2026 Compliance Report

Northeast Business Park Project, Queensland
EPBC Approval No. 2006/2912

North Harbour

Document Version Control

VERSION	PREPARED BY	REVIEWED BY	DATE
1.0	M. McErlean	B. Finney M. Hall-Brown	23/7/26

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Introduction

North Harbour Holdings Pty Ltd is currently developing a master planned community, known as "North Harbour". On 12 July 2006, the project was determined to be a controlled action pursuant to s.75 of the *Environmental Protection and Biodiversity Conservation Act 1999* under the controlling provisions of;

- Sections 16 and 17B (Wetlands of international importance)
- Sections 18 and 18A (Listed threatened species and communities)
- Sections 20 and 20A (Listed migratory species)

Following a detailed environmental impact investigation and assessment process, the project was granted approval with conditions on 18 December 2012. Commencement of the action (as defined within the approval) was triggered 12 May 2014. Condition 3 of the approval requires the publication of an annual report, addressing compliance with each of the conditions of approval.

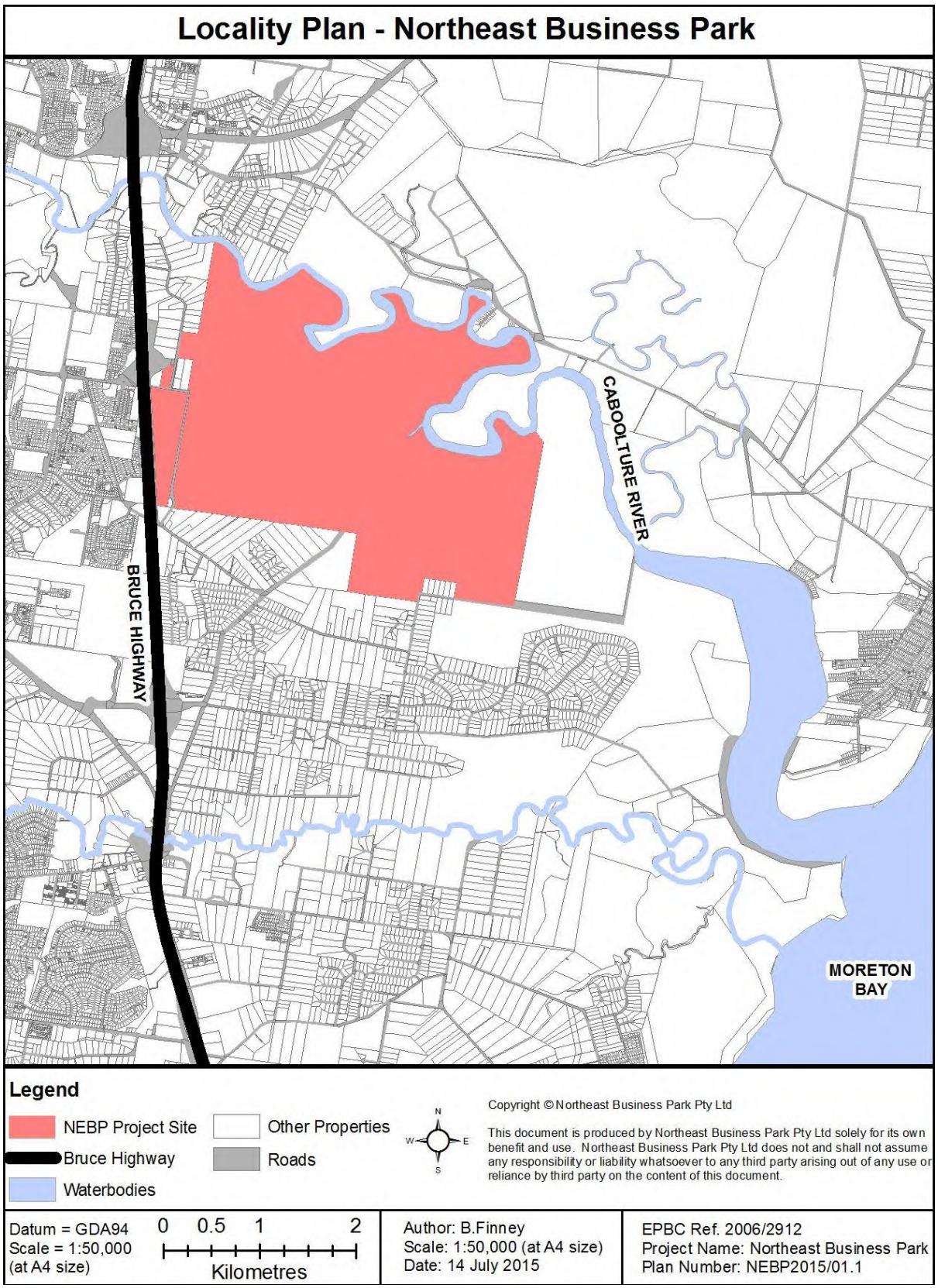
This document is the twelfth compliance report, relating to activities undertaken from 13 May 2025 to 12 May 2026. Please note that during the preparation period of this report, subsequent approvals have been acquired. Reporting associated with these approvals and works undertaken after 12 May 2026 will be provided in the 2027 report.

Project Description

EPBC Number:	2006/2912
Project Name:	Northeast Business Park
Approval Holder:	North Harbour Holdings Pty Ltd (ACN: 101 569 457)*
Approved Action:	To develop an approximately 762 hectare site, for an integrated business park, including residential and marina precincts, located to the east of the Bruce Highway, and bounded to the north by the Caboolture River, Caboolture Shire, Queensland.
Project Location:	The project is located in the Moreton Bay region, Queensland. The property address is 34 Nolan Drive, Morayfield. The site is bounded to the west by the Bruce Highway and to the north by the Caboolture River, as shown on the locality plan at figure 1.
Responsible Person:	Malcolm Hall-Brown (Chairman)
Reporting Period:	13 May 2025 – 12 May 2026
Report Preparation:	June to August 2026

* Approval holder previously known as Northeast Business Park Pty Ltd. The ABN / ACN and other business details remain the same.

Figure 1


Locality Plan - Northeast Business Park
BRUCE HIGHWAY
CABOOLTURE RIVER
MORETON BAY
Legend
NEBP Project Site
Other Properties
Bruce Highway
Roads
Waterbodies
N
W
E
S
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(at A4 size)
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Kilometres
Author: B.Finney
Scale: 1:50,000 (at A4 size)
Date: 14 July 2015
EPBC Ref. 2006/2912
Project Name: Northeast Business Park
Plan Number: NEBP2015/01.1

Description of Activities

During the period relevant to this report, the following activities have been undertaken for the project;

Activities undertaken under the LBEMP & sub-plan 1

All activities undertaken under sub-plan 1 were completed in a previous reporting period (2014 – 2015). Please refer to the 2015 compliance report in relation to these actions.

Activities undertaken under the LBEMP & sub-plan 2

All activities undertaken under sub-plan 2 were completed in previous reporting periods (2014 – 2015 and 2015 - 2016). Please refer to the previous compliance reports in relation to these actions.

Activities undertaken under the LBEMP & sub-plan 3

All activities undertaken under sub-plan 3 were completed in previous reporting periods (2015 – 2016 and 2016 - 2017). Please refer to the previous compliance reports in relation to these actions.

Activities undertaken under the LBEMP & sub-plan 4

All activities undertaken under sub-plan 4 were completed in previous reporting periods (2017 – 2024). Please refer to the previous compliance reports in relation to these actions.

Activities undertaken under the LBEMP & sub-plan 5

All activities undertaken under Sub-plan 5 (approved 3 April 2018) were completed in previous reporting period (2018 - 2019). Please refer to the previous compliance report in relation to these actions.

Activities undertaken under the LBEMP & sub-plan 6

Sub-plan 6 (approved 4 January 2021) defined the approved works program for;

- Vegetation clearing, bulk earthworks and civil construction of the Mixed Industry and Business development. These works were commenced in April 2021 and are ongoing as at 12 May 2026 (closing date for the 2026 compliance reporting period). These works are expected to be completed in the coming year.
- An updated Sub-plan 6 has been submitted and approved on 20 September 2024. The change to the Sub-plan reduces the extent of earthworks to be undertaken in the north portion of the development.

Activities undertaken under the LBEMP & sub-plan 7

All activities undertaken under Sub-plan 7 (approved 23 August 2021) were completed in previous reporting period (2023 - 2024). Please refer to the previous compliance report in relation to these actions.

Activities undertaken under the LBEMP & sub-plan 8

Sub-plan 8 (approved 21 February 2025) defined the approved works program for;

- Bulk earthworks and civil construction of the Mixed Industry and Business development west of Hardwood Drive. These works were commenced in March 2025. These works are expected to be completed in the coming two years.

Activities undertaken under the LBEMP & sub-plan 9

Sub-plan 9 (approved 17 October 2025) defined the approved works program for;

- Bulk earthworks associated with the Regional Park Additional Fill Areas. The four proposed fill areas range in size from 0.6 to 3.5 ha. These works are expected to commence in the coming two years.

Activities undertaken under the LBEMP & sub-plan 10

Sub-plan 10 (approved 21 November 2025) defined the approved works program for;

- Bulk earthworks and civil construction of the early release phase consisting of 249 residential lots, preceding the proposed marina and waterfront residential development at North Harbour. These works are expected to commence in the coming year and be completed over three years.

Activities undertaken under the LBEMP

An updated LBEMP was approved 21 December 2021. The changes to the LBEMP do not impact the approved Sub-plans.

Other project related activities

Vegetation rehabilitation of a riparian corridor alongside the Caboolture River (100m wide behind the top of the southern riverbank) has been underway for some time, with various planting and management methodologies being trialled since 2012. Rehabilitation actions in the current reporting period focused on control of weed species and maintenance within existing replanted areas. Assessment of rehabilitation progress within the riparian corridor has been undertaken as part of the current report (see appendix C). Further tree plant has been undertaken since the 12 May 2026. A review of this area's progress will be included in the next annual review.

Instances of Non-Compliance

No instances of non-compliance with the conditions of approval 2006/2912 were identified during the reporting period.

Summary

The long-term development of the project has continued in the 2025 - 2026 reporting period, with this report providing information on operations conducted during the twelfth 12 month reporting period following commencement of the action.

No compliance issues have been identified during the reporting period.

Declaration of accuracy

In making this declaration, I am aware that sections 490 and 491 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) make it an offence in certain circumstances to knowingly provide false or misleading information or documents. The offence is punishable on conviction by imprisonment or a fine, or both. I declare that all the information and documentation supporting this compliance report is true and correct in every particular. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this declaration.

Signed _____

Full name (please print) Malcolm Hall-Brown

Position (please print) Chairperson

Organisation (please print including ABN/ACN if applicable) North Harbour Holdings Pty Ltd
ACN 101 569 457

Date _____/_____/_____

APPENDICES

APPENDIX A: COMPLIANCE ASSESSMENT REPORTING TABLE

Condition Number / Reference	Condition	Project Compliance	Evidence / Comments
1	Within 20 days after the commencement of the action, the person taking the action must advise the Department in writing of the actual date of commencement of the action.	Not Applicable	Addressed in the 2015 report.
2	The person taking the action must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the management plans required by this approval, and make them available upon request to the Department. Such records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the Department's website. The results of audits may also by publicised through the general media.	Compliant	Accurate records have been maintained by the proponent and contractors, as demonstrated by the information below and associated documentation attached. This includes the summaries for surface water quality monitoring, rehabilitation works and acid sulphate soils at appendix C. Records available for audit by the Department or independent auditor upon request.
3	Within three months of every 12 month anniversary of the commencement of the action, the person taking the action must publish a report on their website addressing compliance with each of the conditions of this approval, including implementation of any management plans as specified in the conditions. Documentary evidence providing proof of the date of publication and non-compliance with any of the conditions of this approval must be provided to the Department at the same time as the compliance report is published.	Compliant	The 2025 compliance report was uploaded to the NEBP website 11 August 2025, within 3 months of the commencement date anniversary (12 May 2014). This was confirmed via email to the Department as evidenced at appendix C.
4	Upon the direction of the Minister, the person taking the action must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the Minister. The independent auditor must be approved by the Minister prior to the commencement of the audit. Audit	Not Applicable	No direction for an independent audit issued by the Minister in the 12 month period applicable to this report.

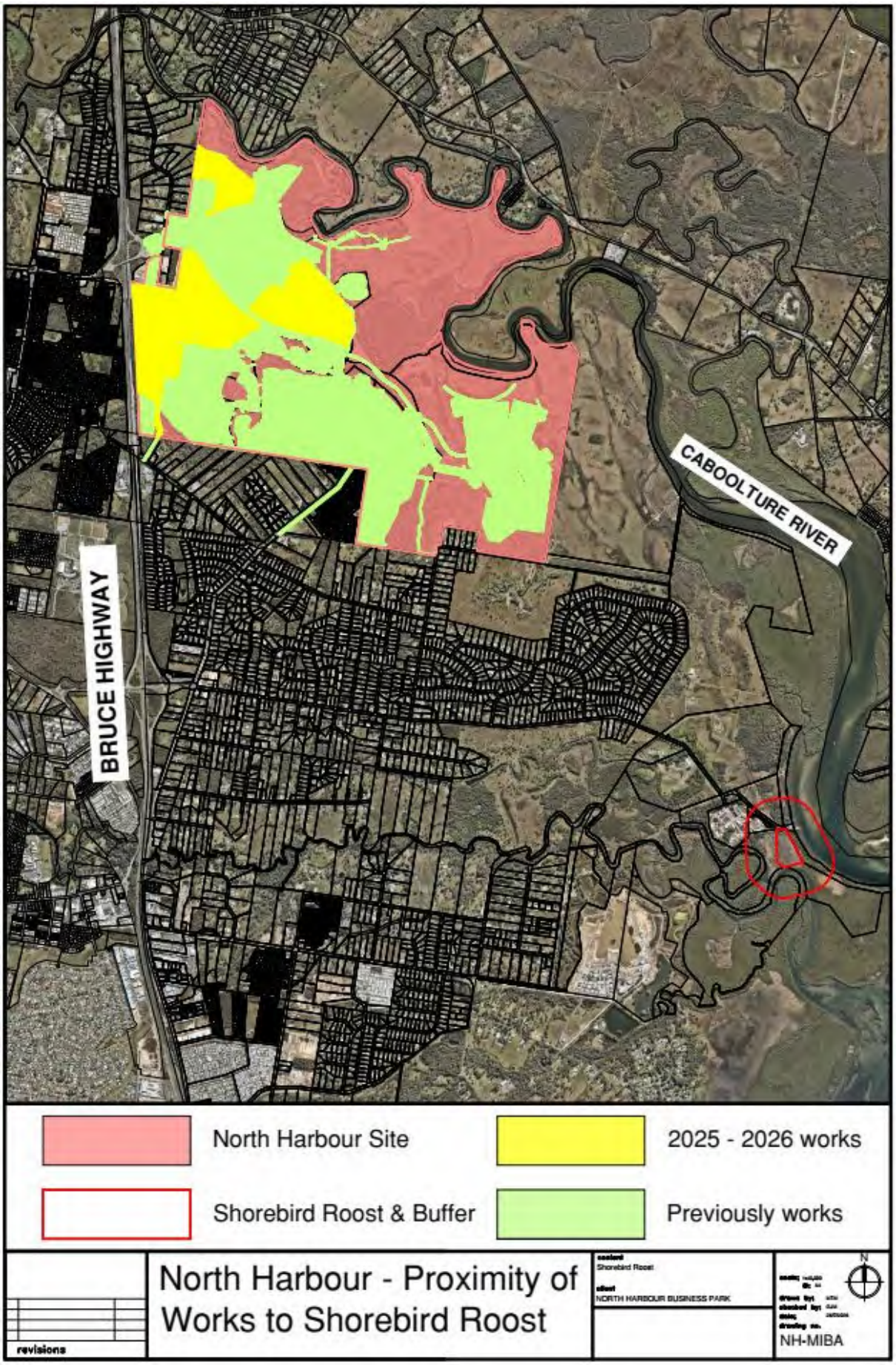
	criteria must be agreed to by the Minister and the audit report must address the criteria to the satisfaction of the Minister.		
5	If the person taking the action wishes to carry out any activity otherwise than in accordance with the management plan/s as specified in the conditions, the person taking the action must submit to the Department for the Minister's written approval a revised version of that management plan/s. The varied activity shall not commence until the Minister has approved the varied management plan/s in writing. The Minister will not approve a varied management plan/s unless the revised management plan/s would result in an equivalent or improved environmental outcome over time. If the Minister approves the revised management plan/s, that management plan/s must be implemented in place of the management plan's originally approved.	Not Applicable	No activities undertaken otherwise than in accordance with the management plans (approved LBEMP, sub-plan 6, and sub-plan 8) during the 12 month period applicable to this report. Please note activities undertaken under sub-plans 1, 2, 3, 4, 5 and 7 were completed prior to this reporting period. For further detail please refer to the previous compliance reports. Please note activities under sub-plans 9 & 10 had not commenced prior to this reporting period.
6	If the Minister believes that it is necessary or convenient for the better protection of the Moreton Bay Ramsar site (sections 16 and 17B of the EPBC Act), listed threatened specied (sections 18 and 18A of the EPBC Act) or migratory shorebirds (sections 20 and 20A of the EPBC Act) to do so, the Minister may request that the person taking the action make specified revisions to the management plan/s specified in the conditions and submit the revised management plan/s for the Minister's written approval. The person taking the action must comply with any such request. The revised approved management plan/s must be implemented. Unless the Minister has approved the revised management plan/s then the person taking the action must continue to implement the management plan/s originally approved, as specified in the conditions.	Not Applicable	No request from the Minister to revise the management plans received in the 12 month period applicable to this report.

7	If, at any time after five years from the date of this approval, the person taking the action has not substantially commenced the action, then the person taking the action must not substantially commence the action without the written agreement of the Minister.	Not Applicable	Addressed in the 2015 report.
8	Unless otherwise agreed to in writing by the Minister, the person taking the action must publish all management plans referred to in these conditions of approval on their website. Each management plan must be published on the website within one month of being approved.	Compliant	The amended Sub-plan 6 was published on the North Harbour website on 1/10/2024. Sub-plan 8 was published on the North Harbour website on 25/2/2025. Works during the period relate to the LBEMP, sub-plan 6 and sub-plan 8, which were all approved in prior reporting periods and addressed in previous compliance reports. Sub-plan 9 was published on the North Harbour website on 22/10/2025. Sub-plan 10 was published on the North Harbour website on 24/11/2025. Please note activities under sub-plans 9 & 10 are due to commence following this reporting period.
9	The person taking the action must prepare and submit a Land-Based Environmental Management Plan (LBEMP) for the Minister's approval. The LBEMP must include, but not be limited to, the following: a. Measures to minimise impacts on EPBC Act listed threatened species, including measure to care for injured fauna and a vegetation clearing strategy; b. Measures to limit the spread of pests and invasive species; c. Sediment and erosion controls; and d. Measures to implement, monitor, or improve (should deficiencies be identified) the LBEMP	Compliant	Works undertaken in this reporting period in the areas addressed by the LBEMP, sub-plan 6 and sub-plan 8. Land Based Environmental Management Plan, sub-plan 6, and sub-plan 8 were prepared and approved prior to commencement of relevant works, including provisions for points a. - d. in condition 9. LBEMP approved 21/12/2021 Amended LBEMP sub-plan 6 approved 20/9/2024 LBEMP sub-plan 8 approved 21/2/2025

	The person taking the action must not conduct clearance of native vegetation unless the Minister has approved the LBEMP. The approved LBEMP must be implemented.		No clearing of vegetation was undertaking during the reporting period.
10	The person taking the action must not destroy by clearing or any other activity, more than 25 ha of native vegetation on the subject site. a. If clearing more than 25 ha of native vegetation is necessary, the person taking the action must: i. Undertake a pre-clearance survey of additional areas to be cleared; and ii. Submit the pre-clearance survey to the Minister for approval, prior to clearing. The person taking the action must not clear more than 25 ha of native vegetation unless then Minister has provided approval in writing to do so.	Compliant	No clearing of vegetation was undertaking during the reporting period.
11	No construction activities may occur within 200 m of the critical high tide shorebird roost area at the mouth of the Caboolture River, during the months of September to April (inclusive) of any given year.	Compliant	The shorebird roost area is well removed from the project site owned by North Harbour Holdings Pty Ltd. Only works associated with dredging of the navigation channel in the Caboolture River will occur in the vicinity of the roost area. No dredging or associated works have been undertaken in the reporting period. All construction activities undertaken in the reporting period have been outside the 200m buffer to the critical high tide shorebird roost area, as shown by plan number NH-2019/02.1 (below).
12	The person taking the action must undertake, maintain and monitor all bank rehabilitation and restoration works detailed in Appendix J of the EIS – Riverbank Erosion Assessment, to	Compliant	The existing rehabilitation works in riparian areas alongside the Caboolture River have continued to be maintained.

	prevent unacceptable impacts to wetlands of international importance (section 16 and 17B of the EPBC Act). This must include, but not be limited to: a. Undertaking, maintaining and monitoring the revegetation of riparian area on the referred subject site; and b. Undertaking, maintaining and monitoring the restoration of wetland area on the referred subject site.		
13	The person taking the action must prepare and submit a Caboolture River Estuary Management Plan (CREMP) for the Minister's approval. a. The CREMP must include, but not be limited to the following: i. Detail all restoration and rehabilitation works that will be undertaken to mitigate impacts on the river bed and banks, including a description of priority works and agreed performance criteria. The strategy must avoid the use of artivicial bank protection structures; ii. Identify corrective actions or alternative options that will be implemented if unexpected adverse impacts on marine and shorebird specied are detected and are attributed to the construction and operation of the action; iii. Specify a schedule of works and/or compensatory actions required to address all potential development related impacts, and measures to implement them; iv. Specify a monitoring program, including requirements for further baseline data that must be collected prior to capital dredging works. Monitoring must include, but not be limited to: 1. Wave energy recorded at the river bank at a minimum of three key locations. Monitoring must also include concurrent measurements of boat traffic and wind velocity. This must be conducted at least once every three months;	Not Applicable	No works impacting on the Caboolture River were undertaken in the 12 month period applicable to this report. Preparation and Minister's approval of the CREMP to be undertaken at a future date, prior to works impacting the Caboolture River.

	2. Water level recording in the mid estuary to determine any changed to the hydrodynamics that may be attributable to dredging. This must be conducted at least once every three months; 3. Annual bank erosion monitoring at fixed locations, including but not limited to, at least four monitoring points on the northern bank of the Caboolture River, evenly spaced within one kilometre downstream of the marina entrance; 4. Hydrographical surveys of the river bed and banks in the vicinity of the upper one-third of the dredged channel, between three and six months from completion of dredging works. Survey must be undertaken by a qualified hydrographical surveyor and consist of soundings no more than 10 metres apart and within a vertical accuracy of 0.1 metre or better; 5. Shorebird monitoring at a minimum of ten key locations in the lower estuary of the Caboolture River, including the critical high tide shorebird roost area at the mouth of the Caboolture River; and 6. Sampling of benthic invertebrates on shallow banks adjacent to the dredged channel at a minimum of three locations. b. The CREMP must be reviewed annually (within three months of every 12 months anniversary of the commencement of works impacting on the Caboolture River) by the person taking the action, with any revision to be approved by the Minister before implementation of changes. The person taking the action must not commence works impacting on the Caboolture River unless the Minister has approved the CREMP. The approved CREMP must be implemented.		


CABOOLTURE RIVER
BRUCE HIGHWAY
North Harbour Site
2025 - 2026 works
Shorebird Roost & Buffer
Previously works
North Harbour - Proximity of Works to Shorebird Roost
Shorebird Roost
NORTH HARBOUR BUSINESS PARK
revisions
NH-MIBA

APPENDIX B: LBEMP RECORDKEEPING SUMMARY TABLES

LBEMP RECORD KEEPING

Reference	Recordkeeping Requirements	Project Compliance	Evidence / Comments
LBEMP section 8 point 1	Retain appropriate records concerning the preparation and implementation of LBEMP Sub Plans, including; - A register of all LBEMPs including all Sub-Plans, along with hard copies of each LBEMP; and - All records that are required by each element of an implemented LBEMP Sub-Plan, including copies of all issue specific management plans each LBEMP Sub-Plan draws from.	Compliant	Register of all LBEMPs in place. As at 12 May 2026, register includes; LBEMP v3 (21 Dec 2021) Sub-Plan 01 v2 (31 Jan 2014) Sub-Plan 02 v1.2 (22 Aug 2014) Sub-Plan 03 (RW6) (28 July 2015) Sub-Plan 04 (RW5) (15 Sept 2017) Sub-Plan 05 (RW1) (28 Mar 2018) Amended Sub-Plan 06 (MIBA) (20 Sept 2024)) Sub-Plan 07 (Flood) (23 Aug 2021) Sub-Plan 08 (Hardwood Dr) (21 Feb 2025) Sub-Plan 09 (Regional Park Additional Fill Areas) (21 Oct 2025) Sub-Plan 10 (Early Release) (21 Nov 2025) Record Keeping required by sub-plans in place. Refer to sub-plan record keeping tables below for further information.
LBEMP section 8 point 2	Review this LBEMP: - As part of the preparation of each LBEMP Sub-Plan; - Following significant environmental incidents involving a MNES; - At the completion of any environmental audit carried out by the DCCEEW; and - In the instance where the objectives of any element of this LBEMP are not being met.	Compliant	LBEMP reviewed as part of the preparation of sub-plans 1 to 10. No significant environmental incidents involving a MNES have occurred. Objectives for all LBEMP elements are considered to be achieved for works in the reporting period.

LBEMP SUB-PLAN 1 RECORD KEEPING

Not applicable to this reporting period – refer 2014-2015 Compliance Report

LBEMP SUB-PLAN 2 RECORD KEEPING

Not applicable to this reporting period – refer 2014-2015 and 2015-2016 Compliance Reports

LBEMP SUB-PLAN 3 RECORD KEEPING

Not applicable to this reporting period – refer 2015-2016 and 2016-2017 Compliance Reports

LBEMP SUB-PLAN 4 RECORD KEEPING

Not applicable to this reporting period – refer 2018 to 2024 Compliance Reports

LBEMP SUB-PLAN 5 RECORD KEEPING

Not applicable to this reporting period – refer 2018-2019 Compliance Reports

LBEMP SUB-PLAN 6 RECORD KEEPING

Reference	Recordkeeping Requirements	Project Compliance	Evidence / Comments
Subplan 6 Section 6 Point 1	Copies of all relevant permits or approvals relevant to the works the subject of this LBEMP Sub-Plan 06.	Compliant	All relevant permits and approvals obtained for subplan 6 works undertaken in the reporting period, as set out in the schedule below. Copies can be provided upon request by the Department.
Subplan 6 Section 6 Point 2	The name, qualifications and contact details of the suitably qualified ecologist engaged to assist in the preparation of this LBEMP Sub-Plan 06.	Compliant	Sub-Plan 6 prepared by James Warren and Associates (JWA) (Adam McArthur). Qualification and contact details can be provided upon request by the Department.
Subplan 6 Section 6 Point 3	The dates and findings of the preclearance flora and fauna surveys and the name, qualifications and contact details of the ecologist who completed the surveys.	Compliant	A number of Ecological Assessment Reports have been prepared over sub-plan 6 including: • Terrestrial Ecology Assessment Report – Northeast Business Park (Cardno 2007 - John Delaney); • Ecological Assessment Report: NEBP – Residential West RoL (Cardno 2014 - John Delaney); • Wetland Mapping Report: North East Business Park Residential West Area (JWA 2015 - Adam McArthur);

Reference	Recordkeeping Requirements	Project Compliance	Evidence / Comments
			• Significant Residual Impact Assessment – Marine Plants, North East Business Park Raff Creek Crossing (JWA 2019a -- Adam McArthur); and • Significant Residual Impact Assessment – Marine Plants, North East Business Park MIBA Bulk Earthworks (JWA 2019b -- Adam McArthur). Copy of reports and associated information can be provided upon request by the Department.
Subplan 6 Section 6 Point 4	The name, qualifications and contact details of the licensed Fauna Spotter / Catcher engaged to supervise vegetation clearance works.	Not Applicable	During the reporting period, no vegetation clearance works were undertaken.
Subplan 6 Section 6 Point 5	The dates and locations of all vegetation clearance works.	Not Applicable	During the reporting period, no vegetation clearance works were undertaken.
Subplan 6 Section 6 Point 6	The post-clearance Fauna Management Report as required by SECTIONS 4.2 and 4.3 of this LBEMP Sub-Plan 06.	Not Applicable	During the reporting period, no vegetation clearance works were undertaken.
Subplan 6 Section 6 Point 7	Any records required to be kept in for specific environmental management elements as identified in SECTION 4 of this LBEMP Sub-Plan 06.	Compliant	Records relating to compliance with environmental management elements have been maintained, including under associated approved management plans for; - MIBA Bulk Earthworks – Site Stabilisation / Ecological Restoration Plan (Place Design Group 2020) - Pest and Invasive Species Plan (JWA 2020a) - Erosion and Sediment Control Strategy (Design Flow 2019) - Acid Sulphate Soil Investigation and Management Plan (Tectonic Geotechnical 2019) - Fauna Management Plan - Vegetation Management

			Plan
Reference	**Recordkeeping Requirements**	**Project Compliance**	**Evidence / Comments**
			Records include (but not limited to); - Testing and validation for ASS - Pre- construction Groundwater Monitoring - Monitoring of ground water and surface water quality - Sediment basin discharge authorisations - Baseline Vegetation and Weed Monitoring - Pest hygiene declarations Copies of records can be provided upon request by the Department.
Subplan 6 Section 6 Point 8	All incident reports and corrective action requests generated during the works program.	Not Applicable	No incident reports or corrective action requests generated during the reporting period.

LBEMP SUB-PLAN 7 RECORD KEEPING

Not applicable to this reporting period – refer 2018-2024 Compliance Reports

LBEMP SUB-PLAN 8 RECORD KEEPING

Reference	**Recordkeeping Requirements**	**Project Compliance**	**Evidence / Comments**
Subplan 8 Section 6 Point 1	Copies of all relevant permits or approvals relevant to the works the subject of this LBEMP Sub-Plan 08.	Compliant	All relevant permits and approvals obtained for subplan 8 works undertaken in the reporting period, as set out in the schedule below. Copies can be provided upon request by the Department.
Subplan 8 Section 6 Point 2	The name, qualifications and contact details of the suitably qualified ecologist engaged to assist in the preparation of this LBEMP Sub-Plan 08.	Compliant	Sub-Plan 8 prepared by James Warren and Associates (JWA) (Adam McArthur). Qualification and contact details can be provided upon request by the Department.

Subplan 8 Section 6 Point 3	The dates and findings of the preclearance flora and fauna surveys and the name, qualifications and contact details of the ecologist who completed the surveys.	Compliant	A number of Ecological Assessment Reports have been prepared over sub-plan 8 including: • Terrestrial Ecology Assessment Report – Northeast Business Park (Cardno 2007 - John Delaney); • Significant Residual Impact Assessment – Marine Plants, North East Business Park Raff Creek Crossing (JWA 2019a -- Adam McArthur); • Significant Residual Impact Assessment – Marine Plants, North East Business Park MIBA Bulk Earthworks (JWA 2019b -- Adam McArthur); and • Revised Vegetation Management Plan (JWA 2024 - Adam McArthur); Copy of reports and associated information can be provided upon request by the Department.
Subplan 8 Section 6 Point 4	The name, qualifications and contact details of the licensed Fauna Spotter / Catcher engaged to supervise vegetation clearance works.	Not Applicable	During the reporting period, no vegetation clearance works were undertaken.
Subplan 8 Section 6 Point 5	The dates and locations of all vegetation clearance works.	Not Applicable	During the reporting period, no vegetation clearance works were undertaken.
Subplan 8 Section 6 Point 6	The post-clearance Fauna Management Report as required by SECTIONS 4.2 and 4.3 of this LBEMP Sub-Plan 08.	Not Applicable	During the reporting period, no vegetation clearance works were undertaken.
Subplan 8 Section 6 Point 7	Any records required to be kept in for specific environmental management elements as identified in SECTION 4 of this LBEMP Sub-Plan 08.	Compliant	Records relating to compliance with environmental management elements have been maintained, including under associated approved management plans for; - MIBA Bulk Earthworks – Site

			Stabilisation / Ecological

Reference	Recordkeeping Requirements	Project Compliance	Evidence / Comments
			- Restoration Plan (Place Design Group 2020) - Pest and Invasive Species Plan (JWA 2020a) - Erosion and Sediment Control Strategy (Design Flow 2019) - Acid Sulphate Soil Investigation and Management Plan (Tectonic Geotechnical 2019) - Fauna Management Plan - Vegetation Management Plan Records include (but not limited to); - Testing and validation for ASS - Pre- construction Groundwater Monitoring - Monitoring of ground water and surface water quality - Sediment basin discharge authorisations - Baseline Vegetation and Weed Monitoring - Pest hygiene declarations Copies of records can be provided upon request by the Department.
Subplan 8 Section 6 Point 8	All incident reports and corrective action requests generated during the works program.	Not Applicable	No incident reports or corrective action requests generated during the reporting period.

LBEMP SUB-PLAN 9 RECORD KEEPING

Not applicable to this reporting period. Works are yet to commence under LBEMP Sub-Plan 9.

LBEMP SUB-PLAN 10 RECORD KEEPING

Not applicable to this reporting period. Works are yet to commence under LBEMP Sub-Plan 10.

Northeast Business Park - Register of Permits or Approvals relevant to Land Based Environmental Management Plans

LBEMP Sub-Plan 1

Not applicable for current reporting period (All works previously completed). Refer 2014 – 2015 Compliance Report.

LBEMP Sub-Plan 2

Not applicable for current reporting period (All works previously completed). Refer 2014 – 2015 and 2015 – 2016 Compliance Reports.

LBEMP Sub-Plan 3

Not applicable for current reporting period (All works previously completed). Refer 2015 – 2016 and 2016 – 2017 Compliance Reports.

LBEMP Sub-Plan 4

Not applicable for current reporting period (All works previously completed). Refer 2018-2024 Compliance Reports.

LBEMP Sub-Plan 5

Not applicable for current reporting period (All works previously completed). Refer 2018-2019 Compliance Reports.

LBEMP Sub-Plan 6

Reference	Approval Date	Description
DA/7352/2002/VCHG/3	22 January 2020	Request to Change (Other) for a Material Change of Use, and for variations to the applicable Planning Scheme under s.3.1.6 of the Integrated Planning Act 1997 (QLD) in relation to development for Mixed Industry, Business Area Precincts, Open Space and Related Purposes. (Original approval dated 28 June 2012).
DA/39447/2019/V4D	27 February 2020	Operational Works for MIBA Bulk Earthworks
DA/31654/2016/V4D/29	11 December 2020	Operational Works for North Harbour Boulevard, Roadworks, Stormwater and Earthworks
DA/2023/4731	29 January 2024	Operational Works - Development Permit for Roadworks, Drainage works, Earthworks, Stormwater and Vegetation Clearing (North Harbour Boulevard – Entry Works)
DA/2023/3176	23 January 2024	Reconfiguring a Lot - Development Permit for Subdivision (2 into 25 MIBA Lots plus balance lot - staged)
DA/2024/0933	16 April 2024	Operational Works - Development Permit for Earthworks (North Harbour MIBA – Lot 200)
DA/2023/5175	30 January 2024	Operational Works - Development Permit for Roadworks, Stormwater, Earthworks & Vegetation Clearing (North Harbour MIBA, Stage 3A & 3B)
DA/2023/1759	30 November 2023	Request to Change (Minor) - Operational Works - Development Permit for Traffic Signals
DA/2023/4900	30 January 2024	Operational Works - Development Permit for Roadworks (North Harbour Boulevard signalised intersection)
DA/2023/4299	26 March 2024	Reconfiguring a Lot - Development Permit for Subdivision (1 lot into 189 lots plus balance lot and park in 5 stages) (North Harbour, Stages 1 – 5)
DA/2024/1859	22 May 2024	Operational Works for MB+ Operational Works - Development Permit for Earthworks, Roadworks and Stormwater (North Harbour, RNA Stage 1)
DA/2024/3425	3 September 2024	Operational Works for MB+ Operational Works - Development Permit for Earthworks, Roadworks and Stormwater (North Harbour, RNA Stage 2)
DA/2024/3425	3 September 2024	Operational Works for MB+ Operational Works - Development Permit for Earthworks, Roadworks and Stormwater (North Harbour, RNA Stage 3)
DA/2024/2312	16 September 2024	Reconfiguring a Lot - Development Permit for Subdivision (1 into 6 Lots plus balance lots and common property) North Harbour MIBA, Stage 4 & 5
DA/2024/4192	25 September 2025	Operational Works for MB+ Operational Works - Development Permit for Earthworks, Roadworks and Stormwater (North Harbour, RNA Stage 4)
DA/2024/2264	7 November 2024	Reconfiguring a Lot - Development Permit for Subdivision (1 lot into 174 lots, plus 2 park lots, and 1

		balance lot in 5 Stages) (North Harbour, Stages 7-11)
DA/2024/5290	12 December 2024	Development Permit - Operational Works for Earthworks (Retaining Wall)
DA/2024/5375	24 February 2025	Development Permit for Operational Works Development Permit for Roadworks & Stormwater (MIBA, Stage 4)
DA/2025/0645	3 March 2025	Development Permit for Operational Works Development Permit for Roadworks & Stormwater (RNA, Stage 5)
DA/2025/1206	3 April 2025	Development Permit for Operational Works Development Permit for Roadworks & Stormwater (RNA, Stage 7)
DA/2024/0251	23 April 2025	Development Permit for Operational Works Development Permit for Roadworks & Stormwater (MIBA, Stage 5)
DA/2025/1404	9 May 2025	Development Permit for Operational Works Development Permit for Roadworks & Stormwater (RNA, Stage 8)
DA/2025/1711	9 May 2025	Development Permit for Operational Works Development Permit for Roadworks & Stormwater (RNA, Stage 9)
DA/2025/5893	15 January 2026	Development Permit for Operational Works Development Permit for Roadworks & Stormwater (RNA, Stage 10)
DA/2025/2270	11 June 2025	Development Permit for Operational Works Development Permit for Roadworks & Stormwater (RNA, Stage 11)
DA/2025/2694	27 June 2025	Development Permit for Operational Works Development Permit for Roadworks & Stormwater (RNA, Stage 12)
DA/2025/2798	1 July 2025	Development Permit for Operational Works Development Permit for Roadworks & Stormwater (RNA, Stage 13)
DA/2025/3247	12 August 2025	Development Permit for Operational Works Development Permit for Roadworks & Stormwater (RNA, Stage 14)

- Note: Register Current as at 12 May 2026
- Other approvals including operational works for future stages may have been recently approved but are not relevant to the reporting period.

LBEMP Sub-Plan 7

Not applicable for 2024-2025 reporting period (All works previously completed). Refer 2018-2024 Compliance Reports.

LBEMP Sub-Plan 8

Reference	Approval Date	Description
DA/7352/2002/VCHG/3	22 January 2020	Request to Change (Other) for a Material Change of Use, and for variations to the applicable Planning Scheme under s.3.1.6 of the Integrated Planning Act 1997 (QLD) in relation to development for Mixed Industry, Business Area Precincts, Open Space and Related Purposes. (Original approval dated 28 June 2012).
DA/39447/2019/V4D	27 February 2020	Operational Works for MIBA Bulk Earthworks

- Note: Register Current as at 12 May 2026
- Other approvals including operational works for future stages may have been recently approved but are not relevant to the reporting period.

LBEMP Sub-Plan 9

Reference	Approval Date	Description
DA/2025/2565	16 September 2025	Operational Works for Earthworks

- Note: Register Current as at 12 May 2026
- Other approvals including operational works for future stages may have been recently approved but are not relevant to the reporting period.

LBEMP Sub-Plan 10

Reference	Approval Date	Description
DEV2025/1706	28 April 2026	Reconfiguring a Lot – 249 residentials lots, park and balance land in accordance with a Plan of Development

- Note: Register Current as at 12 May 2026
- Other approvals including operational works for future stages may have been recently approved but are not relevant to the reporting period.

APPENDIX C: SUPPORTING DOCUMENTATION

Michael McErlean

From: Michael McErlean
Sent: Monday, 11 August 2025 2:27 PM
To: EPBC Monitoring
Cc: Bryan Finney
Subject: EBPC 2025 Compliance Report 2006-2912

EPBC Compliance Monitoring Team,

Please be advised the latest annual compliance report for the Northeast Business Park project has been completed and a public access link has been placed on our website (https://www.northharbour.com.au/land-for-sale/resources/).

