

ANNUAL ENVIRONMENTAL REPORT



QUARANTINE STATION NORTH HEAD (MP08_0041)

JULY 2018 TO DECEMBER 2019



NOTICE

This report has been prepared on behalf of National Parks and Wildlife Service (NPWS) and Mawland Quarantine Station Pty Ltd (Mawland) by SNC-Lavalin Rail & Transit Pty Ltd (SNC-Lavalin), using its professional judgment and reasonable care. It references information supplied by NPWS and Mawland as co-proponents responsible for the joint management of the Q Station site. This Annual Environmental report has been developed to report on the status of the compliance obligations detailed in the Ministers Conditions of Planning Approval (CoPA) for the site under approval MP08_0041 and subsequent modification (MP08_0041 MOD 3).

It is to be read in the context of the agreement dated 26/10/2021 (the “Agreement”) between SNC-Lavalin and NPWS and Mawland (the “Client”), and the methodology, procedures and techniques used, SNC-Lavalin’s assumptions, and the circumstances and constraints under which its mandate was performed. This document is written solely for the purpose stated in the Agreement and for the sole and exclusive benefit of the Client, whose remedies are limited to those set out in the Agreement. This document is meant to be read as a whole, and sections or parts thereof should thus not be read or relied upon out of context.

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July 2018 to December 2019

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Originator : **Alex Bamford** **Date:** 4/03/2022
Senior Environmental Consultant
BSc (Biological Science), MSc (Environmental Science) (Hons)
alex@bamfordconsultants.net

Checked By : **Cheryl Cahill** **Date:** 4/03/2022
Senior Environmental Consultant
B App Sc (Env Sc), B Bus
Cheryl.Cahill@atkinsglobal.com

Approved By :
*Annual Environment Report Compliance Report Declaration Form
has been completed by Authorised Reporting Officer(s) in Section
6 of this Report.*

Amendment Record

Issue	Description	Distribution	Date
A	Draft Issue	NPWS/ Mawland	08/12/2021
0	Final	Project Stakeholders	15/12/2021
1	Final to DPE	DPE	21/01/2022
2	Final Amended to DPE	DPE	04/03/2022

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1. Introduction

SNC-Lavalin has been engaged by the National Parks and Wildlife Services (NPWS) and Mawland Quarantine Station Pty Ltd (Mawland) to undertake the Annual Environment Report in accordance with Condition of Planning Approval 221 of the Quarantine Station development at North Head.

1.1 Overview of the Site

The Quarantine Station (Q Station) (Figure 1) is located on North Head, Manly, and within the Sydney Harbour National Park, some 10km to the north east of the Sydney CBD. It covers 31 hectares, including 67 heritage buildings. This site has cultural and historical significance as it was in operation as a Quarantine Station from 1828 to 1984. The Q Station is owned by the NSW Department of Planning and Environment (DPE) and managed under the NPWS. DPE is the parent organisation of NPWS and regulates matters relating to heritage, pollution, native vegetation, biodiversity and national parks. Planning approval was granted in 2003 for the 'North Head Quarantine Station Conservation and Adaptive re-use Proposal' with NPWS and Mawland as co-proponents. In 2006 the site was leased to Mawland for the construction and operation of a tourist facility "Q Station", accommodating conferences, weddings, school tours and overnight stays. Mawland is the operator of the facility and runs the day-to-day activities onsite.

1.2 Purpose of the Report

This report has been developed to meet the Ministers Conditions of Planning Approval (CoPA) for the site under approval MP08_0041 and subsequent modification (MP08_0041 MOD 3). The reporting period covered by this report is July 2018 to December 2019. Under the conditions of approval for this project, the site is in Operational mode.

A letter from the Planning Secretary on 8 November 2021 identifies that the annual environmental reports supplied to the Department on 30 April 2021 for the period following the 2018 Audit Report (SNC Lavalin, Rev 2.0 09/11/18) did not satisfy the relevant Approval conditions. Accordingly, the Department issued the co-proponents with a Direction under Condition 225, requiring the co-proponents to resubmit by 21 January 2022 a revised annual environmental report for 1 July 2018 to 31 December 2019 prepared consistent with Conditions 219 and 221 – 225 of the Approval and the *Compliance Reporting Post Approval Requirements* (2020).

As addressed below (Section 1.5), a letter issued by DPE on the 14 January 2022 required additional information to be included within the report to satisfy Condition 224 of the Minister's approval. In addition, the Department requested that the comment period for the report was to be extended for a further four weeks (or as otherwise agreed with the relevant party) due to the original comment period incorporating the two week end of year shutdown period. Following this, a revised report is required to be submitted to the Department by 4 March 2022.

1.3 Summary of Activities Undertaken During the Reporting Period

The following activities occurred on site during July 2018 to December 2019

- Operation of Q Station for conferencing, educational tours and activities (art, lectures and classes), accommodation, food and beverage service, interpretive museum and upgrading of information as appropriate

- P21 – 23 Reconstruction (as approved by NPWS, Heritage Council and modifications to the Ministers Approval)
- P1 – P2 Ensuing (as approved by NPWS, Heritage Council and modifications to the Ministers Approval)

1.4 Key Personnel

The personnel responsible for the environmental management of the Q Station are:

- Max Player, Director of Mawland Quarantine Station Pty Ltd Q Station
- Suzanne Stanton, Director of Mawland Quarantine Station Pty Ltd Q Station
- Jennifer Roberts (January 2018 – May 2019), Environmental Manager, NPWS
- Robyn San (May 2019 – August 2019), Environmental Manager, NPWS
- Jessica Dargan (August – December 2019), Environmental Manager, NPWS

1.5 Consultation

In accordance with Conditions 221, 224-225 of the CoPA, a copy of the draft report was made available to the following stakeholders for their review and comment:

- Quarantine Station Community Consultative Committee (QSCCC)
- Department of Planning and Environment (DPE) (formerly DPIE and formerly DIPNR)
- Heritage NSW acting on behalf of the Heritage Council of NSW (Heritage Council)
- NSW Department of Primary Industries (DPI) (formerly NSW Fisheries)
- Transport for NSW (formerly Waterways Authority)

Stakeholders were provided four weeks to review and comment on the report unless otherwise agreed with the co-proponents (Appendix H). Stakeholders received the report for review and comment on 15 December 2021. Comments were required to be received by 14 January 2022. Comments (Appendix I) were received from:

- Sandy Hoy, QSCCC on 07 January 2022
- Alex McGuirk, DPE on 14 January 2022
- Sarah Conacher, DPI Fisheries, 14 January 2022
- Meredith Morris, TfNSW (Maritime), 14 January 2022

An email on 22 December 2021 from Heritage NSW requested an extension of time for the consultation period. This was granted until 11 February 2022.

As above, following a request from DPE on 14 January 2022, the consultation period for comments was extended. An updated copy of the report was made available on 22 January 2022 (Appendix J) to the following stakeholders for review and comment:

- Metro Local Aboriginal Land Council (Metro LALC)
- NSW Department of Primary Industries (DPI) (formerly NSW Fisheries)
- Heritage NSW acting on behalf of the Heritage Council of NSW (Heritage Council)
- Quarantine Station Community Consultative Committee (QSCCC)
- Transport for NSW (formerly Waterways Authority)

Comments were required to be received by the 16 February 2022. Responses were received from (Appendix K):

- Sarah Conacher, DPI Fisheries on 31 January 2022

- Sandy Hoy, QSCCC on 18 February 2022
- Meredith Morris, TfNSW (Maritime) on 18 January 2022 (requesting no further comment period)

Table 1 below provides a summary of feedback received from stakeholders in relation to activities and responses from the co-proponents to feedback received during the consultation process. It should be noted that feedback received has also been incorporated into this final report, in accordance with requirements in DPE's letter, dated 14 January 2022

Please refer to Appendix H - K for stakeholder consultation records.

This report has been prepared in accordance with the *Compliance Reporting Post Approval Requirements* (DPIE, 2020).

Table 1 Stakeholder Comments

Stakeholder Group	Reference (page number or condition)	Comment	Co-proponent Response Action completed
QSCCC	Table 4, page 16	Queried the inclusion of a complaint in relation to an Open Day notification	This inclusion was made in error in the draft report provided to stakeholders for their review. This item was removed from Table 4 as it was identified that a transgression had not occurred.
	CoA 56-60	Requested the inclusion of the web link to the QSCCC	The relevant link has been added to the report
TfNSW, Property Asset Management	CoA 38	Concerned that works were not undertaken on the wharf during the reporting period despite the requirement for maintenance	An assessment of the wharf undertaken in September 2018 identified that the wharf was structurally sound. Business difficulties and lack of income including during bushfire events resulted in proponent Mawland unable to carry out any more than day to day works. The wharf has not been used since March 2020 due to the cancellation of ferry services under COVID19 lockdown restrictions.
DPI Fisheries	CoA 228	Requested an update on a 2018 Compliance Audit Report which recommended that the mooring exclusion zone at Quarantine Beach be extended.	NPWS are in discussions with RMS regarding the exclusion moorings. Further consultation is required with the relevant State and Commonwealth Authorities

Stakeholder Group	Reference (page number or condition)	Comment	Co-proponent Response Action completed
			regarding the extension of the AOBV area.
	CoA 228	Requested a copy of the EcoDivers 2018 Report	Report provided to DPI Fisheries on 19 January 2021
	CoA 228	Requested a copy of the monitoring data/mapping collected during the 2018 assessment conducted by EcoDivers	Report provided to DPI Fisheries on 19 January 2021.
	CoA 228 and Appendix A – Compliance Table 141 & 184	Queried whether DPI Fisheries had been consulted in relation to piling activities undertaken at the wharf in 2018	<p>Urgent works were required to install pilings as heritage fabric protection measures. Due to time constraints a streamlined consultation process was undertaken to allow the work to proceed.</p> <p>The co-proponents understand that wider consultation would be required for any further works undertaken on or in the vicinity of the wharf.</p>
	Appendix A – Compliance Table 141 & 185	Requests confirmation that seagrass monitoring will be undertaken in 2022.	Proponent Mawland have engaged consultants to undertake seagrass monitoring in 2022.
	Appendix A – Compliance Table 183	Requests an update on the measures implemented to discourage private boat moorings in the Quarantine Bay seagrass site	<p>NPWS in conjunction with RMS and Maritime Police have undertaken public awareness programs to educate the public of the sensitivity of the area.</p> <p>Signage placed on the wharf and shoreline identify the area as critical Little Penguin habitat with restrictions implemented during part of the year.</p> <p>Yellow markers buoys have been placed on the AOBV perimeter to demarcate the exclusion zone to the water users.</p>



2. Previous report actions

The following table (Table 2) details actions raised within the reporting period as a result of the independent audit undertaken for the site in 2018 and the previous operational compliance reports for the site.

Table 2: Previous report actions

Source	Condition of consent number	Action proposed	Proposed completion date	Status	Action completed
SNC Lavalin Atkins (2018) Compliance Audit Report. Quarantine Station, North Head, National Parks and Wildlife Service	90 – 94	<p>Unauthorised Vegetation Clearing. Walking track cleared through bushland between buildings A18 and S1 without approval.</p> <p>Consult with OEH and submit required documentation prior to approval for proposed vegetation removal.</p> <p>Provide refresher training to staff, maintenance and weeding contractor(s) to prevent recurrence.</p>	N/A	Refresher training on vegetation identification and clearing is provided to the Q Station contractor 'Go Gardening' approximately every three months via toolbox talks given by Gavin Opie (Director). This commenced in mid-2018. Identification of the Sunshine Wattle is included within this training.	Completed
SNC Lavalin Atkins (2018) Compliance Audit Report. Quarantine Station, North Head, National Parks and Wildlife Service	90-94	Unauthorised Vegetation Clearing. Native vegetation within the First-Class Precinct was cleared without notifying OEH prior to the clearing work being undertaken. Investigation undertaken and it was ascertained that the work was in	N/A	Refresher training on vegetation identification and clearing is provided to the Q Station contractor 'Go Gardening' approximately every three months via toolbox talks given by Gavin Opie (Director). This commenced in mid-2018. Identification of the Sunshine Wattle is included within this training.	Completed

Source	Condition of consent number	Action proposed	Proposed completion date	Status	Action completed
		the scope of a bushfire hazard reduction.			
		Consult with OEH and submit required documentation prior to approval for proposed vegetation removal.			
		Provide refresher training to staff, maintenance and weeding contractor(s) to prevent recurrence.			
SNC Lavalin Atkins (2018) Compliance Audit Report. Quarantine Station, North Head, National Parks and Wildlife Service	90-94	Clearing of native vegetation to create tracks within the Third-Class Precinct	N/A	New track entrances closed and rehabilitation plan provided to OEH for regeneration of vegetation on the track.	Completed
		Consult with OEH and submit required documentation prior to approval for proposed vegetation removal.		Refresher training on vegetation identification and clearing is provided to the Q Station contractor 'Go Gardening' approximately every three months via toolbox talks given by Gavin Opie (Director). This commenced in mid-2018. Identification of the Sunshine Wattle is included within this training.	
		Provide refresher training to staff, maintenance and weeding contractor(s) to prevent recurrence.			
SNC Lavalin Atkins (2018) Compliance Audit Report. Quarantine Station, North Head, National Parks and Wildlife Service	174 - 175	Unauthorised clearing of the weed, <i>Green Cestrum</i> near Little Penguin Critical Habitat adjacent to the Boilerhouse Restaurant.	N/A	OEH to improve the definition of the Critical Habitat Areas on the ground and in the gazettal notice.	Completed
		Written warning was given by OEH. Advice was also provided by OEH that both weeds and native plants provide essential		Refresher training on vegetation identification and clearing is provided to the Q Station contractor 'Go Gardening' approximately every three months via toolbox talks given by Gavin Opie (Director). This commenced in mid-2018. Identification of the Sunshine Wattle is included within this training.	

