



Member of the Surbana Jurong Group



2022/2023 Annual Compliance Report – EPBC 2011/5987

Caloundra South

Prepared for Stockland Development Pty Ltd

5 April 2023

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1 Introduction

This Annual Compliance Report (ACR) has been prepared in accordance with the requirements of the Caloundra South Master Planned Community EPBC Act approval 2011/5987. Condition 14 requires Stockland to prepare and publish an ACR:

'Within three (3) months of every twelve (12) month anniversary of commencement of the action (and until 12 months after the cessation of the action), the person undertaking the action must make public a report on their website, for the duration of the project, addressing compliance with the conditions of this approval over the previous twelve (12) months, including implementation of any management plans, reports, strategies and methods as specified in the conditions.'

The Caloundra South Master Planned Community was re-branded as "Aura – City of Colour" (Aura) for marketing purposes in October 2015. Reference is made throughout this ACR to Aura, being the Caloundra South project.

1.1 Reporting Period

This ACR addresses the status and compliance of the project against the conditions referred to in EPBC 2011/5987 for works carried out during the reporting period from 15 January 2022 to 14 January 2023.

1.2 EPBC Approval

Stockland Development Pty Ltd (ACN 000 064 835) (Stockland), as the Proponent for the Caloundra South Master Planned Community, was issued with EPBC 2011/5987 on 6 June 2013. EPBC 2011/5987 was subsequently amended by variations to Conditions 3, 8, 10 and 12 made pursuant to section 143 of the EPBC Act and will be referred to collectively as EPBC 2011/5987.

1.3 Location of the Project

Aura is an approved master planned community on Queensland's Sunshine Coast. The approximately 2,400 ha site is located 3 km from the Caloundra Major Activity Centre, 16 km south of Maroochydore, the Sunshine Coast's Principal Activity Centre, and approximately 100km north of Brisbane. Most of the site sits between Pelican Waters and the Bruce Highway, with a small portion of the site lying to the west of the highway.

The site and its regional context are shown in Figure 1-1, and the illustrated Master Plan is included as Figure 1-2.

1.4 Overview of Key Activities and Achievements

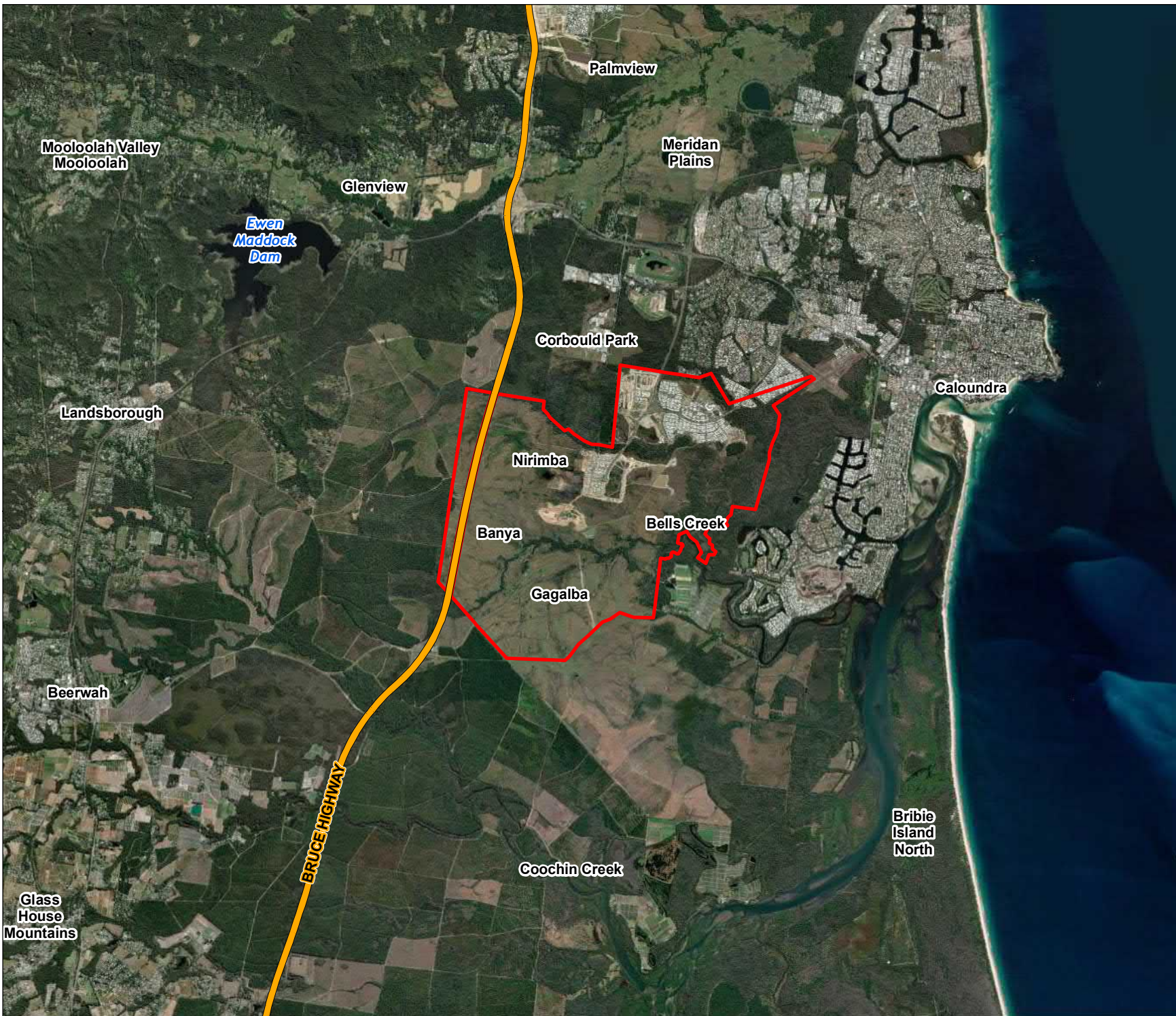
Numerous development and environmental management activities have been achieved on the project to date, including:

- Completion of construction of wallum sedge frog ponds along the northern, central and southern movement corridors
- Monitoring of Wallum Sedge Frog populations on and off the site
- Ongoing water quality monitoring on and off the site
- Rehabilitation works across conservations areas associated with Precincts 2, 3-5 and 10-12
- Completion of Precincts 1 and 2
- Implementation of the approved Precinct Construction Environmental Management Plan (PCEMP)
- Progression of bulk earthworks and civil construction in Precinct 3-6, 7, 9-12, 14 and 15
- Commencement of the final stages of Bells Creek Arterial (Stages 3 and 4) which will provide convenient access to and from the Bruce Highway.



Stockland, its contractors and consultants have worked with the commonwealth, state and local governments to implement procedures to take this project forward over the longer term. With a development timeline of up to 30 years, Stockland is committed to maintaining the project's excellent environmental record for the duration of the development process, whilst actively encouraging a sense of environmental stewardship and pride within the emerging community.

1.5 Summary of Compliance

During the reporting period, compliance has been achieved with all conditions of approval and requirements of approved plans. Evidence of compliance with the conditions of EPBC 2011/5987 for the reporting period from 15 January 2022 to 14 January 2023 is provided in Section 4, Table 2. Evidence of compliance with the requirements of Approved Plans prepared under the EPBC conditions of approval is provided in Appendix A.

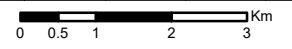


Legend

-  Highways
-  EPBC Act Referral Boundary



1	13/04/2020	CS	MZ	MZ
Issue	Date	By	Chkd	Appd



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Client
Stockland

Job Title
Aura

Drawing Title
Regional Context of Aura (Caloundra South)

Scale at A3 1:100,000	Drawing Status For Information
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Coordinate System
GDA 1994 MGA Zone 56

Job No 30031518	Drawing No 1
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16 DISPLAY VILLAGE

Aura Sales & Vision Centre
Aura Display Village

17 SHOPPING & SERVICES

Future Stockland Baringa with supermarket, tavern, medical and specialty shops
Future City Centre with future cinemas, retail, dining and entertainment centres
Future district and neighbourhood centres with cafes and specialty shops
Bellvista Marketplace - 2km
Stockland Caloundra Shopping Centre - 7km
Caloundra CBD - 8km

18 EDUCATION

20 proposed learning centres including:
5 public primary schools, including a state primary school in Baringa
2 public high schools, including a state high school in Baringa
4 early learning centres, including a childcare centre in Baringa up to 8 private schools
Urban university

19 COMMUNITY CENTRES

Civic plaza in Baringa and future civic plaza in the City Centre
Future community centres located throughout the city
Future sporting clubhouses at regional and neighbourhood sports fields

20 ENTERTAINMENT

Future 90 hectare City Centre with cinemas, retail, dining and entertainment centres
3 planned district retail centres with cafes and specialty shops
6 planned neighbourhood retail centres with cafes and convenience shops
2 future cultural precincts with performing arts facilities
Future People's Place - an 11 hectare Southbank-style parkland
Future Central Park - sports stadium and recreation areas
Café at the Aura Sales & Vision Centre
Bellvista Tavern - 2km
Caloundra CBD - 8km

21 PARKS AND OPEN SPACES

5 local parks within Baringa and many more located throughout the city
4 hectare neighbourhood sports park within Baringa and a number of village and district sports parks located throughout the city
Future 10 hectare regional recreation park within Baringa
Future Central Park - park, playground and recreation areas
Proposed Lakes District recreation areas
Proposed golf course
Adventure Playground at the Aura Sales & Vision Centre
Kings Beach and Golden Beach - 9km

22 ENVIRONMENTAL

700 hectare Conservation Zone
Future Environmental Education Centre
Lamerough Creek Reserve
Blackbutt Forest
Bell's Creek North and South
Pumicestone Passage - 7km

23 BUSINESS

Business & Enterprise Park North
Future Business & Enterprise Park West
Future City Centre with commercial and business centres
Caloundra CBD - 8km

24 VELOWAY & WALKING PATHS

200km of future dedicated bike roadways, bike paths and pedestrian pathways

25 PUBLIC TRANSPORT & ACCESS

Bell's Creek Arterial from Caloundra Road to Baringa
Future Bell's Creek Arterial from Baringa to Bruce Highway
Future Transit Centre in the City Centre
Future bus services to Aura and surrounding regional areas
Future CAMCOS rail line
Sunshine Coast Airport - 38km
Brisbane CBD - 90km
Brisbane Airport - 90km

26 MEDICAL

Future medical centre at Stockland Baringa Shopping Centre
Bellvista Family Medical Practice - 2km
Caloundra Hospital - 6km
Sunshine Coast University Hospital - 12km
Sunshine Coast University Private Hospital - 12km

LEGEND

- Aura Home Sites
- Future Mixed Use
- Future Education
- Future Business Park
- Future Retail Showrooms
- Future Community Facilities
- Future Environmental Education Centre
- Stockland Centres

Masterplan supplied for the purpose of providing an impression of Stockland Aura and the approximate locations of existing and proposed third party infrastructure, facilities, services, amenities and destinations, and is not intended to be used for any other purpose. Indicators of location, distance or size are approximate and for indicative purposes only. Subject to change. No warranty.

2 Status of the Project

2.1 State Approvals

A site-wide Master Plan was approved by the then Urban Land Development Authority (now Economic Development Queensland) in June 2012. Given the size and duration of the project, the project was divided into 19 Precincts.

Precinct 1 was granted approval for a Reconfiguration of a Lot from 1 into 344 Residential Lots, park, roads and drainage in July 2014.

Precinct 2 was granted approval for a Reconfiguration of a Lot from 2 Lots into 1652 Lots, 1 Mixed Use Lot, 2 District Centre Lots, Educational Establishment Lots, Community Centre Lots, Tourist Attraction, Parks and new roads in February 2015. This approval has been the subject of a number of minor change applications, the most recent of which was approved on 12 April 2022.

Precincts 3-5 were granted approval for a Reconfiguration of a Lot from 1 Lot into 184 Business and Industry Lots, 3 Showroom Lots, Open Space, Roads and Drainage in May 2015. This approval has been the subject of a number of minor change applications, the most recent of which was approved on 10 October 2022.

Town Centre (Precincts 7-10) was granted approval for a Reconfiguration of a Lot with a Plan of Development in November 2016. The Plan of Development permits 5000 dwellings provided through a combination of standard and multiple residential lots, retail, commercial, community, education, parks and drainage. This approval has been the subject of a number of minor change applications, the most recent of which was approved on 10 October 2022.

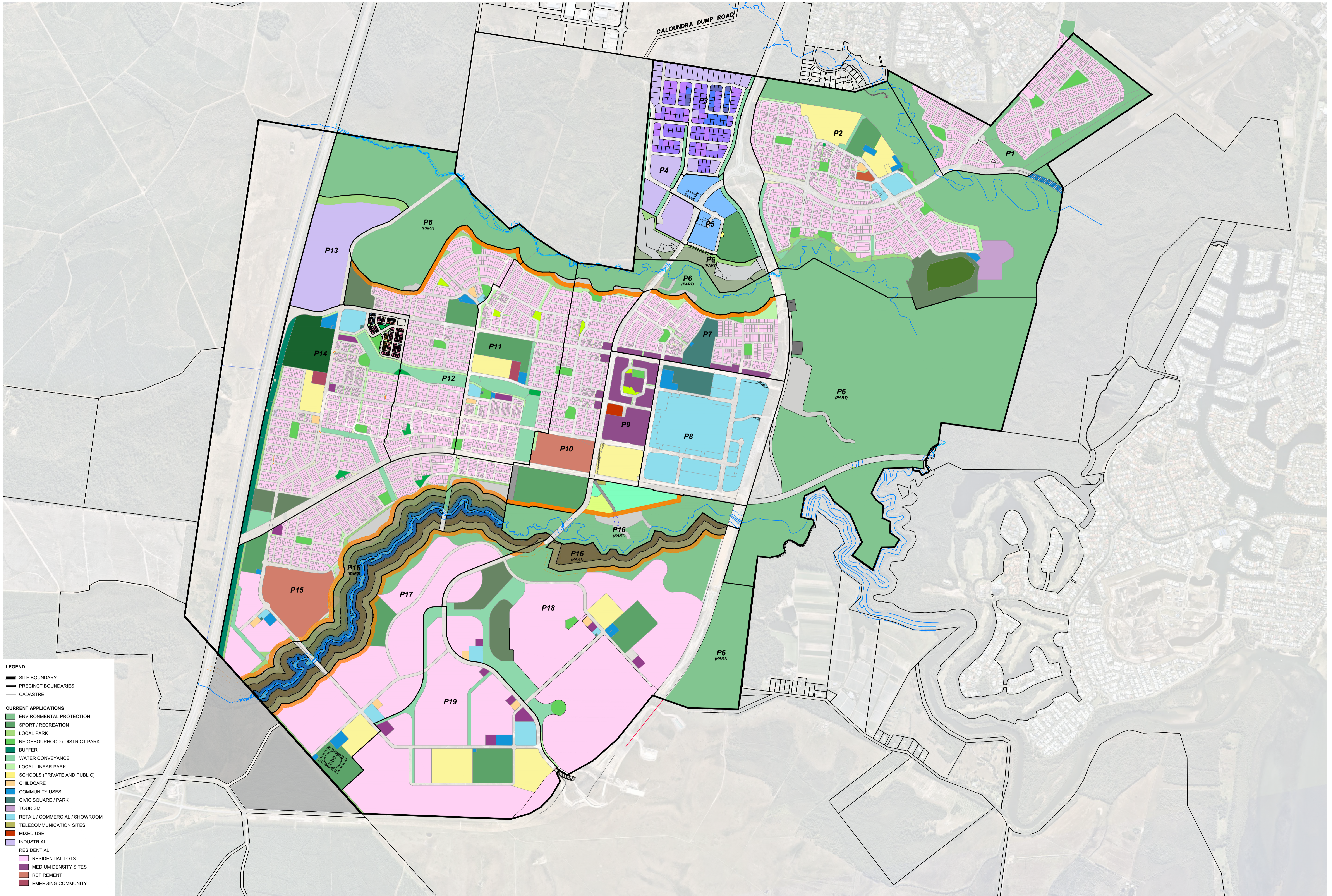
Town Centre (Precincts 11 and 12 (part)) was approved on 11 November 2019 for a Reconfiguration of Lot from 2 lots into 1,152 dwellings, a private school, neighbourhood retail centre, and community centre lots. This approval has been the subject of a number of minor change applications, the most recent of which was approved on 11 November 2021.

Town Centre (Precinct 11) The Precinct 11 P-6 State Primary School was approved on 20 August 2020 as a Reconfiguration of a lot to create a P-6 State Primary School lot in Precinct 11.

Town Centre (Precincts 11 - 14 (part)) was approved on 27 January 2022 for a Reconfiguring of a Lot in accordance with a Plan of Development to create 3,000 dwellings, commercial and retail uses, a Prep-6 State School, community, sport and recreation uses. This approval has been the subject of a number of minor change applications, the most recent of which was approved on 20 January 2023.

Precinct 15 One Lot was approved within Precinct 15 for the purposes of a future Land Lease Community (Retirement Village) on 21 December 2022.

The locations of Precincts are illustrated in Figure 2-1.



- LEGEND**
- SITE BOUNDARY
 - PRECINCT BOUNDARIES
 - CADASTRE
- CURRENT APPLICATIONS**
- ENVIRONMENTAL PROTECTION
 - SPORT / RECREATION
 - LOCAL PARK
 - NEIGHBOURHOOD / DISTRICT PARK
 - BUFFER
 - WATER CONVEYANCE
 - LOCAL LINEAR PARK
 - SCHOOLS (PRIVATE AND PUBLIC)
 - CHILD CARE
 - COMMUNITY USES
 - CIVIC SQUARE / PARK
 - TOURISM
 - RETAIL / COMMERCIAL / SHOWROOM
 - TELECOMMUNICATION SITES
 - MIXED USE
 - INDUSTRIAL
 - RESIDENTIAL
 - RESIDENTIAL LOTS
 - MEDIUM DENSITY SITES
 - RETIREMENT
 - EMERGING COMMUNITY

2.2 Bulk Earthworks and Civil Construction

During the reporting period (15 January 2022 – 14 January 2023), the following construction activities were undertaken:

Precinct 2: Civil works and rehabilitation works completed in November 2021.

Precinct 3-6: Bulk earthworks and civil construction and progression of the final phase of end of line WSUD wetlands.

Town Centre: Bulk earthworks and civil construction continued within Precincts 7 and 9.

Aura Central: Bulk earthworks and civil construction commenced within Precincts 10 – 12 and 14. Rehabilitation works continued in Precincts 10-12.

Bells Creek Arterial: progression of the final stages of Bells Creek Arterial (3&4) which will provide convenient access to and from the Bruce Highway.

Construction Contractors have prepared a CEMP for each work package. CEMPs include the relevant requirements of the EPBC conditions of approval and approved plans, as well the Construction Contractor's proposed approach to manage other environmental aspects on site during construction.