A direct link to the report is included below.

https://spaces.hightail.com/receive/m4UllYYquu

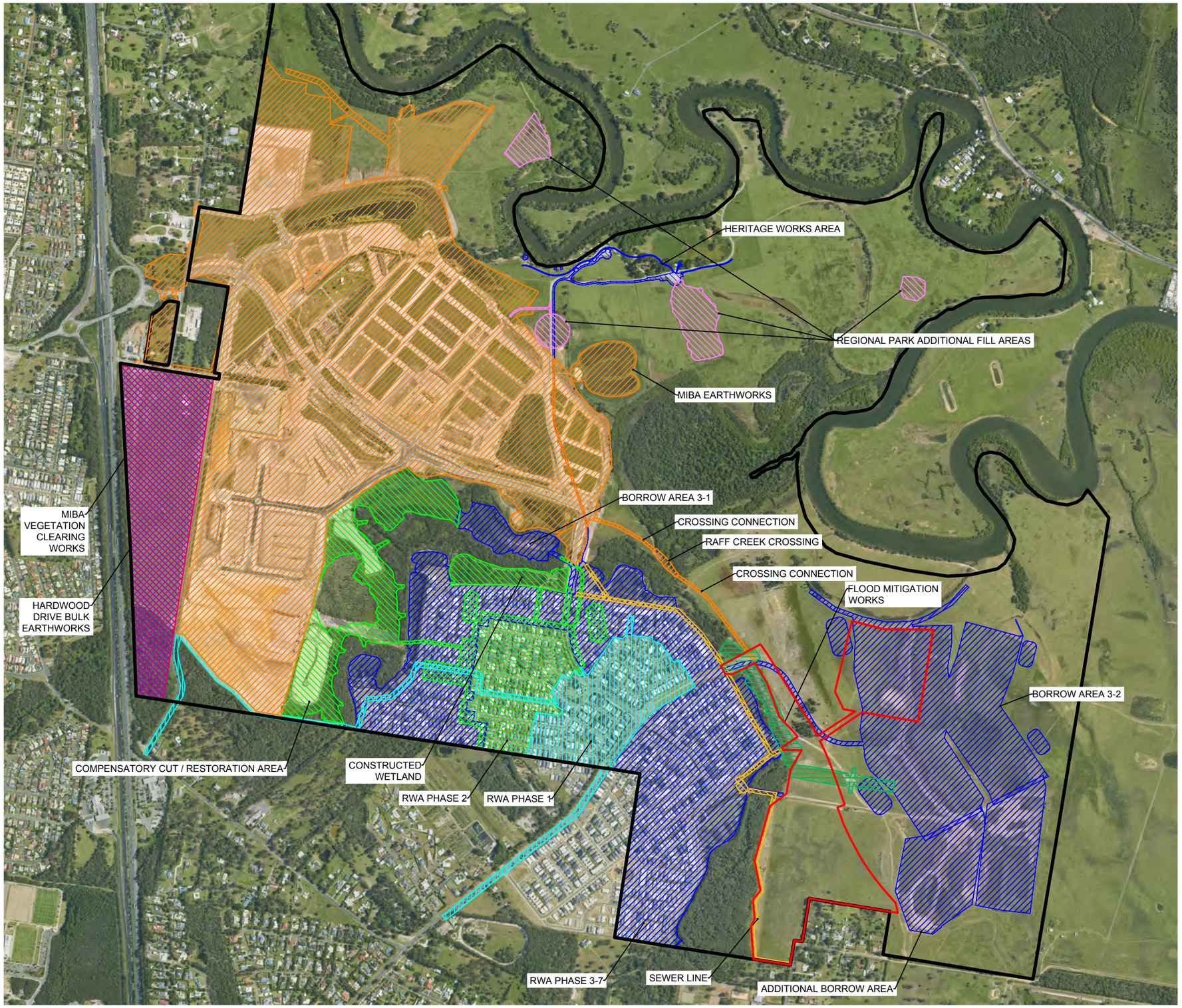
Regards,
Michael McErlean
Planning & Approvals Manager

North Harbour
by Port Binnli

Postal Address P O Box 99, Paddington, Qld 4064

m. 0417 884 155 **northharbour.com.au**


Nearmap



N

LEGEND

- LBEMP Sub-plan 10 Site Boundary
- NEBP Site Boundary
- LBEMP Sub-plan 01 Extent - MIBA (part of) Vegetation Clearing Works
- LBEMP Sub-plan 02 Extent - Residential West Area Phase 1
- LBEMP Sub-plan 03 Extent
  - Residential West Area - Phase 2
  - Compensatory Cut / Restoration Area
  - Constructed Wetland
- LBEMP Sub-plan 04 Extent
  - Residential West Area - Balance (Phases 3-7)
  - Borrow Areas
  - Heritage Works
- LBEMP Sub-plan 05 Extent - Sewer Pump Station SPS-BGY017 (PS3) Reticulation Network
- LBEMP Sub-plan 06 (Revised) Extent
  - MIBA (remaining areas) - Bulk Earthworks
  - Raff Creek Crossing & Connection
- LBEMP Sub-plan 07 Extent - Flood Mitigation Works
- LBEMP Sub-plan 08 Extent - Hardwood Drive Bulk Earthworks
- LBEMP Sub-plan 09 Extent - Regional Park Additional Fill Areas

Scale 1 : 15 000

0 200m 400m 600m

SOURCE: Metro Maps Aerial dated 07/11/24

SCALE: 1 : 15 000 @ A3

JWA Pty Ltd
Ecological Consultants

CLIENT
North Harbour Holdings Pty Ltd

PROJECT
LBEMP Sub-Plan 10
Priority Development Area - Precinct 1
North Harbour, Burpengary East QLD
City of Moreton Bay LGA

FIGURE 3

PREPARED: BW
DATE: 2 October 2025
FILE: Q15003_LBEMP10_20251002.dwg

TITLE

EXTENT OF CURRENT & PREVIOUS LBEMP AREAS

Australian Government
Department of Climate Change, Energy, the Environment and Water

EPBC 2006/2912

Mr Michael McErlean
Planning & Approvals Manager
North Harbour Holdings Pty Ltd
44 Brook Crescent, Burpengary East Qld 4505

Approval of Action Management Plan for North East Business Park Project, Burpengary East, Queensland

Dear Mr. McErlean,

Thank you for your email dated 16 July 2025 to the Department of Climate Change, Energy, the Environment and Water (the department), seeking approval of the Action Management Plan for North East Business Park, in accordance with condition 9 of the above project under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Officers of the department have advised me on the Action Management Plan and the requirements of the conditions of the approval for this project. On this basis, and as a delegate of the Minister for the Environment and Water (the Minister), I have decided to approve *Land Based Environmental Management Plan - Sub-Plan 09 - Regional Park Additional Fill Areas, North Harbour, version RW3* dated 09 September 2025. Now this plan has been approved, it must be implemented.

As you are aware, the department has an active monitoring program which includes monitoring inspections, desk top document reviews and audits. Please ensure that you maintain accurate records of all activities associated with, or relevant to, the conditions of approval so that they can be made available to the department on request.

Should you require any further information please contact Robert Hine by email to: PostApproval@dcceew.gov.au

Yours sincerely

Brendan Linton-Smith
Director, Post Approvals (Qld)
Environment Assessments (Vic and Tas) and Post Approvals Branch
Environment Regulation Division
17 October 2025

Australian Government
Department of Climate Change, Energy, the Environment and Water

EPBC 2006/2912

Mr Michael McErlean
Planning & Approvals Manager
North Harbour Holdings Pty Ltd
44 Brook Crescent, Burpengary East Qld 4505

Approval of Action Management Plan for North East Business Park Project, Burpengary East, Queensland

Dear Mr. McErlean,

Thank you for your email dated 02 October 2025 to the Department of Climate Change, Energy, the Environment and Water (the department), seeking approval of Action Management Plan for North East Business Park, in accordance with condition 9 of the above project under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Officers of the department have advised me on the Action Management Plan and the requirements of the conditions of the approval for this project. On this basis, and as a delegate of the Minister for the Environment and Water (the Minister), I have decided to approve the *Land Based Environmental Management Plan – Sub-Plan 10 North Harbour Priority Development Area – Precinct 1, Version RW2* dated 02 October 2025.

Now this plan has been approved, it must be implemented. The approved plan must also be published in accordance with your conditions of approval.

As you are aware, the department has an active monitoring program which includes monitoring inspections, desk top document reviews and audits. Please ensure that you maintain accurate records of all activities associated with, or relevant to, the conditions of approval so that they can be made available to the department on request.

Should you require any further information please contact Robert Hine by email to: PostApproval@dcceew.gov.au

Yours sincerely

Brendan Linton-Smith

Director, Post Approvals (Qld)
Environment Assessments (Vic and Tas) and Post Approvals Branch
Environment Regulation Division
21 November 2025

SURFACE WATER QUALITY

MONITORING SUMMARY REPORT

2025 / 2026 Reporting Period

North Harbour Residential Development

44 Brooke Crescent, Burpengary East, Queensland

PREPARED FOR	North Harbour Holdings Pty Ltd
ATTENTION	Michael McErlean — Planning & Approvals Manager
PROJECT NUMBER	LP140120
REPORT DATE	*06 August 2026*
REVISION	Rev 0
PREPARED BY	Lithaqua Environmental Services

Lithaqua Environmental Services Pty Ltd

PO Box 136, Peregian Beach QLD 4573 · T: 0401 671 624 · E: james@lithaqua.com · ABN 62 473 026 355

Document Control

Surface Water Quality Monitoring Summary — 2025/2026 Reporting Period

North Harbour Residential Development, 44 Brooke Crescent, Burpengary East, Queensland

PREPARED FOR	PREPARED BY
North Harbour Holdings Pty Ltd P O Box 99 Paddington QLD 4064	**Lithaqua Environmental Services** PO Box 136 Peregian Beach QLD 4573 T: 0401 671 624 E: james@lithaqua.com

Project Team

AUTHOR	**James Hall-Brown, BSc (Environment)** | Principal Environmental Scientist / Director
REVIEWER	**Robert Bartlett** | Senior Environmental Scientist

Revision History

REV	DATE	STATUS	PREPARED	REVIEWED
Rev 0	*06 August 2026*	Issued for Client	J. Hall-Brown	R. Bartlett

Distribution

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North Harbour Holdings Pty Ltd (Client)	1 × electronic copy (PDF) by email
Lithaqua Environmental Services (File)	1 × electronic copy (archived)

Authorisation

AUTHOR	REVIEWER
Signature: 	Signature: 
James Hall-Brown *Principal Environmental Scientist / Director* Date: *06 August 2026*	**Robert Bartlett** *Senior Environmental Scientist* Date: *06 August 2026*

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Abbreviations

ALS	Australian Laboratory Services
ANZG	Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2018)
AS/NZS	Australian / New Zealand Standard
ASS	Acid Sulfate Soils
BoM	Bureau of Meteorology
Cardno	Cardno (Qld) Pty Ltd — author of the Water Quality Monitoring Plan (V7)
Chl-a	Chlorophyll-a
COA	Certificate of Analysis
CoC	Chain of Custody
DO	Dissolved Oxygen
EC	Electrical Conductivity
DERM	Department of Environment and Resource Management (former)
EPP (Water)	Environmental Protection (Water and Wetland Biodiversity) Policy 2019
EV	Environmental Value
EVZ	Environmental Value Zone
MD	Moderately Disturbed (level of protection)
Eurofins	Eurofins Environment Testing Australia
FNU	Formazin Nephelometric Units
Lithaqua	Lithaqua Environmental Services Pty Ltd
LOR	Limit of Reporting
NATA	National Association of Testing Authorities
NEBP	Northeast Business Park
North Harbour	North Harbour Holdings Pty Ltd
NTU	Nephelometric Turbidity Units
NWQMS	National Water Quality Management Strategy
PASS	Potential Acid Sulfate Soils
pH	Potential of Hydrogen
QLD	Queensland
QWQG	Queensland Water Quality Guidelines 2009
SRN	Sample Receipt Notification
the site	North Harbour Residential Development, Burpengary East, Queensland
WQO	Water Quality Objective

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Executive Summary

North Harbour Holdings Pty Ltd (*North Harbour*) engaged Lithaqua Environmental Services (*Lithaqua*) to undertake the 2025/2026 surface water quality monitoring program at the North Harbour Residential Development at Burpengary East, Queensland (*the site*). Monitoring was completed in general accordance with the Residential West Water Quality Monitoring Plan (Version 7, Cardno, 3 February 2015), under which monitoring has been conducted since July 2015.

Lithaqua conducted twelve surface water monitoring rounds between 31 July 2025 and 15 June 2026 at four on-site locations (A, C, D and F) and three off-site locations along the Caboolture River; Location H upstream, and Locations G and I downstream of the site. Field water quality parameters including; turbidity, temperature, Dissolved Oxygen (DO), Electrical Conductivity (EC) and pH — were measured in-situ, and surface water samples where present were collected and submitted to a NATA-accredited laboratory for Chlorophyll-a analysis. Results were assessed against the Water Quality Objectives (WQOs) scheduled for the Caboolture River sub-basin under the *Caboolture River Environmental Values and Water Quality Objectives* (July 2010), as adopted by the Residential West Water Quality Monitoring Plan (Version 7, Cardno, 2015), refer to Section 1.4 for status of that document.

Daily rainfall records from the nearest catchment gauge were obtained and antecedent rainfall calculated for each round, to distinguish catchment-scale influences from any site-derived effect.

KEY FINDINGS

- ▸ **Rainfall:** The reporting period spanned an unusually wide range of conditions. Rainfall at BoM Beerburrum Forest Station (040284), 16 km from site and within the Caboolture catchment, totalled 1,344.6 mm. September 2025 delivered 3.8 mm for the whole month; March 2026 delivered 265.8 mm, with 98.6 mm falling on a single day. Antecedent rainfall was calculated for every round and tested against the results.
- ▸ **Turbidity:** Exceedances of the 8 NTU estuary objective at Location H, in the river upstream of the project site were recorded on 10 of 12 rounds. Turbidity improved in estuarine locations alongside the project and nearer to the river mouth, with exceedances at Locations C and G on 7 occasions, and at Location I on 6 occasions. The freshwater locations associated with the localised catchments recorded much lower turbidity levels: one exceedance of the 50 NTU objective at Location A, none at Location F. Crucially, turbidity tracks antecedent rainfall, and the relationship tightens as the window lengthens — at 14 days, Pearsons r (r)reaches 0.71 at Location G, 0.69 at C and 0.84 at I. Indicating wash-off from the wider catchment, not a discrete source, is driving these readings.
    - ▸ **Upstream–downstream control comparison:** Mean turbidity at the upstream freshwater controls tracks the downstream tidal locations at r = 0.87 across 11 paired rounds. Readings from Locations A and F, situated upstream of all construction work on the site, rise in tandem with the downstream locations. This indicates that natural background variations drive downstream turbidity, not site construction.
- ▸ **pH:** The Caboolture River locations H, G and I met the 7.0–8.4 objective, on each of the twelve rounds. Locations C and D each returned seven results which marginally under the objective, the lowest being 6.49. However, readings documented from upstream control locations ranged from 6.29 to 7.11 within the same period. The control pH variance confirms the downstream surface water is no more acidic than the freshwater feeding it.
- ▸ **Dissolved Oxygen:** DO fell below the objective band at most locations on most rounds and rose above it on five — four of them on 23 September 2025, the round that followed a month with 3.8 mm of rain and found both freshwater locations dry. Warm, saline, unflushed water at the tidal locations drove oxygen above saturation that day. On the low side the upstream controls were the lowest of all — Location A below the band

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on all 10 assessed rounds, Location F on all 9 — while Location I, furthest downstream, recorded the highest readings and the fewest exceedances. The gradient runs the wrong way for a site-derived oxygen demand and matches every previous reporting period.

- ▸ **Chlorophyll-a:** Ten rounds were analysed. The 4 mg/m³ estuary objective was met and or exceeded at Location G on five rounds, at Location H on four, and Locations C and I on two rounds each. Location D recorded no exceedances at all, and both freshwater Locations A and F stayed at or under their 5 mg/m³ objective throughout. The one striking result — 22 mg/m³ at Location H on 10 March 2026 — was recorded at the river location upstream of the site, where the development cannot be its cause; the two river locations downstream of the site both returned below the limit of reporting on the same day. The final round in June returned the lowest concentrations of the year.
- ▸ **Historical trends (2014–2026):** The twelve-year record is where the clearest evidence sits. At Locations C, D and G — the three locations downstream of the works — pH has **risen** significantly ($p < 0.001$, $p = 0.046$, $p = 0.007$) and turbidity has **fallen** significantly ($p = 0.004$, $p < 0.001$, $p < 0.001$). Acid Sulfate Soil disturbance drives pH down; the pH here has gone up, steadily, throughout the period of project construction. Water clarity has improved over the same span. No location shows a significant adverse trend in either parameter.
- ▸ **Conclusion:** Analysis of the 2025/2026 monitoring data indicates that construction at the site has applied appropriate controls to ensure water quality in Raff Creek, its tributary or the Caboolture River is not impacted by construction activity. The variation observed tracks rainfall and season, and it registers at the upstream controls as readily as downstream. Further, analysing the data over the twelve-year monitoring records demonstrates that key water quality indicators have been steadily trending in the direction of improving water quality, including rising pH and falling turbidity. This data indicates the erosion and sediment controls and the Acid Sulfate Soil management applied at this site are effectively controlling risk of environmental impact during construction. The improving water quality records also indicate that the wetlands and bio basins being installed within the development to treat ongoing stormwater flows is having a positive influence on water quality discharging to the Caboolture River.

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1 Introduction

Lithaqua Environmental Services Pty Ltd (*Lithaqua*) was engaged by North Harbour Holdings Pty Ltd (*North Harbour*) to undertake the 2025/2026 surface water quality monitoring program at the North Harbour Residential Development in Burpengary East, Queensland (*the site*). Monitoring locations are presented in Figures 1 and 2, and photographs, Appendix B.

1.1 Purpose

The purpose of the monitoring program is to collect and compare surface water quality data upstream and downstream of the site, and to assess whether construction activities have affected the receiving waterways — Raff Creek, its tributary and the Caboolture River.

1.2 Scope of Work

The scope of work for the reporting period comprised:

- Monthly in-situ measurements of turbidity, temperature, DO, EC and pH at each accessible monitoring location;
- Monthly collection of water samples for laboratory analysis of Chlorophyll-a;
- Visual assessment for litter and surface sheen at each location;
- Compilation of daily rainfall records for the reporting period from the nearest catchment gauge, and calculation of antecedent rainfall for each monitoring round;
- Comparison of results against the relevant Water Quality Objectives; and
- Preparation of this monitoring summary report.

1.3 Guidelines, Standards and Regulations

The monitoring program was undertaken in general accordance with the following, current at the date of this report:

1. **Residential West Water Quality Monitoring Plan** (Version 7) — Cardno (Qld) Pty Ltd, 3 February 2015, prepared for the project;
2. **Caboolture River Environmental Values and Water Quality Objectives** — Department of Environment and Resource Management, July 2010. The source of the Water Quality Objectives adopted by the Cardno monitoring plan and applied throughout this program. Refer to Section 1.4 regarding the current status of this document;
3. **Environmental Protection (Water and Wetland Biodiversity) Policy 2019** — subordinate legislation under the Queensland Environmental Protection Act 1994. Schedule 1 lists the current Caboolture River Environmental Values and Water Quality Objectives (June 2022), discussed in Section 1.4;
4. **Australian and New Zealand Guidelines for Fresh and Marine Water Quality** (ANZG, 2018), under the National Water Quality Management Strategy, which supersede ANZECC/ARMCANZ (2000);
5. **Queensland Water Quality Guidelines 2009** (reprinted 2013) — applied as default guideline values where Schedule 1 objectives are not scheduled;
6. **Monitoring and Sampling Manual 2018** — Queensland Department of Environment and Science;
7. **AS/NZS 5667.1:1998** Water Quality — Sampling, Part 1: Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples; and
8. **AS/NZS 5667.6:1998** Water Quality — Sampling, Part 6: Guidance on the sampling of rivers and streams.

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1.4 Water Quality Objectives Applied

The WQOs applied throughout this report are those adopted by the council approved Residential West Water Quality Monitoring Plan (Version 7, Cardno, 2015), which draws them from the *Caboolture River Environmental Values and Water Quality Objectives* published by the Department of Environment and Resource Management in July 2010 under the now-repealed Environmental Protection (Water) Policy 2009.

That document has since been replaced. In June 2022 the department published a revised *Caboolture River Environmental Values and Water Quality Objectives*, listed under Schedule 1 of the Environmental Protection (Water and Wetland Biodiversity) Policy 2019 and accompanied by plan WQ1422. The revised document restructures the water type classification — the middle estuary is divided into three sections with separate objectives — assigns a management intent to each Environmental Value Zone, and sets objectives that differ from the 2010 values, in several cases materially. It also specifies flow-dependent objectives, keyed to discharge at gauge 142001A for fresh waters and to conductivity thresholds for estuarine waters.

The 2010 objectives have been retained for this reporting period for two reasons. First, they are the objectives specified by the approved monitoring plan under which this program operates. Second, and more importantly for the analysis in Section 7, they are the objectives against which every reporting period since 2015 has been assessed. The trend analysis draws on 131 monitoring rounds extending to March 2014; applying a different criterion to the final year alone would break the comparability of that record.

Two points follow. The exceedance counts reported in Section 6 are counts against the 2010 objectives and should not be read as compliance findings against the objectives currently scheduled under the EPP (Water and Wetland Biodiversity) Policy 2019, which are in several instances more stringent. The trend findings in Section 7 are unaffected, as they measure change over time and are independent of any threshold.

Lithaqua recommends that the monitoring plan be reviewed against the current Schedule 1 document and plan WQ1422, that the water type and management intent mapped for each monitoring location be confirmed, and that the objectives applied to this program be updated accordingly for future reporting periods. Reporting both sets of objectives in a transitional period would preserve the historical record while establishing the current position.

2 Sample Locations

Monitoring was undertaken at seven locations. Four sit within the site — Locations A and F on the upstream boundary, and Locations C and D downstream of them on Raff Creek and its tributary respectively. The remaining three are located on the Caboolture River, which flows across Location H – upstream of the site, continuing to Location G – downstream of the site, flowing to Location I – further downstream again.

The arrangement gives three independent points of reference against which the site can be assessed. Locations A and F are freshwater and lie on the upstream boundary, above all construction works: A upstream of C on Raff Creek, F upstream of D on the tributary. Location H lies upstream of the site on the Caboolture River. Water quality at these three locations is not influenced by the development, and they serve as the controls against which the downstream locations (C, D, G and I) are compared.

Locations C, D, G, H and I are tidally influenced and Locations A and F remained consistent with freshwater, as reflected in EC readings document across the reporting period.

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Table 1 — Monitoring Locations

Location	Description	Water Type / WQO	Role
A	Upstream Raff Creek	Lowland Freshwater	Upstream control
C	Midstream Raff Creek	Middle Estuary	On-site — downstream
D	Midstream Raff Creek Tributary	Middle Estuary	On-site — downstream
F	Upstream Raff Creek Tributary	Lowland Freshwater	Upstream control
G	Caboolture River — Downstream of site	Middle Estuary	Downstream of site
H	Caboolture River — Upstream of site	Middle Estuary	Upstream control (river)
I	Caboolture River — Furthest downstream	Middle Estuary	Downstream of site

3 Methodology

Water quality monitoring was conducted by Lithaqua personnel in general accordance with the NEBP Residential West Water Quality Monitoring Plan (Version 7), AS/NZS 5667.1:1998, AS/NZS 5667.6:1998 and Queensland regulatory requirements. The following method was used at each location:

- Upon arrival, a visual assessment for litter and surface sheen was undertaken;
- Field parameters — turbidity, temperature, DO, EC and pH — were measured using a Hanna Instruments HI98594 multiparameter meter (serial M01300021111). The meter was calibrated over the reporting period in accordance with the manufacturer's procedure, against standards for each parameter, with pre-calibration and post-calibration readings recorded on each occasion. Certificates of calibration are presented in Appendix D. Turbidity is measured by the instrument in FNU and is reported in this document as NTU-equivalent. The FNU was multipoint calibrated over the reporting perod;
- Samples for laboratory analysis were collected using a telescopic sampling pole. Laboratory-supplied containers were immersed inverted beneath the water surface and turned upright to fill, then sealed, placed on ice and transferred under Chain-of-Custody to a NATA-accredited laboratory (ALS Environmental, Stafford) for analysis of Chlorophyll-a by method EP008; and
- At the tidally influenced locations (C, D, G, H and I), sampling was undertaken on an outgoing (ebb) tide on every round, so that tidal phase is held constant across the reporting period.

3.1 Rainfall Data

Daily rainfall records for the reporting period were obtained from the Bureau of Meteorology Daily Weather Observations for Beerburrum Forest Station (station 040284, product IDCJDW4010), the nearest gauge to the site with a complete record, located approximately 16 km from the site within the Caboolture River catchment. The record is published by the Bureau at bom.gov.au/climate/dwo and is not reproduced in this report. Antecedent rainfall totals (24-hour, 72-hour, 7-day, 14-day and 30-day) were calculated for each monitoring round from that record and are presented in Table 3.

5 Monitoring Program

5.1 Field

Field measurements and laboratory Chlorophyll-a data for all locations are presented in Tables 5–11 (Appendix A), together with graphs of the current and historical data. Laboratory reports are presented in Appendix C.

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Twelve rounds were completed. Data availability across the reporting period was as follows:

- Locations A and F were observed dry on 23 September 2025, with no surface water present to sample. This followed 3.8 mm of rainfall for the month and no rainfall in the preceding 14 days;
- DO was not collected at Locations A, C and F on 31 October 2025 due to probe failure. DO compliance at those three locations for that round is therefore not assessed. Other parameters for that round were unaffected;
- Location F was observed dry again on 31 January 2026. That round followed 92.8 mm over the preceding 30 days but only 5.0 mm in the preceding 7, indicating that the Raff Creek tributary at this point ceases to hold water within about a week of rainfall ending;
- Chlorophyll-a samples collected on 11 December 2025 and 16 February 2026 exceeded the laboratory holding time prior to submission and were not analysed. No Chlorophyll-a result is available for those two rounds at any location.

The two dry observations serves as a formal, documented results. Location F, on the Raff Creek tributary at the upstream site boundary, held no water on 23 September 2025 after 3.8 mm of rainfall for the month, and again on 31 January 2026 after a week with 5.0 mm — despite 92.8 mm over the preceding 30 days. The tributary at this point is an ephemeral channel that ceases to hold water within roughly a week of rainfall ending. Location A, on Raff Creek proper, was dry only on the September occasion.

Chlorophyll-a results are therefore available for ten of the twelve rounds. Both rounds lost to holding time fall in the wet season, when Chlorophyll-a runs highest, so that part of the year is under-represented. Section 9.1 addresses this.

5.2 Rainfall

Total rainfall recorded at Beerburrum Forest Station over the reporting period was 1,344.6 mm. Monthly totals are presented in Table 2.

Table 2 — Monthly Rainfall in mm, Beerburrum Forest Station (040284)

Month Year	Jul 25	Aug 25	Sep 25	Oct 25	Nov 25	Dec 25	Jan 26	Feb 26	Mar 26	Apr 26	May 26	Jun 26
mm	81.6	56	**3.8**	110.2	170.6	69	124.4	133.4	**265.8**	61.8	**200.4**	67.6

Rainfall (mm). Shaded: months exceeding 200 mm, and September 2025 (3.8 mm).

Conditions over the reporting period spanned a wide range. September 2025 recorded 3.8 mm for the month, with no rainfall in the 14 days preceding the 23 September round. March 2026 recorded 265.8 mm, including 98.6 mm on 9 March, the day before the 10 March round. Antecedent rainfall for each round is presented in Table 3.

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Table 3 — Antecedent Rainfall at Each Monitoring Round

Round (day)	Rain on day (mm)	72 hour (mm)	7 day (mm)	14 day (mm)	30 day (mm)
31/07/2025	0.0	0.2	36.0	49.8	57.6
27/08/2025	0.0	0.2	20.4	42.6	56.2
23/09/2025	0.0	0.0	0.0	**0.8**	3.8
31/10/2025	12.8	40.4	53.2	76.4	110.2
28/11/2025	0.0	9.4	26.8	**122.4**	174.0
11/12/2025	0.4	0.4	9.0	18.8	142.8
31/01/2026	0.0	0.2	5.0	72.2	92.8
16/02/2026	24.0	75.2	80.0	88.8	161.0
10/03/2026	19.8	146.2	176.4	**223.0**	308.2
28/04/2026	2.6	17.4	34.2	37.0	51.2
22/05/2026	0.0	4.4	67.8	95.4	169.4
15/06/2026	0.0	8.4	42.6	44.2	186.0

Rainfall totals (mm) for the period preceding and including each round. Shaded and bold: 14-day totals ≥100 mm and ≤5 mm.

Rainfall on 25 and 26 November 2025 was not recorded by the station. The 14-day and 30-day totals for the 28 November 2025 round are therefore minimum values.

6 Data Interpretation

Results were compared against the Water Quality Objectives adopted by the Residential West Water Quality Monitoring Plan (Version 7, Cardno, 2015), which are drawn from the *Caboolture River Environmental Values and Water Quality Objectives* (Department of Environment and Resource Management, July 2010). These are the objectives against which every reporting period of this program has been assessed since 2015, and they are applied here for consistency with that record. Their current legislative status is set out in Section 1.4.

6.1 Electrical Conductivity

EC results confirm the tidal classification of the monitoring locations. Temperature followed the expected seasonal cycle (16.6 °C to 30.8 °C) and is not discussed further.

EC reflecting tidal exchange:

- Location I ranged from 10,090 to 51,330 µS/cm and Locations C, D and G from below 250 µS/cm to above 29,000 µS/cm.

EC results consistent with freshwater:

- Locations A and F remained between 153 and 471 µS/cm throughout,
- .6.1 Turbidity

Turbidity exceedances against the relevant WQO were recorded as follows:

- **Location A:** 1 of 11 rounds exceeded the 50 NTU lowland freshwater objective (56.2 NTU, 28 November 2025).

- **Location F:** No exceedance of the 50 NTU objective on any of 10 rounds (maximum 15.5 NTU).
- **Location C:** 7 of 12 rounds exceeded the 8 NTU middle estuary objective (maximum 41.1 NTU, 28 November 2025).
- **Location D:** 1 of 12 rounds exceeded the 8 NTU objective (11.9 NTU, 28 November 2025).
- **Location G:** 8 of 12 rounds exceeded the 8 NTU objective (maximum 97.2 NTU, 10 March 2026).
- **Location H:** 10 of 12 rounds exceeded the 8 NTU objective (maximum 140.0 NTU, 28 November 2025).
- **Location I:** 6 of 12 rounds exceeded the 8 NTU objective (maximum 63.7 NTU, 10 March 2026).

Every location except F shows turbidity rising with antecedent rainfall, and the pattern has a particular shape: weak against the previous 24 hours, strongest against the previous 14 days, refer to Table 4. That shape matters. A discrete sediment source close to a monitoring point produces an immediate response to rain falling on it. Progressive wash-off from a wider catchment builds over days. The data describe the second.

Table 4 — Turbidity: Correlation with Antecedent Rainfall (Pearson r)

Location	Monitoring Context	n	24 hour (r)	72 hour (r)	7 day (r)	14 day (r)
A	Freshwater control	11	-0.09	0.17	0.25	0.53
C	Tidal	12	0.29	0.46	0.53	**0.69**
D	Tidal	12	-0.02	0.03	-0.10	0.29
F	Freshwater control	10	0.05	-0.19	-0.35	-0.19
G	Tidal	12	0.18	0.50	0.54	**0.71**
H	Tidal	12	0.08	0.33	0.35	**0.68**
I	Tidal	12	0.58	**0.88**	**0.85**	**0.84**

Shaded and bold where $|r| \geq 0.6$.

The two rounds with the highest turbidity across the site were also the two wettest. On 28 November 2025, after 122.4 mm in the preceding fortnight, turbidity hit 140.0 NTU at H, 74.3 at G, 56.2 at A and 41.1 at C. On 10 March 2026, after 146.2 mm in three days — 98.6 mm of it the day before sampling — G reached 97.2 NTU, H 88.3, I 63.7 and C 35.2. Location A, the upstream freshwater control, was elevated on both occasions alongside everything downstream of it, despite sitting above every work on the site.

The paired comparison puts a figure on this. Mean turbidity at the upstream controls tracks mean turbidity at the downstream tidal locations at **r = 0.87** over 11 rounds. Turbidity rises at the upstream and downstream locations together, and it does so in response to rainfall.

Location F is the one exception, returning a weak negative coefficient (r = −0.35 at 7 days). Additionally, turbidity ranged from s 2.7 to 15.5 NTU across 10 rounds — to narrow a range, and too few points, to read anything into the sign of the coefficient.

6.2 pH

The three Caboolture River locations recordings complied across each round range as follows; G: 7.08–7.67, H: 7.02–7.66 and I: 7.02–8.14, all comfortably inside the 7.0–8.4 objective.

Locations C and D each returned seven results a little under the 7.0 bound — C from 6.73 to 7.25, D from 6.49 to 7.44. Location A ran 6.29–7.09 and Location F ranged 6.43–7.11 over the same period, each with one result marginally under the 6.5 freshwater bound. Regional Baseline Alignment: Location A and F establish the ambient chemistry of

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the incoming water. Because Raff Creek and its tributary mirror these exact ranges, the water is simply maintaining its upstream signature.

Additionally, the lowest pH readings line up with the wettest antecedent periods, which demonstrates a mobilised acidity source. Section 7.1 sets out the twelve-year picture, and it points firmly the other way.

6.3 Dissolved Oxygen

DO objectives set a band, not a floor — 85–110% saturation for the freshwater locations, 85–105% for the estuarine. Readings fell outside that band in both directions over the reporting period, and both are reported here

Readings below the band, on the great majority of rounds listed below. At the upstream freshwater controls (Location A and F), it happened without exception:

- Location A on all 10 assessed rounds (10.3–66.1%),
- Location F on all 9 (13.0–59.1%),
- Location C on 9 of 11 assessed rounds,
- Location D on 10 of 12,
- Location G on 9 of 12,
- Location H on 9 of 12, and
- Location I on 4 of 12.

Above the band, on five occasions. Four of those fell on a single round: — 23 September 2025:

- Location D reached 142.6%,
- Location I at 121.3%,
- Location G at 114.6%, and
- Location C at 111.2%.

The fifth event was on 22 May 2026:

- Location I at 108.3%.

No freshwater location recorded supersaturation, for the straightforward reason that both Locations A and F were dry on 23 September. This round is worth understanding rather than simply listing. It followed 3.8 mm of rainfall for the whole of September and fourteen consecutive days without rain (Section 4). Raff Creek and its tributary had stopped flowing — A and F held no water at all. What remained at the tidal locations was warm (23.1–23.6 °C), saline (29,770–51,330 µS/cm) and unflushed. Standing water of that kind, under spring sun, supports photosynthetic production that drives oxygen above saturation during daylight. Supersaturation here is a signature of drought and tidal isolation, not of any discharge from the site. The single May reading at Location I (108.3%, 3.3 percentage points above the bound) sits at the most marine-influenced location on a round with 49,170 µS/cm and is of no interpretive weight.

The gradient across the low-side readings is the substantive finding. DO is lowest at Locations A and F, the freshwater controls on the upstream boundary, above every work on the site. It is highest at Location I, the furthest downstream and most marine-influenced location, and the only one to sit inside the band on the majority of its rounds. Location H, upstream of the site on the river, and Location G, downstream of it, returned closely comparable results — 39.3–96.9% at H against 40.3–114.6% at G — with no step change recorded across the site. If the development site was

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exerting an oxygen demand on the system, DO readings would fall between the upstream and downstream locations rather than rise. This is concurrent within every previous reporting period: the site lies within organic-rich, low-gradient coastal waterways, and DO below the guideline value is their normal condition rather than an exception to it.

6.4 Chlorophyll-a

Chlorophyll-a was analysed by ALS Environmental (method EP008, LOR 1 mg/m³) for ten of the twelve rounds. Results against the relevant objective:

- **Location A:** below the 5 mg/m³ freshwater objective on all 9 analysed rounds (maximum 4 mg/m³, 31 July 2025).
- **Location F:** below the 5 mg/m³ objective on 7 of 8 analysed rounds; one result sat at the objective (5 mg/m³, 28 November 2025).
- **Location C:** at or above the 4 mg/m³ estuary objective on 2 of 10 rounds — 28 November 2025 and 31 January 2026, each exactly at 4 mg/m³.
- **Location D:** below the 4 mg/m³ objective on all 10 analysed rounds (maximum 3 mg/m³).
- **Location G:** at or above the 4 mg/m³ objective on 5 of 10 rounds (maximum 7 mg/m³, 23 September 2025).
- **Location H:** at or above the 4 mg/m³ objective on 4 of 10 rounds (maximum 22 mg/m³, 10 March 2026).
- **Location I:** at or above the 4 mg/m³ objective on 2 of 10 rounds (maximum 8 mg/m³, 28 November 2025).

Both freshwater locations remained under their objective across every analysed round, and the Raff Creek tributary at Location D recorded no exceedance at all. What exceedances there were fell on the three Caboolture River locations — G and I downstream of the site, and H upstream of it. The river drains a 370 km² catchment extending far beyond this development and carries nutrient load inputs from all of it. That Location H, upstream of the site, recorded four exceedances including the highest of the year indicates the source of that enrichment lies in the wider catchment rather than at the development.

The 22 mg/m³ reading at Location H on 10 March 2026 warrants comment, being five times the objective and by a clear margin the highest of the year. Location H lies on the Caboolture River *upstream* of the site. Water at that point has not passed the development, so the result cannot be attributed to it. On the same round the two river locations downstream of the site both returned below the limit of reporting — Location G at <3 mg/m³ and Location I at <3 mg/m³ — so whatever produced the elevated concentration upstream was not detectable downstream. The result reads as localised and transient, and it originates above the site.

The final round, on 15 June 2026, returned the lowest Chlorophyll-a concentrations of the year — every location below its objective, and only Location G (3 mg/m³) registering above the limit of reporting at all.

Some results carry elevated limits of reporting — <2 and <3 mg/m³ — where suspended material reduced the filtration volume. Where the raised LOR sits close to the 4 mg/m³ objective, compliance cannot be positively demonstrated for that result, though the reported value remains below the objective in every case.

6.5 Litter

Litter was observed on five occasions: a plastic wrapper at Location A (31 July 2025); a wooden chair (31 July 2025), a plastic bag (11 December 2025) and glass bottles (16 February 2026) at Location H; and fishing line and a plastic wrapper at Location I (31 July 2025). All observations were at the Caboolture River locations or the upstream freshwater control and are consistent with general public access to the river rather than with construction activity.

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7 Historical Data Trends

A single reporting period can only say so much. The value of this program is that it has been running since March 2014, through baseline and construction alike, and now comprises 131 monitoring rounds. Trends across that record were tested with the Mann-Kendall test — non-parametric, makes no assumption of normality, and holds up against the outliers that dominate any turbidity dataset. Graphs 4–7 (Appendix A) present the data and the fitted trends.

The three locations downstream of the works — C and D on Raff Creek and its tributary, and G on the Caboolture River below the site — all show statistically significant trends. In every case pH has risen and turbidity has fallen (Table 12).

Table 12 — Historical Trend Analysis, Locations C, D and G (2014–2026)

Parameter	Location	Slope	Kendall tau	p-value	Trend
pH	**C**	+0.054 / yr	+0.246	<0.001	Increasing — significant
pH	**D**	+0.027 / yr	+0.119	0.046	Increasing — significant
pH	**G**	+0.029 / yr	+0.166	0.007	Increasing — significant
Turbidity	**C**	−0.63 NTU / yr	−0.171	0.004	Decreasing — significant
Turbidity	**D**	−1.09 NTU / yr	−0.330	<0.001	Decreasing — significant
Turbidity	**G**	−1.84 NTU / yr	−0.226	<0.001	Decreasing — significant

Slope from least-squares linear regression; significance from the Mann-Kendall test (n = 123–130 per series).

7.1 pH — Increasing Trend at Locations C, D and G

All three locations show pH climbing over the monitoring period. Location C on Raff Creek leads at +0.054 units per year (tau = +0.246, p < 0.001), then Location G at +0.029 (p = 0.007) and Location D at +0.027 (p = 0.046). Across twelve years that amounts to roughly 0.6 pH units at C and 0.3 at D and G.

This bears directly on the question of Acid Sulfate Soils. Disturbing ASS or PASS during earthworks releases acidity, and the signature of that in receiving waters is a *falling* pH trend downstream of the works. What the record shows is the opposite, at all three locations, sustained across the entire construction period. The marginal exceedances noted in Section 6.2 sit on top of a baseline that has been rising for twelve years.

Graph 7 shows the practical effect. The fitted trend at Location C begins the record at pH 6.69, below the 7.0 objective, and crosses into the objective band around 2020; Location D crossed in 2016; Location G has been inside the band throughout. These locations have not merely avoided acidifying — two of the three have moved from below the objective to within it over the course of the development.

This is positive evidence, not an absence of evidence. Had ASS management at the site failed, this is precisely the dataset in which the failure would appear — twelve years of monthly monitoring immediately downstream of the works, spanning the whole of construction. It does not appear. The measures applied have held.

7.2 Turbidity — Decreasing Trend at Locations C, D and G

Turbidity has fallen significantly at all three. Location G declines fastest at −1.84 NTU per year (tau = −0.226, p < 0.001), followed by Location D at −1.09 (tau = −0.330, p < 0.001) and Location C at −0.63 (tau = −0.171, p = 0.004).

Location C warrants a note on method. Turbidity data are heavily right-skewed — a handful of storm readings carry most of the weight — and an untransformed linear regression at C returns p = 0.15, resolving nothing. Under the two tests suited to a distribution of this shape, the trend is significant: Mann-Kendall p = 0.004, and log-transformed linear regression p = 0.018. Graph 6 accordingly plots turbidity on a logarithmic scale.

Graph 6 puts the decline in context against the objective. The fitted trend at Location D starts the record at 20.1 NTU and crosses below the 8 NTU objective around 2025; Location C falls from 21.9 to 14.2 NTU and Location G from 36.4 to 14.0 NTU over the same span, both still above the objective but on a clear downward path. The individual exceedances reported in Section 6.1 sit on a baseline that has more than halved at two of the three locations.

The decline runs the length of the construction period. Water leaving the site is clearer now than when baseline monitoring began, individual wet-weather exceedances notwithstanding. The upstream controls decline too (Location A $p < 0.001$, Location F, $p = 0.021$), so some of this is catchment-wide — but the point stands that the works have not reversed it at any downstream location. Erosion and sediment control, together with the artificial wetlands on site, have kept Raff Creek and its tributary on an improving path throughout.

7.3 Other Locations

Elsewhere: pH rose significantly at Locations F and H, and turbidity fell significantly at A, F and I. No significant trend was resolved for pH at A or I, or for turbidity at H.

The broader observation is what the record does *not* contain. Across seven locations, there are two parameters that over twelve years, not one significant adverse trend appears. Nowhere has pH declined. Nowhere has turbidity risen.

8 Conclusions

Twelve monitoring rounds were completed between 31 July 2025 and 15 June 2026, across a year that rainfall totals the ranged from one month with 3.8 mm of rain to one month with 265.8 mm. The findings are as follows.

- Turbidity exceeded the objective at the tidal locations on most rounds, and once at an upstream freshwater control. Those exceedances follow rainfall: the correlation strengthens as the antecedent window lengthens, the rounds of highest turbidity were the two wettest, and the upstream controls track the downstream locations at $r = 0.87$. Water quality at Locations A and F — above every work on the site — trends with the locations below them. Over the twelve-year record, turbidity at Locations C, D and G has **fallen significantly** ($p = 0.004$, $p < 0.001$, $p < 0.001$);
- pH complied on every round at all three Caboolture River locations. The marginal exceedances at Locations C and D sit inside the range measured at the upstream controls, and across the twelve-year record pH at Locations C, D and G has **risen significantly** ($p < 0.001$, $p = 0.046$, $p = 0.007$). Acid Sulfate Soil disturbance drives pH down. The cumulative data trending upward at the locations, where a failure were to occur it would show first, right through construction;
- DO ran below the objective band at most locations on most rounds and above it on five, four of which coincide with the drought occurring at round of 23 September 2025 when the creeks had stopped flowing and both freshwater locations were dry. On the low side the ordering is the reverse of what a site-derived oxygen demand produces — lowest at the upstream controls, highest at the furthest downstream location — and it matches every previous reporting period;
- Chlorophyll-a exceedances fell almost entirely on the three Caboolture River locations, which drain a 370 km² catchment reaching well beyond this site. Location D recorded none across ten rounds, and the freshwater locations stayed at or below their objective throughout; and
- Litter was recorded on five occasions, all consistent with public access to the river.

