storms and can erode rapidly over a very short period of time, although recovery often commences soon after the passing of the storm.

The wave climate of the southern Adelaide region's coastline is responsible for the transport of large volumes of sand and other sediments. Wind-driven wave action is responsible for most longshore sediment transport. Net movement is northwards, under the influence of the prevailing wind-wave direction [9]. Northwards movement of sediment from Adelaide metropolitan beaches exceeds supply by about an order of magnitude (40,000-70,000 m³/y of transport, compared with approximately 5,000 m³ of sediment supply into Adelaide metropolitan beaches [9]). Local sea waves and winds transport sediments on and offshore and tidal and wind currents may also transport sediments in areas where sea grass beds are depleted [9].

This natural tendency for beaches across much of the southern Adelaide region to erode has led to the construction of various coastal defences (e.g. sea walls, groynes) and active beach nourishment programs to protect and maintain sandy beaches, particularly along the metropolitan beaches of the southern Adelaide region.

Climate change and coasts

Enhanced atmospheric greenhouse gas concentrations and warming in response to climate change may affect coastal environments in a variety of ways, including:

- **Sea level rise:** warming will lead to thermal expansion of ocean waters and will be a key driver of projected sea level rise. Sea levels are also projected to rise in response to the melting of continental ice caps in Greenland and Antarctica. Rising sea levels will lead to increases in the frequency, extent and duration of inundation of beaches and other low-lying coastal land. It may also lead to the erosion and the landward retreat or recession of susceptible coastal land;
- **Ocean water acidification:** uptake of CO₂ by ocean waters helps to contain the increase in atmospheric greenhouse gas concentrations that result from fossil fuel and other emissions sources. However the rising CO₂ concentration in ocean waters contributes to their increasing acidity. This may affect the macro-invertebrates that form a critical part of the food chain in coastal waters;
- **Sea temperature change:** sea temperatures are likely to rise in response to increases in atmospheric temperature. This may affect important ecological processes and increase the risk of algal blooms in shallow coastal waters;
- **Wave climate:** climate may affect atmospheric circulation patterns and lead to changes in the latitude at which pressure systems move through the Southern Ocean and in the intensity of storm systems. This may, in turn, influence the intensity and direction of winds and lead to changes in the direction, size and strength of waves. Depending on the nature of such changes, they may lead to enhanced or reduced storm surge heights and/or increased or reduced rates of coastal erosion.

In their *Fourth Assessment Report*, the IPCC found that after accounting for thermal expansion of ocean waters and ice cap retreat, warming of the atmosphere and oceans could lead to global mean sea levels rising by up to 0.79 m by 2100 [17]. These estimates remain uncertain and end of century sea level rises of more than 1.0 m and even as high as 1.5 m are considered to be plausible [11]. The upper range of IPCC projections for 2030 and 2070, the two climate change projection periods used in this report, are 0.15 m and 0.47 m, respectively [20].

Monitoring of sea levels at Port Adelaide's Inner and Outer Harbour has revealed that sea levels have been rising at rates of about 2.1 mm/y for some decades [9]. Land in this area is subsiding at a rate of about 1.8 mm/y. Sea levels at Port Stanvac have risen by about 4 mm/y since the 1990s.

In areas with sandy or other erodible shorelines, rising sea levels may lead to coasts retreating landwards [10]. While the rate of recession is highly uncertain, a widely-used rule of thumb (the Bruun rule [4]), suggests that some sandy coasts may retreat by 50-100 m for each metre of sea level rise. Coasts with coarser or more consolidated sediments may retreat at lower rates.

5.2 Climate change coastal hazard impacts in the southern Adelaide region

Several studies have been undertaken that provide insights into the potential impacts of climate change on coastal hazards experienced within the southern Adelaide region. The following sections provide a summary of the results of this work. It is divided between the Adelaide metropolitan beaches, from Glenelg (City of Holdfast Bay) to about Marino (City of Marion) and the non-metropolitan beaches and coastline (south from Marino, including the southern coastal areas of the City of Marion and coastal areas of the City of Onkaparinga).

5.2.1 Adelaide metropolitan beaches

OzCoasts [22] undertook modelling to identify coastal areas in the Adelaide metropolitan region that may be exposed to inundation resulting from sea level rise. Three scenarios were included in that analysis, involving a combination of the highest astronomical tide (HAT) and 50 cm, 80 cm and 110 cm of sea level rise. Maps showing the outputs of this analysis are provided in Appendix C¹². The use of HAT means that these maps may overstate the new areas that will fall within the typical diurnal tidal range following projected sea level rise (permanent inundation as defined in section 5.1). It will also mean that some areas that may be exposed to temporary inundation during storm surges and storm tides are not be identified.

The OzCoasts analysis shows that with 50 cm of sea level rise (which corresponds with the IPCC's upper range in projected sea level rise for 2070), the main areas affected by periodic coastal inundation would be the beaches and land fronting the Patawalonga River. It suggests that some low lying land near Adelaide Airport could also be inundated; however these areas are protected by flood gates on the Patawalonga River at Glenelg.

With 80 cm and 110 cm of sea level rise (which correspond to high range projections for 2100), the main new areas that are potentially affected by sea level rise are located near Adelaide Airport and the Patawalonga River and are mostly outside of the Resilient South project area. They are also likely to be protected by the flood gates at Glenelg. Beach areas may be inundated for longer periods and sea waters may extend along drains that currently discharge to the coast.

Much of the metropolitan coastline comprises sandy beaches which are highly vulnerable to coastal recession resulting from sea level rise. Seabed monitoring in this area [9] shows that most beaches within the Resilient South study area have been losing sand and are becoming narrower. Without on-going intervention to replenish sand supplies or to retain sand on these beaches, they could ultimately be lost as a result of sea level rise¹³.

Much of this section of the coast currently has sea walls and other structures that are designed to prevent further landward retreat of the coastline. However these structures will not prevent the loss of the beaches as a result of sea level rise.

5.2.2 Non-metropolitan beaches of the Cities of Marion and Onkaparinga

Hallett Cove

Coastal Environment [7] investigated coastal hazards at Hallett Cove, northwards from the boundary between the Cities of Marion and Onkaparinga. This stretch of coast is quite different in character to the beaches of the Adelaide metropolitan coast, with a foreshore comprising shingle deposited by Permian-age glaciers. The foreshores are slowly receding, with the natural rate of sand supply being more than an order of magnitude less than the potential transport out [7]. Sea level is considered likely to contribute to further erosion and retreat of the back beach, but only at a rate (25 m for each metre of sea level rise) that is less than half of the rate of recession of a fully exposed sandy beach [7]. There are no built assets behind the existing back beach escarpment that would be exposed to impacts from coastal recession resulting from 0.3 m of sea level rise. Some assets would be exposed to coastal recession by projected 2100 sea level rise.

¹² The modelling undertaken for the OzCoasts study is relatively simplistic and did not account for any protection from flooding that is provided by natural topography or by roads, sea walls, levees or other infrastructure.

¹³ Such interventions are planned as part of Adelaide's Living Beaches strategy [8].

City of Onkaparinga boundary to Port Stanvac

Caton [6] considered that sea level rise to 2070 would have few impacts on this section of the coast. Sea level rise may allow storms to erode the talus slopes more rapidly than at present, but marked recession of the cliffs in this area was considered to be unlikely.

O'Sullivan Beach Boat Harbour to Christies Beach and Witton Bluff

Christies Beach is currently covered as far as the armoured toe of the bluff at the rear of the beach at high tide. Coastal recession in response to projected sea level rise by 2030 is expected to leave very little of this beach remaining, except north of Gulfview Road [6]. Much of the rear of the beach would suffer increased erosion during storm events. Sea level rise may increase water levels in Christies Creek estuary. However, because its channel is incised, very little land adjacent to the creek will be affected.

Port Noarlunga, Southport and the Onkaparinga River

Sea level rise is anticipated to lead to erosion and recession of Southport beach and dune and increase the potential for flooding in the Onkaparinga River floodplain [6]. Flood heights and the frequency of lower level flood events are expected to increase. Higher water levels near the river mouth will increase erosion at the toe of the cliffs, below the Esplanade and Weatherald Terrace. Sea level rise is estimated to contribute to the beach and foredune receding by 10-30 m by 2070. This would expose the Southport Surf Lifesaving club to damage.

Seaford Cliffs

The narrow beach is projected to be lost under the influence of sea level rise by 2030 [6]. The talus slope at the base of the cliff will be removed and the toe of the cliff trimmed. Erosion within the limestone outcrop will increase.

Moana Sands

Sea level rise is projected to lead to recession of this beach, particularly in front of the esplanade and car park [6]. The relatively flat beaches in this area are likely to be damaged during storm surges due to overwashing of beach sediments landward. Storms are likely to damage the Moana Dunes and contribute to blow outs in the foredune. These processes are likely to commence in response to sea level rise before 2030, but will be slowed by the former storm gravel ridge emplaced in the backshore in front of the dunes. Low-lying land near Pedler Creek may be affected by coastal flooding as a result of sea level rise by 2030.

Ochre Point

Sea level rise is likely to progressively remove talus and trim back the Tertiary marls of the lower cliffs. The more durable quartzites at the base of the cliffs are likely to provide some protection to slow what might otherwise be rapid erosion [6]. The bluffs south of Ochre Cove are not protected in this way and could be subject to more marked impact by storms.

Maslin Beach

The narrow sections of beach at the northern and southern ends are likely to be lost with coastal recession resulting from projected 2030 sea level rise. Most of the beach is anticipated to be lost with projected 2070 sea level rise [6]. The talus slope at the base of the cliff will be removed and the toe of the cliff trimmed. Waves will contribute to erosion of the limestone outcrop. Erosion resulting from sea level rise could possibly threaten water retention arrangements at Maslins Quarry, potentially leading to failure and discharge of sediment.

Port Willunga

Sea level rise will reduce the beach at the Snapper Point end of this section. Sea level rise may exacerbate erosion and undercutting of limestone blocks in this area and contribute to the collapse of the cliff [6]. The

beach south of Port Willunga Creek may be lost by 2030. The beach north of the creek has large sand stores and is expected to be retained for longer.

Aldinga Reef

Erosion at the toe of the cliff, to the north and south of Snapper Point is expected to continue, especially in the Hack and Gordon Street areas [6]. The coastal reserve at this location is narrow and may need protective structures before 2030.

Aldinga Beach

Sea level rise by 2030 is expected to lower beach levels and trim back the leading edge of the dunes. These dunes and the talus at the base of the cliffs would be removed by erosion with sea level rise to 2070 [6]. In some locations the lower part of the cliff may be trimmed to the point where slumping might be expected.

Aldinga Sands

Backshore gravels in the south of this section are likely to slow beach and dune recession in response to sea level rise [6]. These gravels become lower and are buried in the backshore towards Aldinga near the Esplanade from Wattle Avenue to the Aldinga Ramp and provide little protection. This section may be affected by storm damage by 2030. The lower part of the Washpool is subject to sea water incursion during extreme storm surge: inundation will become more frequent as sea levels rise.

Sellicks Beach

Storm wave damage to the unconsolidated materials of the Sellicks Cliffs may occur with sea level rise to 2030, although this will be limited by the pebble ridge at the back of the beach [6]. By this time the very highest surge and wave run up would not be expected to overtop the ridge and it will continue to prevent the removal of sediments from the base of the cliff. By 2070 the ridge could be overtopped in places, causing rapid recession of the base of the cliff.

6. References

1. Atlas of South Australia 1986. Climate and weather. <http://www.atlas.sa.gov.au/resources/atlas-of-south-australia-1986/environment-resources/climate-and-weather> Accessed April 2013
2. Australian Bureau of Statistics 2011. Community Profiles for Holdfast Bay, Marion, Mitcham and Onkaparinga Local Government Areas. <http://www.abs.gov.au/websitedbs/censushome.nsf/home/communityprofiles>. Accessed 11/04/2013.
3. Bradstock RA and Gill AM 2001. Living with fire and biodiversity at the urban edge: in search of a sustainable solution to the human protection problem, *Journal of Mediterranean Ecology*, 2, 179-195.
4. Bruun P 1962. Sea-level rise as a cause of shore erosion. *American Society of Civil Engineering Proceedings, Journal of Waterways and Harbors Division* 88: 117–130.
5. Bureau of Meteorology 2012. Heatwaves. <http://www.bom.gov.au/wa/sevwx/perth/heatwaves.shtml> . Accessed September 2012
6. Caton B 2007. The Impact of Climate Change on the Coastal Lands of the City of Onkaparinga. Consultancy report for the City of Onkaparinga.
7. Coastal Environment Pty Ltd. 2012. Coastal management study, Hallett Cove, South Australia. Consultancy report for the City of Marion.
8. CSIRO and Bureau of Meteorology: 2007 Climate Change in Australia. Technical Report 2007. CSIRO, Melbourne
9. Department for Environment and Heritage 2005. Adelaide's Living Beaches" A strategy for 2005- 2015, Technical Report.
10. Department for Environment and Natural Resources, 2010: Regional Climate Change Projections: Adelaide and Mount Lofty Ranges, South Australia
11. Department of Climate Change 2009. Climate change risks to Australia's coast. A first pass national assessment. Department of Climate Change.
12. Hennessy K, Lucas C, Nicholls N, Bathols J, Suppiah, R and Ricketts J 2005. Climate change impacts on fire-weather in south-east Australia, CSIRO, Victoria.
13. Hines F, Tolhurst, K., Wilson, AAG and McCarthy, GJ 2010. Overall fuel hazard assessment guide. 4th Edition. Fire and adaptive management report no. 82. Department of Sustainability and Environment.
14. Intergovernmental Panel on Climate Change 2007. Climate change 2007: Synthesis report. http://www.ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_synthesis_report.htm
15. Intergovernmental Panel on Climate Change 2007. Glossary. Appendix to Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. http://www.ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_synthesis_report.htm
16. IPCC 2000. IPCC Special Report: Emissions Scenarios. <http://www.ipcc.ch/pdf/special-reports/spm/sres-en.pdf>
17. IPCC 2007b. IPCC, 2007: Summary for Policymakers. In: *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [Solomon S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor, H.L. Miller (eds.)]. Cambridge University Press.
18. Kiehl JT and Trenberth K E 1997. Earth's annual global mean energy budget . *Bull. Amer. Meteor. Soc.*, 78, 197-208.
19. Kiem AS and Franks SW 2001. On the identification of ENSO-induced rainfall and runoff variability: a comparison of methods and indices, *Hydrological Sciences Journal* 46, 715-727.
20. McInnes, K., I. Macadam, and J. O'Grady. 2009. The Effect of Climate Change on Extreme Sea Levels along Victoria's Coast. A Project Undertaken for the Department of Sustainability and Environment, Victoria as part of the 'Future Coasts' Program.
21. National Oceanic and Atmospheric Administration 2012. Trends in atmospheric carbon dioxide. <http://www.esrl.noaa.gov/gmd/ccgg/trends/index.html#global>
22. OzCoasts 2012. Sea level rise maps: Adelaide maps, Geoscience Australia and Department of Climate Change and Energy Efficiency. http://www.ozcoasts.gov.au/climate/Map_images/Adelaide/C-mapLevel4.php

23. Resilient South Project Steering Committee 2010. Resilient South project. Natural Resource Disaster Resilience Grant Scheme Application.
24. South Australian State Emergency Service 2013. Emergency heat plan. http://www.ses.sa.gov.au/site/community_safety/heatwave_information/extreme_heat_plan.jsp; Accessed February 2013
25. Suppiah R, Preston B, Whetton PH, McInnes KL, Jones RN, Macadam I, Bathols J, Kirono D, 2006. Climate change under enhanced greenhouse conditions in South Australia. CSIRO Marine and Atmospheric Research, Aspendale, Vic, Australia.
26. Verdon DC, Franks SW 2005, Indian Ocean sea surface temperature variability and winter rainfall: Eastern Australia, Water Resources Research, 41, 10 pages.
27. Verdon DC, Wyatt AM, Kiem AS, Franks SW 2004, Multidecadal Variability Of Rainfall And Streamflow: Eastern Australia, Water Resources Research, 40 1-8.
28. Westra S 2011. Adapting to climate change - revising our approach to estimating future floods. University of New South Wales: Water Research Centre, Discussion Paper for the Australian Rainfall and Runoff Climate Change Workshop No. 2, Engineers Australia
29. World Meteorological Organisation 2013. What is climate? <http://www.wmo.int/pages/prog/wcp/ccl/faqs.html> Accessed 25/4/2013.

Appendix A. Resilient South climate data library

A.1 Introduction

The historical climate data and climate change projections that were presented and discussed in sections 3 and 4 have been compiled in a series of spreadsheets that accompany this report. The spreadsheets include the base historical data and, in most cases, allow users to select which climate change scenario they want to produce climate change projections for (2030, 2050 or 2070 and low, medium or high emissions scenario).

This appendix provides a brief description of the data library.

A.2 Rainfall

File name	resilient south rainfall
Overview	<p>File contains historical rainfall data and climate change projections for the four representative meteorological stations in the southern Adelaide region:</p> <ul style="list-style-type: none"> • Adelaide Airport • Clarendon • Mt Bold Reservoir • Willunga <p>The file also holds evaporation data for Mt Bold Reservoir, as well as a series of graphs and tables that summarise rainfall data for the historical period of record and under various climate change scenarios. Historical data has been assembled for the periods of record for each station until 31/12/2012.</p>
Worksheets	<ul style="list-style-type: none"> • ReadMe – brief introduction to the data included in the spreadsheet • Rainfall_Raw – the full set of daily rainfall data for the four meteorological stations, infilled as required to provide a completed data set. • ClimateChangeFactors – climate change factors that are used to adjust historical (1980-1999) climate data to produce climate change scenarios. Climate change factors are provided for all climate change variables considered in this report. Values are provided for low, medium and high emissions scenarios and for 2030, 2050 and 2070. The data also includes the 10th, 50th and 90th percentile values for the ensemble of GCMs. These factors are taken from [15]. • Rainfall_Ade.Airport – monthly total rainfall of Adelaide Airport rainfall and average monthly rainfall over the full period of record, the 1980-1999 climate change reference period and 2000-2012. Annual total rainfall over the period of record and seasonal rainfall are also presented. Data to calculated exceedance curves for seasonal rainfall are also provided, with relevant graphs. • ccR_Adelaide – spreadsheet tool with capacity to create climate change scenarios for rainfall at various times and under various emissions scenarios. • Rainfall_Clarendon – as per Rainfall_Ade.Airport, but for Clarendon. • ccR_Clarendon – as per ccR_Adelaide, but for Clarendon • Rainfall_MtBold - as per Rainfall_Ade.Airport, but for Mt Bold Reservoir • ccR_Mt Bold – as per ccR_Adelaide, but for Mt Bold Reservoir • Rainfall_Willunga - as per Rainfall_Ade.Airport, but for Willunga • ccR_Willunga – as per ccR_Adelaide, but for Willunga • Evap Mt Bold – historical potential evaporation data for Mt Bold Reservoir, monthly averages for the climate change reference period, plots of monthly average rainfall and evaporation and adjusted monthly averages for the climate change scenarios used in this report 2030 high and medium emissions (same values) and 2070 high and medium emissions. • Plots _Historical – a series of tables and graphs plotting historical rainfall for each of the meteorological stations • Plots_Projection – a series of tables and graphs plotting rainfall under the four climate change scenarios considered in this report.

A.3 Temperature

File name	resilient south temperature
Overview	<p>File contains historical temperature data and climate change projections for Adelaide Airport (the only meteorological station in or near the southern Adelaide region with long-term, continuous and high quality temperature records).</p> <p>The file also holds relative humidity and wind speed data for Adelaide Airport, as well as a series of graphs and tables that summarise temperature data for the historical period of record and under various climate change scenarios.</p> <p>Historical data has been assembled for the periods of record for each station until 31/12/2012.</p> <p>Note: 2030 medium and high emissions scenarios for temperature are identical for the 50th percentile values.</p>
Worksheets	<ul style="list-style-type: none"> • ReadMe – brief introduction to the data included in the spreadsheet • ClimateChangeFactors – climate change factors that are used to adjust historical (1980-1999) climate data to produce climate change scenarios. Climate change factors are provided for rainfall and temperature. Values are provided for low, medium and high emissions scenarios and for 2030, 2050 and 2070. The data also includes the 10th, 50th and 90th percentile values for the ensemble of GCMs. These factors are taken from [15]. • TempRawAdelaideAirport – raw maximum and minimum temperature data for Adelaide Airport. • annual temp – summary of yearly average maximum and minimum temperatures, with graphs. • MaxTemp _Adelaide – monthly average daily maximum temperatures for each year and for full period of record, 1980-1999 climate change reference period and 2000-2012. • TempMax_CC – climate change projections for maximum temperature • MinTemp_Adelaide - monthly average daily minimum temperatures for each year and for full period of record, 1980-1999 climate change reference period and 2000-2012. • TempMin_CC – climate change projections for minimum daily temperature • HeatWaveDuration_Historical – data on the duration, frequency and intensity of heatwaves under historical conditions. Three measures of heatwave are considered: consecutive days with Tmax ≥35°C and 40°C and 3 consecutive days with average of max and min temp of at least 32°C. • heatwave CC – data and graphs of heatwave duration, frequency and intensity with temperature adjusted for 2030 high and 2070 medium and high emissions scenarios. • wind-rh – historical monthly averages for 3 pm wind speed and relative humidity and climate change projections. • Percentile – exceedance curve for daily maximum temperature • Plots – summary graphs and tables with historical temperatures and climate change projections.

A.4 Forest Fire Danger Index

File name	resilient south ffdi-adelaide airport
Overview	<p>File contains the base historical data to calculate FFDI for the historical period of record and climate change scenarios, based on Adelaide Airport rainfall, temperature, relative humidity and wind speed. The analysis is determines the numbers of days per year of very high or extreme FFDI (≥25 and ≥30, respectively).</p>
Worksheets	<ul style="list-style-type: none"> • .AdelaideAirport-hist – historical data for calculation of FFDI. • RawData – historical data on 3 pm wind speed and relative humidity. • rh-wind – monthly climate change factors for inputs to FFDI calculation. • AdelaideAirport-CC – calculated FFDI under 2030 high/medium and 2070 medium and high climate change scenarios. • chart – day-by-day plot of FFDI for historical period and under climate change scenarios • Climate change results_FFDI – summary results of analysis of effects of climate change on FFDI. • Exceedance curve – exceedance curve for FFDI under historical conditions and with climate change.

Appendix B. Climate change factors for the southern Adelaide region.

This appendix contains the climate change factors used to develop climate change projections for the meteorological stations used to characterise the southern Adelaide region's climate. Climate change factors are provided for: three time periods (2030, 2070 and 2090); low, medium and high emissions scenarios; and for the 10th, 50th and 90th percentile outputs from the full 23 GCM ensemble. Climate change factors are derived from *Regional climate change projections for Adelaide and Mount Lofty Ranges* report (2010 [15]).