Source	Condition of consent number	Action proposed	Proposed completion date	Status	Action completed
		cover and are considered as critical penguin habitat.			
		Consult with OEH and submit required documentation prior to approval for proposed vegetation removal.			
		Provide refresher training to staff, maintenance and weeding contractor(s) to prevent recurrence.			
SNC Lavalin Atkins (2018) Compliance Audit Report. Quarantine Station, North Head, National Parks and Wildlife Service	201	Audio speakers were installed in the outdoor dining area of the Boilerhouse to provide ambient dining music for restaurant diners.	N/A	The Ministers Conditions of Approval were changed in a modification on 25 May 2019 to allow ambient dining music in the outdoor area with seasonal restrictions. Ongoing noise monitoring and enforcement of seasonal restrictions is required.	Completed
		Modification to the Ministers Conditions of Approval sought to allow audio speakers to be installed and utilised.			
SNC Lavalin Atkins (2018) Compliance Audit Report. Quarantine Station, North Head, National Parks and Wildlife Service	35 - 39	New Works including erection of a colourbond fence and shed in Carpark 5 and partial veranda area on P14 – P16 enclosed for a storage area.	N/A	Refresher training was provided by NPWS Environmental Manager and Cherie Pittman on 27 November 2017. This included provision of all appropriate forms to be used in the future. NPWS has been proactive in assisting Q Station to determine the information required to work within the Construction Assessment Procedures (https://www.environment.nsw.gov.au/topics/parks-reserves-and-protected-areas/development-guidelines/construction-assessment-procedures).	Completed
		Work in accordance with the existing OEH/NPWS “Construction Assessment Procedures” prior to, during and at completion of new works on site.			

Source	Condition of consent number	Action proposed	Proposed completion date	Status	Action completed
		Provide refresher training to staff and maintenance contractors as required to prevent recurrence.			
SNC Lavalin Atkins (2018) Compliance Audit Report. Quarantine Station, North Head, National Parks and Wildlife Service	118 – 119 155	<p>Opportunity to increase trips by sustainable forms of transport and reduce car usage.</p> <p>Explore further promotional opportunities of sustainable transport options for visitors to the site. This includes the free shuttle bus and the ferry services from Manly Wharf. Some opportunities may include the website and the provision of traveller information to day visitors and tour groups.</p>	Ongoing	<p>The Eco Hopper Ferry Service operated during this period from Circular Quay to Manly via Luna Park, various Harbour Islands and the Eastern Suburbs. The ferry generally stopped at Q Station 8 times per day. Consumer uptake was slow but consistent. This was not a commuter ferry service.</p> <p>A shuttle bus to Manly operates on visitor request by guests of Q Station but not members of the public.</p> <p>There is a public bus service available that is also used regularly by guests arriving, departing and visiting the local area. Ubers and taxis are also used frequently by guests.</p> <p>No cars are permitted on site except operation cars and site mini buses. Guests are encouraged to walk or ride on the site if possible. Bike racks and hire bikes are available on site. The Q Station website and site signage contains this information.</p>	Completed
SNC Lavalin Atkins (2018) Compliance Audit Report. Quarantine Station, North Head, National Parks and Wildlife Service	203 - 204	<p>Waste Management – Bin placement around the site could be improved so bins are more visually accessible to patrons and they are better informed of recycling options.</p> <p>The placement of bins (and signage) is reviewed and improved as appropriate.</p>	Immediately	New bins and bin housing was improved following the 2018 Audit. The design and placement of bins is regularly reviewed as brush turkeys learn how to access the bins.	Completed
SNC Lavalin Atkins (2018) Compliance	106	Sewage Spillage – notification to authorities and at-risk persons.	Immediately	The incident notification protocol was reviewed in line with the requirements.	Completed

Source	Condition of consent number	Action proposed	Proposed completion date	Status	Action completed
Audit Report. Quarantine Station, North Head, National Parks and Wildlife Service		The incident notification protocol should be regularly reviewed and updated and ensure that it is implemented for incidents that “cause or threaten environmental harm”. In the event of a sewage spill into Sydney Harbour, the EPA, Council and Department of Health should be notified “Immediately and without delay”. Recreational users of the harbour should be notified immediately to ensure their safety and so that evacuation plans can be implemented in the event of an incident.		No sewage spillage events occurred during the reporting period.	
SNC Lavalin Atkins (2018) Compliance Audit Report. Quarantine Station, North Head, National Parks and Wildlife Service	184 - 187	Seagrasses – threat of recreational vessel anchoring from dropping or setting of the anchor. It is recommended that the mooring exclusion zone at Quarantine Beach is extended.	Ongoing	An assessment of Sea Grass in Quarantine Bay in 2018 by Eco Divers found the sea grass cover is highly susceptible to significant damage from the primary threat of unregulated boating activity. Mawland does not support unregulated boating activity and works with NPWS to attempt to curb same. A report prepared by EcoDivers in July 2018 – Report on Sea Grass in Quarantine Bay adjacent to the Quarantine Wharf details the proposed additional piles adjacent to the wharf to accommodate the ferry service for the Invictus Games ferry arrival. The report detailed that there would be no adverse impacts to the sea grass (Appendix E). A Minor Project approval was issued by OEH (NPWS) on 5 October 2018 following a REF Determination	Ongoing

Source	Condition of consent number	Action proposed	Proposed completion date	Status	Action completed
				process under section 151A NPW Act to allow the works to proceed.	
				NPWS conduct regular awareness and educational programs in conjunction with RMS, DPI Fisheries and NSW Marine Police, in an attempt to educate the general public of the potential impacts from vessel anchoring in or near the Little Penguin Critical Habitat Demarcation Area and sea-grass beds. This work is ongoing.	
SNC Lavalin Atkins (2018) Compliance Audit Report. Quarantine Station, North Head, National Parks and Wildlife Service	188 - 190	Pest abatement programs. Ongoing implementation (review and continual improvement) of pest abatement programs to ensure fox and rabbit numbers are within acceptable range.	Ongoing	Ongoing – program on track. Predator and Pest results lie within the acceptable range documented in the Predator and Pest Control Plan 2008. Predator and Pest Control Plan 2008 is under review, to be updated in accordance with management responses outlined in the Regional Pest Management Strategy 2012-2017 (under revision) and Fox TAP (Threat Abatement Plan) Site Plan.	Ongoing
SNC Lavalin Atkins (2018) Compliance Audit Report. Quarantine Station, North Head, National Parks and Wildlife Service	191 - 195	Environmental Management Plan. The EMP consists of a series of documents and procedures. It is recommended these are consolidated to form one consolidated set of environmental operating procedures.	Review proposed for 22/23 FY	Plan update due every 5 years. Last update was put on hold due to submission of modifications to the CoPA.	Ongoing
SNC Lavalin Atkins (2018) Compliance Audit Report. Quarantine Station, North Head, National	228 c)	The adequacy of the integrated monitoring program and EMP. The IMS should be reviewed so that the system is more simplified,	Review proposed for 22/23 FY	Co-proponents to consider options with regard to fulfilling the requirements of this condition. EMP is due for review in the 22/23 Financial Year.	Ongoing

Source	Condition of consent number	Action proposed	Proposed completion date	Status	Action completed
Parks and Wildlife Service		streamlined and focused. The EMP could be consolidated into one central document for simplicity.			
SNC Lavalin Atkins (2018) Compliance Audit Report. Quarantine Station, North Head, National Parks and Wildlife Service	228 f)	The adequacy and functioning of the information management and GIS system. A detailed review is to be undertaken to determine if any refinements or improvements can be made.	Ongoing	Co-proponents to consider options with regard to fulfilling the requirements of this condition.	Ongoing
SNC Lavalin Atkins (2018) Compliance Audit Report. Quarantine Station, North Head, National Parks and Wildlife Service	226 - 233	Environmental Reporting and Audit Timeframes. Delayed commencement of the Environmental Audit. Ensure reporting dates are documented in diaries of key operational staff to ensure adequate time is allocated to prepare and submit key environmental reports and audits.	Ongoing	This document has been prepared in accordance with the direction received from the Planning Secretary. Future dates for preparation of documentation have been noted with the NPWS Environmental Manager and Mawland.	Ongoing
SNC Lavalin Atkins (2018) Compliance Audit Report. Quarantine Station, North Head, National Parks and Wildlife Service	233	Incompletion Status of Conditions. Review conditions where unknown completion has been achieved and close out any residual actions.	Ongoing	Ongoing. This is being undertaken as part of this Annual Report (2018 – 2019) and will continue to be addressed in the preceding years reports where conditions have not been completed.	Ongoing
National Parks and Wildlife Service (2017)	167	NPWS to update bandicoot monitoring methods from foraging	Ongoing	See Appendix B – Long-nosed Bandicoot Monitoring North-Head, Manly. November 2018.	Ongoing

Q Station Annual Environmental Report – July 2018 to December 2019

Source	Condition of consent number	Action proposed	Proposed completion date	Status	Action completed
Q Station Sustainability Report 2015 – 2017.	Schedule 5	activity and use of habitat to cage trapping.			
National Parks and Wildlife Service (2017) Q Station Sustainability Report 2015 – 2017.	189 -190	NPWS to continue to undertake fox control programme in particular to protect the Little Penguin population.	Ongoing	Ongoing Fox TAP management across Quarantine Station. This work is carried out every six weeks or when required.	Completed
National Parks and Wildlife Service (2017) Q Station Sustainability Report 2015 – 2017.	189 - 190	NPWS to continue to monitor and control rabbit populations within QS.	Ongoing	Shooting is undertaken at regular intervals or on a needs basis.	Completed
National Parks and Wildlife Service (2017) Q Station Sustainability Report 2015 – 2017.	16	Improve Sewer infrastructure works and to rectify heritage infrastructure and warning system during rain periods.	N/A	Completed A sewer leak incident occurred on 14 October 2012 at the Q Station entrance. Immediate emergency works were undertaken to rectify the issue. Further works were completed in March 2015 under an Exemption to the Heritage Act (s57(2)).	Completed
National Parks and Wildlife Service (2017) Q Station Sustainability Report 2015 – 2017.	216	Recommence the monitoring of Native Vegetation Health (Sunshine Wattle, Camfield's Stringybark, Fuel loads in bushland)	Ongoing	See Appendix G – Monitoring Report Q Station 2018 – 2019. The environmental indicators section details native vegetation health.	Ongoing
National Parks and Wildlife Service (2017) Q Station Sustainability Report 2015 – 2017.	90	Cultural Landscape interpretation improved by use of sign boarding and tour information.	Ongoing	Ongoing	Ongoing
National Parks and Wildlife Service (2017)	98	Undertake repainting of the inscriptions.	Ongoing	Works have not been completed. The stone mason recommended by the Heritage Council was not	Ongoing

Source	Condition of consent number	Action proposed	Proposed completion date	Status	Action completed
Q Station Sustainability Report 2015 – 2017.				willing to undertake the works and the Heritage Council has not approved the works to be undertaken by the University of Sydney.	
National Parks and Wildlife Service (2017) Q Station Sustainability Report 2015 – 2017.	90 - 92	Recommence the monitoring of Aboriginal Sites in the lease area.	Ongoing	Works will be undertaken in 2021/2022.	Ongoing
National Parks and Wildlife Service (2017) Q Station Sustainability Report 2015 – 2017.	118 138	Mawland to work with Tourism and Transport Forum to introduce a harbour hopper service that will include Q Station.	Immediately	The EcoHopper now stops at Q Station 8x per day in peak season and usage is being monitored. Public take-up is favourable. Constant review of timetables and guest feedback is enabling improvement of this service.	Completed
National Parks and Wildlife Service (2017) Q Station Sustainability Report 2015 – 2017.	59	NPWS to reinstate quarterly QSCCC meetings.	Ongoing	Meetings now run every quarter and information is reported back to NPWS and Mawland. Meeting minutes can be found at: https://www.environment.nsw.gov.au/about-us/who-we-are/advisory-committees/quarantine-station-community-consultative-committee .	Ongoing
National Parks and Wildlife Service (2017) Q Station Sustainability Report 2015 – 2017.	122	Mawland continue marketing and sales into conferencing and functions. Marketing to families for leisure especially for cottage use.	Ongoing	New Director of Sales and Marketing appointed in 2015.	Ongoing
National Parks and Wildlife Service (2017) Q Station Sustainability Report 2015 – 2017.	122	Mawland to increase use of NPWS and ACCOR referrals.	Ongoing	Ongoing since 2016. Mawland work with ACCOR to receive references for potential conferences and functions which Q Station can bid for (along with other ACCOR properties). Q Station is listed in all ACCOR compendiums and is marketed by ACCOR Head office as a conference venue.	Ongoing