Nothing in the 2025/2026 dataset indicates that construction at the site has affected water quality in Raff Creek, its tributary or the Caboolture River. The data set clearly show a system responding to rainfall and season and responding upstream of the works as readily as downstream.

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The twelve-year record settles the question more firmly than any single year could. At the three locations downstream of the development, pH has risen and turbidity has fallen, both significantly, across the whole of construction. Neither trend is what an impacted waterway looks like. Across seven locations and two parameters, twelve years of monthly monitoring has not produced a single significant adverse trend. On this evidence the erosion and sediment controls, the artificial wetlands and the Acid Sulfate Soil management applied at this site have achieved what they were designed to do — and the receiving waters are in better condition now than when the baseline was set.

Lithaqua recommends monitoring continue under the Residential West Water Quality Monitoring Plan (Version 7). Three matters would tighten the dataset in future periods:

- Chlorophyll-a samples reaching the laboratory within holding time on every round, so that wet-season data is not lost as it was in December and February;
- Field duplicates and blanks at a defined frequency, giving the field dataset an independent measure of precision; and
- The monitoring plan reviewed against the current Schedule 1 Caboolture EV/WQO document (June 2022) and plan WQ1422, and the water type and management intent confirmed for each monitoring location, so that future reporting is assessed against the objectives currently in force.

9 Limitations

9.1 Data Limitations

The following limitations apply to the 2025/2026 dataset and should be read inconjuction with the conclusions in Section 8:

- Chlorophyll-a results are available for ten of the twelve rounds. Samples from 11 December 2025 and 16 February 2026 exceeded the laboratory holding time and were not analysed. Both fall in the wet season, when Chlorophyll-a concentrations run highest, so the dataset under-represents that period and the exceedance frequency in Section 6.4 may understate the true figure;
- DO was not collected at Locations A, C and F on 31 October 2025 due to probe failure. DO compliance at those locations for that round is not assessed;
- Locations A and F were observed dry on 23 September 2025, and Location F again on 31 January 2026. No surface water was present to sample on those occasions, so no result exists for those location-rounds;
- Field duplicate, blank and rinsate samples were not collected during the reporting period. Field precision and potential cross-contamination cannot therefore be quantified. Instrument calibration is documented — certificates for the meter used are presented in Appendix D — but calibration records address instrument accuracy rather than sampling precision, and the two are not interchangeable;
- Several Chlorophyll-a results carry elevated limits of reporting (<2 and <3 mg/m³). Where the elevated LOR approaches the 4 mg/m³ objective, compliance cannot be positively demonstrated for that result;
- The Water Quality Objectives applied are those of the July 2010 Caboolture EV/WQO document, as adopted by the Cardno monitoring plan. That document was replaced in June 2022 and the objectives currently scheduled under the EPP (Water and Wetland Biodiversity) Policy 2019 differ, in several cases materially. Exceedance counts in Section 6 are therefore counts against the 2010 objectives and are not compliance findings against the current Schedule 1. The water type and management intent mapped for each location under plan WQ1422 have not been confirmed. Refer to Section 1.4;

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- Rainfall data are from Beerburrum Forest Station, approximately 16 km from the site. Rainfall in Southeast Queensland is spatially variable, particularly during convective events, and rainfall at the site may differ from that recorded at the gauge. No rainfall was recorded at the station on 25 and 26 November 2025, so the antecedent totals for the 28 November 2025 round are minimum values; and
- Correlation does not establish causation. The rainfall correlations and the upstream–downstream comparison presented in Section 6.1 are consistent with a catchment-scale driver of turbidity, but do not by themselves exclude a contribution from other sources.

9.2 General Limitations

The conclusions and recommendations in this report are relevant to the condition of the site at the time and date investigated and the legislation enacted as at the date of this report. Lithaqua makes no representation or warranty that the conclusions will be applicable in the future, as there may be changes in the condition of the site, applicable legislation or other factors. Lithaqua takes no responsibility for the use of information from third parties or for any errors or omissions in information provided to it.

Lithaqua has used a degree of skill and care ordinarily exercised by reputable members of the profession practising in the same or a similar locality. Conclusions are based on representative samples or locations at the site, the intensity of sampling being in accordance with the usual levels of testing carried out for this type of monitoring. Due to inherent variability in surface waters, Lithaqua cannot warrant that the overall condition of the site is identical or substantially similar to the representative samples.

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Prepared by Lithaqua Environmental Services Pty Ltd

PO Box 136, Peregian Beach QLD 4573 · T: 0401 671 624 · E: james@lithaqua.com · ABN 62 473 026 355

APPENDIX A

Water Quality Monitoring Data Summary Tables and Graphs

Tables 5–11 — 2025/2026 Reporting Period

Table 5

Water Quality Monitoring Data Summary

Location A — Upstream Raff Creek

North Harbour — Surface Water Quality Monitoring — 2025/2026 Reporting Period · 44 Brooke Crescent, Burpengary East QLD

Loc.	Date	Turbidity (NTU)	Temp (°C)	Dissolved Oxygen (% Sat.)	Conductivity (µS/cm)	pH	Litter (>5mm)^	Chlorophyll-a (mg/m³)
LOR		0.1	0.1	1	1	0.01	—	1
WQO — Lowland Freshwater	<50 NTU	—	85–110%	—	6.5–8.0	—	5	
WQO — Middle Estuary	<8 NTU	—	85–105%	—	7.0–8.4	—	4	
A	31/07/2025	2.8	18.1	**53.5**	226	7.09	**Plastic wrapper**	4
A	27/08/2025	3.6	17.0	**37.2**	293	7.00	No	<1
A	23/09/2025	*Location dry — no surface water present; not sampled*						
A	31/10/2025	1.2	23.4	Probe failure - reading not collected	319	**6.29**	No	<2
A	28/11/2025	**56.2**	27.4	**10.3**	210	6.57	No	4
A	11/12/2025	5.6	27.0	**62.5**	254	7.02	No	Holding time exceeded - not analysed
A	31/01/2026	7.0	25.5	**66.1**	166	6.66	No	4
A	16/02/2026	4.1	26.3	**38.9**	269.8	6.99	No	Holding time exceeded - not analysed
A	10/03/2026	32.1	25.3	**42.7**	153	6.65	No	<1
A	28/04/2026	7.2	20.2	**20.6**	243	6.58	No	<1
A	22/05/2026	16.6	19.1	**24.6**	226	6.71	No	2
A	15/06/2026	33.0	19.0	**34.9**	228	6.60	No	<2

Notes:

- * Water Quality Objectives as adopted by the NEBP Residential West Water Quality Monitoring Plan (V7, Cardno, 2015), drawn from the Caboolture River Environmental Values and Water Quality Objectives (DERM, July 2010). That document was replaced in June 2022 under the Environmental Protection (Water and Wetland Biodiversity) Policy 2019 and the current objectives differ; the 2010 values are retained here for consistency with the monitoring plan and the 2014–2026 dataset. Refer to Section 1.4;
- ° Water Quality Parameters as recommended in the NEBP — Residential West Water Quality Monitoring Plan (V7), Cardno, 3 February 2015;
- Field parameters recorded with a Hanna HI98594 multiparameter meter; turbidity measured in FNU and reported as NTU-equivalent. Chlorophyll-a analysed by ALS Environmental (EP008), LOR 1 mg/m³. A "<" value is below the LOR; elevated LORs ("<2", "<3") reflect reduced filtration volume from suspended material;
- Samples at the tidally influenced locations (C, D, G, H and I) were collected on an outgoing (ebb) tide on every round;
- Shaded values indicate a result outside the relevant Water Quality Objective. Dissolved Oxygen objectives are a band (85–110% freshwater, 85–105% estuarine); readings both below and above the band are shaded;
- "—" indicates the location was not sampled on that round; "^" litter results are based on visual assessment on the day of sampling; and
- ALS work orders: EB2529759 (27/08), EB2533283 (23/09), EB2538330 (31/10), EB2542478 (28/11), EB2604209 (31/01), EB2608763 (10/03), EB2614940 (28/04), EB2618416 (22/05) and EB2621487 (15/06).

Table 5 — LP140120

Table 6

Water Quality Monitoring Data Summary

Location C — Midstream Raff Creek

North Harbour — Surface Water Quality Monitoring — 2025/2026 Reporting Period · 44 Brooke Crescent, Burpengary East QLD

Loc.	Date	Turbidity (NTU)	Temp (°C)	Dissolved Oxygen (% Sat.)	Conductivity (µS/cm)	pH	Litter (>5mm)^	Chlorophyll-a (mg/m³)
LOR		0.1	0.1	1	1	0.01	—	1
WQO — Lowland Freshwater	<50 NTU	—	85–110%	—	6.5–8.0	—	5	
WQO — Middle Estuary	<8 NTU	—	85–105%	—	7.0–8.4	—	4	
C	31/07/2025	7.7	19.8	**81.0**	10400	7.23	No	1
C	27/08/2025	1.6	18.2	**48.8**	5479	7.00	No	2
C	23/09/2025	7.4	23.1	**111.2**	30700	7.25	No	1
C	31/10/2025	0.0	24.4	Probe failure - reading not collected	594	**6.74**	No	1
C	28/11/2025	**41.1**	29.8	**45.6**	255	**6.73**	No	**4**
C	11/12/2025	**16.2**	28.1	85.6	12632	7.02	No	Holding time exceeded - not analysed
C	31/01/2026	8.0	30.8	**58.6**	16130	**6.82**	No	**4**
C	16/02/2026	**26.5**	30.2	**59.2**	15536	**6.99**	No	Holding time exceeded - not analysed
C	10/03/2026	**35.2**	25.5	**61.6**	182	**6.87**	No	<1
C	28/04/2026	**9.2**	21.2	**61.0**	1464	**6.74**	No	<1
C	22/05/2026	**27.4**	19.2	**57.1**	344	**6.94**	No	<2
C	15/06/2026	**18.8**	18.7	**56.9**	315	7.05	No	<2

Notes:

- * Water Quality Objectives as adopted by the NEBP Residential West Water Quality Monitoring Plan (V7, Cardno, 2015), drawn from the Caboolture River Environmental Values and Water Quality Objectives (DERM, July 2010). That document was replaced in June 2022 under the Environmental Protection (Water and Wetland Biodiversity) Policy 2019 and the current objectives differ; the 2010 values are retained here for consistency with the monitoring plan and the 2014–2026 dataset. Refer to Section 1.4;
- ° Water Quality Parameters as recommended in the NEBP — Residential West Water Quality Monitoring Plan (V7), Cardno, 3 February 2015;
- Field parameters recorded with a Hanna HI98594 multiparameter meter; turbidity measured in FNU and reported as NTU-equivalent. Chlorophyll-a analysed by ALS Environmental (EP008), LOR 1 mg/m³. A "<" value is below the LOR; elevated LORs ("<2", "<3") reflect reduced filtration volume from suspended material;
- Samples at the tidally influenced locations (C, D, G, H and I) were collected on an outgoing (ebb) tide on every round;
- Shaded values indicate a result outside the relevant Water Quality Objective. Dissolved Oxygen objectives are a band (85–110% freshwater, 85–105% estuarine); readings both below and above the band are shaded;
- "—" indicates the location was not sampled on that round; "^" litter results are based on visual assessment on the day of sampling; and
- ALS work orders: EB2529759 (27/08), EB2533283 (23/09), EB2538330 (31/10), EB2542478 (28/11), EB2604209 (31/01), EB2608763 (10/03), EB2614940 (28/04), EB2618416 (22/05) and EB2621487 (15/06).

Table 6 — LP140120

Table 7

Water Quality Monitoring Data Summary

Location D — Midstream Raff Creek Tributary

North Harbour — Surface Water Quality Monitoring — 2025/2026 Reporting Period · 44 Brooke Crescent, Burpengary East QLD

Loc.	Date	Turbidity (NTU)	Temp (°C)	Dissolved Oxygen (% Sat.)	Conductivity (µS/cm)	pH	Litter (>5mm)^	Chlorophyll-a (mg/m³)
LOR		0.1	0.1	1	1	0.01	—	1
WQO — Lowland Freshwater	<50 NTU	—	85–110%	—	6.5–8.0	—	5	
WQO — Middle Estuary	<8 NTU	—	85–105%	—	7.0–8.4	—	4	
D	31/07/2025	3.8	19.2	86.4	973	7.44	No	1
D	27/08/2025	1.9	16.6	**49.0**	507	7.03	No	<1
D	23/09/2025	3.7	23.5	**142.6**	29770	7.18	No	1
D	31/10/2025	1.2	27.4	**30.6**	396	**6.70**	No	3
D	28/11/2025	**11.9**	30.6	**13.0**	209	**6.49**	No	3
D	11/12/2025	6.8	27.9	**69.3**	9505	7.01	No	Holding time exceeded - not analysed
D	31/01/2026	7.2	27.4	**45.0**	18170	**6.63**	No	3
D	16/02/2026	5.6	25.7	**43.6**	981	7.11	No	Holding time exceeded - not analysed
D	10/03/2026	5.0	25.9	**46.6**	185	**6.72**	No	<1
D	28/04/2026	2.1	21.5	**70.0**	351	**6.82**	No	3
D	22/05/2026	2.0	19.6	**48.6**	245	**6.75**	No	<1
D	15/06/2026	1.6	19.1	**40.5**	266	**6.57**	No	<2

Notes:

- * Water Quality Objectives as adopted by the NEBP Residential West Water Quality Monitoring Plan (V7, Cardno, 2015), drawn from the Caboolture River Environmental Values and Water Quality Objectives (DERM, July 2010). That document was replaced in June 2022 under the Environmental Protection (Water and Wetland Biodiversity) Policy 2019 and the current objectives differ; the 2010 values are retained here for consistency with the monitoring plan and the 2014–2026 dataset. Refer to Section 1.4;
- ° Water Quality Parameters as recommended in the NEBP — Residential West Water Quality Monitoring Plan (V7), Cardno, 3 February 2015;
- Field parameters recorded with a Hanna HI98594 multiparameter meter; turbidity measured in FNU and reported as NTU-equivalent. Chlorophyll-a analysed by ALS Environmental (EP008), LOR 1 mg/m³. A "<" value is below the LOR; elevated LORs ("<2", "<3") reflect reduced filtration volume from suspended material;
- Samples at the tidally influenced locations (C, D, G, H and I) were collected on an outgoing (ebb) tide on every round;
- Shaded values indicate a result outside the relevant Water Quality Objective. Dissolved Oxygen objectives are a band (85–110% freshwater, 85–105% estuarine); readings both below and above the band are shaded;
- "—" indicates the location was not sampled on that round; "^" litter results are based on visual assessment on the day of sampling; and
- ALS work orders: EB2529759 (27/08), EB2533283 (23/09), EB2538330 (31/10), EB2542478 (28/11), EB2604209 (31/01), EB2608763 (10/03), EB2614940 (28/04), EB2618416 (22/05) and EB2621487 (15/06).

Table 7 — LP140120

Table 8

Water Quality Monitoring Data Summary

Location F — Upstream Raff Creek Tributary

North Harbour — Surface Water Quality Monitoring — 2025/2026 Reporting Period · 44 Brooke Crescent, Burpengary East QLD

Loc.	Date	Turbidity (NTU)	Temp (°C)	Dissolved Oxygen (% Sat.)	Conductivity (µS/cm)	pH	Litter (>5mm)^	Chlorophyll-a (mg/m³)
LOR		0.1	0.1	1	1	0.01	—	1
WQO — Lowland Freshwater	<50 NTU	—	85–110%	—	6.5–8.0	—	5	
WQO — Middle Estuary	<8 NTU	—	85–105%	—	7.0–8.4	—	4	
F	31/07/2025	8.9	19.0	**58.9**	333	7.05	No	4
F	27/08/2025	4.7	17.0	**44.5**	382	7.11	No	<1
F	23/09/2025	*Location dry — no surface water present; not sampled*						
F	31/10/2025	5.6	23.0	Probe failure - reading not collected	418	6.88	No	<1
F	28/11/2025	12.7	28.5	**13.0**	231	6.52	No	**5**
F	11/12/2025	15.5	28.2	**36.4**	245	6.80	No	Holding time exceeded - not analysed
F	31/01/2026	*Location dry — no surface water present; not sampled*						
F	16/02/2026	13.8	27.0	**37.1**	471	6.86	No	Holding time exceeded - not analysed
F	10/03/2026	3.4	26.9	**59.1**	354	7.09	No	<1
F	28/04/2026	5.2	21.4	**32.9**	362	6.92	No	<1
F	22/05/2026	6.8	19.3	**19.5**	263	**6.43**	No	<2
F	15/06/2026	2.7	19.9	**42.5**	436	7.07	No	<1

Notes:

- * Water Quality Objectives as adopted by the NEBP Residential West Water Quality Monitoring Plan (V7, Cardno, 2015), drawn from the Caboolture River Environmental Values and Water Quality Objectives (DERM, July 2010). That document was replaced in June 2022 under the Environmental Protection (Water and Wetland Biodiversity) Policy 2019 and the current objectives differ; the 2010 values are retained here for consistency with the monitoring plan and the 2014–2026 dataset. Refer to Section 1.4;
- ° Water Quality Parameters as recommended in the NEBP — Residential West Water Quality Monitoring Plan (V7), Cardno, 3 February 2015;
- Field parameters recorded with a Hanna HI98594 multiparameter meter; turbidity measured in FNU and reported as NTU-equivalent. Chlorophyll-a analysed by ALS Environmental (EP008), LOR 1 mg/m³. A "<" value is below the LOR; elevated LORs ("<2", "<3") reflect reduced filtration volume from suspended material;
- Samples at the tidally influenced locations (C, D, G, H and I) were collected on an outgoing (ebb) tide on every round;
- Shaded values indicate a result outside the relevant Water Quality Objective. Dissolved Oxygen objectives are a band (85–110% freshwater, 85–105% estuarine); readings both below and above the band are shaded;
- "—" indicates the location was not sampled on that round; "^" litter results are based on visual assessment on the day of sampling; and
- ALS work orders: EB2529759 (27/08), EB2533283 (23/09), EB2538330 (31/10), EB2542478 (28/11), EB2604209 (31/01), EB2608763 (10/03), EB2614940 (28/04), EB2618416 (22/05) and EB2621487 (15/06).

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Table 9

Water Quality Monitoring Data Summary

Location G — Caboolture River — Downstream of site

North Harbour — Surface Water Quality Monitoring — 2025/2026 Reporting Period · 44 Brooke Crescent, Burpengary East QLD

Loc.	Date	Turbidity (NTU)	Temp (°C)	Dissolved Oxygen (% Sat.)	Conductivity (µS/cm)	pH	Litter (>5mm)^	Chlorophyll-a (mg/m³)
LOR		0.1	0.1	1	1	0.01	—	1
WQO — Lowland Freshwater	<50 NTU	—	85–110%	—	6.5–8.0	—	5	
WQO — Middle Estuary	<8 NTU	—	85–105%	—	7.0–8.4	—	4	
G	31/07/2025	**11.0**	19.3	85.4	37900	7.54	No	**4**
G	27/08/2025	6.1	19.2	**72.1**	16280	7.16	No	1
G	23/09/2025	6.5	23.5	**114.6**	32170	7.51	No	**7**
G	31/10/2025	6.4	26.8	**40.3**	22770	7.20	No	<1
G	28/11/2025	**74.3**	27.5	**44.7**	1319	7.16	No	**6**
G	11/12/2025	**17.5**	27.9	**65.3**	17540	7.67	No	Holding time exceeded - not analysed
G	31/01/2026	**30.9**	28.2	**71.7**	20870	7.39	No	3
G	16/02/2026	**11.4**	29.1	**84.0**	16466	7.58	No	Holding time exceeded - not analysed
G	10/03/2026	**97.2**	25.0	85.1	249	7.08	No	<3
G	28/04/2026	6.8	22.3	**82.8**	20330	7.32	No	**4**
G	22/05/2026	**13.6**	20.3	**81.9**	12710	7.60	No	**4**
G	15/06/2026	**71.3**	19.4	**72.0**	15090	7.16	No	3

Notes:

- * Water Quality Objectives as adopted by the NEBP Residential West Water Quality Monitoring Plan (V7, Cardno, 2015), drawn from the Caboolture River Environmental Values and Water Quality Objectives (DERM, July 2010). That document was replaced in June 2022 under the Environmental Protection (Water and Wetland Biodiversity) Policy 2019 and the current objectives differ; the 2010 values are retained here for consistency with the monitoring plan and the 2014–2026 dataset. Refer to Section 1.4;
- ° Water Quality Parameters as recommended in the NEBP — Residential West Water Quality Monitoring Plan (V7), Cardno, 3 February 2015;
- Field parameters recorded with a Hanna HI98594 multiparameter meter; turbidity measured in FNU and reported as NTU-equivalent. Chlorophyll-a analysed by ALS Environmental (EP008), LOR 1 mg/m³. A "<" value is below the LOR; elevated LORs ("<2", "<3") reflect reduced filtration volume from suspended material;
- Samples at the tidally influenced locations (C, D, G, H and I) were collected on an outgoing (ebb) tide on every round;
- Shaded values indicate a result outside the relevant Water Quality Objective. Dissolved Oxygen objectives are a band (85–110% freshwater, 85–105% estuarine); readings both below and above the band are shaded;
- "—" indicates the location was not sampled on that round; "^" litter results are based on visual assessment on the day of sampling; and
- ALS work orders: EB2529759 (27/08), EB2533283 (23/09), EB2538330 (31/10), EB2542478 (28/11), EB2604209 (31/01), EB2608763 (10/03), EB2614940 (28/04), EB2618416 (22/05) and EB2621487 (15/06).

Table 9 — LP140120

Table 10

Water Quality Monitoring Data Summary

Location H — Caboolture River — Upstream of site

North Harbour — Surface Water Quality Monitoring — 2025/2026 Reporting Period · 44 Brooke Crescent, Burpengary East QLD

Loc.	Date	Turbidity (NTU)	Temp (°C)	Dissolved Oxygen (% Sat.)	Conductivity (µS/cm)	pH	Litter (>5mm)^	Chlorophyll-a (mg/m³)
LOR		0.1	0.1	1	1	0.01	—	1
WQO — Lowland Freshwater	<50 NTU	—	85–110%	—	6.5–8.0	—	5	
WQO — Middle Estuary	<8 NTU	—	85–105%	—	7.0–8.4	—	4	
H	31/07/2025	7.8	18.4	**74.8**	6890	7.63	**Wooden chair**	**4**
H	27/08/2025	**11.8**	18.9	**65.2**	3806	7.27	No	<1
H	23/09/2025	6.8	24.2	96.9	13570	7.34	No	1
H	31/10/2025	**10.8**	26.4	**39.3**	4567	7.13	No	<1
H	28/11/2025	**140.0**	29.8	**71.0**	252	7.02	No	**5**
H	11/12/2025	**16.2**	26.9	**76.5**	7250	7.60	**Plastic bag**	Holding time exceeded - not analysed
H	31/01/2026	**25.5**	28.0	**67.5**	5196	7.31	No	**7**
H	16/02/2026	**15.4**	28.8	**63.1**	819	7.54	**Glass bottles**	Holding time exceeded - not analysed
H	10/03/2026	**88.3**	24.9	91.6	130	7.17	No	**22**
H	28/04/2026	**33.3**	22.6	87.2	3937	7.39	No	2
H	22/05/2026	**33.3**	20.1	**72.3**	533	7.51	No	<2
H	15/06/2026	**25.5**	18.3	**83.7**	258	7.66	No	<2

Notes:

- * Water Quality Objectives as adopted by the NEBP Residential West Water Quality Monitoring Plan (V7, Cardno, 2015), drawn from the Caboolture River Environmental Values and Water Quality Objectives (DERM, July 2010). That document was replaced in June 2022 under the Environmental Protection (Water and Wetland Biodiversity) Policy 2019 and the current objectives differ; the 2010 values are retained here for consistency with the monitoring plan and the 2014–2026 dataset. Refer to Section 1.4;
- ° Water Quality Parameters as recommended in the NEBP — Residential West Water Quality Monitoring Plan (V7), Cardno, 3 February 2015;
- Field parameters recorded with a Hanna HI98594 multiparameter meter; turbidity measured in FNU and reported as NTU-equivalent. Chlorophyll-a analysed by ALS Environmental (EP008), LOR 1 mg/m³. A "<" value is below the LOR; elevated LORs ("<2", "<3") reflect reduced filtration volume from suspended material;
- Samples at the tidally influenced locations (C, D, G, H and I) were collected on an outgoing (ebb) tide on every round;
- Shaded values indicate a result outside the relevant Water Quality Objective. Dissolved Oxygen objectives are a band (85–110% freshwater, 85–105% estuarine); readings both below and above the band are shaded;
- "—" indicates the location was not sampled on that round; "^" litter results are based on visual assessment on the day of sampling; and
- ALS work orders: EB2529759 (27/08), EB2533283 (23/09), EB2538330 (31/10), EB2542478 (28/11), EB2604209 (31/01), EB2608763 (10/03), EB2614940 (28/04), EB2618416 (22/05) and EB2621487 (15/06).

Table 10 — LP140120

Table 11

Water Quality Monitoring Data Summary

Location I — Caboolture River — Furthest downstream

North Harbour — Surface Water Quality Monitoring — 2025/2026 Reporting Period · 44 Brooke Crescent, Burpengary East QLD

Loc.	Date	Turbidity (NTU)	Temp (°C)	Dissolved Oxygen (% Sat.)	Conductivity (µS/cm)	pH	Litter (>5mm)^	Chlorophyll-a (mg/m³)
LOR		0.1	0.1	1	1	0.01	—	1
WQO — Lowland Freshwater	<50 NTU	—	85–110%	—	6.5–8.0	—	5	
WQO — Middle Estuary	<8 NTU	—	85–105%	—	7.0–8.4	—	4	
I	31/07/2025	2.8	18.9	95.0	48700	7.90	Fishing line and plastic wrapper	2
I	27/08/2025	0.6	19.0	79.5	40830	7.50	No	1
I	23/09/2025	12.1	23.6	121.3	51330	7.90	No	<1
I	31/10/2025	9.6	27.4	69.7	42840	7.51	No	1
I	28/11/2025	15.3	29.8	98.9	31390	7.78	No	8
I	11/12/2025	5.7	28.1	89.9	51030	7.87	No	Holding time exceeded - not analysed
I	31/01/2026	3.5	25.2	101.1	41760	7.92	No	6
I	16/02/2026	10.1	27.9	66.7	43205	7.52	No	Holding time exceeded - not analysed
I	10/03/2026	63.7	24.8	79.4	10090	7.02	No	<3
I	28/04/2026	7.5	22.1	102.5	42520	7.77	No	3
I	22/05/2026	8.2	19.6	108.3	49170	8.14	No	<1
I	15/06/2026	3.3	19.4	92.4	37230	7.79	No	<1

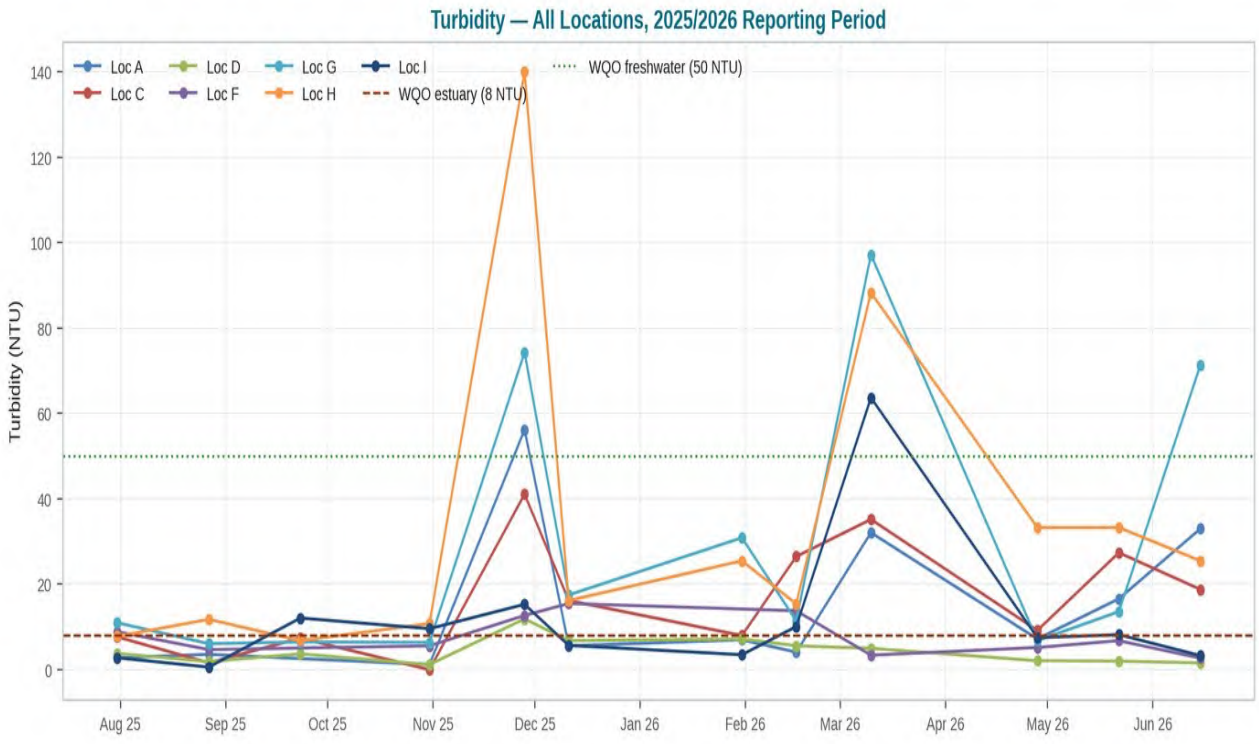
Notes:

- * Water Quality Objectives as adopted by the NEBP Residential West Water Quality Monitoring Plan (V7, Cardno, 2015), drawn from the Caboolture River Environmental Values and Water Quality Objectives (DERM, July 2010). That document was replaced in June 2022 under the Environmental Protection (Water and Wetland Biodiversity) Policy 2019 and the current objectives differ; the 2010 values are retained here for consistency with the monitoring plan and the 2014–2026 dataset. Refer to Section 1.4;
- ° Water Quality Parameters as recommended in the NEBP — Residential West Water Quality Monitoring Plan (V7), Cardno, 3 February 2015;
- Field parameters recorded with a Hanna HI98594 multiparameter meter; turbidity measured in FNU and reported as NTU-equivalent. Chlorophyll-a analysed by ALS Environmental (EP008), LOR 1 mg/m³. A "<" value is below the LOR; elevated LORs ("<2", "<3") reflect reduced filtration volume from suspended material;
- Samples at the tidally influenced locations (C, D, G, H and I) were collected on an outgoing (ebb) tide on every round;
- Shaded values indicate a result outside the relevant Water Quality Objective. Dissolved Oxygen objectives are a band (85–110% freshwater, 85–105% estuarine); readings both below and above the band are shaded;
- "—" indicates the location was not sampled on that round; "^" litter results are based on visual assessment on the day of sampling; and
- ALS work orders: EB2529759 (27/08), EB2533283 (23/09), EB2538330 (31/10), EB2542478 (28/11), EB2604209 (31/01), EB2608763 (10/03), EB2614940 (28/04), EB2618416 (22/05) and EB2621487 (15/06).

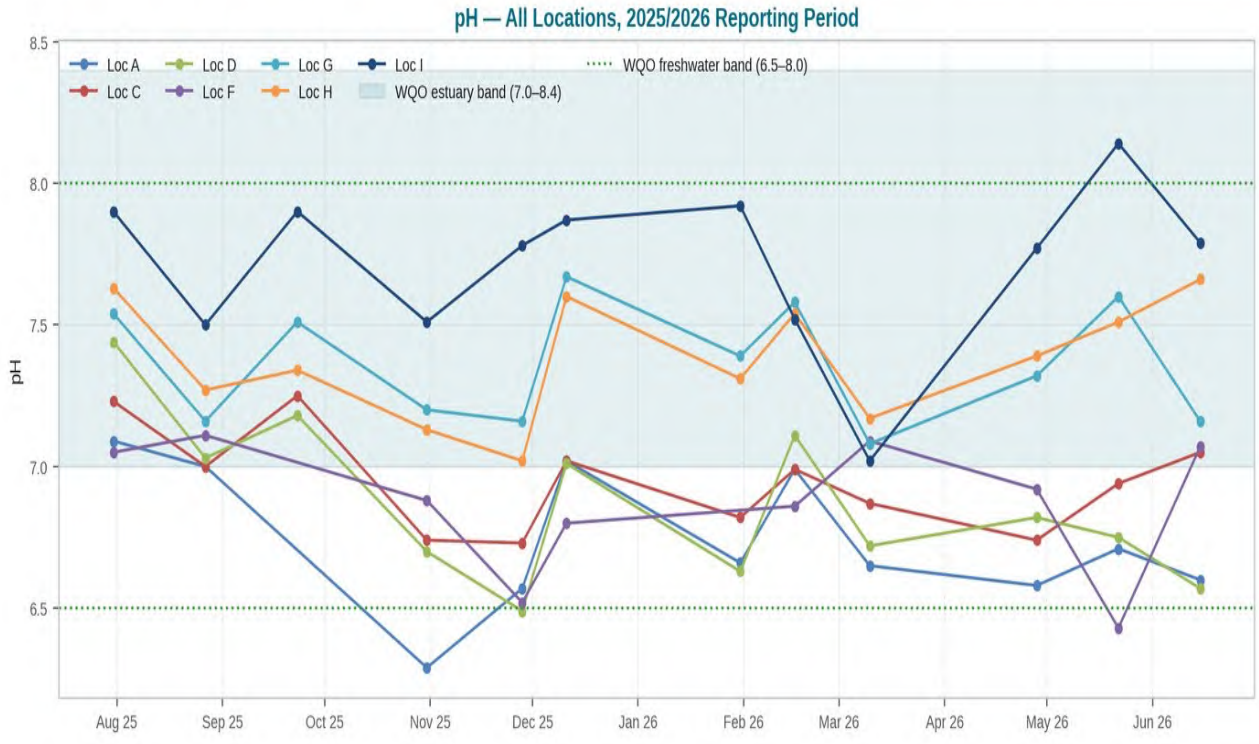
Table 11 — LP140120

Graphs

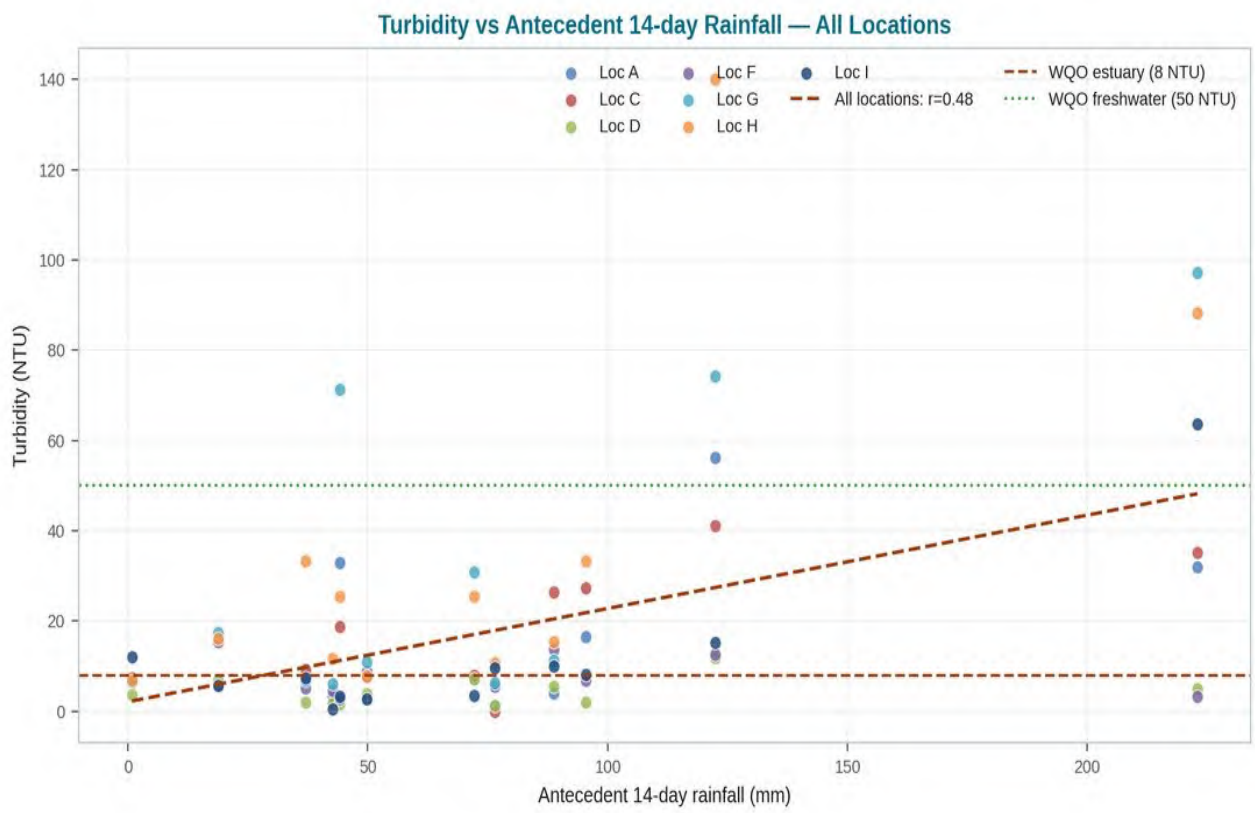
Graph 1 — Turbidity, all locations, 2025/2026 reporting period



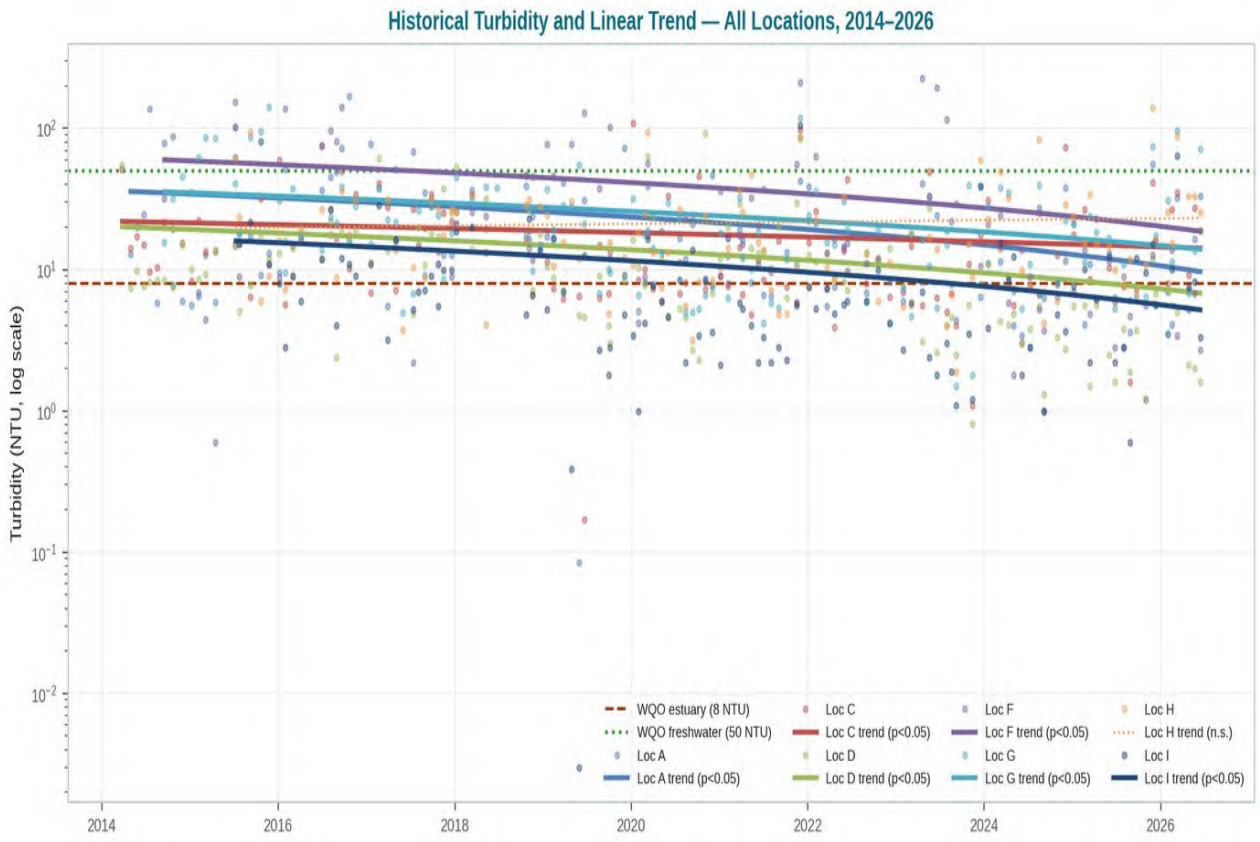
Graph 2 — pH, all locations, 2025/2026 reporting period