This report only refers to 50th percentile projections for 2030 and 2070 medium and high emissions scenarios. Most other scenarios or GCM outputs are available in the data library.

B.1 Rainfall

Climate change factors for rainfall are presented as % change in annual or seasonal rainfall from 1980-1999.

2030

Percentile	Low emissions (B1 scenario)			Medium emissions (A1B scenario)			High emissions (A1FI scenario)		
	10 th	50 th	90 th	10 th	50 th	90 th	10 th	50 th	90 th
Annual	-7.5	-3.5	0	-15	-3.5	0	-15	-3.5	0
Summer	-15	-3.5	7.5	-15	-3.5	7.5	-15	-3.5	7.5
Autumn	-7.5	-3.5	3.5	-15	-3.5	3.5	-7.5	-3.5	3.5
Winter	-15	-3.5	0	-15	-7.5	0	-15	-7.5	0
Spring	-15	-7.5	0	-15	-7.5	0	-15	-7.5	0

2050

Percentile	Low emissions (B1 scenario)			Medium emissions (A1B scenario)			High emissions (A1FI scenario)		
	10 th	50 th	90 th	10 th	50 th	90 th	10 th	50 th	90 th
Annual	-15	-7.5	0	-15	-7.5	0	-15	-7.5	0
Summer	-15	-3.5	7.5	-30	-3.5	15	-30	-7.5	15
Autumn	-15	-3.5	7.5	-15	-3.5	15	-15	-7.5	15
Winter	-15	-7.5	0	-15	-7.5	0	-30	-7.5	0
Spring	-30	-7.5	0	-30	-15	0	-30	-15	0

2070

Percentile	Low emissions (B1 scenario)			Medium emissions (A1B scenario)			High emissions (A1FI scenario)		
	10 th	50 th	90 th	10 th	50 th	90 th	10 th	50 th	90 th
Annual	-15	-7.5	0	-30	-15	0	-30	-15	3.5
Summer	-30	-3.5	15	-30	-7.5	15	-30	-7.5	30
Autumn	-15	-3.5	15	-30	-7.5	15	-30	-7.5	15
Winter	-15	-7.5	0	-30	-15	0	-30	-15	3.5

Spring	-30	-15	0	-30	-15	3.5	-50	-30	3.5
---------------	-----	-----	---	-----	-----	-----	-----	-----	-----

B.2 Temperature

Climate change factors for temperature are presented as the °C change in annual or seasonal average temperature from the 1980-1999 reference period.

2030

Percentile	Low emissions (B1 scenario)			Medium emissions (A1B scenario)			High emissions (A1FI scenario)		
	10 th	50 th	90 th	10 th	50 th	90 th	10 th	50 th	90 th
Annual	0.45	0.8	0.8	0.45	0.8	1.25	0.45	0.8	1.25
Summer	0.45	0.8	1.25	0.45	0.8	1.25	0.45	0.8	1.25
Autumn	0.45	0.8	0.8	0.45	0.8	1.25	0.45	0.8	1.25
Winter	0.45	0.45	0.8	0.45	0.8	1.25	0.45	0.8	1.25
Spring	0.45	0.8	1.25	0.45	0.8	1.25	0.45	0.8	1.25

2050

Percentile	Low emissions (B1 scenario)			Medium emissions (A1B scenario)			High emissions (A1FI scenario)		
	10 th	50 th	90 th	10 th	50 th	90 th	10 th	50 th	90 th
Annual	0.8	1.25	1.25	1.25	1.75	2.25	1.25	1.75	2.25
Summer	0.8	1.25	1.75	0.8	1.75	2.75	0.8	1.75	2.75
Autumn	0.8	0.8	1.25	0.8	1.25	2.25	0.8	1.75	2.25
Winter	0.45	0.8	1.25	0.8	1.25	1.75	0.8	1.25	2.25
Spring	0.8	0.8	1.75	1.25	1.75	2.25	1.25	1.75	2.25

2070

Percentile	Low emissions (B1 scenario)			Medium emissions (A1B scenario)			High emissions (A1FI scenario)		
	10 th	50 th	90 th	10 th	50 th	90 th	10 th	50 th	90 th
Annual	0.8	1.25	1.75	1.25	2.25	2.75	1.75	2.25	3.5
Summer	0.8	1.25	2.25	1.25	1.75	3.5	1.75	2.75	4.5
Autumn	0.8	1.25	1.75	1.25	1.75	2.75	1.75	2.25	3.5
Winter	0.8	1.25	1.75	1.25	1.75	2.75	1.25	2.25	3.5
Spring	0.8	1.25	2.25	1.25	2.25	2.75	1.75	2.75	3.5

B.3 Relative humidity

Climate change factors for relative humidity are presented as the % change in annual or seasonal average from the 1980-1999 reference period. Projections are only provided for 2030 and 2070.

2030

Percentile	Low emissions (B1 scenario)			Medium emissions (A1B scenario)			High emissions (A1FI scenario)		
	10 th	50 th	90 th	10 th	50 th	90 th	10 th	50 th	90 th
Annual	-1.5	0	0	-1.5	-0.8	0	-1.5	-0.8	0
Summer	-0.8	0	0	-1.5	0	0	-1.5	0	0
Autumn	-1.5	0	0	-1.5	0	0	-1.5	0	0
Winter	-1.5	0	0	-1.5	-0.8	0	-1.5	0	0
Spring	-1.5	-0.8	0	-1.5	-0.8	0	-1.5	-0.8	0

2070

Percentile	Low emissions (B1 scenario)			Medium emissions (A1B scenario)			High emissions (A1FI scenario)		
	10 th	50 th	90 th	10 th	50 th	90 th	10 th	50 th	90 th
Annual	-2.5	-0.8	0	-3.5	-1.5	0	-4.5	-1.5	0
Summer	-1.5	-0.8	0	-2.5	-1.5	0	-3.5	-1.5	0.8
Autumn	-2.5	-0.8	0.8	-3.5	-0.8	1.5	-4.5	-1.5	1.5
Winter	-2.5	-0.8	0.8	-4.5	-1.5	1.5	-4.5	-1.5	1.5
Spring	-2.5	-1.5	0	-4.5	-2.5	0	-4.5	-2.5	0

B.4 Wind speed

Climate change factors for wind speed are presented as the % change in annual or seasonal average from the 1980-1999 reference period. Projections are only provided for 2030 and 2070.

2030

Percentile	Low emissions (B1 scenario)			Medium emissions (A1B scenario)			High emissions (A1FI scenario)		
	10 th	50 th	90 th	10 th	50 th	90 th	10 th	50 th	90 th
Annual	-3.5	0	3.5	-3.5	0	3.5	-3.5	0	3.5
Summer	0	0	8	0	3.5	8	0	0	8
Autumn	-8	0	3.5	-8	0	3.5	-8	0	3.5
Winter	-8	0	3.5	-8	0	3.5	-8	0	3.5
Spring	-8	0	3.5	-8	0	3.5	-8	0	3.5

2070

Percentile	Low emissions (B1 scenario)			Medium emissions (A1B scenario)			High emissions (A1FI scenario)		
	10 th	50 th	90 th	10 th	50 th	90 th	10 th	50 th	90 th
Annual	-8	0	3.5	-8	0	8	-13	0	8
Summer	-3.5	3.5	13	-3.5	3.5	13	-8	8	18
Autumn	-13	0	8	-13	-3.5	8	-18	-3.5	13
Winter	-13	0	8	-18	-3.5	8	-18	-3.5	13
Spring	-13	0	8	-13	0	13	-18	-3.5	13

B.5 Evaporation

Climate change factors for potential evaporation are presented as the % change in annual or seasonal average from the 1980-1999 reference period. Projections are only provided for 2030 and 2070.

2030

Percentile	Low emissions (B1 scenario)			Medium emissions (A1B scenario)			High emissions (A1FI scenario)		
	10 th	50 th	90 th	10 th	50 th	90 th	10 th	50 th	90 th
Annual	0	0	3	0	3	6.5	0	3	3
Summer	0	0	3	0	0	6.5	0	0	3
Autumn	0	3	6.5	0	3	6.5	0	3	6.5
Winter	0	6.5	10	3	6.5	10	3	6.5	10
Spring	0	0	3	0	0	3	0	0	3

2070

Percentile	Low emissions (B1 scenario)			Medium emissions (A1B scenario)			High emissions (A1FI scenario)		
	10 th	50 th	90 th	10 th	50 th	90 th	10 th	50 th	90 th
Annual	0	3	6.5	0	6.5	10	3	6.5	14
Summer	0	3	6.5	0	6.5	10	0	6.5	14
Autumn	3	6.5	10	3	6.5	14	6.5	10	18
Winter	3	10	18	6.5	10	18	6.5	14	18
Spring	0	3	6.5	0	3	10	-0.5	6.5	10

Appendix C. Sea level rise modelling for the northern reaches of the southern Adelaide region's coastline

C.1 Sea level rise scenarios

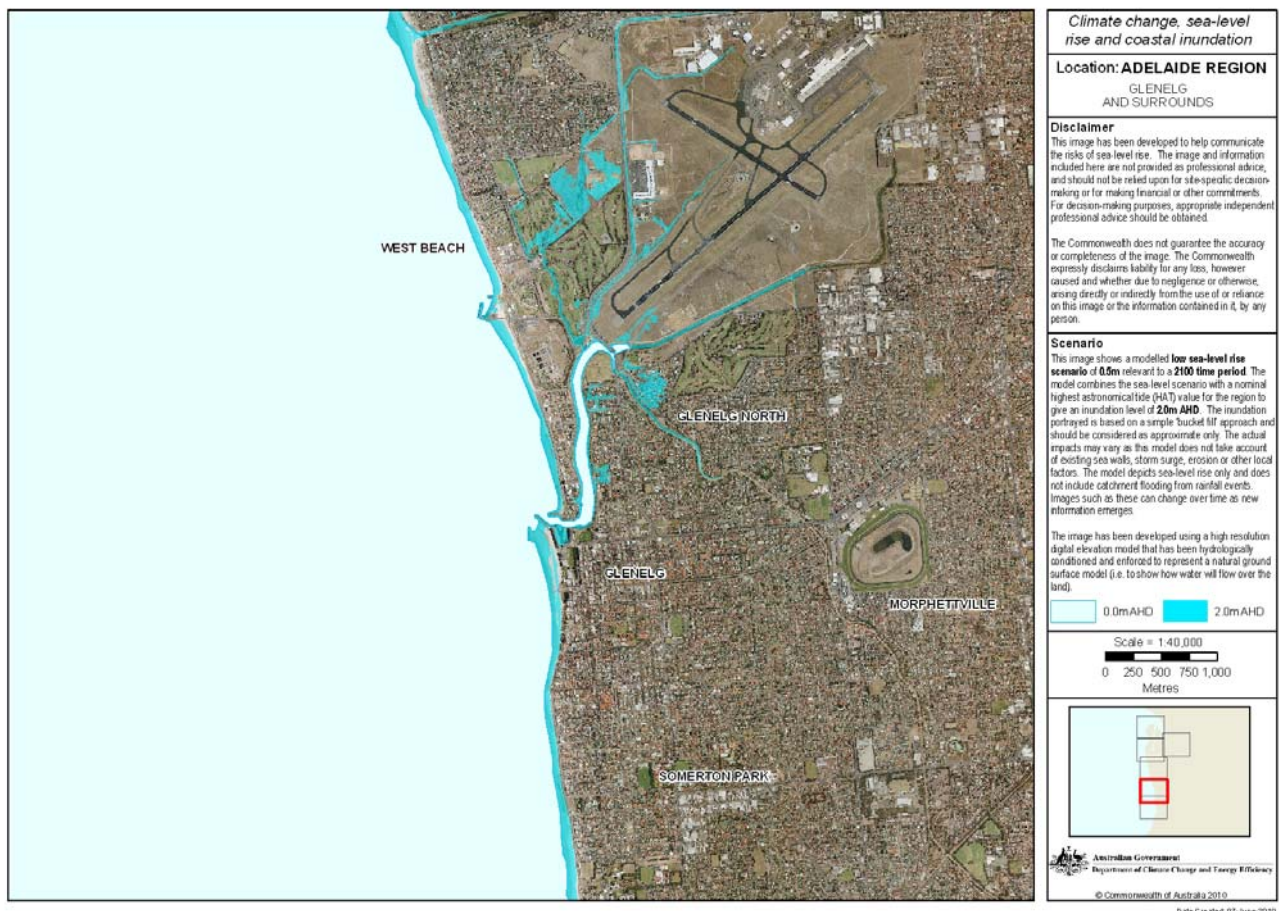
Modelling of coastal inundation by projected sea level rise for the OzCoasts study [25] included three sea level rise scenarios: highest astronomical tide (HAT) plus 50, 80 and 110 cm of sea level rise. The latter two scenarios correspond to the upper range of IPCC projections for 2100 (under a high emissions scenario and accounting for ice sheet dynamics) and plausible, upper range sea level rise projections for 2100, respectively. Inundation of additional areas is possible if storm surge conditions coincided with high astronomical tides. Storm surges along the Adelaide coast can add up to 1.5 m in sea levels to tidal water elevations [25].

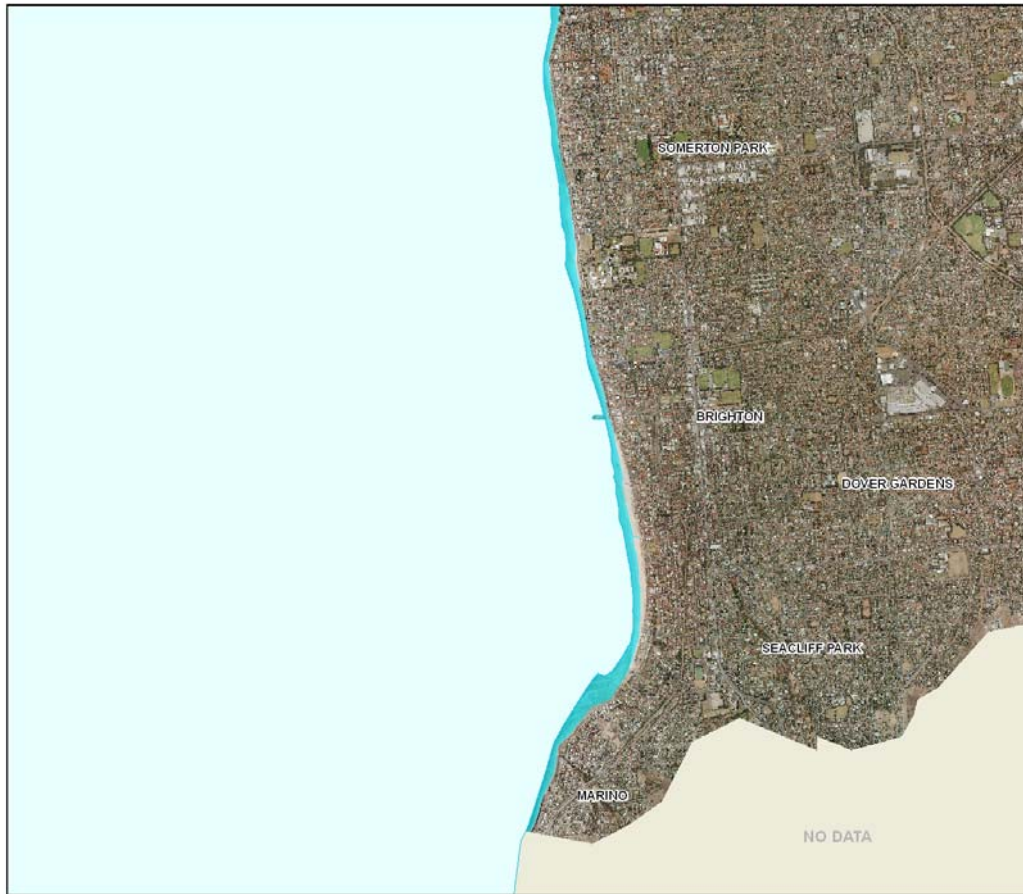
Coastal inundation modelling was undertaken for two sections of the coast in the north of the southern Adelaide region. There is currently no modelling or mapping of inundation along the remainder of the coast.

The modelling undertaken for OzCoasts is based entirely on land surface elevation. It takes no account of whether it is possible for elevated seas to reach the identified low lying land.

C.2 50 cm sea level rise

With 50 cm of sea level rise on top of the HAT, inundation would be largely confined to the beaches and land fronting the Patawalonga River. Some low lying land within and adjacent to Adelaide Airport could be inundated. These areas are currently protected from extreme sea levels by flood gates at Glenelg.





Climate change, sea-level rise and coastal inundation

Location: ADELAIDE REGION
BRIGHTON AND SURROUNDS

Disclaimer
This image has been developed to help communicate the risks of sea level rise. The image and information included here are not provided as professional advice, and should not be relied upon for site-specific decision-making or for making financial or other commitments. For decision-making purposes, appropriate independent professional advice should be obtained.

The Commonwealth does not guarantee the accuracy or completeness of the image. The Commonwealth expressly disclaims liability for any loss, however caused and whether due to negligence or otherwise, arising directly or indirectly from the use of or reliance on this image or the information contained in it, by any person.

Scenario
This image shows a modelled **low sea-level rise scenario of 0.6m** relevant to a **2100 time period**. The model combines the sea level scenario with a nominal highest astronomical tide (HAT) value for the region to give an inundation level of **2.0m AHD**. The inundation portrayed is based on a simple 'bucket fill' approach and should be considered as approximate only. The actual impacts may vary as the model does not take account of existing sea walls, storm surge, erosion or other local factors. The model depicts sea-level rise only and does not include catchment flooding from rainfall events. Images such as these can change over time as new information emerges.

The image has been developed using a high resolution digital elevation model that has been hydrologically conditioned and enforced to represent a natural ground surface model (i.e. to show how water will flow over the land).

0.0m AHD 2.0m AHD

Scale = 1:40,000

0 250 500 750 1,000 Metres

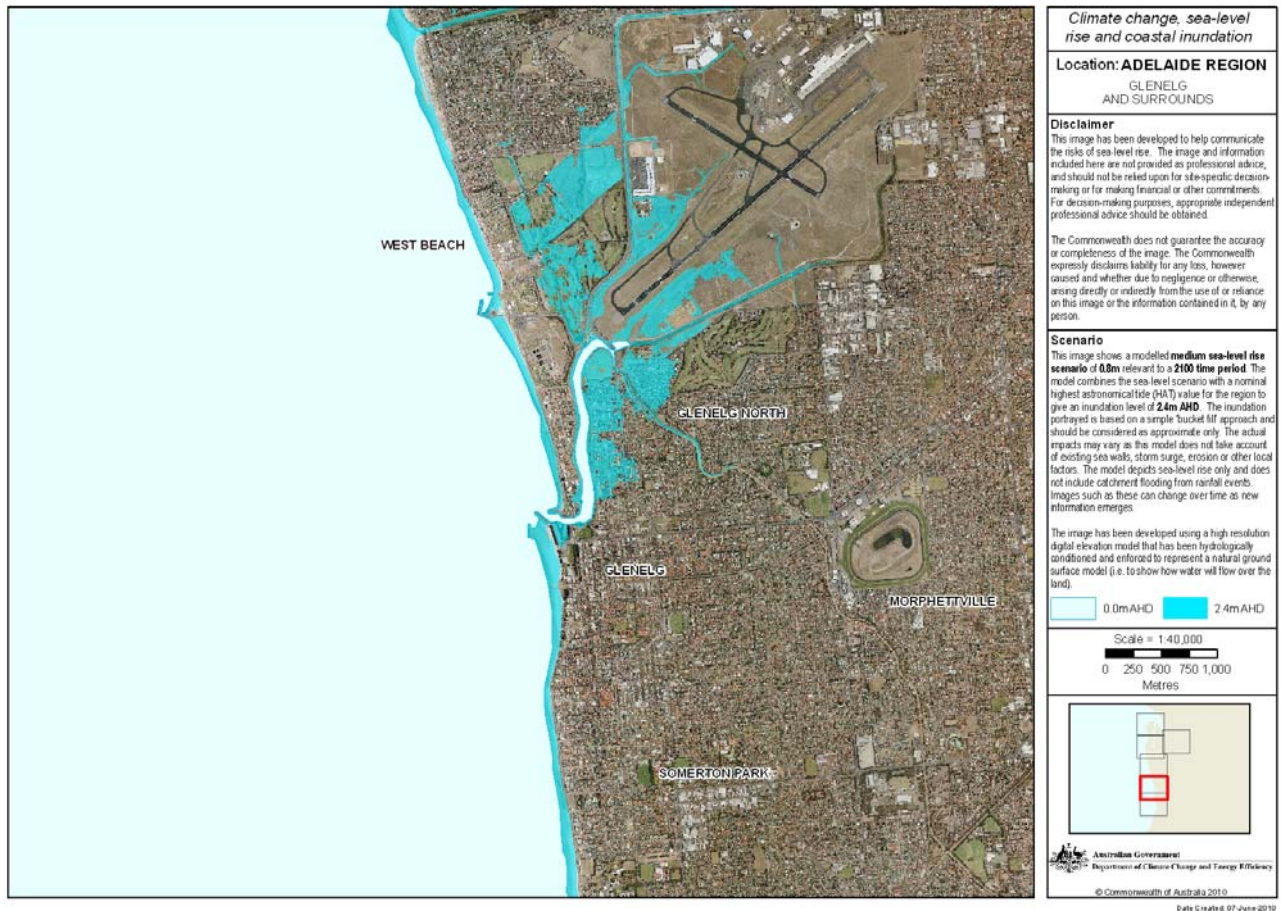
Australian Government
Department of Climate Change and Energy Efficiency

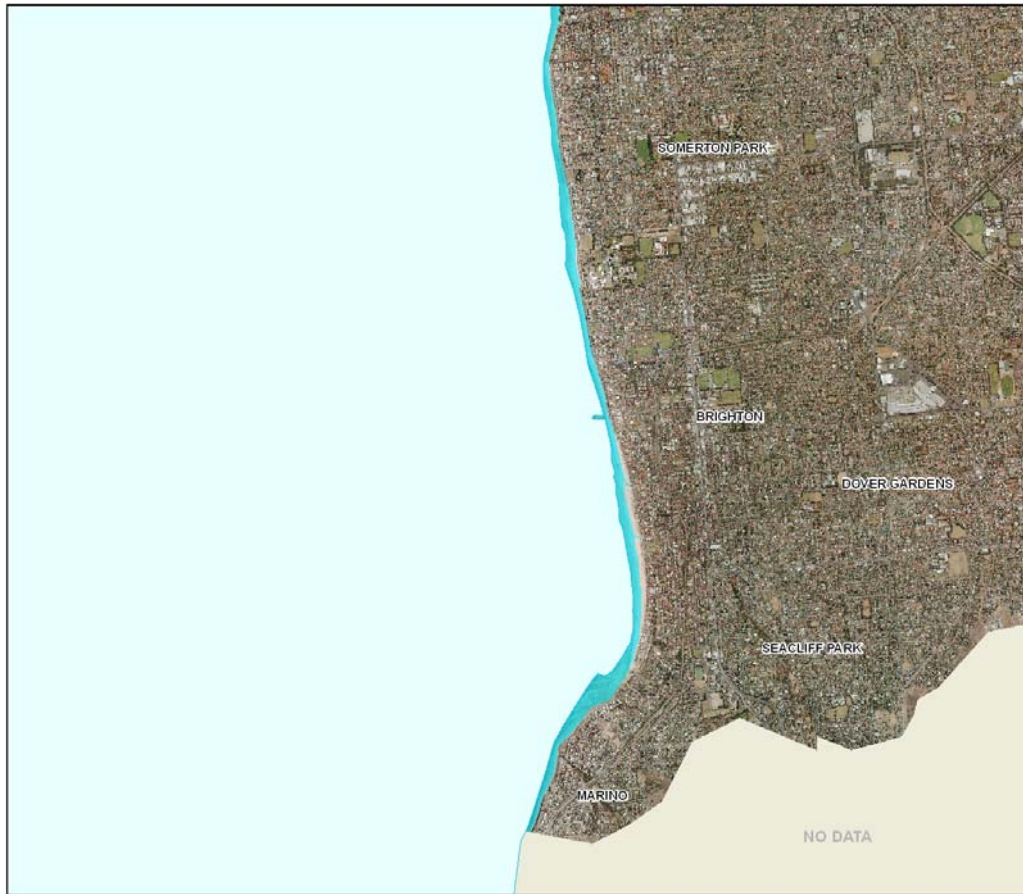
© Commonwealth of Australia 2010

Date Created: 07 June 2010

C.3 80 cm sea level rise

Inundation resulting from the HAT plus 80 cm of sea level rise would be more extensive in low lying areas near the Patawolonga River than with 50 cm of sea level rise. However, as noted above, such areas are currently protected from extreme sea level events. Along the remainder of the coast, inundation would cover the beach, but not affect adjacent land or infrastructure. Flooding may extend along drains that currently discharge to the coast.