The Construction Contractor completes daily and weekly environmental checklists to assist in implementation of the PCEMP and the results are reported in the Monthly Environment Report.

2.3 Green Star Communities

The Caloundra South project was awarded a 6 Star Green Star Communities Rating from the Green Building Council of Australia in March 2015 and was re-certified in June 2020, maintaining its 6 Star rating. The highly coveted 6 Star Green Star – Communities rating signifies world leadership in the design of the masterplan, which sets the highest possible sustainability standards for the community both during construction and after it is completed. Aura was recognised for its:

- Heat island effect reduction through provision of open space and cool roofs, both of which reduce heat stress and contribute to energy savings in cooling homes.
- Veloways that provide leading cycling infrastructure, separating cyclists from motorists and improving cycling connections.
- Dark Sky Alliance-compliant LED street lights, which improve night sky amenity and reduce impact on nocturnal fauna.
- Aura's community stewardship program, which empowers the community to engage and contribute to the successful operation and longevity of the environment and society.

2.4 Frog Pond Creation

Frog ponds have been progressively constructed commensurate with adjacent development. In 2022, the majority of frog pond construction was fully completed across the Aura site, resulting in the realignment of the Wallum Sedge Frog northern, central and southern movement corridors. Frog ponds were constructed in accordance with the Wallum Sedge Frog Management Plan (WSFMP), with continual improvements made to the design based on monitoring data collected. There are currently only five remaining frog ponds to be constructed.

Frog ponds within the northern movement corridor (Precinct 2, Lamerough Creek) were created during the 2015/2016 reporting period. Compensatory habitat in the northern movement corridor achieved the success criteria outlined in the Wallum Sedge Frog Management Plan (WSFMP) and Precinct 2 Environmental Rehabilitation Plan in May 2021 and is now Off Maintenance. Monitoring has shown that this habitat supports the presence of all three Acid Frogs (*Litoria onlongburensis*, *Litoria freycineti*, and *Crinia tinnula*) (Figure 2-2). Frog ponds along the northern bank of Bells Creek North (Precinct 2-5) were created during the 2016/17 reporting period and continue to be subject to biannual monitoring.

Constructed ponds along the southern bank of Bells Creek North are performing well given their relatively young age. Vegetation growth is progressing and several of the ponds have maintained a pH of <5. Retained habitat patches within this corridor are supporting acid frog populations and appear to be free of competitor frog species.

Recently, constructed ponds along the southern bank of Bells Creek South have pH levels within a good range for acid frog populations, with almost all ponds <6, and several <5.

Further information about the implementation of the Wallum Sedge Frog Management Plan is provided in Section 3 and Appendix A.



Figure 2-2: Protected and created Wallum Sedgefrog habitat

2.5 Wallum Sedge Frog Research

Since the 2015/2016 reporting period, Stockland has provided The University of Queensland (UQ) with funding for research in support of actions identified in the National Recovery Plan for the Wallum Sedgefrog and other wallum-dependent frog species (Meyer et al., 2006) and the Wallum Sedge Frog Plan both within Aura and also across the broader distribution range of the target species. During the reporting period, Stockland's efforts were focussed on finalising previous research findings and associated scientific publications and formulating a research program to commence in late 2023 and early 2024. Of the priority actions listed within the Wallum Sedge Frog Plan, the focus of research undertaken to date has been the following:

- Undertaking studies identified in the National recovery plan for the Wallum Sedgefrog and other wallum dependent frog species (Meyer et al 2006) such as:
 - Identification of essential habitat that is critical to the survival of the species through determining non-breeding habitat use and determining genetic structure within and between populations;
 - Characterising threats to Wallum Sedgefrogs, including competition

The research activities carried out also supported three recovery actions as identified in the National Recovery Plan for the Wallum Sedgefrog and other wallum-dependent frog species (Meyer et al., 2006):

Action 3: Acquire information on threats relevant to wallum frogs to inform management (including competition from invading species)

Action 4: Engage stakeholders and the broader community in recovery of wallum frog species

Action 6: Monitor wallum frog numbers and distribution (including multi-species population processes such as species co-occurrence and how these processes drive patterns in species composition and population sizes).

The key outcomes of this research include:

- Development and calibration of call recognizer software for the detection of Wallum Sedgefrog
- Publication of results related to wallum frog call recognition research (Gan *et al.*, 2019, 2020)

- Publication of results from the wallum frog distribution mapping research outcomes and quantitative support for the Wallum and Eastern Sedgefrogs to display behavioural calling responses most likely as a result of acoustic competition (Filer et al., 2020, 2021).
- Contribution towards Baringa State primary School's STEM curriculum through the development of eight frog boxes which have been used within the School's classes to enrich learning activities such as learning to identify species specific frog calls
- Providing information regarding research activities and outcomes including Aura's World Wetland Day.

2.6 Community Stewardship Program

The Aura Community Stewardship Program, guided by the Aura Community Advisory Group (ACAG), is now in its eighth year of implementation. The inaugural Aura Environment Festival was established through a partnership with groups involved in the Aura Community Stewardship Program to replace the long-running Aura World Wetlands Day celebrations and activities at a time that better suits the school year and addresses sustainability more broadly than a wetland focus. This event held in July 2022 had been postponed from earlier in the year due to Covid-19 constraints.

The event was jointly co-ordinated by a team lead by Healthy Land and Water and Stockland. A professional event organiser was contracted to ensure all the necessary permits and safety measures were in place. The day was opened by Gubbi Gubbi Dance Troupe who performed dance and stories, and ran a dance workshop later in the day. The community groups involved with the Aura Community Stewardship Program that were present with interactive displays on the day were: Wildlife Preservation Society Qld (WPSQ) Sunshine Coast Branch; Take Action for Pumicestone Passage (TAPP); Barung Landcare; Mooloolah River Landcare; and Sunshine Coast Council (SCC) (Bushcare, electric bikes, sustainability team). The Mooloolah Valley Lions Club provided a sausage sizzle and speakers included TAPP and SCC waste education. Craft workshops included print-making of local species and creating critters made from local plants. Music was provided by international musician Linsey Pollak with performance of "Dangerous Song" and an interactive music installation. WPSQ provided fauna and flora experts to guide regular walks through the nearby Blackbutt Forest and across the sedgeland to view the Notophyll Vine Forest. Attendance by the local community was not as much as expected being about 80 visitors, however it was agreed it was a good start for what will become a regular event near the Blackbutt Forest.



Figure 2-3: World Wetland Day Event 2022

2.7 Sediment Basins and Construction Management

During construction water quality has been managed through a combination of traditional sediment basins and high efficiency sediment basins, with all captured runoff treated to meet the nominated water quality performance criteria outlined in the Water Quality Management Plan. A total of thirteen, both high efficiency and traditional, sediment basins were installed and operating during the reporting period. The design of high efficiency sediment basins is continually being adapted to suit local soil conditions and construction activities. A hybrid design of high efficiency sediment basin has been developed and implemented on site, which is capable of treating runoff continuously during a rainfall event, as well as capturing and storing runoff for treatment following cessation of the rainfall event, as per the design of a traditional sediment basin (Figure 2-4). This hybrid design has been implemented to address site specific conditions, particularly the presence of low pH surface runoff and fluctuation of incoming flow rates from large catchments.



Figure 2-4: High efficiency sediment basins

3 Approved Documents

The Conditions of the EPBC Approval required the submission and approval of several Management Plans and Strategies. Documents listed in Table 1. have been submitted to and/or approved by the Minister administering the EPBC Act, in accordance with EPBC 2011/5987 and were in effect during the reporting period. Compliance with the approved documents is reported on within the ACR. Current approved EPBC documents are available from <https://www.stockland.com.au/residential/qld/aura/resources>.

During the duration of the EPBC approval, the name of the government department administering the EPBC Act has changed. The Department of Environment and Energy (DotEE) was in existence from 19 July 2016 to 1 February 2020 and changed to the Department of Agriculture, Water and the Environment (DAWE) until the 30 June 2022. On 1 July 2022, the agriculture and water component became the Department of Agriculture, Fisheries and Forestry and the environment sector became the Department of Climate Change, Energy, the Environment and Water (DCCEEW). Throughout the compliance assessment, reference is made to departmental name current at that time.

Table 1: Approved documents in effect during the reporting period

Condition	Document Name	Revision	Applicable Reporting Period	Compliance Assessment
1	Environmental Management Plan	Revision 8 (September 2020) – approved by the Department of Department of Agriculture, Water and the Environment (DAWE) on 2 October 2020 under 'revised management plan, condition 12 of the EPBC approval.	15 January 2022 to 14 January 2023	The Environmental Management Plan comprises three documents: Environmental Management Plan – See Appendix A (Precinct Construction Environmental Management plan) Environmental Engagement Plan – See Appendix A Vegetation Management and Rehabilitation Plan – See Appendix A
2	Environmental Protection Plan 14 July 2015	Revision 2 (July 2015) - Approved by DotEE on 21 August 2015	15 Jan 2022– 14 Jan 2023	Refer to Section 4
3	Construction Environmental Management Plan May 2020	Issue C (October 2021) – Issued to DAWE on 21 October 2021 under 'revised management plan condition' 12 of the EPBC approval and approved on 12 November 2021	15 Jan 2022 – 10 July 2022	See Appendix A
		Issue D (July 2022) - Approved by the DCEEW on 11 July 2022 under 'revised management plan, condition 12 of the EPBC approval.	11 July 2022 – 24 November 2022	
		Issue E – (November 2022) Issued to DCEEW on 9 September 2022 and approved on the 25 November 2022.	25 November 2022 – 14 January 2023	

Approved Documents

4	Water Quality Management Plan	Revision 10, September 2020 – approved by DAWE on 2 October 2020 under 'revised management plan, condition 12 of the EPBC approval.	15 January 2022 – 14 Jan 2023	See Appendix A
7	Wallum Sedge Frog Management Plan	Revision G (May 2020)- Approved by DAWE on 3 June 2020.	15 January 2022 – 14 Jan 2023	See Appendix A
9	Wallum Sedge Frog Contingency and Offset Strategy	Revision 5 – Submitted to DotEE 15 December 2015 and was accepted on 8 June 2016.	15 January 2022 – 14 Jan 2023	See Appendix A

4 EPBC Approval Conditions and Compliance

During the reporting period, compliance has been achieved with all conditions of approval and requirements of approved plans. Evidence of compliance with the conditions of EPBC 2011/5987 for the reporting period from 15 January 2022 to 14 January 2023 is provided in Table 2. Evidence of compliance with the requirements of Approved Plans prepared under the EPBC conditions of approval is provided in Appendix A.

Table 2: EPBC Approval Conditions Compliance

Condition Reference Number	Condition	Is the Project Compliant with this Condition	Evidence/Comments
1	<p>Prior to the commencement of the action, the person undertaking the action must submit to the Minister for approval a detailed Environmental Management Plan for the proposed action. The Environmental Management Plan must be submitted to the Minister at least three (3) months prior to the commencement of the action. The Environmental Management Plan must be a standalone document that incorporates specific management actions required to protect matters of national environmental significance. The Environmental Management Plan must include:</p> <ul style="list-style-type: none"> • Potential impacts to matters of national environmental significance • Management and mitigation measures to manage: • Acid sulfate soils; • Sediment and erosion controls; and • Pests and weeds. • Detail of the objectives, methods, parameters and monitoring strategies to be used; • Performance criteria for each set of parameters at which point Corrective actions are required to be implemented; • Corrective actions, and/or mechanisms for developing Corrective actions, and the parties responsible for implementing Corrective actions. • A vegetation management and rehabilitation plan/strategy 	Compliant	<p>Stockland submitted the Environmental Management Plan to DotEE on 6 November 2013, prior to commencement of the action on 15 January 2015. DotEE provided a letter to Stockland on the 26 November 2013 approving the plan, stating that it meets the requirements of Condition 1. The requirements of the Environmental Management Plan have been incorporated into PCEMP (refer to EPBC Condition 3).</p> <p>Appendix A, Table A1 lists all the requirements of the Environmental Engagement Plan and states how the requirements have been met. Appendix A, Table A2 lists the requirements of the Environmental Rehabilitation Plan and states how the requirements have been met.</p>

	<ul style="list-style-type: none"> An environmental engagement strategy/plan for identifying communication and engagement mechanisms for ensuring community engagement with management practices required to protect matters of national environmental significance; <p>The commencement of the action must not occur until the Environmental Management Plan has been approved by the Minister. The approved Environmental Management Plan must be reviewed by the person undertaking the action within six (6) months of an audit undertaken in accordance with Condition 13. If the Environmental Management Plan is amended following the review, the amended plan must be submitted to the Minister for approval. The approved Environmental Management Plan must be implemented.</p>		
2	<p>Within six (6) months of the commencement of the action, the person undertaking the action must submit to the Minister for approval a detailed Environmental Protection Plan which outlines the actions that will be taken to implement legally binding mechanisms to ensure the protection of the Environmental Protection Zone and Buffer Zones.</p>	Compliant	<p>Stockland submitted the Environmental Protection Plan to DotEE on 14 June 2015, within six months of commencement of the action on 15 January 2015. DotEE reviewed the Environmental Protection Plan, as updated following discussion and consultation, and issued a letter to Stockland on 21 August 2015 approving the July 2015 version of the plan.</p>
3	<p>Prior to the Commencement of the action within each Precinct, the person undertaking the Action must submit to the Minister for approval a detailed Precinct Construction Environmental Management Plan (PCEMP). Each PCEMP must be submitted to the Minister at least three (3) months prior to the Commencement of the action within each Precinct. Each PCEMP must be a standalone document that incorporates specific management actions required for that Precinct, and any Incidental or Associated Works, unless those works are addressed in another PCEMP. Each PCEMP must include:</p> <ul style="list-style-type: none"> Details of the timing of construction works including (consistent with the requirements under Condition 7) any compensatory habitat works; 	Compliant	<p>Precinct 1 Part Precinct 3/4 and Associated Works Construction Environmental Management Plan (Precinct 1 CEMP)</p> <p>Stockland submitted the Precinct 1 CEMP to DotEE on 12 March 2014. DotEE reviewed the PCEMP, as updated following discussion and consultation, and provided a letter to Stockland on 21 August 2014 approving the version of the plan dated 23 June 2014.</p> <p>Civil construction in Precinct 1 reached Practical Completion in April 2016 and therefore this PCEMP is deemed to no longer be in effect.</p>

<ul style="list-style-type: none"> • Current and detailed maps of the locations of: • Environmental Protection Zones, no go areas/protected areas where only habitat creation, weed management or rehabilitation will occur; • Sediment and erosion treatment and prevention devices; • Prescribed Buffer Zones; • Development and construction zones; • Essential services and easements; • Roads; and • Fauna protection devices and road crossings/underpasses. • Potential impacts to Matters of National Environmental Significance; • Management and mitigation actions required for acid sulfate soils, surface and ground water quality, sediment and erosion controls, vegetation management, and pest and weed management to protect Matters of National Environmental significance; • The objectives, methods, parameters and monitoring strategies to be used; • Performance criteria for each set of parameters at which point Corrective actions are required to be implemented; • Corrective actions, and/or mechanisms for developing Corrective actions, and the parties responsible for implementing Corrective actions. <p>The Commencement of the action in a Precinct must not occur until the PCEMP for the relevant Precinct has been approved by the Minister, or another PCEMP approved by the Minister includes the proposed works. Approved PCEMPs must be implemented.</p>	<p>Precinct 2 Part Precinct 3/4 and Associated Works Construction Environmental Management Plan (Precinct 2 CEMP)</p> <p>Stockland submitted the Precinct 2 CEMP to DotEE on 26 March 2015, prior to commencement of the action within Precinct 2 in December 2016. DotEE provided a letter to Stockland on 25 August 2015 approving Revision B of the plan dated May 2015.</p> <p>The requirements of this plan have been incorporated into the site wide PCEMP.</p> <p>Appendix A, Table A3 lists all the requirements of the Precinct 2 CEMP and states how the requirements have been met.</p> <p>Precinct 3-5 and Part Precinct 6 Construction Environmental Management Plan (Precinct 3-5 CEMP)</p> <p>Stockland submitted the Precinct 3-5 CEMP to DotEE on 9 December 2016, prior to commencement of the action within Precinct 3-5 on 8 January 2018. DotEE provided a letter to Stockland on 21 April 2017 approving Revision A of the plan dated April 2017.</p> <p>The requirements of this plan have been incorporated into the site wide PCEMP.</p> <p>Appendix A, Table A4 lists all the requirements of the Precinct 3 – 5 CEMP and states how the requirements have been met.</p> <p>Precinct 7, 9, 11, 12, 14, Parts 6, 8, 10, 13, 15, 16, and the Western Borrow Area Construction Management Plan (Town Centre CEMP)</p> <p>Stockland submitted the Town Centre CEMP to DotEE on 7 July 2017, prior to commencement of the action within these Precincts on 10 May 2018. DotEE provided a letter to Stockland on 16 October 2017 approving Revision C of the plan dated October 2017.</p>
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	<p>For incidental or Associated Works, measures necessary to protect Matters of National Environmental Significance must be employed, such as erosion and sediment control and the re-establishment of vegetation, in accordance with the approved PCEMP.</p> <p>Note: For clarification Preliminary Works may occur prior to the approval of each PCEMP.</p>		<p>The requirements of this plan have been incorporated into the site wide PCEMP.</p> <p>Precincts 17, 18 & 19 or Associated Works</p> <p>Stockland submitted the Precinct 17,18 & 19 or Associated Works to DCCEEW on the 9 September, prior to the commencement of the action within these Precincts. DCCEEW provided a letter to Stockland on the 25 November 2022 approving Revision E of the plan dated November 2022</p> <p>Appendix A, Table A5 lists all the requirements of the CEMP and states how the requirements have been met.</p>
<p>4</p>	<p>Prior to the commencement of the action, the person undertaking the action must submit to the Minister for approval a Water Quality Management Plan. The Water Quality Management Plan must address the management and monitoring of both groundwater and surface water and must:</p> <ul style="list-style-type: none"> • Outline the baseline water quality data; • Set out water quality performance objectives and parameters; • Set monitoring and reporting periods; • Set out scientifically robust methods for sampling and data collection; • Include a risk assessment of any modelling, assumptions and predications used; • Identify readily measurable performance indicators and goals and identify performance indicators at which point corrective actions will be taken; 	<p>Compliant</p>	<p>Stockland submitted the Water Quality Management Plan to DotEE on 12 March 2014, prior to commencement of the action on 15 January 2015. DotEE provided a letter to Stockland on 25 March 2014 approving Revision 3 (February 2014) of the plan, stating that it meets the requirements of Condition 4. The current version of the Water Quality Management Plan is Revision 10 dated September 2020, which was approved by DAWE on 2 October 2020.</p> <p>The Water Quality Management Plan was reviewed following completion of the audit in 2021 undertaken in accordance with Condition 13. No amendments are required following the review.</p> <p>Appendix A, Table A6 lists all the requirements of the Water Quality Management Plan and states how the requirements have been met</p>