Graph 3 — Turbidity vs antecedent 14-day rainfall, all locations



Graph 4 — Historical turbidity and linear trend, all locations, 2014–2026



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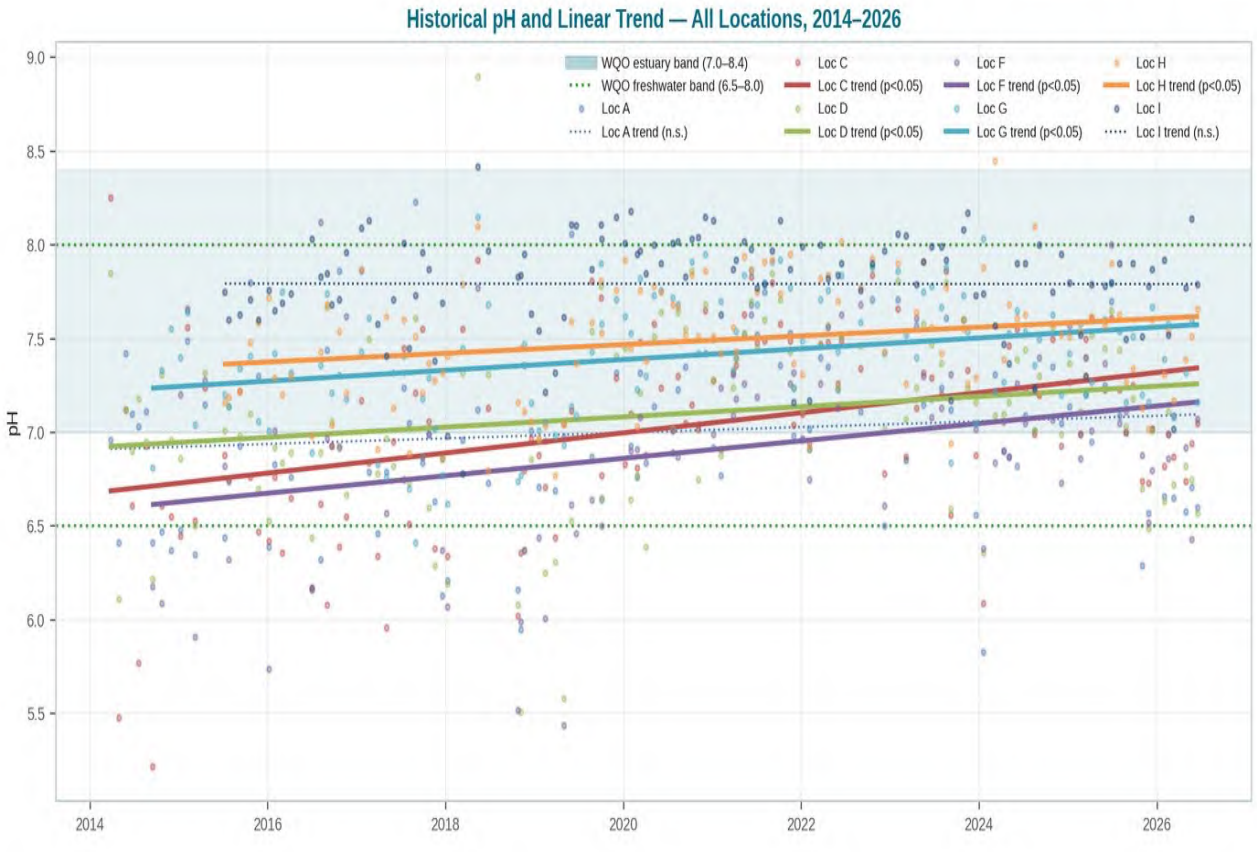
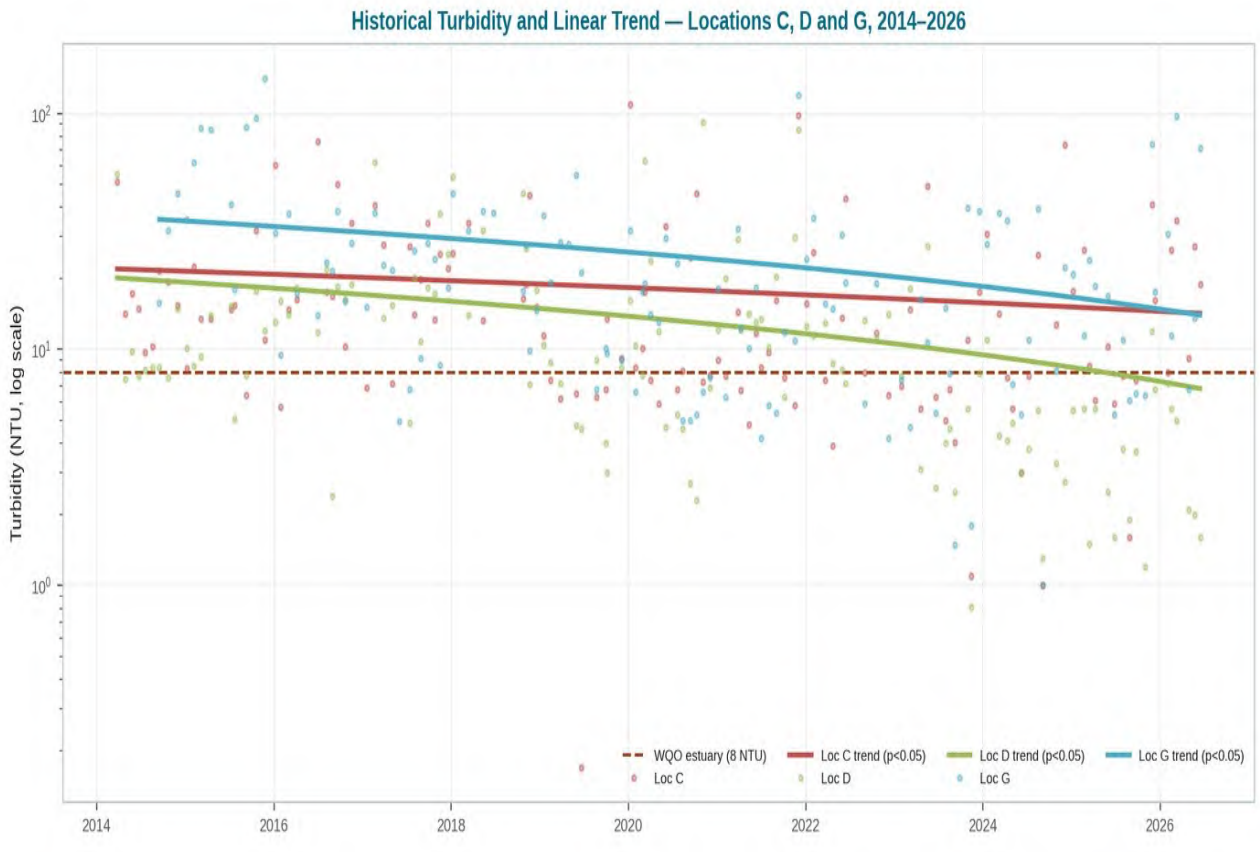
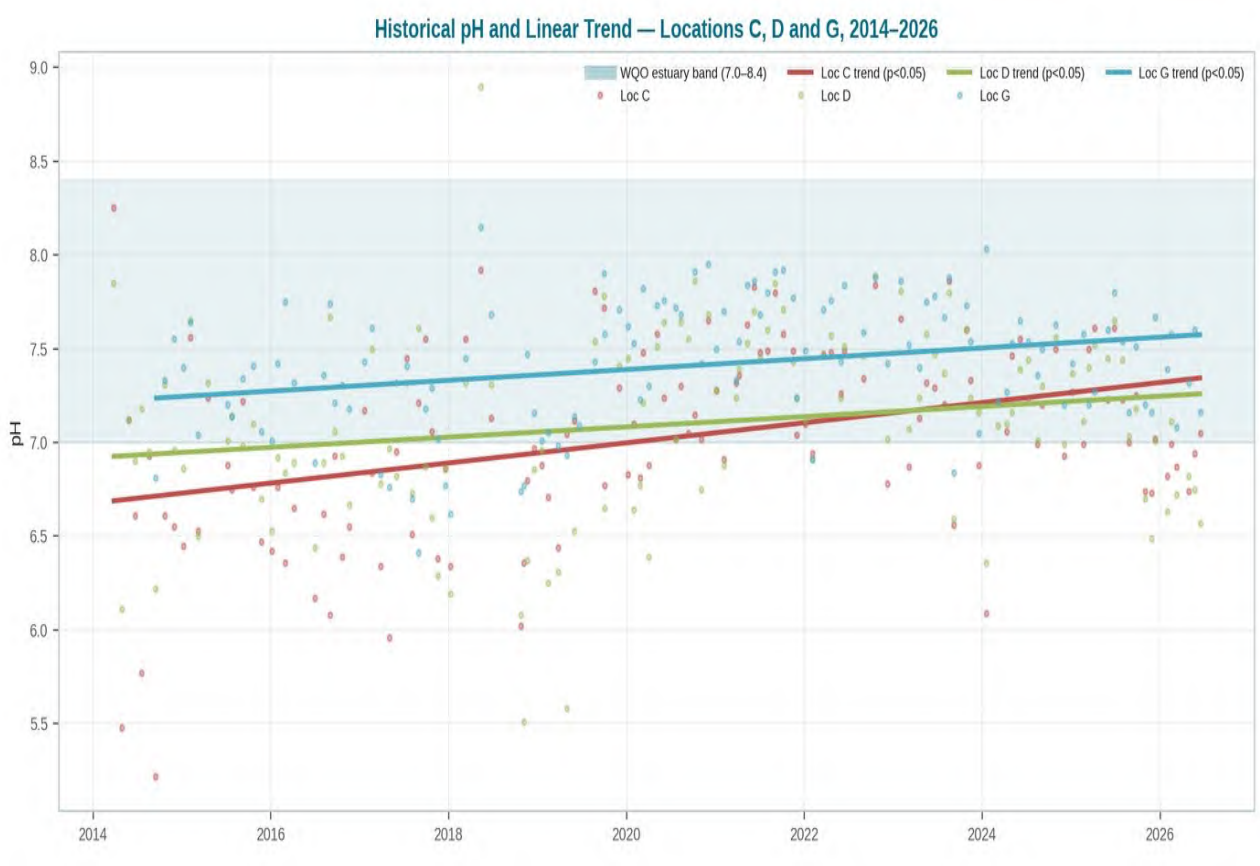
Graph 5 — Historical pH and linear trend, all locations, 2014–2026



Graph 6 — Historical turbidity and linear trend, Locations C, D and G, 2014–2026


Historical Turbidity and Linear Trend — Locations C, D and G, 2014–2026
Turbidity (NTU, log scale)
10^2
10^1
10^0
2014
2016
2018
2020
2022
2024
2026
WQO estuary (8 NTU)
Loc C trend (p<0.05)
Loc D trend (p<0.05)
Loc G trend (p<0.05)
Loc C
Loc D
Loc G

Graph 7 — Historical pH and linear trend, Locations C, D and G, 2014–2026



Water Quality Objectives are shown on each graph: a dashed line for the 8 NTU middle estuary turbidity objective, a dotted line for the 50 NTU lowland freshwater objective, a shaded band for the 7.0–8.4 estuary pH objective and dotted lines for the 6.5–8.0 freshwater pH band. Objectives are shown only where a location of the corresponding water type is plotted. Trendlines are least-squares linear fits. Trend significance assessed by the Mann-Kendall test; solid trendlines indicate a statistically significant trend ($p < 0.05$), dotted trendlines indicate no significant trend. Turbidity is plotted on a logarithmic scale in Graphs 4 and 6 to accommodate the skewed distribution of the data.

APPENDIX B

Figures and Monitoring Location Photographs

Figures 1 and 2 · Monitoring Location Photographs 1–7

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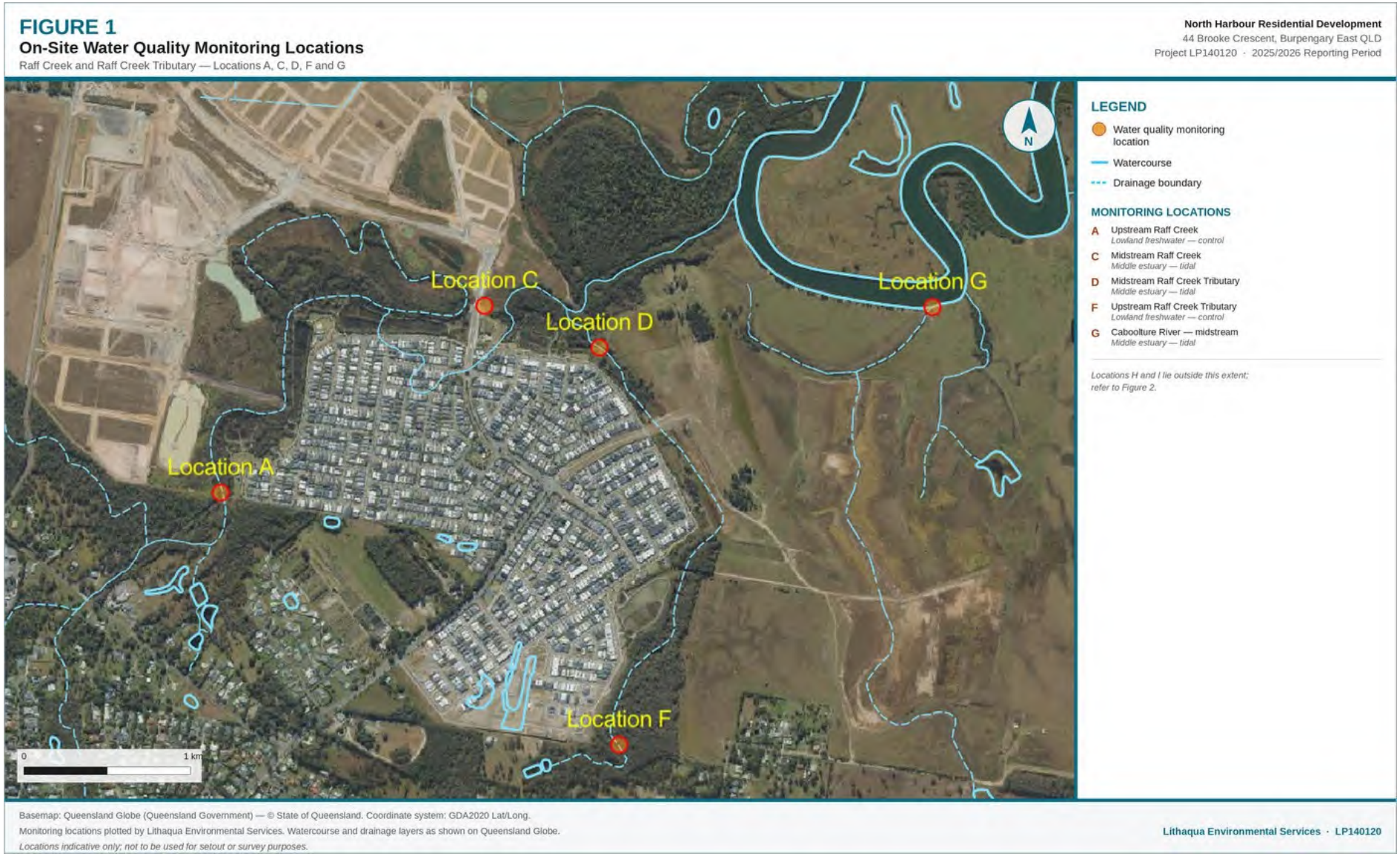
Figure 1 — On-Site Monitoring Locations

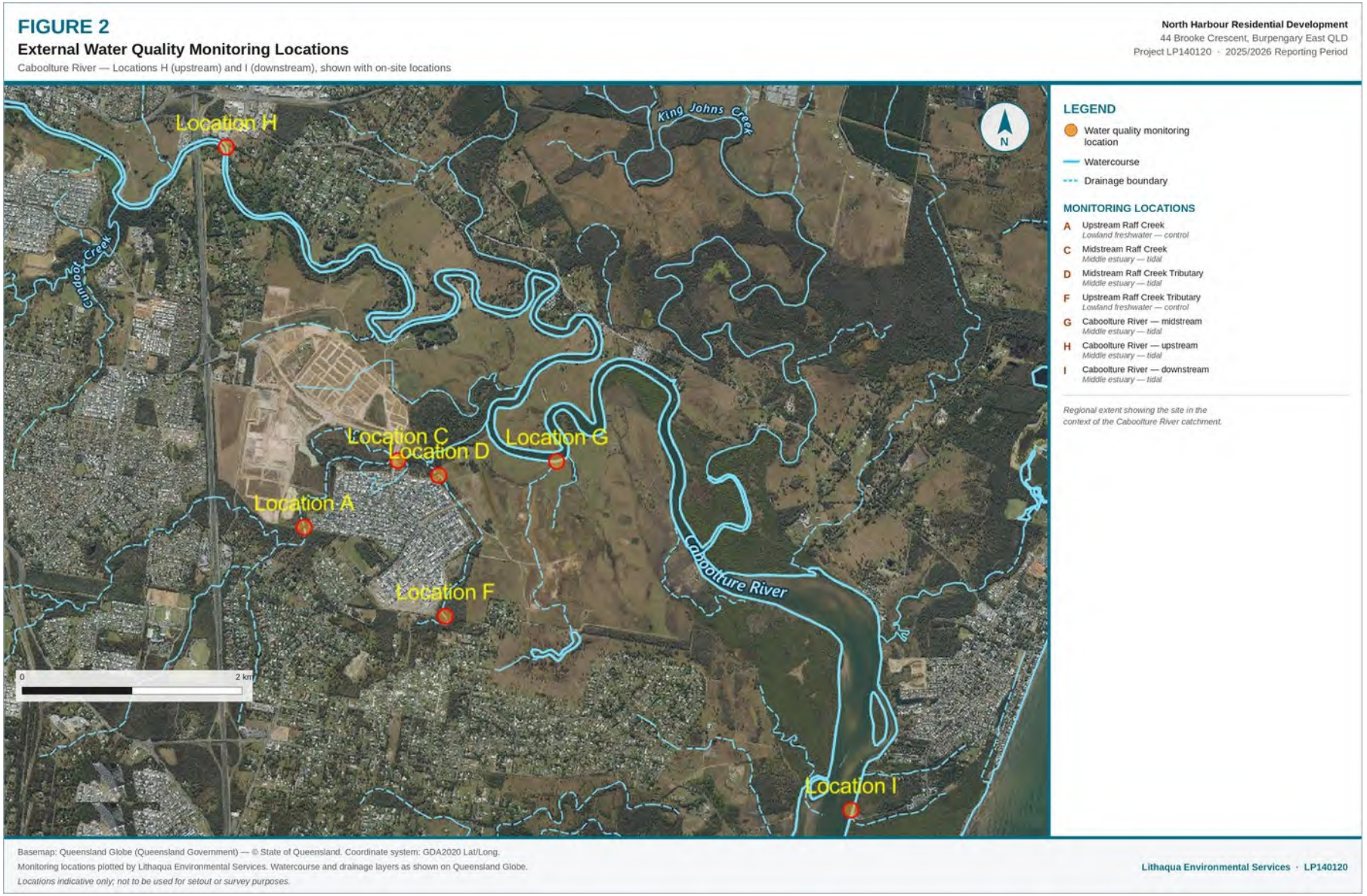
Raff Creek and Raff Creek Tributary — Locations A, C, D, F and G



Basemap: Queensland Globe (Queensland Government) — © State of Queensland. Coordinate system GDA2020 Lat/Long. Monitoring locations plotted by Lithaqua Environmental Services.

Figure 2 — External Water Quality Monitoring Locations

Caboolture River — Locations H (upstream) and I (downstream), shown in the context of the site and the wider catchment



Basemap: Queensland Globe (Queensland Government) — © State of Queensland. Coordinate system GDA2020 Lat/Long. Monitoring locations plotted by Lithaqua Environmental Services.

Monitoring Location Photographs

Photographs 1–7 show representative conditions at each monitoring location. They were taken over the course of the reporting period and are not a record of conditions on any single monitoring round.

Photograph 1 — Monitoring Location A Upstream Raff Creek

Location A · Lowland freshwater — upstream control · representative conditions

Photograph 2 — Monitoring Location C Midstream Raff Creek

Location C · Middle estuary — tidal · representative conditions

PO Box 136, Peregian Beach QLD 4573 · T: 0401 671 624 · E: james@lithaqua.com · ABN 62 473 026 355

Photograph 3 — Monitoring Location D Midstream Raff Creek Tributary

Location D · Middle estuary — tidal · representative conditions

Photograph 4 — Monitoring Location F Upstream Raff Creek Tributary

Location F · Lowland freshwater — upstream control · representative conditions

PO Box 136, Peregian Beach QLD 4573 · T: 0401 671 624 · E: james@lithaqua.com · ABN 62 473 026 355

Photograph 5 — Monitoring Location G Caboolture River — Downstream of site

Location G · Middle estuary — tidal · representative conditions

Photograph 6 — Monitoring Location H Caboolture River — Upstream of site

Location H · Middle estuary — tidal · representative conditions

PO Box 136, Peregian Beach QLD 4573 · T: 0401 671 624 · E: james@lithaqua.com · ABN 62 473 026 355

Photograph 7 — Monitoring Location I Caboolture River — Furthest downstream

Location I · Middle estuary — tidal · representative conditions

APPENDIX C

Laboratory Reports

NATA-accredited laboratory reports (ALS Environmental) — COA and CoC

Laboratory Reports

Certificates of Analysis and Chain of Custody documents for ALS work orders EB2529759, EB2533283, EB2538330, EB2542478, EB2604209, EB2608763, EB2614940, EB2618416 and EB2621487. Sample Receipt Notification available upon request.

PO Box 136, Peregian Beach QLD 4573 · T: 0401 671 624 · E: james@lithaqua.com · ABN 62 473 026 355

CERTIFICATE OF ANALYSIS

Work Order	: **EB2526404**	Page	: 1 of 4
Client	: **LITHAQUA ENVIRONMENTAL SERVICES**	Laboratory	: Environmental Division Brisbane
Contact	: MR JAMES HALL-BROWN	Contact	: Customer Services EB
Address	: 45 LOWRY STREET PEREGIAN BEACH 4573	Address	: 2 Byth Street Stafford QLD Australia 4053
Telephone	: 07 3191 9038	Telephone	: +61-7-3552-8685
Project	: LP140120 NHH SURFACE WATER	Date Samples Received	: 31-Jul-2025 14:00
Order number	: ----	Date Analysis Commenced	: 01-Aug-2025
C-O-C number	: ----	Issue Date	: 05-Aug-2025 14:37
Sampler	: JAMES HALL-BROWN		
Site	: NHH		
Quote number	: EN/222		
No. of samples received	: 7		
No. of samples analysed	: 7		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

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This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

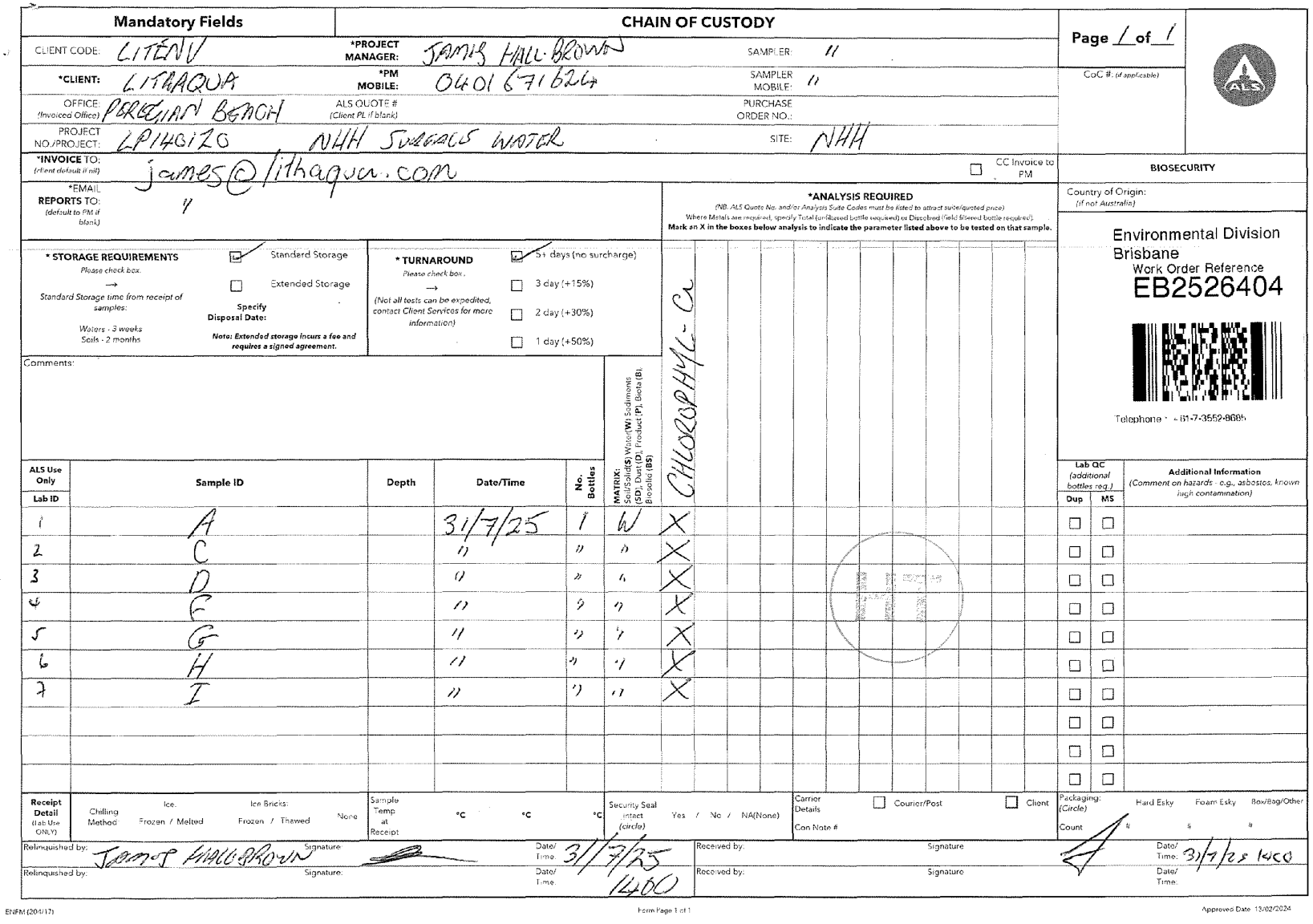
Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Kim McCabe	Senior Inorganic Chemist	Brisbane Inorganics, Stafford, QLD

right solutions. right partner.



Mandatory Fields

CHAIN OF CUSTODY

Page 1 of 1

CLIENT CODE: LITENV
*PROJECT MANAGER: JAMES HALL-BROWN
SAMPLER: "
*CLIENT: LITHAQUA
*PM MOBILE: 0401 671 624
SAMPLER MOBILE: "
OFFICE (Invoiced Office): PEREGIAN BEACH
ALS QUOTE # (Client PL if blank)
PURCHASE ORDER NO.:
PROJECT NO./PROJECT: LP140120 NHH SURFACE WATER
SITE: NHH
*INVOICE TO: (Client default if nil) james@lithaqua.com
☐ CC Invoice to PM
*EMAIL REPORTS TO: (default to PM if blank) "
CoC #: (if applicable)

BIOSECURITY
Country of Origin: (if not Australia)

Environmental Division Brisbane
Work Order Reference
EB2526404

Telephone : +61-7-3552-8685

*** STORAGE REQUIREMENTS** Please check box. → Standard Storage ☐ Extended Storage
Standard Storage time from receipt of samples: Waters - 3 weeks, Soils - 2 months
Specify Disposal Date:
Note: Extended storage incurs a fee and requires a signed agreement.

*** TURNAROUND** Please check box. → (Not all tests can be expedited, contact Client Services for more information)
☑ 5+ days (no surcharge) ☐ 3 day (+15%) ☐ 2 day (+30%) ☐ 1 day (+50%)

***ANALYSIS REQUIRED**
(NB: ALS Quote No. and/or Analysis Suite Codes must be listed to attract suite/quoted price)
Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).
Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

Comments:

ALS Use Only / Lab ID	Sample ID	Depth	Date/Time	No. Bottles	MATRIX: Soil/Solid(S) Water(W) Sediments (SD) Dust (D) Product (P) Biota (B) Biosolid (BS)	CHLOROPHYLL-a	Lab QC (additional bottles req.) Dup	Lab QC MS	Additional Information (Comment on hazards - e.g., asbestos, known high contamination)
1	A		31/7/25	1	W	X	☐	☐	
2	C		"	"	"	X	☐	☐	
3	D		"	"	"	X	☐	☐	
4	E		"	"	"	X	☐	☐	
5	G		"	"	"	X	☐	☐	
6	H		"	"	"	X	☐	☐	
7	I		"	"	"	X	☐	☐	
							☐	☐	
							☐	☐	
							☐	☐	

Receipt Detail (Lab Use ONLY) Chilling Method: Ice / Ice Bricks: Frozen / Melted / Frozen / Thawed / None
Sample Temp at Receipt: °C °C °C
Security Seal (intact) (circle): Yes / No / NA(None)
Carrier Details: ☐ Courier/Post ☐ Client
Con Note #
Packaging: (Circle) Hard Esky, Foam Esky, Box/Bag/Other
Count: # # #

Relinquished by: JAMES HALL-BROWN Signature: Date/Time: 31/7/25 1400
Relinquished by: Signature: Date/Time:
Received by: Signature: Date/Time:
Received by: Signature: Date/Time: 31/7/25 1400

ENFM (204/17) Form Page 1 of 1 Approved Date 13/02/2024

CERTIFICATE OF ANALYSIS

Work Order	: **EB2529759**	Page	: 1 of 4
Client	: **LITHAQUA ENVIRONMENTAL SERVICES**	Laboratory	: Environmental Division Brisbane
Contact	: MR JAMES HALL-BROWN	Contact	: Customer Services EB
Address	: 45 LOWRY STREET PEREGIAN BEACH 4573	Address	: 2 Byth Street Stafford QLD Australia 4053
Telephone	: 07 3191 9038	Telephone	: +61-7-3552-8685
Project	: LP140120 / NHH SURFACE WATER	Date Samples Received	: 27-Aug-2025 11:00
Order number	: ----	Date Analysis Commenced	: 27-Aug-2025
C-O-C number	: ----	Issue Date	: 01-Sep-2025 17:09
Sampler	: JAMES HALL-BROWN		
Site	: ----		
Quote number	: EN/222		
No. of samples received	: 7		
No. of samples analysed	: 7		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

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- Analytical Results

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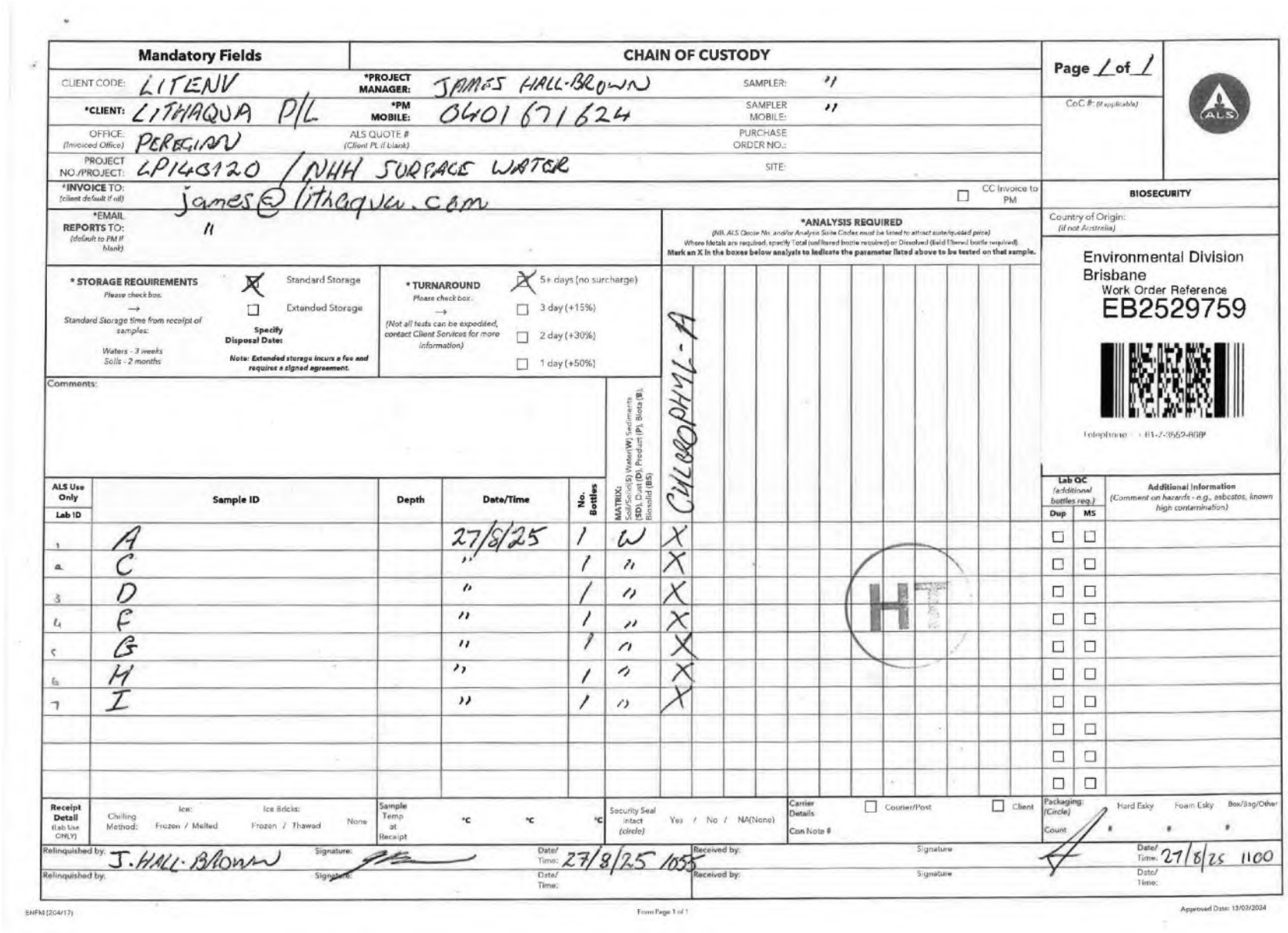
Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Beatriz Llarinas	Senior Chemist	Brisbane Inorganics, Stafford, QLD

right solutions. right partner.



Mandatory Fields | **CHAIN OF CUSTODY** | Page 1 of 1

CLIENT CODE: LITENV
*CLIENT: LITHAQUA P/L
OFFICE: (Invoiced Office) PEREGIAN
PROJECT NO./PROJECT: LP140120 / NHH SURFACE WATER
*INVOICE TO: (client default if nil) james@lithaqua.com
*EMAIL REPORTS TO: (default to PM if blank) "

*PROJECT MANAGER: JAMES HALL-BROWN
*PM MOBILE: 0401 671 624
ALS QUOTE # (Client PL if blank)
SAMPLER: "
SAMPLER MOBILE: "
PURCHASE ORDER NO.:
SITE:
CC Invoice to PM

BIOSECURITY
Country of Origin: (if not Australia)

Environmental Division Brisbane
Work Order Reference
EB2529759

Telephone : 61-7-3552-8688

*STORAGE REQUIREMENTS (Please check box →) [X] Standard Storage [ ] Extended Storage
Standard Storage time from receipt of samples: Waters - 3 weeks; Soils - 2 months
Specify Disposal Date:
Note: Extended storage incurs a fee and requires a signed agreement.

*TURNAROUND (Please check box →) (Not all tests can be expedited, contact Client Services for more information) [X] 5+ days (no surcharge) [ ] 3 day (+15%) [ ] 2 day (+30%) [ ] 1 day (+50%)

*ANALYSIS REQUIRED
(NB. ALS Quote No. and/or Analysis Suite Codes must be listed to attract suite/quoted price)
Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).
Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

Comments:

ALS Use Only Lab ID	Sample ID	Depth	Date/Time	No. Bottles	MATRIX: Soil/Solid(S) (Water(W) Sediments (SD), Dust (D), Product (P), Biota (B), Biosolid (BS))	CHLOROPHYL-A	Lab QC (additional bottles req.) Dup	Lab QC MS	Additional Information (Comment on hazards - e.g., asbestos, known high contamination)
1	A		27/8/25	1	W	X	☐	☐	
2	C		"	1	"	X	☐	☐	
3	D		"	1	"	X	☐	☐	
4	F		"	1	"	X	☐	☐	
5	G		"	1	"	X	☐	☐	
6	H		"	1	"	X	☐	☐	
7	I		"	1	"	X	☐	☐	
							☐	☐	
							☐	☐	
							☐	☐	

Receipt Detail (lab use ONLY): Chilling Method: Ice: Frozen / Melted; Ice Bricks: Frozen / Thawed; None
Sample Temp at Receipt: °C °C °C
Security Seal Intact (circle): Yes / No / NA(None)
Carrier Details: Con Note # ☐ Courier/Post ☐ Client
Packaging: (Circle) Hard Esky; Foam Esky; Box/Bag/Other
Count # # #

Relinquished by: J. HALL-BROWN Signature: Date/Time: 27/8/25 1055
Relinquished by: Signature: Date/Time:
Received by: Signature: Date/Time: 27/8/25 1100
Received by: Signature: Date/Time:

ENFM (204/17) Form Page 1 of 1 Approved Date: 13/03/2024

CERTIFICATE OF ANALYSIS

Work Order	: **EB2533283**	Page	: 1 of 2
Client	: **LITHAQUA ENVIRONMENTAL SERVICES**	Laboratory	: Environmental Division Brisbane
Contact	: MR JAMES HALL-BROWN	Contact	: Customer Services EB
Address	: 45 LOWRY STREET PEREGIAN BEACH 4573	Address	: 2 Byth Street Stafford QLD Australia 4053
Telephone	: 07 3191 9038	Telephone	: +61-7-3552-8685
Project	: LP140120 - NHH SURFACE WATER	Date Samples Received	: 23-Sep-2025 15:35
Order number	: ----	Date Analysis Commenced	: 24-Sep-2025
C-O-C number	: ----	Issue Date	: 08-Dec-2025 11:54
Sampler	: JAMES HALL-BROWN		
Site	: NORTH HARBOUR		
Quote number	: EN/222		
No. of samples received	: 5		
No. of samples analysed	: 5		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

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Signatories

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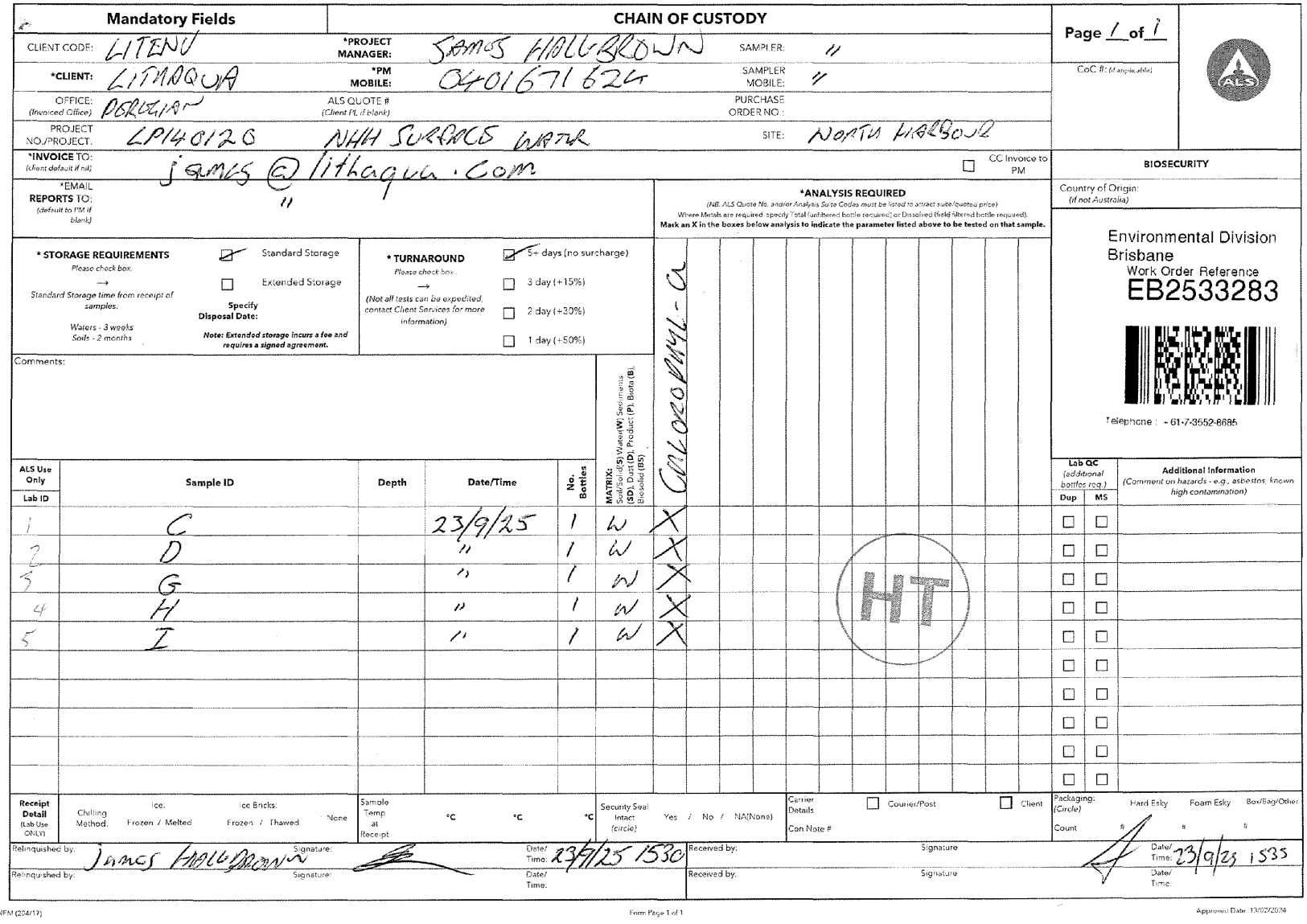
Signatories	*Position*	*Accreditation Category*
Beatriz Llarinas	Senior Chemist	Brisbane Inorganics, Stafford, QLD

right solutions. right partner.



Mandatory Fields | **CHAIN OF CUSTODY** | Page 1 of 1 | CoC #: (if applicable)

CLIENT CODE: LITENV | *PROJECT MANAGER: James HALLBROWN | SAMPLER: "

*CLIENT: LITHAQUA | *PM MOBILE: 0401671624 | SAMPLER MOBILE: "

OFFICE: (Invoiced Office) PORTIAN | ALS QUOTE #: (Client PL if blank) | PURCHASE ORDER NO.:

PROJECT NO./PROJECT: LP140120 NHH SURFACE WATER | SITE: NORTH HARBOUR

*INVOICE TO: (client default if nil) james@lithaqua.com | CC Invoice to PM

*EMAIL REPORTS TO: (default to PM if blank) "

BIOSECURITY — Country of Origin: (if not Australia)

Environmental Division Brisbane
Work Order Reference
EB2533283

Telephone : +61-7-3552-8685

*** STORAGE REQUIREMENTS** (Please check box. → Standard Storage time from receipt of samples. Waters - 3 weeks, Soils - 2 months)
☑ Standard Storage ☐ Extended Storage
Specify Disposal Date:
Note: Extended storage incurs a fee and requires a signed agreement.