Climate change, sea-level rise and coastal inundation

Location: ADELAIDE REGION
BRIGHTON AND SURROUNDS

Disclaimer
This image has been developed to help communicate the risks of sea level rise. The image and information included here are not provided as professional advice, and should not be relied upon for site-specific decision-making or for making financial or other commitments. For decision-making purposes, appropriate independent professional advice should be obtained.

The Commonwealth does not guarantee the accuracy or completeness of the image. The Commonwealth expressly disclaims liability for any loss, however caused and whether due to negligence or otherwise, arising directly or indirectly from the use of or reliance on this image or the information contained in it, by any person.

Scenario
This image shows a modelled **medium sea-level rise scenario of 0.6m** relevant to a **2100 time period**. The model combines the sea level scenario with a nominal highest astronomical tide (HAT) value for the region to give an inundation level of **2.4m AHD**. The inundation portrayed is based on a simple 'bucket fill' approach and should be considered as approximate only. The actual impacts may vary as the model does not take account of existing sea walls, storm surge, erosion or other local factors. The model depicts sea-level rise only and does not include catchment flooding from rainfall events. Images such as these can change over time as new information emerges.

The image has been developed using a high resolution digital elevation model that has been hydrologically conditioned and enforced to represent a natural ground surface model (i.e. to show how water will flow over the land).

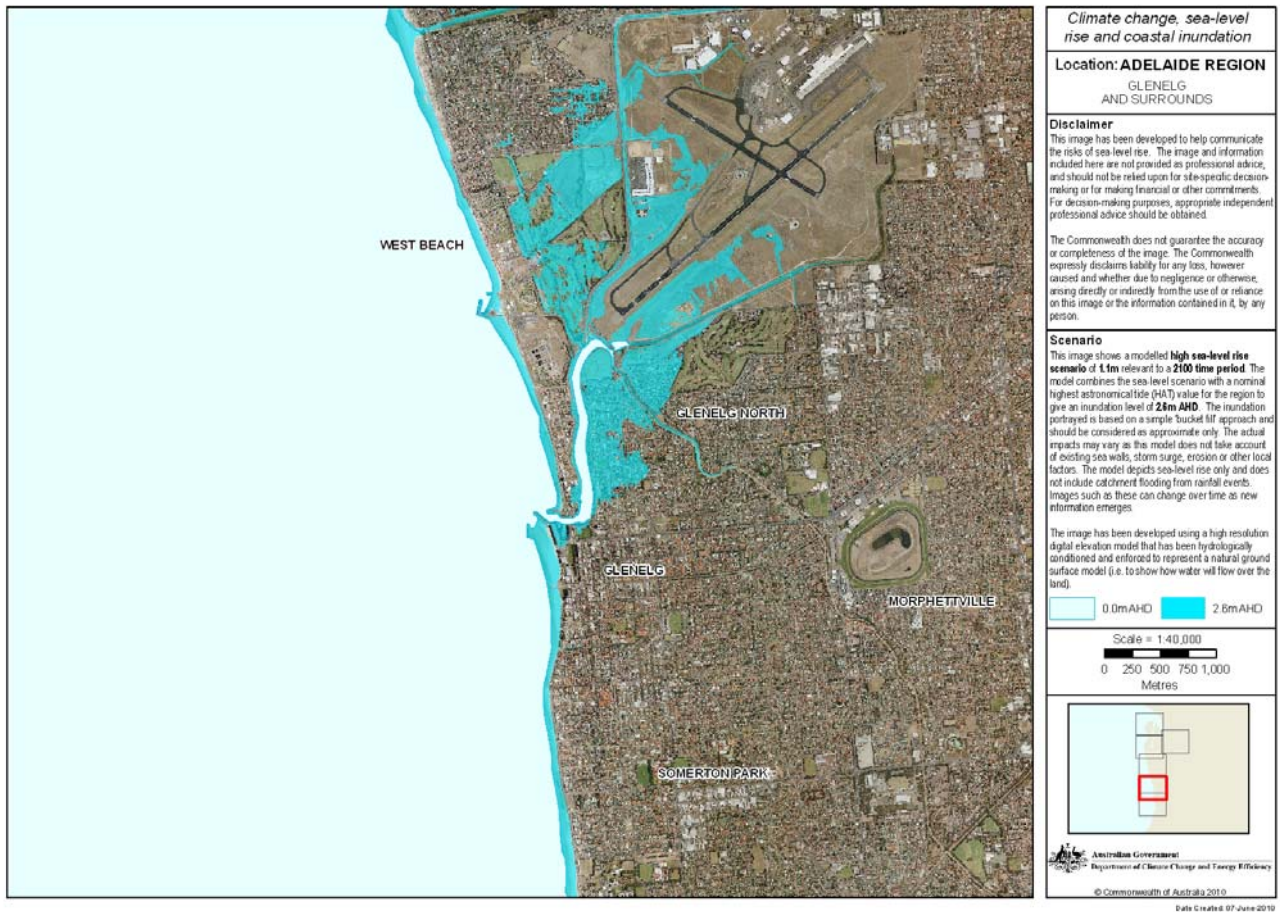
0.0m AHD 2.4m AHD

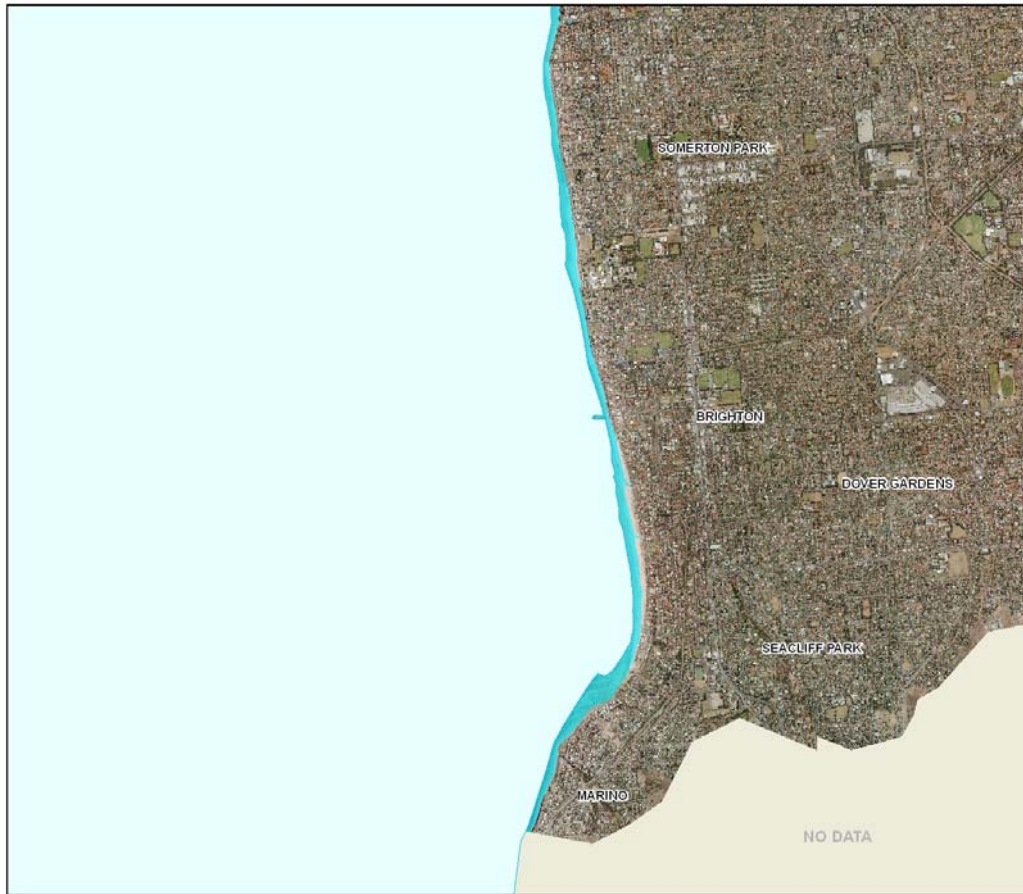
Scale = 1:40,000
0 250 500 750 1,000 Metres

Australian Government
Department of Climate Change and Energy Efficiency
© Commonwealth of Australia 2010
Date Created: 07 June 2010

C.4 110 cm sea level rise

The only significant change with 110 cm of sea level rise, compared with 80 cm, is that larger areas in the vicinity of the Patawolonga River and Adelaide Airport would be inundated if water breached the floodgates at Glenelg. Most of the potentially affected land is outside of the Resilient South study area.





Climate change, sea-level rise and coastal inundation

Location: ADELAIDE REGION
BRIGHTON AND SURROUNDS

Disclaimer
This image has been developed to help communicate the risks of sea level rise. The image and information included here are not provided as professional advice, and should not be relied upon for site-specific decision-making or for making financial or other commitments. For decision-making purposes, appropriate independent professional advice should be obtained.

The Commonwealth does not guarantee the accuracy or completeness of the image. The Commonwealth expressly disclaims liability for any loss, however caused and whether due to negligence or otherwise, arising directly or indirectly from the use of or reliance on this image or the information contained in it, by any person.

Scenario
This image shows a modelled **high sea-level rise scenario** of 1.6m relevant to a **2100 time period**. The model combines the sea level scenario with a nominal highest astronomical tide (HAT) value for the region to give an inundation level of **2.6m AHD**. The inundation portrayed is based on a simple 'bucket fill' approach and should be considered as approximate only. The actual impacts may vary as the model does not take account of existing sea walls, storm surge, erosion or other local factors. The model depicts sea-level rise only and does not include catchment flooding from rainfall events. Images such as these can change over time as new information emerges.

The image has been developed using a high resolution digital elevation model that has been hydrologically conditioned and enforced to represent a natural ground surface model (i.e. to show how water will flow over the land).

0.0m AHD 2.6m AHD

Scale = 1:40,000
0 250 500 750 1,000 Metres

Australian Government
Department of Climate Change and Energy Efficiency
© Commonwealth of Australia 2010
Date Created: 07 June 2010

Item No: **14.5**

Subject: **DONATION OF LAND TO COUNCIL - PINE GULLY**

Date: 10 September 2013

Written By: Manager Contracts and Strategic Projects

General Manager: City Assets, Mr S Hodge

SUMMARY

Council has been approached by the owner of land comprised in the Certificate of Title 5853 Folio 53 (part of which is known as Pine Gully) with a desire of making a donation of a portion of this land to Council to enable preservation of the land as natural reserve. This report details the negotiations that have taken place with the property owner and seeks Council's endorsement to enter into a lease which will lead to subsequent ownership by Council.

RECOMMENDATION

- 1. That Council accepts the offer of land from Mrs Mary Trott shown as Allotments 301 and 302 in attachment 1.**
 - 2. That the Mayor and Chief Executive Officer be authorised to sign and seal all documents associated with the lease and transfer of the land identified in the lease as Allotments 301 and 302.**
 - 3. That Council endorse the draft Community Land Management Plan for public consultation as required under the Local Government Act.**
 - 4. That an allocation of \$10,000 be considered in the 2013/14 Budget Review 1 to enable the creation of the new Certificate of Titles for Allotments 301 and 302.**
-

COMMUNITY PLAN

A Place with a Quality Lifestyle
A Place for Every Generation
A Place that Values its Natural Environment
A Place that Manages its Environmental Impacts
A Place that Welcomes Visitors
A Place that is Well Planned
A Place that Provides Choices and Enhances Life

COUNCIL POLICY

Community Land Management policy

STATUTORY PROVISIONS

Local Government Act (1999)

BACKGROUND

Mrs Mary Trott and her husband (deceased) settled in Seacliff in 1952 at the property known as 74 Marine Parade, Seacliff (Certificate of Title 5853 Folio 53) and have lived in the property since that date. The land in question is surrounded to the west and south by extensive portions of open and natural bushland (extensively vegetated some 20-30 years ago by the owners and a number of volunteers) and while zoned residential its development would pose a number of issues due to the steepness of the terrain. Part of the land which is known as Pine Gully is also adjacent the Kingston Cliff Face (owned by Council) and has significant environmental and biodiversity value for the City and forms part of Council's limited open space.

Council was first approached by Mrs Trott in 2010 about the possibilities of Council acquiring the land in question as part of a natural reserve. The intent of this transfer was to ensure that the land remained as open space and could not be developed by future owners of the property once it was sold.

While negotiations with Mrs Trott have been amicable they have been protracted due to her previous experiences and subsequent distrust with Council in respect to development that has occurred around her property and the illegal discharge of Council stormwater on to her property which has resulted in significant erosion of the gully.

REPORT

As indicated Council commenced negotiations with Mrs Trott in 2010 and these negotiations have been predicated by a number of conditions that were identified by the property owner as part of any land transfer. These conditions included:

- That the transfer of the land does not affect the current entitlements that the land owner receives from Centrelink.
- That the Council takes over responsibility of the land and that it preserves it as natural land.

Based on these requirements Council (with the assistance of Norman Waterhouse Lawyers) has considered a number of options to deliver on the objectives above while ensuring the interest of Council are maintained. These options have included:

- Establishing a Charitable Trust.
- Vesting the land in Council and registering an encumbrance over the land.

- Vesting the land in Council name and placing a caveat over the land.
- Vesting in Council and ensuring the land is covered by a Community Land Management Plan.
- Assuming care and control and management of the land with an option to purchase.
- Lease of the land with an option to purchase.

Based on the conditions established by the property owner (non-negotiable), an assessment of Council's risks with each model and a review of the practicalities of each option it was agreed that the most efficient option for both parties (Council and the land owner) was to negotiate a lease with an option to purchase at identified milestones.

Contents of the lease

The lease is over portion of the land known as Allotment 725 in Certificate of Title 5853 Folio 53 and is described in Attachment 1 as allotments 301 and 302 with allotment 300 remaining in the ownership of Mary Trott. These new allotments will be created as a result of a proposed land division which will create new Certificates of Title for lots 300 and 301 (in the name of Mary Trott) and vest lot 302 as public road (once the process to create a public road has been completed).

The proposed lease (refer Attachment 2) contains the following key elements:

- Initial lease period of 10 years with two rights of renewal for a further 10 years each.
- The land is encumbered for a total of 50 years which precludes any form of development (except what is consistent with the Community Land Management Plan).
- The land is to be used as a natural reserve and for the treatment of stormwater. The lease requires Council to undertake identified works including fencing, stormwater and property access.
- Allows Council to develop or modify the land for community use and stormwater management.
- Requires Council to pay rent of \$1/ year and to be able to purchase the leased land for \$10 when one of the conditions precedent are met.

While it is possible that the lease may extend for its full life (30 years) the other conditions precedent contained within the lease suggest that Council will be able to take freehold possession of the land possibly within the next 10 years. This transfer of the land will happen if one of the following situations is to arise during the term of the lease and include:

- If the land owner decides to sell the land
- The land owner dies
- The land owner ceases to reside at the current property
- If the land owner is required to pay land tax on the property that Council is leasing

One of the key negotiation points in the donation of the land to Council has been the requirement of Mrs Trott to ensure that the land is not sold or developed by Council for commercial purposes. While the land will be defined as Community Land (all Council owned land is defined as Community Land unless it is excluded at the time of purchase) and is therefore bound by the conditions contained within the Community Land Management Plan it does not prevent Council from disposing or developing the land (subject to the revocation process and Ministerial approval) as a result further restrictions were sought by Mrs Trott which will see the donated land (allotment 301) being encumbered for a period of 50 years. While it is unlikely that Council would ever want to develop the land the encumbrance provides Mrs Trott with the insurance she required while still allowing Council long term flexibility should there be a need after the encumbrance has lapsed to do so.

Refer Attachment 1 and 2

Future works

As discussed the lease will give Council access to an area of land of approximately 2350 square metres (approximately half the existing property) which will enable it to be developed in conjunction with existing open space (Kingston Cliff face and Brighton Caravan Park) to provide multiple benefits to the environment (marine, open space and flora and fauna).

The land while being a valuable asset is significantly degraded as a result of weed infestation, vegetation overgrowth and stormwater erosion of the gully. To enable public access and to achieve other objectives of stormwater quality improvement and erosion control, significant works will need to be undertaken over many years to achieve the objectives of the proposed Community Land Management Plan. The cost of this will be significant but the return of the land to a natural state is likely to also have the potential to attract both State and Federal funds (State Natural Resource Department have already offered funds if Council takes control of the land).

As part of the agreement to donate the land to Council the lease requires Council over the next 2-3 years to, undertake some essential work to separate the land in to its separable portions. These works include:

- Providing road access of Pine Avenue to allotments 300 and 301
- Alter current stormwater infrastructure to eliminate erosion and facilitate access
- Boundary fencing to separate allotments 300 and 301

These works will not only conform with, the lease requirements but will also ensure access to the leased land to enable improvements (revegetation etc) to be undertaken.

Alignment with other Council strategies

While the donation of any open space is seen as an overall benefit to the community and the environment and is consistent with Council environment strategy (EcoCity) the donation of this portion of land also delivers on other objectives identified in the Stormwater Management Plan (SMP). The local stormwater catchment that flows in to Pine Gully covers the area to the south of Scholefield Road and catches the major portion of the stormwater from the Seacliff area. This stormwater currently makes its way to the gulf via a series of pipes and open water course that results in considerable erosion and pollution of the gulf in heavy rainfall events. The SMP suggests that Pine Gully provides the opportunity to undertake localised water retention and treatment to ensure improved water quality discharge to the gulf and at the same time provide the potential for stormwater harvesting for reuse within the Brighton Caravan Park for irrigation purposes.

Next steps

If Council accepts the donation of land from Mrs Trott then Council can sign and seal the lease agreement (the lease needs to be signed under seal as the lease will be registered on the title) once this has been completed Council can then proceed with sub dividing the land (CT 5853 Folio 53) into the three allotments shown in Attachment 1.

Once the lease has been signed Council can then proceed with the land division to separate the land in to three allotments:

- Land that is the residence of Mary Trott (Allotment 300).
- Land that is to be leased to Council (Allotment 301).
- Land that is to become Public Road (Allotment 302).

The other key document that needs to be developed is the Community Land Management Plan for the land (refer Attachment 3). If the plan is endorsed by Council then it will be subject to community consultation with the result being brought back to Council for consideration.

Once all the necessary documents have been processed Council can then begin to investigate the development of a plan that provides direction with respect to land rehabilitation and revegetation and stormwater management. To deliver on this it is proposed to undertake a detailed master planning process in 2014/15.

Refer Attachment 3

BUDGET

The cost to date to negotiate and develop the lease arrangements have been met from existing operational funds. If Council accepts the land from Mrs Trott there will be a need to establish a budget in the current financial year of \$10,000 to progress the legal and conveyancing costs associated with creation of new land titles. It is also envisaged that a budget of \$30,000 will be required in 2014/15 to develop a master plan for the site and progress some of the works identified in the lease.

LIFE CYCLE COSTS

At this stage Council has not established what the life cycle cost will be as it does not have any detail on what future assets will be constructed on the land. These costs however will be a combination of operational and capital projects which will be informed by the Master Plan to be developed for this land. Once this master plan has been developed a better understand of the assets and therefore there life cycle costs can be established.

About this Document

This map has been created for the purpose of showing basic locality information and is a representation of the data currently held by The City of Holdfast Bay. This information is provided for private use only.

Disclaimer

While every effort has been made to ensure the accuracy of the product, Council accepts no responsibility for any errors or omissions. Property boundary line network data is supplied by State Government.

Lot 725 CT5853 Folio 53

Map Scale: 1:1,060
Created by user
Monday, 26 August



MEMORANDUM OF LEASE**CERTIFICATES OF TITLE BEING LEASED**

Portion of the land comprised in Certificate of Title Volume 5853 Folio 53, being the portion identified as ___ on
FX _____

ESTATE AND INTEREST

Fee simple

ENCUMBRANCES

Nil

LESSOR (Full name and address)**Mary Dorothy Trott** of 74 Marine Parade, Seacliff, South Australia 5049**LESSEE** (Full name, address and mode of holding)**City of Holdfast Bay** of 24 Jetty Road, Brighton, South Australia 5048**TERM OF LEASE**

COMMENCING ON THE.....

EXPIRING ON THE.....

RENT AND MANNER OF PAYMENT (OR OTHER CONSIDERATION)

In accordance with clause 3.

OPERATIVE CLAUSE ^(a) delete the inapplicable

The Lessor LEASES TO THE LESSEE the land ^(a) ABOVE / ~~HEREINAFTER~~ described and the LESSEE ACCEPTS THIS LEASE of the land for the term and at the rent stipulated, subject to the covenants and conditions expressed ^(a) herein / in Memorandum No. _____ and to the powers and covenants implied by the Real Property Act 1886 (except to the extent that the same are modified or negated below).

DEFINE THE LAND BEING LEASED INCORPORATING THE REQUIRED EASEMENT(S) ETC.