Source	Condition of consent number	Action proposed	Proposed completion date	Status	Action completed
National Parks and Wildlife Service (2017) Q Station Sustainability Report 2015 – 2017.	122	Mawland to provide new improved products and process increased in accordance with market and customer reaction.	Ongoing	Added value in response to customer feedback. Monitoring customer feedback is ongoing.	Ongoing
National Parks and Wildlife Service (2017) Q Station Sustainability Report 2015 – 2017.	N/A	Move to “Slow Food” cuts and preparation methods from local suppliers.	Ongoing	Constant review of food prices and offering by chef.	Ongoing
National Parks and Wildlife Service (2017) Q Station Sustainability Report 2015 – 2017.	118	Mawland to aim at reducing delegate transport cost on site.	Ongoing	Ongoing. Delegates are encouraged to walk the site between conferencing venues rather than call the buses for short distances. Take-up depends on the individual delegates and timetables.	Ongoing
National Parks and Wildlife Service (2017) Q Station Sustainability Report 2015 – 2017.	22	Mawland to commence planning for the construction of P21 and P23.	Ongoing	<p>S60 Application submitted on 25 August 2011 for the reconstruction of building P21 and P23 for the purpose of educational accommodation within the 3rd Class/Asiatic precinct of the Quarantine Station.</p> <p>NSW Heritage Council approved the S60 Application in a letter dated 26/03/2012.</p> <p>A works certificate was issued on 20 December 2018 for the completion of the buildings.</p> <p>Letter prepared by Ron Edgar of Form Architects to the Heritage Office, Office of Environment and Heritage on 1 August 2019. Letter details that the reconstruction of Buildings P21 and P23 have been completed in accordance with the provisions of the development consent permitted under Section 60 No</p>	Completed

Source	Condition of consent number	Action proposed	Proposed completion date	Status	Action completed
				2011/S60/85. A log book / photographic record of the construction stage prepared by Form Architects was also submitted to the formerly known Heritage Office (now Heritage NSW) detailing the works undertaken.	
National Parks and Wildlife Service (2017) Q Station Sustainability Report 2015 – 2017.	20	To improve occupancy of Authentic accommodation with shared bathrooms, Mawland propose conversion of P1 and P2 to ensuites as part of the proposed modifications to CoPA and submit this to OEH and DPE.	N/A	On 2 March 2017 the Heritage Council approved the installation of ensuites to P1 and P2.	Completed
National Parks and Wildlife Service (2017) Q Station Sustainability Report 2015 – 2017.	Schedule 3 18	To improve conference and function venue, Mawland to apply for air-conditioning on some buildings as part of the proposed modifications to CoPA and submit this to OEH and DPE.	N/A	On 2 March 2017 the Heritage Council approved the installation of air conditioners at Q Station in building A28/29, A11, P5, P15, P27 and S7.	Completed
National Parks and Wildlife Service (2017) QStation Sustainability Report 2015 – 2017.	151 - 154	Mawland investigating imposing a parking charge for use of the CP1 Carpark, equivalent to NPWS charges on North Head, to allow establishment of a fund to further bushland and environmental care.	Ongoing	Parking fees have not been established for the use of CP1 Carpark.	Ongoing

3. Compliance status summary

There are 237 Conditions of Planning Approval for the Q Station that have all been assessed for compliance in this report for the period July 2018 to December 2019. Table 3 details the number of conditions assessed as compliant, non-compliant and not triggered for the reporting period.

Table 3: Compliance status summary

Number of conditions in reporting period	
Compliant	174
Not Triggered	37
Non-Compliant	26

Note: Total number of conditions of MP08_0041 is 237 (not 233) due to some conditions numbers having multiple conditions (e.g. 99 and 99A)

Table 4 details the non-compliances with the Conditions of Planning Approval at the Q Station site between July 2018 and December 2019.

Table 4: Non compliances with CoPA during July 2018 to December 2019

Condition of consent number	Non-Compliance	Action proposed	Status
5	Monitoring reports and data is not publicly available.	Co-proponents to address.	Ongoing
66	Documentation is held in paper files at S7 at Q Station and on the NSW Government Department information system CM9. No specific computer-based information management and GIS has been developed for Q Station.	Co-proponents to consider options with regard to fulfilling the requirements of this condition.	Ongoing

Condition of consent number	Non-Compliance	Action proposed	Status
67	A computer-based information management and GIS was not developed for Q Station. Documentation is held in paper files at S7 at Q Station and on the NSW Government Department information system CM9.	Co-proponents to consider options with regard to fulfilling the requirements of this condition.	Ongoing
68	A computer-based information management system and GIS was not developed for Q Station. Documentation is held in paper files at S7 at Q Station and on the NSW Government Department information system CM9.	Co-proponents to consider options with regard to fulfilling the requirements of this condition.	Ongoing
74	There has been a lapse in on-going consultation with the Aboriginal community. The co-proponents have obtained advice on these matters as required.	NPWS to undertake consultation with the Aboriginal community.	Ongoing
82	A review of the Conservation Works Program has not occurred since 2006.	Review of document to be undertaken in 2022.	Ongoing
83	No review of the CWP since 2006.	Review of document to be undertaken in 2022.	Ongoing
89	A review of the Moveable Heritage and Resources Plan has not been undertaken in the last five years.	A review of this plan will be undertaken in 2021 and approval will be sought from the Heritage Council.	Ongoing
96	A review of the Inscriptions Management Plan has not been undertaken.	Review of document to be undertaken in 2022.	Ongoing
98	Works have not been completed. The stone mason recommended by the Heritage Council has not been willing to undertake the works and the Heritage Council have not approved the works to be undertaken by the University of Sydney.	Co-proponents to seek advice from Heritage NSW.	Ongoing
103	A review of the Interpretation Plan has not been undertaken in the last five years.	Review of document to be undertaken in 2022.	Ongoing

Condition of consent number	Non-Compliance	Action proposed	Status
109	A review of the Infrastructure Control Plan has not been undertaken.	Review of document to be undertaken in 2022.	Ongoing
114	Two vending machines were installed in 2019 by Mawland at the request of guests for snacks and drinks when these services are not available on site.	Vending machines will be removed from site in Autumn 2022.	Ongoing
117	A review of the Security Plan has not been undertaken.	Review of document to be undertaken in 2022.	Ongoing
119	A review of the Access Strategy has not been undertaken.	Review of document to be undertaken in 2022.	Ongoing
139	Less than 40% of arrivals use the ferry system. Most guests arrive by car, public bus or walk from manly. Q Station encourages ferry use as much as possible.	Mawland and QSCCC have spoken with NRMA to request the Eco Hopper ferry service recommences.	Ongoing
143	Proportion of vehicles accessing the site is greater than 50%.	Mawland and QSCCC have spoken with NRMA to request the Eco Hopper ferry service recommences.	Ongoing
165	A Population Viability Analysis on the endangered North Head Long-nosed Bandicoot Population based on long-term data from 2004 will be prepared in 2021.	Relevant details will be incorporated into the Heritage Landscape Management Plan, which is subject to review in 2022.	Ongoing
184	There was no formal seagrass monitoring undertaken during the reporting period.	Seagrass monitoring to be scheduled in 2022.	Ongoing
190	A review has not been undertaken for the Predator and Pest Control Plan.	Review of document to be undertaken in 2022.	Ongoing
192	No evidence of approval of the EMS.	Review of document to be undertaken in 2022.	Ongoing
195	A review has not been undertaken for the EMP.	Review of document to be undertaken in 2022.	Ongoing

Condition of consent number	Non-Compliance	Action proposed	Status
208	A review of the Emergency and Evacuation Plan has not been undertaken in the last five years.	Review of document to be undertaken in 2022.	Ongoing
216	An Integrated Monitoring Program has not been developed for the site.	Review of program to be undertaken in 2022.	Ongoing
217	An Integrated Monitoring Program has not been developed for the site.	Review of program to be undertaken in 2022.	Ongoing
220	Review of the overall integrated monitoring program has not occurred.	Review of program to be undertaken in 2022. Planning comments on the new system suggested with the 2018 Modification proposal.	Ongoing

4. Incidents

Table 5 details the incidents that took place on the Q Station site between July 2018 and December 2019. The table also details the actions taken following each incident and the current status of the incident.

All incidents that occurred during the reporting period only occurred once (except the water leak near the pump house). All incidents were successfully closed out within the reporting period, however the brush turkeys have remained a problem on site with no effective solution.

Table 5: Onsite incidents between July 2018 and December 2019

Date Incident Occurred	Description of Incident	Action Taken	Status of Incident (Open/Closed)
13 December 2018 and April 2019	Water leak on site near Pump House caused by reticulation works to the Police College.	Leak rectified by Mawland Contractor, Sydney Water and NPWS.	Closed
July 2019	Brush turkey nest within the penguin area that has caused a drain blockage and beach erosion after heavy rainfall.	Reported to NPWS NPWS repaired drain blockage and beach erosions.	Closed
30 July 2019	Cat spotted on site by a guest.	NPWS trapped the cat.	Closed
3 September 2019	Mawland wrote to NPWS seeking assistance with the brush turkeys trying to take food from guests' table, jumping on chairs and prams, foraging in rubbish, entering the penguin zone and attempting to enter rooms and conferences.	Advice provided by NPWS. Mawland staff squirt brush turkeys from a spray bottle of water if they are aggressive towards guests.	Closed
October 2019	Discussions with NPWS regarding the potholes and road rubble on North Head Scenic Drive near the entry to the site.	NPWS repaired potholes.	Closed

5. Complaints

Table 6 details the complaints received in regard to the operation of the Q Station between July 2018 and December 2019. Only three complaints were received during this reporting period. None of these complaints resulted from the public, all complaints were lodged by NPWS or DPE staff members. All complaints were closed out and there have been no recurrences.

Table 6: Complaints received between July 2018 to December 2019

Date of Complaint	Complainant	Summary	Response	Status of Complaint
10 July 2018	Penguin Warden (verbal) NPWS Environment Manager (email)	Penguin Warden stated that during clean up after evening service at the Boilerhouse, QS Staff were dancing to music and potentially worrying penguins. No public complaint was received regarding this incident.	QS Staff were immediately counselled, managers alerted and signage in staff rooms improved. An investigation found the music was from a phone speaker.	Closed
23 October 2019	Emmanuel Smith Aspros DPE	The advertised Halloween season Ghost Hunt Tour finish time was 1.30am and not 12am. No public complaint was received regarding this incident.	This was a staff error. The tour times were adjusted to the compliance standard as per Q Station email to DPE on 24 October 2019.	Closed

6. Declaration

Compliance Report Declaration Form

Project Name North Head Quarantine Station Conservation and Adaptive re-use

Project Application Number: MP08_0041 and MP08_0041 MOD3

Description of Project: Construction and operation of a tourist facility “Q Station”, accommodating for conferences, weddings, school tours and overnight stays.

Project Address: North Head, Manly

Proponent: National Parks and Wildlife Service and The Mawland Group

Title of Compliance Report: Annual Environmental Report – Quarantine Station North Head (MP08_0041): July 2018 to December 2019

Date: 04/03/2022

I declare that I have reviewed relevant evidence and prepared the contents of the attached Compliance Report and to the best of my knowledge:

- the Compliance Report has been prepared in accordance with all relevant conditions of consent;
- the Compliance Report has been prepared in accordance with the Compliance Reporting Post Approval Requirements;
- the findings of the Compliance Report are reported truthfully, accurately and completely;
- due diligence and professional judgement have been exercised in preparing the Compliance Report; and
- the Compliance Report is an accurate summary of the compliance status of the development.

Notes:

- Under section 10.6 of the Environmental Planning and Assessment Act 1979 a person must not include false or misleading information (or provide information for inclusion in) a report of monitoring data or an audit report produced to the Minister in connection with an audit if the person knows that the information is false or misleading in a material respect. The proponent of an approved project must not fail to include information in (or provide information for inclusion in) a report of monitoring data or an audit report produced to the Minister in connection with an audit if the person knows that the information is materially relevant to the monitoring or audit. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000; and
- The Crimes Act 1900 contains other offences relating to false and misleading information: section 307B (giving false or misleading information – maximum penalty 2 years’ imprisonment or 200 penalty units, or both).