*** TURNAROUND** (Please check box. → Not all tests can be expedited, contact Client Services for more information)
☑ 5+ days (no surcharge) ☐ 3 day (+15%) ☐ 2 day (+30%) ☐ 1 day (+50%)

***ANALYSIS REQUIRED**
(NB. ALS Quote No. and/or Analysis Suite Codes must be listed to attract suite/quoted price)
Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).
Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

Comments:

ALS Use Only Lab ID	Sample ID	Depth	Date/Time	No. Bottles	MATRIX: Soil/Solid(S) Water(W) Sediments (SD), Dust (D), Product (P), Biota (B), Biosolid (BS)	Chlorophyll-a	Lab QC (additional bottles req.) Dup	MS	Additional Information (Comment on hazards - e.g., asbestos, known high contamination)
1	C		23/9/25	1	W	X	☐	☐	
2	D		"	1	W	X	☐	☐	
3	G		"	1	W	X	☐	☐	
4	H		"	1	W	X	☐	☐	
5	I		"	1	W	X	☐	☐	
							☐	☐	
							☐	☐	
							☐	☐	
							☐	☐	
							☐	☐	

HT

Receipt Detail (Lab Use ONLY) — Chilling Method: Ice: Frozen / Melted; Ice Bricks: Frozen / Thawed; None — Sample Temp at Receipt: °C °C °C — Security Seal Intact (circle): Yes / No / NA(None) — Carrier Details: ☐ Courier/Post ☐ Client — Con Note # — Packaging: (Circle) Hard Esky, Foam Esky, Box/Bag/Other — Count # # #

Relinquished by: James HALLBROWN Signature: Date/Time: 23/9/25 1530

Relinquished by: Signature: Date/Time:

Received by: Signature: Date/Time: 23/9/25 1535

Received by: Signature: Date/Time:

ENFM (204/17) Form Page 1 of 1 Approved Date: 13/02/2024

CERTIFICATE OF ANALYSIS

Work Order	: **EB2538330**	Page	: 1 of 4
Client	: **LITHAQUA ENVIRONMENTAL SERVICES**	Laboratory	: Environmental Division Brisbane
Contact	: MR JAMES HALL-BROWN	Contact	: Customer Services EB
Address	: 45 LOWRY STREET PEREGIAN BEACH 4573	Address	: 2 Byth Street Stafford QLD Australia 4053
Telephone	: 07 3191 9038	Telephone	: +61-7-3552-8685
Project	: NHH SURFACE WATER - LP140120	Date Samples Received	: 31-Oct-2025 13:57
Order number	: ----	Date Analysis Commenced	: 31-Oct-2025
C-O-C number	: ----	Issue Date	: 19-Nov-2025 10:36
Sampler	: JAMES HALL-BROWN		
Site	: NORTH HARBOUR		
Quote number	: EN/222		
No. of samples received	: 7		
No. of samples analysed	: 7		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

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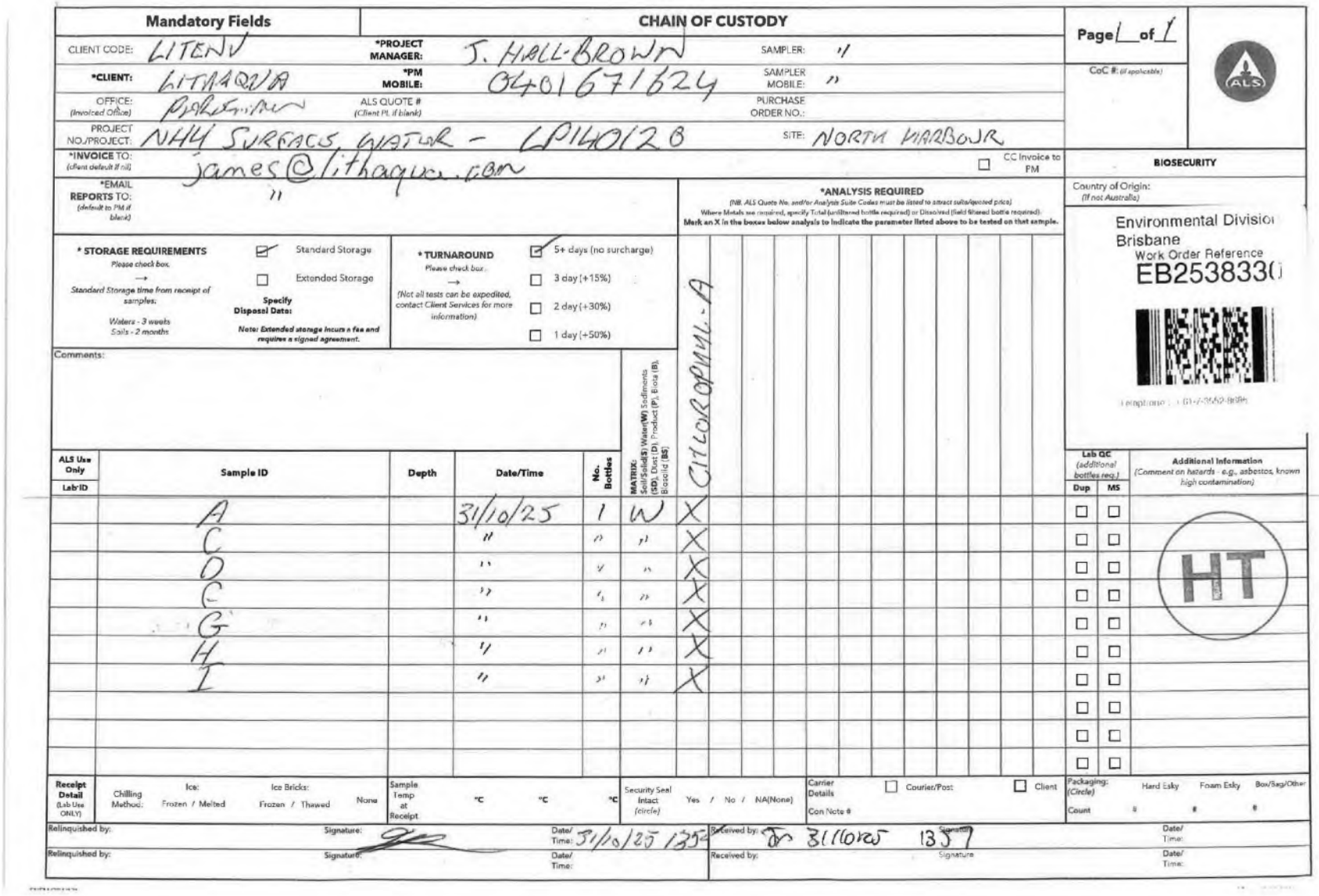
Signatories	*Position*	*Accreditation Category*
Kim McCabe	Senior Inorganic Chemist	Brisbane Inorganics, Stafford, QLD

right solutions. right partner.



Mandatory Fields | **CHAIN OF CUSTODY** | Page 1 of 1

CLIENT CODE: LITENV | *PROJECT MANAGER: J. HALL-BROWN | SAMPLER: "

*CLIENT: LITHAQUA | *PM MOBILE: 0401671624 | SAMPLER MOBILE: "

OFFICE: (Invoiced Office) PARRE | ALS QUOTE # (Client PL if blank) | PURCHASE ORDER NO.:

PROJECT NO./PROJECT: NH4 SURFACE WATER - LP140128 | SITE: NORTH HARBOUR

*INVOICE TO: (client default if nil) james@lithaqua.com | ☐ CC Invoice to PM

*EMAIL REPORTS TO: (default to PM if blank) "

CoC #: (if applicable)

BIOSECURITY

Country of Origin: (If not Australia)

Environmental Division Brisbane
Work Order Reference
EB2538330

*** STORAGE REQUIREMENTS** Please check box. → Standard Storage ☑ / Extended Storage ☐
Standard Storage time from receipt of samples: Waters - 3 weeks, Soils - 2 months
Specify Disposal Data:
Note: Extended storage incurs a fee and requires a signed agreement.

*** TURNAROUND** Please check box. → (Not all tests can be expedited, contact Client Services for more information)
5+ days (no surcharge) ☑ / 3 day (+15%) ☐ / 2 day (+30%) ☐ / 1 day (+50%) ☐

***ANALYSIS REQUIRED**
(NB. ALS Quote No. and/or Analysis Suite Codes must be listed to attract suite/quoted price)
Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).
Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

Comments:

ALS Use Only Lab ID	Sample ID	Depth	Date/Time	No. Bottles	MATRIX: Soil/Solid(S) Water(W) Sediments (SD), Dust (D), Product (P), Biota (B), Biosolid (BS)	CHLOROPHYLL-A	Lab QC (additional bottles req.) Dup	Lab QC (additional bottles req.) MS	Additional Information (Comment on hazards - e.g., asbestos, known high contamination)
	A		31/10/25	1	W	X	☐	☐	HT
	C		"	"	"	X	☐	☐	
	O		"	"	"	X	☐	☐	
	C		"	"	"	X	☐	☐	
	G		"	"	"	X	☐	☐	
	H		"	"	"	X	☐	☐	
	I		"	"	"	X	☐	☐	
							☐	☐	
							☐	☐	
							☐	☐	

Receipt Detail (Lab Use ONLY): Chilling Method: | Ice: Frozen / Melted | Ice Bricks: Frozen / Thawed | None
Sample Temp at Receipt: °C °C °C
Security Seal Intact (circle): Yes / No / NA(None)
Carrier Details: ☐ Courier/Post ☐ Client
Con Note #
Packaging: (Circle) Hard Esky, Foam Esky, Box/Bag/Other
Count # # #

Relinquished by: Signature: Date/Time: 31/10/25 1357
Relinquished by: Signature: Date/Time:
Received by: 31/10/25 1357 Signature Date/Time:
Received by: Signature Date/Time:

CERTIFICATE OF ANALYSIS

Work Order	: **EB2542478**	Page	: 1 of 4
Client	: **LITHAQUA ENVIRONMENTAL SERVICES**	Laboratory	: Environmental Division Brisbane
Contact	: MR JAMES HALL-BROWN	Contact	: Customer Services EB
Address	: 45 LOWRY STREET PEREGIAN BEACH 4573	Address	: 2 Byth Street Stafford QLD Australia 4053
Telephone	: 07 3191 9038	Telephone	: +61-7-3552-8685
Project	: LP146120 - North Harbour	Date Samples Received	: 28-Nov-2025 14:45
Order number	: ----	Date Analysis Commenced	: 28-Nov-2025
C-O-C number	: ----	Issue Date	: 08-Dec-2025 11:59
Sampler	: JAMES HALL-BROWN		
Site	: ----		
Quote number	: EN/222		
No. of samples received	: 7		
No. of samples analysed	: 7		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

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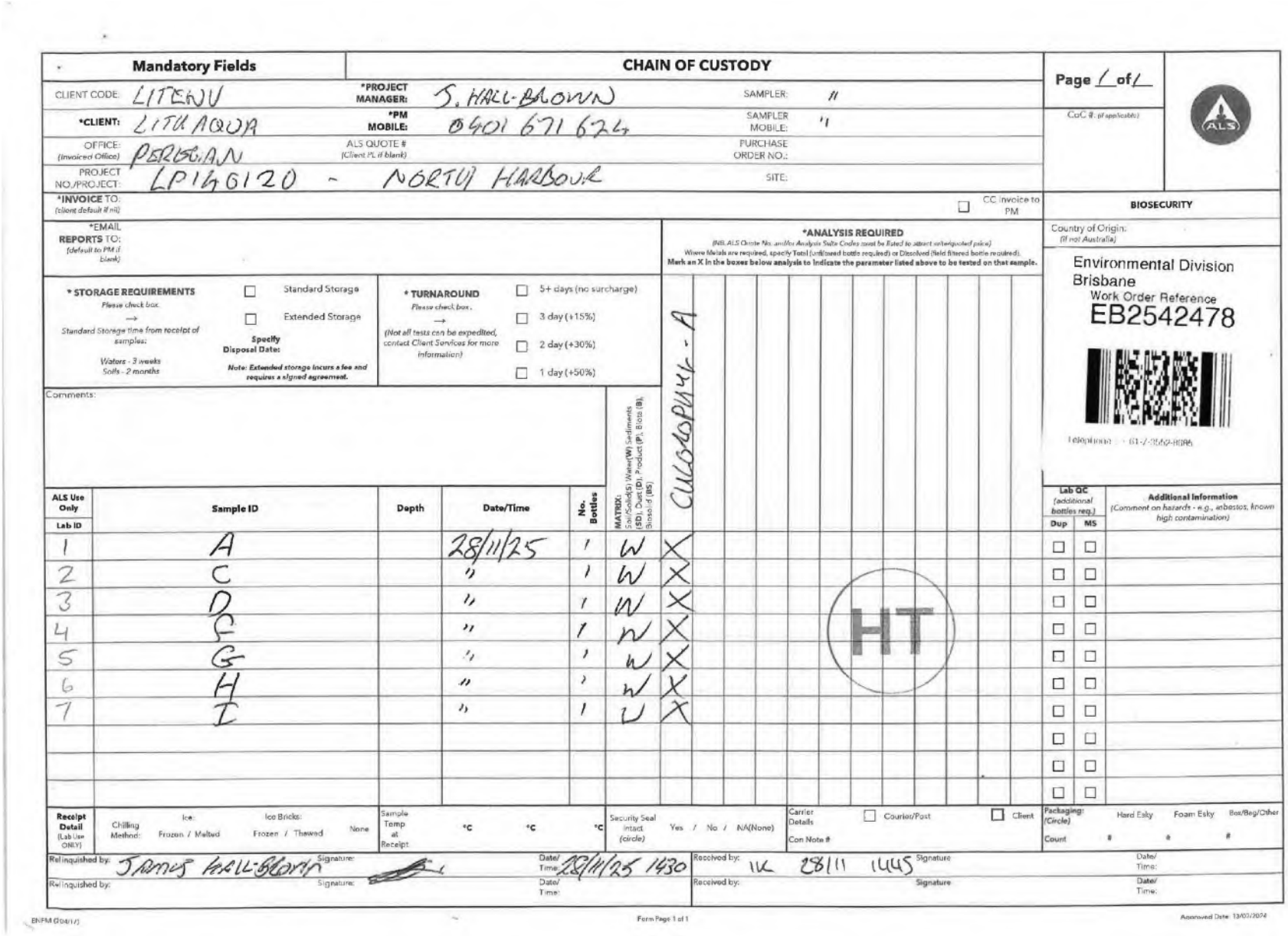
Kim McCabe	Senior Inorganic Chemist	Brisbane Inorganics, Stafford, QLD

right solutions. right partner.



Mandatory Fields | **CHAIN OF CUSTODY** | Page 1 of 1

CLIENT CODE: LITENV | *PROJECT MANAGER: J. HALL-BROWN | SAMPLER: "

*CLIENT: LITHAQUA | *PM MOBILE: 0401 671 624 | SAMPLER MOBILE: "

OFFICE: (Invoiced Office) PEREGIAN | ALS QUOTE # (Client PL if blank) | PURCHASE ORDER NO.:

PROJECT NO./PROJECT: LP140120 - NORTH HARBOUR | SITE:

*INVOICE TO: (client default if nil) | ☐ CC invoice to PM

*EMAIL REPORTS TO: (default to PM if blank)

BIOSECURITY — Country of Origin: (if not Australia)

Environmental Division Brisbane
Work Order Reference
EB2542478

Telephone : +61-7-3243-7222

*ANALYSIS REQUIRED
(NB. ALS Quote No. and/or Analysis Suite Codes must be listed to attract anticipated price)
Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).
Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

CULLOSPHERE - A

*STORAGE REQUIREMENTS (Please check box. →)
☐ Standard Storage
☐ Extended Storage
Standard Storage time from receipt of samples: Waters - 3 weeks; Soils - 2 months
Specify Disposal Date:
Note: Extended storage incurs a fee and requires a signed agreement.

*TURNAROUND (Please check box. →) (Not all tests can be expedited, contact Client Services for more information)
☐ 5+ days (no surcharge)
☐ 3 day (+15%)
☐ 2 day (+30%)
☐ 1 day (+50%)

Comments:

ALS Use Only Lab ID	Sample ID	Depth	Date/Time	No. Bottles	MATRIX: Soil/Solid(S) Water(W) Sediments (SD), Dust (D), Product (P), Biota (B), Sinsoid (BS)	CULLOSPHERE - A	Lab QC (additional bottles req.) Dup	MS	Additional Information (Comment on hazards - e.g., asbestos, known high contamination)
1	A		28/11/25	1	W	X	☐	☐	
2	C		"	1	W	X	☐	☐	
3	D		"	1	W	X	☐	☐	
4	F		"	1	W	X	☐	☐	
5	G		"	1	W	X	☐	☐	
6	H		"	1	W	X	☐	☐	
7	I		"	1	W	X	☐	☐	
							☐	☐	
							☐	☐	
							☐	☐	

HT

Receipt Detail (Lab Use ONLY): Chilling Method: | Ice: Frozen / Melted | Ice Bricks: Frozen / Thawed | None | Sample Temp at Receipt: °C °C °C | Security Seal Intact (circle): Yes / No / NA(None) | Carrier Details: ☐ Courier/Post ☐ Client | Con Note # | Packaging: (Circle) Hard Esky, Foam Esky, Box/Bag/Other | Count # # #

Relinquished by: James HALL-BROWN Signature: [signature] Date/Time: 28/11/25 1430

Received by: IK 28/11 1445 Signature Date/Time:

Relinquished by: Signature: Date/Time:

Received by: Signature Date/Time:

ENFM 00417 | Form Page 1 of 1 | Approved Date: 13/03/2024

CERTIFICATE OF ANALYSIS

Work Order	: **EB2604209**	Page	: 1 of 4
Client	: **LITHAQUA ENVIRONMENTAL SERVICES**	Laboratory	: Environmental Division Brisbane
Contact	: MR JAMES HALL-BROWN	Contact	: Customer Services EB
Address	: 45 LOWRY STREET PEREGIAN BEACH 4573	Address	: 2 Byth Street Stafford QLD Australia 4053
Telephone	: 07 3191 9038	Telephone	: +61-7-3552-8685
Project	: LP140120 - NHH SURFACE WATER	Date Samples Received	: 05-Feb-2026 16:05
Order number	: ----	Date Analysis Commenced	: 05-Feb-2026
C-O-C number	: ----	Issue Date	: 11-Mar-2026 10:34
Sampler	: JAMES HALL-BROWN		
Site	: NHH		
Quote number	: EN/222		
No. of samples received	: 6		
No. of samples analysed	: 6		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

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This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

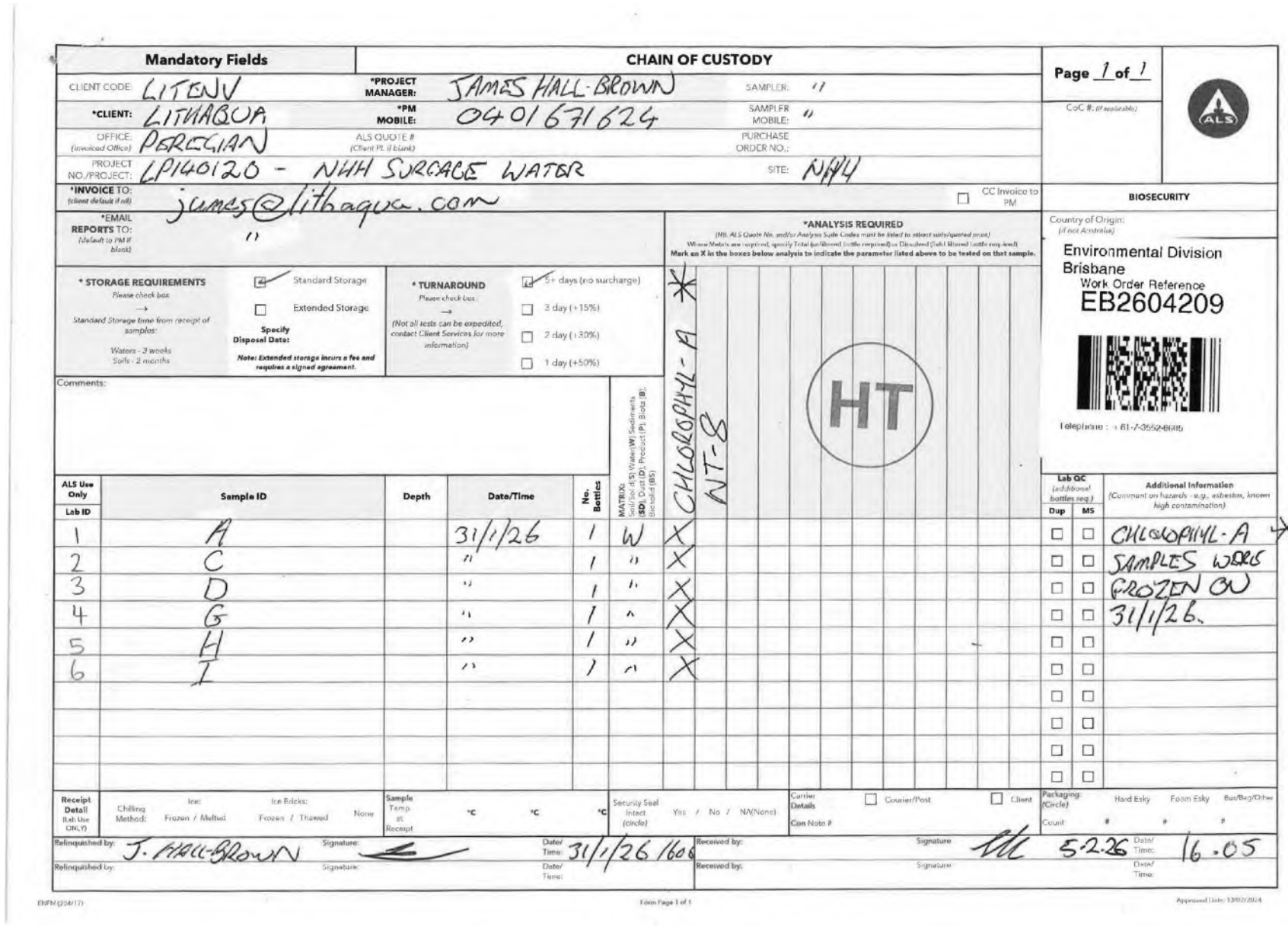
Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Kim McCabe	Senior Inorganic Chemist	Brisbane Inorganics, Stafford, QLD

right solutions. right partner.



Mandatory Fields

CHAIN OF CUSTODY

Page 1 of 1

CoC #: (if applicable)

CLIENT CODE: LITENV

*PROJECT MANAGER: JAMES HALL-BROWN

SAMPLER: "

*CLIENT: LITHAQUA

*PM MOBILE: 0401671624

SAMPLER MOBILE: "

OFFICE: (Invoiced Office) PEREGIAN

ALS QUOTE # (Client PL if blank)

PURCHASE ORDER NO.:

PROJECT NO./PROJECT: LP140120 - NHH SURFACE WATER

SITE: NHH

*INVOICE TO: (client default if all) james@lithaqua.com

CC Invoice to PM

*EMAIL REPORTS TO: (default to PM if blank) "

BIOSECURITY

Country of Origin: (if not Australia)

Environmental Division Brisbane

Work Order Reference EB2604209

Telephone : +61-7-3552-8685

*ANALYSIS REQUIRED

(NB. ALS Quote No. and/or Analysis Suite Codes must be listed to select suite/quoted price)

Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).

Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

* STORAGE REQUIREMENTS — Please check box → Standard Storage / Extended Storage. Standard Storage time from receipt of samples: Waters - 3 weeks, Soils - 2 months. Specify Disposal Date: Note: Extended storage incurs a fee and requires a signed agreement.

* TURNAROUND — Please check box → 5+ days (no surcharge) / 3 day (+15%) / 2 day (+30%) / 1 day (+50%). (Not all tests can be expedited, contact Client Services for more information)

Comments:

ALS Use Only Lab ID	Sample ID	Depth	Date/Time	No. Bottles	MATRIX: Soil/Sol (S) Water (W) Sediments (SD) Dust (D) Product (P) Biota (B) Biofield (BS)	CHLOROPHYL-A	NT-8	HT	Lab QC (additional bottles req.) Dup	Lab QC MS	Additional Information (Comment on hazards - e.g., asbestos, known high contamination)
1	A		31/1/26	1	W	X			☐	☐	CHLOROPHYL-A *
2	C		"	1	"	X			☐	☐	SAMPLES WERE
3	D		"	1	"	X			☐	☐	FROZEN ON
4	G		"	1	"	X	X		☐	☐	31/1/26.
5	H		"	1	"	X			☐	☐	
6	I		"	1	"	X			☐	☐	
									☐	☐	
									☐	☐	
									☐	☐	
									☐	☐	

Receipt Detail (Lab Use ONLY) — Chilling Method: Ice / Ice Bricks: Frozen / Melted / Frozen / Thawed / None. Sample Temp. at Receipt: °C °C °C. Security Seal Intact (circle): Yes / No / NA(None).

Carrier Details: ☐ Courier/Post ☐ Client. Con Note #

Packaging: (Circle) Hard Esky / Foam Esky / Bag/Bag/Other. Count # # #

Relinquished by: J. HALL-BROWN Signature: Date/Time: 31/1/26 1600

Relinquished by: Signature: Date/Time:

Received by: Signature: 5-2-26 Date/Time: 16.05

Received by: Signature: Date/Time:

ENFM (204/17) Form Page 1 of 1 Approved Date: 13/02/2024

CERTIFICATE OF ANALYSIS

Work Order	: **EB2608763**	Page	: 1 of 4
Client	: **LITHAQUA ENVIRONMENTAL SERVICES**	Laboratory	: Environmental Division Brisbane
Contact	: MR JAMES HALL-BROWN	Contact	: Customer Services EB
Address	: 45 LOWRY STREET PEREGIAN BEACH 4573	Address	: 2 Byth Street Stafford QLD Australia 4053
Telephone	: 07 3191 9038	Telephone	: +61-7-3552-8685
Project	: LP140120/ NHH SURFACE WATER	Date Samples Received	: 11-Mar-2026 07:30
Order number	: ----	Date Analysis Commenced	: 11-Mar-2026
C-O-C number	: ----	Issue Date	: 19-Mar-2026 10:30
Sampler	: JAMES HALL-BROWN		
Site	: ----		
Quote number	: EN/222		
No. of samples received	: 7		
No. of samples analysed	: 7		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

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- Analytical Results

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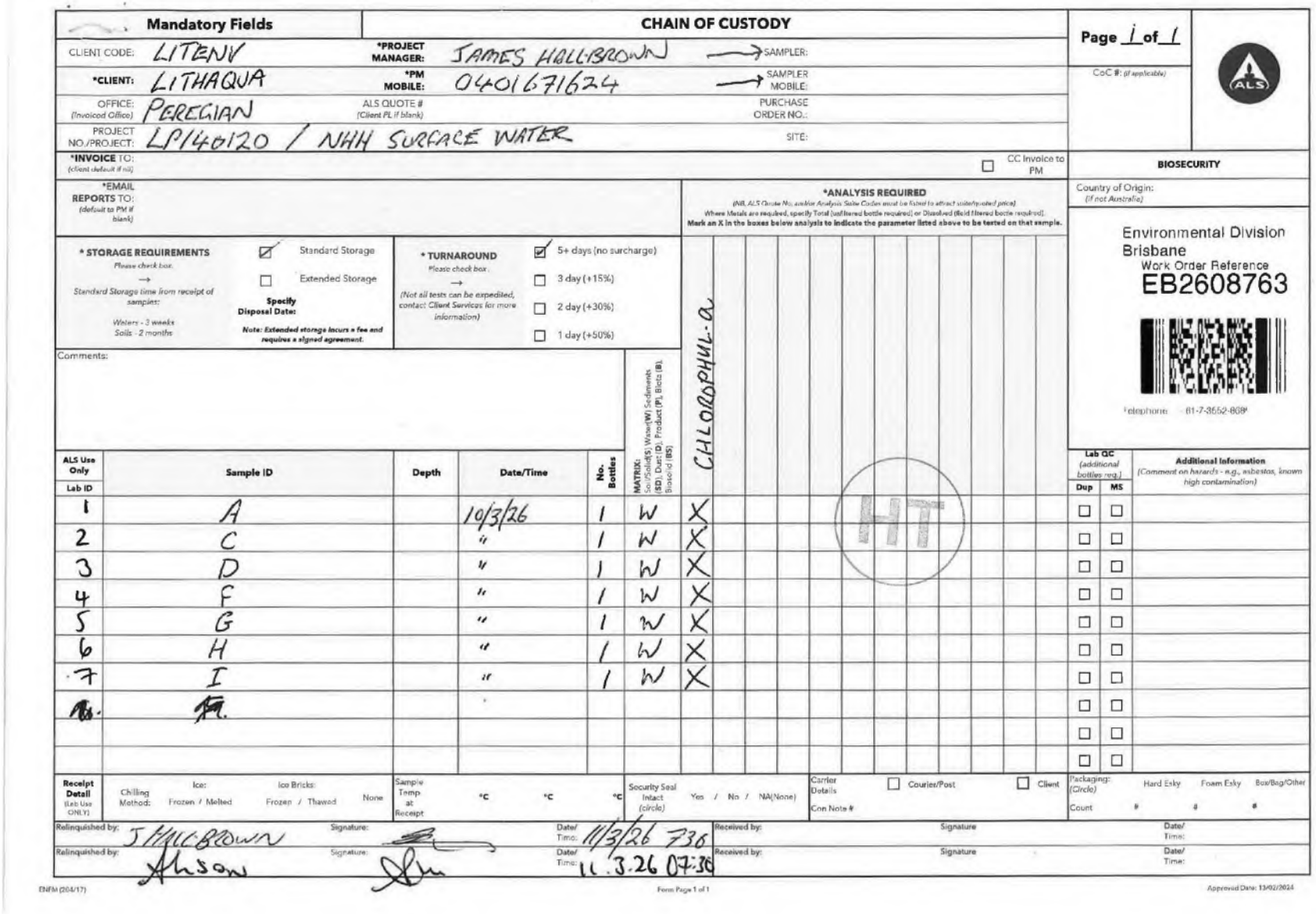
Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Kim McCabe	Senior Inorganic Chemist	Brisbane Inorganics, Stafford, QLD

right solutions. right partner.



Mandatory Fields | **CHAIN OF CUSTODY** | Page 1 of 1

CLIENT CODE: LITENV | *PROJECT MANAGER: JAMES HALLBROWN | SAMPLER:

*CLIENT: LITHAQUA | *PM MOBILE: 0401671624 | SAMPLER MOBILE:

OFFICE: (Invoiced Office) PEREGIAN | ALS QUOTE # (Client PL if blank) | PURCHASE ORDER NO.:

PROJECT NO./PROJECT: LP140120 / NHH SURFACE WATER | SITE:

*INVOICE TO: (client default if nil) | ☐ CC Invoice to PM

*EMAIL REPORTS TO: (default to PM if blank)

CoC #: (if applicable)

BIOSECURITY

Country of Origin: (if not Australia)

Environmental Division Brisbane
Work Order Reference
EB2608763

Telephone: 61-7-3552-8699

*ANALYSIS REQUIRED
(NB. ALS Quote No. and/or Analysis Suite Codes must be listed to attract quoted price)
Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).
Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

* STORAGE REQUIREMENTS (Please check box. →) ☑ Standard Storage ☐ Extended Storage
Standard Storage time from receipt of samples: Waters - 3 weeks; Soils - 2 months
Specify Disposal Date:
Note: Extended storage incurs a fee and requires a signed agreement.

* TURNAROUND (Please check box. →) ☑ 5+ days (no surcharge) ☐ 3 day (+15%) ☐ 2 day (+30%) ☐ 1 day (+50%)
(Not all tests can be expedited, contact Client Services for more information)

Comments:

ALS Use Only Lab ID	Sample ID	Depth	Date/Time	No. Bottles	MATRIX: Soil/Solid(S) Water(W) Sediments (SD) Dust (D) Product (P), Biota (B), Biosolid (BS)	CHLOROPHYL-A	Lab QC (additional bottles req.) Dup	MS	Additional Information (Comment on hazards - e.g., asbestos, known high contamination)
1	A		10/3/26	1	W	X	☐	☐	
2	C		"	1	W	X	☐	☐	
3	D		"	1	W	X	☐	☐	
4	F		"	1	W	X	☐	☐	
5	G		"	1	W	X	☐	☐	
6	H		"	1	W	X	☐	☐	
7	I		"	1	W	X	☐	☐	
							☐	☐	
							☐	☐	
							☐	☐	

HT

Receipt Detail (Lab Use ONLY) Chilling Method: Ice: Frozen / Melted Ice Bricks: Frozen / Thawed None
Sample Temp at Receipt °C °C °C
Security Seal Intact (circle) Yes / No / NA(None)
Carrier Details ☐ Couries/Post ☐ Client Con Note #
Packaging: (Circle) Hard Esky Foam Esky Box/Bag/Other Count # # #

Relinquished by: J HALLBROWN Signature: Date/Time: 11/3/26 7:36
Relinquished by: Alison Signature: Date/Time: 11.3.26 07:36
Received by: Signature: Date/Time:
Received by: Signature: Date/Time:

ENFM (204/17) Form Page 1 of 1 Approved Date: 13/02/2024

CERTIFICATE OF ANALYSIS

Work Order	: **EB2614940**	Page	: 1 of 4
Client	: **LITHAQUA ENVIRONMENTAL SERVICES**	Laboratory	: Environmental Division Brisbane
Contact	: MR JAMES HALL-BROWN	Contact	: Customer Services EB
Address	: 45 LOWRY STREET PEREGIAN BEACH 4573	Address	: 2 Byth Street Stafford QLD Australia 4053
Telephone	: 07 3191 9038	Telephone	: +61-7-3552-8685
Project	: LP140120 NORTH HARBOUR HOLDINGS	Date Samples Received	: 28-Apr-2026 16:15
Order number	: ----	Date Analysis Commenced	: 30-Apr-2026
C-O-C number	: ----	Issue Date	: 05-May-2026 14:33
Sampler	: ----		
Site	: NORTH HARBOUR		
Quote number	: EN/222		
No. of samples received	: 7		
No. of samples analysed	: 7		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

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- General Comments
- Analytical Results

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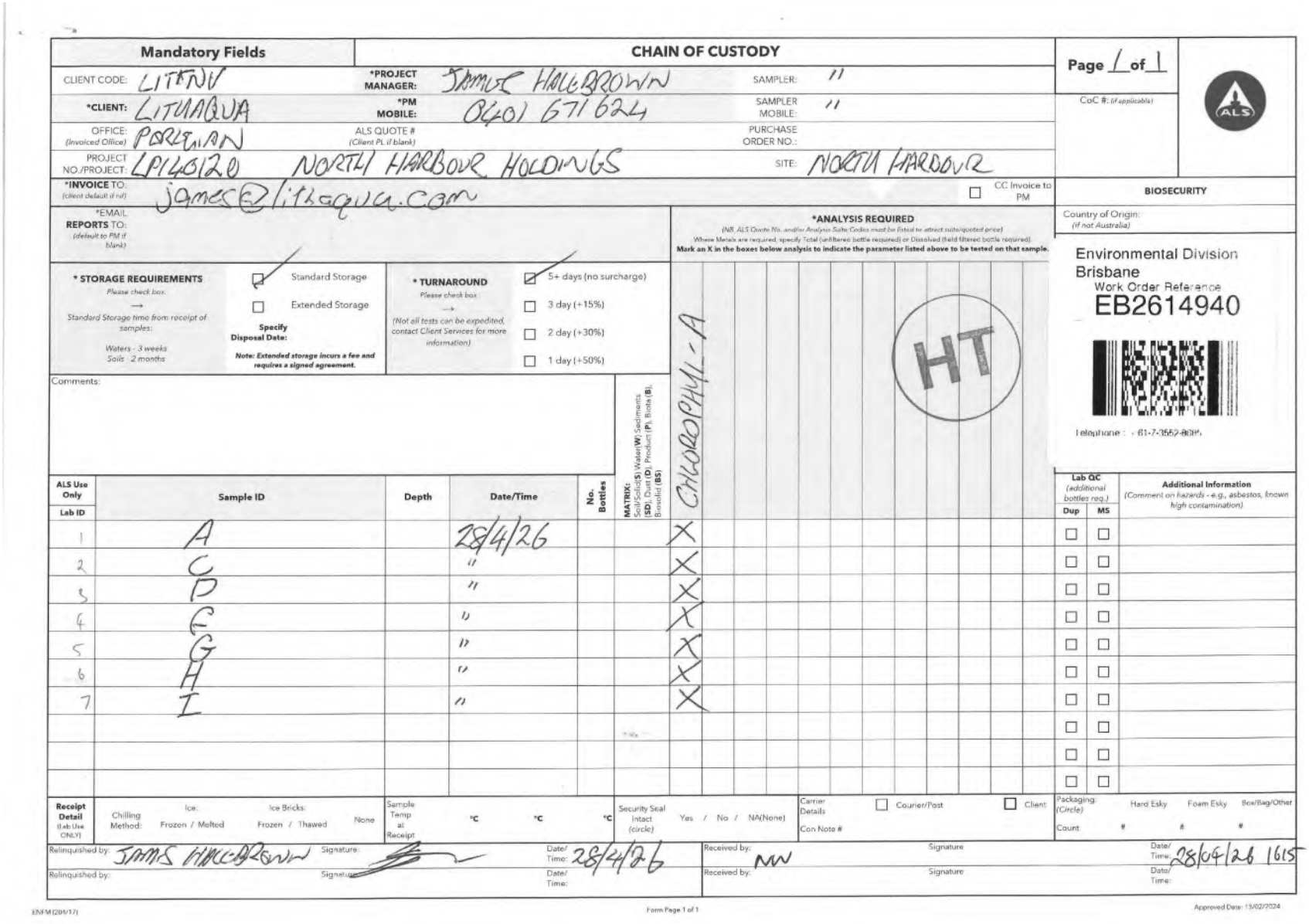
Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Kim McCabe	Senior Inorganic Chemist	Brisbane Inorganics, Stafford, QLD

right solutions. right partner.



Mandatory Fields | **CHAIN OF CUSTODY** | Page 1 of 1

CLIENT CODE: LITHNV | *PROJECT MANAGER: JAMES HALLBROWN | SAMPLER: "

*CLIENT: LITHAQUA | *PM MOBILE: 0401 671 624 | SAMPLER MOBILE: "

OFFICE: (Invoiced Office) PEREGIAN | ALS QUOTE # (Client PL if blank) | PURCHASE ORDER NO.:

PROJECT NO./PROJECT: LP140120 NORTH HARBOUR HOLDINGS | SITE: NORTH HARBOUR

*INVOICE TO: (client default if nil) james@lithaqua.com | ☐ CC Invoice to PM

*EMAIL REPORTS TO: (default to PM if blank)

CoC #: (if applicable)

BIOSECURITY — Country of Origin: (if not Australia)

*** STORAGE REQUIREMENTS** (Please check box. → Standard Storage time from receipt of samples: Waters - 3 weeks, Soils - 2 months)
☐ Standard Storage
☐ Extended Storage
Specify Disposal Date:
Note: Extended storage incurs a fee and requires a signed agreement.

*** TURNAROUND** (Please check box. → Not all tests can be expedited, contact Client Services for more information)
☑ 5+ days (no surcharge)
☐ 3 day (+15%)
☐ 2 day (+30%)
☐ 1 day (+50%)

***ANALYSIS REQUIRED**
(NB. ALS Quote No. and/or Analysis Suite Codes must be listed to attract suite/quoted price)
Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).
Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

Comments:

Environmental Division Brisbane
Work Order Reference
EB2614940
Telephone : +61-7-3552-8611

ALS Use Only Lab ID	Sample ID	Depth	Date/Time	No. Bottles	MATRIX: Soil/Solid(S) Water(W) Sediments (SD), Dust (D), Product (P), Biota (B), Biosolid (BS)	CHLOROPHYL-A	Lab QC (additional bottles req.) Dup	MS	Additional Information (Comment on hazards - e.g., asbestos, known high contamination)
1	A		28/4/26			X	☐	☐	
2	B		"			X	☐	☐	
3	C		"			X	☐	☐	
4	E		"			X	☐	☐	
5	G		"			X	☐	☐	
6	H		"			X	☐	☐	
7	I		"			X	☐	☐	
							☐	☐	
							☐	☐	
							☐	☐	

Receipt Detail (Lab Use ONLY) — Chilling Method: Ice: Frozen / Melted; Ice Bricks: Frozen / Thawed; None
Sample Temp at Receipt: °C °C °C
Security Seal Intact (circle): Yes / No / NA(None)
Carrier Details: ☐ Courier/Post ☐ Client
Con Note #
Packaging: (Circle) Hard Esky, Foam Esky, Box/Bag/Other
Count # # #

Relinquished by: JAMES HALLBROWN Signature: Date/Time: 28/4/26
Relinquished by: Signature: Date/Time:

Received by: NW Signature Date/Time: 28/04/26 1615
Received by: Signature Date/Time:

EN/FM (204/17) Form Page 1 of 1 Approved Date: 13/02/2024

CERTIFICATE OF ANALYSIS

Work Order	: **EB2618416**	Page	: 1 of 4
Client	: **LITHAQUA ENVIRONMENTAL SERVICES**	Laboratory	: Environmental Division Brisbane
Contact	: MR JAMES HALL-BROWN	Contact	: Customer Services EB
Address	: 45 LOWRY STREET PEREGIAN BEACH 4573	Address	: 2 Byth Street Stafford QLD Australia 4053
Telephone	: 07 3191 9038	Telephone	: +61-7-3552-8685
Project	: LP140120 - North Harbour Surface Water	Date Samples Received	: 22-May-2026 17:05
Order number	: ----	Date Analysis Commenced	: 22-May-2026
C-O-C number	: ----	Issue Date	: 11-Jun-2026 08:48
Sampler	: JAMES HALL-BROWN		
Site	: ----		
Quote number	: EN/222		
No. of samples received	: 7		
No. of samples analysed	: 7		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

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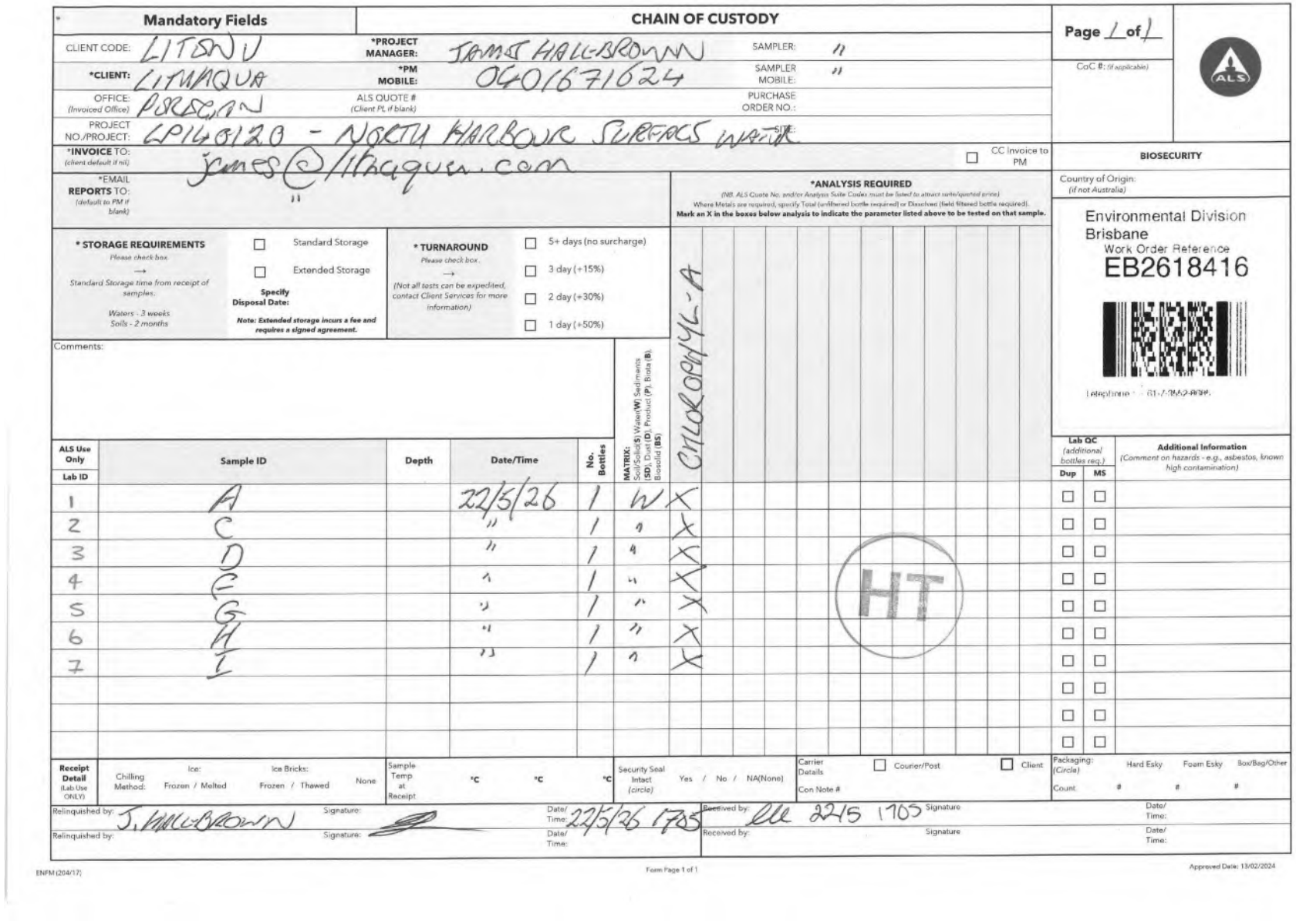
Signatories	*Position*	*Accreditation Category*
Mark Hallas	Senior Inorganic Chemist	Brisbane Inorganics, Stafford, QLD

right solutions. right partner.