Not applicable

IT IS COVENANTED BY AND BETWEEN THE LESSOR AND THE LESSEE as follows:
(Covenants, where not deposited, to be set forth on insert sheet(s) and securely attached)

LEASE AGREEMENT

Portion of 74 Marine Parade, Seacliff

**Norman
Waterhouse**
LAWYERS

Level 15, 45 Pirie Street
Adelaide SA 5000
Telephone + 61 8 8210 1200
Fax + 61 8 8210 1234
www.normans.com.au

TABLE OF CONTENTS

Page No

1.	DEFINITIONS AND INTERPRETATION.....	1
1.1	Definitions.....	1
1.2	Interpretation	2
1.3	Background	3
2.	GRANT OF LEASE.....	3
3.	RENT	3
4.	RATES AND TAXES AND OUTGOINGS	3
4.1	Liability for Rates and Taxes.....	3
4.2	Power and other utilities	4
5.	USE OF LAND.....	4
5.1	Permitted Use.....	4
5.2	Offensive activities.....	4
5.3	Statutory Requirements	4
5.4	Signs	4
5.5	Fire precautions.....	4
6.	INSURANCE	4
7.	REPAIR AND MAINTENANCE.....	5
7.1	Repair and Maintenance.....	5
7.2	Works, Alterations and Additions by Lessee	5
7.3	Cleaning	5
8.	PRESERVATION AND CONSERVATION.....	5
9.	ASSIGNMENT, SUBLETTING AND CHARGING	5
9.1	Assignment.....	5
9.2	Subletting	5
9.3	Encumbering, Charging etc	5
10.	LESSOR'S OBLIGATIONS AND RIGHTS	6
10.1	Quiet enjoyment	6
10.2	Right to enter.....	6
11.	RENEWAL.....	6
12.	RIGHTS AND OBLIGATIONS ON EXPIRY	6
12.1	Expiry	6
12.2	Handover of possession	6
12.3	Abandoned goods	7
12.4	Holding over	7
13.	BREACH	7
13.1	Termination of this Lease.....	7
13.2	Landlord and Tenant Act	7
14.	INDEMNITY AND RELEASE	7
14.1	Risk	7
14.2	Indemnity.....	7
15.	GOODS AND SERVICES TAX.....	8
16.	LAND DIVISION	8
17.	WORKS.....	9
18.	OPTION TO PURCHASE	9
19.	MISCELLANEOUS	11
19.1	Approvals and consents	11
19.2	Entire agreement	11
19.3	Waiver	11
19.4	Exercise of power	11
19.5	Freedom of Information	11
19.6	Survival.....	12
20.	NOTICE.....	12

TABLE OF CONTENTS

Page No

21. COSTS..... 12
SCHEDULE 1..... 13

DATE

PARTIES

Mary Dorothy Trott of 74 Marine Parade, Seacliff, South Australia 5049 (**Lessor**)

City of Holdfast Bay of 24 Jetty Road, Brighton, South Australia 5048 (**Lessee**)

BACKGROUND

- A. The Lessor is, or is entitled to be, the registered proprietor of the Land.
- B. The Lessor has, for a significant period of time, put considerable effort into the conservation of the Land, including by playing an instrumental part in planting and protecting the Land with the assistance of community groups including the Girl Guides.
- C. The Lessor wishes to ensure the ongoing preservation of the Land.
- D. The Lessee, as the council constituted under the *Local Government Act 1999(SA)* for the area in which the Land is situated, has offered to take a lease of the Land to facilitate the on-going preservation and use of the Land.
- E. The Lessor has agreed to grant a lease to the Lessee and the parties now wish to record the terms of their agreement.

AGREED TERMS

1. DEFINITIONS AND INTERPRETATION

1.1 Definitions

In this lease:

Business Day means a day which is not a Saturday, Sunday or public holiday in Adelaide.

Commencement Date means the commencement date described in Item 2 of Schedule 1.

Financial Year means:

- (a) the initial period from the Commencement Date up to and including 30 June next (which unless this lease commences on 1 July is a period of less than 12 months);
- (b) each consecutive period of 12 months commencing 1 July in any year and expiring on 30 June in the next following year; and
- (c) a final period commencing on 1 July and expiring on the last day of this lease (which, unless this lease expires on 30 June, is a period of less than 12 months).

Initial Term means the initial term of this lease commencing on the Commencement Date and for the period described in Item 2 of Schedule 1.

Land means the land identified in schedule 1 Item 1 and more particularly identified on the 'Plan of Land' set out in Annexure A of this Lease together with all fences, signs and structures erected thereon.

Legislation includes any relevant Act of Parliament (whether State or Federal) and any regulation or by-law including by-laws issued by any local government body or authority.

Lessee means the party described as 'Lessee' in this lease and where the context permits includes the employees, officer, contractors, agents, consultants and other invitees of the Lessee.

Lessor means the party described as 'Lessor' in this lease and where the context permits includes the employees, contractors, agents and other invitees of the Lessor and the Lessor's administrators, executors and successors in title.

Permitted Use means the use described in Item 5 of Schedule 1.

Plan of Division has the meaning given to it in clause 16.1.1.

Rates and Taxes means all present and future rates, charges, levies, assessments, duty and charges of any Statutory Authority, department or authority having the power to raise or levy any such amounts in respect of the use, ownership or occupation of the Land and includes water and sewer charges, Council rates, emergency services levy and land tax.

Registrar-General means the Registrar-General of the Lands Titles Office in South Australia.

Renewal Term means each of the terms of renewal or extension in Item 3 of Schedule 1.

Rent means the rent described in Item 4 of Schedule 1.

Statutory Authority means any governmental authority created by or under any relevant Legislation.

Statutory Requirements means all relevant Legislation and all lawful conditions, requirements, notices and directives issued or applicable under any such Legislation or by any Statutory Authority.

Term means the Initial Term, the Renewal Terms and any period during which the Lessee holds over or remains in occupation of the Land.

1.2 Interpretation

In this lease, unless the context otherwise requires:

1.2.1 headings do not affect interpretation;

-
- 1.2.2 singular includes plural and plural includes singular;
 - 1.2.3 words of one gender include any gender;
 - 1.2.4 a reference to a party includes its executors, administrators, successors and permitted assigns;
 - 1.2.5 a reference to a person includes a partnership, corporation, association, government body and any other entity;
 - 1.2.6 a reference to this lease includes any schedules and annexures to this lease;
 - 1.2.7 a reference to any document (including this lease) is to that document as varied, novated, ratified or replaced from time to time;
 - 1.2.8 a reference to legislation includes any amendment to it, any legislation substituted for it, and any subordinate legislation made under it;
 - 1.2.9 a provision is not construed against a party only because that party drafted it;
 - 1.2.10 an unenforceable provision or part of a provision may be severed, and the remainder of this lease continues in force;
 - 1.2.11 the meaning of general words is not limited by specific examples introduced by 'including', 'for example' or similar expressions;
 - 1.2.12 an expression defined in the *Corporations Act 2001* (Cth) has the meaning given by that act at the date of this lease; and
 - 1.2.13 the covenants and powers implied in leases by virtue of sections 124 and 125 of the *Real Property Act 1886* apply and are implied in this lease unless they are expressly or impliedly excluded or modified.

1.3 **Background**

The Background forms part of this lease and is correct.

2. **GRANT OF LEASE**

The Lessor grants and the Lessee accepts a lease of the Land for the Term as set out in this lease.

3. **RENT**

The Lessee must pay the Rent annually on each anniversary of the Commencement Date during the Term if demanded by the Lessor.

4. **RATES AND TAXES AND OUTGOINGS**

4.1 **Liability for Rates and Taxes**

- 4.1.1 The Lessee must pay or reimburse the Lessor all Rates and Taxes levied, assessed or charged in respect of the Land or upon the owner or occupier of the Land.

4.1.2 The Rates and Taxes must be adjusted between the Lessor and the Lessee as at the Commencement Date and the end or termination date of this lease.

4.2 **Power and other utilities**

4.2.1 The Lessee must pay, when due, all costs for the use of electricity, gas, water and any and all other services and utilities supplied to or used from the Land.

4.2.2 If there is no separate meter for a service or utility used on or from the Land then the Lessee may install a meter at its own cost.

5. **USE OF LAND**

5.1 **Permitted Use**

The Lessee may use the Land only for the Permitted Use and must not use or allow the Land to be used for any other use without the Lessor's consent.

5.2 **Offensive activities**

The Lessee must:

5.2.1 not carry on any offensive or dangerous activities on or from the Land;
or

5.2.2 not create a nuisance or disturbance for the Lessor or for the owners or occupiers of any adjoining property.

5.3 **Statutory Requirements**

The Lessee must comply with all Statutory Requirements relating to:

5.3.1 the Lessee's use and occupation of the Land; and

5.3.2 the Permitted Use.

5.4 **Signs**

The Lessee may install or affix signs in, on or to the Land that are consistent with the Permitted Use.

5.5 **Fire precautions**

The Lessee must comply with all Statutory Requirements relating to fire safety and procedures as a consequence of the Lessee's use of the Land.

6. **INSURANCE**

The Lessee warrants that it is a member of the Local Government Association Mutual Liability Scheme (**Scheme**) and is bound by the rules of the Scheme pursuant to the provisions of the *Local Government Act 1999* (SA). In the event that the Lessee ceases to be a member of the Scheme the Lessee will immediately, pursuant to the provisions of the *Local Government Act 1999* (SA), effect public liability insurance to a minimum level of cover of fifty million dollars (\$50,000,000.00).

7. REPAIR AND MAINTENANCE

7.1 Repair and Maintenance

The Lessee must keep and maintain the Land in good repair taking into account its condition at the Commencement Date and the Permitted Use.

7.2 Works, Alterations and Additions by Lessee

7.2.1 The Lessee may carry out any works, alterations or additions on or to the Land without the Lessor's consent only if such works, alterations or additions are consistent with the Permitted Use.

7.2.2 The products of any works, alterations or additions to the Land will remain at all times in the ownership of the Lessee and despite any rule of law to the contrary will not be considered to be fixtures to the Land.

7.3 Cleaning

The Lessee must keep the Land clean and tidy by removing any rubbish and unnecessary materials from the Land regularly.

8. PRESERVATION AND CONSERVATION

8.1 The Lessee must:

8.1.1 maintain landscaping on the Land in accordance with the community land management plan applicable to the Land under the *Local Government Act 1999 (SA)*; and

8.1.2 not remove any significant or regulated trees on the Land without the consent of the Lessor and all necessary legal approvals.

9. ASSIGNMENT, SUBLETTING AND CHARGING

9.1 Assignment

9.1.1 A party must not assign its interest in this Lease.

9.1.2 For the avoidance of doubt, the Lessor agrees that it must not sell or otherwise dispose of the Land during the Term.

9.2 Subletting

9.2.1 The Lessee must not sublet any part of the Land without the Lessor's consent.

9.2.2 The Lessee may sublicence or hire out the Land or any part of it without the Lessor's consent provided that any sublicence or hiring out is in accordance with the community land management plan adopted by the Lessee for the Land.

9.3 Encumbering, Charging etc

The Lessor agrees that it will not encumber, mortgage or charge the Land or grant any interest in the Land.

10. LESSOR'S OBLIGATIONS AND RIGHTS

10.1 Quiet enjoyment

Subject to the Lessor's rights and to the Lessee complying with the Lessee's obligations under this lease, the Lessee may occupy the Land during the Term without interference from the Lessor.

10.2 Right to enter

The Lessor may (except in an emergency when no notice is required) enter the Land after giving the Lessee reasonable notice:

10.2.1 to see the state of repair of the Land; and

10.2.2 to do anything the Lessor must or may do under this lease or must do under any Legislation or to satisfy the requirements of any Statutory Authority.

10.3 Discharge of Stormwater

10.3.1 While Mary Dorothy Trott is the registered proprietor of the balance of the land in Certificate of Title Volume 5853 Folio 53, Mary Dorothy Trott may continue to discharge stormwater from the balance of the land in Certificate of Title Volume 5853 Folio 53 on to the Land.

10.3.2 The right in clause 10.3.1 is personal to Mary Dorothy Trott and clause 10.3.1 will no longer apply, and is deleted from this Lease, immediately on Mary Dorothy Trott ceasing to be the registered proprietor of the balance of the land in Certificate of Title Volume 5853 Folio 53.

11. RENEWAL

If a right of renewal is specified in Item 3 of Schedule 1 and the Lessee wishes to exercise that right of renewal, then the Lessee must give a written notice to the Lessor not less than 6 months and not more than 12 months before the expiry of the Initial Term or the first Renewal Term (as the case may be) stating it wishes to renew this lease for the period specified in Item 3 of Schedule 1. If such notice is given the Lessor must renew this lease for the relevant Renewal Term on the terms in this lease (except, in the case of the Second Renewal Term, this subclause) commencing immediately after the Initial Term or the first Renewal Term (as the case may be) expires.

12. RIGHTS AND OBLIGATIONS ON EXPIRY

12.1 Expiry

Subject to clause 11, this lease comes to an end at midnight on the last day of the Term unless it is terminated earlier by the Lessor or the Lessee under this lease.

12.2 Handover of possession

Before this lease comes to an end, the Lessee must remove all of the Lessee's goods and equipment from the Land, except that the Lessee is not required to

remove any goods, equipment, fixtures or fittings which it has installed on or brought on to the Land that are in accordance with the community land management plan applicable to the Land under the *Local Government Act 1999 (SA)*.

12.3 Abandoned goods

If the Lessee leaves any items of equipment or other goods at the Land at the expiry or earlier termination of the Term, then the Lessor must give the Lessee written notice providing the Lessee with no fewer than 30 days in which to attend on the Land and collect these items. If the Lessee does not collect its items within the notice period set out in the notice then the Lessor may deal with those items as it sees fit.

12.4 Holding over

If, with the Lessor's consent, the Lessee continues to occupy the Land after the end of this lease, the Lessee does so under a monthly tenancy which:

12.4.1 either party may terminate on one month's notice given at any time; and

12.4.2 is on the same terms as this lease.

13. BREACH

13.1 Termination of this Lease

Either party may terminate this lease with immediate effect by giving written notice to the other party if:

13.1.1 a party breaches a material provision of this lease where that breach is not capable of remedy; or

13.1.2 a party breaches a provision of this lease and fails to remedy the breach within 20 Business Days (or such other period of time as may be reasonable in the circumstances) after receiving notice requiring it to do so.

13.2 Landlord and Tenant Act

A notice under section 10 of the *Landlord and Tenant Act 1936 (SA)* must allow at least 14 days for the Lessee to remedy a breach of this lease if it is capable of remedy and to make reasonable compensation in money to the satisfaction of the Lessor.

14. INDEMNITY AND RELEASE

14.1 Risk

The Lessee occupies and uses the Land at the Lessee's risk.

14.2 Indemnity

The Lessee is liable for and indemnifies the Lessor against all actions, liabilities, penalties, claims or demands for any loss, damage, injury or death

incurred or suffered by any person on the Land or incurred or suffered in connection with the Lessee's use or occupation of the Land, except to the extent that such loss, damage injury or death is caused or contributed to by an act or omission of the Lessor.

15. GOODS AND SERVICES TAX

- 15.1 In this clause an expression defined in the *A New Tax System (Goods and Service Tax) Act 1999* (Cth) has the meaning given to it in that Act.
- 15.2 If a party makes a supply under or in connection with this lease in respect of which GST is payable, the consideration for the supply is increased by an amount equal to the GST payable by the supplier on the supply.
- 15.3 A party need not make a payment for a taxable supply under or in connection with this lease until it receives a tax invoice for the supply.

16. LAND DIVISION

- 16.1 To the extent that any of the following has not already been completed prior to the date of this lease, the parties agree to undertake the following:
- 16.1.1 The Lessee will, at its cost, arrange for the approval and deposit of a plan of division (**Plan of Division**), substantially in the form of the 'Plan of Land' in Annexure A.
- 16.1.2 The Lessor must do all things to assist the Lessee to ensure that the Plan of Division is prepared, approved and deposited, including but not limited to consenting to any required approval for development pursuant to the *Development Act 1993* (SA), signing all documents and providing the Lessee with authority to obtain all consents required to the Plan of Division, and its approval and deposit.
- 16.1.3 The Lessee will consult with the Valuer General's Department of the South Australian Government with respect to the intended use of the Land as the Permitted Use so as to assure the Department of the intended use pursuant to this Lease before the Plan of Division is lodged with the Registrar-General in order to attempt to have the Land valued for rating and taxation purposes as of no value.
- 16.1.4 The Plan of Division must vest the portion of the Land marked '302' on the 'Plan of Land' in Annexure A to this lease in the Lessee as public road pursuant to section 223LF of the *Real Property Act 1886*.
- 16.1.5 The Plan of Division must not create or continue any rights of way over the land marked as "F/G/H/Q" on the Plan of Division (**Relevant Area**) which will enable the owners and occupiers of land adjoining the Relevant Area to access the Land via the Relevant Area.
- 16.1.6 In the event that any works are required to be undertaken in order for the Plan of Division to be deposited by the Registrar-General, the Lessee will be responsible for completing such works at its cost.
- 16.1.7 If:

- 16.1.7.1 the Lessee is unable to obtain any required consents for the division of the Land in accordance with the Plan of Division pursuant to the *Development Act 1993* (SA) or required by any other Legislation; or
- 16.1.7.2 the Registrar-General will not approve or deposit the Plan of Division for any reason; or
- 16.1.7.3 the cost of any works or other things required to facilitate the division of the Land in accordance with the Plan of Division is, in the Lessee's opinion, too onerous;

then the Lessee may terminate this lease at any time and with immediate effect by giving written notice to the Lessor of such termination.

17. WORKS

17.1 If and when the Plan of Division is deposited by the Registrar-General in accordance with clause 16, the Lessee will complete the following works on the Land and the balance of the land in Certificate of Title Volume 5358 Folio 53, at the Lessee's cost:

- 17.1.1 upgrading of the existing access path as described in Annexure B and as otherwise reasonably agreed between the Lessor and the Lessee;
- 17.1.2 pruning or removing the overgrowth on the access road as described in Annexure B and as otherwise reasonably agreed between the Lessor and the Lessee, resulting in better access to the rear of the balance of the land in Certificate of Title Volume 5853 Folio 53; and
- 17.1.3 installation of fencing of a design and quality reasonably agreed between the Lessor and the Lessee to delineate the boundary between the balance of the land in Certificate of Title Volume 5853 Folio 53 and the Land.

18. OPTION TO PURCHASE

18.1 In this clause:

Contract means the Contract for Sale and Purchase of the Land annexed to this lease as Annexure C.

Purchase Price means the amount of ten dollars (\$10.00) (exclusive of GST).

18.2 The Lessor grants to the Lessee an option to purchase the Land on the terms in the Contract.

18.3 The Lessee may exercise the option:

18.3.1 by serving a notice of exercise of option on:

18.3.1.1 the Lessor; or

18.3.1.2 if the Lessor is no longer alive, then on the Lessor's administrator or executor or the new proprietor of the Land (as the case may be);

during the Initial Term or any Renewal Term, but only after one of the following events has occurred:

18.3.1.3 the Lessor intends to sell or otherwise dispose of the Land (either by advising the Lessee of the Lessor's intention to sell or dispose of the Land or by the Lessor's intention being assumed from the actions of the Lessor, for example but not limited to, the Lessor engaging an agent to sell or dispose of the Land or potential purchasers being shown the Land);

18.3.1.4 the Lessor dies; or

18.3.1.5 the Lessor ceases to reside on the balance of the land comprised in Certificate of Title Volume 5853 Folio 53; or

18.3.1.6 the Lessee is notified by the Lessor or otherwise becomes aware that the Lessee has or will become liable to pay any amount pursuant to clause 4.1.1 in respect of land tax; and

18.3.2 by paying to the Lessor \$1.00 as a deposit under the Contract at the same time.

18.4 The notice of exercise of option:

18.4.1 must be in writing; and

18.4.2 must state clearly that the Lessee wishes to purchase the Land in accordance with the option contained in this lease

(Notice of Exercise of Option).

18.5 The option must be exercised by the Lessee within 90 days of the Lessee becoming aware that one of the events in clauses 18.3.1.3 to 18.3.1.6 has occurred, unless otherwise agreed by the parties.

18.6 The purchase price for the Land is the Purchase Price.

18.7 Upon the Lessee exercising the option, the Lessor (and its administrators, executors and subsequent proprietors of the Land) will be bound to sell and the Lessee will be bound to purchase the Land on the terms and conditions set out in the Contract and the Contract will be deemed to be entered into on the date the Option is exercised without the requirement for execution by the parties.

18.8 The Lessee must cause its solicitor to:

18.8.1 insert in the Contract:

18.8.1.1 the date of settlement, being 30 Business Days after the date of the Notice of Exercise of Option or, if the option is exercised in the event of the Lessor's death, 30 Business

Days after the date of Grant of Probate or Letters of Administration of the Lessor's estate;

18.8.1.2 any other correct particulars which in the reasonable opinion of the Lessee's solicitor should be included; and

18.8.2 annex any certificates, surveys, the results of searches or inquiries, diagrams or other like documents which in the reasonable opinion of the Lessee's solicitor should be annexed.

18.9 The parties agree that the option to purchase contained in this clause 18:

18.9.1 is irrevocable;

18.9.2 is intended to be exercisable by the Lessee against, and is binding on, the Lessor and the Lessor's administrators, executors and successors in title; and

18.9.3 is not personal to the Lessor.

19. MISCELLANEOUS

19.1 Approvals and consents

Unless otherwise provided, the Lessor must not unreasonably withhold any approval or consent under this lease.

19.2 Entire agreement

This lease:

19.2.1 constitutes the entire agreement between the parties about the Land;

19.2.2 supersedes any prior understanding, agreement, condition, warranty, indemnity or representation about the Land.

19.3 Waiver

If the Lessor accepts or waives any breach by the Lessee, that acceptance or waiver cannot be taken as an acceptance or waiver of any future breach of the same obligation or of any other obligation under this lease.

19.4 Exercise of power

19.4.1 The failure, delay, relaxation or indulgence by a party in exercising a power or right under this lease is not a waiver of that power or right.

19.4.2 An exercise of a power or right under this lease does not preclude a further exercise of it or the exercise of another right or power.

19.5 Freedom of Information

19.5.1 The *Freedom of Information Act 1991* (SA) (**FOE Act**) gives members of the public rights to access the Lessee's documents. The FOI Act promotes openness in governance and accountability of government agencies and to achieve these objects confers on members of the

public a legally enforceable right to be given access to documents, including agreements, held by the Lessee subject but not limited to such restrictions as are consistent with the public interest, commercial in confidence and/or the preservation of personal privacy in respect of those from whom information is collected and held by the Lessee and other public authorities.

19.5.2 The Lessor consents to any disclosures made as a result of the Lessee complying with its obligations under the FOI Act, subject to any legally required consultation.

19.6 **Survival**

Each indemnity, obligation of confidence and other term capable of taking effect after the expiration or termination of this lease, remains in force after the expiration or termination of this lease.

20. **NOTICE**

20.1 A notice, demand, consent, approval or communication under this lease (**Notice**) must be in writing, in English and signed by a person authorised by the sender.