Name of Authorised Reporting Officer: Deon van Rensburg

Title: Director – Greater Sydney Park Operations

Signature:

Date:

Qualification:

Company: NSW National Parks & Wildlife Service

Company Address: 12 Darcy Street, Parramatta NSW 2150

Compliance Report Declaration Form

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- the Compliance Report has been prepared in accordance with the Compliance Reporting Post Approval Requirements;
- the findings of the Compliance Report are reported truthfully, accurately and completely;
- due diligence and professional judgement have been exercised in preparing the Compliance Report; and
- the Compliance Report is an accurate summary of the compliance status of the development.

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- The Crimes Act 1900 contains other offences relating to false and misleading information: section 307B (giving false or misleading information – maximum penalty 2 years’ imprisonment or 200 penalty units, or both).

Name of Authorised Reporting Officer: Suzanne Stanton

Title: Director / Corporate Counsel

Signature:

Date:

Qualification:

Company: Mawland Group, Q Station

Company Address: 1 North Head Scenic Drive, Manly, NSW 2095

7. Appendices

7.1 Appendix A – Compliance table

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
GENERAL					
Documents To Be Complied With					
1	<p>The activity shall be generally carried out in accordance with the Environmental Impact Statement (EIS) “Proposal for the Conservation and Adaptive Re-use, North Head Quarantine Station, Sydney Harbour National Park”, Volumes 1-5, dated 7 September 2001, except where modified by:</p> <ul style="list-style-type: none"> a) the proposal, including plans, safeguards and mitigation measures, presented in the Preferred Activity Statement (PAS) prepared by the co-proponents dated September 2002; b) preliminary details for the proposed adaptation of Building A6 provided by the co-proponents in a facsimile dated 14 October 2002 and in the paper dated 31 October 2002; c) the variations proposed to the PAS by the co-proponents in a letter dated 12 November 2002; and the conditions of this approval (which incorporate the conditions of concurrence and approval granted by the NSW Heritage Council, 	Operation	Joint	Activities were carried out in accordance with the EIS. Incidents and non-compliances reported against the CoPA and therefore the EIS are reported in the above tables.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>Minister for Fisheries, Minister for the Environment and the Minister for Infrastructure, Planning and Natural Resources).</p> <p>d) the conditions of this approval (which incorporate the conditions of concurrence and approval granted by the NSW Heritage Council, Minister for Fisheries, Minister for the Environment and the Minister for Infrastructure, Planning and Natural Resources).</p> <p>e) any future variations to the PAS proposed for the site, that are supported by OEH and the Heritage Council, provided that such variations reflect the key site activities approved for the site (see 'Definitions'); and</p> <p>f) all documentation submitted in support of the modification request (MP08_0041 MOD 3), including Environmental Assessment prepared by Linchpin Environmental (dated August 2015) and Responses to Submissions and Correspondence from Planning prepared by Mawland Group (dated September 2017).</p>				
2	In the event of any inconsistency with the EIS and PAS, the conditions of approval specified in this schedule and schedules 2 to 9 shall prevail.	Operation	Joint	No inconsistencies with the EIS were found during the reporting period. Incidences and non-compliances are reported in Table 4 and Table 5 above.	Not Triggered

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
Compliance With Conditions					
3	It shall be the ultimate responsibility of the co-proponents to ensure compliance with the conditions of this approval and to ensure compliance by staff and contractors. The conditions do not relieve the co-proponents of the obligation to obtain all other approvals from relevant authorities required under any other legislation.	Operation	Joint	<p>This report details compliance of the activity with the conditions of approval.</p> <p>Non-compliances and incidents are detailed in Table 4 and Table 5 above.</p>	Compliant
Dispute Resolution					
4	In the case of a dispute between the co-proponents and any public authority, company or person in the implementation of the conditions of approval, the matter shall be referred to the Department of Environment and Conservation (DEC) in the first instance. If the DEC is unable to resolve the dispute and/or is of the view that further consideration is justified the matter will be referred to the Department of Infrastructure, Planning and Natural Resources (DIPNR). If the matter is still unable to be resolved it shall then be referred to the Minister for the Environment and the Minister for Infrastructure, Planning and Natural Resources for final resolution.	Operation	Joint	No disputes were raised during the reporting period.	Not Triggered
Public Information					
5	All final reports, reviews, plans and monitoring data referred to in the conditions of approval are to be publicly available, with the exception of material that is commercially sensitive or contains sensitive information regarding	Operation	Joint	<p>Monitoring reports and data is currently not publicly available for this reporting period.</p> <p>Information that is publicly available, is available on the Q Station website.</p>	Non-Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	Aboriginal heritage or the location\ of threatened species and/or their habitat.			https://www.qstation.com.au/our-story.html	
Contact					
6	Prior to the commencement date, the co-proponents shall establish and publicise a contact telephone number, which would enable any member of the general public to reach a person who can arrange appropriate response actions to any queries or complaints received.	Operation	Joint	Contact information has been made publicly available on the Q Station website: https://www.qstation.com.au/contact.html	Compliant
7	The co-proponents shall provide to DIPNR, DEC, NSW Waterways Authority and the Heritage Office the name and a 24 hour contact telephone number of at least one person who will have authority to enter any work areas, to take immediate action to stop works or any activity or take other action as necessary. The appointment of this person does not preclude any public authority from entering the site for the purposes of meeting or enforcing their statutory responsibilities.	Operation	Joint	The 24 hour contact for the site is: Suzanne Stanton – Mawland.	Compliant
Complaints Register					
8	The co-proponents shall record details of all complaints received, and actions taken and response times. The Complaints Register shall be made available to: the Environmental Manager at the end of each week; the auditor for the purposes of the comprehensive audit (condition 226); and at other times as requested by relevant NSW Government agencies.	Operation	Joint	Details of complaints within the reporting period are in Table 6 of this report. Mawland typically receive the complaints from NPWS.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
COMMENCEMENT					
Commencement Of Activity					
9	<p>The activity is not to commence until:</p> <ul style="list-style-type: none"> a) the Plan of Management for Sydney Harbour National Park, prepared under the National Parks and Wildlife Act 1974, has been amended to include provisions enabling the adaptive reuse of the Quarantine Station and until other relevant requirements of section 151B of the Act have been met; b) a relevant lease agreement under the provisions of the National Parks and Wildlife (NPW) Act 1974 has been entered into, although the Minister for the Environment, as a co-proponent, shall be at liberty to undertake part or all of the activity prior to the finalisation of a lease; c) the co-proponents have obtained any necessary approvals from relevant authorities required under any other legislation, including the Heritage Act 1977; d) the co-proponents provide documentary evidence to the satisfaction of DIPNR that arrangements have been entered into with relevant agencies and/or private firms for a ferry (the Jenner or a similar vessel) to use wharf facilities at Manly; and 	Construction	Joint	Condition satisfied prior to the commencement of operation. Compliance noted in previous annual reports and records maintained onsite.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	e) an emergency and evacuation plan has been prepared for the site by the co-proponents and approved by the DEC (condition 205).				
10	Notwithstanding condition 9), the co-proponents may undertake the following activities prior to the commencement date: a) commence relevant monitoring programs; b) finalise the various strategies, plans and management systems specified in the EIS, PAS or conditions of approval; and c) operate the existing Quarantine Station facilities up to the current level of usage providing this is undertaken in accordance with condition 24), and subject to conditions 9)e) and 210) being met. This is also subject to any relevant approvals being obtained under the NPW Act.	Construction	Joint	Condition satisfied prior to the commencement of operation. Compliance noted in previous annual reports and records maintained onsite.	Compliant
11	For the purpose of the conditions of approval the “commencement date” is taken to be the date that DIPNR declares that all of the requirements of condition 9) have been met and that the activity may commence.	Construction	Joint	Condition satisfied prior to the commencement of operation. Compliance noted in previous annual reports and records maintained onsite.	Compliant
12	The conditions of this approval shall be incorporated into the lease agreement under NPW Act for the site.	Operation	Joint	NPWS letter to Mawland re the modification of the Ministers Approval and the addition of these conditions to the lease document (letter dated 27 June 2018).	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
DURATION OF PLANNING APPROVAL					
13	This approval is valid for a period of 21 years. Any proposal to extend the approval beyond this period shall comply with the relevant legislative requirements that exist at the time the extension is sought.	Operation	Joint	Approval was given for the North Head Quarantine Station Conservation and Adaptive Re-Use Proposal on 23 December 2003. Any required extension of approval is not required until 2024.	Not Triggered
14	An extension to the duration of the planning approval may only be sought if there is a current endorsed conservation management plan for the site.	Operation	Joint	Approval was given for the North Head Quarantine Station Conservation and Adaptive Re-Use Proposal on 23 December 2003. Any required extension of approval is not required until 2024.	Not Triggered
15	<p>In addition to any specific legislative requirements that may exist at the time an extension to the approval is sought, the application shall be made available for public comment and address:</p> <ul style="list-style-type: none"> the provisions of any relevant endorsed conservation management plans; compliance with the terms of this activity approval and any approved modifications; the outcomes of all monitoring undertaken since commencement of the activity, including the success of any adaptive management measures applied; and the status of any integrated planning undertaken for north head, including the role of the site in any such process. <p>This condition shall not fetter the exercise of any statutory power or discretion of any authority</p>	Operation	Joint	Approval was given for the North Head Quarantine Station Conservation and Adaptive Re-Use Proposal on 23 December 2003. Any required extension of approval is not required until 2024.	Not Triggered