	<ul style="list-style-type: none"> • Corrective actions, and/or mechanisms for developing corrective actions, and the parties responsible for implementing corrective actions; • Include scientifically robust methods for detecting a 10% change in water quality parameters in Bell's Creek and 5% change in water quality in Pumicestone Passage unless an alternate is approved by the Minister; and • Demonstrate adaptive management mechanisms reflecting contemporary industry best practice are being implemented throughout the period of this approval. <p>The action must not commence until the Water Quality Management Plan is approved by the Minister. The approved Water Quality Management Plan must be reviewed by the person undertaking the action within six months of an audit undertaken in accordance with Condition 13. If the Water Quality Management Plan is amended following the review, the amended plan must be submitted to the Minister for approval.</p> <p>The person undertaking the action must demonstrate that the water quality performance objectives of the Water Quality Management Plan would result in an equivalent or improved environmental outcome over the life of this approval.</p> <p>The approved Water Quality Management Plan must be implemented.</p> <p>Note: For clarification Preliminary Works may occur prior to approval of the Water Quality Management Plan.</p>		
5	<p>Prior to commencement of the action, the person undertaking the action must provide a detailed map to the Department that identifies areas of Wallum Sedge Frog (<i>Litoria olongburensis</i>) habitat that will be destroyed or removed on the subject site.</p>	Compliant	<p>Stockland submitted the Wallum Sedge Frog Management Plan to DotEE on 6 December 2013, prior to commencement of the action on 15 January 2015. Figure 2.2d of the Wallum Sedge Frog Management Plan includes a map showing the area of Wallum Sedge Frog habitat to be destroyed or removed from the subject</p>

			<p>site. DotEE issued a letter to Stockland on 10 December 2013 confirming that Condition 5 of the approval has been satisfied.</p> <p>The latest version of Figure 2.2d (April 2023) is provided in Appendix B.</p>
6	The Person undertaking the action must not destroy or remove more than 152 ha of Wallum Sedge Frog habitat on the subject site as set out in the map provided in Condition 5 of this approval.	Compliant	At the end of the ACR reporting period, 68.22 ha of Wallum Sedge Frog habitat has been removed. A summary of Wallum Sedge Frog habitat created, retained and removed is provided in Appendix C.
7	To minimise and compensate for the loss of a maximum 152 ha Wallum Sedge Frog (<i>Litoria olongburensis</i>) habitat at the subject site, the person undertaking the action must establish created compensatory habitat for the Wallum Sedge Frog within the subject site in accordance with the Wallum Sedge Frog Management Plan. The created compensatory habitat must be established in stages, commensurate with the area of habitat destroyed or removed through the construction of precincts and must reach a minimum of 152 ha, prior to completion of construction of the Development.	Compliant	<p>A pre-construction Wallum Sedge Frog habitat survey has been undertaken, in accordance with the methods outlined in the Wallum Sedge Frog Management Plan (Box 1, Appendix B) to confirm the extent of Wallum Sedge Frog habitat to be removed under each approved precinct Construction Environmental Management Plan (CEMP). A summary of Wallum Sedge Frog habitat removed, retained and created in each precinct is provided in Appendix C.</p> <p>Creation of Wallum Sedge Frog ponds in the northern, central and southern frog corridors have been completed in advance of construction in the relevant precincts. Compensatory habitat will continue to be created in line with the Environmental Rehabilitation Plans. Photos of the completed frog ponds are provided in Figure 2-2.</p>
8	Prior to the commencement of the action the person undertaking the action must develop and submit to the Minister for approval a Wallum Sedge Frog Management Plan to monitor and manage the Wallum Sedge Frog (<i>Litoria olongburensis</i>) population at the Subject Site including its use of the Created Compensatory Habitat within the Subject Site. The Wallum Sedge Frog Management Plan must be developed by an Appropriately Qualified Ecologist. The Wallum Sedge Frog Management Plan must include:	Compliant	<p>Stockland submitted the Wallum Sedge Frog Management Plan to DotEE on 6 December 2013, prior to commencement of the action on 15 January 2015. DotEE issued Stockland a letter on 10 December 2013 approving Revision B of the plan, stating that it meets the requirements of Condition 8. The current version of the Wallum Sedge Frog Management Plan is Revision G (May 2020) which was approved by DAWE on 3 June 2020.</p> <p>The Wallum Sedge Frog Management Plan was reviewed following completion of the audit in 2021 undertaken in accordance</p>

	<ul style="list-style-type: none"> • a review of the existing baseline <i>L. olongburensis</i> population and distribution within the Subject Site; • a scientifically robust methodology for <i>monitoring L. olongburensis</i> population and Created Compensatory Habitat success within the Subject Site; • commitment to the construction of habitat ponds for the <i>L. olongburensis</i> concurrent with the commencement of works within each precinct; • a <i>L. olongburensis</i> population and Created Compensatory Habitat monitoring program with readily measurable objectives, performance indicators and scientifically robust Success Criteria; • timeframes for reporting and implementation; • Corrective Actions, and/or mechanisms for developing Corrective Actions, and the parties responsible for implementing Corrective Actions; • a requirement for pre-construction surveying of the Subject Site by an Appropriately Qualified Ecologist immediately prior to the removal of any identified area/s of <i>L. olongburensis</i> habitat to record the size of the area to be destroyed/removed by the proposed action. This information must be included as a reporting requirement of the Wallum Sedge Frog Plan; • an outline of the measures that will be undertaken to ensure that the Created Compensatory Habitat will be protected in perpetuity; • funding to at least \$0.5 million (2013 dollars, indexed to the Consumer Price Index and excluding GST) over 10 years from the Commencement of the Action, for priority actions identified in the Wallum Sedge Frog Management Plan. 		<p>with Condition 13. No amendments are required following the review.</p> <p>Appendix A, Table A 5 lists the requirements of the Wallum Sedge Frog Management Plan and states how the requirements have been met.</p>
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	<p>The action must not commence until the Wallum Sedge Frog Management Plan is approved by the Minister. The approved Wallum Sedge Frog Management Plan must be reviewed by the person undertaking the action within six (6) months of an audit undertaken in accordance with Condition 13. If the Wallum Sedge Frog Management Plan is amended following the review, the amended plan must be submitted to the Minister for approval. The approved Wallum Sedge Frog Management Plan must be implemented.</p> <p>Note: For clarification Preliminary Works may occur prior to approval of the Wallum Sedge Frog Management Plan.</p>		
9	<p>Within one (1) year of the commencement of the action, the person undertaking the action must prepare and submit a detailed <i>L. olongburensis</i> Contingency and Offset Strategy (including offsets in accordance with the department’s Environmental Offset Policy) that will be implemented if the created compensatory habitat does not meet the defined success criteria.</p>	Compliant	<p>Stockland submitted the <i>L. olongburensis</i> Contingency and Offset Strategy to DotEE on 15 December 2015, within one year of commencement of the action on 15 January 2015. DotEE issued a letter to Stockland on 8 June 2016 stating that it meets the requirements of condition 9.</p> <p>Appendix A, Table A 6 lists the requirements of the ‘Wallum Sedge Frog (<i>L. olongburensis</i>) Contingency and Offset Strategy’ and states how the requirements have been met.</p>
10	<p>The person undertaking the action must implement the following buffer zones at the subject site:</p> <ul style="list-style-type: none"> • the Riparian Corridor; • the Frog Zone; • the Frog Buffer; and • the Lifestyle Buffer. <p>Activities in accordance with table 2.4 of the approved Wallum Sedge Frog Management Plan, required under condition 8, are permitted in the Buffer Zones.</p>	Compliant	<p>The buffer zones listed have been implemented as shown on the design drawings provided in the PCEMP.</p>

<p>11</p>	<p>The person undertaking the action must not provide creek access within the Riparian Corridor.</p>	<p>Compliant</p>	<p>No creek access has been provided for under the master plan layout. Landscaping has been undertaken to deter inappropriate activities or access to the Environmental Protection Zone, which includes the Riparian Corridor. Measures include:</p> <ul style="list-style-type: none"> • Dense planting with endemic species at the verge of the Environmental Protection Zone and the adjacent development to restrict access • Signage in specific locations to educate the public on the importance of the conservation areas and to restrict access • Fencing in specific locations to restrict access.
<p>12a</p>	<p>The person taking the action may choose to revise a management plan or program approved by the Minister under conditions 1, 3, 4 and 8 without submitting it for approval (including approval under section 143A of the Environment Protection and Biodiversity Conservation Act, 1999 (cth)), if the taking of the action in accordance with the revised plan or program would not reduce the ability to identify or measure any impact of the action and would not be likely to have a new or increased impact. If the person taking the action makes this choice they must:</p> <ul style="list-style-type: none"> • Notify the Department in writing that the approved plan or program has been revised and provide the Department with: • An electronic copy of the revised pan or program; • an explanation of the differences between the revised plan or program and the approved plan or program; and • the reasons the person taking the action considers that taking the action in accordance with the revised plan or program would not be likely to have a new or increased impact. 	<p>Compliant</p>	<p>The following approved plans have been updated under the 'revised management plan condition' during the reporting period:</p> <ul style="list-style-type: none"> • Construction Environmental Management Plan (Issue D), accepted by the Department on 11 July 2022. • Construction Environmental Management Plan (Issue E), accepted by the Department on 25 November 2022.

	Declare in writing a date on which the revised plan or program will first be implemented must be at least 28 days after sub-condition 12a is satisfied unless a lesser period is approved by the Minister.		
12b	The person taking the action may revoke their choice under condition 12a at any time by giving such notice, the person taking the action must implement the plan or program previously submitted for approval and approved by the Minister.	Not applicable	No request has been made to revoke an approved plan.
12c	<p>If the Minister gives a notice to the person taking the action that the Minister is satisfied that the taking of the action in accordance with the revised plan or program would be likely to have a new or increased impact, then:</p> <ul style="list-style-type: none"> • Condition 12 a does not apply, or ceases to apply, in relation to the revised plan or program; and • The person taking the action must implement the plan or program previously submitted for approval and approved by the Minister. • To avoid doubt, this condition does not affect any operation of sub-conditions 12 a and 12 b in the period before the day the notice is given. <p>At the time of giving the notice the Minister may also notify that, for a specified period of time, sub-condition 12 a does not apply for one or more specified plans or programs required under the approval.</p>	Not applicable	All approved plans have been implemented until a varied plan has been approved by the department in accordance with Condition 12.
13	Unless otherwise agreed to in writing by the Minister, within three (3) months of every three (3) year anniversary of the commencement of the action, for the first nine (9) years from the commencement of the action and then within three (3) months of every five (5) year anniversary thereafter until the cessation of the action, the person undertaking the action must ensure that an independent audit of compliance with the conditions of approval	Compliant	<p>2015-2017 Independent Audit of Compliance</p> <p>Stockland submitted the proposed audit criteria and methodology to DotEE for approval on 8 May 2018. DotEE issued a letter to Stockland on 22 May 2018 approving the proposed audit criteria and methodology and stating that the audit report is due to be</p>

	<p>and all management plans, reports, strategies and methods is conducted. For each independent audit, the independent auditor must be approved by the Minister and the audit criteria must be agreed to by the Minister prior to the commencement of the audit. The person undertaking the action must submit an audit report to the Minister for approval within three (3) months of the date of completion of the audit, identifying any remedial actions that have been taken in response to recommendations identified by the independent auditor, with any proposed changes to any management plan, report, strategy or method to be included.</p>		<p>submitted within 12 weeks from the date of the letter (22 August 2018).</p> <p>Stockland submitted the independent audit to DotEE on 14 August 2018. No non-compliance items were found during the audit process.</p> <p>2018-2021 Independent Audit of Compliance</p> <p>Stockland submitted the proposed audit criteria and methodology to DotEE for approval on 9 June 2021. DotEE issued a letter to Stockland on 2 July 2021 approving the proposed audit criteria and methodology and stating that the audit report is due to be submitted within 6 months from the date of the letter being 2 January 2022.</p> <p>Stockland submitted the independent audit to DotEE on 20 October 2021. No non-compliance items were found during the audit process.</p> <p>The next three-year audit is scheduled for 2024.</p>
14	<p>Within three (3) months of every twelve (12) month anniversary of the commencement of the action (and until 12 months after the cessation of the action), the person undertaking the action must publish a report on their website, for the duration of the project, addressing compliance with the conditions of this approval over the previous twelve (12) months, including implementation of any management plans, reports, strategies and methods as specified in the conditions. Within five (5) days after publication, the person undertaking the action must provide the Minister with a copy of the report. Non-compliance with any of the condition of this approval must be reported to the Minister within two (2) business days of becoming aware of the non-compliance.</p>	Compliant	<p>The 2015/2016 ACR was published on Stockland's Aura website on 24 March 2016, DotEE was notified on this date.</p> <p>The 2016/2017 ACR was published on Stockland's Aura website on 11 April 2017, DotEE was notified on this date.</p> <p>The 2017/2018 ACR was published on Stockland's Aura website on 5 April 2018, DotEE was notified on this date.</p> <p>The 2018/2019 ACR was published on Stockland's Aura website on 15 April 2019, DotEE was notified on this date.</p> <p>The 2019/2020 ACR was published on Stockland's Aura website on 14 April 2020, DAWE was notified on this date.</p>

			<p>The 2020/2021 ACR was published on Stockland's Aura website on 14 April 2021, DAWE was notified on this date.</p> <p>The 2021/2022 ACR was published on Stockland's Aura website on 15 April 2022.</p> <p>The 2022/2023 ACR is the subject of this report.</p>
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Appendix A Requirements of Approved Plans

The Environmental Engagement Plan

The Environmental Engagement Plan outlines measures to communicate and engage with the community on management practices to protect matters of national environmental significance. The Environmental Engagement Plan seeks to achieve on-going participation in and ownership of the project's environmental objectives and obligations through two primary strategies:

- Establishment of an independent community group such as a Landcare Group
- Provision of Environmental Education Programs.

The focus of reporting for this ACR is to provide an update on the progress of these two primary engagement strategies.

Table A 1: Approved documents in effect during the reporting period (Revision 8, September 2020)

Section	Id.	Condition	Is the Project Compliant with this Condition	Evidence/Comments
Table B1.7	EEP-1	Establishment of an independent community group such as a Landcare Group	Compliant	<p>The Caloundra South Community Advisory Stewardship Group was established in 2014 and involves numerous community organisations that work together to identify and optimise community land care opportunities within Caloundra South. The ACAG is now in its eighth year of implementation.</p> <p>The inaugural Aura Environment Festival was established with groups involved in the Aura Community Stewardship Program to replace the long-running Aura World Wetlands Day celebrations and activities at a time that better suits the school year and addresses sustainability more broadly than a wetland focus.</p> <p>The event was held in July 2022 after being postponed earlier in the year due to COVID-19 constraints.</p>

				<p>The group has continued to implement community lead rehabilitation activities throughout the conservation areas including fauna monitoring.</p> <p>A local Landcare group (through Aura Connected) is intended to be established once sufficient demand has been established within the community to sustain a land care group.</p>
Table B1.7	EEP-2	Provision of Environmental Education Programs	Compliant	<p>Environmental education programs developed to date include:</p> <ul style="list-style-type: none"> Residents welcome pack providing information on Aura including environmental and cultural heritage values, community programs, emergency preparedness checklist and tips for sustainable living. Factsheets available on the Aura website on topics including: integrated water management; water smart homes; creating smart gardens and being energy and waste smart. Education programs developed as part of Aura Environment Festival.

Vegetation Management and Rehabilitation Plan

The Vegetation Management and Rehabilitation Plan outlines the overarching rehabilitation and enhancement strategy for the Environmental Protection Zone and riparian zones across the site. The Vegetation Management and Rehabilitation Plan identifies Habitat Management Units (HMUs) across the site and prescribes broad treatments types, within a strategic and site wide context, intended to achieve the overall objectives of the plan. Further detail of the treatment types is provided in precinct level Environment Rehabilitation Plans, which are prepared prior to the commencement of subdivision works in each precinct. This ACR documents how the Vegetation Management and Rehabilitation Plan have been implemented during the reporting period.