20.2 Without excluding any other method, Notice is sufficiently given:

20.2.1 to the Lessee, if posted by pre-paid post to the address of the Lessee detailed in this lease or at such other address as may be notified by the Lessee to the Lessor from time to time;

20.2.2 to the Lessor, if posted by pre-paid post to the address of the Lessor detailed in this lease or at such other address as may be notified by the Lessor to the Lessee from time to time

20.3 Notice given by pre-paid post is deemed to have been given three Business Days after posting.

21. **COSTS**

On request, the Lessee must pay or reimburse to the Lessor:

21.1 all stamp duty (if any) payable on this lease;

21.2 the reasonable legal costs of the Lessor in relation to the preparation and negotiation of this lease up to a maximum amount of \$2,000.00 (inclusive of GST); and

21.3 if the Lessee elects to register this lease, then all fees and charges payable in respect of the registration of this lease.

Schedule 1

Item 1

Land

Portion of the land comprised in Certificate of Title Volume 5853 Folio 53, being the portion identified as '301' on the 'Plan of Land' in Annexure A to this lease.

Item 2

Initial Term

Ten (10) years commencing on the date on which the first of the parties to this Lease signs this Lease (**Commencement Date**).

Item 3

Renewal(s)

Two (2) renewals each of ten (10) years.

Item 4

Rent

\$1.00 per annum (exclusive of GST).

Item 5

Permitted Use

The on-going preservation and use of the Land as coastal reserve and drainage reserve.

EXECUTED as an agreement

Signed by the Lessor

Signed by Mary Dorothy Trott in the presence of:

.....
Signature of witness

.....
Mary Dorothy Trott

.....
Name of witness (print)

Signed by the Lessee

The common seal of City of Holdfast Bay was affixed in the presence of:

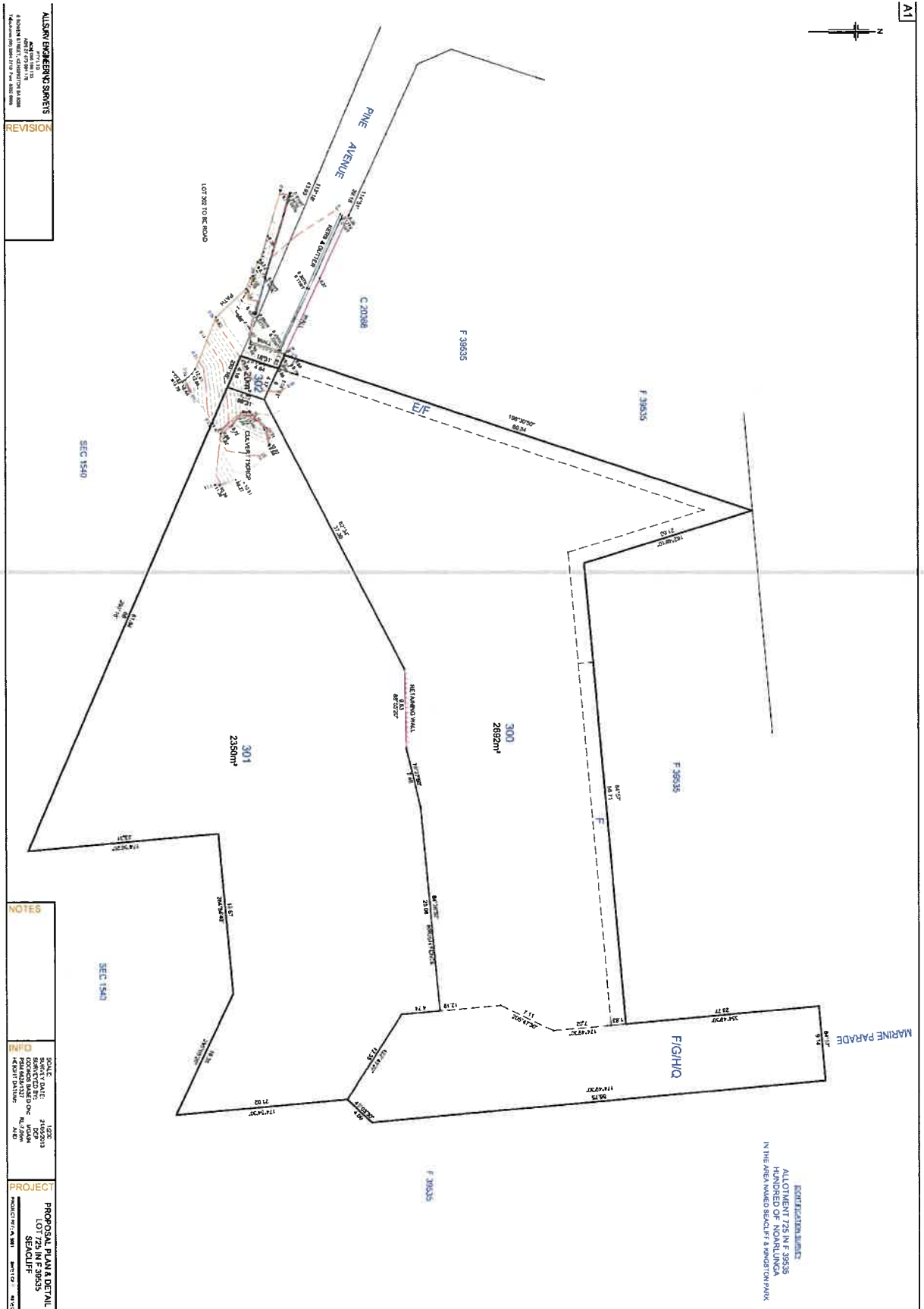
.....
Signature of Mayor

.....
Signature of Chief Executive Officer

.....
Name of Mayor (print)

.....
Name of Chief Executive Officer (print)

Annexure A Plan of Land



ALSWAY ENGINEERING SERVICES
 4500 15th Street
 4500 15th Street, Edmonton, AB T6C 1K8
 Tel: (780) 462-1111
 Fax: (780) 462-1112
 Email: info@alsway.com

REVISION

NOTES
<p>RFPD</p> <p>DATE: 2024-07-15 DRAWN BY: J. [Name] CHECKED BY: [Name] APPROVED BY: [Name]</p>

PROJECT
<p>PROPOSAL PLAN & DETAIL LOT 300 SCALE: 1:500</p>

EDMONTON, ALBERTA
 ALL OTHER 725 IN F. 39835
 HUNDRED OF NON-ALIGNED
 IN THE AREA NUMBERED BEAULIEF & WINDSTON PARK

Annexure B Draft Works Plan

1. BACKGROUND

The majority of the works are associated with formalising access to the western end of the property via what is known as Pine Ave.

The project elements discussed below have been given a time scale based on a number of assumptions in the absence of a formal site investigation and approved budgeted costing. As it stands, the works will be categorised under three separate headings:

- (1) Short term – Deliverable within a number of months using approved Council revenue alone.
- (2) Medium term – Deliverable over 1-2 financial years with approved Council funding.
- (3) Long term – Deliverable over the life of the project with continued landscaping and stormwater upgrades that may prove necessary during the duration of the Lease.

2. PROPOSED WORKS

2.1 The proposed works will comprise of:

- 2.1.1 Levelisation of the existing topography to allow for the remediation and improvement works to be undertaken (short term)

Currently there is a difference in levels (between the road and the land contained within proposed lot 302) of approximately 1500mm. The intent of this Lease and associated works is to provide access to proposed lots 300 and 301 by increasing the length of the road known as Pine Ave by some 6 metres thereby allowing the creation of a gradually rising road to take account of the differing levels.

- 2.1.2 Upgrading the existing stormwater infrastructure associated with the Land (medium – long term);

As part of this work it will be necessary to undertake works associated with the current stormwater infrastructure thereby changing the current levels to a lower level to allow the access road to be built.

Drainage pit inspections will occur.

- 2.1.3 Installation of perimeter fencing (short term)

The other works identified is the construction of fence between proposed lots 300 and 301 to separate the leased land from the land still owned by the Lessor. This fence will commence at a point close to the front of the existing house and run to the corner of proposed lot 302. At this time the type of fence has not been determined but would be constructed of either a tubular form or colour bond style.

- 2.1.4 Clearing of wild vegetation and development of a planting scheme to complement the existing landscaping (short – medium term)

The other major works envisaged for the Land is the clearing of weed species and eventually all non-native plants which will be undertaken in stages with replanting being undertaken as the removal proceeds. While the details of this vegetation removal have not been fully identified at this time it will be further informed in future years by a master plan to be developed for the site which will look to formalise plant and any infrastructure such as stormwater retention systems

- 2.1.5 Road and footpath upgrades (medium – long term)

Once this road has been constructed it will be necessary to also construct a perimeter fence (north and eastern sides of proposed lot 302) so as to define the road and private property this fence will also have constructed within its length 2 gates (1 on each of the north and eastern sides) to allow independent access to proposed lot 300 and 301.

- 2.1.6 Site security (medium term)

As part of the initial construction works envisaged for proposed lot 302 it will be necessary to also undertake vegetation clearance across the whole of proposed lot 302 and approximately a further 5 metres around this allotment to facilitate construction of the road, stormwater infrastructure and fencing.

Measures will be taken to limit access to the Land during the Lease term until the works have been completed and the Land is considered safe from a risk and safety perspective to allow anyone access. Only then will access be granted, if at all, from proposed lot 302.

- 2.1.7 Conservation / Environment / Hard landscaping

*Weed and general grass control in or about the Land.
Community planting of the coastal reserve in accordance with the Community Land Management Plan (CLMP).*

New fences will be installed as noted above and other 'hard landscaping' options will be explored on the more navigatable areas of the Land.

Annexure C Contract for the Sale and Purchaser of the Land



**THE LAW SOCIETY
OF SOUTH AUSTRALIA**

CONTRACT

**FOR THE SALE AND
PURCHASE OF LAND**

Notice to purchaser:

**This is a contract for the sale of residential land.
You may be bound by the terms of this contract if it is signed by both you and the vendor.
You should seek independent legal advice if you are unsure
about the terms contained in this contract.
Contracts for the sale of land may be subject to a
2 day cooling-off period (exercisable by the purchaser) under section 5
of the *Land and Business (Sale and Conveyancing) Act 1994*.**

Copyright Reserved
LXG02499971
Updated 2009

INTERPRETATION

1. (1) In this Agreement any reference to an item with an accompanying number is a reference to the particulars set opposite the item number referred to in the schedule to this Agreement. If no item with the number referred to is contained in the schedule or no particulars appear in the schedule opposite the item number, this Agreement shall be read and construed as if the word 'nil' or the words 'not applicable', as the context shall admit or require, are contained in the schedule opposite the item number.
- (2) The terms set opposite item numbers in the schedule shall not govern or affect the particulars set opposite those terms in the schedule and, except where otherwise provided in this Agreement, any short description of the subject matter of any item appearing in the schedule shall not affect the construction of this Agreement.
- (3) Headings to clauses are for convenience only and shall not affect the construction of this Agreement.
- (4) In this Agreement, unless the context otherwise requires:-
 - (a) reference to a party includes the party's executors, administrators and assigns and, where the party is a body corporate, its successors and assigns but does not authorise devolution or assignment where the same is subject to the other party's permission or any other condition contained in this Agreement or otherwise;
 - (b) reference to the singular includes the plural and vice-versa;
 - (c) reference to any gender includes the other gender and neuter;
 - (d) where two or more persons are designated as "the Vendor" the agreements on their part in this Agreement bind them and every two or greater number of them jointly and each of them severally;
 - (e) where two or more persons are designated as the "the Purchaser" the agreements on their part in this Agreement bind them and every two or greater number of them jointly and each of them severally;
 - (f) expressions importing persons include bodies corporate;
 - (g) reference to any statute includes all statutes amending, consolidating or replacing the statute referred to;
 - (h) any reference to the schedule to this Agreement includes any schedule of particulars referred to in any special condition annexed to, or forming part of, this Agreement;
 - (i) "**Business Day**" means a day other than a Saturday, Sunday or Public Holiday in South Australia within the meaning of the *Holidays Act 1910*;
 - (j) "**Business Hours**" means the hours between 9:00am and 5:00pm (South Australian time) on a Business Day;
 - (k) "**Cooling-off Period**" means the period from the date of this Agreement to the expiration of "**the prescribed time**" within the meaning of section 5 of the *Land and Business (Sale and Conveyancing) Act 1994*;
 - (l) "**Default Rate**" means 2% above the published BankSA Variable Business Loan Rate;
 - (m) "**Goods and Services Tax**" and "**GST**" mean a goods and services tax, a value-added tax or any similar or comparable tax imposed in Australia, and for the present purposes the expressions mean the goods and services tax imposed under the *A New Tax System (Goods and Services Tax) Act 1999* and any other Act or Regulation pursuant to, associated with, amending or replacing that Act (together the "**GST Law**");
 - (n) "**Land**" includes the included property referred to in Item 4 and the included chattels referred to in Item 5;
 - (o) "**Purchase Price**" means the Purchase Price in Item 11 including the deposit but not including any GST applicable; and

(p) "Settlement Day" means the Settlement Day in Item 15.

SALE OF THE LAND

2. The Vendor agrees to sell and the Purchaser agrees to purchase from the Vendor the Land described in Item 3 upon and subject to the terms and conditions contained in this Agreement.

RIGHTS AND PROPERTY INCLUDED

3. The Land is sold together with:-
 - (a) any easements, rights, privileges and other appurtenances referred to in the certificate or other muniment of title for the Land;
 - (b) all improvements and fixtures on the Land; and
 - (c) the included property referred to in Item 4, if any.

CHATTELS

4. (1) The Vendor also agrees to sell and the Purchaser agrees to purchase the included chattels referred to in Item 5, if any, for the amount payable for the included chattels set out in Item 11.
 - (2) The Purchaser acknowledges that the excluded property referred to in Item 7, if any, is not included in the sale.

ENCUMBRANCES

5. The Land is sold subject to:-
 - (a) any statutory easement pursuant to the *Electricity Trust of South Australia Act 1946*;
 - (b) any easements and rights to which the Land is subject referred to in the certificate or other muniment of title for the Land and any exceptions and reservations referred to therein;
 - (c) the exceptions and reservations referred to in Item 8, if any;
 - (d) the mortgages, encumbrances, liens, charges and interests referred to in item 9, if any; and
 - (e) the tenancies or other interests referred to in Item 10, if any.

PURCHASE PRICE

6. Subject to clause 32, the Purchaser shall pay the Purchase Price to the Vendor for the Land.

PAYMENT OF PURCHASE PRICE

7. (1) The Purchaser shall pay the Purchase Price, together with any GST applicable, in the following manner:-
 - (a) the deposit set out in Item 12 in the manner and at the time specified in Item 12 to the Deposit Holder specified in Item 14 or, if no Deposit Holder is specified, to the Vendor; and
 - (b) the balance set out in Item 13 to the Vendor, or as the Vendor may in writing direct, at settlement.
- (2) If it is so specified in Item 14, the Deposit Holder shall hold the deposit as a stakeholder.

- (3) The receipt of any person paid at the direction of the Vendor shall be a sufficient discharge to the Purchaser for the amount paid to that person.

SETTLEMENT

8. (1) Settlement shall take place on the Settlement Day specified in Item 15 at the Lands Titles Registration Office at Adelaide or at any other place agreed between the Vendor and the Purchaser.
- (2) Not less than seven days before the Settlement Day, or within such shorter period as the Vendor may allow, the Purchaser shall deliver to the Vendor or the Vendor's agent, for execution by the Vendor, a memorandum of transfer of the Land duly executed by the Purchaser and any assignment or assignments required by the Purchaser.
- (3) Failing due delivery of a memorandum of transfer or assignment, the Vendor may at any time thereafter prepare a memorandum of transfer at the expense in all things of the Purchaser, based upon the scale of fees provided in the applicable *Supreme Court Rules*.
- (4) Upon payment by the Purchaser of all moneys required to be paid by the Purchaser at or before settlement and upon compliance by the Purchaser in all other respects with the provisions of this Agreement to be complied with by the Purchaser at or before settlement, the Vendor shall execute in favour of the Purchaser, or as the Purchaser shall direct, and deliver to the Purchaser -
 - (a) the memorandum of transfer of the Land free of all mortgages, encumbrances, liens, charges, tenancies, licences and other interests except those referred to in clause 5; and
 - (b) such other assignments of the Land as the Purchaser may reasonably require; and
 - (c) any declaration application or certificate which the Vendor may be required to make or give under any Act or Regulation in order to enable the memorandum of transfer to be registered.
- (5) The memorandum of transfer shall be in a form registrable under the provisions of the *Real Property Act 1886*.
- (6) The provisions stated in Item 16, so far as applicable, shall apply to the mortgages, encumbrances, liens and charges referred to in Item 9 and the tenancies and other interests referred to in Item 10.

POSSESSION

9. Vacant possession of the Land and delivery of the included property and the included chattels shall be given and taken on settlement, or at such other time as the Vendor and Purchaser may mutually agree, subject to the tenancies and other interests referred to in Item 10.

ADJUSTMENTS

10. (1) Subject to clauses 21(6) and 21(7) all rates and taxes, including land tax, all other outgoings in respect of the Land and all rents and other income arising from the Land shall be adjusted to midnight on the day preceding settlement. After settlement the Purchaser shall pay all such rates, taxes and other outgoings and shall indemnify the Vendor in respect thereof and the Purchaser shall be entitled to all such rents and other income arising after settlement.
- (2) Land tax shall be adjusted on the amount of tax that would be payable in respect of the Land if the Vendor owned no other land liable to be assessed.
- (3) Before settlement, the Vendor shall pay and discharge all land tax, including any differential land tax, which has or will become payable in respect of the Land in the rating year in which settlement occurs and in all previous rating years. Such land tax shall be paid whether the tax is then due and payable or not.
- (4) The cost or charge for the consumption of water upon the Land shall be adjusted between the Vendor and the Purchaser as follows:

- (a) Where the Land receives an annual water allowance that allowance shall be adjusted on a daily basis to the settlement date whereupon the Vendor shall pay for consumption of water exceeding the allowance so calculated in the proportion of the number of days from the commencement of the consumption year to the settlement date calculated upon the current water rate for water supplied to the Land.
- (b) Where water is supplied to the Land on the basis of a charge for such consumption (including incremental charges based upon volume consumed) the volume of water supplied, and if applicable, such volume to which an incremental rate is applicable, shall be adjusted on a daily basis calculated from the date of the commencement of the consumption year to the settlement date whereupon the Vendor shall pay for all water supplied to the Land apportioned from the commencement of the consumption year to the settlement date and, if the case so requires, at each incremental rate for the volume of water consumed.
- (c) Where more than one official meter reading is obtained the meter reading made on the day nearest to the settlement date shall be used in making the adjustment.
- (d)
 - (i) If an official meter reading is not obtained by either of the parties before settlement, if so required by the Purchaser, the Vendor shall lodge the sum specified in Item 17, or, if no sum is specified in Item 17, the sum of \$300 with the Vendor's solicitor, or if the Vendor is not represented by a solicitor, the Purchaser's solicitor, at or before settlement.
 - (ii) The solicitor shall hold the sum lodged with him or her upon trust until the official meter reading is obtained.
 - (iii) Upon the official meter reading being obtained, the solicitor shall pay to the Purchaser the amount, if any, payable by the Vendor to the Purchaser for water consumed or for water used in excess of the annual water allowance and pay the balance, if any, of the money lodged with him or her to the Vendor and.
 - (iv) If the amount lodged with the solicitor is less than the amount payable by the Vendor to the Purchaser, the Vendor shall pay the deficiency to the Purchaser.
- (5) Where the Vendor has received, or is entitled to receive, a remission in respect of any rate, the amount of the rate for the purposes of this clause shall be deemed to be the amount of the rate which the Vendor would be liable to pay if no remission were applicable.

TITLE

- 11. The Certificate of the Title under the *Real Property Act 1886* or other muniment of title in the name of the Vendor or the other person named in Item 1 as owner of the Land shall be deemed conclusive evidence of title and the Purchaser shall not be entitled to an abstract of title nor to take any objection thereto nor to make any requisition thereon and no evidence of the identity of the Land shall be required other than that afforded by comparison of the description contained in this Agreement with that contained in the said Certificate of Title.

INCORRECT DESCRIPTION

- 12.
 - (1) The Land is believed by the Vendor, and shall be taken by the Purchaser, to be correctly described but this sub-clause is without prejudice to the rights of the Purchaser under sub-clause (2).
 - (2)
 - (a) No error, omission or improper or imperfect description shall annul the sale or affect the obligation of the parties to settle on the Settlement Day.
 - (b) If any error, omission or improper or imperfect description of the Land is notified by one of the parties to the other before settlement, but not afterwards, the same shall be subject to compensation to be received or paid by one party or the other as the case may require.
 - (3) The Purchaser acknowledges that the Vendor makes no representation or warranty in respect of the Land or any part of the Land except as set out in this Agreement.

STATUTORY REQUIREMENTS

13. (1) The Vendor warrants that at the date of this Agreement no notices, orders, requirements or demands in relation to the Land have been given or made under the provisions of any Act Regulation or by-law which have not been fully complied with or which adversely affect the Land, except those referred to in Item 18.
- (2) Prior to the Settlement Day the Vendor shall comply with the matters referred to in paragraph (i) of Item 18.
- (3) The Purchaser shall comply with and indemnify the Vendor in respect of the matters referred to in paragraph (ii) of Item 18.
- (4) (a) The Purchaser shall indemnify the Vendor against all liability incurred or obligations created by any notice, order, requirement, declaration or demand relating to the Land made or given after the date of this Agreement.
- (b) If the Vendor complies with any such notice, order, requirement, declaration or demand, the Purchaser shall reimburse to the Vendor upon demand or, if no prior demand is made, on settlement all amounts paid in complying with the notice, order, requirement, declaration or demand.
- (5) (a) The Vendor shall pay all charges against the Land for the forming making and paving of roads, kerbs, footpaths and water tables in respect of work commenced before the date of this Agreement and any interest or fines payable in respect thereof.
- (b) The Purchaser shall pay all such charges, interest and fines in respect of work commenced on or after the date of this Agreement and shall indemnify and keep the Vendor indemnified in respect thereof.

CHATELS ON HIRE

14. (1) The Purchaser acknowledges that the chattels and other property described in Item 6 are on hire or lease to the Vendor or are subject to a consumer mortgage or bill of sale granted by the Vendor.
- (2) The Purchaser shall, as from settlement, take over the obligations of the Vendor under the agreement for the hire or lease of the said chattels or property or the consumer mortgage or bill of sale to which the said chattels or property are subject and shall indemnify the Vendor against all liability in respect thereof arising after settlement.
- (3) At settlement or at any time thereafter, at the request and expense of the Purchaser (but subject to the consent, if required, of the owner of the chattels or property or the mortgagee or grantee under the said consumer mortgage or bill of sale, as the case may be) the Vendor shall execute and deliver to the Purchaser such assignment of the Vendor's interest in the agreement, consumer mortgage or bill of sale and in the chattels or property comprised therein as the Purchaser may reasonably require.