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	with respect to any proposed extension of the duration of planning approval.				
SCOPE OF APPROVAL					
Other Infrastructure Approvals					
16	With the exception of minor maintenance repairs or works (as defined) or works in accordance with condition 38) c), prior to undertaking any works associated with the provision of water and sewer services to the site the co-proponents shall consult Sydney Water and obtain a Section 73 Certificate under the <i>Sydney Water Act 1994</i> .	Operation	Joint	No works were undertaken during the reporting period that were associated with the provision of water and sewer services to the site.	Not Triggered
Aspect Of The Activity Not Approved					
17	Aspects of the activity that are not approved as part of this application are listed in Schedule 2.	Operation	Joint	No works detailed in Schedule 2 were undertaken during this reporting period.	Compliant
Aspects Of The Activity Approved Subject To Modification Of Detailed Design					
18	Aspects of the proposal that are approved, subject to modifications or further detailed design, are listed in Schedule 3. The outcomes and objectives to be achieved, and the criteria for assessment of the achievement of the outcome or objective, are also detailed in Schedule 3.	Operation	Joint	See Schedule 3 for additional details.	Compliant
Adaptation Of Accommodation Facilities					
19	Prior to the commencement of any works associated with the conversion of rooms in any of the accommodation buildings, a sample adaptation within Building P6 must be completed and endorsed by the Heritage Council and DEC.	Construction	Joint	Condition satisfied prior to the commencement of operation. Compliance noted in previous annual reports and records maintained onsite.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	The sample adaptation is to include accommodation room fitout and furnishing				
20	With the exception of buildings P1 and P2, which are to remain with their current spatial layout and internal configuration, adaptation of buildings within the First and Second Class Precincts may occur in accordance with the specifications in Table B-2 of the PAS. Adaptation works are to be assessed and approved in accordance with conditions 35)-40), and reflecting the outcomes of the P6 prototype adaptation.	Construction	Joint	Condition satisfied prior to the commencement of operation. Compliance noted in previous annual reports and records maintained onsite.	Compliant
21	Buildings P1, P2 and the original rooms that are adapted, at the conclusion of the lease, are to be returned to their condition and spatial layout/internal configuration as at the commencement date of the lease. Other permissible alterations include those works that are identified in terms 31 and 38. At all times interpretation of the original spatial layout and internal configuration is to be exhibited prominently near buildings P1 and P2.	Operation	Joint	The initial term of the lease does not expire until 2027, therefore this condition has not yet been triggered.	Not Triggered
Reconstructions					
Buildings P21 And P23					
22	The proposed reconstruction of P21 and P23 and use for environmental and cultural study purposes is approved, subject to: <ul style="list-style-type: none"> a) all existing buildings associated with the Environmental and Cultural Study Centre being made operational first; 	Operation	Joint	S60 Application submitted on 25 August 2011 for the reconstruction of building P21 and P23 for the purpose of educational accommodation within the 3rd Class/Asiatic precinct of the Quarantine Station.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<ul style="list-style-type: none"> b) information demonstrating a clear need for the reconstruction based on the management requirements for the ongoing operation of the site (including demonstrated market demand for additional student accommodation) being provided to the satisfaction of the Heritage Council and DEC; c) final plans for reconstruction being submitted to and approved by the Heritage Council in accordance with the requirements of the Heritage Act 1977. These plans must incorporate distinctions in design between the two buildings; and d) Compliance with the certification requirements of the NPWS Construction Assessment and Approvals procedure. 			<p>NSW Heritage Council approved the S60 Application in a letter dated 26 March 2012.</p> <p>A works certificate was issued on 20 December 2018 for the completion of the buildings.</p> <p>Letter prepared by Ron Edgar of Form Architects to the Heritage Office, Office of Environment and Heritage on 1 August 2019. Letter details that the reconstruction of Buildings P21 and P23 have been completed in accordance with the provisions of the development consent permitted under Section 60 No 2011/S60/85. A log book / photographic record of the construction stage prepared by Form Architects was also submitted to the formerly known Heritage Office (now Heritage NSW) detailing the works undertaken.</p>	
Buildings H1 And P22					
23	<p>Reconstruction and use of buildings H1 and P22 is approved, subject to:</p> <ul style="list-style-type: none"> a) final plans for reconstruction being submitted to and approved by the Heritage Council in accordance with the requirements of the Heritage Act 1977; b) compliance with the certification requirements of the NPWS Construction Assessment and Approvals Procedure; and 	Operation	Joint	Section 60 Application was submitted to DEC in November 2005 for the Reconstruction of Buildings H1 and P22. This work was approved for construction on 31 March 2006.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	c) if, after reconstruction commences or is completed, further alterations to the buildings are proposed, these shall require assessment and approvals under the relevant legislation.				
Restrictions On Use					
24	Use of the site and the undertaking of the activity must proceed in accordance with uses permissible under the NPW Act 1974 (as amended).		Joint	The site is only used in accordance with the uses permissible under the NPW Act 1974.	Compliant
25	Buildings in the Third Class/Asiatic Precinct shall be used only for accommodation, interpretation and education purposes as specified in the PAS. Building P27 may also be used for special events, functions and/or conferences but only as a secondary use to education and interpretation.		Joint	The buildings in the Third Class / Asiatic Precinct are only used for the approved purposes. Building P27 is used for additional functions as required.	Compliant
26	Regular public tours of the site must form a component of the operation of the Quarantine Station and be run during publicly accessible periods, including weekends and public holidays.	Operation	Joint	<p>Public tours of the site include:</p> <p>Ghostly Encounters 2.5 hours duration Available daily 8 – 10.30pm</p> <p>Ghost Trackers 2 hours duration Available weekends and school holidays</p> <p>Q Station Paranormal Investigation 3 hours</p>	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
				Available first Thursday of every month	
				Quarantine Wander History Tour 1 hour Available daily 11am	
				Q Station Wildlife Meanders Tour 1.5 hours Available daily 12.30pm	
27	Timber buildings shall not be used for the storage of fuel or other flammable materials.	Operation	Joint	The only fuel stored on site at Q Station is small quantities of petrol in jerry cans in the metal maintenance shed.	Compliant
INTEGRATED PLANNING					
28	The co-proponents shall contribute to any future initiatives focused on the development of an integrated planning approach for North Head, or components thereof, such as transport, infrastructure and utilities, accommodation and/or visitor access. Opportunities for providing general water access to North Head via Quarantine wharf shall be considered in developing such an approach, with a focus on the potential impacts of such access on the volumes of the Quarantine Station and implications for visitor management.	Operation	Joint	The co-proponents are active members of the North Head Stakeholder Group which regularly meets to discuss and make decisions and contributions on these items. To date, RMS (Maritime) has not agreed to general water access.	Compliant
29	In order to minimise the requirement for on-site parking, the co-proponents shall undertake consultations with other land managers at North Head regarding options for off-site car parking.	Operation	Joint	The North Head Stakeholders Committee receives the Annual Environmental Report	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	The outcome of these discussions shall be reported on an annual basis as part of the annual environmental report (Condition 221).			A cooperative approach is undertaken where and when necessary.	
30	The co-proponents shall undertake discussions with the Sydney Harbour Federation Trust or future land manager regarding a cooperative and integrated approach to the future management and interpretation of the 3rd Cemetery.	Operation	Joint	<p>Management of the 3rd Cemetery is conducted in accordance with the North Head Sanctuary Management Plan prepared in 2011 (north-head-sanctuary-management-plan.pdf (harbourtrust.gov.au)).</p> <p>The Trust also commissioned an interpretation strategy in 2017 during which the co-proponents were consulted as key stakeholders (tqc-north-head-sanctuary-manly-ip-september-2017.pdf (harbourtrust.gov.au)).</p>	Compliant
STAGING, CERTIFICATION AND UNDERTAKING OF WORKS					
Staging Of Works					
31	<p>The undertaking of works as part of the activity shall generally occur in accordance with the staging plan specified in Table F-1 of the PAS, subject to the following modifications:</p> <ul style="list-style-type: none"> a) references to the “DACMP” shall be deleted and replaced with “Conservation Works Program (condition 78)”; b) references to “QSARG” shall be deleted; c) 50% of the Conservation Works Program medium term works shall be completed by the end of stage 2; 	Construction	Joint	<p>Condition satisfied prior to the commencement of operation. Compliance noted in previous annual reports and records maintained onsite.</p> <p>Compliance against CoPA 31-34 will be reviewed in the EMS review in 2022.</p>	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>d) upgrade of the fire hydrant system shall be completed within 5 years of the commencement date in accordance with condition 211);</p> <p>e) revisions to building and conservation works as follows:</p> <ul style="list-style-type: none"> • adaptation of P12 shall occur in Stage 2 • adaptation of P10 shall occur in Stage 3 • an approach to sampling and adaptation of the bathrooms in P14-16 shall be prepared during Stage 1 (refer Schedule 3); and <p>f) amend the staging plan so that two free public open days are to be held in every twelve-month period, in accordance with condition 126).</p>				
32	The co-proponents shall not commence works associated with Stage 2 of the staging plan until the works and project planning actions specified in Stage 1 have been substantially completed to the satisfaction of the DEC and the Heritage Council.	Construction	Joint	<p>Condition satisfied prior to the commencement of operation. Compliance noted in previous annual reports and records maintained onsite.</p> <p>Compliance against CoPA 31-34 will be reviewed in the EMS review in 2022.</p>	Compliant
33	The co-proponents shall not commence works associated with Stage 3 of the staging plan until the first comprehensive audit has been completed (condition 228) and any requirements or directions issued by the DEC, DIPNR or the Minister for Infrastructure, Planning and Natural	Construction	Joint	Condition satisfied prior to the commencement of operation. Compliance noted in previous annual reports and records maintained onsite.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	Resources under conditions 232) and 233) have been complied with.			Compliance against CoPA 31-34 will be reviewed in the EMS review in 2022.	
34	<p>The co-proponents shall not commence works associated with Stage 4 of the staging plan until the DEC and the Heritage Council are satisfied that a significant proportion of the remaining Conservation Works Program (condition 78)) medium term works have been completed during Stage 3. Compliance with this condition shall be determined as follows:</p> <ul style="list-style-type: none"> a) if Stage 4 is not scheduled to commence within 3 years of the commencement date, then 100% of all medium term works must be completed before Stage 4 works may proceed; or b) if Stage 4 is scheduled to commence within 3 years of the commencement date, then at least 75% of the total medium term works must be completed before Stage 4 works may proceed. 	Construction	Joint	<p>Condition satisfied prior to the commencement of operation. Compliance noted in previous annual reports and records maintained onsite.</p> <p>Compliance against CoPA 31-34 will be reviewed in the EMS review in 2022.</p>	Compliant
General Works					
35	<p>The co-proponents shall comply with the requirements of the NPWS Construction Assessment and Approvals Procedure for all relevant construction works to be carried out under this approval, except where varied by the conditions of this approval. All relevant construction works includes:</p> <ul style="list-style-type: none"> a) all works that require the disturbance or alteration of fabric, buildings and other structures; 	Operation	Joint	<p>All works are undertaken in accordance with the NPWS Construction Assessment and Approvals Procedure. These documents can be found at:</p> <p>https://www.environment.nsw.gov.au/topics/parks-reserves-and-protected-areas/development-guidelines/construction-assessment-procedures.</p>	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>b) installation or upgrading of utility infrastructure and any maintenance or upgrade work that requires the excavation of new lines or locations or involves the discharge of polluting substances (as defined); and</p> <p>c) landscape works in accordance with the adopted Heritage Landscape Management Plan that require ground surface disturbance, or the installation of new landscape elements including car park construction and road works.</p>			<p>Works were undertaken on Building P21 and P23 during the reporting period. A Works Certificate was issued to Mawland by NPWS on 20 December 2019 to approve the application for a Completed Works Certificate for these works based on advice from consultants regarding compliance as evidenced by:</p> <ul style="list-style-type: none"> • Heritage Council letter indicating compliance with consent conditions dated 14 August 2019 • Crown Completion certificate No. P217_186-2 issued by Design Confidence on 18 June 2019 • Log Book / Photographic Record for Buildings P21 and P23 issued by Form Architects on 1 August 2019. <p>Works were undertaken on building P1 and P2 during the reporting period. A request from Mawland to NPWS for a completed works certificate was denied (5 December 2019) due to several minimum Building Code of Australia requirements not being met. Additional works would be undertaken in the following reporting period to rectify this.</p>	
36	Any application for construction work within the Quarantine Station site must be submitted to the Heritage Advisor for review prior to lodgement with the DEC and Heritage Council. This requirement can be waived at the discretion of the Heritage Advisor, except for those works	Operation	Joint	A S60 prepared by the Heritage Advisor for the reconstruction of building P21 and P23 for the purpose of educational accommodation within the 3 rd Class Asiatic precinct of the Quarantine Station was approved on 28 March 2012 by the Heritage Council. Works were conducted within the reporting period.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	specified in the conditions of approval as requiring approval from the Heritage Council.			A S60 prepared for reconstruction of buildings H1 and P22 (1883 Hospital Building and 1883 Accommodation Building) was approved on 31 March 2006 by the Heritage Council. Works were conducted within the reporting period.	
37	<p>The co-proponents must submit as part of any application for construction works the following additional information (where it is relevant to the particular proposal) to that required under the NPWS Construction Assessment and Approvals Procedure:</p> <ul style="list-style-type: none"> a) a statement of compliance with the relevant policies of the QSCMP, DACMP, relevant site-wide plans and/or requirements of the conditions of this approval, or clear justification for any proposed variances; b) details of all materials, fittings, fixtures and other specifications; c) details of proposed construction techniques; d) sample boards and coloured elevations showing proposed materials and colours, based on research into historic colour schemes as required; e) a schedule of fabric and other materials to be sampled consistent with the fabric sampling guidelines [condition 86) d)] and sampling provisions for asbestos 	Operation	Joint	<p>All required documentation for construction works on P21 and P23 was submitted as part of the S60 Application to the Heritage Council and approved on 28 March 2012. Construction works were conducted within the reporting period.</p>	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>and rainwater systems (condition 111) and bathroom fixtures [condition 99) b)];</p> <p>f) for carparks:</p> <ul style="list-style-type: none"> • details of the stormwater management system based on the guideline “Managing Urban Stormwater – Soils and Construction” (DoH 1998) • an assessment of the soil and hydrological characteristics downslope of the proposed carparks • the proposed maintenance program for structures associated with the carpark (eg: stormwater cells; <p>g) a historical archaeological assessment to comply with the requirements of the North Head Quarantine Station Archaeological Management Plan (2000);</p> <p>h) an outline of environmental and/or heritage impacts and proposed mitigative measures or safeguards, including procedures for avoiding impacts on flora and fauna; and</p> <p>i) proposed monitoring and maintenance procedures, where relevant.</p>				
38	Notwithstanding the above, approvals in accordance with the NPWS Construction Assessment and Approvals Procedure are not required for the following matters, where these are undertaken in accordance with the	Operation	Joint	Regular maintenance works are conducted in accordance with the Conservation Works Program (CWP) on site. A maintenance log is maintained by the Mawland operations team.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>provisions of the Conservation Works Program or relevant side-wide plan(s):</p> <ul style="list-style-type: none"> a) painting and carpeting; b) basic essential services, such as upgrading of electrical wiring, installation of power points, telephone connections, etc; c) infrastructure works which involve the essential repair or replacement of existing facilities in the same location using “like-for-like” technology, or where this is not available, appropriate contemporary technology; d) the provision of external lighting, signage and waste receptacles; and e) minor maintenance repairs or works (as defined). 				
39	Prior to works commencing, the co-proponents shall notify the Environmental Manager and provide evidence that the necessary approvals have been obtained in accordance with the NPWS Construction Assessment and Approvals Procedure.	Operation	Joint	NPWS (Regional Manager – Metro North East) issued a Construction Certificate to Mawland on 29 September 2015 to approve the construction of the Quarantine Station buildings P21 and P23 following notification of commencement of works by Mawland to NPWS.	Compliant
NSW Heritage Council Approvals					
40	Prior to any construction works commencing, the co-proponents shall submit the detailed design and working drawings for the project to the NSW Heritage Council for approval.	Operation	Joint	No approvals were given in the reporting period. All works undertaken within the reporting period were approved by the Heritage Council prior to the reporting period.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
				S60 for Reconstruction of building P21 and P23 for the purpose of educational accommodation within the 3 rd Class Asiatic precinct of the Quarantine Station was approved on 28 March 2012. Works were conducted within the reporting period.	
				S60 for Reconstruction of buildings H1 and P22 (1883 Hospital Building and 1883 Accommodation Building) was approved on 31 March 2006. Works were conducted within the reporting period.	
Wharf					
41	If necessary, a separate application and approval under Part 5 of the EP&A Act 1979 and other relevant legislation will be required for: <ul style="list-style-type: none"> a) upgrade works to the wharf, including any works that require excavation or disturbance of the seabed. This excludes use by the proposed ferry service, lighting, works identified in the PAS and minor maintenance repairs or works (as defined) that do not impact on the seabed and; and/or b) provision of additional ferry services or watercraft access to the Quarantine Station. 	Operation	Joint	<p>An application to the Office of Environment and Heritage was made on 20 September 2018 for the installation of additional fender piles at the wharf to assist with the docking of a large ferry as part of the Invictus Games. This application was approved on 5 October 2018 following consultation.</p> <p>It should be noted that discussions continue between NPWS and RMS (Maritime), supported by QSCCC, Local Members and North Head Stakeholders for the wharf to become a public wharf.</p>	Compliant
42	Prior to commencement of any work on or associated with the Quarantine Station wharf, or the commencement of the ferry service at the wharf, the co-proponents shall lodge an	Operation	Joint	An application to the Office of Environment and Heritage was made on 20 September 2018 for the installation of additional fender piles at the wharf to assist with the docking of	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	Application for Construction of Waterside Structures to the Waterways Authority for approval. This application must be submitted to the Heritage Advisor for endorsement prior to lodgement with the Waterways Authority. The application shall be accompanied by the information and comply with the requirements specified in Schedule 4. Prior to determining the application, the Waterways Authority shall consult with NSW Fisheries.			a large ferry as part of the Invictus Games. This application was approved on 5 October 2018 following consultation.	
Access to Store Beach					
43	A separate application and approval under Part 5 of the EP&A Act 1979, and other relevant legislation, will be required for the provision of independent access to Store Beach, or any works associated with the upgrading of the existing access track or construction of any new tracks to Store Beach.	Operation	Joint	No works were undertaken in regard to access to Store Beach during the reporting period.	Not Triggered
Operating Certificate					
44	The co-proponents shall apply to the DEC for an Operating Certificate (as defined), prior to the commencement of operation of the following facilities: <ul style="list-style-type: none"> a) therapeutic health facility (P5); b) educational facilities; c) restaurant, food service and beverage facilities; d) accommodation facilities; and e) the ferry service 	Operation	Joint	The Operating Certificate for: <ul style="list-style-type: none"> • Accommodation was issued by DEC on 18 March 2008 • Ferry service was issued on 17 December 2010 • Food and Beverage 19 January 2011 	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
Archival Recording					
45	<p>Archival recording shall be carried out at two stages:</p> <p>a) prior to any adaptation work commencing on a building, historic item (including infrastructure) or cultural landscape element - the archival recording shall be submitted to and endorsed by the Heritage Advisor prior to works commencing. This shall form part of the application for construction works where applicable; and</p> <p>b) on completion of adaptation works - the archival recording shall be submitted to the Heritage Advisor for endorsement. This shall form part of the application for a Compliance Certificate in accordance with the NPWS Construction Assessment and Approvals Procedure where applicable. Archival recording will also be required during the removal of any fabric on site that exposes significant fabric/detail.</p>	Construction	Joint	The Heritage Council endorsed the prior to adaptation full site Archival Recording on 27 July 2006.	Compliant
46	<p>The form of archival recording required is:</p> <p>a) archival record prior to commencement of adaptation works - the archival record shall meet the minimum standards for recording outlined in the Archaeological Management Plan. It shall include measured drawings of all buildings and</p>	Construction	Joint	Buildings P21 and P23 archival recording was prepared by Form Architects (August 2019) and issued to OEH on 1 August 2019.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	structures and photographic recording; and b) archival record for completed adaptation works – the archival record shall comprise “as-built” drawings of all buildings and structures that have been the subject of adaptation works indicating the location and detail of changes.				
47	Measured drawings shall be prepared in accordance with the NSW Heritage Office guidelines ‘How to prepare archival records of heritage items’.	Construction	Joint	Buildings P21 and P23 archival recording was prepared by Form Architects (August 2019) and issued to OEH on 1 August 2019.	Compliant
48	Photographic records shall be prepared in accordance with the NSW Heritage Office ‘Guidelines for photographic recording of heritage sites, buildings, structures and movable items’.	Construction	Joint	Buildings P21 and P23 archival recording was prepared by Form Architects (August 2019) and issued to OEH on 1 August 2019.	Compliant
49	A copy of the archival record shall be lodged with DEC and the NSW Heritage Office.	Construction	Joint	Buildings P21 and P23 archival recording was prepared by Form Architects (August 2019) and issued to OEH on 1 August 2019.	Compliant
Emergency Works					
50	Notwithstanding any other conditions of this approval, in the event that emergency works are required to be undertaken, the co-proponents shall take all reasonable steps to ensure that these occur as expeditiously as possible. Emergency works are works of a temporary and reversible nature which are urgently required to arrest an imminent threat to life, safety, public liability, and/or threat to the fabric or property.	Operation	Joint	Emergency works within the reporting period included removal of a Coral Tree within Peace Park that had fallen down during a storm. Removal of the tree occurred in early December 2019.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
				Mawland notified NPWS on 11 December 2019 of the requirement to remove the tree due to safety concerns.	
51	Where the co-proponents consider it is necessary to undertake emergency works, notification shall be given to the Heritage Council and the NPWS as soon as possible and direction sought on further procedures to be implemented.	Operation	Joint	Mawland notified NPWS on 11 December 2019 of the requirement to remove a Coral Tree in Peace Park due to safety concerns after it fell down during a storm event.	Compliant
ENVIRONMENTAL MANAGER					
52	<p>Prior to the commencement of construction works the co-proponents shall appoint a suitably qualified Environmental Manager (EM). The appointment of the EM shall be subject to the approval of the DEC and DIPNR. The co-proponents shall provide to the DEC and DIPNR the following information:</p> <ul style="list-style-type: none"> a) the qualifications and experience of the EM; b) the roles and responsibilities of the EM; and c) the authority and independence of the EM <p>The EM shall be engaged for the duration of the approval.</p>	Operation	Joint	The Environmental Manager for the site during the reporting period was Jennifer Roberts (2018), Robyn San (early 2019) and Jess Dargan (August 2019).	Compliant
53	<p>The EM shall</p> <ul style="list-style-type: none"> a) undertake the specific actions identified in the conditions of approval; 	Operation	Joint	The Environmental Manager for the site during the reporting period was Jennifer Roberts (2018), Robyn San (early 2019) and Jess Dargan (August 2019).	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>b) oversee the undertaking of the activity in accordance with the conditions of approval;</p> <p>c) contribute to the development, and oversee the implementation of, the EMP and the associated integrated monitoring and adaptive management system as it relates to environmental management;</p> <p>d) facilitate an environmental management module as part of an induction and training program for all persons involved with the construction works;</p> <p>e) for the first five years from the commencement date, provide six monthly (or as required) status reports to the DEC which shall include, but not be limited to:</p> <ul style="list-style-type: none"> • progress in implementation of approval conditions as these relate to environmental management (this shall include monitoring programs) • complaints and responses to these • any breaches of conditions and response • compliance or other issues arising; <p>f) have the authority to stop work immediately if, in the view of the EM, an unacceptable impact is likely to occur as a result of the undertaking of the activity, or to require other reasonable steps to</p>			<p>All works during the reporting period were overseen by the EM.</p> <p>Six monthly reports to DEC by the EM were not required during this reporting period.</p> <p>There was no requirement to stop works for any unacceptable impacts during the reporting period.</p> <p>There was no requirement for the EM to advise any stakeholder of any major issues on site during the reporting period.</p>	