Table A 2: Compliance Assessment of the Vegetation Management and Rehabilitation Plan (Revision 8, September 2020)

Section	Id.	Condition	Is the Project Compliant with this Condition	Evidence/Comments
All	VM-1	<p>Environmental Rehabilitation Plans will be prepared to further detail rehabilitation requirements in each Precinct, and will be developed in accordance with, and to achieve the objectives and performance indicators outlined in the Vegetation Management and Rehabilitation Plan.</p> <p>Environmental Rehabilitation Plans will be prepared prior to commencement of subdivision works in each precinct.</p>	Compliant	<p>The requirement to prepare and implement an Environmental Rehabilitation Plan for each Precinct is secured in the State Reconfiguration of a Lot approval. Environmental Rehabilitation Plans are required to be prepared in accordance with, and to achieve the objectives and performance indicators outlined in, the Vegetation Management and Rehabilitation Plan. In accordance with the requirements of the Approved Environmental Protection Plan and Conservation Infrastructure Agreement, implementation of each Precinct Environmental Rehabilitation Plan must commence within 12 months of registration of the first plan of subdivision and is to reach On Maintenance within 2 years after the registration of the final Plan of Subdivision for the last Precinct identified in the HMU Precinct Stage. A summary of Environmental Rehabilitation Plans in effect during the reporting period are outlined below.</p> <p>Precinct 2 (Stage 2)</p> <p>The Precinct 2 Environmental Rehabilitation Plan was approved by Economic Development Queensland on 27 May 2016. Civil subdivision works commenced in Precinct 2 on 18 May 2016. The first plan of subdivision was registered on 12 October 2016 and were completed in 2021.</p>

			<p>The Precinct 2 Environmental Rehabilitation Plan outlines management and monitoring requirements for 14 HMU's encompassing 97.4 ha. Environmental rehabilitation treatments to be applied include remnant enhancement, assisted regeneration and reconstruction as well as the creation and augmentation of Wallum Sedge Frog habitat.</p> <p>As per the requirements of EPBC 2011/5987 Condition 7, Wallum Sedge Frog ponds were created in the frog zone of Precinct 2 in advance of commencement of construction of the development within this Precinct. A total of 22.03 ha of Wallum Sedge Frog habitat has been created within the Frog Zone, Frog Buffer and Riparian Zone.</p> <p>Revegetation and rehabilitation of the first two phases of Precinct 2 conservation lands achieved Practical Completion on 5 April 2018 and went off maintenance on 29 July 2021.</p> <p>The remaining conservation lands under the Precinct 2 ERP achieved Practical Completion on 11 December 2020, signifying commencement of the initial 3 year 'on maintenance period'. No other habitat areas have reached On Maintenance.</p> <p>Precinct 3 – 5 (Stage 3)</p> <p>The Precinct 3-5 Environmental Rehabilitation Plan was approved by Economic Development Queensland on 6 September 2017 and Civil subdivision works commenced in Precinct 3-5 on 8 January 2018. The first plan of subdivision in Precinct 3-5 was registered on 7 August 2018. Civil subdivision works are continuing.</p> <p>The Precinct 3-5 Environmental Rehabilitation Plan outlines management and monitoring requirements for 13 Habitat Management Units encompassing 50.1ha. Environmental rehabilitation treatments to be applied include remnant enhancement and assisted regeneration as well as the creation and augmentation of Wallum Sedge Frog habitat.</p>
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			<p>Implementation of the Precinct 3-5 Environmental Rehabilitation Plan commenced in August 2019, within 12 months of registration of the first plan of subdivision. As per the requirements of EPBC 2011/5987 Condition 7, Wallum Sedge Frog ponds were created in the Frog Zone and Frog Buffer in advance of commencement of construction of the development within this Precinct.</p> <p>A total of 8.86 ha of Wallum Sedge Frog habitat is being progressively rehabilitated within the Frog Zone, Frog Buffer and Riparian Zone. Rehabilitation works are continuing.</p> <p>Precinct 7 – 9 (Stage 4)</p> <p>The Precinct 7-9 Environmental Rehabilitation Plan was submitted to Economic Development Queensland on 22 September 2020 and was approved in August 2021. Civil construction commenced in December 2020. The first plan of subdivision in Precinct 7 occurred in July 2021.</p> <p>Precinct 10 – 12 (Stage 5)</p> <p>The Precinct 10-12 Environmental Rehabilitation Plan was submitted to Economic Development Queensland on 22 June 2018 and was approved on 13 May 2019. Civil construction commenced in Precinct 10-12 on 31 July 2018. The first plan of subdivision in Precincts 10-12 occurred on 20 March 2019. Civil subdivision works are continuing.</p> <p>Implementation of the Environmental Rehabilitation Plan commenced in January 2020, within 12 months of registration of the first plan of subdivision.</p> <p>The precinct 10-12 Environmental Rehabilitation Plan outlines management and monitoring requirements for 11 Habitat Management Units encompassing approximately 153 ha.</p>
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				<p>Environmental rehabilitation treatments to be applied include remnant enhancement and assisted regeneration as well as the creation and augmentation of Wallum Sedge Frog habitat.</p> <p>As per the requirements of EPBC 2011/5987 Condition 7, Wallum Sedge Frog ponds were created in the Frog Zone and Frog Buffer in advance of commencement of construction of the development within this Precinct. Rehabilitation works are continuing.</p>
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Precinct Construction Environmental Management Plan

The PCEMP is a standalone document that details precinct specific actions to manage environmental aspects and risks associated with the construction of the Project. Addendums with information regarding specific precinct mitigation or management measures have been attached to the PCEMP. This ACR will report on how the performance criteria, management measures, monitoring, corrective action and reporting requirements of the PCEMP have been complied with during the reporting period. This ACR reports on compliance with Issue E of the PCEMP dated October 2022.

Table A 3: Compliance assessment of the PCEMP (Revision E, October 2022)

Section	Id.	Condition	Is the Project Compliant with this Condition	Evidence/Comments
Erosion and Sediment Control	PCEMP - ESC 1	<p>The following water quality performance criteria will be achieved prior to the dewatering or surcharging of sediment basins:</p> <ul style="list-style-type: none"> pH 6.5 to 8.5, if groundwater is passed through the sediment basins, then the pH of the discharged water can be less than 6.5, providing it is within the range from that reported within the WSFMP (2015) – a pH range of between 4 and 5 Dissolved Oxygen (DO) > 80% saturation Total Suspended Solids (TSS) less than 50 mg/L, or the equivalent turbidity Nutrients (nitrogen and phosphorus) to be managed through normal erosion and sediment control practices Discharge turbidity offsite to be less than 10% of the upstream turbidity monitor for up to and including the design rainfall event. <p>Discharge of construction related stormwater runoff is able to enter conservation corridor</p>	Compliant	<p>All active precincts</p> <p>Prior to the dewatering of sediment basins, all captured runoff was treated to meet the nominated water quality performance criteria for all rain events up to and including the design rainfall event. Sediment basin water quality monitoring results are provided in the Construction Contractors' Monthly Environment Report.</p> <p>Turbidity at Bells Creek North and Bells Creek South sites and the Bruce Highway culverts remained within permitted limits of no more than 10% above the upstream site at most times during the reporting period.</p> <p>No exceedances were caused by development related impacts up to and including the design rainfall event (77 mm over a 5 day period).</p>

		zones provided it meets the above water quality parameters and is contained within a defined channel that directly connects to a receiving water body (Lamerough Creek, Bells Creek North, Bells Creek South).		
	PCEMP - ESC 2	<p>If during a rain event, the above discharge criteria have been exceeded, and downstream water quality are within the required criteria, then no further corrective action is required.</p> <p>If performance criteria have been exceeded, then corrective actions are to be implemented refer section 5.1.5.</p>	Compliant	<p>All active precincts</p> <p>Prior to the dewatering of sediment basins, all captured runoff was treated to meet the nominated water quality performance criteria for all rain events up to and including the design rainfall event. Sediment basin water quality monitoring results are provided in the Construction Contractors' Monthly Environment Report.</p>
	PCEMP - ESC 3	All testing is to be in accordance with the Water Quality Management Plan approved on January 2016, or latest approved version.	Compliant	<p>All precincts</p> <p>All water quality testing has been undertaken in accordance with the Water Quality Management Plan.</p>
	PCEMP - ESC 4	Design erosion and sediment controls in accordance the Best Practice Erosion and Sediment Control Guidelines (IECA, 2008) with guidance from the Manual for Erosion and Sediment Control Version 1.2 (Sunshine Coast Regional Council 2008).	Compliant	<p>All active precincts</p> <p>Erosion and Sediment Control (ESC) plans have been prepared in accordance with the IECA guidelines and the Sunshine Coast Regional Council Manual for Erosion and Sediment Control.</p>
	PCEMP - ESC 5	<p>Conservation areas will be clearly identified and protected from construction activity through signage, barriers or other appropriate measures.</p> <p>All construction activities will occur within specified construction areas, as advised by the Superintendent.</p>	Compliant	<p>All active precincts</p> <p>As reported in the Superintendent Monthly Progress Reports and Construction Contractors' Monthly Environment Reports, the clearing area was surveyed, and all protected vegetation and conservation areas were demarcated with flagging tape and "no go" signage prior to commencement of clearing. There are no known instances of unplanned clearing in conservation areas.</p>

	PCEMP - ESC 6	Areas of soil disturbance will be minimised wherever possible.	Compliant	All active precincts This requirement is noted in the Construction Contractor's CEMP. Construction sequencing has been planned to minimise the area of disturbance.
	PCEMP - ESC 7	Construction activities will be staged in order to reduce the area of soil exposed at any time.	Compliant	All active precincts Construction activities have been staged and are reported in the Superintendent Monthly Progress Reports and Construction Contractors' Monthly Environment Reports.
	PCEMP - ESC 8	All areas within the site will be stabilised within 5 days of earthworks completion. Stabilisation will consist of both short term and long-term stabilisation.	Compliant	All active precincts Stabilisation works and monitoring of groundcover are reported in the Construction Contractors' Monthly Environment Reports. Disturbed areas have generally been progressively stabilised with the required treatment following completion of earthworks.
	PCEMP - ESC 9	Divert clean flows around works areas and divert dirty flows for treatment prior to discharge. All cut-off drains will be designed to both convey and be structurally stable for the 10-year ARI event. The quality of any stormwater discharge resulting from the construction works will be tested to confirm parameters performance criteria are met, before discharge to the receiving environment. No diversion flows will enter Wallum Sedge Frog (WSF) breeding habitat	Compliant	All active precincts As per approved ESC plans, clean water flows are diverted away from the works zone via clean water drains and extremities bunds. Within the construction site, dirty water drains direct flows to sediment basins for treatment. Releases from sediment basins have met the nominated water quality criteria prior to discharge up to and including the design rainfall event.
	PCEMP -	Stockpiles are located within the area of disturbance, and away from any waterways or	Compliant	All active precincts

	ESC 10	drainage channels with appropriate erosion and sediment control measures installed and maintained. Stockpile batter will be maintained at a slope of no greater than 1:1 and the height should be no greater than 2m.		This requirement is noted in the Construction Contractor's CEMP. Stockpiles on site have been established in accordance with these requirements.
	PCEMP - ESC 11	Sediment fences will be installed to provide further protection and retention of runoff from disturbed areas. These will be strategically placed along contours and will include overflow weirs to prevent both scour and failure of the devices. Earthen bunds/drains may be used as an alternative technique subject to an assessment of their suitability in relation to location and catchment characteristics.	Compliant	All active precincts Sediment fences have generally been installed in accordance with ESC plans.
	PCEMP - ESC 12	High efficiency and traditional sediment basins will be installed on site to capture all runoff from disturbed areas throughout construction. Traditional sediment basins will be designed in accordance with the Manual for Erosion and Sediment Control (SCRC 2008) and will have a design rainfall depth of 77mm over a 5-day period. High efficiency basins will be designed to treat storm events 0.5 times the peak 1-year ARI discharge. All captured runoff shall be treated (flocculated) and discharged within 5 days of the cessation of the rain event.	Compliant	All active precincts High efficiency and traditional sediment basins have been installed as per ESC plans. All high efficiency and traditional sediment basins have been designed and operated in accordance with the nominated requirements of the PCEMP in effect at the time the activity was undertaken.
	PCEMP -	Regular monitoring of all erosion and sediment control measures will be undertaken by the	Compliant	All active precincts

	<p>ESC 13</p>	<p>Principal Contractor and Superintendent including:</p> <ul style="list-style-type: none"> • Daily inspections of all ESC measures; • Daily inspection of the road network for evidence of sediment being deposited external to the site; • Inspection of all ESC control measures after major rain events (greater than 25 mm in 24 hours); • Daily measurement of sediment basin turbidity, pH, Electrical Conductivity (EC) and Dissolved Oxygen (DO) within sediment basins; • Weekly measurements of TSS and nutrients at the primary discharge points; • Rainfall will be recorded at 9 am each working day; and • Real time turbidity monitoring at basin outlet. • Water quality testing of any indirect stormwater runoff entering the foraging areas of the WSF habitat <p>At the cessation of use of temporary sediment control measures, natural runoff from the stabilised catchment is to be within the discharge limits specified in section 5.1.2 or, will not adversely impact the water quality in the receiving environment as confirmed by the relevant parties.</p>		<p>Construction Contractors complete environment checklists to record the effectiveness of erosion and sediment controls on a daily and weekly basis and after major rain events. Monitoring results are recorded in the Construction Contractors' Monthly Environment Reports. Releases from sediment basins have met the nominated water quality criteria prior to discharge up to and including the design rainfall event.</p>
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		Receiving water quality monitoring is also undertaken by Stockland in accordance with the approved QWQMP.		
	PCEMP - ESC 14	Temporary sediment control measures incl. sediment basins can be decommissioned provided greater than 70% groundcover is to be achieved in the catchment through measures such as permanent landscape treatments, roads and roofs or temporary measures such as hydro-mulch with the design intent for permanent vegetative cover.	Compliant	All active precincts This requirement is included in Construction Contractor's ESC plans and CEMP. Erosion and sediment controls remain in place in areas where stabilisation has not yet occurred, as per ESC plans.
	PCEMP - ESC 15	If the performance Criteria are exceeded, the following corrective actions are required: <ul style="list-style-type: none"> The Principal Civil Contractor shall inspect all temporary erosion and sedimentation controls. Any defects revealed by such inspections shall be rectified immediately and these works shall be cleaned, repaired and augmented as required, to ensure effective erosion and sedimentation control thereafter. The Principal Civil Contactor shall review the erosion and sediment control strategy, identify opportunities for improvement of the strategy. 	Compliant	All active precincts Construction Contractors inspect erosion and sediment controls daily, weekly, prior to rainfall and following rainfall of >25 mm/24 hrs. Inspection checklists are included in the Construction Contractors' Monthly Environment Reports. The Construction Contractor prepares a report following a major rainfall event, outlining the effectiveness of ESC in place and the need for corrective actions.
	PCEMP - ESC 16	Onsite documentation must be held whereby a record of daily inspection documentation is kept, including but not limited to: <ul style="list-style-type: none"> Monthly environmental compliance reports (ECR) to address erosion and sediment 	Compliant	All active precincts All environmental reporting requirements are included in the Construction Contractors' Monthly Environment Reports.

		<p>control measures and events resulting from significant rainfall (see above)</p> <ul style="list-style-type: none"> • A log of the effectiveness of the erosion and sediment control measures will be maintained • Daily inspections of all erosion and sediment control measures • Rectification of defect items • Onsite water quality testing results • Real time turbidity monitoring documentation. 		
Groundwater	PCEMP - GW 1	Discharges of surface water from the site (that could be groundwater affected) are managed and released in accordance with surface water quality discharge standards	Compliant	<p>All active precincts</p> <p>Prior to the dewatering of sediment basins, all captured runoff was treated to meet the nominated water quality performance criteria up to and including the design rainfall event.</p>
	PCEMP - GW 2	Sediment basins to be dewatered within 5 days	Compliant	<p>All active precincts</p> <p>Sediment basins have been used for dust suppression or treated to meet the nominated water quality criteria. Where practicable sediment basins were dewatered generally within 5 days of cessation of the rain event.</p>
	PCEMP - GW 3	Acidity and/or dissolved metals are not to be conveyed off of the site through groundwater as a result of the development above what is considered to be natural variability	Compliant	<p>All active precincts</p> <p>Groundwater monitoring is conducted in accordance with the requirements of the Water Quality Management Plan. Groundwater monitoring results have not indicated that construction related impacts on groundwater have occurred.</p>

	PCEMP - GW 4	Spills or other contaminant releases that could affect groundwater quality are avoided or otherwise treated immediately.	Compliant	<p>All active precincts</p> <p>The Construction Contractors' CEMPs outlines spill response procedures and provides control measures, monitoring and reporting requirements for the use of hazardous chemical on site. Large spills (greater than 20L) are reported through the incident report form and included in the Construction Contractors' Monthly Environment Reports. During the reporting period there were no large spills recorded.</p>
	PCEMP - GW 5	No drainage of retained or created Wallum Sedge Frog breeding habitat	Compliant	<p>All active precincts</p> <p>There has been no drainage of any created or retained Wallum Sedge Frog breeding habitat. Monitoring of Wallum Sedge Frog habitat has been conducted in accordance with the WSFMP. Refer to Table A 5, WSF-26 for monitoring results.</p>
	PCEMP - GW 6	<p>To minimise potential negative impacts to groundwater quality, the following management structure will apply in order of preference:</p> <ul style="list-style-type: none"> • Avoid • Reduce • Re-use • Treat • Dispose 	Compliant	<p>All active precincts</p> <p>Where possible, groundwater has been avoided by keeping excavations above the groundwater table. All groundwater encountered during construction works was managed in accordance with the groundwater management hierarchy and was re-used onsite for dust suppression or treated to meet the nominated water quality criteria and discharge from site.</p>
	PCEMP - GW 7	All bores within catchments with active construction works will be sampled on a biannual basis, up to and for 12 months after active development works are completed in respective catchments.	Compliant	<p>All active precincts</p> <p>Biannual groundwater monitoring is conducted in accordance with the requirements of the Water Quality Management Plan</p>

				and results are reported within the Annual Water Quality Monitoring Report.
	PCEMP - GW 8	All Sentinel and Control bores within catchments where there are active construction activities occurring will be sampled on a monthly basis.	Compliant	<p>All active precincts</p> <p>Monthly groundwater monitoring is conducted in accordance with the requirements of the Water Quality Management Plan and results are reported on a monthly basis and compiled within the Annual Water Quality Monitoring Report.</p>
	PCEMP - GW 9	Construction bores within catchments where construction activities are occurring and which are in close proximity (i.e. within 500 m) to areas of active development works will be sampled on a monthly basis.	Compliant	<p>All active precincts</p> <p>Monthly groundwater monitoring is conducted in accordance with the requirements of the Water Quality Management Plan and results are reported on a monthly basis and compiled within the Annual Water Quality Monitoring Report.</p>
	PCEMP - GW 10	<p>Following the detection of an exceedance of a trigger level, corrective actions to be implemented may include:</p> <ul style="list-style-type: none"> • Review of site construction management practices; • Localised filling or excavation works to adjust land elevations; • Review of current and planned filling and excavation works; • Changes to proposed re-vegetation and ecological enhancement strategies; • Review of site surface water management devices (WSUD) and stormwater harvesting practices; 	Compliant	<p>All active precincts</p> <p>Groundwater monitoring results have concluded that there has been no construction related impacts on groundwater.</p>