LEASES

15. (1) The Purchaser shall carry out, observe and perform all the covenants terms and conditions contained in the leases and tenancy agreements relating to the tenancies or other interests referred to in Item 10 and on the part of the lessor or the landlord to be carried out, observed or performed (herein called "**the Lessor's Covenants**") and shall indemnify and keep the Vendor indemnified from and against any and all actions, proceedings, claims and demands which may be made or taken against the Vendor in respect of any breach of any of the Lessor's Covenants occurring after settlement. The Vendor shall carry out, observe and perform all of the Lessor's Covenants to be carried out, observed or performed prior to settlement and shall indemnify and keep the Purchaser indemnified from and against any and all actions, proceedings, claims and demands which may be made or taken against the Purchaser in respect of any breach of any of the Lessor's covenants to be carried out, observed or performed prior to settlement.
- (2) At any time whether before or after settlement the Vendor or the Purchaser may give notice to the other party requiring that the parties enter into a Deed of assignment of the leases or agreements relating to the tenancies or other interests referred to in Item 10, which Deed shall include the indemnities specified in the preceding sub-clause. The Vendor shall use best endeavours to procure the execution of such Deed by the

lessee. The said Deed shall be prepared by the party who gives the said notice with the cost of preparation of such Deed to be payable by the party giving the said notice.

- (3) At the same time or following the giving of the notice referred to in the preceding sub-clause, the party giving the notice shall deliver to the other party a Deed executed by the party giving the said notice. The said Deed shall be executed by the other party within 7 days of receipt, and if the Deed is so received by the other party not less than 7 days before settlement it shall be executed by such party prior to settlement.

EXCLUDED PROPERTY

16. Before settlement:

- (a) the Vendor may remove from the Land the excluded property referred to in Item 7; and
- (b) the Vendor shall make good any damage done to the Land by or in consequence of the installation or removal of the excluded property.

RISK

17. From the date of this Agreement the Land shall be at the risk of the Purchaser in all respects but, if and for so long as the Vendor occupies the Land, the Vendor shall use the Land with all reasonable care.

CONSENTS

18. (1) If this Agreement or the performance of this Agreement would otherwise contravene the provisions of the *Real Property Act 1886* or any other Act, this Agreement is subject to the obtaining of all consents and to the deposit of all plans required by law to be obtained or deposited by either party, whether or not such consents are mentioned in Item 19.

(2) Without limiting the generality of sub-clause (1), this Agreement is subject to -

- (a) the approval in writing of the relevant planning authority pursuant to the *Strata Titles Act 1988*; or
- (b) the Development Assessment Commission issuing a certificate under section 51 of the *Development Act 1993* or any other consent necessary under the provisions of that Act being given; or
- (c) the deposit of a plan of division or a strata plan or a plan of community division pursuant to the *Community Titles Act 1996*;

where it is necessary by virtue of the provisions of any of the Acts referred to in this clause to obtain the approval, certificate or consent or to deposit the plan.

- (3) The grant, transfer, conveyance, mortgage or encumbrance of any estate or interest in the Land pursuant to this Agreement shall not have effect until the plan of division or the strata plan or plan of community division contemplated by the parties has been deposited if the grant, sale, transfer, conveyance, mortgage or encumbrance thereof would otherwise contravene the provisions of the *Real Property Act 1886*.
- (4) The parties shall use their best endeavours to obtain all such consents and to procure the deposit of all such plans as are required by Item 19 to be obtained or procured and all such other consents as they may be required to obtain under this clause and to have any such plan of division or strata plan or plan of community division deposited.
- (5) If default is made by either party in carrying out any of his or her obligations under this clause, the provisions of clause 20 shall apply.
- (6) (a) Subject to sub-clause (8), if all the consents referred to in this clause are not obtained or if any such plan is not deposited within the period or respective periods specified in Item 19 or, if no period is specified in Item 19, within one calendar month from the date of this Agreement, either party, upon giving 14 days' notice in writing to the other, may determine this Agreement.

- (b) This Agreement shall determine immediately upon the expiration of such notice, unless the consents are obtained or the plan is deposited in the meantime.
- (7) (a) Except where otherwise provided in this Agreement, upon the determination of this Agreement under sub-clause (6), all moneys paid by the Purchaser under this Agreement shall be refunded,
 - (b) the Vendor shall be liable to pay to the Purchaser the amount of any moneys paid by the Purchaser to the Deposit Holder if -
 - (i) the Deposit Holder to whom the moneys were paid is the agent of the Vendor; and
 - (ii) the Deposit Holder does not refund the money within 14 days of the receipt by the Deposit Holder of notice that this Agreement has been determined; and
 - (c) except as provided in paragraph (b), neither party shall have any recourse against the other consequent upon the determination of this Agreement under this clause.
- (8) If any consent mentioned in this clause is not obtained or any plan mentioned in this clause is not deposited due to the failure of the party required by Item 19 to obtain the consent or to procure the deposit of the plan, then the party who is in default shall not be entitled to determine this Agreement under sub-clause (6); any such determination by the party who is not in default shall not prejudice any other rights or remedies which the party may have against the other party.
- (9) In this clause, "consent" includes approval, certificate or other permission or authorisation and "deposited" means deposited in the Lands Titles Registration Office by the Registrar-General.

INTEREST ON DEFAULT

- 19. (1) If, by reason of the neglect or default of the Purchaser, the purchase is not completed on the Settlement Day the Purchaser shall pay to the Vendor interest on the Purchase Price, or on so much of the Purchase Price as from time to time remains unpaid, at the rate specified in Item 20 or, if no rate is specified in Item 20, at the Default Rate, computed from the Settlement Day until either the date of completion or the date of the determination of this Agreement.
- (2) If, by reason of the neglect or default of the Vendor, the purchase is not completed on the Settlement Day, the Vendor shall pay the Purchaser interest on the deposit and so much of the Purchase Price as has from time to time been paid, at the rate specified in Item 20 or, if no rate is specified in Item 20, at the Default Rate, computed from the Settlement Day until either the date of completion or the date on which the money paid by the Purchaser is repaid to him or her.
- (3) The payment of interest under this clause shall be in addition and without prejudice to any other rights or remedies the parties may have by reason of any default.

DEFAULT PRIOR TO SETTLEMENT

- 20. (1) If either party to this Agreement (herein called "**the Defaulting Party**") makes default in the due payment of the deposit or any part of the deposit, or in the due observance or performance of any of the terms and conditions contained in this Agreement and on the part of the Defaulting Party to be observed or performed prior to settlement, the other party (herein called "**the Complying Party**") may give notice of default to the Defaulting Party.
- (2) Notice of default under sub-clause (1)
 - (a) may be given at any time after the occurrence of the default;
 - (b) shall be without prejudice to any other rights or remedies the Complying Party may have; and
 - (c) shall

- (i) require the Defaulting Party to remedy the default within a period of three Business Days from the service of the notice or within such longer period as the Complying Party may specify in the notice; and
 - (ii) state that, unless the default is remedied within the period specified in the notice, this Agreement will automatically determine.
- (3) If the default is not remedied within the period specified in the notice of default, this Agreement shall automatically determine at the expiration of that period unless, in the meantime, the notice is withdrawn by the Complying Party by notice to the Defaulting Party.
- (4) Notice of default under this clause may be given on more than one occasion.

DEFAULT AT SETTLEMENT

21. (1) If
- (a) either party to this Agreement (herein called "**the Defaulting Party**") makes default in the due observance or performance of any of the terms and conditions contained in this Agreement and on the part of the Defaulting Party to be observed and performed at settlement; and
 - (b) the default continues unremedied for a period of not less than three Business Days;
- the other party (herein called "**the Complying Party**"), at any time thereafter, may give notice of completion to the Defaulting Party.
- (2) Notice of completion shall appoint a time for settlement, which shall be a time during Business Hours on a Business Day, and shall require the Defaulting Party to settle at the time appointed in the notice.
- (3) If the time for settlement appointed in a notice of completion is not less than fourteen days after the date of service of the notice, the period of notice given shall for all purposes be deemed fair and reasonable and the Defaulting Party shall be precluded from raising any objection to the period of notice given notwithstanding the absence of any unreasonable, unnecessary or improper delay on the part of the Defaulting Party.
- (4) (a) If the Defaulting Party fails to carry out observe and perform the obligations on his or her part to be observed and performed at settlement at the time appointed in a notice of completion, the Complying Party may determine this Agreement by notice to the Defaulting Party.
- (b) Notice under this sub-clause:
- (i) may be given at any time after the time appointed for settlement in the notice of completion; and
 - (ii) shall be without prejudice to any other rights or remedies the Complying Party may have.
- (5) Notice of completion under this clause may be given on more than one occasion.
- (6) Where settlement is postponed as a result of the default of the Vendor, all rents and other income arising from the Land shall be adjusted to midnight on the day preceding the Settlement Day. Rates, taxes and other outgoings shall continue to be adjusted pursuant to clause 10(1).
- (7) Where settlement is postponed as a result of the default of the Purchaser, all rates, taxes and other outgoings in respect of the Land shall be adjusted to midnight on the day preceding the Settlement Day. Rents and other income shall continue to be adjusted pursuant to clause 10(1).
- (8) The reasonable costs of preparation and service of any notice given under this clause (being the amount of \$300 together with any applicable GST) together with any incidental costs reasonably incurred (including the costs of service) shall be paid by the Defaulting Party at settlement or on termination of this Agreement.

TIME

22. Time shall in all respects be of the essence in respect of any time appointed under clauses 20 and 21, any period of notice fixed under those clauses and any notice given pursuant to those clauses.

EFFECT OF DETERMINATION

23. (1) If this Agreement is determined by the Vendor under clause 20 or clause 21:
- (a) all monies paid or payable by the Purchaser under this Agreement by way of deposit shall be forfeited to the Vendor absolutely; and
 - (b) the Vendor, at the Vendor's option, may either:-
 - (i) retain the Land and sue the Purchaser for damages for breach of contract; or
 - (ii) resell the Land, together or in lots, either by public auction or private contract, and the deficiency, if any, in price upon the resale together with all charges and expenses of and incidental to the resale, any attempted resale and the Purchaser's default shall immediately after the resale be made good by the Purchaser under this Agreement; and
 - (c) in the case of non-payment of the deficiency, charges and expenses, the whole thereof shall be recoverable by the Vendor as and by way of liquidated damages with the Purchaser receiving credit for any deposit paid provided that proceedings for the recovery of the deficiency, charges and expenses shall be commenced within 12 calendar months after the determination of this Agreement; and
 - (d) the Vendor shall be entitled to any increase in price on any resale.
-
- (2) If this Agreement is determined by the Purchaser under clause 20 or clause 21:
- (a) the Vendor shall re-pay to the Purchaser all moneys paid by the Purchaser under this Agreement by way of deposit or otherwise; and
 - (b) the Purchaser may sue the Vendor for damages for breach of contract provided that proceedings for the recovery of the damages shall be commenced within 12 calendar months after the determination of this Agreement.
- (3) It shall not be necessary for the Complying Party to first tender a transfer to the Defaulting Party before determining this Agreement or before exercising any other rights or remedies of the Complying Party.

REMEDIES NOT EXCLUSIVE

24. The remedies provided in this Agreement are in addition to and without prejudice to any other rights or remedies that the parties may have by reason of any default.

FURTHER DOCUMENTS

25. The parties to this Agreement shall promptly do and execute all such further acts, documents and things as may be required to give effect to this Agreement.

NOTICES

26. (1) Any notice or demand to be given to, or made upon, any party to this Agreement shall be in writing and shall be signed by the party giving the notice or making the demand or signed for and on behalf of that party by his or her solicitor or authorised agent.
- (2) Any notice or demand may be served upon the party intended to receive the notice or demand (herein called "**the intended recipient**");

- (a) by leaving the notice or demand at the address of the intended recipient stated in Item 1 or Item 2 as the case may be; or
 - (b) by sending the notice or demand by the ordinary course of post in a prepaid envelope addressed to the intended recipient at the address of the intended recipient stated in Item 1 or Item 2 as the case may be and posted in South Australia; or
 - (c) by sending the notice or demand addressed to the intended recipient by facsimile to the facsimile number of the intended recipient stated in Item 1 or Item 2 as the case may be.
- (3) Any notice or demand served by post shall be deemed to have been duly served at noon on the second Business Day after the day on which the envelope containing the notice or demand was posted and in proving service of the notice or demand it shall be sufficient to prove that the envelope containing the notice or demand was properly addressed, stamped and posted.
 - (4) Any notice or demand served by facsimile shall be deemed to have been duly served on the day and time when the sender's facsimile machine reports that the transmission was completed without error.
 - (5) Where there is more than one Purchaser or Vendor, a notice or demand duly served on any one Purchaser or Vendor shall be deemed to have been duly served upon both or all of the Purchasers or Vendors as the case may be.
 - (6) Service effected in accordance with this clause shall be valid and effectual notwithstanding that, at the time of service, the intended recipient was dead, bankrupt or legally incapacitated, or, where the intended recipient is a corporation, notwithstanding that the corporation was in liquidation or wound up or in the process of being wound up, and notwithstanding any other matter or event.
 - (7) Any party may from time to time change his or her address for the service of notices or demands pursuant to this clause by notice in writing to the other party and, in that event, the address so notified shall apply in lieu of the address stated in Item 1 or Item 2 or the address last notified.

COSTS OF AGREEMENT

27. Unless it is otherwise provided in Item 21 or elsewhere in this Agreement:
- (a) the Vendor shall pay the costs of and incidental to the preparation of this Agreement and any costs associated with the discharge, surrender or withdrawal of any mortgage, encumbrance, caveat or lien existing in respect of the Land at settlement and required to be discharged, surrendered or withdrawn to enable the Vendor to give good title to the Purchaser; and
 - (b) the Purchaser shall pay the costs of and incidental to the preparation of the memorandum of transfer and any assignment, mortgage or other document to be executed pursuant to this Agreement and all surveyor's fees, stamp duty, registration fees and Government fees.

ANNEXED SPECIAL CONDITIONS

28. (1) The special conditions, if any, referred to in Item 22 and annexed to this Agreement shall be incorporated into this Agreement and in the event of any inconsistency between the special conditions and any other provision contained in this Agreement the special conditions shall prevail.
- (2) Any reference to "this Agreement" in any special condition annexed to this Agreement shall be deemed to refer to this Agreement, the special conditions and the schedule to this Agreement.

LEGAL TENDER

29. Any payment due under this Agreement may be made or tendered either in cash or by cheque in Australian dollars drawn by a body corporate which is entitled to carry on a "banking business", as defined in the *Banking Act 1959* (Cth).

NON-MERGER

30. The provisions of this Agreement shall continue to have effect notwithstanding settlement.

RESCISSION UNDER THE LAND AND BUSINESS (SALE AND CONVEYANCING) ACT 1994

31. If this Agreement is rescinded by the Purchaser pursuant to section 5 of *the Land and Business (Sale and Conveyancing) Act 1994*, the Vendor may retain any moneys, not exceeding \$50, paid by the Purchaser by way of deposit.

GOODS AND SERVICES TAX

32. (1) The Vendor and the Purchaser acknowledge and agree respectively that, for the purpose of the GST Law, the Land is as described in Item 23.
- (2) If GST has application to a taxable supply made under this Agreement by either the Vendor or the Purchaser then:
- (a) the amount payable under this Agreement in respect of the taxable supply (including the taxable supply of the Land) ("**Payment**") is exclusive of GST; and
 - (b) the Supplier may in addition to the Payment, recover from the Recipient (and the Recipient shall pay or reimburse the Supplier) an additional amount on account of GST equal to 10% of the Payment (the "**GST Amount**") which GST Amount must be paid or reimbursed:
 - (i) at settlement; or
 - (ii) in the event that the GST Amount is payable by the Supplier otherwise than in respect of the tax period of the Supplier during which settlement occurs, upon written demand made by the Supplier to the Recipient; and
 - (c) subject to clause 32(4)(c), the Supplier shall, in respect of the taxable supply, provide the Recipient with a tax invoice at settlement or upon written request by the Recipient if settlement does not occur.

Going Concern

- (3) If the sale of the Land is the supply of a going concern or the supply of something which comprises part of the supply of a going concern (the "**Arrangement**") then:
- (a) the sale of the Land under or pursuant to this Agreement is made under the Arrangement;
 - (b) the Vendor is supplying to the Purchaser all of the things that are necessary for the continued operation of an enterprise;
 - (c) the Vendor carries on, or will carry on, the enterprise until settlement;
 - (d) the Purchaser is registered or required to be registered under the GST Law and provides evidence thereof to the Vendor's satisfaction; and
 - (e) the Payment will not be increased on account of GST.

Margin Scheme

- (4) If the margin scheme applies to the sale of the Land then:
- (a) the Vendor and the Purchaser agree to apply the margin scheme to the sale;
 - (b) the Purchaser's obligation to pay or reimburse the Vendor GST under clause 32(2)(b) shall be 10% of the margin under the margin scheme;
 - (c) the Purchaser shall, where a valuation is required under Division 75 of the GST Law:

- (i) obtain at its expense, in the name of the Vendor, a valuation of the Land which complies with the requirements of Division 75 of the GST Law using the valuation method approved by the Vendor; and
- (ii) provide the valuation to the Vendor not less than 7 days prior to settlement;
- (d) the Vendor is not required to provide the Purchaser with a tax invoice at settlement; and
- (e) the Purchaser acknowledges that the acquisition of the Land is not a creditable acquisition and it is not entitled to claim an input tax credit.

GST Liability for Vendor

- (5) If this Agreement provides that the sale of the Land:
 - (a) is not a taxable supply and the Purchaser uses the Land in a way that makes the sale a taxable supply; or
 - (b) is the supply of a going concern and the sale is not such a supply (other than by virtue of a breach by the Vendor of clauses 32(3)(b) or (c)),

the Purchaser shall pay to the Vendor on written demand (which the Vendor is entitled to make notwithstanding that settlement of the sale and purchase of the Land pursuant to this Agreement has, or may have occurred) an amount equal to 10% of the Payment, together with any interest or penalties assessed to the Vendor (whether under the GST Law or otherwise) arising from or in respect of the sale.

Adjustment to GST

- (6) (a) The parties acknowledge that the Purchase Price set out in Item 11 has been negotiated on the basis that the sale is wholly a taxable supply under the GST Law and that (subject to box (h) in Item 23 being marked as "yes") in calculating its liability to GST the Vendor and the Purchaser agree not to apply the margin scheme.
- (b) If the supply is negotiated by the parties and represented in this Agreement as either wholly taxable or wholly non-taxable (as evidenced by the omission to complete Item 24), and the supply is found after settlement to be partly taxable and partly non-taxable, then the Purchaser shall either pay to the Vendor or be reimbursed by the Vendor (as is appropriate) the amount of the adjustment in the Vendor's GST liability as determined by the Australian Taxation Office, within one month of such determination. The Purchaser shall pay to the Vendor any interest and/or penalties associated with any such adjustment provided an adjustment note is provided.

Interpretation

- (7) In this clause 32:
 - (a) any expression used that is also used in the GST Law shall have, for the purposes of this Agreement, the meaning used in or attributed to that expression by the GST Law from time to time;
 - (b) **"Recipient"** means a person who acquires or receives or is entitled to acquire or receive a taxable supply under this Agreement and includes the Purchaser; and
 - (c) **"Supplier"** means a person who supplies or is required to supply a taxable supply under this Agreement and includes the Vendor.

SEVERABILITY OF CLAUSES

- 33. Each clause and sub-clause of this Agreement is severable from each other clause and sub-clause, and the invalidity or unenforceability of any clause or sub-clause shall not prejudice or affect the validity or enforceability of any other clause or sub-clause.

FOREIGN INTERESTS

34. Unless otherwise provided, the Purchaser warrants that:

- (a) the Purchaser is not a "foreign person" within the meaning of section 21A of the *Foreign Acquisitions and Takeovers Act 1975* (Cth) as the meaning of that expression is extended by the operation of section 4(6) of that Act; and
- (b) the Purchaser is not a "person to whom this section applies" within the meaning of that expression in section 26A of the *Foreign Acquisitions and Takeovers Act 1975* (Cth) as that section is affected by section 5A of that Act.

Signed by _____ in the presence of:

.....
Signature of witness

.....

.....
Name of witness (print)

The common seal of City of Holdfast Bay was affixed in the presence of:

.....
Signature of Mayor

.....
Signature of Chief Executive Officer

.....
Name of Mayor (print)

.....
Name of Chief Executive Officer (print)



**THE LAW SOCIETY
OF SOUTH AUSTRALIA**

CONTRACT

FOR THE SALE AND PURCHASE OF LAND

For the use of Law Society of South Australia members only
Updated 2009

SCHEDULE

This Schedule is to be read in conjunction with the Contract Terms and Conditions.

The terms opposite the item numbers 1 to 22 have the respective meanings as detailed in the particulars in the Schedule.

THIS AGREEMENT IS MADE BETWEEN THE VENDOR AND THE PURCHASER NAMED AND DESCRIBED IN THE SCHEDULE.