Mandatory Fields | **CHAIN OF CUSTODY** | Page 1 of 1

CLIENT CODE: LITSNV | *PROJECT MANAGER: JAMES HALL-BROWN | SAMPLER: "

*CLIENT: LITHAQUA | *PM MOBILE: 0401671624 | SAMPLER MOBILE: "

OFFICE: (Invoiced Office) PSREGAN | ALS QUOTE # (Client PL if blank) | PURCHASE ORDER NO.:

PROJECT NO./PROJECT: LP140120 - NORTH HARBOUR SURFACE WATER | SITE:

*INVOICE TO: (client default if nil) james@lithaqua.com | ☐ CC invoice to PM

*EMAIL REPORTS TO: (default to PM if blank) "

CoC #: (if applicable)

BIOSECURITY

Country of Origin: (if not Australia)

Environmental Division Brisbane

Work Order Reference EB2618416

Telephone : 61-7-3243-7222

*** STORAGE REQUIREMENTS** (Please check box →) — Standard Storage Time from receipt of samples: Waters - 3 weeks, Soils - 2 months

☐ Standard Storage ☐ Extended Storage

Specify Disposal Date:

Note: Extended storage incurs a fee and requires a signed agreement.

*** TURNAROUND** (Please check box →) (Not all tests can be expedited, contact Client Services for more information)

☐ 5+ days (no surcharge) ☐ 3 day (+15%) ☐ 2 day (+30%) ☐ 1 day (+50%)

***ANALYSIS REQUIRED**

(NB. ALS Quote No. and/or Analysis Suite Codes must be listed to attract suite/quoted price)

Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).

Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

Comments:

ALS Use Only Lab ID	Sample ID	Depth	Date/Time	No. Bottles	MATRIX: Soil/Solid(S) Water(W) Sediments (SD), Dust(D), Product(P), Biota(B), Biosolid(BS)	CHLOROPHYLL-A	Lab QC (additional bottles req.) Dup	Lab QC (additional bottles req.) MS	Additional Information (Comment on hazards - e.g., asbestos, known high contamination)
1	A		22/5/26	1	W	X	☐	☐	
2	C		"	1	"	X	☐	☐	
3	D		"	1	"	X	☐	☐	
4	E		"	1	"	X	☐	☐	
5	G		"	1	"	X	☐	☐	
6	H		"	1	"	X	☐	☐	
7	I		"	1	"	X	☐	☐	
							☐	☐	
							☐	☐	
							☐	☐	

HT

Receipt Detail (Lab Use ONLY) — Chilling Method: Ice: Frozen / Melted Ice Bricks: Frozen / Thawed None | Sample Temp at Receipt °C °C °C | Security Seal Intact (circle) Yes / No / NA(None) | Carrier Details ☐ Courier/Post ☐ Client Con Note # | Packaging: (Circle) Hard Esky Foam Esky Box/Bag/Other Count # # #

Relinquished by: J. HALL-BROWN Signature: Date/Time: 22/5/26 1705

Relinquished by: Signature: Date/Time:

Received by: lle 22/5 1705 Signature Date/Time:

Received by: Signature Date/Time:

ENFM (204/17) Form Page 1 of 1 Approved Date: 13/02/2024

CERTIFICATE OF ANALYSIS

Work Order	: **EB2621487**	Page	: 1 of 4
Client	: **LITHAQUA ENVIRONMENTAL SERVICES**	Laboratory	: Environmental Division Brisbane
Contact	: MR JAMES HALL-BROWN	Contact	: Customer Services EB
Address	: 45 LOWRY STREET PEREGIAN BEACH 4573	Address	: 2 Byth Street Stafford QLD Australia 4053
Telephone	: 07 3191 9038	Telephone	: +61-7-3552-8685
Project	: LP140120 - NORTH HARBOUR SURFACE WATER	Date Samples Received	: 15-Jun-2026 13:30
Order number	: ----	Date Analysis Commenced	: 17-Jun-2026
C-O-C number	: ----	Issue Date	: 16-Jul-2026 13:22
Sampler	: JAMES HALL-BROWN		
Site	: ----		
Quote number	: EN/222		
No. of samples received	: 7		
No. of samples analysed	: 7		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

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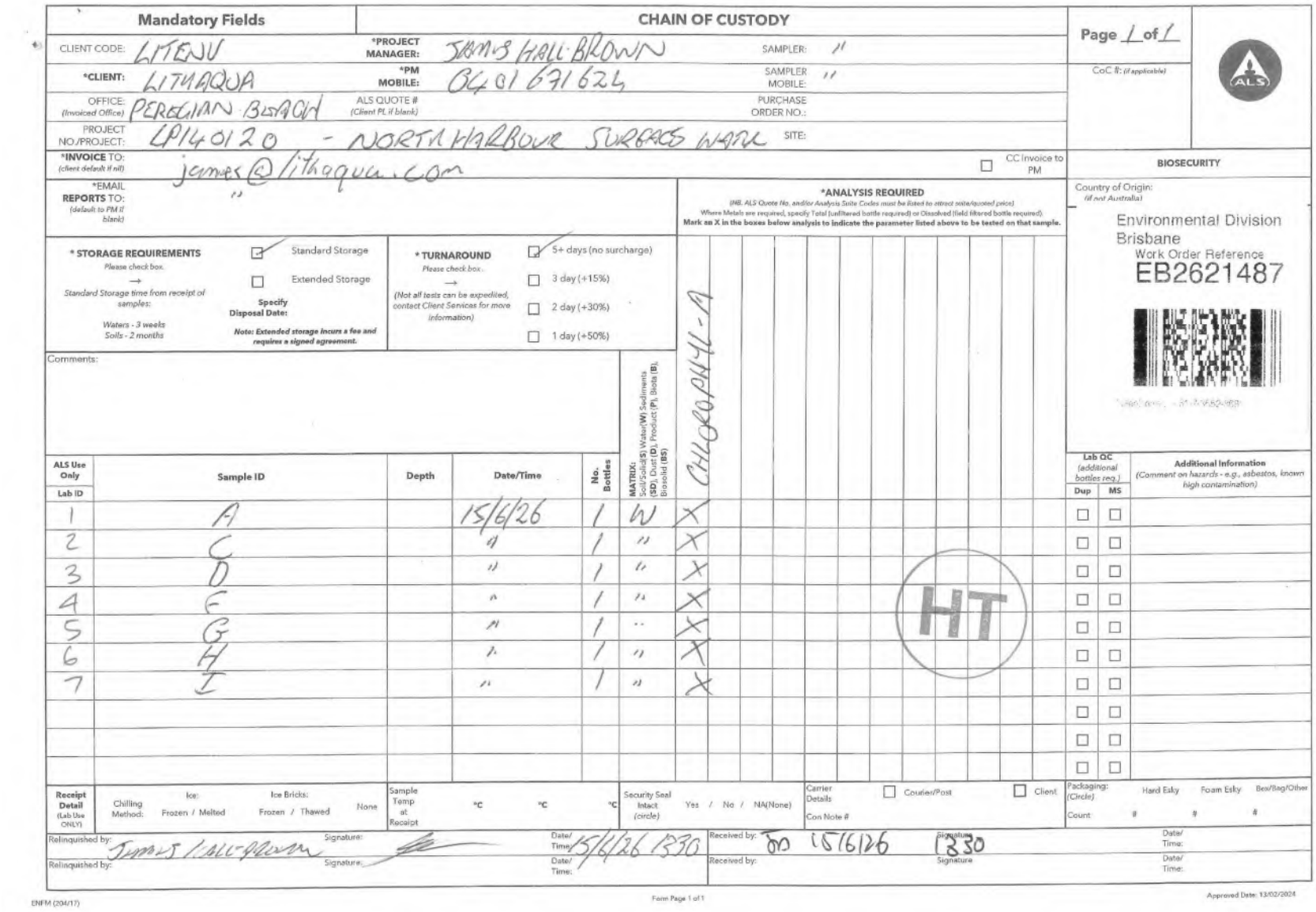
Kim McCabe	Senior Inorganic Chemist	Brisbane Inorganics, Stafford, QLD

right solutions. right partner.



Mandatory Fields | **CHAIN OF CUSTODY** | Page 1 of 1

CLIENT CODE: LITENV | *PROJECT MANAGER: JAMES HALL-BROWN | SAMPLER: "

*CLIENT: LITHAQUA | *PM MOBILE: 0401 671 624 | SAMPLER MOBILE: "

OFFICE: (Invoiced Office) PEREGIAN BEACH | ALS QUOTE # (Client PL if blank) | PURCHASE ORDER NO.:

PROJECT NO./PROJECT: LP140120 - NORTH HARBOUR SURFACE WATER | SITE:

*INVOICE TO: (client default if nil) james@lithaqua.com | CC Invoice to PM

*EMAIL REPORTS TO: (default to PM if blank) "

BIOSECURITY

Country of Origin: (if not Australia)

Environmental Division Brisbane

Work Order Reference EB2621487

*STORAGE REQUIREMENTS — Please check box. → Standard Storage ☑ / Extended Storage ☐

Standard Storage time from receipt of samples: Waters - 3 weeks; Soils - 2 months

Specify Disposal Date:

Note: Extended storage incurs a fee and requires a signed agreement.

*TURNAROUND — Please check box. → 5+ days (no surcharge) ☑ / 3 day (+15%) ☐ / 2 day (+30%) ☐ / 1 day (+50%) ☐

(Not all tests can be expedited, contact Client Services for more information)

*ANALYSIS REQUIRED

(NB. ALS Quote No. and/or Analysis Suite Codes must be listed to attract suite/quoted price)

Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).

Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

Comments:

ALS Use Only Lab ID	Sample ID	Depth	Date/Time	No. Bottles	MATRIX: Soil/Solid(S) Water(W) Sediments (SD) Dust (D) Product (P) Biota (B) Biosolid (BS)	CHLOROPHYLL-A	Lab QC (additional bottles req.) Dup	MS	Additional Information (Comment on hazards - e.g., asbestos, known high contamination)
1	A		15/6/26	1	W	X	☐	☐	
2	C		"	1	"	X	☐	☐	
3	D		"	1	"	X	☐	☐	
4	E		"	1	"	X	☐	☐	
5	G		"	1	"	X	☐	☐	
6	H		"	1	"	X	☐	☐	
7	I		"	1	"	X	☐	☐	
							☐	☐	
							☐	☐	
							☐	☐	

HT

Receipt Detail (Lab Use ONLY): Chilling Method: Ice: Frozen / Melted Ice Bricks: Frozen / Thawed None | Sample Temp at Receipt °C °C °C | Security Seal Intact (circle) Yes / No / NA(None) | Carrier Details ☐ Courier/Post ☐ Client Con Note # | Packaging: (Circle) Hard Esky Foam Esky Box/Bag/Other Count # # #

Relinquished by: JAMES HALL-BROWN Signature: Date/Time: 15/6/26 1330

Relinquished by: Signature: Date/Time:

Received by: 15/6/26 1330 Signature Date/Time:

Received by: Signature Date/Time:

ENFM (204/17) Form Page 1 of 1 Approved Date: 13/02/2024

PO Box 136, Peregian Beach QLD 4573 · T: 0401 671 624 · E: james@lithaqua.com · ABN 62 473 026 355

APPENDIX D

Instrument Calibration Certificates

Hanna HI98594 multiparameter meter — 2025/2026 reporting period

PO Box 136, Peregian Beach QLD 4573 · T: 0401 671 624 · E: james@lithaqua.com · ABN 62 473 026 355

Instrument Calibration Certificates

Certificates of calibration for the Hanna Instruments HI98594 pH/EC/DO/turbidity multiparameter meter (serial number M01300021111) used to record the field parameters reported in this document. Twelve calibrations were undertaken over the reporting period. Each certificate records the calibration standards used, the pre-calibration and post-calibration readings for each parameter, meter condition and battery status, and is signed by the operator.

Certificates are presented in date order.

Certificate of Calibration — 30 July 2025

Water Quality Meter

Certificate of Calibration

LithAqua environmental services

Manufacturer:	Hanna Instruments	Date:	30/07/2025
Model:	HI98594	Time:	19:50
Serial Number:	M01300021111	Personnel:	James Hall-Brown
Meter Condition:	Good	Signature:	
Battery Status:	100%/76%		

Full Calibration

pH

Calibration Standard	Temparature	Pre-Cal Reading	Post-Cal Reading	Comment
4.01	19.65	4.03	--	Cal not required
7.01	19.49	7.02	--	Cal not required
10.01	19.43	10.03	--	Cal not required
Electro-conductivity				
12880 µS/cm	19.65	12940	12890	☑
Dissolved Oxygen				
100%	20.37	110.80%	100.00%	Cal not required
0%	20.04	0.00%	--	Cal not required
Turbidity				
0 FNU	20.28	0.3	--	Cal not required
20 FNU	20.32	20.2	--	Cal not required
200FNU	20.77	202	--	Cal not required
ORP				
240mv	24.4	239	241	☑

Quick Calibration

pH

6.86				
Electro-conductivity				
5000 µS/cm				

Notes:

Meter working well

Full calibration conducted

Hanna Instruments HI98594 · serial M01300021111

PO Box 136, Peregian Beach QLD 4573 · T: 0401 671 624 · E: james@lithaqua.com · ABN 62 473 026 355

Certificate of Calibration — 26 August 2025

Water Quality Meter

Certificate of Calibration

Manufacturer:	Hanna Instruments	Date:	26/08/2025
Model:	HI98594	Time:	16:15
Serial Number:	M01300021111	Personnel:	James Hall-Brown
Meter Condition:	Good	Signature:	
Battery Status:	ALK: 100% Li-Ion: 62%		

Full Calibration

pH

Calibration Standard	Temparature	Pre-Cal Reading	Post-Cal Reading	Comment
4.01	20.37	3.97	4.00	☑
7.01	20.81	7.01	7.02	☑
10.01	20.73	10.05	10.04	☑
Electro-conductivity				
12880 µS/cm	20.74	12670	12890	☑
Dissolved Oxygen				
100%	20.22	104.00%	100.00%	Cal not required
0%	20.76	0.00%	--	Cal not required
Turbidity				
0 FNU	19.65	0.6	--	Cal not required
20 FNU	20.29	19.8	--	Cal not required
200FNU	20.54	199	--	Cal not required
ORP				
240mv		239	241	☑

Quick Calibration

pH

6.86				
Electro-conductivity				
5000 µS/cm				

Notes:

Meter working well

Full calibration conducted

Hanna Instruments HI98594 · serial M01300021111

PO Box 136, Peregian Beach QLD 4573 · T: 0401 671 624 · E: james@lithaqua.com · ABN 62 473 026 355

Certificate of Calibration — 23 September 2025

Water Quality Meter

Certificate of Calibration

LithAqua environmental services

Manufacturer:	Hanna Instruments	Date:	23/09/2025
Model:	HI98594	Time:	9:45
Serial Number:	M01300021111	Personnel:	James Hall-Brown
Meter Condition:	Good	Signature:	
Battery Status:	ALK: 100% Li-Ion: 48%		

Full Calibration

pH

Calibration Standard	Temparature	Pre-Cal Reading	Post-Cal Reading	Comment
4.01	20.47	3.99	4.01	☑
7.01	20.37	7.04	7.02	☑
10.01	20.44	10.05	10.01	☑
Electro-conductivity				
12880 µS/cm	20.52	13010	12880	☑
Dissolved Oxygen				
100%	21.33	132.40%	99.80%	☑
0%	20.39	0.00%	0%	☑
Turbidity				
0 FNU	20.43	0.7	0.0	☑
20 FNU	20.29	21.3	20.0	☑
200FNU	20.54	207	199	☑
ORP				
240mv		235	240	☑

Quick Calibration

pH

6.86				
Electro-conductivity				
5000 µS/cm				

Notes:

Meter working well

Full calibration conducted

Hanna Instruments HI98594 · serial M01300021111

PO Box 136, Peregian Beach QLD 4573 · T: 0401 671 624 · E: james@lithaqua.com · ABN 62 473 026 355

Certificate of Calibration — 31 October 2025

Water Quality Meter

Certificate of Calibration

LithAqua environmental services

Manufacturer:	Hanna Instruments	Date:	31/10/2025
Model:	HI98594	Time:	8:25
Serial Number:	M01300021111	Personnel:	James Hall-Brown
Meter Condition:	Good	Signature:	
Battery Status:	ALK: 100% Li-Ion: 76%		

Full Calibration

pH

Calibration Standard	Temparature	Pre-Cal Reading	Post-Cal Reading	Comment
4.01	23.56	3.96	4.00	☑
7.01	23.48	7.03	7.01	☑
10.01	23.45	10.04	10.02	☑
Electro-conductivity				
12880 µS/cm	23.87	12750	12880	☑
Dissolved Oxygen				
100%	24.3	102.7%	-	calibration not required
0%	22.76	0.00%	-	calibration not required
Turbidity				
0 FNU	23.65	0.2	0.0	☑
20 FNU	23.87	21.2	20.0	☑
200FNU	23.24	204	199	☑
ORP				
240mv	20.84	236.7	-	calibration not required

Quick Calibration

pH

6.86				
Electro-conductivity				
5000 µS/cm				

Notes:

Meter working well

Full calibration conducted

Hanna Instruments HI98594 · serial M01300021111

PO Box 136, Peregian Beach QLD 4573 · T: 0401 671 624 · E: james@lithaqua.com · ABN 62 473 026 355

Certificate of Calibration — 28 November 2025

Water Quality Meter

Certificate of Calibration

LithAqua environmental services

Manufacturer:	Hanna Instruments	Date:	28/11/2025
Model:	HI98594	Time:	11:25
Serial Number:	M01300021111	Personnel:	James Hall-Brown
Meter Condition:	Good	Signature:	
Battery Status:	ALK: 100% Li-Ion: 97%		

Full Calibration

pH

Calibration Standard	Temparature	Pre-Cal Reading	Post-Cal Reading	Comment
4.01	26.46	4.07	4.01	☑
7.01	26.69	7.03	7.01	☑
10.01	26.34	9.98	10.01	☑
Electro-conductivity				
12880 µS/cm	27.01	13790	12880	☑
Dissolved Oxygen				
100%	22.43	115.40%	104.20%	☑
0%	25.76	0.00%	0%	☑
Turbidity				
0 FNU	27.64	0	0.0	☑
20 FNU	26.94	20.3	20.1	☑
200FNU	25.87	205	201	☑
ORP				
240mv	25.23	236	240	☑

Quick Calibration

pH

6.86				
Electro-conductivity				
5000 µS/cm				

Notes:

Meter working well

Full calibration conducted

Hanna Instruments HI98594 · serial M01300021111

PO Box 136, Peregian Beach QLD 4573 · T: 0401 671 624 · E: james@lithaqua.com · ABN 62 473 026 355

Certificate of Calibration — 2 December 2025

Water Quality Meter

Certificate of Calibration

LithAqua

Manufacturer:	Hanna Instruments	Date:	2/12/2025
Model:	HI98594	Time:	8:30
Serial Number:	M01300021111	Personnel:	James Hall-Brown
Meter Condition:	Good	Signature:	
Battery Status:	ALK: 100% Li-Ion: 92%		

Full Calibration

pH

Calibration Standard	Temparature	Pre-Cal Reading	Post-Cal Reading	Comment
4.01	26.46	4.07	4.01	☑
7.01	26.69	7.03	7.01	☑
10.01	26.34	9.98	10.01	☑
Electro-conductivity				
12880 µS/cm	27.01	13790	12880	☑
Dissolved Oxygen				
100%	22.43	115.40%	104.20%	☑
0%	25.76	0.00%	0%	☑
Turbidity				
0 FNU	27.64	0	0.0	☑
20 FNU	26.94	20.3	20.1	☑
200FNU	25.87	205	201	☑
ORP				
240mv	25.23	236	240	☑

Quick Calibration

pH

6.86				
Electro-conductivity				
5000 µS/cm				

Notes:

Meter working well

Full calibration conducted

Hanna Instruments HI98594 · serial M01300021111

PO Box 136, Peregian Beach QLD 4573 · T: 0401 671 624 · E: james@lithaqua.com · ABN 62 473 026 355

Certificate of Calibration — 31 January 2026

Water Quality Meter

Certificate of Calibration

LithAqua environmental services

Manufacturer:	Hanna Instruments	Date:	31/01/2026
Model:	HI98594	Time:	8:25
Serial Number:	M01300021111	Personnel:	James Hall-Brown
Meter Condition:	Good	Signature:	
Battery Status:	ALK: 100% Li-Ion: 100%		

Full Calibration

pH

Calibration Standard	Temparature	Pre-Cal Reading	Post-Cal Reading	Comment
4.01	25.76	4.02	4.01	☑
7.01	25.68	6.99	7.01	☑
10.01	25.69	9.96	10	☑

Electro-conductivity

12880 µS/cm	23.87	12690	12880	☑

Dissolved Oxygen

100%	24.3	103.7%	-	calibration not required
0%	22.76	0.00%	-	calibration not required

Turbidity

0 FNU	23.65	0.1	0.0	☑
20 FNU	23.87	19.8	20.3	☑
200FNU	23.24	196	200	☑

ORP

240mv	20.84	236.7	-	calibration not required

Quick Calibration

pH

6.86				

Electro-conductivity

5000 µS/cm				

Notes:

Meter working well

Full calibration conducted

Hanna Instruments HI98594 · serial M01300021111

PO Box 136, Peregian Beach QLD 4573 · T: 0401 671 624 · E: james@lithaqua.com · ABN 62 473 026 355

Certificate of Calibration — 16 February 2026

Water Quality Meter

Certificate of Calibration

LithAqua environmental services

Manufacturer:	Hanna Instruments	Date:	16/02/2026
Model:	HI98594	Time:	7:25
Serial Number:	M01300021111	Personnel:	James Hall-Brown
Meter Condition:	Good	Signature:	
Battery Status:	ALK: 100% Li-Ion: 100%		

Full Calibration

pH

Calibration Standard	Temparature	Pre-Cal Reading	Post-Cal Reading	Comment
4.01	23.45	3.98	4.01	☑
7.01	23.54	6.98	7	☑
10.01	23.6	9.97	10.01	☑

Electro-conductivity

12880 µS/cm	23.87	12830	12880	☑

Dissolved Oxygen

100%	25.7	101.6%	-	calibration not required
0%	24.65	0.00%	-	calibration not required

Turbidity

0 FNU	23.65	0.3	0.0	☑
20 FNU	23.87	20.9	20.1	☑
200FNU	23.24	204	200	☑

ORP

240mv	23.94	243.4	-	calibration not required

Quick Calibration

pH

6.86				

Electro-conductivity

5000 µS/cm				

Notes:

Meter working well

Full calibration conducted

Hanna Instruments HI98594 · serial M01300021111

Certificate of Calibration — 5 March 2026

Water Quality Meter

Certificate of Calibration

LithAqua environmental services

Manufacturer:	Hanna Instruments	Date:	5/03/2026
Model:	HI98594	Time:	8:20
Serial Number:	M01300021111	Personnel:	James Hall-Brown
Meter Condition:	Good	Signature:	
Battery Status:	ALK: 100% Li-Ion: 75%		

Full Calibration

pH

Calibration Standard	Temparature	Pre-Cal Reading	Post-Cal Reading	Comment
4.01	23.54	4.01	-	calibration not required
7.01	23.65	7.02	-	calibration not required
10.01	23.45	10.01	-	calibration not required
Electro-conductivity				
12880 µS/cm	23.76	12890	12880	☑
Dissolved Oxygen				
100%	23.1	98.60%	-	calibration not required
0%	22.89	0.00%	-	calibration not required
Turbidity				
0 FNU	23.45	0	-	calibration not required
20 FNU	23.76	20.5	-	calibration not required
200FNU	22.25	203	-	calibration not required
ORP				
240mv	23.75	231	240	☑

Quick Calibration

pH

6.86				
Electro-conductivity				
5000 µS/cm				

Notes:

Meter working well

Full calibration conducted

Hanna Instruments HI98594 · serial M01300021111

PO Box 136, Peregian Beach QLD 4573 · T: 0401 671 624 · E: james@lithaqua.com · ABN 62 473 026 355

Certificate of Calibration — 28 April 2026

Water Quality Meter

Certificate of Calibration

LithAqua environmental services

Manufacturer:	Hanna Instruments	Date:	28/04/2026
Model:	HI98594	Time:	6:45
Serial Number:	M01300021111	Personnel:	James Hall-Brown
Meter Condition:	Good	Signature:	
Battery Status:	ALK: 100% Li-Ion: 100%		

Full Calibration

pH

Calibration Standard	Temparature	Pre-Cal Reading	Post-Cal Reading	Comment
4.01	22.67	4.04	4.00	☑
7.01	22.63	7.05	7.01	☑
10.01	22.76	10.08	10	☑

Electro-conductivity

12880 µS/cm	22.89	12790	12880	☑

Dissolved Oxygen

100%	20.6	101.6%	-	calibration not required
0%	24.65	0.00%	-	calibration not required

Turbidity

0 FNU	22.87	0.1	0.0	☑
20 FNU	22.78	21.5	20.3	☑
200FNU	22.65	190	201	☑

ORP

240mv	22.56	236.8	-	calibration not required

Quick Calibration

pH

6.86				

Electro-conductivity

5000 µS/cm				

Notes:

Meter working well

Full calibration conducted

Hanna Instruments HI98594 · serial M01300021111

PO Box 136, Peregian Beach QLD 4573 · T: 0401 671 624 · E: james@lithaqua.com · ABN 62 473 026 355

Certificate of Calibration — 22 May 2026

Water Quality Meter

Certificate of Calibration

LithAqua environmental services

Manufacturer:	Hanna Instruments	Date:	22/05/2026
Model:	HI98594	Time:	10:55
Serial Number:	M01300021111	Personnel:	James Hall-Brown
Meter Condition:	Good	Signature:	
Battery Status:	ALK: 100% Li-Ion: 30%		

Full Calibration

pH

Calibration Standard	Temparature	Pre-Cal Reading	Post-Cal Reading	Comment
4.01	20.75	4.03	4.01	☑
7.01	20.97	7.09	7.02	☑
10.01	23.45	9.98	10.02	☑
Electro-conductivity				
12880 µS/cm	19.00	12640	12880	☑
Dissolved Oxygen				
100%	20.86	101.5%	-	calibration not required
0%	21.18	0.00%	-	calibration not required
Turbidity				
0 FNU	19.99	2.1	0.0	☑
20 FNU	20.65	20.5	20.1	☑
200FNU	20.89	189	200	☑
ORP				
240mv	20.84	239.7	-	calibration not required

Quick Calibration

pH

6.86				
Electro-conductivity				
5000 µS/cm				

Notes:

Meter working well

Full calibration conducted

Hanna Instruments HI98594 · serial M01300021111

PO Box 136, Peregian Beach QLD 4573 · T: 0401 671 624 · E: james@lithaqua.com · ABN 62 473 026 355

Certificate of Calibration — 15 June 2026

Water Quality Meter

Certificate of Calibration

LithAqua environmental services

Manufacturer:	Hanna Instruments	Date:	15/06/2026
Model:	HI98594	Time:	7:30
Serial Number:	M01300021111	Personnel:	James Hall-Brown
Meter Condition:	Good	Signature:	
Battery Status:	ALK: 100% Li-Ion: 84%		

Full Calibration

pH

Calibration Standard	Temparature	Pre-Cal Reading	Post-Cal Reading	Comment
4.01	20.75	3.89	4.01	☑
7.01	20.97	7.11	7.02	☑
10.01	23.45	9.86	10.02	☑

Electro-conductivity

12880 µS/cm	19.00	12860	12880	☑

Dissolved Oxygen

100%	20.86	103.5%	-	calibration not required
0%	21.18	0.00%	-	calibration not required

Turbidity

0 FNU	19.99	0.8	0.0	☑
20 FNU	20.65	20.6	20.1	☑
200FNU	20.89	197	200	☑

ORP

240mv	20.84	236.7	-	calibration not required

Quick Calibration

pH

6.86				

Electro-conductivity

5000 µS/cm				

Notes:

Meter working well

Full calibration conducted

Hanna Instruments HI98594 · serial M01300021111

PO Box 136, Peregian Beach QLD 4573 · T: 0401 671 624 · E: james@lithaqua.com · ABN 62 473 026 355

19 June 2026 Ref.: 19210-036-Rev0

North Harbour Holdings Pty Ltd
Attention: Michael McErlean
michael@northharbour.com.au

RE: ENVIRONMENTAL MONITORING SUMMARY – JUNE 2025 TO MAY 2026
NORTH HARBOUR DEVELOPMENT

Dear Michael,

1. Introduction

Tectonic was engaged by North Harbour Holdings Pty Ltd (NHH) to prepare this report summarising acid sulfate soil (ASS) management completed between June 2025 to May 2026, related with ongoing land development at North Harbour.

1.1 Background

Tectonic has provided ongoing ASS and groundwater management advice on behalf of North Harbour since 2017, throughout development of the *'Residential West'* and *'Mixed Industry and Business Area'* (MIBA) precincts.

Implementation of ASS management strategies throughout ongoing development (including bulk soil treatment, verification testing and other services pertaining to general site management) have been undertaken by the Primary Contractor, SEE Civil (previously Hall Civil) and their various subcontractors, the details of which have been provided to Tectonic for inclusion herein.

Soil and water management pertaining to ASS, for active development components, has been completed in general accordance with the following approved management documents:

- *Acid Sulfate Soil Investigation and Management Plan*, North Harbour Mixed Industry and Business Area (MIBA), prepared by Tectonic (Report No. 19210-001-Rev0, dated 8 November 2019).
- *Addendum to Acid Sulfate Soil Management Plan,* Proposed Sports Fields Bulk Earthworks; North Harbour Mixed Industry and Business Area, prepared by Tectonic (Report No. 19210-032-Rev0, dated 31 October 2023).

It is noted that the majority of development involving disturbance of ASS for *Residential West* and *MIBA* precincts was completed prior to June 2025. Works which have been undertaken throughout the current reporting period have mostly comprised bulk earthworks within identified non-ASS areas or have involved treatment of relatively low risk acidic, non-sulfuric soil (ANS), which requires less stringent mitigation and management measures.

2. Site Development Activities (June 2025 to May 2026)

Development across North Harbour *Residential West* was completed prior to June 2024. All ASS management and monitoring associated with this development precinct were reported throughout the development phase and was sufficiently closed out at the time of completion. Development works undertaken at North Harbour during the June 2025 to May 2026 reporting period are described below.

2.1 Completion of the external DTMR Road Upgrade

These works have comprised civil road construction connecting North Harbour Boulevard to Buchanan Road. Earthworks associated with this area were completed prior to June 2025, which included treatment and successful validation testing of approximately 10,000 m^3 of material.

2.2 Ongoing earthworks within the MIBA

2.2.1 Completion of Northern Sports Fields

This work involved placement and compaction of approximately 17,000 m^3 of managed topsoil, which had been previously stockpiled within residential north zones RN1 and RN2. No specific ASS management, including verification testing, was required for these works.

2.2.2 Completion of Wetland 1

This work involved excavation of approximately 8930 m^3 of ANS soil from Wetland 1, which was placed as controlled fill within earthworks area H2 (west of Nolan Drive). These were the only works undertaken within the reporting period with potential to impact material characterised as comprising ANS. Lime guard layers were therefore applied at the specified rate of 9 kg/m^3 during placement by the contractor. No further ASS management, including verification testing, was required for these works.

2.2.3 Ongoing H1/H2 bulk earthworks (west of Nolan Drive)

This work involved excavation and placement of approximately 423,000 m^3 of non-ASS material, typically occurring above RL 5 m AHD. Despite there being no mandatory requirement for ASS management associated with these works, approximately 247 tonnes of agricultural lime was applied as guard layers throughout fill zones, as a precaution to protect against possible ANS, which may be present. No further ASS management, including verification testing, was required for these works.

2.2.4 Civil construction within residential north zones RN1 & RN2,

These works involved disturbance of approximately 33,680 m^3 to shape final civil stages, including disturbance of materials which had previously undergone soil management (including verification, as required) and during bulk earthworks. No specific ASS management, including verification testing, was required or has been completed for these works.

3. Validation Testing

The works carried out withing the current reporting period have taken place within soils which have been characterised as non-ASS or ANS only, with no disturbance of ASS. Disturbances of ANS materials were understood to have been treated with agricultural lime in accordance with the ASSMP but did not require validation testing under the approved ASSMP.

No validation testing has therefore been completed during the June 2025 to May 2026 period.

3.1 Lime Delivery Records

Lime delivery records provided by SEE Civil indicate a total of 325.5 tonne of agricultural lime was delivered to the North Harbour MIBA site for use between June 2025 and May 2026. Assuming these materials were applied in accordance with the ASSMP, this volume sufficiently accounts for the treatment of disturbed ANS materials as described by SEE Civil, at the soil treatment rates defined in the ASSMP.

4. Groundwater Monitoring

Groundwater monitoring was required for areas of identified ASS, which typically included Wetlands 2 to 4, the Moreton Bay Boulevard / Urban Arterial bridge connection and the Buchanan Road Drainage Reserve. Earthworks associated with development of these areas were finished in November 2022, with associated groundwater monitoring completed in accordance with the approved ASSMP between November 2020 and October 2023. The works associated with MIBA development since 2023 have taken place within soils which have been characterised as non-ASS or ANS, where the environmental risk of acid migration is low, and for which there is no requirement for groundwater monitoring. Thus, no groundwater monitoring has been completed within the current reporting period.

5. Conclusion

The information provided by SEE Civil has been reviewed and indicates that, where disturbed, acidic soil has been effectively treated and managed during ongoing land development at North Harbour. It is understood that there have been no major adverse environmental impacts to local soil or groundwater conditions as a result of the construction activities undertaken within the summary period.

These results demonstrate that environmental risks associated with disturbance of ASS during development of *North Harbour Residential West* and *MIBA* are being appropriately managed by North Harbour and SEE Civil during works to date.

Your attention is drawn to the document *Limitations*, which is attached to this letter report.

Please contact the undersigned should you wish to discuss any of the above matters.

Yours faithfully,

Tectonic Geotechnical Pty Ltd

Mark Thomson B.Sc (Environmental) CPESC RSP-ASS
Senior Environmental Scientist

Attachments:
A. Limitations

Limitations

This document has been prepared for the purpose outlined in Tectonic's proposal and no responsibility is accepted for the use of this document, in whole or in part, for any other purpose.

The scope of Tectonic's Services are as described in Tectonic's proposal, and are subject to restrictions and limitations. Tectonic did not perform a complete assessment of all possible conditions or circumstances that may exist at the site referenced in the report. If a service is not expressly indicated, do not assume it has been provided. If a matter is not addressed, do not assume that any determination has been made by Tectonic in regards to it.

Conditions may exist which were undetectable given that economic and time constraints limit the practical extent of geotechnical investigation. Variations in conditions may occur between investigation locations, and there may be special conditions pertaining to the site which have not been revealed by the investigation and which have not therefore been taken into account in the document. Where variations exist on site, additional studies and actions may be required.

Tectonic's opinions are based upon information that existed at the time that the work was performed. The passage of time, man-made or natural events, may alter the site conditions. It is understood that the Services undertaken allowed Tectonic to form an opinion of the actual conditions of the site at the time the site was visited and cannot be used to assess the effect of any subsequent changes in the quality of the site, or its surroundings, or any laws or regulations.

Any assessments made in the preparation of this document are based on the conditions indicated from published sources and the findings of the investigation described. Actual subsurface conditions may differ from those indicated in the document (e.g. between boreholes or test pits). No warranty is included, either express or implied, that the actual conditions will conform exactly to the assessments contained in this document.

Where data supplied by the client or other external sources, including previous site investigation data, have been used, it has been assumed that the information is correct unless otherwise stated. No responsibility is accepted by Tectonic for incomplete or inaccurate data supplied by others.

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JWA PTY LTD
Ecological Consultants
ABN 56 066 448 879

2025 - 2026
SUMMARY OF REVEGETATION WORKS

North East Business Park

A Report Prepared for
North Harbour Holdings Pty Ltd

AUGUST 2026

JWA Pty Ltd
PO Box 650, Jimboomba QLD 4280
p 07 3219 9436 • **e** brisbane@jwaec.com.au

www.jwaec.com.au

DOCUMENT CONTROL

Document

Title	Summary of Revegetation Works
Job Number	Q15003
File Reference	\\JWAServer\Data\2015 CLIENTS\Q15003_Northeast Business Park, Morayfield\Reports\EPBC Rehab Summary (2026)
Version and Date	RW1 10/08/26
Client	North Harbour Holdings Pty Ltd

Revision History (office use only)

Issue	Version	Draft/ Final	Date	Distributed To	No. Copies	Media	Delivery Method
1	RW1	DRAFT	10/08/26	Client	1	.pdf	Email

Client Issue

Version	Date Sent	Author		Approved by	
		Name	Initials	Name	Initials
RW1	10/08/26	Nicole Davies	ND	Adam McArthur	AM

TABLE OF CONTENTS

1 Introduction

This summary report discusses the actions taken by North Harbour Holdings Pty Ltd (formerly Northeast Business Park Pty Ltd) towards revegetation of parts of the company's development site "North Harbour" at Morayfield, Queensland. The project site, which was extensively cleared for pine plantation forestry by previous owners, includes frontage to the southern bank of the Caboolture River. North Harbour Holdings Pty Ltd is actively seeking to revegetate a 100 m wide native vegetation "riparian buffer" to the Caboolture River on the majority of the frontage. North Harbour Holdings would like to thank the following groups and individuals for their assistance in the planning, preparation and establishment of the revegetation works thus far:

- Jim Pulsford, Sue Davies, Alex Smith, and other volunteers from the Friends of CREEC (Caboolture Region Environmental Education Centre);
- Warwick Halse Jr and the staff and volunteers from the CREEC Nursery;
- Wes Mortensen and Seelan Kulasegaram from Moreton Bay Regional Council;
- Staff from Greening Australia;
- Charlie and Jenny Cope;
- Trainees and staff involved in the 2016 and 2017 Skilling Queenslanders for Work program, provided by the Deception Bay Community Youth Programs (DBCYP) organisation; and
- Clint Howchin.

2 Overview of Revegetation Works to Mid 2026

Monitoring of previously planted sections A, B, C, F and G (**SECTIONS 4 - 7**) has been continued, with maintenance in these areas including weed control, fencing repairs and track maintenance. Weed diversity and density throughout the revegetation areas was found to have increased since the previous monitoring visit. Ongoing weed maintenance is required and should be completed as soon as practicable.

Monitoring of natural regeneration trials in section H has continued, with maintenance in this area limited to fencing repairs as required.

Monitoring of natural regeneration elsewhere (i.e. photo monitoring at points 7, 8, 11 and 12) has been discontinued until active planting is undertaken in these areas to establish revegetation.

A new planting area has been established (section I) with planting taking place on the 26th July 2026. Monitoring of this new area will start next year, however, baseline photos were taken on the 4th August 2026.

3 Revegetation Areas Involving Active Planting

Since December 2011, revegetation has been progressively established in a number of locations on the property (upstream end of the project site frontage to the Caboolture River).

Previously, revegetation has been established utilising different methodologies as trials to determine the most effective methodologies for assisted revegetation of the riparian corridor.

Preliminary planning is consistent for all assisted regeneration established thus far because the underlying pre-clearing regional ecosystem is consistent across all areas. Preliminary planning involved:

- Vegetation survey conducted by Sue Davies (Friends of CREEC).
- Revegetation Management Plan prepared by Greening Australia, including documentation of the species planting palette.
- Seed collection and propagation from local sources (including the project site) conducted by the CREEC Nursery.

Based on the observations of seedling survival and growth in previous trial plantings, continuation of planting in section G has been undertaken using the following methods:

- No broadscale soil conditioning / disturbance (as trialled in section A). Limited soil disturbance undertaken to avoid stimulating growth of competing weeds and pasture grasses.
- Ongoing maintenance (through slashing of pasture grasses and weeds, and watering beyond initial establishment) has not been included. Ongoing maintenance undertaken in Section A did not appear to significantly aid the survival and growth of seedlings compared with sections B and C where ongoing maintenance was limited to fencing repairs to exclude grazing by stock.
- Slashing of existing grasses/weeds undertaken just prior to planting (as trialled in sections B and C) has been adopted, providing opportunity for seedlings to establish before being subjected to competition for sunlight.
- Planting palette has been modified to increase the number of seedlings planted from pioneer/hardy species and reduce the number of seedlings planted from secondary species that require protection from the elements via an established upper canopy. Growth rates of secondary species seedlings have been low in area A and B plantings. It is anticipated that secondary species will establish via natural recruitment as fauna species recolonise the revegetated areas. In the event this does not occur, additional planting to introduce these species will be considered once suitable canopy protection has been established.