		<ul style="list-style-type: none"> • Detection and remediation of spills or other contaminant releases (if groundwater quality is detected as being affected); or • Review and amendment of acid sulfate soil management practices in the context of unusually low groundwater pH or the presence of dissolved metals at downstream monitoring locations. 		
Acid Sulfate Soils	PCEMP - ASS 1	<p>Management and testing of ASS are to be in accordance with the Guidelines for sampling and Analysis of Lowland Acid Sulfate Soils in Queensland (C.R. Ahern et. Al. 1998), or the most recent version, or most recent version and the Queensland Acid Sulfate Soil Technical Manual Soil Management Guidelines.</p> <p>Management approaches to Acid Sulfate Soils are to be assessed on a case specific basis on advice from specialist consultants. Management methodology is to be approved in writing by the Construction Superintendent.</p>	Compliant	<p>All active precincts</p> <p>ASS sampling undertaken prior to commencement of bulk earthworks indicated a low ASS risk in the areas being worked (Douglas Partners, 2014). The Construction Contractors' CEMPs include the requirement for ASS to be monitored on a risk-based approach. Results of ASS monitoring are reported in the Construction Contractors' Monthly Environment Reports. Management of ASS and potential ASS has generally been conducted in accordance with the Queensland Acid Sulfate soil Technical Manual (2014).</p>
	PCEMP - ASS 2	<p>Minimise areas of excavation under RL 5.0 m (AHD) where greater concentrations of acid sulfate soils could be present.</p>	Compliant	<p>All active precincts</p> <p>The extent of excavation below the RL 5.0 m AHD contour has been minimised, as evidenced in the CEMPs. Excavations in areas below the RL 5.0 m AHD are largely limited to trunk sewer works.</p>
	PCEMP - ASS 3	<p>During construction, where acid sulfate soils are expected to be encountered, progressive testing of soils to determine if acid sulfates are present in the soils. Testing to be completed by an appropriately qualified geotechnical engineer. Remediation of acid sulfate soils to be</p>	Compliant	<p>All active precincts</p> <p>The Construction Contractors' CEMPs include the requirement for ASS to be monitored daily and in conjunction with any excavation works below the RL 5.0 m AHD. Results of ASS monitoring are reported in the Construction Contractors' Monthly Environment Reports. Management of ASS and</p>

		determined by a qualified geotechnical engineer and in accordance with the Guidelines for sampling and Analysis of Lowland Acid Sulfate Soils in Queensland (C.R. Ahern et. Al. 1998) or the most recent version.		potential ASS has generally been conducted in accordance with the Queensland Acid Sulfate soil Technical Manual (2014).
	PCEMP - ASS 4	Monitoring requirements for ASS are as follows: <ul style="list-style-type: none"> Acid sulfate testing to be completed on areas below 5 m AHD and other areas expected to contain ASS Completion of daily pH testing of site water and sediment pond water to ensure no downstream impact. 	Compliant	All active precincts ASS sampling undertaken prior to commencement of bulk earthworks indicated a low ASS risk in the areas being worked (Douglas Partners, 2014). The Construction Contractor's CEMP includes the requirement for ASS to be monitored daily and in conjunction with any excavation works. Results of ASS monitoring are reported in the Construction Contractors' Monthly Environment Reports.
	PCEMP - ASS 5	Corrective actions following the detection of an acid sulfate soils may include: <ul style="list-style-type: none"> Review of ASS testing procedures Isolation and separation of effected stockpile material. Ensuring that protection against overland flows and containment of stockpile runoff is achieved Treatment of fill or trench material to be determined by and appropriately qualified geotechnical engineer. Implement corrective actions for WSF habitat in accordance with Section 5.4.5. 	Compliant	All active precincts ASS sampling undertaken prior to commencement of bulk earthworks indicated a low ASS risk at the site (Douglas Partners, 2014). The Construction Contractor's CEMP includes the requirement for ASS to be monitored daily and in conjunction with any excavation works. Results of ASS monitoring are reported in the Construction Contractors' Monthly Environment Report, including any corrective actions required. Acid Sulfate Soils have not been identified during the 2022/2023 reporting period.
Wallum Sedge Frog	PCEMP - WSF 1	Establish and maintain WSF movement corridor along the Bells Creek North, Bells Creek South and Lamerough Creek, incorporating recreation	Compliant	All active precincts Wallum Sedge Frog movement corridors are shown on design drawings and are being progressively established and

		of WSF foraging and movement habitat, during the construction		maintained in accordance with the WSFMP and Vegetation Management and Rehabilitation Plan.
	PCEMP - WSF 2	<p>Establish and maintain a minimum 30m buffer between created or retained frog breeding ponds and water sensitive urban design systems.</p> <p>Where a 30 m buffer cannot be established, construction and development stormwater discharges will be prevented from discharging to WSF Breeding habitat. This will be achieved by constructing and maintaining swale drains and bunds to ensure no discharge of construction area surface waters to WSF breeding habitat. Additionally, when this buffer cannot be achieved, the pH of waters within the swale drains must be less than 6, preferably between 4-5.</p>	Compliant	<p>All active precincts</p> <p>Construction ESC plans have been prepared to ensure that Wallum Sedge Frog breeding habitat is not adversely impacted by stormwater by adopting a 30 m setback or physical separation using bunds and/or swales.</p> <p>A senior ecologist has reviewed ESC plans and conducted a site inspection to check the suitability of the proposed design, with respect to the location of Wallum Sedge Frog habitat, to ensure that impacts are minimised and the required set back or physical separation is achieved.</p> <p>During construction, all water released from sediment basins has met the nominated water quality criteria prior to discharge up to and including the design rainfall event. Monitoring results are provided in the Construction Contractors' Monthly Environment Reports.</p>
	PCEMP - WSF 3	The buffer is to be planted with semi-erect semi-aquatic emergent vegetation consistent with species common in existing habitats on site.	Not Applicable	<p>All active precincts</p> <p>Rehabilitation works in the Frog Zone and Frog Buffer are being progressively undertaken as part of implementation of the Environmental Rehabilitation Plans.</p>
	PCEMP - WSF 4	All stormwater runoff from the development and discharge from the WSUD systems up to 5 year ARI event will be directed around created and retained WSF breeding ponds (to maintain pH, ensure habitat stability and limit introduction of competitor/predatory species).	Compliant	<p>All active precincts</p> <p>Stormwater management across the site has been designed to direct discharge from WSUD around created and retained WSF breeding ponds for all rainfall events up to and including the 5-year ARI event. This requirement is included in the Aura Development Stormwater Management Plan and shown on design drawings.</p>

	PCEMP - WSF 5	Maintaining natural groundwater hydroperiod and other water chemistry aspects (particularly pH and tannin levels) of retained habitat areas.	Compliant	All active precincts Monitoring of hydroperiod and water chemistry of a representative sample of retained habitat areas across Aura has been conducted in accordance with the requirements of the WSFMP. Results of monitoring of retained habitat is provided in Table A 5, WSF-26.
	PCEMP - WSF 6	Maintaining and enhance vegetation communities within retained habitat areas through weed management.	Compliant	All active precincts Retained habitat areas are maintained in accordance with the Environmental Rehabilitation Plan, which includes weed management requirements.
	PCEMP - WSF 7	Deter inappropriate recreational activities in retained frog habitat through signage, vegetation planting and physical barriers.	Compliant	All active precincts Security fencing is installed around construction areas to prevent public access. Within active construction areas, protected vegetation and conservation areas are demarcated with flagging tape and “no go” signage to prevent unauthorised access.
	PCEMP - WSF 8	Adjacent earthworks (i.e. filling works, clearing of vegetation etc.) to be undertaken to avoid impacts on retained habitat.	Compliant	All active precincts As reported in the Superintendents’ Monthly Progress Reports and Construction Contractors’ Monthly Environment Reports, all protected vegetation and conservation areas were demarcated with flagging tape and “no go” signage prior to commencement of clearing.
	PCEMP - WSF 9	Taking practical measures to reduce lighting in proximity to areas of retained Wallum Sedge Frog habitat where possible.	Compliant	All active precincts During construction, light exposure near retained Wallum Sedge Frog habitat is minimal. There is generally no construction works on site after 6 pm and site compounds are not located in close proximity to retained habitat.

	PCEMP - WSF 10	Until the off-maintenance period, monitoring will be undertaken in accordance with the WSFMP.	Compliant	<p>All active precincts</p> <p>On Maintenance monitoring of existing and created Wallum Sedge Frog habitat has been undertaken in accordance with the requirements of the WSFMP. Refer to Appendix A, Table A 5, Item WSF-26 for monitoring results.</p>
	PCEMP - WSF 11	<p>If clearing occurs outside the delineated, approved areas, cease all work in the area affected and advise the Superintendent (and regulatory agencies if protected communities/species).</p> <p>Instigate rehabilitation efforts immediately at any area accidentally cleared in accordance with directions from the Superintendent.</p> <p>Specific corrective actions associated with the retained Wallum Sedge Frog breeding habitat are to be implemented in accordance the requirements of the WSFMP.</p>	Compliant	<p>All active precincts</p> <p>As reported in the Superintendents' Monthly Progress Reports and Construction Contractors' Monthly Environment Reports, the clearing area was surveyed, and all protected vegetation and conservation areas were demarcated with flagging tape and "no go" signage prior to commencement of clearing. There are no known instances of unplanned clearing in conservation areas.</p>
	PCEMP - WSF 12	Annual reporting will be undertaken of all monitoring activities for Wallum Sedge Frog.	Compliant	<p>All active precincts</p> <p>Annual reporting has been undertaken as set out in the WSFMP. Refer to Appendix A, Table A 5, Item WSF-26 for a summary of monitoring undertaken and key findings.</p>
Vegetation Management	PCEMP - VM 1	The area of EPZ to be conserved and rehabilitated must not be adversely affected by the works as identified on construction plans, marked and protected through the use of barrier fencing protection.	Compliant	<p>All active precincts</p> <p>As reported in the Superintendent's Monthly Progress Reports and Construction Contractors' Monthly Environment Reports, all protected vegetation and conservation areas (including the Environmental Protection Zone) are demarcated with flagging tape and "no go" signage. No unauthorised clearing has</p>

				occurred within the EPZ. There are no known instances of unplanned clearing in conservation areas.
	PCEMP - VM 2	Activities such as storage of materials, parking, liquid disposal, refuelling activities, construction site office or shed, combustion, stockpiling of soil, any filling or excavation activity (unless approved by the Construction Superintendent or Proponent) and use of unauthorised chemicals will be prohibited within the EPZ.	Compliant	<p>All active precincts</p> <p>As reported in the Superintendent's Monthly Progress Reports and Construction Contractors' Monthly Environment Reports, all protected vegetation and conservation areas (including the Environmental Protection Zone) are demarcated with flagging tape and "no go" signage. No prohibited activities have occurred within the Environmental Protection Zone.</p>
	PCEMP - VM 3	Retained trees shall not have their crown removed. The contractor is to take all reasonable care to ensure that no branches and trunks are damaged during the construction.	Compliant	<p>All active precincts</p> <p>This requirement is noted in the Construction Contractor's CEMPs. There have been no instances recorded of vegetation removal contrary to these requirements.</p>
	PCEMP - VM 4	All staff involved in construction are made aware of the defined significant and protected vegetation areas including all personnel engaged in preconstruction works.	Compliant	<p>All active precincts</p> <p>All persons working on site are required to attend the Construction Contractor's Project Induction, which includes information on the location and importance of conservation areas on site. The Construction Contractors' Monthly Environment Reports note that regular toolbox meetings are also held on environment matters, including the extent and significance of protected vegetation areas on site.</p>
	PCEMP - VM 5	All tree roots that are damaged during excavations and related activities are to be saw cut to a clean surface and are to be treated with a fungicidal solution prior to backfilling or within 24 hours of the damage to the root occurring.	Compliant	<p>All active precincts</p> <p>The Construction Contractors' CEMPs adopt this requirement and there are no instances reported that are contrary to these requirements.</p>
	PCEMP -	All construction traffic will be confined to designated access roadways to prevent soil	Compliant	<p>All active precincts</p>

	VM 6	compaction. No heavy machinery is to be driven under canopies of significant vegetation nominated for retention.		The Construction Contractors' CEMPs adopt the specified haul road locations, and this has been implemented on site.
	PCEMP - VM 7	Livestock and the general public will be excluded from HMUs undergoing ecological enhancement, unless temporary crash grazing is being used to control exotic pasture grasses.	Compliant	All active precincts Fencing has been installed to exclude public access and cattle from HMUs undergoing ecological enhancement.
	PCEMP - VM 8	Rehabilitation within HMU's in the EPZ in Precinct will be implemented in accordance with an Environmental Rehabilitation Plan.	Compliant	All active precincts Rehabilitation works across in the EPZ are being progressively undertaken as part of the implementation of the Environmental Rehabilitation Plan.
	PCEMP - VM 9	Visual and photographic monitoring will be conducted to evaluate the effectiveness of the enhancement strategies within HMU's in the EPZ. Photo point records will be maintained every 6 months.	Compliant	All active precincts Bi-annual monitoring and annual reporting has been completed in accordance with the Environmental Rehabilitation Plan.
	PCEMP – VM 10	A permanent flora transect will be established to represent treatment types and target communities, undertaken annually and identified in precinct Environmental Rehabilitation Plans	Compliant	All active precincts Bi-annual monitoring and annual reporting has been completed in accordance with the Environmental Rehabilitation Plan.
	PCEMP - VM 11	Implement corrective actions if vegetation clearing occurs outside the delineated, approved areas: <ul style="list-style-type: none"> • Cease all work in the area affected and advise Superintendent (and regulatory agencies if protected vegetation). • Instigate rehabilitation efforts immediately at any area accidentally cleared in 	Not applicable	All active precincts There are no known instances of clearing outside the delineated approved areas, therefore corrective actions have not been triggered.

		<p>accordance with directions from the Superintendent.</p> <ul style="list-style-type: none"> • In relation to the success of rehabilitation works, an adaptive management approach will be taken and outlined in the Precincts associated with this CEMPs Environmental Rehabilitation Plan. • Whilst not expected on the basis of previous surveys (as discussed in Table 3-1), if any Listed Threatened MNES vegetation species are identified during construction, the contractor will adopt the following corrective actions: <ul style="list-style-type: none"> - Confirm the identity of the species found with the assistance of a qualified ecologist; and - If confirmed as a Listed Threatened Species, undertake transplanting of the plant(s) into an appropriate location in the Environmental Protection Zone where it will be protected. 		
	PCEMP - VM 12	<p>Any vegetation compliance issues must be incorporated into the regular environmental reporting required by the contractor to the Superintendent.</p> <p>A report will be produced annually for the duration of the ecological enhancement program (which may extend beyond the construction program for the rest of the development in Precincts associated with this CEMP.</p>	Compliant	<p>All active precincts</p> <p>This requirement is noted in the Construction Contractors' CEMPs. There have been no instances recorded of vegetation removal contrary to these requirements.</p> <p>Monitoring and reporting requirements for the ecological enhancement program are outlined in the WSFMP and Precinct Environmental Rehabilitation Plans. Reporting requirements under these plans have been implemented.</p>

Pest Management	PCEMP - P 1	The construction crew and visitors to site will not be permitted to bring domestic animals to the construction works site or in conservation areas of the project site.	Compliant	<p>All active precincts</p> <p>This commitment has been included in the Construction Contractor's CEMP. The Construction Contractors' Monthly Environment Reports confirm that there have been no incidents of domestic animals brought to site.</p>
	PCEMP - P 2	Putrescible waste are managed and transported off the site for disposal.	Compliant	<p>All active precincts</p> <p>This commitment has been included in the Construction Contractor's CEMP. Putrescible wastes are contained and disposed of in a lawful manner. The Construction Contractor maintains appropriate waste records.</p>
	PCEMP - P 3	Regular checking of the performance criteria will be undertaken by the contractor and the Superintendent.	Compliant	<p>All active precincts</p> <p>The Construction Contractor assesses achievement of the Pest Management Performance Criteria on a monthly basis and reports this to the Superintendent in the Monthly Environment Report.</p>
	PCEMP - P 4	Regular checking is required to identify if fish predators (in particular mosquito fish <i>Gambusia holbrooki</i>) are located within retained Wallum Sedge Frog breeding habitat.	Compliant	<p>All active precincts</p> <p>Monitoring of fish predators is conducted as part of presence/absence surveys for Wallum Sedge Frog, as set out in the WSFMP.</p>
	PCEMP - P 5	<p>The conservation areas and the retained WSF habitats will be inspected weekly by the contractor to identify any ground disturbance possibly caused by feral animals, including: dingo, wild dog, wild cat, fox, pig, black rat, brown hare, spotted turtle-dove, cane toad and eastern gambusia.</p> <p>If this is observed, this is to be reported directly to the Approval Holder's Environmental</p>	Compliant	<p>All active precincts</p> <p>Daily observations of pest flora and fauna are recorded within the Construction Contractors Daily Environmental Inspection Checklist.</p>

		Management Representative to enable investigations to be conducted in consultation with the Sunshine Coast Regional Council.		
	PCEMP - P 6	Maintain a record of any siting (including animal tracks) of any predatory exotic fauna (cats, foxes, dogs, pigs) including the date, time and location of the siting. Records are to be maintained in the weekly inspection checklist and made available to Stockland and SCRC on request.	Compliant	All active precincts Daily observations of pest flora and fauna are recorded within the Construction Contractors Daily Environmental Inspection Checklist.
	PCEMP - P 7	Corrective action in accordance with Section 5.6.5 is to be undertaken where non-compliance of the performance criteria is observed.	Not applicable	All active precincts As reported in the Construction Contractors' Monthly Environment Reports, weed management performance criteria have been achieved throughout the reporting period.
	PCEMP - P8	Any pest control measures implemented must be incorporated into the regular weekly/monthly environmental report required by the contractor to the Superintendent.	Compliant	All active precincts The Construction Contractor records details of pest control measures undertaken as part of the Monthly Environment Report.
Weed Management	PCEMP - W 1	Implement the following weed management measures: <ul style="list-style-type: none"> • Treatment of existing weeds within the construction site. • Limiting machinery access near retained vegetation, Wallum Sedge Frog retained habitat and the EPZ. • Wash-down facilities are provided on site. 	Compliant	All active precincts The following weed management measures have been implemented: The Construction Contractor undertakes regular inspections and removal of weeds from within the construction site. Machinery is not permitted to enter conservation areas, unless instructed by the Superintendent and in accordance with the EPBC Conditions of Approval. All fill material has been sourced from within the site.

		<ul style="list-style-type: none"> • Certification of the origin of construction material is required to manage the importation of weed species onto site. <p>Mechanical removal (by hand or machine) will be required for the removal of larger plants such as pine and lantana. In the area of Wallum Sedge Frog habitat within the EPZ, chemical spot spraying will be unsuitable, and mechanical or hand removal of pasture grasses will be required.</p>		
	PCEMP - W 2	Edge planting is to be undertaken to prevent weed species from penetrating high conservation areas which in the associated precincts is the EPZ and retained Wallum Sedge Frog habitat contained within. These areas of edge planting are to be at least 5 metres in width.	Not applicable	<p>All active precincts</p> <p>Landscape design includes dense edge planting with native and endemic species to minimise invasion of weed species.</p>
	PCEMP - W 3	Green waste handling, stockpiling and disposal procedures will be developed and implemented on the site.	Compliant	<p>All active precincts</p> <p>No Green Waste has been generated. All topsoil and mulched material have been re-used onsite.</p>
	PCEMP - W 4	Plant material will be removed from site in a manner which reduces disturbance and is to be disposed of at an approved green waste disposal facility or mulched on-site for landscaping purposes.	Compliant	<p>All active precincts</p> <p>No Green Waste has been generated. All topsoil and mulched material have been re-used onsite.</p>
	PCEMP - W 5	Machinery used for earth-moving and vegetation-clearing will be cleaned and inspected prior to the commencement of work to	Compliant	<p>All active precincts</p> <p>The Construction Contractor requires a Vehicle Inspection Checklist Form to be provided for all machinery that enters the site.</p>

		identify any attached material that needs to be removed to avoid the spread of weeds.		
	PCEMP - W 6	Control <i>Baccharis halimifolia</i> and <i>Pinus elliottii</i> in conservation areas.	Compliant	All active precincts Weed management within conservation areas is undertaken in accordance with the Environmental Management and Rehabilitation Plan.
	PCEMP - W 7	During rehabilitation within each HMU in the EPZ, measures will be required in place to prevent the spread of weed seeds and diseases such as Phytophthora, Myrtle Rust and Chytrid fungus.	Not Applicable	Precinct specific rehabilitation works are detailed in the Environmental Rehabilitation Plans, which are reflected in landscape drawings and specifications.
	PCEMP - W 8	Any requirements for fire management within HMU's listed in section 5.5 will be outlined in detail in the Environmental Rehabilitation Plan for this area.	Compliant	Precinct specific rehabilitation works are detailed in the Environmental Rehabilitation Plans, which are reflected in landscape drawings and specifications.
	PCEMP - W 9	The contractor will conduct weekly visual inspections to identify infestations of restricted invasive plants within the construction area and vehicle site access points. Monitoring of weed infestations within conservation areas will be undertaken in accordance with the Environmental Rehabilitation Plan.	Complaint	All active precincts Regular weed monitoring and removal is undertaken throughout the construction area and is reported in the Construction Contractors' Monthly Environmental Reports.
	PCEMP - W 10	Corrective action is to be undertaken where non-compliance of the performance criteria is observed.	Compliant	All active precincts As reported in the Construction Contractors' Monthly Environment Reports, weed management performance criteria have been achieved throughout the reporting period.