THE VENDOR AND THE PURCHASER AGREE as follows:

Item	Term	Particulars
1.	Vendor (Name, address and description)	Mary Dorothy Trott of 74 Marine Parade, Seacliff, South Australia 5049
	Facsimile:	N/A
2.	Purchaser (Name, address and description)	City of Holdfast Bay of 24 Jetty Road, Brighton, South Australia 5048
	Facsimile:	N/A
3.	The Land (Description of the Land) (Clause 2)	An estate in fee simple in portion of the land comprised and described in Certificate of Title Volume 5853 Folio 53, being the portion identified as '301' on the plan forming Annexure B to this Agreement.
	Property address:	74 Marine Parade, Seacliff, South Australia 5049
4.	Included Property (Improvements fixtures fittings and other property included in the sale) (Clause 3)	Nil

5.	Included Chattels (Chattels sold and included in this sale) (Clause 4)	Nil																						
6.	Chattels on hire etc. (Chattels on hire, lease, mortgage or bill of sale to be taken over by Purchaser) (Clause 14)	Nil																						
7.	Excluded Property (Property excluded from the sale including chattels on hire, lease, mortgage or bill of sale) (Clause 4)	Nil																						
8.	Exceptions and reservations (Clause 5)	Nil																						
9.	Mortgages, encumbrances etc. (Mortgages, encumbrances, liens and interests) (Clause 5)	Refer to special condition 1.3.																						
10.	Tenancies and other interests (Clauses 5, 15)	Nil - The existing Memorandum of Lease between the Vendor (as lessor) and the Purchaser (as lessee) is to be surrendered at settlement.																						
11.	Purchase Price (Clauses 4, 6)	<table> <tr> <td>Amount payable for the Land: (in words)</td> <td><u>\$ 10.00</u></td> </tr> <tr> <td>Ten dollars</td> <td></td> </tr> <tr> <td>Amount payable for the included chattels: (in words)</td> <td><u>\$ 0.00</u></td> </tr> <tr> <td>Nil</td> <td></td> </tr> <tr> <td>Purchase Price: (in words)</td> <td><u>\$ 10.00</u></td> </tr> <tr> <td>Ten dollars</td> <td></td> </tr> <tr> <td>GST (Clause 32)</td> <td>GST (if applicable): (in words)</td> </tr> <tr> <td></td> <td>Nil</td> </tr> <tr> <td></td> <td>Total</td> </tr> <tr> <td></td> <td>Ten Dollars</td> </tr> <tr> <td></td> <td><u>\$ 10.00</u></td> </tr> </table>	Amount payable for the Land: (in words)	<u>\$ 10.00</u>	Ten dollars		Amount payable for the included chattels: (in words)	<u>\$ 0.00</u>	Nil		Purchase Price: (in words)	<u>\$ 10.00</u>	Ten dollars		GST (Clause 32)	GST (if applicable): (in words)		Nil		Total		Ten Dollars		<u>\$ 10.00</u>
Amount payable for the Land: (in words)	<u>\$ 10.00</u>																							
Ten dollars																								
Amount payable for the included chattels: (in words)	<u>\$ 0.00</u>																							
Nil																								
Purchase Price: (in words)	<u>\$ 10.00</u>																							
Ten dollars																								
GST (Clause 32)	GST (if applicable): (in words)																							
	Nil																							
	Total																							
	Ten Dollars																							
	<u>\$ 10.00</u>																							

<p>12. Deposit (Clause 7)</p>	<p>Payable in accordance with clause 18.3.2 of the Memorandum of Lease between the Vendor (as lessor) and the Purchaser (as lessee) dated _____</p> <p>One dollar</p>	<p><u>\$ 1.00</u></p>
<p>13. Balance (including GST, if applicable) (Clause 7)</p>	<p>Nine dollars</p>	<p><u>\$ 9.00</u></p>
<p>14. Deposit Holder (Clause 7)</p>	<p>The Vendor.</p>	
<p>15. Settlement Day (Clause 8)</p>	<p>As determined in accordance with clause 18.8.1.1 of the Memorandum of Lease between the Vendor (as lessor) and the Purchaser (as lessee) dated _____</p>	
<p>16. Provisions applying to mortgages, tenancies etc. (Provisions which apply to the mortgages, encumbrances, liens, charges, tenancies, licences and other interests referred to in Items 9 and 10) (Clause 8(6))</p>	<p>Not applicable</p>	
<p>17. Water Allowance (Clause 10(4)(d))</p>	<p>Nil</p>	
<p>(Caution should be exercised to ensure that the sum in this item relates to water use, otherwise the sum in clause 10(4)(d) provides for \$300 to be retained)</p>		
<p>18. Notices and orders (Clause 13)</p>	<p>(i) Matters to be discharged by the Vendor: Nil</p> <p>(ii) Matters to be discharged by the Purchaser: Nil</p>	
<p>19. Consents (Consents to which this Agreement is subject) (Clause 18)</p>	<p>(i) To be obtained by the Vendor: Nil</p> <p>Period within which to be obtained: Not applicable</p> <p>(ii) To be obtained by the Purchaser: Nil</p> <p>Period within which to be obtained: Not applicable</p>	

20.	Interest Rate <small>(Interest rate on unpaid money if not in accordance with Clause 19)</small>	In accordance with clause 19
21.	Costs <small>(Liability for costs if not in accordance with Clause 27)</small>	In accordance with Annexure A.
22.	Annexures <small>(Annexures forming part of this contract) (Clause 28)</small>	<input checked="" type="checkbox"/> Annexure A - Special Conditions <input checked="" type="checkbox"/> Annexure B – Plan <input checked="" type="checkbox"/> Annexure C – Encumbrance
23.	GST <small>(Clause 32)</small> [Please place a cross in the appropriate box below. Only one (1) box can be selected as 'Yes']	<p>The Land sold by the Vendor to the Purchaser under this Agreement:</p> <p>(a) comprises a taxable supply and is not subject to the margin scheme (sections 9-5 and 195-1 of the GST Law) <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>(b) comprises residential premises (other than new residential premises), and which are to be used by the Purchaser predominantly for residential accommodation (sections 40-65 and 195-1 of the GST Law) <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>(c) comprises a taxable supply of new residential premises (sections 40-65, 40-75 and 195-1 of the GST Law) <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>(d) comprises commercial residential premises (sections 40-65 and 195-1 of the GST Law) <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>(e) comprises subdivided farm land (sections 38-475 and 195-1 of the GST Law) <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>(f) comprises farm land supplied for farming (sections 38-480 and 195-1 of the GST Law) <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>(g) is the supply of a going concern (sections 38-325 and 195-1 of the GST Law) <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>(h) is subject to the margin scheme (Division 75 and section 195-1 of the GST Law) <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>(i) comprises a supply which is partly taxable and a supply which is partly non-taxable. The GST exclusive values of those respective supplies are detailed in Item 24. <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>(j) comprises a supply which is not taxable as the Vendor is not, or is not required to be, registered for GST. <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes</p>
24	GST (Where the Land comprises partly a taxable supply and partly a non-taxable supply) <small>(Item 23(i))</small>	<p>Taxable Supply Description of property _____ [Description of Property] GST exclusive value _____ \$ [GST exclusive \$]</p> <p>Non-Taxable Supply Description of property _____ [Description of property] GST exclusive value _____ \$ [GST exclusive \$]</p>

Total _____ **\$ [Total]**
Note total is to be the same as the Purchase Price in Item 11.

GST not applicable _____

Annexure A – Special Conditions

1. CLASSIFICATION AND PRESERVATION OF THE LAND

- 1.1 The Purchaser agrees that the Land will be classified as community land pursuant to the *Local Government Act 1999*(SA) upon its transfer from the Vendor to the Purchaser at Settlement.
- 1.2 Following Settlement, the Purchaser agrees to:
 - 1.2.1 keep the Land clean and tidy by removing any rubbish and unnecessary materials from the Land regularly;
 - 1.2.2 maintain landscaping on the Land in accordance with the community land management plan applicable to the Land under the *Local Government Act 1999* (SA); and
 - 1.2.3 not remove any significant or regulated trees on the Land without all necessary legal approvals.
- 1.3 For the purpose of securing the Purchaser's compliance with the requirements of special condition 1.2, at settlement, the Purchaser agrees to execute a memorandum of encumbrance substantially in the form set out in Annexure C to this agreement in favour of the Vendor (**Encumbrance**) and lodge the Encumbrance with the Registrar-General for registration immediately after the Memorandum of Transfer for the Land.

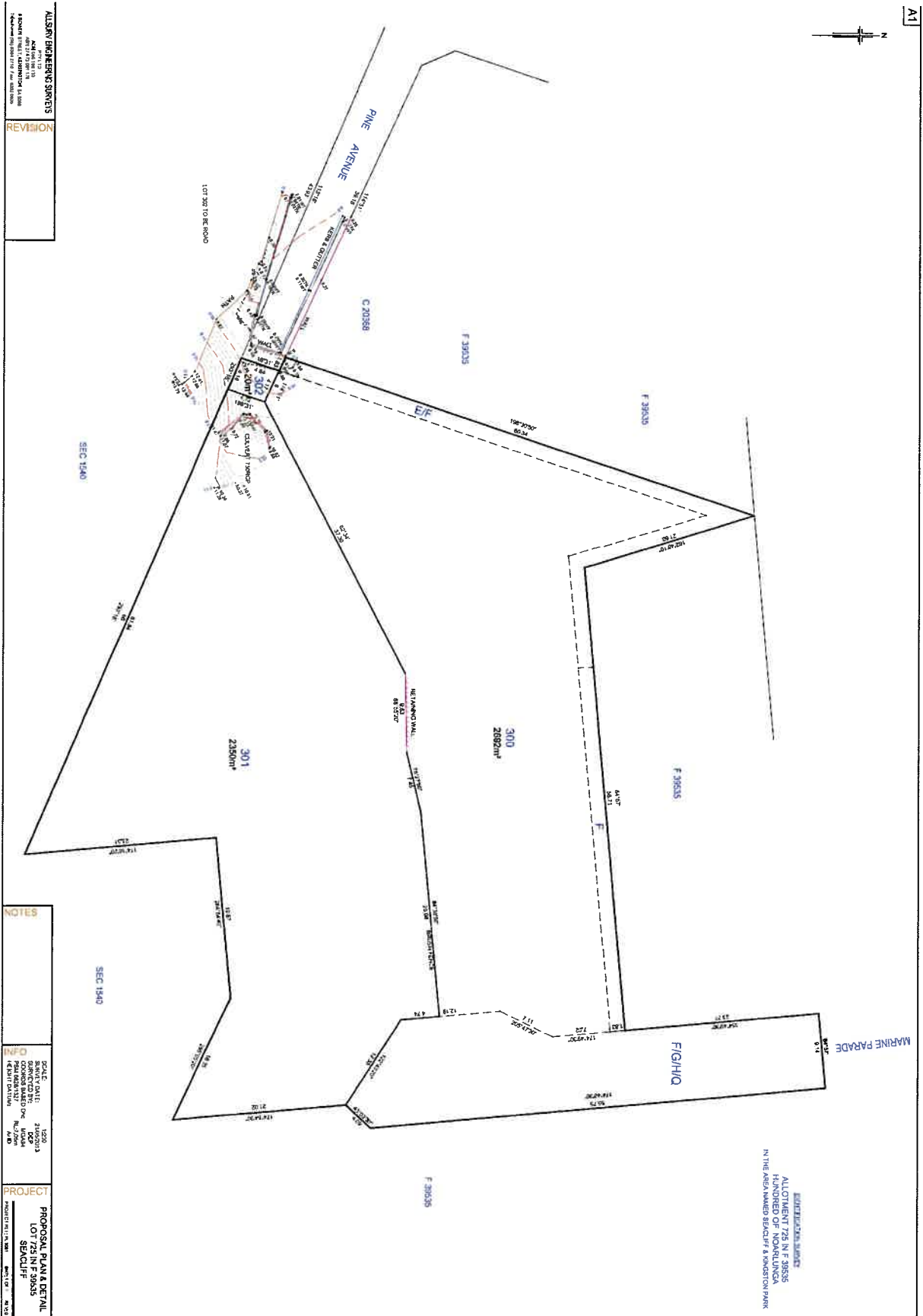
2 VARIATION TO STANDARD CONTRACT TERMS

- 2.1 Clauses 13(4) and (5) and 27 of this Agreement do not apply and are of no effect.

3 COSTS

- 3.1 The Purchaser is responsible for the costs of preparing this Agreement.
- 3.2 The Purchaser is responsible for the costs of preparing the Memorandum of Transfer, Encumbrance, Surrender of Lease and any other documents to be executed pursuant to this Agreement.
- 3.3 The Purchaser is responsible for all surveyor's fees, stamp duty, registration fees and Government fees in relation to this Agreement and the transfer of the Land.

Annexure B – Plan



AUSTIN ENGINEERING SERVICES 100/101/102/103/104/105/106/107/108/109/110/111/112/113/114/115/116/117/118/119/120/121/122/123/124/125/126/127/128/129/130/131/132/133/134/135/136/137/138/139/140/141/142/143/144/145/146/147/148/149/150/151/152/153/154/155/156/157/158/159/160/161/162/163/164/165/166/167/168/169/170/171/172/173/174/175/176/177/178/179/180/181/182/183/184/185/186/187/188/189/190/191/192/193/194/195/196/197/198/199/200/201/202/203/204/205/206/207/208/209/210/211/212/213/214/215/216/217/218/219/220/221/222/223/224/225/226/227/228/229/230/231/232/233/234/235/236/237/238/239/240/241/242/243/244/245/246/247/248/249/250/251/252/253/254/255/256/257/258/259/260/261/262/263/264/265/266/267/268/269/270/271/272/273/274/275/276/277/278/279/280/281/282/283/284/285/286/287/288/289/290/291/292/293/294/295/296/297/298/299/300/301/302/303/304/305/306/307/308/309/310/311/312/313/314/315/316/317/318/319/320/321/322/323/324/325/326/327/328/329/330/331/332/333/334/335/336/337/338/339/340/341/342/343/344/345/346/347/348/349/350/351/352/353/354/355/356/357/358/359/360/361/362/363/364/365/366/367/368/369/370/371/372/373/374/375/376/377/378/379/380/381/382/383/384/385/386/387/388/389/390/391/392/393/394/395/396/397/398/399/400/401/402/403/404/405/406/407/408/409/410/411/412/413/414/415/416/417/418/419/420/421/422/423/424/425/426/427/428/429/430/431/432/433/434/435/436/437/438/439/440/441/442/443/444/445/446/447/448/449/450/451/452/453/454/455/456/457/458/459/460/461/462/463/464/465/466/467/468/469/470/471/472/473/474/475/476/477/478/479/480/481/482/483/484/485/486/487/488/489/490/491/492/493/494/495/496/497/498/499/500/501/502/503/504/505/506/507/508/509/510/511/512/513/514/515/516/517/518/519/520/521/522/523/524/525/526/527/528/529/530/531/532/533/534/535/536/537/538/539/540/541/542/543/544/545/546/547/548/549/550/551/552/553/554/555/556/557/558/559/560/561/562/563/564/565/566/567/568/569/570/571/572/573/574/575/576/577/578/579/580/581/582/583/584/585/586/587/588/589/590/591/592/593/594/595/596/597/598/599/600/601/602/603/604/605/606/607/608/609/610/611/612/613/614/615/616/617/618/619/620/621/622/623/624/625/626/627/628/629/630/631/632/633/634/635/636/637/638/639/640/641/642/643/644/645/646/647/648/649/650/651/652/653/654/655/656/657/658/659/660/661/662/663/664/665/666/667/668/669/670/671/672/673/674/675/676/677/678/679/680/681/682/683/684/685/686/687/688/689/690/691/692/693/694/695/696/697/698/699/700/701/702/703/704/705/706/707/708/709/710/711/712/713/714/715/716/717/718/719/720/721/722/723/724/725/726/727/728/729/730/731/732/733/734/735/736/737/738/739/740/741/742/743/744/745/746/747/748/749/750/751/752/753/754/755/756/757/758/759/760/761/762/763/764/765/766/767/768/769/770/771/772/773/774/775/776/777/778/779/780/781/782/783/784/785/786/787/788/789/790/791/792/793/794/795/796/797/798/799/800/801/802/803/804/805/806/807/808/809/810/811/812/813/814/815/816/817/818/819/820/821/822/823/824/825/826/827/828/829/830/831/832/833/834/835/836/837/838/839/840/841/842/843/844/845/846/847/848/849/850/851/852/853/854/855/856/857/858/859/860/861/862/863/864/865/866/867/868/869/870/871/872/873/874/875/876/877/878/879/880/881/882/883/884/885/886/887/888/889/890/891/892/893/894/895/896/897/898/899/900/901/902/903/904/905/906/907/908/909/910/911/912/913/914/915/916/917/918/919/920/921/922/923/924/925/926/927/928/929/930/931/932/933/934/935/936/937/938/939/940/941/942/943/944/945/946/947/948/949/950/951/952/953/954/955/956/957/958/959/960/961/962/963/964/965/966/967/968/969/970/971/972/973/974/975/976/977/978/979/980/981/982/983/984/985/986/987/988/989/990/991/992/993/994/995/996/997/998/999/1000/1001/1002/1003/1004/1005/1006/1007/1008/1009/1010/1011/1012/1013/1014/1015/1016/1017/1018/1019/1020/1021/1022/1023/1024/1025/1026/1027/1028/1029/1030/1031/1032/1033/1034/1035/1036/1037/1038/1039/1040/1041/1042/1043/1044/1045/1046/1047/1048/1049/1050/1051/1052/1053/1054/1055/1056/1057/1058/1059/1060/1061/1062/1063/1064/1065/1066/1067/1068/1069/1070/1071/1072/1073/1074/1075/1076/1077/1078/1079/1080/1081/1082/1083/1084/1085/1086/1087/1088/1089/1090/1091/1092/1093/1094/1095/1096/1097/1098/1099/1100/1101/1102/1103/1104/1105/1106/1107/1108/1109/1110/1111/1112/1113/1114/1115/1116/1117/1118/1119/1120/1121/1122/1123/1124/1125/1126/1127/1128/1129/1130/1131/1132/1133/1134/1135/1136/1137/1138/1139/1140/1141/1142/1143/1144/1145/1146/1147/1148/1149/1150/1151/1152/1153/1154/1155/1156/1157/1158/1159/1160/1161/1162/1163/1164/1165/1166/1167/1168/1169/1170/1171/1172/1173/1174/1175/1176/1177/1178/1179/1180/1181/1182/1183/1184/1185/1186/1187/1188/1189/1190/1191/1192/1193/1194/1195/1196/1197/1198/1199/1200/1201/1202/1203/1204/1205/1206/1207/1208/1209/1210/1211/1212/1213/1214/1215/1216/1217/1218/1219/1220/1221/1222/1223/1224/1225/1226/1227/1228/1229/1230/1231/1232/1233/1234/1235/1236/1237/1238/1239/1240/1241/1242/1243/1244/1245/1246/1247/1248/1249/1250/1251/1252/1253/1254/1255/1256/1257/1258/1259/1260/1261/1262/1263/1264/1265/1266/1267/1268/1269/1270/1271/1272/1273/1274/1275/1276/1277/1278/1279/1280/1281/1282/1283/1284/1285/1286/1287/1288/1289/1290/1291/1292/1293/1294/1295/1296/1297/1298/1299/1300/1301/1302/1303/1304/1305/1306/1307/1308/1309/1310/1311/1312/1313/1314/1315/1316/1317/1318/1319/1320/1321/1322/1323/1324/1325/1326/1327/1328/1329/1330/1331/1332/1333/1334/1335/1336/1337/1338/1339/1340/1341/1342/1343/1344/1345/1346/1347/1348/1349/1350/1351/1352/1353/1354/1355/1356/1357/1358/1359/1360/1361/1362/1363/1364/1365/1366/1367/1368/1369/1370/1371/1372/1373/1374/1375/1376/1377/1378/1379/1380/1381/1382/1383/1384/1385/1386/1387/1388/1389/1390/1391/1392/1393/1394/1395/1396/1397/1398/1399/1400/1401/1402/1403/1404/1405/1406/1407/1408/1409/1410/1411/1412/1413/1414/1415/1416/1417/1418/1419/1420/1421/1422/1423/1424/1425/1426/1427/1428/1429/1430/1431/1432/1433/1434/1435/1436/1437/1438/1439/1440/1441/1442/1443/1444/1445/1446/1447/1448/1449/1450/1451/1452/1453/1454/1455/1456/1457/1458/1459/1460/1461/1462/1463/1464/1465/1466/1467/1468/1469/1470/1471/1472/1473/1474/1475/1476/1477/1478/1479/1480/1481/1482/1483/1484/1485/1486/1487/1488/1489/1490/1491/1492/1493/1494/1495/1496/1497/1498/1499/1500/1501/1502/1503/1504/1505/1506/1507/1508/1509/1510/1511/1512/1513/1514/1515/1516/1517/1518/1519/1520/1521/1522/1523/1524/1525/1526/1527/1528/1529/1530/1531/1532/1533/1534/1535/1536/1537/1538/1539/1540/1541/1542/1543/1544/1545/1546/1547/1548/1549/1550/1551/1552/1553/1554/1555/1556/1557/1558/1559/1560/1561/1562/1563/1564/1565/1566/1567/1568/1569/1570/1571/1572/1573/1574/1575/1576/1577/1578/1579/1580/1581/1582/1583/1584/1585/1586/1587/1588/1589/1590/1591/1592/1593/1594/1595/1596/1597/1598/1599/1600/1601/1602/1603/1604/1605/1606/1607/1608/1609/1610/1611/1612/1613/1614/1615/1616/1617/1618/1619/1620/1621/1622/1623/1624/1625/1626/1627/1628/1629/1630/1631/1632/1633/1634/1635/1636/1637/1638/1639/1640/1641/1642/1643/1644/1645/1646/1647/1648/1649/1650/1651/1652/1653/1654/1655/1656/1657/1658/1659/1660/1661/1662/1663/1664/1665/1666/1667/1668/1669/1670/1671/1672/1673/1674/1675/1676/1677/1678/1679/1680/1681/1682/1683/1684/1685/1686/1687/1688/1689/1690/1691/1692/1693/1694/1695/1696/1697/1698/1699/1700/1701/1702/1703/1704/1705/1706/1707/1708/1709/1710/1711/1712/1713/1714/1715/1716/1717/1718/1719/1720/1721/1722/1723/1724/1725/1726/1727/1728/1729/1730/1731/1732/1733/1734/1735/1736/1737/1738/1739/1740/1741/1742/1743/1744/1745/1746/1747/1748/1749/1750/1751/1752/1753/1754/1755/1756/1757/1758/1759/1760/1761/1762/1763/1764/1765/1766/1767/1768/1769/1770/1771/1772/1773/1774/1775/1776/1777/1778/1779/1780/1781/1782/1783/1784/1785/1786/1787/1788/1789/1790/1791/1792/1793/1794/1795/1796/1797/1798/1799/1800/1801/1802/1803/1804/1805/1806/1807/1808/1809/1810/1811/1812/1813/1814/1815/1816/1817/1818/1819/1820/1821/1822/1823/1824/1825/1826/1827/1828/1829/1830/1831/1832/1833/1834/1835/1836/1837/1838/1839/1840/1841/1842/1843/1844/1845/1846/1847/1848/1849/1850/1851/1852/1853/1854/1855/1856/1857/1858/1859/1860/1861/1862/1863/1864/1865/1866/1867/1868/1869/1870/1871/1872/1873/1874/1875/1876/1877/1878/1879/1880/1881/1882/1883/1884/1885/1886/1887/1888/1889/1890/1891/1892/1893/1894/1895/1896/1897/1898/1899/1900/1901/1902/1903/1904/1905/1906/1907/1908/1909/1910/1911/1912/1913/1914/1915/1916/1917/1918/1919/1920/1921/1922/1923/1924/1925/1926/1927/1928/1929/1930/1931/1932/1933/1934/1935/1936/1937/1938/1939/1940/1941/1942/1943/1944/1945/1946/1947/1948/1949/1950/1951/1952/1953/1954/1955/1956/1957/1958/1959/1960/1961/1962/1963/1964/1965/1966/1967/1968/1969/1970/1971/1972/1973/1974/1975/1976/1977/1978/1979/1980/1981/1982/1983/1984/1985/1986/1987/1988/1989/1990/1991/1992/1993/1994/1995/1996/1997/1998/1999/2000/2001/2002/2003/2004/2005/2006/2007/2008/2009/2010/2011/2012/2013/2014/2015/2016/2017/2018/2019/2020/2021/2022/2023/2024/2025/2026/2027/2028/2029/2030/2031/2032/2033/2034/2035/2036/2037/2038/2039/2040/2041/2042/2043/2044/2045/2046/2047/2048/2049/2050/2051/2052/2053/2054/2055/2056/2057/2058/2059/2060/2061/2062/2063/2064/2065/2066/2067/2068/2069/2070/2071/2072/2073/2074/2075/2076/2077/2078/2079/2080/2081/2082/2083/2084/2085/2086/2087/2088/2089/2090/2091/2092/2093/2094/2095/2096/2097/2098/2099/2100/2101/2102/2103/2104/2105/2106/2107/2108/2109/2110/2111/2112/2113/2114/2115/2116/2117/2118/2119/2120/2121/2122/2123/2124/2125/2126/2127/2128/2129/2130/2131/2132/2133/2134/2135/2136/2137/2138/2139/2140/2141/2142/2143/2144/2145/2146/2147/2148/2149/2150/2151/2152/2153/2154/2155/2156/2157/2158/2159/2160/2161/2162/2163/2164/2165/2166/2167/2168/2169/2170/2171/2172/2173/2174/2175/2176/2177/2178/2179/2180/2181/2182/2183/2184/2185/2186/2187/2188/2189/2190/2191/2192/2193/2194/2195/2196/2197/2198/2199/2200/2201/2202/2203/2204/2205/2206/2207/2208/2209/2210/2211/2212/2213/2214/2215/2216/2217/2218/2219/2220/2221/2222/2223/2224/2225/2226/2227/2228/2229/2230/2231/2232/2233/2234/2235/2236/2237/2238/2239/2240/2241/2242/2243/2244/2245/2246/2247/2248/2249/2250/2251/2252/2253/2254/2255/2256/2257/2258/2259/2260/2261/2262/2263/2264/2265/2266/2267/2268/2269/2270/2271/2272/2273/2274/2275/2276/2277/2278/2279/2280/2281/2282/2283/2284/2285/2286/2287/2288/2289/2290/2291/2292/2293/2294/2295/2296/2297/2298/2299/2300/2301/2302/2303/2304/2305/2306/2307/2308/2309/2310/2311/2312/2313/2314/2315/2316/2317/2318/2319/2320/2321/2322/2323/2324/2325/2326/2327/2328/2329/2330/2331/2332/2333/2334/2335/2336/2337/2338/2339/2340/2341/2342/2343/2344/2345/2346/2347/2348/2349/2350/2351/2352/2353/2354/2355/2356/2357/2358/2359/2360/2361/2362/2363/2364/2365/2366/2367/2368/2369/2370/2371/2372/2373/2374/2375/2376/2377/2378/2379/2380/2381/2382/2383/2384/2385/2386/2387/2388/2389/2390/2391/2392/2393/2394/2395/2396/2397/2398/2399/2400/2401/2402/2403/2404/2405/2406/2407/2408/2409/2410/2411/2412/2413/2414/2415/2416/2417/2418/2419/2420/2421/2422/2423/2424/2425/2426/2427/2428/2429/2430/2431/2432/2433/2434/2435/2436/2437/2438/2439/2440/2441/2442/2443/2444/2445/2446/2447/2448/2449/2450/2451/2452/2453/2454/2455/2456/2457/2458/2459/2460/2461/2462/2463/2464/2465/2466/2467/2468/2469/2470/2471/2472/2473/2474/2475/2476/2477/2478/2479/2480/2481/2482/2483/2484/2485/2486/2487/2488/2489/2490/2491/2492/2493/2494/2495/2496/2497/2498/2499/2500/2501/2502/2503/2504/2505/2506/2507/2508/2509/2510/2511/2512/2513/2514/2515/2516/2517/2518/2519/2520/2521/2522/2523/2524/2525/2526/2527/2528/2529/2530/2531/2532/2533/2534/2535/2536/2537/2538/2539/2540/2541/2542/2543/2544/2545/2546/2547/2548/2549/2550/2551/2552/2553/2554/2555/2556/2557/2558/2559/2560/2561/2562/2563/2564/2565/2566/2567/2568/2569/2570/2571/2572/2573/2574/2575/2576/2577/2578/2579/2580/2581/2582/2583/2584/2585/2586/2587/2588/2589/2590/2591/2592/2593/2594/2595/2596/2597/2598/2599/2600/2601/2602/2603/2604/2605/2606/2607/2608/2609/2610/2611/2612/2613/2614/2615/2616/2617/2618/2619/2620/2621/2622/2623/2624/2625/2626/2627/2628/2629/2630/2631/2632/2633/2634/2635/2636/2637/2638/2639/2640/2641/2642/2643/2644/2645/2646/2647/2648/2649/2650/2651/2652/2653/2654/2655/2656/2657/2658/2659/2660/2661/2662/2663/2664/2665/2666/2667/2668/2669/2670/267	
--	--