4 Revegetation Area A

This was the first trial revegetation area planted in December 2011. Canopy height is estimated to have reached approximately 50% of mature height, vegetation is now well established, and bird life and other fauna is returning to this area. It is anticipated this area will return to remnant condition without further planting of native species.

Weed diversity and density throughout Area A was found to have increased since the previous monitoring visit, and recent monitoring has identified ongoing weed maintenance is required. **PLATES 1 - 10** show aerial photos of the revegetation progress of Areas A, C and F in June 2026 compared to previous years (May 2012 to November 2024). The progress of Revegetation Area A in August 2026 is shown in **PLATES 11 & 12** compared to previous years (July 2018 to July 2025) shown in **PLATES 13 - 26**.

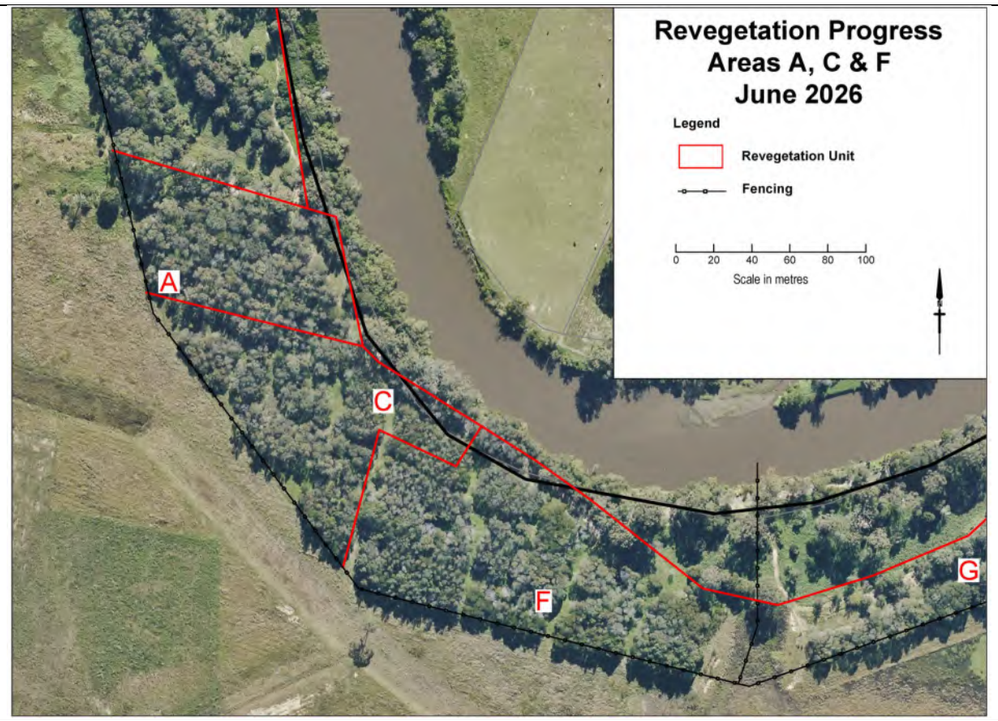

PLATE 1: Aerial of Revegetation progress of Areas A, C and F – June 2026

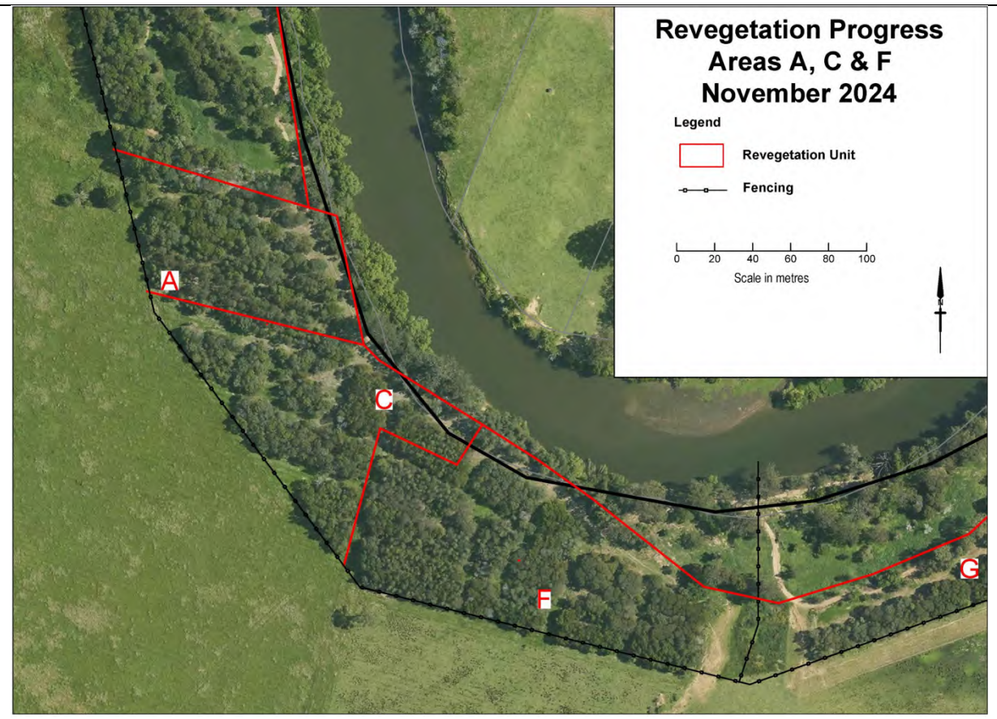

PLATE 2: Aerial of Revegetation progress of Areas A, C and F – November 2024

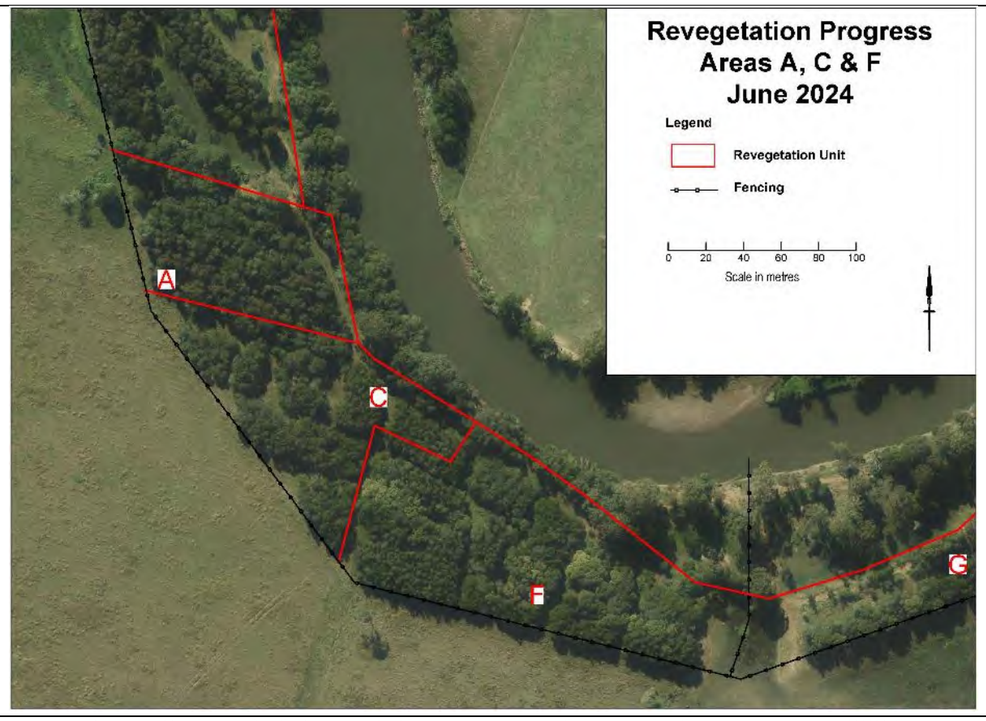

PLATE 3: Aerial of Revegetation progress of Areas A, C and F – June 2024

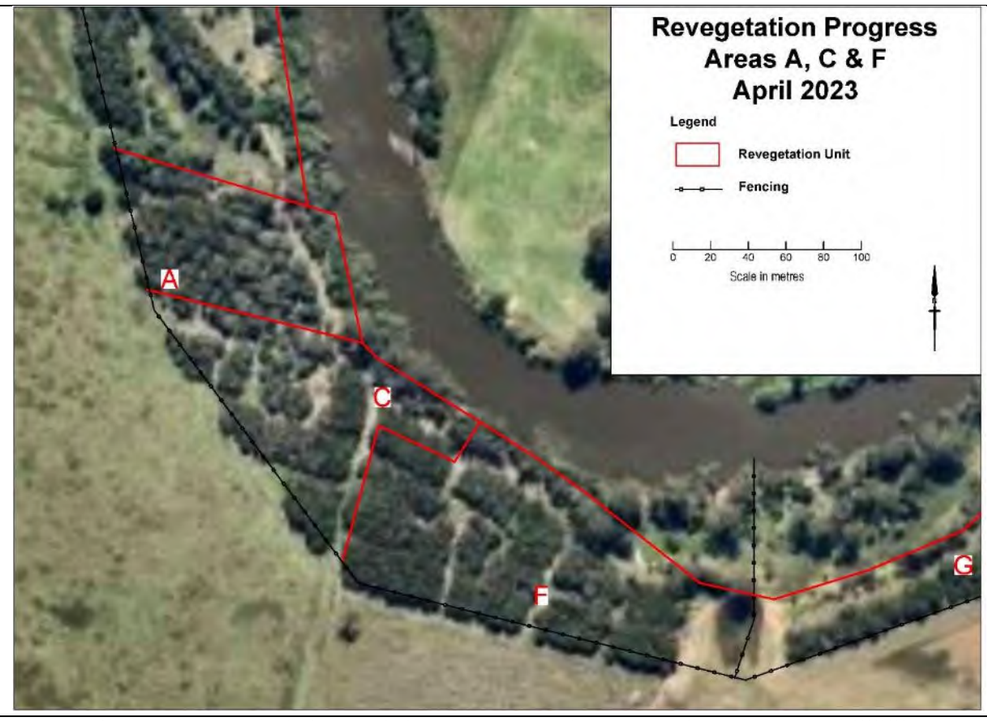

PLATE 4: Aerial of Revegetation progress of Areas A, C and F – April 2023

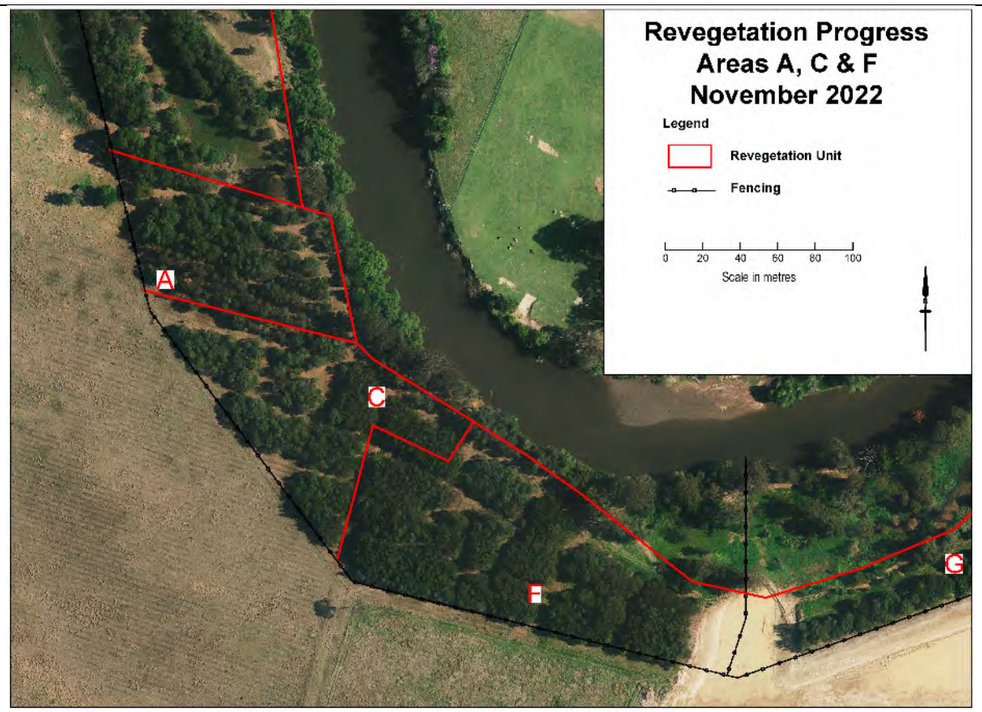

PLATE 5: Aerial of Revegetation progress of Areas A, C and F – November 2022

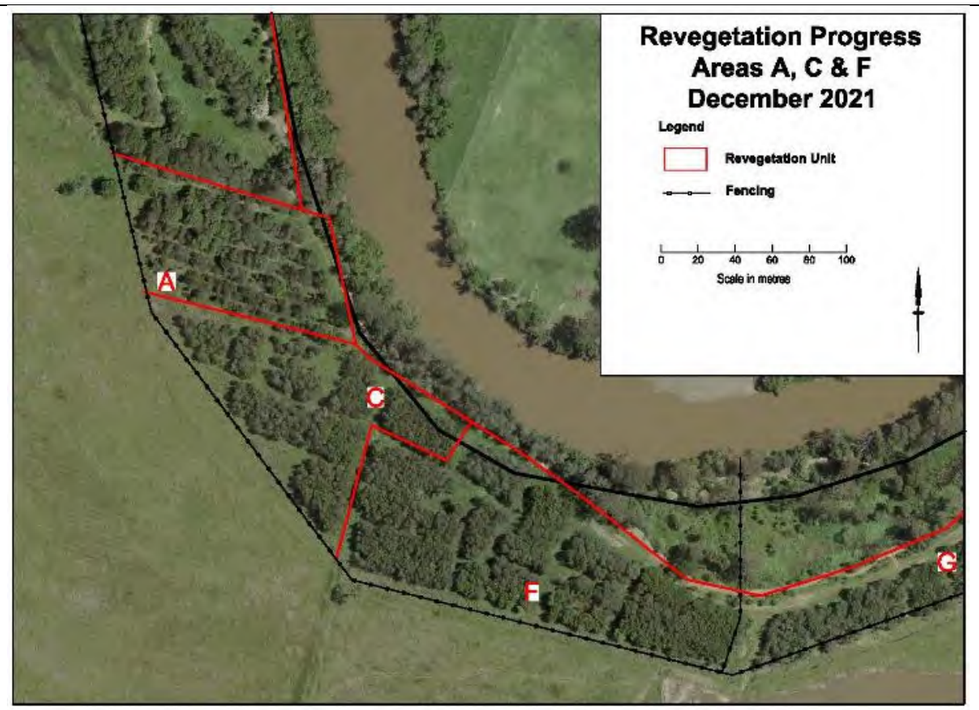

PLATE 6: Aerial of Revegetation progress of Areas A, C and F – December 2021

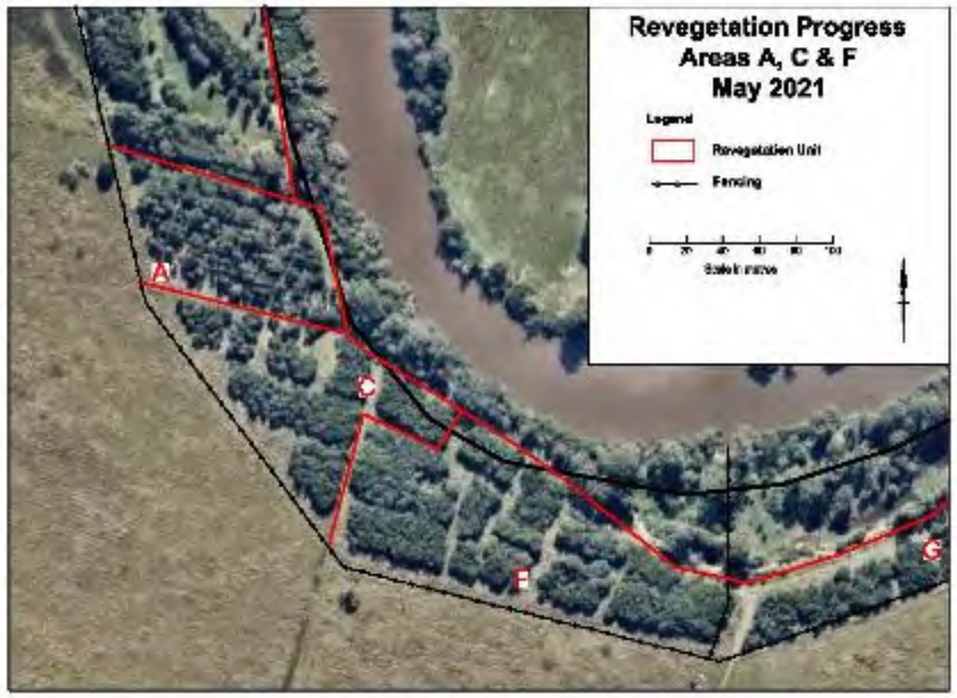

PLATE 7: Aerial of Revegetation progress of Areas A, C and F – May 2021

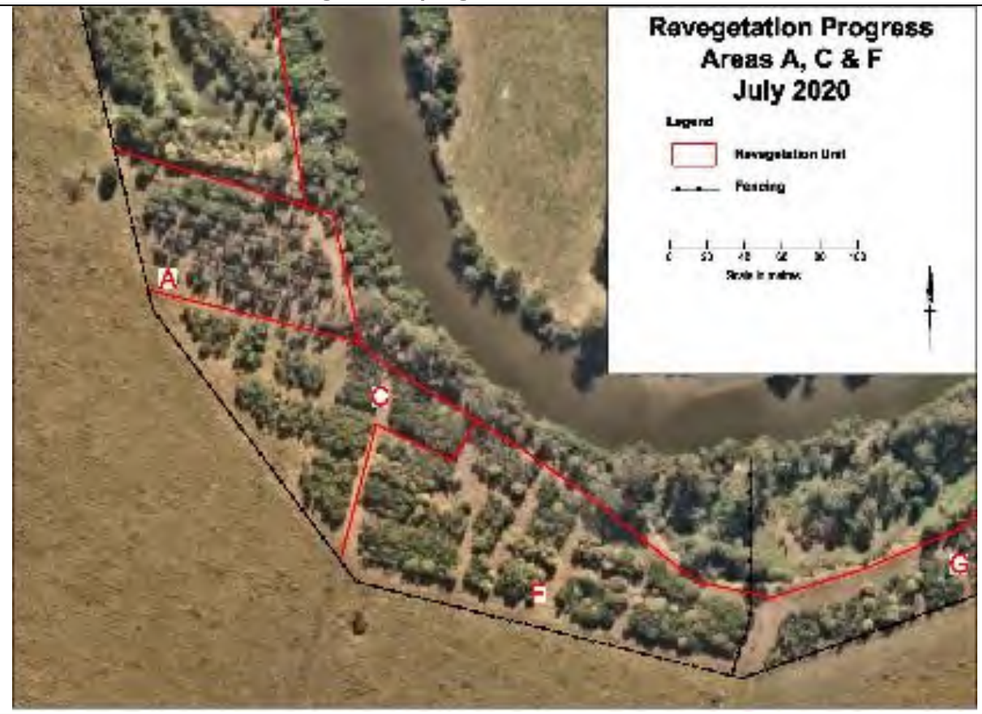

PLATE 8: Aerial of Revegetation progress of Areas A, C and F – July 2020

PLATE 9: Aerial of Revegetation progress of Areas A, C and F – July 2018

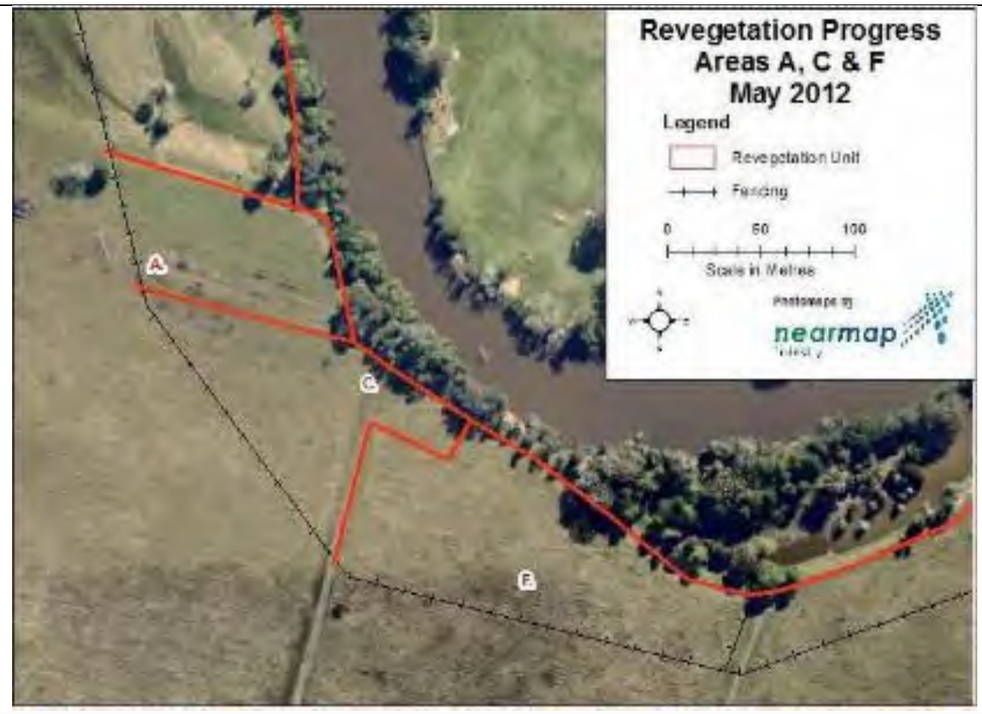

PLATE 10: Aerial of Revegetation progress of Areas A, C and F – May 2012

PLATE 11: Revegetation Area A August 2026

PLATE 12: Revegetation Area A August 2026

PLATE 13: Revegetation Area A July 2025

PLATE 14: Revegetation Area A July 2025

PLATE 15: Revegetation Area A July 2024

PLATE 16: Revegetation Area A July 2024

PLATE 17: Revegetation Area A June 2023

PLATE 18: Revegetation Area A June 2023

PLATE 19: Revegetation Area A June 2022

PLATE 20: Revegetation Area A June 2022

PLATE 21: Revegetation Area A June 2021

PLATE 22: Revegetation Area A June 2021

PLATE 23: Revegetation Area A July 2020

PLATE 24: Revegetation Area A July 2020

PLATE 25: Revegetation Area A July 2018

PLATE 26: Revegetation Area A July 2018

5 Revegetation Area C

Revegetation Area C was planted in March – May 2014. Vegetation in area C has again grown significantly in size as demonstrated by the photos below. Vegetation is now well established and expected to return to remnant status with limited additional intervention. Weed diversity and density throughout Area C was found to have increased since the previous monitoring visit. Follow-up weed maintenance is required in some parts of Area C. **PLATES 1 - 10** show aerial photos of the revegetation progress of Areas A, C and F in June 2026 compared to previous years (May 2012 to November 2024). The progress of Revegetation Area C in June 2025 is shown in **PLATE 27** compared to previous years (June 2017 to July 2026) shown in **PLATES 28**-**35**.

PLATE 27: Revegetation Area C August 2026

PLATE 28: Revegetation Area C July 2025

PLATE 29: Revegetation Area C July 2024

PLATE 30: Revegetation Area C June 2023

PLATE 31: Revegetation Area C June 2022

PLATE 32: Revegetation Area C June 2021

PLATE 33: Revegetation Area C July 2020

PLATE 34: Revegetation Area C July 2018

PLATE 35: Revegetation Area C June 2017

6 Revegetation Area F

Seedlings were planted progressively in area F from late 2015 to May 2016. Seedlings have established well and have significantly increased in size in this reporting period. Weed diversity and density throughout Area F was found to have increased since the previous monitoring visit. Recent monitoring has identified ongoing weed maintenance is required. **PLATES 1 - 10** show aerial photos of the revegetation progress of Areas A, C and F in June 2026 compared to previous years (May 2012 to November 2024). The progress of Revegetation Area F in August 2026 is shown in **PLATE 36** compared to previous years (June 2017 to July 2025) shown in **PLATES 37**–**44**.

PLATE 36: Revegetation Area F July 2026

PLATE 37: Revegetation Area F June 2025

PLATE 38: Revegetation Area F July 2024

PLATE 39: Revegetation Area F June 2023

PLATE 40: Revegetation Area F June 2022

PLATE 41: Revegetation Area F June 2021

PLATE 42: Revegetation Area F July 2020

PLATE 43: Revegetation Area F July 2018

PLATE 44: Revegetation Area F June 2017

7 Revegetation Area B

Revegetation area B was planted over a 10-month period from February to November 2013. Much of area B has established well and the canopy height is now around 50% of the expected mature height. However, the wetter areas which did not establish well following prolonged inundation shortly after planting are not at the same stage of regeneration. More in-depth monitoring will be undertaken in future to determine if additional action is required to assist regeneration in these wetter areas. Weed diversity and density throughout Area B was found to have increased since the previous monitoring visit. Recent monitoring has identified ongoing weed maintenance is required. **PLATES 45-54** show aerial photos of the revegetation progress of Area B in June 2026 compared to previous years (May 2012 to November 2024). The progress of Revegetation Area B in August 2026 is shown in **PLATES 55 & 56** compared to previous years (July 2018 to July 2025) shown in **PLATES 57-70**.

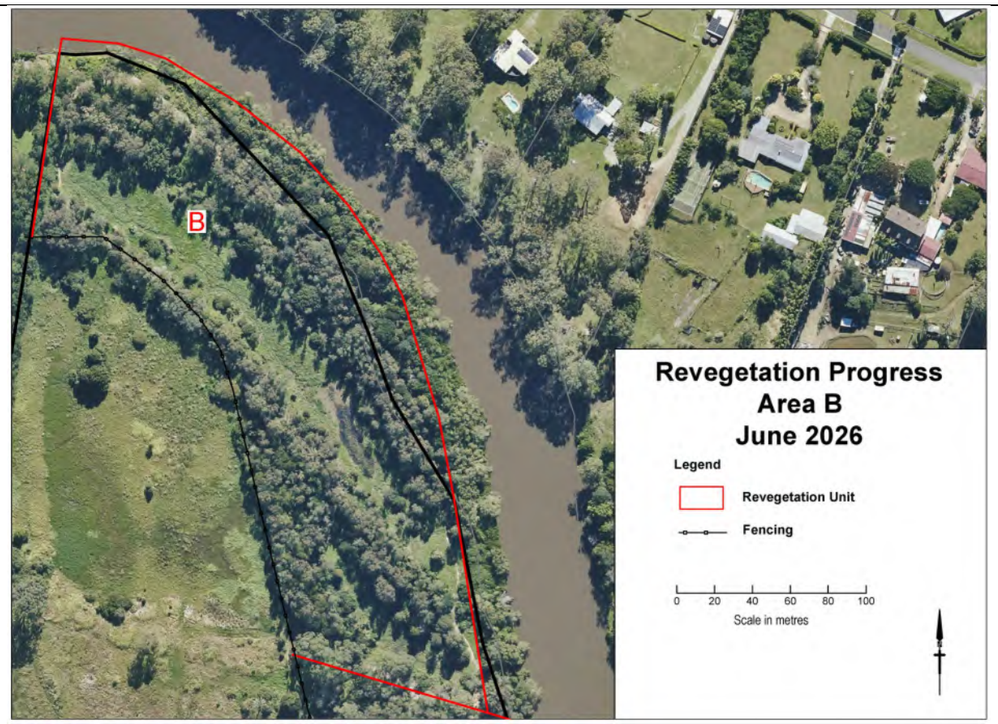

PLATE 45: Aerial of Revegetation progress of Area B – June 2026

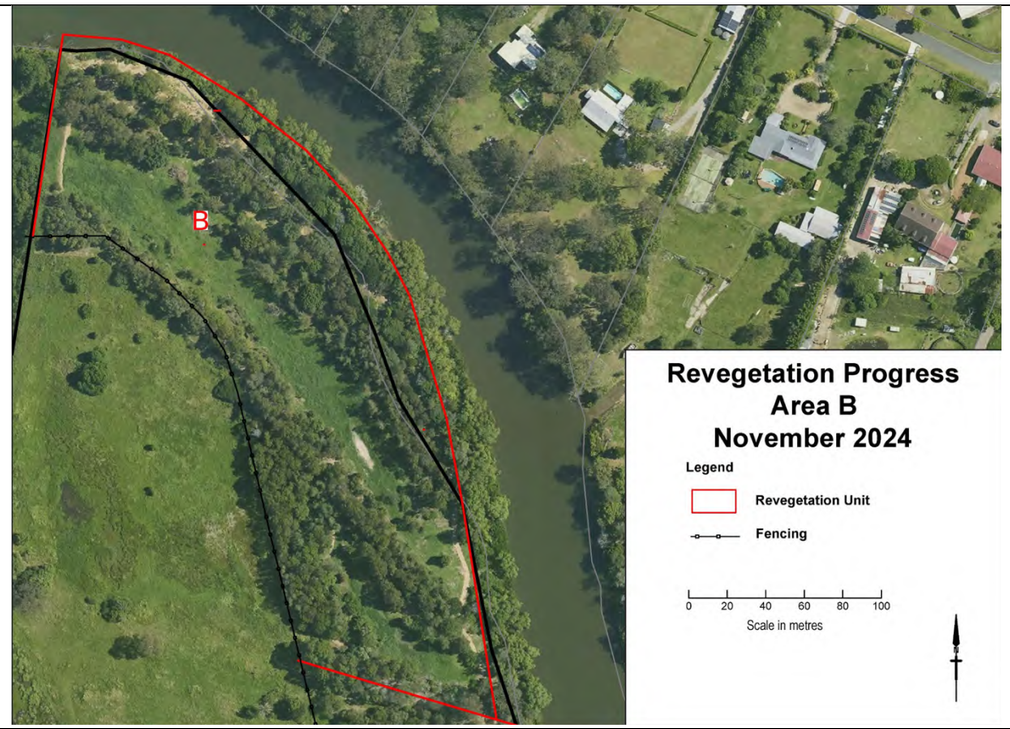

PLATE 46: Aerial of Revegetation progress of Area B – November 2024

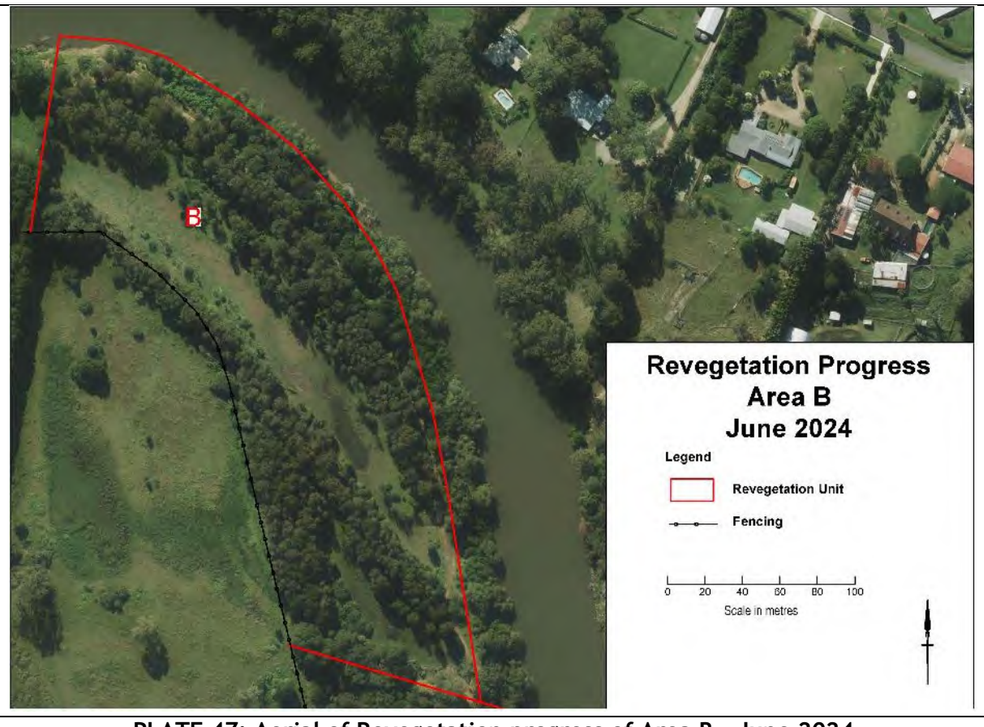

PLATE 47: Aerial of Revegetation progress of Area B – June 2024

PLATE 48: Aerial of Revegetation progress of Area B – April 2023

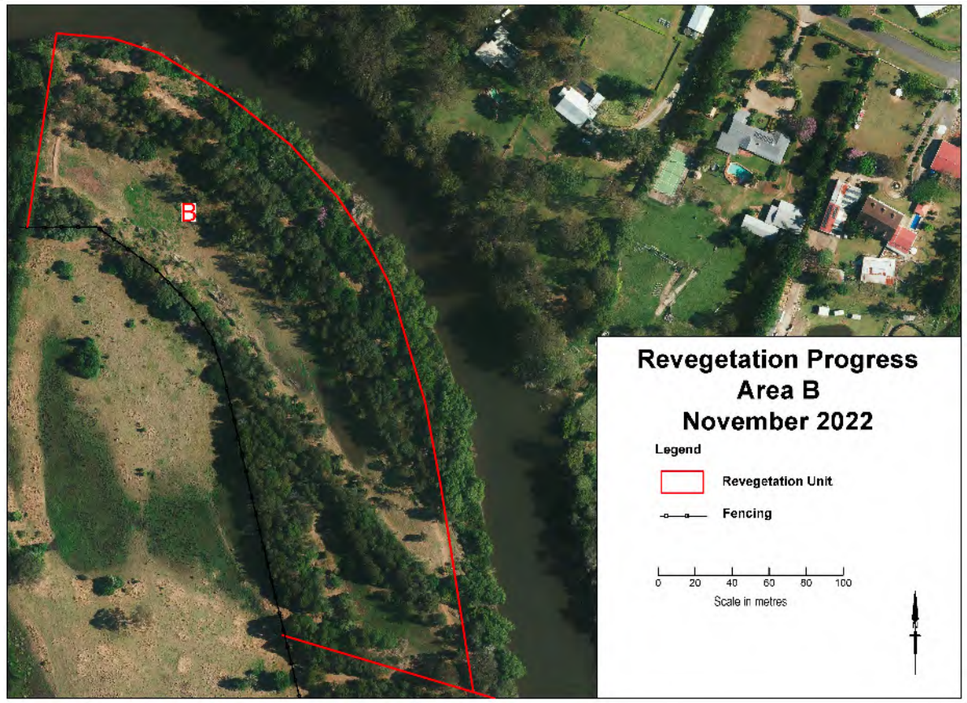

PLATE 49: Aerial of Revegetation progress of Area B – November 2022

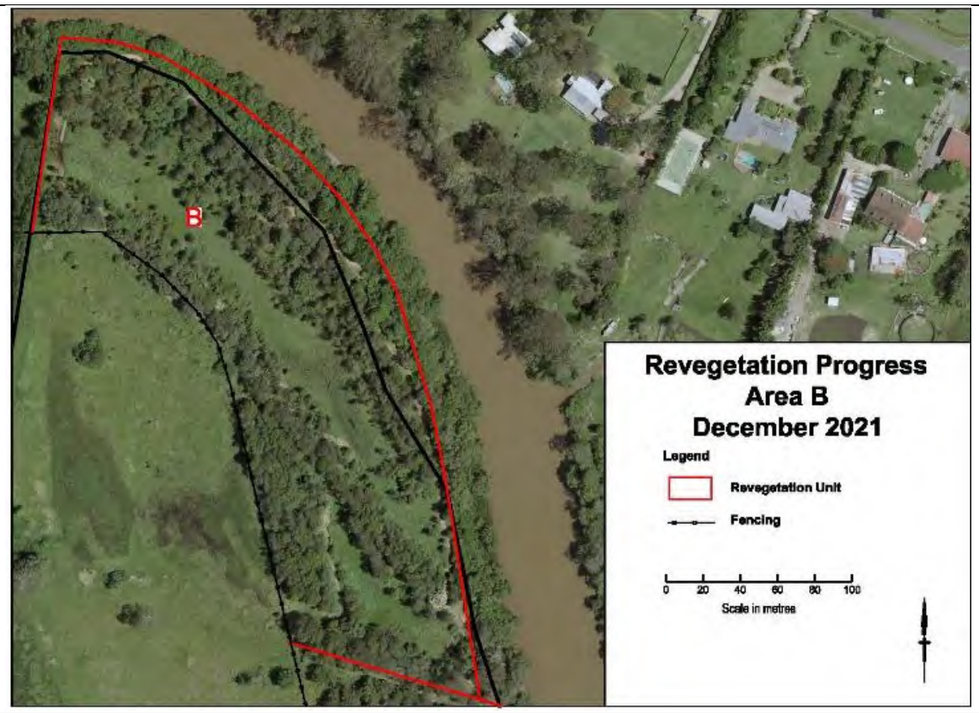

PLATE 50: Aerial of Revegetation progress of Area B – December 2021

PLATE 51: Aerial of Revegetation progress of Area B – May 2021

PLATE 52: Aerial of Revegetation progress of Area B – July 2020

PLATE 53: Aerial of Revegetation progress of Area B – July 2018

PLATE 54: Aerial of Revegetation progress of Area B – May 2012

PLATE 55: Revegetation Area B August 2026

PLATE 56: Revegetation Area B August 2026

PLATE 57: Revegetation Area B June 2025

PLATE 58: Revegetation Area B June 2025

PLATE 59: Revegetation Area B July 2024

PLATE 60: Revegetation Area B July 2024

PLATE 61: Revegetation Area B June 2023

PLATE 62: Revegetation Area B June 2023

PLATE 63: Revegetation Area B June 2022

PLATE 64: Revegetation Area B June 2022

PLATE 65: Revegetation Area B June 2021

PLATE 66: Revegetation Area B June 2021

PLATE 67: Revegetation Area B July 2020

PLATE 68: Revegetation Area B July 2020

PLATE 69: Revegetation Area B July 2018

PLATE 70: Revegetation Area B July 2018

8 Revegetation Area G

Area G was fenced in June 2015. Seedlings have been progressively planted in this large area since June 2015. The last planting in area G was completed by the end of 2018. Seedlings planted in the earlier stages of this area have now established well as shown in the photos below. **PLATES 71-80** show aerial photos of the revegetation progress of Area G in June 2026 compared to previous years (May 2012 to November 2024). The progress of Revegetation Area C in August 2026 is shown in **PLATE 81** compared to previous years (June 2017 to July 2025) shown in **PLATES 82-89**.