	PCEMP - W 11	If clearing occurs outside the delineated, approved areas, cease all work in the area affected and advise Superintendent and relevant regulatory agencies. Instigate rehabilitation efforts immediately at any area accidentally cleared in accordance with directions from the Superintendent.	Compliant	All active precincts As reported in the Construction Contractors' Monthly Environment Report, weed management performance criteria have been achieved throughout the reporting period.
	PCEMP - W 12	For retained or rehabilitated habitat, undertake corrective actions as outlined in the Vegetation Management Plan or the detailed Environmental Rehabilitation Plan relevant to that area.	Compliant	All active precincts As reported in the Construction Contractors' Monthly Environment Report, weed management performance criteria have been achieved throughout the reporting period.
	PCEMP - W 13	Any weed control measures implemented and non-compliance must be incorporated into the regular environmental reporting required by the contractor to the Superintendent.	Compliant	All active precincts Weed management measures and compliance with the performance criteria are reported in the Construction Contractors' Monthly Environment Report.
Auditing, Reporting and Revisions	PCEMP - A 1	Biannual systems audit of PCEMP to review environmental issues onsite and the effectiveness of these systems in managing these. The audit will consist of a document review or desktop audit conducted in conjunction with a technical or operational audit.	Compliant	All active precincts The Superintendent conducts an audit of the PCEMP on a monthly basis. This includes a desktop assessment of records and an on-ground inspection. A monthly audit report is prepared outlining the findings of the assessment.
	PCEMP - A 2	Annual systems audit of PCEMP to assess the current compliance status of the site against the EPBC Act Conditions of Approval and requirements of Approved plans and documents.	Compliant	All active precincts An audit of the PCEMP has been undertaken by SMEC and the findings documented in this table of the ACR.
	PCEMP -	Audits will to be entered into an audit schedule. The minimum content of the schedule is to be;	Compliant	All active precincts

	A 3	<ul style="list-style-type: none"> Type of audit i.e.: Sediment Control Audit. Date of audit, start and completion times. The personnel involved in the audit. Audit Scope – predetermined prior to audit date. Audit findings. Audit Recommendations. Corrective and Preventative Action. Audit Review. 		An Audit schedule has been developed and is maintained.
	PCEMP - A 4	A weekly assessment of onsite environmental activities and controls in accordance with the PCEMP	Compliant	<p>All active precincts</p> <p>The Construction Contractor conducts a weekly audit of onsite environmental activities. These are included within the Construction Contractors' Monthly Environment Reports.</p>
	PCEMP - A 5	A monthly compilation of weekly monitoring activities to be compiled and submitted to the Construction Superintendent.	Compliant	<p>All active precincts</p> <p>The Construction Contractor conducts a weekly audit of onsite environmental activities. These are included within the Construction Contractors' Monthly Environment Reports that are submitted to the Construction Superintendent.</p>
	PCEMP - A6	<p>This PCEMP will be reviewed on an annual basis, or as the need for review is identified.</p> <p>The review will be scheduled by the Approval Holder's Environmental Management Representative, and be inclusive of the Principal Contractor, Construction Superintendent and other interested parties and stakeholders.</p>	Compliant	<p>All active precincts</p> <p>The PCEMP was updated in 2022.</p> <p>Stockland submitted the most recent independent audit to DotEE on 20 October 2021. No non-compliance items were found during the audit process. There were no updates required to the PCEMP from the audit.</p>

		<p>All personnel involved with the Environmental Management of the Project are required to attend the review.</p> <p>The Proponent will assess the results of this review and make amendments to this PCEMP as required.</p>		
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Water Quality Management Plan

The Water Quality Management Plan (WQMP) outlines the management and monitoring requirements for surface water and groundwater on and adjacent to the Aura site. The WQMP identifies measurable performance indicators and goals. It sets monitoring and reporting periods and methods for sampling and data collection. It includes methods for detecting relevant changes in surface water and groundwater and identifies corrective actions to be implemented. This ACR reports on compliance with Revision 5 of the WQMP dated September 2020.

Table A 4: Compliance Assessment of the Water Quality Management Plan (Revision 5, September 2020)

WQMP Section	Id.	Condition	Is the Project Compliant with this Condition	Evidence/Comments
Section 2.1.2	WQMP-1	<p>Monthly monitoring of ambient water quality is to occur at nine locations within the site, four each respectively on Bells Creek North, three on Bells Creek South and two on Lamerough Creek.</p> <p>Commence monitoring in the respective waterways a minimum of six months ahead of any development works occurring within local catchments and must encompass wet and dry conditions. Monitoring will continue for a minimum of 12 months after all development work has been completed within the respective catchments, or sooner if deemed appropriate by the relevant nominated assessing authority.</p> <p>Analyse samples for water the parameters listed in Section 2.1.2.</p> <p>Prior to the cessation of monitoring in a catchment, certification will be provided to DAWE by a suitably qualified professional demonstrating that water quality has stabilised in the catchment.</p> <p>Following the provision of the certification, catchment monitoring may cease.</p>	Compliant	<p>Monthly ambient surface water monitoring commenced at two locations on Lamerough Creek and at three locations in Bells Creek North in February 2014. Construction in the Lamerough Creek catchment commenced in January 2015 and construction in the Bells Creek North catchment commenced in March 2016. Monitoring commenced at three locations at Bells Creek South in July 2017. Construction commenced in the Bells Creek South catchment in May 2018.</p> <p>The duration of pre-construction monitoring undertaken exceeds the required minimum six-month requirement. All parameters outlined in Section 2.1.2 were sampled monthly.</p> <p>Water quality monitoring was completed in the Lamerough Creek, Bells Creek South and Bells Creek North catchments for the duration of the 2022/2023 annual compliance reporting period.</p>

<p>Section 2.1.3</p>	<p>WQMP-2</p>	<p>Event based water quality samplers to be installed on Bells Creek North and South at the upper and lower boundaries of the Caloundra South site a minimum of six months prior to any development works occurring within the catchments. This six- months period will encompass a suitable range of wet and dry weather conditions, with special emphasis on wet conditions when any potential impacts from the site will be most noticeable.</p> <p>All of the above samples will be analysed for the following parameters:</p> <ul style="list-style-type: none"> • Flow • Total Suspended Solids; • Total Nitrogen; and • Total Phosphorus. 	<p>Compliant</p>	<p>Event based water quality samplers were installed at locations on Bells Creek North in March 2014 and in Bells Creek South in June 2017 at the upper and lower boundaries of the Aura site. Monitoring in the respective waterways was commenced six months ahead of any development works occurring within local catchments (encompassing wet and dry conditions).</p> <p>A range of weather events were recorded during the required monitoring period and the parameters listed in Section 2.1.3 were logged. This obligation was deemed to be complete and has been undertaken in full in accordance with the requirement of the approved plan.</p>
<p>Section 2.1.3</p>	<p>WQMP-3</p>	<p>At each of the monitoring sites listed above (WQMP-2), additional event based water quality samplers are to be deployed midway along Bells Creek North and South before substantial urban land development works are to commence in the areas upstream of these locations.</p> <p>These samplers will be triggered by flows in either of the creeks, and will collect composited, flow proportional samples from significant runoff events. Analyse samples for the following parameters:</p> <ul style="list-style-type: none"> • Flow • Total Suspended Solids • Total Nitrogen 	<p>Compliant</p>	<p>An additional monitoring station was deployed midway along Bells Creek North in July 2016 six (6) months before substantial urban land development works commenced in the areas upstream of this location.</p> <p>All samples have been analysed for the parameters listed in Section 2.1.3 of the WQMP.</p>

		<ul style="list-style-type: none"> Total Phosphorus 		
Section 2.1.4	WQMP-4	<p>Establishment and continuation of Ecosystem Health Monitoring Program (EHMP) for two sites within Bells Creek downstream of the development</p>	Compliant	<p>Since October 2013, Healthy Land and Water have monitored ambient water quality at two locations within Bells Creek downstream of the development. This monitoring is undertaken as part of the Ecosystem Health Monitoring Program (EHMP), which is a multi-agency funded (led by the Queensland Government) regional environmental monitoring program. Data collected from monitoring is provided to Stockland for assessment purposes and is reported by Healthy Land and Water through the Healthy Waterways Report Card.</p>
Section 2.1.5	WQMP-5	<p>Establish real time turbidity monitoring stations to be established at the following locations a minimum of 6 months before development starts in a catchment:</p> <ul style="list-style-type: none"> Bells Creek North and South at the lower boundary of the site Bells Creek North and South at the upper boundary of the site; and The downstream extent of the development footprint within the Lamerough Creek Catchment. 	Compliant	<p>Three real time turbidity monitoring stations were installed in February 2014, two on Bells Creek North (upstream and downstream), two on Bells Creek South (upstream and downstream) and one on Lamerough Creek (downstream). Construction in the Lamerough Creek catchment commenced in January 2015 and construction in Bells Creek North commenced in March 2016.</p> <p>Turbidity monitoring in the respective waterways commenced a minimum of six months ahead of development works occurring within each catchment and will continue for a minimum of twelve months after the completion of development works within the respective catchments. This is outlined in Section 2.1.5 of the WQMP.</p> <p>Real time turbidity monitoring continued in the Lamerough Creek catchment until February 2023, 15 months following completion of development works in November 2021. Monitoring is ongoing in Bells Creek South and Bells Creek North.</p>
Section 2.1.6	WQMP-6	<p>Two load-based monitoring sites will be established within the ultimate development footprint. Data will be collected for a two-year period to quantify the quality</p>	Compliant	<p>Two load-based monitoring sites were established in the Bells Creek Catchment in January 2016 and were decommissioned in June 2018.</p>

		of run-off from the site, commencing within one year of construction starting elsewhere on the site.		
Section 2.1.6	WQMP-7	At each of the two load-based monitoring sites listed above (WQMP-6), an event-based stormwater sampler is to be installed and stormwater flow and quality data collected from at least 20 representative storms over a two-year period. Samples collected will be composited and event mean concentrations for each storm event derived.	Compliant	Two load-based monitoring sites were established in the Bells Creek Catchment in January 2016 and were decommissioned in June 2018. During this period, samples were collected from twenty storm events and were analysed for the parameters listed in Section 2.1.6 of the WQMP.
Section 2.1.7	WQMP-8	<p>Construction stage water quality - the following surface water monitoring regime is to be integrated into each Precinct CEMPs:</p> <ul style="list-style-type: none"> Regular (daily and after major rain events of greater than 25 mm in 24 hour) site inspections of all erosion and sediment control measures. Regular (daily and after major rain events of greater than 25 mm in 24 hour) inspections of areas surrounding construction site to detect and manage any occurrence of sediment deposition off-site. Rainfall will be recorded at 9 am each working day from an installed rain gauge. All construction activities will be monitored daily for compliance with erosion and sediment control measures. Within sediment basins, turbidity, pH and dissolved oxygen will be measured prior to discharge. 	Compliant	Surface water monitoring requirements have been incorporated into Section 5.1.4 of the PCEMP.
Section 2.2.3	WQMP-9	Groundwater Pre-construction Baseline Monitoring:	Compliant	Baseline groundwater monitoring has been completed in accordance with the requirements of the approved revision of

		Pre-construction baseline groundwater monitoring will be carried out for at least ten (10) rounds over at least a 12-month period at all bores within the catchment where practicable for both groundwater level and chemistry. Analyse samples for the parameters listed in Section 2.2.3.		<p>the Water Quality Management Plan in effect at the time of sampling. All sampled were tested for the field and analytical parameters listed in Section 5.2.2 of the WQMP.</p> <p>Surveillance baseline monitoring of bores in the Lamerough Creek catchment was conducted in September 2014 and active construction commenced in January 2015. Surveillance baseline monitoring of bores in the Bells Creek north catchment commenced in October 2015 and continued until active construction commenced in March 2016. Surveillance baseline monitoring of bores in the Bells Creek south catchment commenced in March 2016 and was completed in April 2017. Construction commenced in the Bells Creek South catchment in May 2018.</p>
Section 2.2.4	WQMP-10	<p>Groundwater Construction Phase Monthly Monitoring:</p> <p>Those bores within catchments where there are construction activities occurring and which are in close proximity (i.e. within 500m) to areas of active construction works will be sampled on a monthly basis.</p> <p>Analyse samples for the parameters listed in Section 2.2.4.</p>	Compliant	<p>Monthly monitoring was undertaken for all Control bores and Sentinel Bores and Construction bores within 500 m of construction works. All samples have been analysed for the parameters listed in Section 2.2.4 of the Water Quality Management Plan.</p> <p>Groundwater monitoring continued in the Lamerough Creek catchment until February 2023, 15 months following completion of development works in November 2021. Monitoring is ongoing in Bells Creek South and Bells Creek North catchments.</p>
Section 2.2.5	WQMP-11	<p>Groundwater Construction Phase Biannual Monitoring:</p> <p>All bores within the site will be sampled on a biannual basis, up to and for 12 months after active development works are completed in respective catchments. Analyse samples for the parameters listed in Section 2.2.5.</p>	Compliant	<p>Biannual groundwater monitoring of all bores within the site (WQMP, Figure 2-2) was undertaken in March and October 2022 (this excluded where bores were dry). All samples were analysed for the parameters listed in Section 2.2.5 of the Water Quality Management Plan.</p>

<p>Section 3.1.2</p>	<p>WQMP-12</p>	<p>Construction stage water quality:</p> <ul style="list-style-type: none"> All discharge from site sedimentation basins as per performance criteria included in precinct CEMPs. During periods of flow in Bells Creek North or South and for any such flow events up to and including the *design rainfall event (as specified below), discharge turbidity offsite (as measured by the downstream automated turbidity monitor) to be no greater than 10% above background with background being the quality of water entering the site via the culverts where Bells Creek North and South pass under the Bruce Highway. <p>*Design rainfall event is defined as –</p> <p>For traditional sediment basins, the design rainfall event is 77 mm over a 5 day period.</p> <p>For high efficiency sediment basins, rainfall intensity and inflow duration govern the time available for suspended sediment to settle in the basin. The design rainfall event for these basins is 0.5 time the peak 1 year ARI discharge.</p>	<p>Compliant</p>	<p>Prior to the dewatering of sediment basins, all captured runoff was treated to meet the nominated water quality performance criteria for all rain events up to and including the design rainfall event. Sediment basin water quality monitoring results are provided in the Construction Contractors’ Monthly Environment Reports.</p> <p>Turbidity at the downstream Bells Creek North and Bells Creek South sites remained within permitted limits of no more than 10% above the upstream site at most times during the reporting period. Investigations/surveillance assessments were triggered for exceedances at the downstream site and results showed there were no construction related impacts for events up to and including the design rainfall event.</p> <p>Result of turbidity monitoring in Bells Creek North and Bells Creek South are compiled within the Annual Water Quality Monitoring Report.</p>
<p>Section 3.1.3</p>	<p>WQMP-13</p>	<p>Operational stage water quality – Assess receiving water quality in Pumicestone Passage and Bells Creek using the methods described in Section 4.1.2</p>	<p>Compliant</p>	<p>Downstream Pumicestone Passage and Bells Creek ambient operational water quality monitoring was completed in accordance with Section 2 of the WQMP. The results showed that there were no detectable construction or operational impacts on water quality.</p> <p>Results of water quality monitoring in Bells Creek North and Bells Creek South are compiled within the Annual Water Quality Monitoring Report.</p>

Section 3.2	WQMP - 14	Groundwater – Assess groundwater quality and levels using the methods described in Section 4.1.3	Compliant	<p>Groundwater monitoring was completed in accordance with Section 2 of the WQMP. Investigations/surveillance assessments were triggered for exceedances of the baseline percentile, however results showed there were no detectable construction or operational impacts on groundwater. Monitoring results are compiled within the Annual Water Quality Monitoring Report.</p> <p>Groundwater monitoring continued in the Lamerough Creek catchment until February 2023, 15 months following completion of development works in November 2021. Monitoring is ongoing in Bells Creek South and Bells Creek North catchments.</p>
Section 5.1	WQMP-15	Where trigger values/performance criteria in Section 3 are exceeded, implement further investigations as per Table 5-1.	Compliant	Where required, further investigation of water quality monitoring results has been undertaken to identify the source of outliers in data. Outcomes of further investigations found no evidence of construction or operational impacts, up to and including the design rainfall events.
Section 5.2	WQMP-16	If further investigations as outlined in Section 5.1 indicate that construction activities or operation of the site have contributed to water quality impacts, corrective actions will be implemented as per Table 5-2	Compliant	During the reporting period, there have been no exceedances of water quality performance criteria as a result of construction activities, up to and including the design rainfall events.

Wallum Sedge Frog Management Plan

The WSFMP provides the overarching strategy to mitigate impacts of the development on the Wallum Sedge Frog and protect and create Wallum Sedge Frog habitat and movement opportunities throughout Aura. The overarching strategy of the WSFMP is built upon through development of a detailed mitigation strategy that documents how Wallum Sedge Frog habitat will be conserved and re-created. This ACR will report on progress made in implementing the commitments made in the WSFMP, including an update on the results of monitoring of existing and re-created habitat across the site. The ACR will report on Revision G of the plan, dated May 2020.