Annexure C - Encumbrance

MEMORANDUM OF ENCUMBRANCE

CERTIFICATE(S) OF TITLE BEING ENCUMBERED

The whole of the land comprising allotment in Deposited Plan , being the whole of the land comprised in
Certificate of Title Volume Folio

ESTATE AND INTEREST

Fee Simple

ENCUMBRANCES

Nil

ENCUMBRANCER (Full name and address)

City of Holdfast Bay of PO Box 19 Brighton South Australia 5048, which includes its successors and assigns.

ENCUMBRANCEE (Full name, address and mode of holding)

Mary Dorothy Trott of 74 Marine Parade Seacliff South Australia 5049, which includes her executors, administrators and assigns.

OPERATIVE CLAUSE

THE ENCUMBRANCER ENCUMBERS THE ESTATE AND INTEREST IN
THE LAND ABOVE DESCRIBED FOR THE BENEFIT OF THE
ENCUMBRANCEE SUBJECT TO THE ENCUMBRANCES AND OTHER
INTERESTS AS SHOWN HEREON WITH AN ANNUITY OR RENT
CHARGE OF

(a) Insert the amount of the annuity or rent charge

(a) \$0.10 (ten cents) if demanded

(b) State the term of the annuity or rent charge.
If for life use the words "during his or her lifetime"

(b) TO BE PAID TO THE ENCUMBRANCEE for a period of fifty years.

(c) State the times appointed for payment of the
annuity or rent charge. Any special covenants
may be inserted on page 2.

(c) AT THE TIMES AND IN THE MANNER FOLLOWING
On 1 January each year if demanded

COVENANTS

1. DEFINITIONS and INTERPRETATION

In this instrument:

- 1.1. **Act** means the *Real Property Act 1886(SA)*;
- 1.2. **Land** means the land described as the 'Certificate of Title Being Encumbered' on page 1;
- 1.3. **Term** means a period of fifty years commencing on the date of this instrument;
- 1.4. headings do not affect interpretation;
- 1.5. singular includes plural and plural includes singular;
- 1.6. words of one gender include any gender;
- 1.7. a reference to a document includes that document as varied, novated or replaced from time to time;
- 1.8. a reference to legislation includes any amendment to it, any legislation substituted for it, and any subordinate legislation made under it; and
- 1.9. a provision is not construed against a party only because that party drafted it.

2. ENCUMBRANCE

The Encumbrancer encumbers the estate and interest in the land described above for the benefit of the Encumbrancee for the Term on the terms and conditions set out in this instrument. After the Term has elapsed, this Encumbrance will cease to have effect.

3. RENT CHARGE

Notwithstanding anything else in this instrument, the Encumbrancee agree that it will not make demand for payment of the rent charge reserved by this instrument so long as the Encumbrancer observes all of the covenants of this Encumbrance.

4. SUBDIVISION

The Encumbrancer must not divide the Land except with the prior approval of the Encumbrancee.

5. PLANNING AND ZONING LAWS

The Encumbrancer must not use and develop the Land otherwise than as community land.

6. WORKS

The Encumbrancer must not erect, or permit or suffer to be erected, any buildings on the Land without the prior consent of the Encumbrancee, except where such buildings are consistent with or necessary for the on-going preservation of the Land as community land.

7. PRESERVATION AND CONSERVATION

The Encumbrancer must:

- 7.1. keep the Land in a general state of tidiness and free from rubbish;
- 7.2. maintaining landscaping in accordance with the community land management plan applicable to the Land under the *Local Government Act 1999 (SA)*;
- 7.3. not remove any significant or regulated trees without the consent of the Encumbrancee and all necessary legal approvals.

8. DEFAULT

- 8.1. If the Encumbrancer defaults in the payment of any money due pursuant to this instrument or defaults on any obligation the Encumbrancer is required to comply with pursuant to this instrument, and the default continues for a period of no fewer than 21 days, the Encumbrancee may serve a notice on the Encumbrancer pursuant to section 132 of the Act (**Default Notice**).
- 8.2. If following the service of a Default Notice the default complained of in the Default Notice continues for a further period of no fewer than 21 days, the Encumbrancee may exercise the power of sale and other powers of the Encumbrancee pursuant to the Act.

9. EXPIRY

- 9.1. The restrictive covenants in Clauses 4, 5 and 6 of this instrument are for the benefit of and are attached to the land specified as Allotment 300 in Deposited Plan number _____.
- 9.2. At the end of the Term, the Encumbrancer will not be bound to comply with the covenants in this instrument, whether this instrument remains registered under the Act or not, and the Encumbrancee, her executors, administrators and heirs and subsequent registered proprietors of the Land must provide the Encumbrancer with all reasonable assistance on request to register a discharge of this instrument under the Act.

IT IS COVENANTED BETWEEN THE ENCUMBRANCER AND ENCUMBRANCEE in accordance with the terms and conditions expressed *herein / in Memorandum No. ### subject to such exclusions and amendments specified herein.

* Delete the inapplicable

THE COMMON SEAL of
City of Holdfast Bay
was affixed in the presence of:-

.....
Mayor

.....
Chief Executive Officer

LANDS TITLES REGISTRATION
OFFICE
SOUTH AUSTRALIA

**MEMORANDUM OF
ENCUMBRANCE**

FORM APPROVED BY THE REGISTRAR-GENERAL

**BELOW THIS LINE FOR OFFICE &
STAMP DUTY PURPOSES ONLY**

Prefix
E
Series No.

BELOW THIS LINE FOR AGENT USE ONLY

CERTIFIED CORRECT FOR THE PURPOSES
OF THE REAL PROPERTY ACT 1886

Solicitor/Registered Conveyancer/Encumbrancee

AGENT CODE

Lodged by: **Norman Waterhouse** **NWAM**
Correction to: **Norman Waterhouse** **NWAM**

TITLES, CROWN LEASES, DECLARATIONS ETC. LODGED WITH
INSTRUMENT (TO BE FILLED IN BY PERSON LODGING)

1.
2.
3.
4.

PLEASE ISSUE NEW CERTIFICATE(S) OF TITLE AS FOLLOWS

1.
2.
3.
4.

DELIVERY INSTRUCTIONS (Agent to complete)
PLEASE DELIVER THE FOLLOWING ITEM(S) TO THE
UNDERMENTIONED AGENT(S)

ITEM(S)	AGENT CODE

CORRECTION	PASSED
REGISTERED	
REGISTRAR-GENERAL	

CONSENTS OF MORTGAGEES AND SECTION 32 DEVELOPMENT ACT 1993 CERTIFICATION

This lease does not contravene section 32 of the *Development Act 1993*.

DATED

EXECUTION

LESSOR

.....
Signature of the LESSOR

.....
Signature of WITNESS – Signed in my presence by the LESSOR who is either personally known to me or has satisfied me as to his or her identity. *

.....
Print Full name of Witness (BLOCK LETTERS)

.....
Address of Witness

.....
Business Hours Telephone Number

LESSEE

THE COMMON SEAL of
City of Holdfast Bay was affixed
in the presence of:-

.....
Mayor

.....
Chief Executive Officer

* NB: A penalty of up to \$2000 or 6 months imprisonment applies for improper witnessing.

LANDS TITLES REGISTRATION
OFFICE
SOUTH AUSTRALIA

MEMORANDUM OF LEASE

FORM APPROVED BY THE REGISTRAR-GENERAL

**BELOW THIS LINE FOR OFFICE &
STAMP DUTY PURPOSES ONLY**

Prefix
L
Series No.

BELOW THIS LINE FOR AGENT USE ONLY

<p>CERTIFIED CORRECT FOR THE PURPOSES OF THE REAL PROPERTY ACT 1886</p> <p style="text-align: center;">_____</p> <p style="text-align: center;">Solicitor/Registered Conveyancer/Lessee</p>
--

AGENT CODE

Lodged by: **Norman Waterhouse** **NWAM**

Correction to: **Norman Waterhouse** **NWAM**

TITLES, CROWN LEASES, DECLARATIONS ETC. LODGED WITH INSTRUMENT (TO BE FILLED IN BY PERSON LODGING)

1.
2.
3.
4.

PLEASE ISSUE NEW CERTIFICATE(S) OF TITLE AS FOLLOWS

1.
2.
3.
4.

DELIVERY INSTRUCTIONS (Agent to complete)
PLEASE DELIVER THE FOLLOWING ITEM(S) TO THE UNDERMENTIONED AGENT(S)

ITEM(S)	AGENT CODE

CORRECTION	PASSED
REGISTERED	
REGISTRAR-GENERAL	

Community Land Management Plan

Natural Reserve



Introduction

Consistent with the *Local Government Act 1999*, the City of Holdfast Bay has prepared Management Plans for the majority of its community land. A Management Plan is a document prepared in consultation with the community and will provide direction and assistance in the management, use and maintenance of the land held for community use.

Description – Natural Reserve

Natural reserves are noted for their environmental and conservation significance and feature significant biodiversity value throughout the reserves. They are used by people for educational, recreation and research purposes. Access is generally unrestricted. However, access to areas that are environmentally sensitive is discouraged and people are requested to use the designated paths, trails and boardwalks. They may have some limited facilities such as boardwalks and park furniture and have limited formal areas.

Natural Reserves

The following is a list of registered natural reserves owned and/or under the care, control and management of the City of Holdfast Bay and affected by this Management Plan:

Barton Avenue Gully
Gilbertson Gully
Kingston Park Coast Reserve – Natural Area
Pine Gully

Identification Details (refer Schedule)

Ownership Details (refer Schedule)

Alienation by lease/licence

A lease or licence is not generally granted for a natural reserve. However, if Council is to grant a lease or licence then it must be consistent with the objectives for management of the land. Existing leases/licences for individual natural reserves are detailed in the Schedule.

Purpose for which land is held

The City of Holdfast Bay own or controls Natural Reserves for environmental benefits including the preservation and rehabilitation of biodiversity within the Council area.

Reason why a Management Plan is required

Council owns and manages over 80 community land properties for a range of purposes such as recreation, tourism, community use and conservation. The *Local Government Act 1999* requires Council to prepare Management Plans for community land that has been, or is to be, specifically modified/adapted for the benefit/enjoyment of the community. Further, to ensure these valuable assets are managed in the best interests of the community, Council has prepared a range of Management Plans for different types of community land within its ownership, care, control and/or management.

Objectives for management of the land

To protect, restore or rehabilitate areas of high biodiversity value and/or remnant vegetation.

To create and expand native local habitats.

To provide natural areas for community use, enjoyment and education.

To provide amenity and enhance the visual character of the City.

To provide improved utilisation and quality control of floodwater to benefit the natural reserve ecosystem.

Plans, Policies and By-laws

Following is a list of plans, policies and by-laws that may be relevant to the management of Natural Reserve and should be considered in conjunction with this Management Plan. Where there is a conflict or inconsistency between the provisions of a Management Plan under the Local Government Act and the provisions of an official plan or policy under a different Act, the latter will override the Management Plan to the extent of the inconsistency.

Council Plans*

- City of Holdfast Bay Strategic Plan
- Holdfast Bay (City) Development Plan
- City of Holdfast Bay Urban Image Strategy Plan (2004)
- City of Holdfast Bay Open Space Strategy Plan (2012)
- EcoCity Plan (2012)
- "Access for All" – Report on Disability Access Project (October 1998)
- City of Holdfast Bay Heritage Works Manual
- City of Holdfast Bay Bike Plan Review – June 2000
- Asset Management Plan (2012)
- Register of Local Heritage Places
- Street Tree Strategy (November 2001)
- Southern Councils Memorandum of Agreement to jointly develop a Reconciliation Agreement with the Kurna Community (October 2003).

**Note: There are also a number of specific plans that relate only to one piece of land (eg. Master Plans). Where relevant, these plans will be listed under that individual piece of land in the Schedule to this Management Plan.*

Policies

- City of Holdfast Bay Community Consultation Model (adopted on 8 April 2003)
- Leasing Policy
- Social Development Policy (adopted on April 2004)
- Youth Policy.

By-laws

- By-law no. 3 – Council Land
- By-law no. 4 – Waste Management
- By-law no. 5 - Caravans and Camping
- By-law no. 7 – Fire Prevention
- By-law no. 8 – Creatures.

The above plans, policies and by-laws can be viewed at the Council office, at the Glenelg Customer Service Centre located in Glenelg Library or from the City of Holdfast Bay website at www.holdfast.sa.gov.au. They are subject to review and amendment from time to time as required.

Management

Management Issue	Strategies	Actions
Use/Activities	To ensure that natural reserves provide for a limited range of low impact uses and activities, and appropriate facilities are provided for these activities.	<ul style="list-style-type: none"> • Generally do not permit the use of Natural Reserves for business purposes unless for special circumstances. • Provision of minor multi-functional recreation facilities such as bike tracks.
Form/Buildings/ Maintenance	Provide and maintain attractive and safe sites, buildings, structures and facilities while preserving the environmental, cultural and heritage values of the site.	<ul style="list-style-type: none"> • Design and upgrade facilities such as park furniture and lighting in accordance with Council's Urban Image Strategy Plan. • Design, build and maintain buildings and structures such as shelters that meet the requirements of the City of Holdfast Bay Development Plan and maintain using a "whole of life-cycle" asset management approach. • Protect and preserve European and indigenous culture and heritage. • Monitor and promptly remove graffiti and repair vandalism to buildings and assets. • Install fencing where there is a high usage by children, for environmental purposes, for activities that require fencing or a barrier from neighbours is required.
Environment	Provide safe, attractive and appropriately maintained reserves whilst protecting and enhancing the native flora and fauna.	<ul style="list-style-type: none"> • Regularly maintain reserves through maintenance programs (ie. slashing, weed control). • Protect and enhance the native flora and fauna on Natural Reserves in accordance with their Vegetation Management Plans where relevant including significant trees, within the context of their intensive use by the community and their suburban location.

Management Issue	Strategies	Actions
		<ul style="list-style-type: none"> • Efficient use of water.
Movement/Access	Where practical provide accessible Natural Reserves for people.	<ul style="list-style-type: none"> • Physical access is provided for all sections of the community through the provision of appropriate facilities. • Paths and trails are provided (where appropriate) and maintained.
Management	Provide safe and clean Natural Reserves and reduce exposure to hazards.	<ul style="list-style-type: none"> • Undertake and regularly update risk management processes for all Natural Reserves. • Regular removal of waste and litter. • Where possible and without impacting significantly on the natural value of the land Natural Reserves should assist stormwater management and improvements in water quality.

Performance Measures

The City of Holdfast Bay has established and regularly reports on performance measures through its Strategic Plan Key Performance Indicators that relate to the Goals and Objectives in the City of Holdfast Bay Strategic Plan. The relevant Goals, Objectives and KPIs for this Community Land Management Plan are:

Economic Development

Goal

A dynamic environment which encourages economic growth of business and tourism, generating increased local employment opportunities.

Key Performance Indicator – *Business/resident agreement on the City of Holdfast Bay business environment as a dynamic environment which encourages economic growth of business and tourism and which generates local employment opportunities.*

Objectives

1.1 Tourism – To ensure that the City of Holdfast Bay remains as South Australia's premier seaside destination through the promotion and provision of targeted events, tourism infrastructure, attractions, touring products and services.

Key Performance Indicator – *Visitor average length of stay, number of overnight stays within City accommodation.*

Social Development

Goal

A quality of life which provides the opportunity for all to participate in a safe, healthy and culturally rich community.

Key Performance Indicator - *Resident agreement on a good and improving quality of life in terms of safety, health and cultural richness.*

Objectives

2.1 Community Services – To facilitate the provision of human services that meet the needs of the community.

2.2 Community Safety – To provide a safe environment for residents, visitors and businesses within the City of Holdfast Bay.

Key Performance Indicator – *Number of offences against persons and property.*

2.3 Health and Recreation – To provide and facilitate services and facilities which support public health and encourage a “healthy lifestyle”.

Key Performance Indicator – *The percentage of environmental health complaints responded to on the day of receipt.*

2.4 Public Access – To ensure equitable access for all residents and visitors within Holdfast Bay.

2.6 Cultural and Built Heritage – To conserve and promote the cultural, built and natural heritage of the City, including the indigenous community.

Environmental Management

Goal

Improved natural and built environments which benefit the community and future generations.

Key Performance Indicator – *Resident agreement on the improvement of the City of Holdfast Bay environment for the broader community and for future generations.*

Objectives

3.1 Sand Management – To ensure clean sandy beaches forever.

Key Performance Indicator – *Change in beach sand levels over 12 month period.*

3.2 Coastal and Waterway Management – To ensure clean water and a rejuvenated coastal environment for the City.

Key Performance Indicator – *Weight of waste intercepted at Gross Pollutant Traps over 12 month period.*

3.3 Sustainable Environment – To lead and involve the community in actions towards a sustainable global environment.

Key Performance Indicator – *Number of volunteers and average hours involved in environmental initiatives.*

3.4 Biodiversity – To enhance the City's flora and fauna biodiversity.

Key Performance Indicator – *Total number of indigenous plants planted in the Council area over 12 month period.*

3.5 Open Space – To provide attractive, usable and safe open spaces.

Key Performance Indicator – *Number of new park furniture items installed in Council reserves over 12 month period.*

In addition to the above performance measures, the City of Holdfast Bay also participates in the annual Local Government Comparative Performance Measurement “Community Survey” involving resident feedback on a wide range of policy and operational areas. This Survey allows measurement of “outcomes” performance, both over time and compared to other Councils.

Pine Gully Coast Reserve – Natural area

Pine Gully is a portion of land owned by the owners of 74 Marine Parade, Seacliff. The land in question is part of an agreement between the property owner and the City Holdfast Bay to transfer a portion of the land referred to as Allotment 301 to Council for preservation as reserve.

The land in question will initially be leased by Council but has limited potential for access, however it provides a natural backdrop and connection to the Kingston Cliff Face and the Coastal Foreshore. In addition to this the land has the potential to provide significant opportunity for improved flora and fauna biodiversity and stormwater management objectives.

Identification and Ownership Details

Street Address	74 Marine Parade, Seacliff
Suburb	Kingston Park
Area	2,350 m ² (approx)
Certificate of Title	Portion CT 5853/53, known as allotment 301
Owner	City of Holdfast Bay
Lease/licence details	-
Master Plan	Pine Gully Vegetation Management Plan (Aug 2003) City Holdfast Bay EcoCity Plan City Holdfast Bay Open Space Strategy Biodiversity Strategy
Specific Management Issues	<ul style="list-style-type: none"> • Erosion control* • Weed control* • Protection and rehabilitation of native vegetation and wildlife habitat* • Stormwater management* <p><i>Note: The above management plans provide strategies and actions to address these issues.</i></p>