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>be taken to avoid or minimise any adverse impacts;</p> <p>g) be available during construction activities at the site and be present on-site during any critical construction activities as defined in the EMP; and</p> <p>h) immediately advise the co-proponents, DEC, DIPNR, the Heritage Council and/or the Waterways Authority (depending on the issue involved) of any major issues resulting from the undertaking of the activity that have not been dealt with expediently or adequately by the co-proponents.</p>				
HERITAGE ADVISOR					
54	<p>Prior to the intended commencement of construction works the co-proponents shall appoint a suitably qualified Heritage Advisor. The appointment of the Heritage Advisor shall be subject to the approval of the DEC and the Heritage Council. The co-proponents shall provide to the DEC and the Heritage Council the following information prior to any appointment being made:</p> <p>a) the qualifications and experience of the Heritage Advisor;</p> <p>b) the roles and responsibilities of the Heritage Advisor;</p> <p>c) the authority and independence of the Heritage Advisor.</p>	Construction / Operation	Joint	<p>Paul Davies and Ron Edgar – Form Architects were appointed and approved as the Heritage Advisor for the Q Station.</p> <p>The Heritage Advisor(s) for the site was confirmed by Verena Mauldon on 12 December 2017.</p>	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	The appointment of the Heritage Advisor shall be for a period agreed to by the Heritage Council and DEC. The Heritage Council and the DEC shall review the functioning of the Heritage Advisor upon receipt of the six monthly status reports [condition 55) d)].				
55	<p>The Heritage Advisor shall:</p> <p>a) assess applications for construction works with respect to heritage matters and provide advice to the NSW Heritage Council (condition 40) and DEC. This shall include, but not be limited to, ensuring that all plans and specifications submitted with applications for construction works are prepared in accordance with:</p> <ul style="list-style-type: none"> the conditions of approval the requirements of any relevant site-wide plans and Precinct Plans the QSCMP and DACMP, where applicable. 	Operation	Joint	The Heritage Advisors participated in and supervised all construction works (where required) during this reporting period including applications for Section 60 approvals, inspections, preparation of plans.	Compliant
	<p>The Heritage Advisor shall also have responsibility for approving such applications, if the NSW Heritage Council delegates this function.</p> <p>b) review all site-wide plans prior to lodgement with the relevant approval body to ensure that these are generally in accordance with the QSCMP and DACMP;</p>	Operation	Joint	The Heritage Advisors participated in and supervised all construction works (where required) during this reporting period including applications for Section 60 approvals, inspections, preparation of plans.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	c) undertake regular inspections of works in progress and, where appropriate or as specified by the DACMP, either directly supervise works or require the co-proponents to appoint a suitably qualified person to supervise works;	Operation	Joint	The Heritage Advisors participated in and supervised all construction works (where required) during this reporting period including applications for Section 60 approvals, inspections, preparation of plans.	Compliant
	d) for the first three years from the commencement date, provide status reports to the Heritage Council and DEC every six months or as required which shall include, but not be limited to: <ul style="list-style-type: none"> • applications for construction works approved and works undertaken to date • the next 3-6 months schedule of works • compliance or other issues arising; and 	Operation	Joint	The Heritage Advisors participated in and supervised all construction works (where required) during this reporting period including applications for Section 60 approvals, inspections, preparation of plans.	Compliant
	e) have the authority to stop work immediately if, in the view of the Heritage Adviser, an unacceptable impact is likely to occur, or to require other reasonable steps to be taken to avoid or minimise any adverse impacts with respect to those matters for which a construction application is required or where maintenance work is being conducted	Operation	Joint	No works were required to be stopped by the Heritage Advisor	Not Triggered