Table A 5: Compliance Assessment of the Wallum Sedge Frog Management Plan (Revision G, May 2020)

Section	Id.	Condition	Is the Project Compliant with this Condition	Evidence/Comments
Section 3.2	WSF-1	Establish frog habitat conservation areas and land use zones. Activities (i.e. pedestrian paths, boardwalk etc.) must be compatible with conservation and other zones as outlined in Table 2.4 of the WSFMP.	Compliant	Frog habitat conservation areas are shown on the Caloundra South Master Plan, as approved by Economic Development Queensland, the State Government agency charged with planning responsibility for the site. They are also shown on Map 2.2d (Appendix B). Prior to any works within the Frog Zone or Frog Buffer, a senior ecologist reviews the design drawings and conducts a site inspection to confirm that the design meets the requirements of the WSFMP and impacts to Wallum Sedge Frog are avoided or minimised.
Section 3.5	WSF-2	<p>Implement the following location specific management and mitigation commitments for Wallum Sedge Frog into the development, as detailed in Table 3.5b of the WSFMP.</p> <p>Northern development zone commitments include:</p> <p>Partial retention and protection of habitat patch 45</p> <p>Inclusion of frog friendly underpasses / crossings across existing sedge habitats associated with habitat patch 44.</p>	Compliant	<p>Northern Development Zone</p> <p>As shown on Map 2.2d (Appendix B), the design will partially retain habitat patches 45 and 44.</p> <p>The Aura Boulevard bridge over Lamerough Creek includes a dedicated frog crossing on the southern approach as well as a movement corridor underneath the bridge. The dedicated frog crossing has been designed in accordance with the specifications outlined in Table 3.5a of the WSFMP. The crossing consists of a 3000 X 1500 mm reinforced concrete box culvert, which exceeds the minimum height requirements (i.e. 900mm) outlined in the WSFMP, and Queensland Government fauna sensitive road guidelines (TMR, 2010).</p>

		<p>Wallum Sedge Frog fauna friendly crossings and frog movement barriers at Bellvista Boulevard.</p> <p>Central development zone commitments include:</p> <p>Partial retention of habitat patches 36 and 39 where not impacted by the developable footprint, and complete retention of patch 71.</p> <p>Retention of possible drought refugia in habitat patch 36.</p> <p>Frog friendly creek structures and frog movement barriers, and an additional frog dedicated underpass at each of the three road crossing the realigned Bells Creek north movement corridor.</p> <p>Southern development zone commitments include:</p> <p>Retention of habitat patches 75, 76 and 78 in their entirety.</p> <p>Partial retention of habitat patches 79, 72, 3 and 1.</p> <p>Retention of likely drought refugia within habitat patches 91, 76, 75, 72 and 3.</p> <p>Frog friendly creek crossing structures and movement barriers, and an additional frog dedicated underpass at the four road crossings over the Bells Creek South corridor.</p>		<p>The culvert design includes a natural floor and grasses and sedge planted at the mouth of the culvert. The area of the frog movement corridor underneath the bridge has been maximised by setting the bridge abutments high on the bank and is protected from all rainfall events up to and including the five-year ARI event. The movement corridor has been revegetated using sedges and grasses and two Wallum Sedge Frog breeding ponds have been constructed at both sides of the culvert to encourage movement.</p> <p>Construction of the Aura Boulevard Bridge over Lamerough Creek commenced in November 2015, with practical completion reached in November 2016.</p> <p>Central Development Zone</p> <p>As shown on Map 2.2d (Appendix B), the design will retain habitat patches 36, 39 and 71, where not impacted by the development footprint.</p> <p>Construction of the Aura Boulevard bridge over Bells Creek North commenced in January 2018, with practical completion reached in August 2019. The design includes a dedicated frog crossing on the southern approach as well as a movement corridor underneath the bridge. The dedicated frog crossing has been designed in accordance with the specifications outlined in Table 3.5a of the WSFMP. The crossing consists of a 1200 X 2400 mm reinforced concrete box culvert, which exceeds the minimum height requirements (i.e. 900 mm) outlined in the WSFMP, and Queensland Government fauna sensitive road guidelines (TMR, 2010). The culvert design includes a natural floor and grasses and sedges planted at the mouth of the culvert.</p> <p>The area of the frog movement corridor underneath the bridge has been maximised by setting the bridge abutments high on the bank. The area will be revegetated using sedges and grasses.</p>
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				<p>Southern Development Zones</p> <p>As per Box 1 within the WSFMP, the design will retain habitat patches 75, 76 and 78 and partially retain habitat patches 79, 72, 3 and 1.</p> <p>Based on the survey results from the most recent Phase 1 preconstruction surveys completed in 8-14 February 2021, the extent of habitat polygon 79, 75 and 72 has been significantly reduced and habitat polygon 91 no longer represents frog habitat. These results reflect the increased understanding of Wallum Sedge Frog habitat across the pre-developed sections of the site. No development has occurred within or adjacent to these habitat polygons.</p> <p>Consideration was given to the inclusion of frog culverts at Bells Creek north and south however the expansive bridge openings were considered sufficient to enable frog movement. Frog fencing have been included at key locations along the alignment to facilitate safe passage under the bridge.</p>
Section 3.6	WSF-3	During construction exclusion fencing will be established around the frog buffer and habitat areas.	Compliant	The PCEMP includes the requirement for exclusion fencing to be installed around the frog buffer and frog zone. Flagging tape, physical barriers and "No Go" signage was installed around the frog zone and frog buffer prior to commencement of works in each Precinct. The daily construction checklist includes a requirement to check that all works are occurring within the designated works area.
Section 3.6	WSF-4	Temporary stormwater treatment devices will be designed so as to avoid directing run off into or across areas of identified (breeding) habitat.	Compliant	Construction related stormwater has been managed in accordance with the approved ESC plans, which requires that discharge from sediment basins is directed away from created and retained wallum sedge frog ponds for all rainfall events up to and including the design rainfall event. Prior to commencement of works, a senior ecologist reviews the ESC

				plans and conducts a site inspection to check the suitability of proposed discharge locations.
Section 3.6	WSF-5	Construction of some ponds particularly along Bells Creek North should proceed ahead of the development front to maintain continuity of habitat connectivity.	Compliant	<p>Wallum Sedge Frog breeding ponds have been created in advance of construction of the development. In Precinct 2, Wallum Sedge Frog breeding ponds were created in June 2015 in the Frog Zone, providing Wallum Sedge Frog movement along Lamerough Creek. In Precincts 4 and 5, nine Wallum Sedge Frog breeding ponds were created along the northern bank of Bells Creek North in November 2016. In Precinct 7-12, Wallum Sedge Frog ponds were completed in January 2018 and April 2019 in the Frog Zone on the southern bank of Bells Creek North.</p> <p>Wallum Sedge Frog ponds were completed along the northern bank of Bells Creek South in October 2020 and along the southern bank of Bells Creek South in January 2021. These works now complete the construction of ponds along this corridor and within the development.</p>
Section 3.6	WSF-6	During construction, only appropriately trained personnel should undertake the removal of native fauna. A licensed spotter and catcher must be on-call for the duration of bulk earthworks and clearing activities and will conduct a visual inspection of the site for animals immediately prior to and during vegetation clearance works.	Compliant	<p>This commitment has been included in the PCEMP and was implemented. The appropriately licensed fauna spotter-catcher/s supervised all clearing activities and was available on-call for the duration of bulk earthworks.</p> <p>During clearing activities, the licensed fauna spotter-catcher/s:</p> <ul style="list-style-type: none"> • Identified the presence of any fauna or associated habitat / breeding places • Managed the relocation of any displaced fauna to appropriate retained habitat or appropriately licensed wildlife facilities as necessary • Managed the relocation of habitat features when appropriate

				<ul style="list-style-type: none"> Documented all incidences of disturbance / destruction of animal breeding places and interference with wildlife.
Section 3.6	WSF-7	During construction, in stream works should be completed as quickly as possible to minimise disturbance to aquatic species	Compliant	This commitment has been included in PCEMP. Construction activities have been programmed to minimise the duration of in-stream works. Pre-fabricated deck units were used during construction to minimise the duration of works in Lamerough Creek, Bells Creek North and Bells Creek South.
Section 3.6	WSF-8	During construction, fauna fencing and wildlife structures installed during construction and maintained during the operational stage should be designed to minimise harbourage and roosting opportunities for pest species.	Compliant	All fauna fencing and structures have been designed to minimise harbourage and roosting opportunities for pest species.
Section 3.6	WSF-9	Induction training for wildlife management for contractor staff and other personnel that enter the construction site.	Compliant	All contractor staff and other personnel that enter the construction site attend induction training which includes fauna awareness and management.
Section 3.6	WSF-10	A licensed spotter and catcher will be on-call for the duration of bulk earthworks and clearing activities and a visual inspection of the site for animals will occur immediately prior to and during vegetation clearance works.	Compliant	A pre and post clearance survey report is included within relevant Construction Contractors' Monthly Reports.
Section 3.6	WSF-11	Construction crew will not be permitted to bring domestic animals to the project area.	Compliant	This requirement has been included in the Construction Contractors' CEMPs. As documented in the Construction Contractors' Monthly Reports, there has been no evidence of domestic animals being brought to site.
Section 3.6	WSF-12	Putrescible waste generated during construction will be stored in containers on site to restrict access by scavenger animals and will be transported off site for disposal.	Compliant	This commitment has been included in the Construction Contractors' CEMPs. Putrescible wastes are contained and regularly removed and disposed of at a registered waste facility.

Section 3.6	WSF-13	Fill material used in close proximity to retained habitats should have low clay content and be free of monomeric aluminium	Compliant	On ground investigations were undertaken in regard to soil conditions within the Frog Zone for the creation of Wallum Sedge Frog breeding ponds. Detailed Technical Specifications have been developed to guide construction of frog ponds in the Frog Zone and Frog Buffer.
Section 3.6	WSF-14	Construction and maintenance of temporary drains and or bunding diverting sediment-laden runoff away from areas of frog (breeding) habitat and construction and maintenance of silt traps/fencing upslope of creek lines and areas of frog habitat.	Compliant	Construction related stormwater has been managed in accordance with the approved ESC plans, which requires that discharge from sediment basins is directed away from created and retained wallum sedge frog ponds for all rainfall events up to and including the design rainfall event. Prior to commencement of works, a senior ecologist reviews the ESC plans and conducts a site inspection to check the suitability of proposed discharge locations.
Section 3.6	WSF-15	The temporary use of sterile sorghum to stabilise loose fill in proximity to areas of Wallum Sedge Frog habitat. Sorghum should be used as a temporary stabilising agent. Slower native vegetation should replace or be used in preference to sorghum where ongoing soil disturbance would not occur.	Compliant	Where possible, areas close to Wallum Sedge Frog habitat have been stabilised by re-spreading topsoil that was stripped from the area of disturbance and allowing natural regeneration of the seed bank present. Where this has not been possible, areas have been stabilised using a sterile grass seed appropriate to the growing season.
Section 3.7	WSF-16	Retention, or partial retention, of existing Wallum Sedge Frog habitats within and adjacent to movement corridors along Lamerough Creek, Bells Creek North and Bells Creek South in perpetuity.	Compliant	The Environmental Protection Plan outlines the legal mechanisms which will protect created and retained Wallum Sedge Frog habitat in perpetuity. The latest version of Map 2.2d (April 2023) showing areas of Wallum Sedge Frog habitat retained and created, is provided in Appendix B.
Section 3.7	WSF-17	Creation of artificial Wallum Sedge Frog habitat in areas above Q5 (where possible) in the Frog Zone (and not existing Wallum Sedge Frog habitat) with a maximum distance between breeding opportunities being less than 400 m.	Compliant	Wallum sedge frog ponds have been created in areas above Q5 where possible. Created frog ponds have been designed to be a maximum distance of 300 m from the nearest retained or constructed Wallum Sedge Frog pond, in accordance with the

				Habitat Connectivity success criteria contained in Table 4.2a of the WSFMP.
Section 3.7	WSF-18	Provision of frog buffers between retained and re-created Wallum Sedge Frog habitat and earthworks and other development-related threats (refer WSFMP, Figure 3.1).	Compliant	During construction 'no go' fencing or flagging and signage has been installed around the frog zone and frog buffer zone.
Section 3.7	WSF-19	Revegetation and rehabilitation of waterway movement corridors using flora species that will extend the extent of existing ecosystems and enhance habitat for Wallum Sedge Frog.	Compliant	Environmental Rehabilitation Plans have been prepared to further detail rehabilitation requirements in each Precinct. Refer to Table A 2 for further details on the status of Environmental Rehabilitation Plans.
Section 3.7	WSF-20	Installation of movement barriers (i.e. frog proof fencing to 'funnel' frog movement under bridge crossings and culvert underpasses.	Compliant	<p>Lamerough Creek</p> <p>At the Aura Boulevard bridge over Lamerough Creek, the high batters of the bridge embankments form an effective barrier to funnel frog movement under the bridge or through the dedicated frog culvert.</p> <p>Bells Creek North</p> <p>Construction of the Aura Boulevard bridge over Bells Creek North commenced in January 2018 and reached Practical Completion in August 2019. The design uses a combination of high batter embankments and frog fencing to funnel frog movement under the crossing. Frog fencing has been installed where the embankment has a slope of less than 1:2.</p> <p>Bells Creek South</p> <p>Construction of the Bells Creek Arterial bridges over Bells Creek south and north commenced in April 2021 and is expected to be complete in mid to late 2023.</p>

				<p>Consideration was given to the inclusion of frog culverts at Bells Creek north and south however the expansive bridge openings were considered sufficient to enable frog movement.</p> <p>Frog fencing has been included at key locations along the alignment to facilitate safe passage under the bridge.</p>
Section 3.7	WSF-21	Ongoing land management to support existing habitats in undeveloped portions of the site	Compliant	<p>Regular weed inspection occurs across the site and weed removal occurs in accordance with the Queensland Government Biosecurity Act 2014. The Queensland <i>Biosecurity Act 2014</i> commenced in July 2016, replacing the <i>Land Protection (Pest and Stock Route) Act 2002</i>, with generally consistent weed management obligations for landowners. Chopper rolling activities occur where required to maintain pine tree regrowth and support existing habitats in undeveloped portions of the site.</p>
Section 3.7	WSF-22	Periodic slashing and/or pruning of vegetation adjacent to frog barriers.	Compliant	<p>Regular weed inspection occurs across the site and weed removal occurs in accordance with the Queensland Government Biosecurity Act 2014. The Queensland <i>Biosecurity Act 2014</i> commenced in July 2016, replacing the <i>Land Protection (Pest and Stock Route) Act 2002</i>, with generally consistent weed management obligations for landowners. Chopper rolling activities occur where required to maintain pine tree regrowth and support existing habitats in undeveloped portions of the site.</p>
Section 3.7	WSF-23	Construction and maintenance of silt fencing, bunding and detention basins for containing and treating silt laden runoff, away from areas of sensitive frog habitat.	Compliant	<p>ESC plans have been prepared to direct discharge from sediment basins away from wallum frog breeding habitat for all rainfall events up to and including the design rainfall event. Prior to commencement of works, a senior ecologist reviews the ESC plan and conducts a site inspection to check the suitability of proposed discharge locations.</p>
Section 3.8	WSF-24	Stockland has committed (EPBC Act condition 8) to funding of \$0.5M over ten years for priority actions	Compliant	<p>Stockland have provided funding to the University of Queensland (UQ) since the 2015/2016 reporting period. UQ</p>

		<p>identified in the WSFMP. The priority actions are outlined in section 3.8 and include (i) studies identified in the national recovery plan for WSF and other studies (ii) impact of noise and light on Wallum Sedge Frog behaviour and breeding (iii) monitoring frog populations adjacent to the development.</p>		<p>have undertaken research which addresses priority action (i) – Studies identified in the national recovery plan for the WSF. A summary of the research outcomes and tasks completed to date are provided within Section 2.5.</p> <p>During the reporting period, Stockland’s efforts were focussed on finalising previous research findings and associated scientific publications and formulating a research program to commence in late 2023 and early 2024 during the WSF breeding period.</p>
Section 3.9	WSF-25	<p>Rehabilitation of Habitat Management Units (HMUs) including creating compensatory Wallum Sedge Frog habitat must commence within 5 years of commencement of civil (subdivision) works within a development stage or precinct that adjoins an HMU as outlined in Figure 3.9b.</p> <p>Rehabilitation of an HMU including creation of compensatory WSF habitat will be undertaken in accordance with relevant performance objectives and success criteria outlined in Section 4 of the WSMP).</p> <p>A minimum handover of 5ha is required for each stage of rehabilitation. It must also be completed five years prior to finalisation of the development (refer also to the EPP).</p> <p>Across the site, all rehabilitation must be completed five years prior to the finalisation of the development (this commitment is in accordance with Condition 36 of the Preliminary Approval conditions for the Master Plan).</p>	Compliant	<p>An Environmental Protection Plan (RPS, 2015) has been prepared to satisfy the requirements of EPBC Condition 2 and outlines how conservation areas will be rehabilitated and protected in perpetuity. The Environmental Protection Plan commits to commencing rehabilitation within twelve months of registration of the first Plan of Subdivision for the first Precinct in a Habitat Management Unit Precinct Stage. It also states that the Habitat Management Unit will reach On Maintenance within two years after the final Plan of Subdivision for the last Precinct identified in the Habitat Management Unit Precinct Stage. The commitments made in the Environmental Protection Plan have expedited the timeframe for commencement of rehabilitation of a Habitat Management Unit from that stated in the WSFMP.</p> <p>Refer to Table A 2 for further details on the status of Environmental Rehabilitation Plans.</p>
Section 4.2	WSF-26	<p>Section 4.2 outlines the success criteria to be applied to all conservation and open space areas containing Wallum Sedge Frog habitat being claimed for</p>	Compliant	<p>Monitoring has been conducted in accordance with the requirements of the WSFMP.</p>