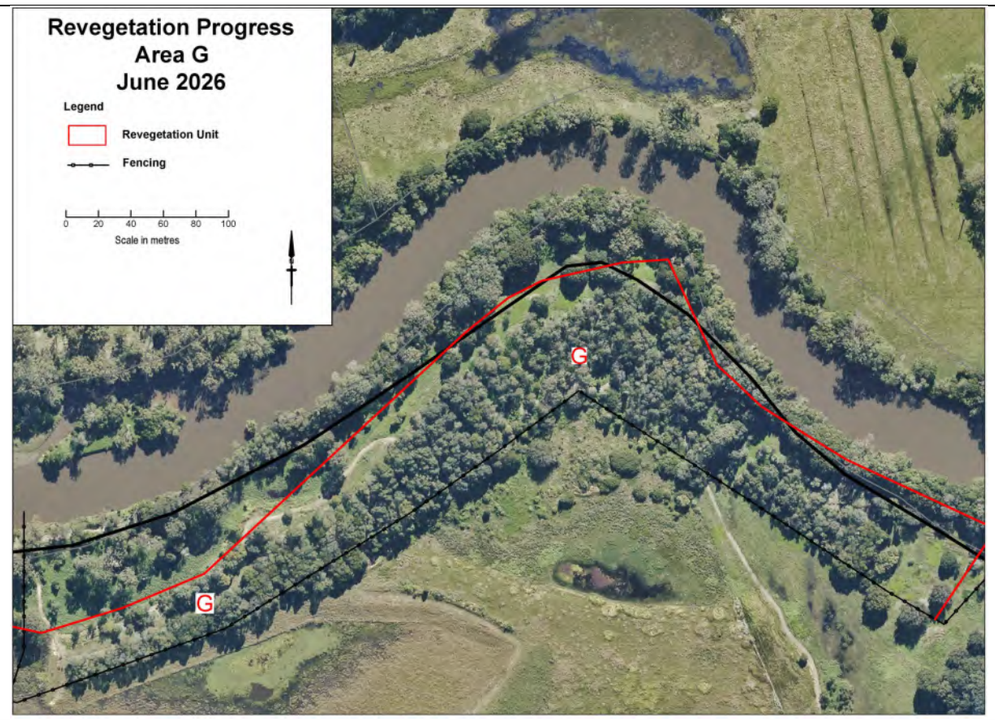

PLATE 71: Aerial of Revegetation progress of Area G – June 2026

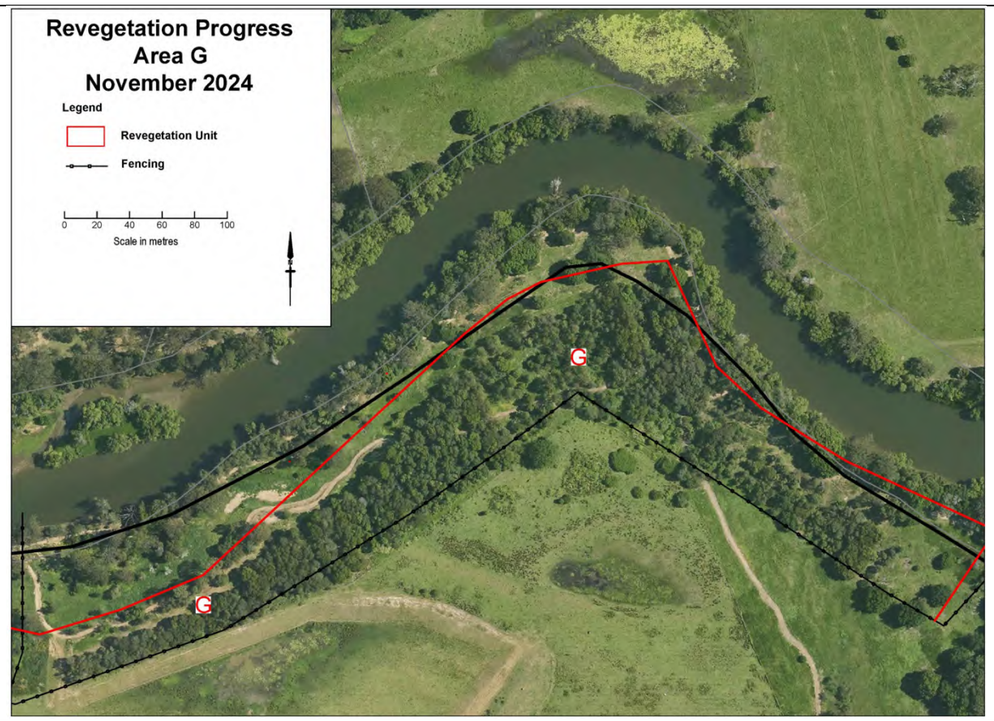

PLATE 72: Aerial of Revegetation progress of Area G – November 2024

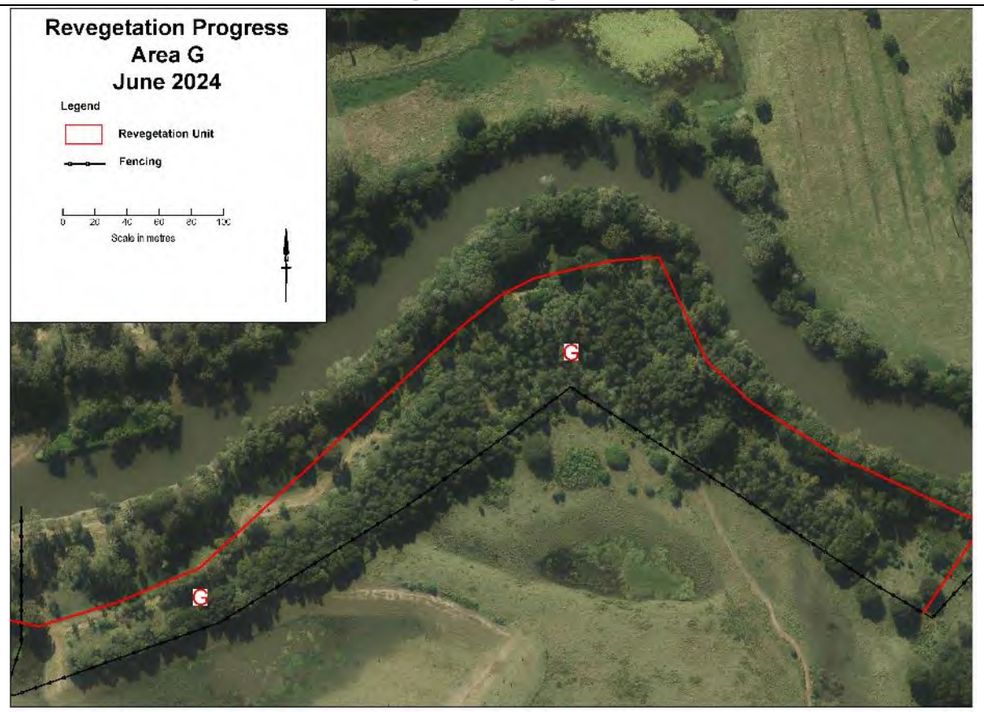

PLATE 73: Aerial of Revegetation progress of Area G – June 2024

PLATE 74: Aerial of Revegetation progress of Area G – April 2023

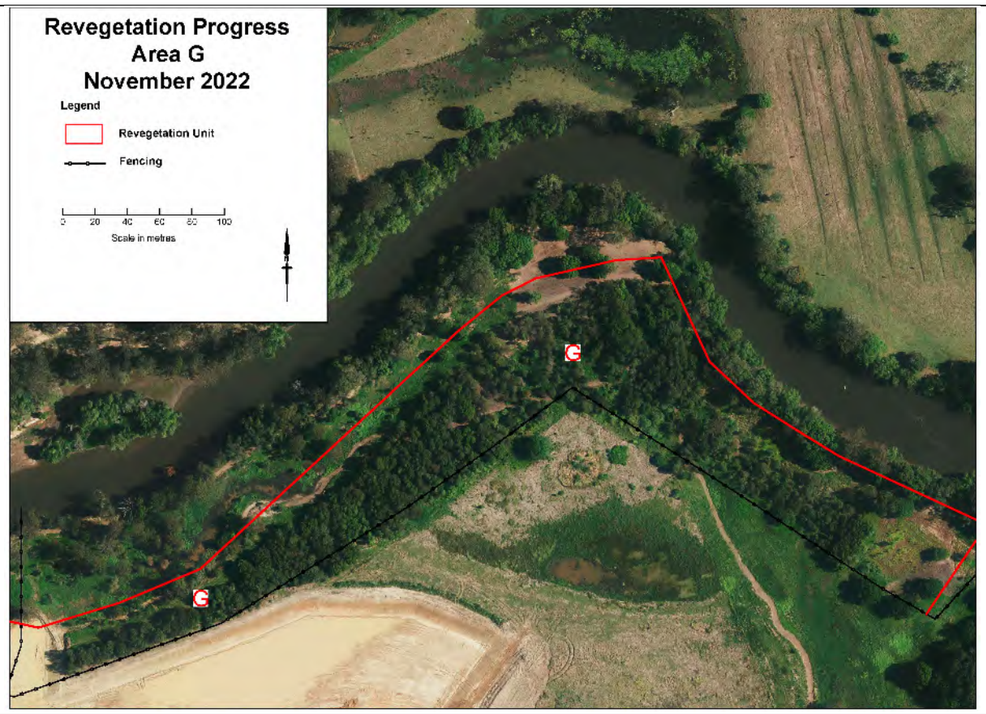

PLATE 75: Aerial of Revegetation progress of Area G – November 2022

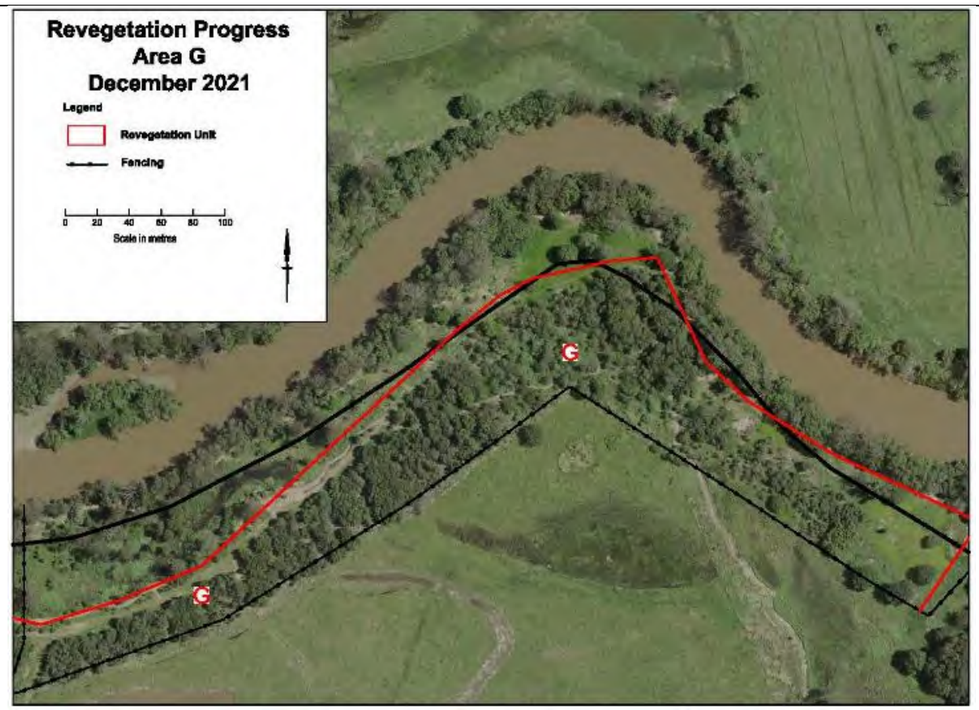

PLATE 76: Aerial of Revegetation progress of Area G – December 2021

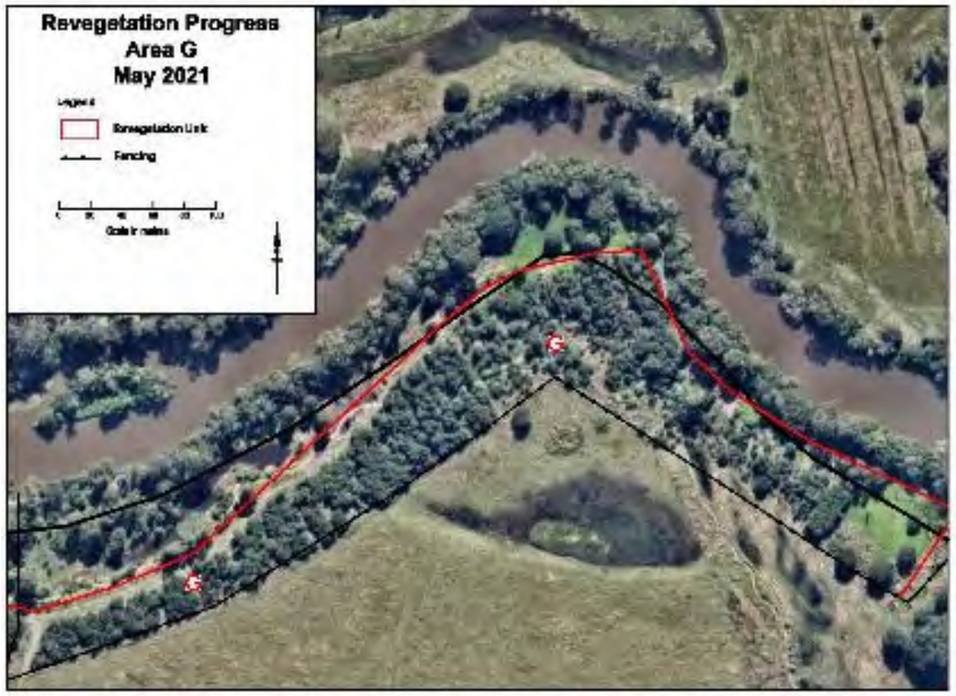

PLATE 77: Aerial of Revegetation progress of Area G – May 2021

PLATE 78: Aerial of Revegetation progress of Area G – July 2020

PLATE 79: Aerial of Revegetation progress of Area G – July 2018

PLATE 80: Aerial of Revegetation progress of Area G – May 2012

PLATE 81: Revegetation Area G August 2026

PLATE 82: Revegetation Area G June 2025

PLATE 83: Revegetation Area G July 2024

PLATE 84: Revegetation Area G June 2023

PLATE 85: Revegetation Area G June 2022

PLATE 86: Revegetation Area G June 2021

PLATE 87: Revegetation Area G July 2020

PLATE 88: Revegetation Area G July 2018

PLATE 89: Revegetation Area G June 2017

9 Trials Involving Site Management Actions (Without Active Tree Planting)

In addition to the assisted regeneration involving active planting of seedlings, natural regeneration of area H has continued in the last 12 months. Initially, 5 areas were established to gauge the opportunity for natural regeneration through largely passive approaches whereby changes to management of the onsite farming operation may allow regeneration to occur without significant active planting and maintenance. These trials are summarised below:

- Area D was partly fenced to exclude stock in some sections of the trial. There has been some isolated natural recruitment of seedlings within the fenced area of the trial, however this has not been sufficiently successful to continuation of the trial. Area D will be included in the active revegetation planting activities in future (to be undertaken in future).
- Area F was fenced to exclude stock from the trial area. There has been some isolated natural recruitment of seedlings within the fenced area of the trial, however this was not sufficiently successful to warrant continuation of the trial. Area F has now been actively replanted with seedlings as part of the 2015 – 2016 revegetation works.
- Area G, which is alongside Area F was left unfenced as a trial for natural recruitment within an area in which stock were allowed continued access. No natural seedling recruitment was observed in this area. It has been fenced as part of the 2015 – 2016 revegetation works and continued active replanting with seedlings is ongoing.
- Area E, which is in close proximity to Area D, was left unfenced as a trial for natural recruitment within an area in which stock were allowed continued access. No natural seedling recruitment was observed in this area. The trial has been abandoned and this area will be fenced and actively replanted as part of future revegetation works.
- Area H is a different vegetation type to the other trials, composed of marine plants being mangrove and salt-water couch species. This trial area was partly fenced to observe the difference in seedling recruitment between areas grazed by stock and areas where stock was excluded. Following the success of this trial, additional fencing was erected in 2016. Since then, natural regeneration of casuarina on the land above highest astronomical tide has also been observed along with additional recruitment of mangrove species fringing the river and improvement in the health of salt couch in the occasionally inundated areas.

10 Revegetation Area H

This area is a trial establishing the natural regeneration capacity of marine plant vegetation units on the property. Commenced in February 2014, following success in the fenced trial area additional fencing was erected in 2016 to exclude stock from all parts of area H. In the latest July 2024, July 2025 and August 2026 monitoring, the gates to Revegetation Area H were open and cattle were present. Pasture grass was encroaching on areas of saltmarsh. Damage from cattle was evident in the saltmarsh areas in July 2025 and August 2026 monitoring. **PLATES 90 - 99** show aerial photos of the revegetation progress of Area H in June 2026 compared to previous years (May 2012 to November 2024). The progress of Revegetation Area H in August 2026 is shown in **PLATES 100 & 101** and compared to previous years (July 2018 to July 2025) in (**PLATES 102-115**).

PLATE 90: Aerial of Revegetation progress of Area H – June 2026

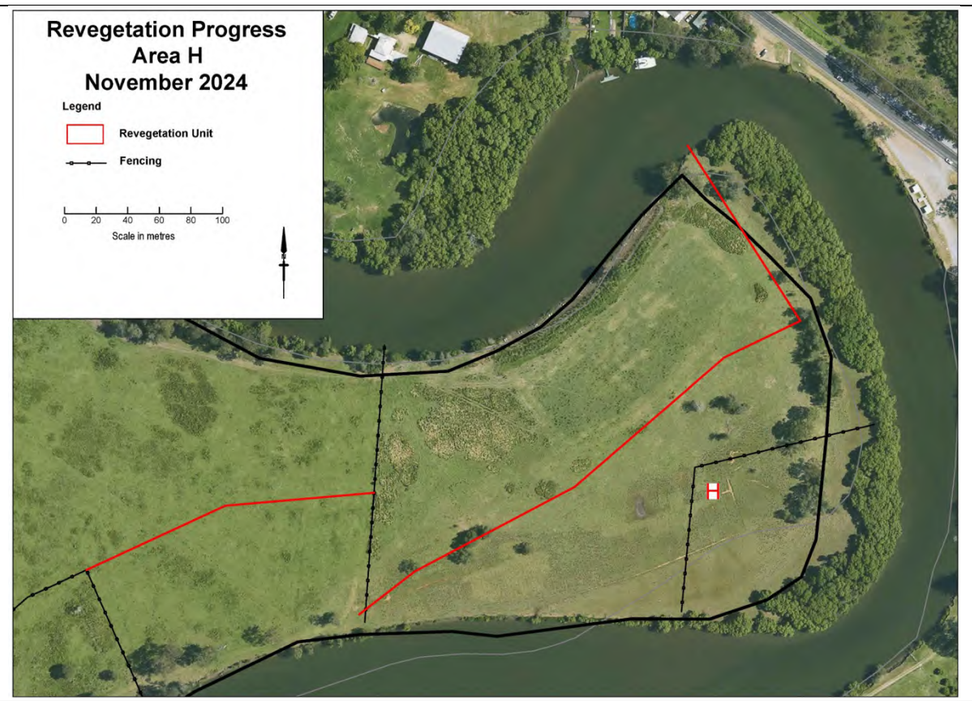

PLATE 91: Aerial of Revegetation progress of Area H – November 2024

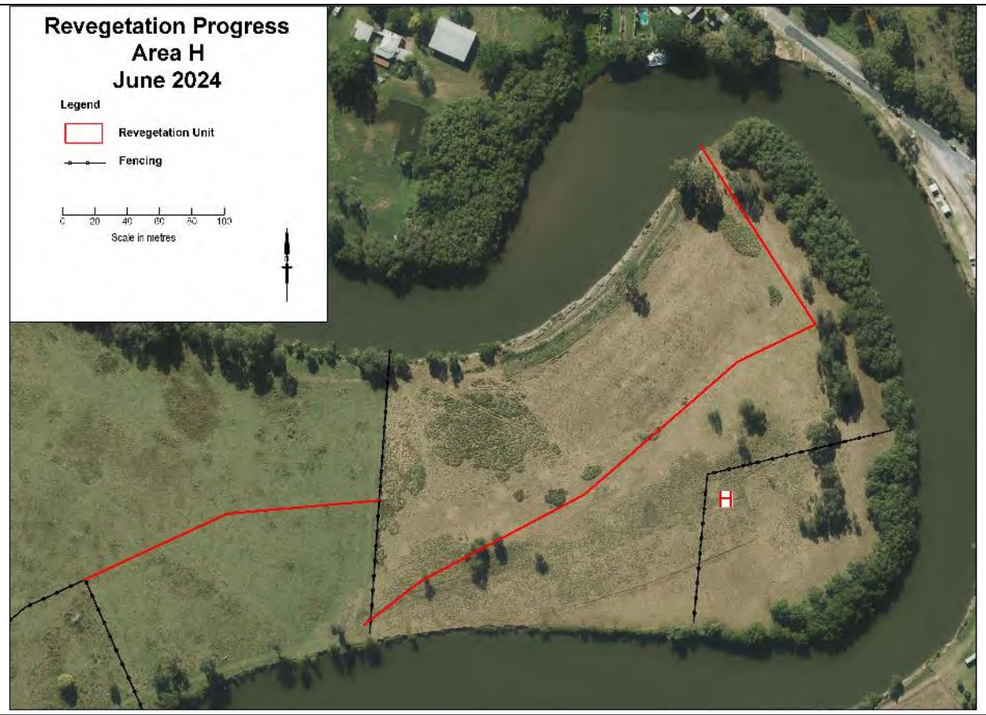

PLATE 92: Aerial of Revegetation progress of Area H – April 2024

PLATE 93: Aerial of Revegetation progress of Area H – April 2023

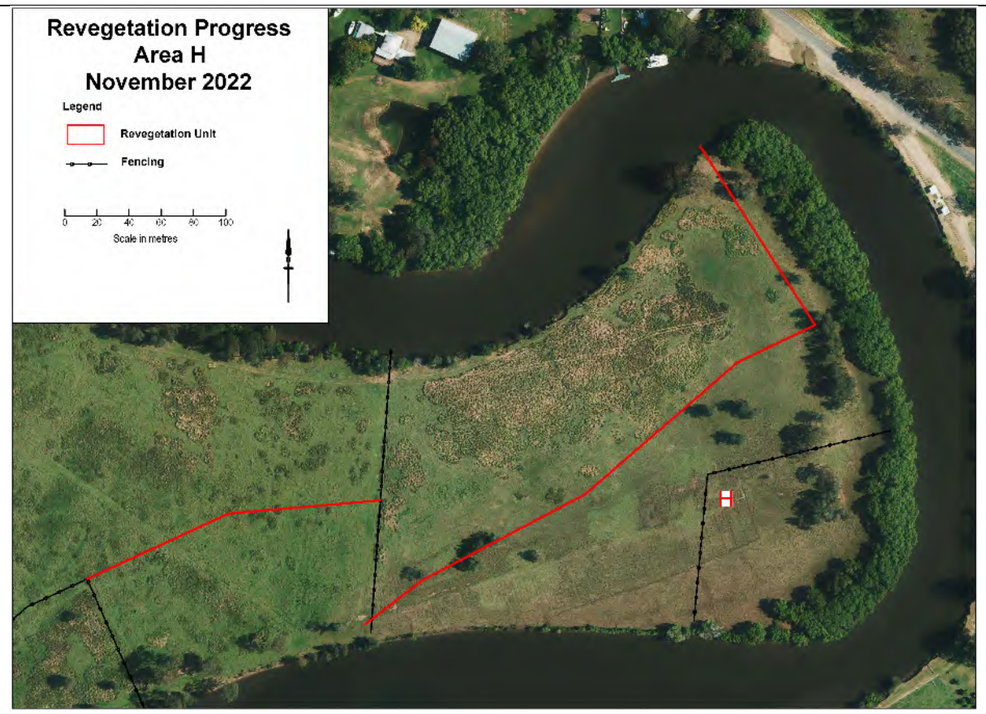

PLATE 94: Aerial of Revegetation progress of Area H – November 2022

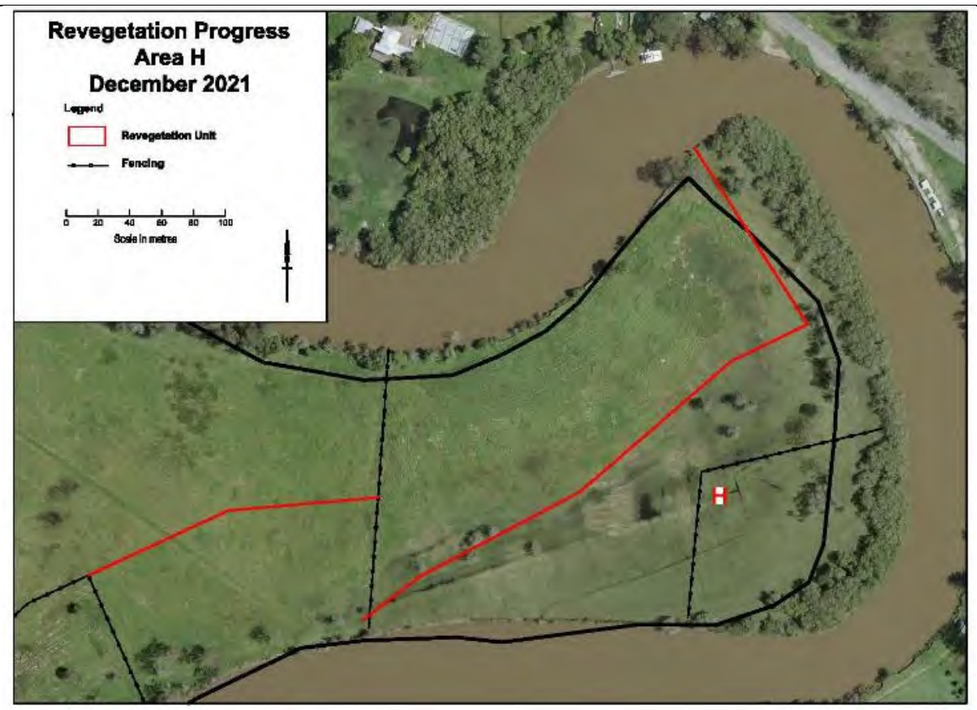

PLATE 95: Aerial of Revegetation progress of Area H – December 2021

PLATE 96: Aerial of Revegetation progress of Area H – May 2021

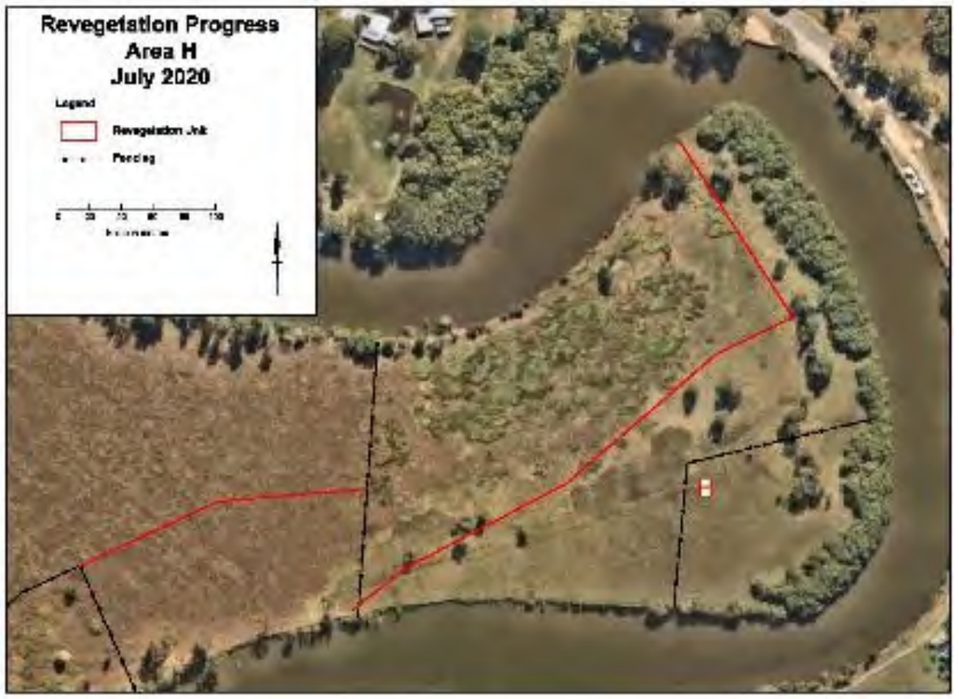

PLATE 97: Aerial of Revegetation progress of Area H – July 2020

PLATE 98: Aerial of Revegetation progress of Area H – July 2018

PLATE 99: Aerial of Revegetation progress of Area H – May 2012

PLATE 100: Revegetation Area H August 2026

PLATE 101: Revegetation Area H August 2026

PLATE 102: Revegetation Area H June 2025

PLATE 103: Revegetation Area H June 2025

PLATE 104: Revegetation Area H July 2024

PLATE 105: Revegetation Area H July 2024

PLATE 106: Revegetation Area H June 2023

PLATE 107: Revegetation Area H June 2023

PLATE 108: Revegetation Area H June 2022

PLATE 109: Revegetation Area H June 2022

PLATE 110: Revegetation Area H June 2021

PLATE 111: Revegetation Area H June 2021

PLATE 112: Revegetation Area H July 2020

PLATE 113: Revegetation Area H July 2020

PLATE 114: Revegetation Area H July 2018

PLATE 115: Revegetation Area H July 2018

11 Revegetation Area I

This area was planted with the community on the 26th July 2026. **PLATE 99** shows an aerial photo of Area I in June 2026. Baseline progress of Revegetation Area I in August 2026 is shown in **PLATE 117**.

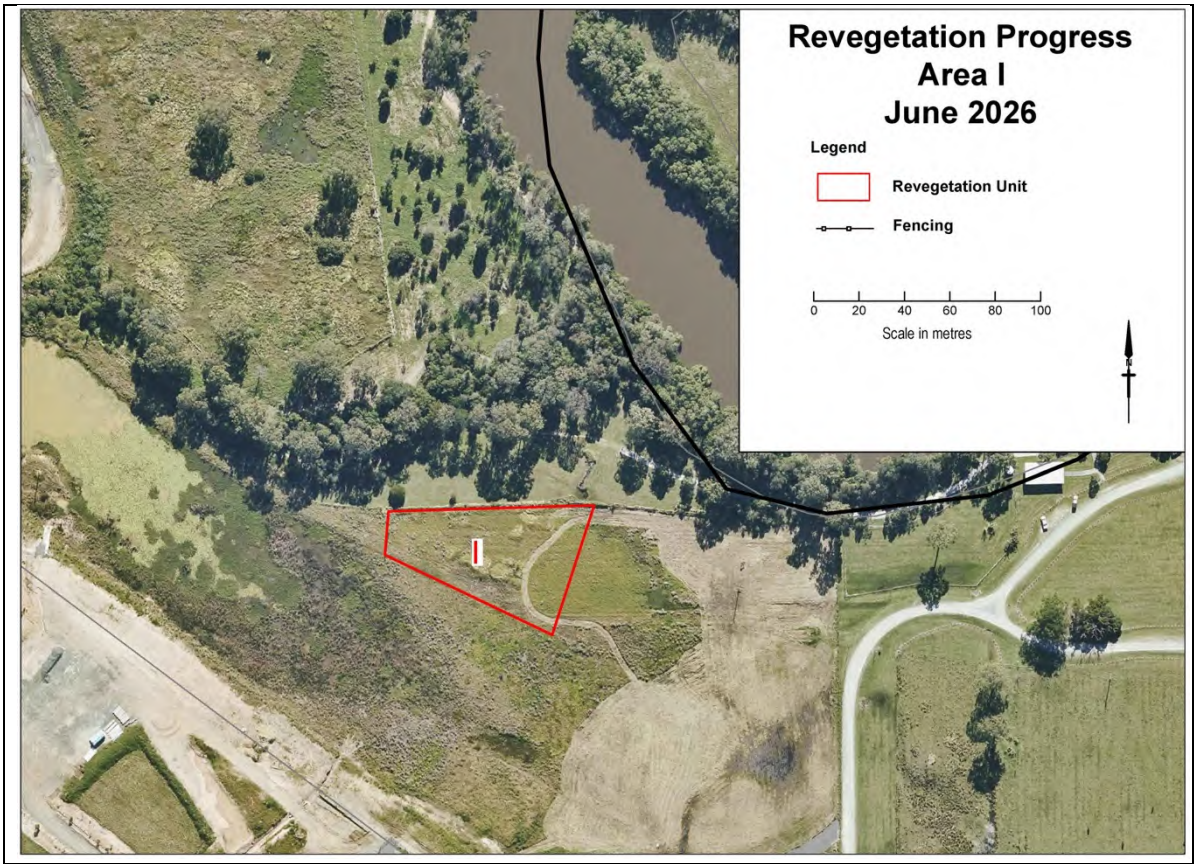

PLATE 116: Aerial of Revegetation progress of Area I – June 2026

PLATE 117: Revegetation Area I August 2026

12 Photo Point Monitoring

Photo Point Monitoring has continued annually between 2017-2026. To limit the size of this summary report, only 1 photo from each monitoring point has been included in this section of the report. Should you require further photos or other information, please contact North Harbour Pty Ltd. **PLATE 118** provides a plan showing the location of each original Photo Point. **PLATE 119** provides a recent aerial (June 2026) showing the location of each current Photo Point.

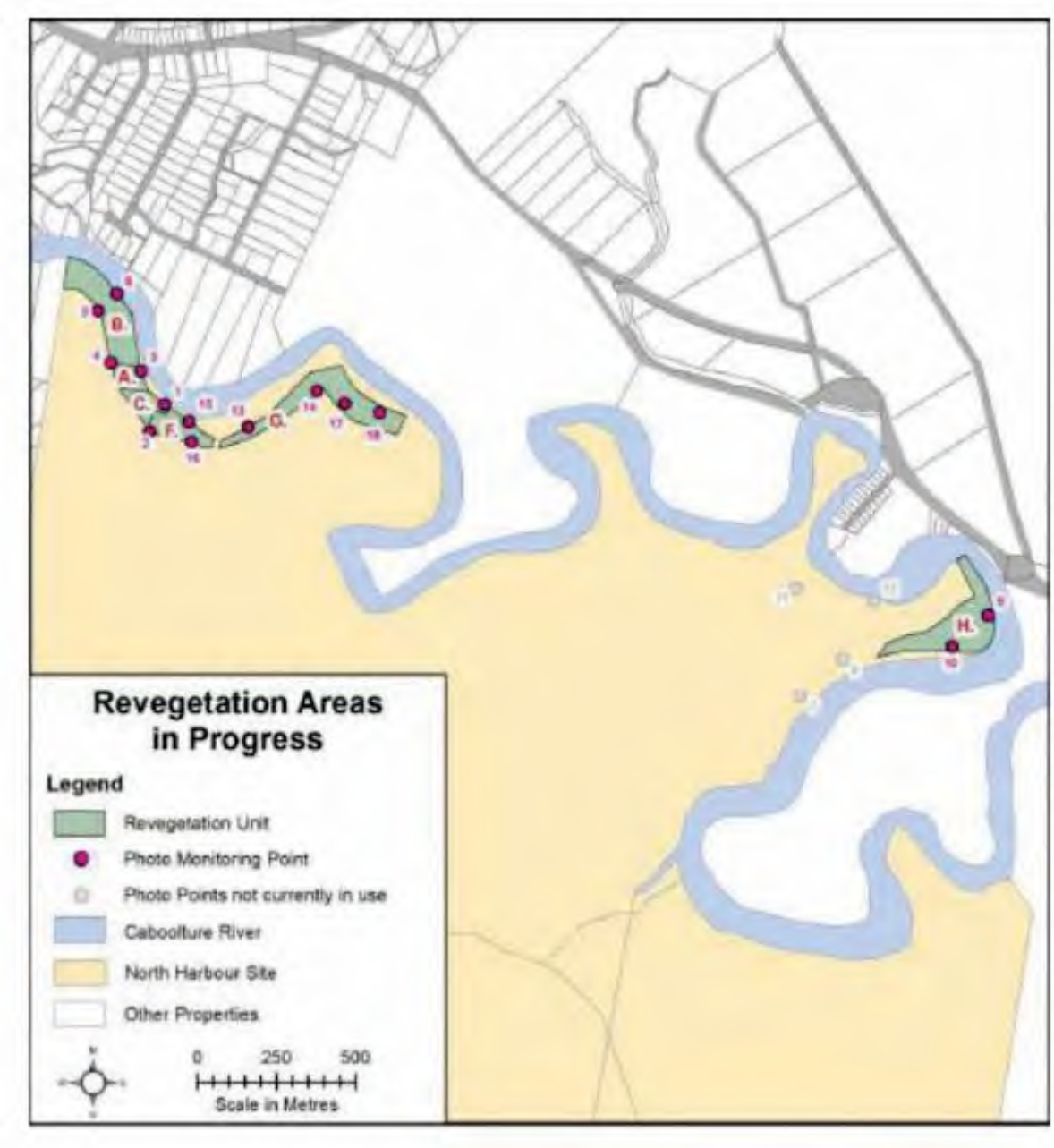

PLATE 118: Revegetation Areas in Progress.

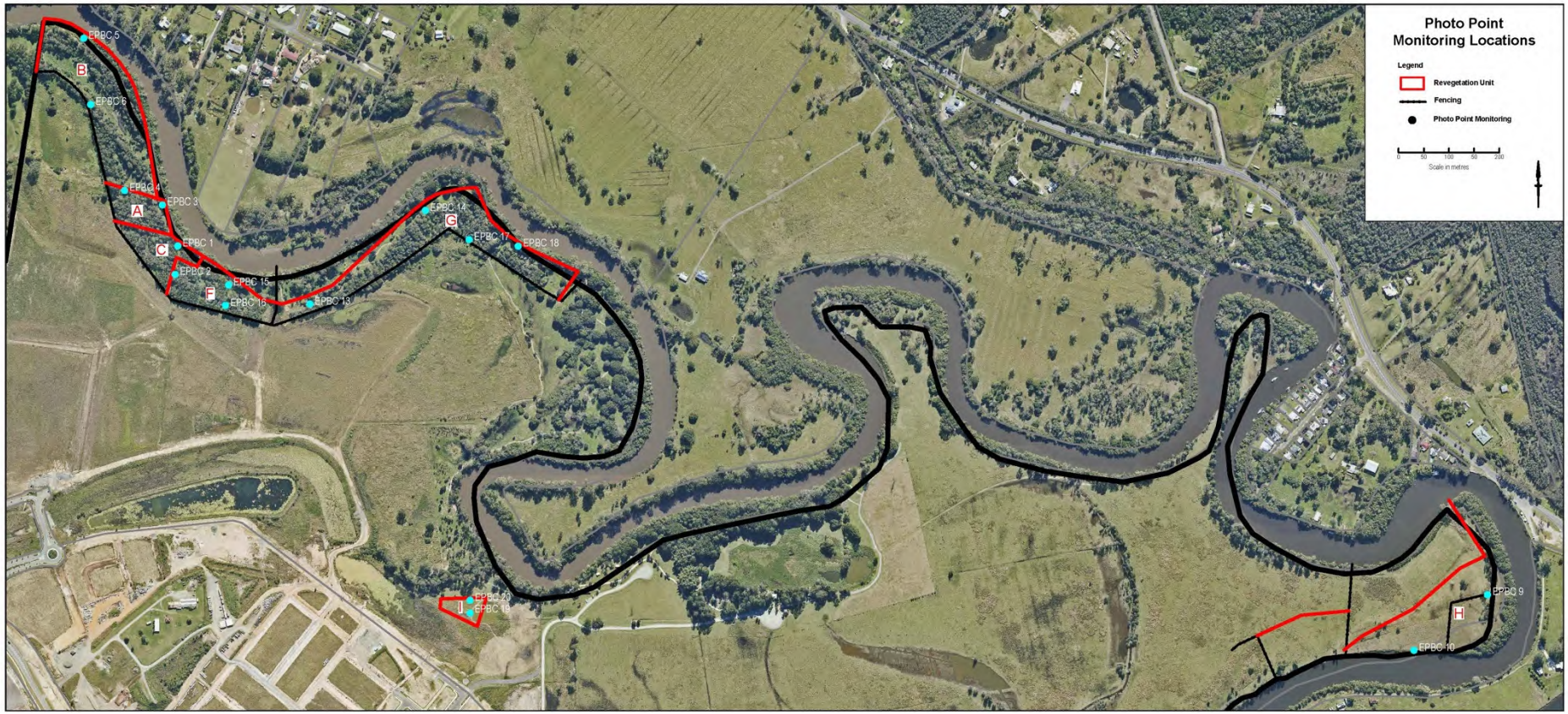

PLATE 119: Recent aerial (June 2026) of Photo Point locations.

PHOTO POINT 1: Revegetation Area C. Blue billygoat weed (*Ageratum houstonianum*), exotic pasture grasses, Wild tobacco (*Solanum mauritianum*), exotic forbs and Brazilian nightshade (*Solanum seaforthianum*) growing within revegetation area - to be controlled by ongoing weed management.

PHOTO POINT 2: Revegetation Area F. Groundcover dominated by exotic grasses and forbs, Giant devil's fig (*Solanum chrysotrichum*), and Blue billygoat weed (*Ageratum houstonianum*), within revegetation area – to be controlled by ongoing weed management.

PHOTO POINT 3: Revegetation Area A. Some exotic grasses, Wild tobacco (*Solanum mauritianum*), Blue billygoat weed (*Ageratum houstonianum*), Lantana (*Lantana camara*), Broad-leaved pepper tree (*Schinus terebinthifolia*) and Easter cassia (*Senna pendula var. glabrata*) growing within revegetation area - to be controlled by ongoing weed management.

PHOTO POINT 4: Revegetation Area A. Primarily Singapore daisy (*Sphagneticola trilobata*), Blue billygoat weed (*Ageratum houstonianum*), exotic pasture grasses, Giant devil's fig (*Solanum chrysotrichum*), Broad-leaved pepper tree (*Schinus terebinthifolia*) - to be controlled by ongoing weed management.

PHOTO POINT 5: Revegetation Area B. Some exotic grasses, Mile-a-minute (*Ipomoea cairica*), Blue billygoat weed (*Ageratum houstonianum*), Broadleaved pepper tree (*Schinus terebinthifolia*), Wild tobacco (*Solanum mauritianum*), Thickhead (*Crassocephalum crepidioides*), Yellow bells (*Tecoma stans*), Camphor laurel (*Cinnamomum camphora*) and Devil's fig (*Solanum chrysotrichum*) growing within revegetation area - to be controlled by ongoing weed management.

PHOTO POINT 6: Revegetation Area B. Mile-a-minute (*Ipomoea cairica*), Blue billygoat weed (*Ageratum houstonianum*), Broadleaved pepper tree (*Schinus terebinthifolia*), Wild tobacco (*Solanum mauritianum*), Snakeweed (*Stachytarpheta cayennensis*), Singapore daisy (*Sphagneticola trilobata*) Noogoora burr (*Xanthium occidentale*) and Giant devil's fig (*Solanum chrysotrichum*) growing within revegetation area - to be controlled by ongoing weed management.

PHOTO POINT 9: Revegetation Area H: Exotic pasture grasses encroaching into saltmarsh areas. Damage from cattle to saltmarsh areas.

PHOTO POINT 10: Revegetation Area H. Exotic pasture grasses encroaching into saltmarsh areas. Damage from cattle to saltmarsh areas.

PHOTO POINT 13: Revegetation Area G. Some pasture grass, Singapore daisy (*Sphagneticola trilobata*), Lantana (*Lantana camara*), Corky passion vine (*Passiflora suberosa*) Brazilian nightshade (*Solanum seaforthianum*) and Wild tobacco (*Solanum mauritianum*) growing within rehab area - to be controlled by ongoing weed management.

PHOTO POINT 14: Revegetation Area G. Some pasture grasses, Singapore daisy (*Sphagneticola trilobata*), Blue billygoat weed (*Ageratum houstonianum*), Giant devil's fig (*Solanum chrysotrichum*), Wild tobacco (*Solanum mauritianum*), Lantana (*Lantana camara*), Broad-leaved pepper tree (*Schinus terebinthifolius*) growing - to be controlled by ongoing weed management.

PHOTO POINT 15: Revegetation Area F. Some pasture grasses, Lantana (*Lantana camara*), Wild tobacco (*Solanum mauritianum*), Blue billy goat weed (*Ageratum houstonianum*), Brazilian nightshade (*Solanum seaforthianum*) and Water primrose (*Ludwigia palustris*) - to be controlled by ongoing weed management.

PHOTO POINT 16: Revegetation Area F. Some pasture grasses, Blue billy goat weed (*Ageratum houstonianum*) and Water primrose (*Ludwigia palustris*) - to be controlled by ongoing weed management.

PHOTO POINT 17: Revegetation Area G. Area predominately comprised of exotic species including, pasture grasses, Giant devil's fig (*Solanum chrysotrichum*), Wild tobacco (*Solanum mauritianum*), Chinese elm (*Celtis sinensis*), Mile-a-minute vine (*Ipomoea cairica*), Broad-leaved pepper tree (*Schinus terebinthifolius*), Urena burr (*Urena lobata*), Blue billy goat weed (*Ageratum houstonianum*) and Lantana (*Lantana camara*) - to be controlled by ongoing weed management.

PHOTO POINT 18: Revegetation Area G. Pasture grasses, Singapore daisy (*Sphagneticola trilobata*), Giant devil's fig (*Solanum chrysotrichum*) Camphor laurel (*Cinnamomum camphora*) and Broad-leaved pepper tree (*Schinus terebinthifolius*) throughout area - to be controlled by ongoing weed management.

PHOTO POINT 19: Revegetation Area I. Recently slashed pasture grasses.

PHOTO POINT 20: Revegetation Area I. Recently slashed pasture grasses.