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
COMMUNITY CONSULTATION					
Quarantine Station Community Committee					
56	Within three months from the commencement date the co-proponents shall establish a Quarantine Station Community Committee (QSCCC). The QSCCC may be established as a subcommittee of the NPWS Sydney Region Advisory Committee or as a full Advisory Committee under the NPW Act, or some other suitable arrangement approved by the DEC. The QSCCC shall report to the DEC.	Operation	Joint	<p>The Quarantine Station Community Consultative Committee is established to assist with the conservation and management of the historic site.</p> <p>Meeting minutes from the Quarantine Station Community Consultative Committee can be found at: https://www.environment.nsw.gov.au/about-us/who-we-are/advisory-committees/quarantine-station-community-consultative-committee.</p> <p>The February 2019 – February 2020 Annual Report from the Quarantine Station Community Consultative Committee can be found at: https://www.planning.nsw.gov.au/-/media/Files/DPE/Reports/CCC-annual-reports/2019/quarantine-station-manly-ccc-report-2019.pdf?la=en.</p>	Compliant
57	The QSCCC shall be chaired by an independent chairperson approved by the DEC and DIPNR and comprise representatives with relevant expertise and experience from appropriate community interest groups, Aboriginal communities and local government. Representatives from relevant government	Operation	Joint	<p>Sandy Hoy is the independent chairperson of the QSCCC.</p> <p>Meeting minutes of the QSCCC can be accessed at: https://www.environment.nsw.gov.au/about-us/who-we-are/advisory- </p>	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	agencies or other individuals may be invited to attend meetings by the Chairperson.			committees/quarantine-station-community-consultative-committee. The February 2019 – February 2020 Annual Report from the Quarantine Station Community Consultative Committee can be found at: https://www.planning.nsw.gov.au/-/media/Files/DPE/Reports/CCC-annual-reports/2019/quarantine-station-manly-ccc-report-2019.pdf?la=en .	
58	The general functions of the QSCCC shall include: <ul style="list-style-type: none"> a) provide comment and recommendations to the co-proponents on proposals or relevant matters including the development and implementation of site-wide plans (as defined), the integrated monitoring program, annual environmental reports, comprehensive audit reports and compliance with the conditions of this approval; and b) provide a communication channel between the community, the co-proponents and the determining and approval authorities on matters relating to the Quarantine Station. The conditions of approval also include other specific functions of the QSCCC 	Operation	Joint	The Quarantine Station Community Consultative Committee is established to assist with the conservation and management of the historic site. Meeting minutes from the Quarantine Station Community Consultative Committee can be found at: https://www.environment.nsw.gov.au/about-us/who-we-are/advisory-committees/quarantine-station-community-consultative-committee . The February 2019 – February 2020 Annual Report from the Quarantine Station Community Consultative Committee can be found at: https://www.planning.nsw.gov.au/-/media/Files/DPE/Reports/CCC-annual-reports/2019/quarantine-station-manly-ccc-report-2019.pdf?la=en .	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
59	The QSCCC shall meet at least quarterly during the first 3 years from the commencement date and thereafter on an as needs basis, as determined by the Committee. The Committee shall function for the duration of this approval. Minutes are to be taken for each Committee meeting.	Operation	Joint	<p>The Quarantine Station Community Consultative Committee is established to assist with the conservation and management of the historic site.</p> <p>Meeting minutes from the Quarantine Station Community Consultative Committee can be found at:</p> <p>https://www.environment.nsw.gov.au/about-us/who-we-are/advisory-committees/quarantine-station-community-consultative-committee.</p> <p>The February 2019 – February 2020 Annual Report from the Quarantine Station Community Consultative Committee can be found at:</p> <p>https://www.planning.nsw.gov.au/-/media/Files/DPE/Reports/CCC-annual-reports/2019/quarantine-station-manly-ccc-report-2019.pdf?la=en.</p>	Compliant
60	<p>The co-proponents shall:</p> <ul style="list-style-type: none"> a) provide the Committee with regular information on the environmental performance and management of the activity; b) provide all relevant plans, including site-wide plans (as defined), to the Committee for comment prior to their approval by the relevant authority; c) ensure the Committee has reasonable access to the necessary plans and 	Operation	Joint	<p>Meeting minutes from the Quarantine Station Community Consultative Committee can be found at:</p> <p>https://www.environment.nsw.gov.au/about-us/who-we-are/advisory-committees/quarantine-station-community-consultative-committee.</p> <p>The February 2019 – February 2020 Annual Report from the Quarantine Station</p>	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>reports and is provided with sufficient time to carry out its functions;</p> <p>d) consider the recommendations and comments of the Committee and provide a response to the Committee;</p> <p>e) provide the Committee with access to sufficient resources to perform its functions, including: a meeting space; photocopying, phone and fax facilities; computer/printer and supervised access to the site;</p> <p>f) make any resolutions or decisions arising from Committee meetings available for public inspection within fourteen days of the Committee endorsing the written record of any such resolutions or decisions, or as otherwise agreed by the Committee; and</p> <p>g) shall, depending on the frequency of meetings and workload of the Committee, consider reimbursing community representatives for reasonable expenses associated with their work on the Committee.</p>			<p>Community Consultative Committee can be found at:</p> <p>https://www.planning.nsw.gov.au/-/media/Files/DPE/Reports/CCC-annual-reports/2019/quarantine-station-manly-ccc-report-2019.pdf?la=en.</p>	
CONTRACTORS					
Environmental Management System					
61	Contractors engaged in the undertaking of the activity must be able to demonstrate a commitment to environmental management. Demonstration should be by way of commitment to a recognised Environmental Management	Operation	Joint	A register of contractors working at Q Station during the reporting period is kept by the General Manager on site.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	System in accordance with NSW Government guidelines and/or a proven satisfactory environmental management performance record.			<p>The main contractor working on site during the reporting period was:</p> <ul style="list-style-type: none"> Ironbark Constructions. <p>Mawland require a commitment to the EMS procedures and protocols from all contractors prior to engagement.</p> <p>All contractors receive instruction from Max Player (Mawland Group), the Maintenance Supervisor and where required, Helen Drew (regarding education, heritage and the museum) prior to undertaking works on site.</p>	
Appropriately Skilled Contractors And Consultants					
62	<p>All works, including those works identified in the DACMP as requiring specialist expertise, shall be carried out by:</p> <p>a) for construction works - licensed, suitably qualified and, where appropriate, specialised tradespersons; and</p> <p>b) for planning and assessment works - suitably qualified and specialised staff, consultants and/or contractors.</p>	Operation	Joint	<p>A register of contractors working at Q Station during the reporting period is kept by the General Manager on site.</p> <p>The main contractor working on site during the reporting period was:</p> <ul style="list-style-type: none"> Ironbark Constructions <p>All contractors receive instruction from Max Player (Mawland Group), the Maintenance Supervisor and where required Helen Drew (regarding education, heritage and the museum) prior to undertaking works on site.</p>	Compliant
63	Prior to the commencement of works the co-proponents shall submit a list of appropriately qualified and/or experienced heritage specialists (particularly architects, landscape planners and builders) to the Heritage Council and DEC for	Operation	Joint	No works were undertaken during this reporting period that triggered this CoPA.	Not Triggered

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	approval. The list shall include at least 3 specialists in each relevant field where possible. All specialists contracted to work on-site shall be those identified as a preferred contractor, unless otherwise approved by the Heritage Council and DEC.				
64	The co-proponents shall ensure that all contractors, sub-contractors and consultants working on the site are aware of the relevant conditions of approval for the activity and have been provided with sufficient training and awareness regarding the conservation values of the site.	Operation	Mawland	<p>NPWS and Mawland both have an induction process for contractors prior to commencement of works on site. Where a contractor is used for multiple works, the induction is updated as necessary. All relevant conditions of approval are discussed in the induction training.</p> <p>An induction register is kept by the Mawland General Manager or head contractor (where appropriate).</p>	Compliant
Training For Contractors And Staff Working On Heritage Sites					
65	<p>a) An induction and training program shall be developed by a suitably qualified person and provided to the following persons within 1 week of those persons commencing duties/works:</p> <ul style="list-style-type: none"> All contractors and sub-contractors, who will be required to attend such a program through the provision of a clause in all contracts for on-site works: and All staff employed on the site, including but not limited to shuttle bus drivers(s) and ferry crew, whether on a 	Operation	Mawland	<p>NPWS and Mawland both have an induction process for contractors prior to commencement of works on site. Where a contractor is used for multiple works, the induction is updated as necessary. All relevant conditions of approval are discussed in the induction training.</p> <p>An induction register is kept by the General Manager or head contractor (where appropriate).</p>	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>permanent, temporary, contract or casual basis. Staff working on the site for a period longer than 12 months must undertake a refresher program every year.</p> <p>The program shall include, but not be limited to, an environmental management module outlining the natural and cultural heritage significance or the site and procedures to be followed while working on site, and</p> <p>b) An education and awareness program shall be developed and provided by a suitably qualified person for companies providing services such as, but not limited to, coach and bus access, service delivery and other regular vehicle access to the site within one month of them accessing the site.</p>				
INFORMATION MANAGEMENT AND DOCUMENTATION					
Information Management System					
66	The co-proponents shall develop and implement a computer-based information management and Geographic Information System (GIS) for the site. The requirements of the State Records Act 1998 and other relevant legislation, standards and guidelines shall be taken into account in developing the system.	Operation	Joint	A computer based information management system and GIS was not developed for Q Station. Documentation is held in paper files at S7 at Q Station and on the NSW Government Department information system CM9.	Non - Compliant
67	An outline of the system is to be submitted to the DEC for approval within 12 months of the commencement date. Implementation of the system must commence within 3 months of the date its approval.	Operation	Joint	A computer based information management system and GIS was not developed for Q Station. Documentation is held in paper files at S7 at Q Station and on the NSW	Non - Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
				Government Department information system CM9.	
68	<p>The primary role of the system shall be to document decision making by providing a record of all works and management actions taken, and provide current information on resources and assets at the site. The system must be regularly updated and record and reference a range of information, including but not limited to the following:</p> <ul style="list-style-type: none"> a) all approvals issued for works; b) all works undertaken, including renovation, construction and regular maintenance works (date, what work, location etc); c) monitoring programs implemented; d) references to building plans, files, maps, design specifications and other documents; e) Conservation Works Program schedules, including a list of works (including regular maintenance works), priorities and when works are to be conducted (month/year); f) Moveable Heritage and Resources Plan (condition 85); and g) GIS data layers: <ul style="list-style-type: none"> • location of lease boundary • locations of standing buildings, inscriptions, former fence lines and barriers, cultural landscape features and 	Operation	Joint	A computer based information management system and GIS was not developed for Q Station. Documentation is held in paper files at S7 at Q Station and on the NSW Government Department information system CM9.	Non - Compliant


CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>other historic structures, works and paths</p> <ul style="list-style-type: none"> archaeological information as per the requirements of the North Head Quarantine Station Archaeological Management Plan locations of Aboriginal archaeological sites locations of threatened flora species, Eastern Suburbs Banksia Scrub, and high-use foraging habitat for the Long-nosed Bandicoot areas subject to bushfire hazard reduction and/or wildfires, including fire history bush regeneration areas, including a history of works locations of all existing and new site services and infrastructure locations of all new works (including carparks, reconstructions, signs, lights, fences, paths) data from monitoring programs, as relevant (eg. Longnosed Bandicoot and penguin mortalities). 				
69	The co-proponents shall undertake a review of the information management and GIS system every five years after the commencement date for the duration of the activity. The review shall focus on the effectiveness of the system for managing data, and currency of information	Operation	Joint	A GIS or information management system was not developed for Q Station therefore a review was not possible.	Not Triggered

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	contained within the system, and be submitted to the DEC. The co-proponents shall comply with all reasonable requirements of the DEC with respect to the outcomes of the review.				
ABORIGINAL HERITAGE					
70	<p>The co-proponents shall prepare and implement an Aboriginal heritage management plan for the Quarantine Station in partnership with the relevant Aboriginal community group/s. The plan shall be submitted to the Heritage Council and DEC for approval within 12 months of the commencement date.</p> <p>The plan shall provide a strategic framework for conserving and managing Aboriginal cultural heritage values and provide a schedule of conservation works. It must consider all Aboriginal cultural heritage values associated with the Quarantine Station site, including physical site, wild resource use, and social values in a traditional, historical and contemporary context.</p>	Operation	Joint with MLALC	A 'North Head Aboriginal Site Management Report' was prepared in 2008 by the Aboriginal Heritage Office.	Compliant
71	<p>The plan shall address, but not be limited to, the following matters:</p> <ul style="list-style-type: none"> a) the identification of key stakeholders and their interest; b) the identification and documentation, as appropriate, of Aboriginal cultural values, taking into account values associated more broadly with North Head, and provide a statement of significance; 	Operation	Joint	<p>A 'North Head Aboriginal Site Management Report' was prepared in 2008 by the Aboriginal Heritage Office.</p> <p>The plan is scheduled for a review in 2022.</p>	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>c) document the results of an audit of all Aboriginal sites known to occur in the lease area. The audit shall:</p> <ul style="list-style-type: none"> • review and consolidate records from all previous investigations at the Quarantine Station • record any previously unrecorded sites, and identify any site duplications • develop an Aboriginal site data layer for use on the Quarantine Station GIS database (access restrictions to data will be determined in consultation with the relevant Aboriginal community group/s); <p>d) constraints and opportunities;</p> <p>e) conservation policy / objectives;</p> <p>f) strategies or actions;</p> <p>g) provide a schedule of conservation works required for Aboriginal sites within the lease area. The schedule should be based on the recent conservation assessment conducted by AMBS (2002) for the NPWS, and shall be incorporated into the Conservation Works Program (condition 78);</p> <p>h) management responsibilities, performance measures and monitoring procedures; and</p>				