		<p>compensation. Monitoring tasks will be applied to measure success criteria and reported annually.</p> <p>The Wallum Sedge Frog population and created compensatory habitat monitoring program is detailed in Section 5 (and summarised in Section 6) and includes monitoring during Pre-construction (confirm habitat to be removed / retained), On Maintenance (Confirm successful establishment and colonisation) and Off Maintenance (Confirm habitat use and corridor function).</p> <p>Table 4.2a outlines the success criteria that aim to ensure that created and retained habitat is maintained in such a way as to safeguard Wallum Sedge Frog habitat and connectivity corridors.</p>	<p>Pre-clearing Wallum Sedge Frog Surveys</p> <p>As per Box 1 within the WSFMP Phase 1 preconstruction surveys have been undertaken across Precincts 1-18 as detailed on Map 2.2d in Appendix B.</p> <p>In addition, the following Phase 2 pre-construction surveys of Wallum Sedge Frog habitat have also been carried out, immediately prior to the removal of habitat:</p> <ul style="list-style-type: none"> • Precinct 1, 2 and Part 3/4 were undertaken on 4 January, 6 February and 2 December 2014 • Precinct 3-5 were undertaken on 23 September 2016 • Precincts 7-12 were surveyed on 23 September 2017 • Precincts 10-11 Part 7-9+11-12, 15 were surveyed on 20 March 2018 • Bells Creek Alignment (stages 3 and 4) were surveyed on 16 December 2020. • Western Detention Basin - Part 8 and 106 were surveyed on the 7 June 2022. <p>Existing habitat in the Environmental Protection Zone has been surveyed during pre-construction surveys of the adjacent Precinct area.</p> <p>On Maintenance Monitoring</p> <p>During the establishment of the Frog Zone and Frog Buffers, monitoring of Wallum Sedge Frog presence and habitat has been undertaken in both retained and created Wallum Sedge Frog habitat as per the requirements of the WSFMP.</p> <p>Monitoring results are documented annually. The following survey effort has been undertaken during the reporting period:</p> <ul style="list-style-type: none"> • Vegetation Monitoring - March and December 2022
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				<ul style="list-style-type: none"> • Presence/Abundance Wallum Sedge Frog – February and April 2022 • Pond Water Quality and Hydroperiod – March/May and December 2022 • Wet Weather Runoff Assessments – March and December 2022 <p>Off Maintenance</p> <p>Under the Conservation Infrastructure Agreement, Precinct 1 and the first two phases of Precinct 2 conservation lands achieved Practical Completion on 5 April 2018 and reached Off Maintenance on 19 May 2021.</p> <p>The remaining conservation lands under the Precinct 2 ERP achieved Practical Completion on 11 December 2020. No other habitat areas have reached On Maintenance</p>
Section 4.3	WSF-27	At each site, a real time water level logger (Odyssey water level logger) will be deployed to measure and record wetland water level at 1 hour intervals for a minimum period of 5 years. Following significant rainfall (3-4 weeks after an initial 150-200mm event), each control site will be assessed for the extent of surface water ponding and water pH and tannin levels. The information derived from monitoring control sites will help determine the success of the created compensatory habitat.	Compliant	At each site, a water level logger has been deployed to measure and record wetland water level at 1-hour intervals for a minimum period of 5 years. Following significant rainfall, each site was assessed for the extent of surface water ponding, water pH and tannin levels. Monitoring results are documented in the annual report.
Section 4.3	WSF-28	Control sites will be visited at least three times per year, twice to download and service the hydro period loggers and once to assess Wallum Sedgefrog habitat and extent of inundation following rainfall. Should significant rainfall not occur in any one year, then the control sites will be visited prior to the end of April in order to assess Wallum Sedgefrog habitat in	Compliant	Monitoring of water chemistry and hydroperiod at control sites was completed in March/May and December 2022. Monitoring results are documented in the annual report.

		accordance with Wallum Sedge Frog habitat assessment during dry weather outlined in Box 1 of the WSFMP.		
Section 5	WSF-29	Corrective actions (as outlined in Table 5.2) will be implemented to address risks to the successful establishment of Wallum Sedge Frog habitat ponds, preservation of the northern Wallum Sedge Frog habitat corridor and the successful achievement of meeting all proposed success criteria.	Compliant	Corrective actions have been identified as a result of monitoring completed in December 2022 and are documented in the annual monitoring report. Corrective actions are being progressively implemented.
Appendix B	WSF-30	Specific construction techniques and methods to be used within the Frog Zone and Buffer Zone will be reported within the Construction Environmental Management Plan (CEMP) for the release area and will also include a detailed Construction Technical Specification.	Compliant	Detailed Technical Specifications have been developed to guide construction of frog ponds in the Frog Zone and Frog Buffer. General measures to minimise impacts to Wallum Sedge Frog habitat are contained within Precinct CEMPs.

Wallum Sedge Frog Offset and Contingency Strategy

The Wallum Sedge Frog Offset and Contingency Strategy outlines the approach to deliver compensatory habitat in the Environmental Protection Zone that can be used if patches of the 152 ha of created compensatory habitat in the Frog Zone and Frog Buffer do not meet the KPIs as defined in the WSFMP. The plan outlines the triggers for offset implementation and timing and the mechanism for delivery.

Table A 6: Compliance Assessment of the Wallum Sedge Frog Offset and Contingency Strategy (Revision 5, May 2016)

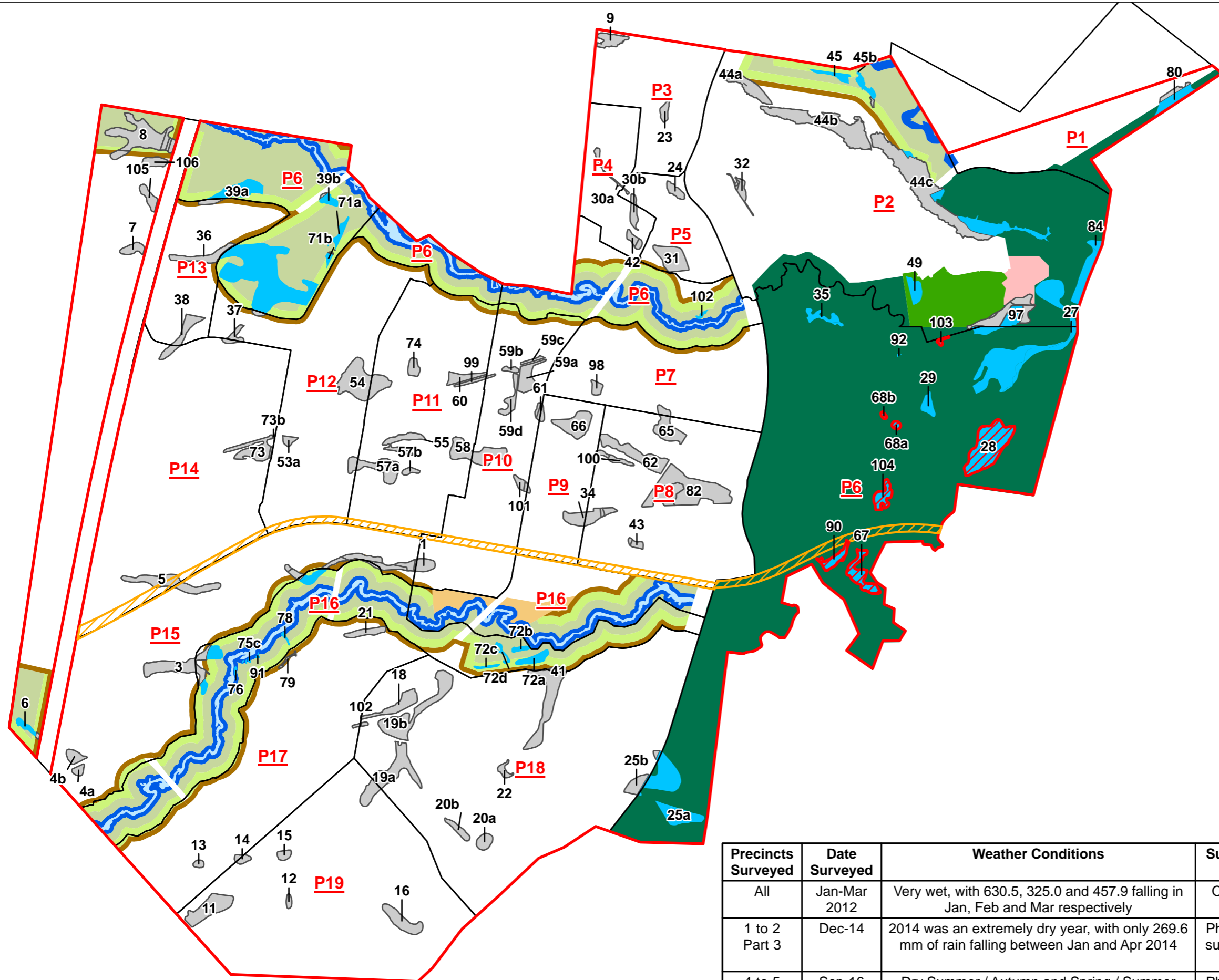
Section	Id.	Condition	Is the Project Compliant with this Condition	Evidence/Comments
3.1	WSF OCS-1	Biannual monitoring of the key performance criteria in table 3 of the Wallum Sedge Frog Offset and Contingency Strategy (including success criteria in the WSFMP) for areas of created compensatory habitat within a development precinct for the 3 year 'on-maintenance period'.	Compliant	<p>Created habitat is monitored bi-annually and assessed against the success criteria in the WSFMP. See Table A 5, Id. WSF-26 for monitoring results.</p> <p>Under the Conservation Infrastructure Agreement, the first two phases of Precinct 2 conservation lands achieved Practical Completion on 5 April 2018 and reached Off Maintenance on 19 May 2021.</p> <p>The remaining conservation lands under the Precinct 2 ERP achieved Practical Completion on 11 December 2020. No other habitat areas have reached On Maintenance.</p> <p>Bi-annual monitoring and annual reporting has been completed in accordance with Environmental Rehabilitation Plans and WSFMP.</p>
3.1	WSF OCS-2	Key performance criteria are met for an area of created compensatory habitat after the 3 year 'On Maintenance period', meaning the applicable area of created compensatory habitat can be handed over in accordance with the Conservation Infrastructure Agreement.	Not applicable	<p>Under the Conservation Infrastructure Agreement, the first two phases of Precinct 2 conservation lands achieved Practical Completion on 5 April 2018 and reached Off Maintenance on 19 May 2021. No other habitat areas have reached Off Maintenance.</p>

3.1	WSF OCS-3	If the key performance criteria have not been met by the end of the 3 year 'On Maintenance period' a further nine years of continued monitoring and corrective actions can be undertaken.	Not applicable	<p>Under the Conservation Infrastructure Agreement, the first two phases of Precinct 2 conservation lands achieved Practical Completion on 5 April 2018 and reached Off Maintenance on 19 May 2021.</p> <p>The remaining conservation lands under the Precinct 2 ERP achieved Practical Completion on 11 December 2020, signifying commencement of the initial 3 year 'on maintenance period'. No other habitat areas have reached On Maintenance.</p> <p>Bi-annual monitoring and annual reporting has been completed in accordance with the Environmental Rehabilitation Plan and WSFMP.</p>
	WSF OCS-4	Bi-annual monitoring reports specify whether a particular parcel of compensatory habitat is successful and thus when a particular parcel of compensatory habitat can be taken 'off maintenance'.	Compliant	Bi-annual monitoring and annual reporting has been completed in accordance with the Environmental Rehabilitation Plans and WSFMP. Monitoring of compensatory habitat that is On Maintenance is continuing.
3.1	WSF OCS-5	The preconstruction habitat survey area (including habitat quality rating) has been applied to determine area of failed created compensatory habitat to be offset, where the key performance criteria have not been met by the end of the 12 year 'On Maintenance period' (including the additional nine years monitoring and application of corrective actions).	Not applicable	No areas of created compensatory habitat have exceeded the 12 year On Maintenance period.
5.2 (and 3.3)	WSF OCS-6	<p>Reporting of the status of compensatory habitat creation and offset delivery including:</p> <p>Results of any pre-clearing Wallum Sedge Frog habitat surveys (including habitat score in accordance with table 5 of the WSF OCS)</p> <p>Results of any Wallum Sedge Frog habitat condition surveys in the Environmental Protection Zone</p>	Compliant	<p>Pre-clearing Wallum Sedge Frog Surveys</p> <p>As per Box 1 within the WSFMP Phase 1 preconstruction surveys have been undertaken across Precincts 1-18 as detailed on Map 2.2d in Appendix B.</p> <p>In addition, the following Phase 2 pre-construction surveys of Wallum Sedge Frog habitat have also been carried out, immediately prior to the removal of habitat:</p>

		<p>A quantification of Wallum Sedge Frog habitat protected and Wallum Sedge Frog habitat removed or destroyed to tally to the allowed maximum of 152 ha impacted</p> <p>Calculation of areas of created compensatory habitat and results of any maintenance monitoring</p> <p>Calculation of areas of Wallum Sedge Frog Habitat created in the EPZ as offsets and results of any maintenance monitoring</p> <p>Calculation of areas of created or restored Wallum Sedge Frog habitat that has met the key performance indicators in both the compensatory habitat and offset areas.</p>	<ul style="list-style-type: none"> • Precinct 1, 2 and Part 3/4 was undertaken on 4 January, 6 February and 2 December 2014 • Precinct 3 and Part 3/4 was undertaken on 23 September 2016 • Precincts 7-12 were surveyed on 23 September 2017 • Precincts 10-11 Part 7-9+11-12, 15 were surveyed on 20 March 2018 • Bells Creek Alignment (stages 3 and 4) were surveyed on 16 December 2020. • Western Detention Basin - Part 8 and 106 were surveyed on the 7 June 2022. <p>Existing habitat in the Environmental Protection Zone has been surveyed during pre-construction surveys of the adjacent Precinct area.</p> <p>Wallum Sedge Frog Habitat Condition Surveys</p> <p>Habitat quality scores have been calculated for all Wallum Sedge Frog breeding habitat impacted. The results are documented in the pre-construction survey reporting.</p> <p>Calculation of Wallum Sedge Frog Habitat Protected, Removed or Destroyed</p> <p>The ledger of areas of created compensatory habitat is provided in Appendix C and monitoring results are reported under the WSFMP in Table A 5.</p> <p>Wallum Sedge Frog habitat to be created in the EPZ as offsets will commence in accordance with the relevant Precinct Environmental Rehabilitation Plan, Environmental Protection Plan and Conservation Infrastructure Agreement.</p>
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3.3	WSF OCS-7	The Wallum Sedge Frog Habitat map (Map 2.2d) is updated after each pre-construction survey to track the areas of Wallum Sedge Frog Habitat protected, created and removed.	Compliant	The latest version of Map 2.2d (April 2022) is provided in Appendix C.
4.2	WSF OCS-8	<p>Opportunities for improving existing Wallum Sedge Frog Habitat or creating new Wallum Sedge Frog Habitat are identified during the preparation of each Precinct's Environmental Rehabilitation Plan, including consideration of areas for delivery of offsets within the Environmental Protection Zone.</p> <p>The habitat quality of areas proposed as potential offsets (either enhancement of existing low-quality Wallum Sedge Frog Habitat or for newly created habitat) will be assessed in accordance with the habitat score approach in table 5 of the WSF OCS and the results of the EPBC Act Offset Assessment Guide calculator.</p>	Compliant	<p>Precinct Environmental Rehabilitation Plans include the following measures to improve existing or create new Wallum Sedge Frog habitat:</p> <ul style="list-style-type: none"> • Precinct 2 - 8.4 ha for habitat enhancement works and 0.3 ha of habitat reconstruction • Precinct 3-5 - 8.3 ha for habitat enhancement works. • Precinct 10-12 – 2.99 ha for habitat enhancement works. <p>Habitat enhancement and re-construction works will be undertaken in accordance with the requirements of the relevant Precinct Environmental Rehabilitation Plan, Environmental Protection Plan and Conservation Infrastructure Agreement.</p>
4.2	WSF OCS-9	An area of created compensatory habitat that fails to meet the key performance indicators after the maximum total maintenance period of 12 years, is offset by the offset established in the Environmental Protection Zone. The actual area required to be covered by the offset contribution has been calculated based on the habitat quality scores and the results of the EPBC Act Offset Assessment Guide calculator.	Not applicable	No areas of created compensatory habitat have exceeded the 12 year On Maintenance period.

Appendix B Map 2.2D



LEGEND

- EBPC Referral Boundary
- Master Plan Precincts
- Impacted
- Protected
- CAMCOS Corridor
- Conservation Area:**
- Creek corridor
- Frog buffer
- Frog zone
- Lifestyle
- Open space conservation (area confirmed as not suitable to support WSF habitat)
- Riparian
- WSF Offset Habitat (9.42ha)
- Environmental Protection Zone
- Major Recreation Park
- Environmental Education - Integrated Tourist Facility

Combined Pre-Construction Mapped
WSF Habitat Total: 164.07ha
- 55.90ha Protected
- 108.17ha Impacted

EPZ (Including Major Recreational Park):
- 427ha

SOURCES:
1. Basemap © Light Gray Reference: Mireton Bay Regional Council, Department of Resources, Dept of Environment and Science, Esri, HERE, Garmin, FAO, NOAA, USGS
Light Gray Base: Mireton Bay Regional Council, Department of Resources, Dept of Environment and Science, Esri, HERE, Garmin, FAO, NOAA, USGS

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PROJECT: Aura
PROJECT NO: 30031518
FIGURE NO: 2.2d
FIGURE TITLE: Wallum Sedgefrog (and Acid Frog) Habitat to be Removed
ISSUE: 34
DATE: 4/04/2023
CREATED BY: JO15865
CHECKED BY: M Zulpo
APPROVED BY:
SMEC: M Zulpo
STOCKLANDS: M Stephens

Precincts Surveyed	Date Surveyed	Weather Conditions	Survey Methodology
All	Jan-Mar 2012	Very wet, with 630.5, 325.0 and 457.9 falling in Jan, Feb and Mar respectively	Original PER survey
1 to 2 Part 3	Dec-14	2014 was an extremely dry year, with only 269.6 mm of rain falling between Jan and Apr 2014	Phase 2 (dry weather) survey method, as per Box 1 (pg 52)
4 to 5 Part 3	Sep-16	Dry Summer / Autumn and Spring / Summer period	Phase 2 (dry weather) survey method, as per Box 1 (pg 52)
6,7 to 12	Mar-17	483 mm between Jan and Mar, with the majority of rain (385 mm) falling within Mar	Phase 1 (wet weather) survey method, as per Box 1 (pg 52)
6,13 to 18	Feb-21	Wet, with 591 mm falling between 1 Dec 2020 and the survey start date (8 Feb 2021), with the majority of rain (281 mm) falling in Jan	Phase 1 (wet weather) survey method, as per Box 1 (pg 52)

Appendix C Ledger of Wallum Sedge Frog Habitat Created, Retained and Removed

Master Plan Precinct	Existing WSF Habitat Impacted (ha)	Existing Habitat Protected (ha)			Created Compensatory Habitat On-maintenance*	Created Compensatory Habitat Off-maintenance*
		Conservation Zones	EPZ (excluding offset areas)	Sum		
Precinct 1 (Stage 1)	0.45	0.00	1.33	1.33	N/A	N/A
Precinct 2 (Stage 2)	16.47	1.88	3.25	5.12	0.00	22.03
Precinct 3, 4 and 5 (Stage 3)	6.08	0.16	12.40	12.56	9.32	0.00
Precincts 7,8 and 9 (Stage 4)	16.09	0	0.11	0.11	17.15	0.00
Precincts 10,11 and 12 (Stage 5)	17.98	13.27	2.23	15.50	44.47	0.00
Precincts 13, 14 and 15 (Stage 6)	8.32	4.44	0.02	4.46	59.33	0.00
Precincts 17, 18 and 19 (Stage 7)	2.83	2.25	5.22	7.47	56.28	0.00
TOTAL	68.22	21.99	24.56	46.55	186.53*	22.03

NA = Not Applicable - Compensatory habitat will not be created in the Precinct

*The area of compensatory habitat that is 'On Maintenance' and 'Off Maintenance' has been determined as per the success criteria outlined in the Wallum Sedge Frog Management Plan. Note that the use of these terms is not related to the 'On Maintenance' and 'Off Maintenance' handover processes as outlined in the Environmental Protection Plan or the Caloundra South Infrastructure Agreement.

*Note: The reduction in Created Compensatory Habitat On-maintenance in the 2022/2023 reporting period is due to further on ground surveys determining areas within the Conservation Zones as unsuitable to support the Wallum Sedge Frog.

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