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	i) liaise with DEC and use the information to update the NPWS Aboriginal Heritage Information Management System.				
72	The co-proponents shall undertake a review of the Aboriginal Heritage Management Plan every five years after the commencement date for the duration of the activity. The review shall be undertaken in consultation with the Heritage Council, DEC and relevant Aboriginal stakeholders. On the basis of the review the co-proponents shall, as necessary, prepare a revised Aboriginal Heritage Management Plan to be submitted to the Heritage Council and DEC for approval.	Operation	Joint	The Plan is to be reviewed in 2022 in consultation with the Heritage Council, Heritage NSW, and relevant Aboriginal Stakeholders.	Not Triggered
73	Any conservation works for Aboriginal sites are to be undertaken in accordance with the plan and schedule of conservation works and in consultation with the relevant Aboriginal community group/s.	Operation	Joint	No work undertaken during this reporting period.	Not Triggered
74	The co-proponents will, undertake on-going consultation with the relevant Aboriginal community groups on aspects of the proposal and operation of the site that relate to Aboriginal heritage. These aspects shall include, but not be limited to: <ul style="list-style-type: none"> a) the development of protocols for Aboriginal community involvement in the management of Aboriginal heritage within the lease area; b) the development of educational material and tours interpreting Aboriginal heritage; 	Operation	Joint	There has been a lapse in on-going consultation with the Aboriginal community. The co-proponents have obtained advice on these matters as required.	Non-Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<ul style="list-style-type: none"> c) opportunities for establishing a centre for Aboriginal cultural heritage on site; d) on-going evaluation of the Aboriginal cultural heritage values of the site (to include both new information on historical associations and emerging contemporary values of the place, such as wild resource use); and e) other relevant matters identified in consultations between the co-proponents and the Aboriginal communities. Relevant groups and individuals to be consulted shall be determined in consultation with the DEC. 				
75	There shall be no promotion of or public access to Aboriginal sites within the Quarantine Station unless endorsed by the relevant Aboriginal community group/s and the DEC.	Operation	Joint	There is no promotion of or public access to Aboriginal Sites within the Quarantine Station.	Compliant
76	<p>A fence shall be installed near the southwest end of Building A14-17 to limit public access to Cannae Point within twelve months of the commencement date. The location and design of the fence shall:</p> <ul style="list-style-type: none"> a) be determined in consultation with the relevant Aboriginal community groups; b) take into account fencing requirements for the protection of Little Penguin habitat (see condition 174); and 	Operation	Joint	This fence was completed in 2008 in accordance with this condition.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	c) be designed in consultation with the DEC prior to the lodgement of an application for construction work.			 <p>Fencing west from A14 – 17.</p>	
HISTORIC HERITAGE					
Conservation Works Program					
77	<p>For the purposes of the following conditions of approval, conservation works are those works that are essential and necessary to retain the cultural significance of the place. This may include, but is not limited to:</p> <ul style="list-style-type: none"> a) building, landscape and infrastructure works to the extent that these demonstrably contribute to the physical conservation of the site; b) curatorial work on inscriptions, archives, artefacts and moveable heritage; c) environmental management programs, such as erosion, weed and feral animal control; d) a portion of works to improve visitor access within the site (being basic 	Operation	Joint	There have been no conservation works during this reporting period. Regular maintenance works are undertaken as and when required.	Not Triggered

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>works, such as disabled access ramps, that are considered essential to provide equitable access and to minimise visitor impacts); and</p> <p>e) a portion of works to improve visitor understanding of the significance of the place (being basic works, such as interpretive displays).</p> <p>It does not include:</p> <p>a) works associated with the planning, design and the physical reconstruction of buildings P21, P22, P23 and H1;</p> <p>b) assessment work or documentation undertaken as part of the preparation of the EIS or PAS, including design drawings;</p> <p>c) assessment work or documentation to be undertaken as part of the preparation of detailed design plans for proposed adaptation work; or</p> <p>d) works completed prior to the commencement date, with the exception of urgent works identified in the DACMP.</p>				
78	<p>The co-proponents shall prepare and submit a final Conservation Works Program (CWP) to the Heritage Council and the DEC for approval as follows:</p> <p>a) Stage 1 of the CWP encompassing works required for all buildings, structures and landscape elements, including but not limited to those</p>	Operation	Mawland	A Conservation Works Program was approved in 2006 by NPWS on 12 May 2006 and the Heritage Council on 01 June 2006.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>identified in the DACMP and the asbestos sampling and replacement strategy (condition 111), shall be prepared within six months of the commencement dates: and</p> <p>b) Stage 2 of the CWP encompassing all works identified for Aboriginal sites (Condition 70), the Moveable Heritage and Resources Plan (Condition 85), Heritage Landscape Master Plan (Condition 91), Inscriptions Plan (Condition 95), Interpretation Plan (Condition 100) and Infrastructure Control Plan (as relevant – Condition 105) shall be prepared and incorporated into the CWP as soon as practicable</p>				
79	<p>For all heritage items covered by condition 78) above, the CWP shall include, but not be limited to the following:</p> <p>a) identification of all conservation works and priorities at a site level. This should identify urgent works (0-1 year), medium term work (1-3 years) and long term work (3-5 years);</p> <p>b) identification of all works relevant to ensuring public health and safety for each building or historic item (such as the removal and stabilisation of asbestos materials);</p> <p>c) identification of any issues requiring further assessment or research, an</p>	Operation	Joint	A Conservation Works Program was approved in 2006 by NPWS on 12 May /2006 and the Heritage Council on 01 June 2006.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>approach for addressing this, and a timeframe where appropriate;</p> <p>d) an outline of the methodology, materials and standards to be followed for all maintenance works; and</p> <p>e) identification of any on-going monitoring requirements.</p>				
80	Following the approval of Stage 1 of the CWP, the co-proponents shall undertake the urgent and medium term priority conservation works in accordance with the staging plan for the activity, as amended by condition 31).	Operation	Joint	A Conservation Works Program was approved in 2006 by NPWS on 12 May 2006 and the Heritage Council on 01 June 2006.	Compliant
81	All conservation works, excluding minor maintenance repairs or works (as defined), shall be conducted in accordance with the Conservation Works Program.	Operation	Joint	There were no such works undertaken during this reporting period.	Not Triggered
82	<p>The co-proponents shall undertake a review of the CWP concurrent with or prior to the first comprehensive audit of the activity (condition 228), and thereafter on an annual basis as part of the overall annual environmental report (condition 221). An annual review is not required in the year that a comprehensive review of the CWP occurs (condition 83).</p> <p>The review must be undertaken in consultation with the DEC and the Heritage Council, and include:</p> <p>a) a list of conservation works implemented;</p> <p>b) the identification of any additional conservation works required to be</p>	Operation	Joint	A review of the CWP has not occurred since 2006. A review is scheduled for 2022.	Non-Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>undertaken. This must include specific consideration of the condition of all asbestos items and actions required to ensure that public health and safety standards are met ; and</p> <p>c) information on the amount spent on conservation works (including maintenance works) within the site annually, together with independent verification of expenditures provided by a quantity surveyor. The information should include a breakdown on costs and works undertaken.</p> <p>Advice must be sought from the relevant Aboriginal community group/s, an appropriately qualified and experienced conservation practitioner and other specialists as required in the review process.</p>				
83	The co-proponents shall undertake a regular comprehensive review of the CWP concurrent with or prior to the on-going (5 yearly) comprehensive audits of the activity (condition 228). The review shall be undertaken in consultation with the Heritage Council and the DEC. In addition to the matters referred to above, the review shall include a re-assessment of the condition of each heritage item (historic and Aboriginal) and a reassessment of conservation priorities.	Operation	Joint	A review of the CWP has not occurred since 2006. A review is scheduled for 2022.	Non-Compliant
84	On the basis of the comprehensive review and the outcomes of the comprehensive audit process (condition 226) the co-proponents shall,	Operation	Joint	Next review to be undertaken in 2022.	Not Triggered

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	as necessary, prepare a revised CWP to be submitted to the DEC and the Heritage Council for approval.				
Moveable Heritage And Resource Collection					
85	<p>The co-proponents shall submit a Moveable Heritage and Resource Collection Plan within 12 months of the commencement date. The plan shall include all items of moveable heritage and items from the resource collection. The plan shall address the requirements of the State Records Act 1998 and other relevant legislation and be prepared by a suitably qualified person with demonstrated skills and experience in the management of archival collections.</p> <p>The plan shall be reviewed by the Heritage Advisor and submitted to the DEC and the Heritage Council for approval. Implementation of the plan must commence within 3 months of its approval.</p>	Operation	NPWS	A Moveable Heritage and Resource Collection Plan was prepared in 2007 by Anne Cummings. The Plan was approved by Tony Fleming, Deputy Director – General Parks and Wildlife Division on 20 April 2007 and Reece McDougall, Executive Director, Heritage Office on 10 August 2007.	Compliant
86	<p>The plan shall include, but not be limited to:</p> <ul style="list-style-type: none"> a) the documentation and recording of all moveable heritage and resource collection items, to be registered on a database system; b) a condition assessment of each moveable heritage item and, as appropriate, items in the resource collection and a prioritised schedule of conservation works required. This shall be incorporated into the Conservation Works Program (condition 78); 	Operation	NPWS	A Moveable Heritage and Resource Collection Plan was prepared in 2007 by Anne Cummings. The Plan was approved by Tony Fleming, Deputy Director – General Parks and Wildlife Division on 20 April 2007 and Reece McDougall, Executive Director, Heritage Office on 10 August 2007.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>c) collection management guidelines, including:</p> <ul style="list-style-type: none"> • a system for referencing and recording information for all items, with an ability to incorporate new information and/or items as it becomes available; • storage requirements for all items, including: <ul style="list-style-type: none"> - consideration of whether items should be stored on or off-site. - conservation requirements for housing and storing items. - an approach to the documentation and storage of fabric and materials removed during construction and adaptation works. This should consider the requirements outlined in the DACMP; and • a system and protocols for public access to items, and the loan of items outside the Quarantine Station; <p>d) fabric and material sampling guidelines, with reference to the minimum requirements outlined of the Archaeological Management Plan; and</p> <p>e) identify and implement a system for cross-referencing the collections held by other institutions (eg. State Records NSW and the National Archives of</p>				

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	Australia) which relate to the Quarantine Station site.				
87	No items of moveable heritage or items from the resource collection shall be used for display purposes or made available on loan outside the Quarantine Station until the Moveable Heritage and Resources Plan has been adopted.	Operation	Joint	A Moveable Heritage and Resource Collection Plan was prepared in 2007 by Anne Cummings. The Plan was approved by Tony Fleming, Deputy Director – General Parks and Wildlife Division on 20 April 2007 and Reece McDougall, Executive Director, Heritage Office on 10 August 2007.	Compliant
88	The display, storage, loan and public access of moveable heritage must be undertaken in accordance with the Moveable Heritage and Resources Plan	Operation	Joint	There were small pox vaccination kits on display. These were scraped on site by Ashleigh Porter of the University of Sydney in September 2018 with the approval from Elizabeth Broomhead.	Compliant
89	The co-proponents shall undertake a review of the Moveable Heritage and Resources Plan every five years after the commencement date for the duration of the activity. On the basis of the review the co-proponents shall, as necessary, prepare a revised Moveable Heritage and Resources Plan to be submitted to the DEC and Heritage Council for approval.	Operation	Joint	<p>A review was not undertaken during the reporting period.</p> <p>A review of this plan will be undertaken in 2021/22 and approval will be sought from the Heritage Council.</p>	Non-compliant
Heritage Landscape Master Plan					
90	The cultural landscape will be conserved, managed and interpreted primarily to reflect its 1958-84 form (the Aviation phase). The interpretation of earlier landscape conditions is appropriate providing there is demonstrated compliance with the policies in the QSCMP, DACMP and Interpretation Plan (condition 100)	Operation	Joint	<p>The cultural landscape is managed in accordance with the Heritage Landscape Plan:</p> <p>https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Parks-plans-of-management-other-documents/quarantine-station-heritage-</p>	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	or a clear justification for any proposed variances.			<u>landscape-management-plan.pdf?la=en&hash=AEB5B9F24B52496A4D0E4D297D0A8A7B2C9925C0</u> .	
91	The co-proponents shall engage a qualified horticulturist, arborist and heritage landscape specialist to prepare a site wide Heritage Landscape Master Plan within 18 months of the commencement date. The plan shall be reviewed by the Heritage Advisor and submitted to the DEC and Heritage Council for approval.	Operation	Joint	The Heritage Landscape Management Plan was prepared by Thompson Berrill Landscape Design Pty Ltd in August 2005. The plan was approved by Simon McArthur, General Manager Mawland Hotel Management and Q Station in May 2006, Tony Fleming, Deputy Director-General Parks and Wildlife Division on behalf of DEC on 15 September 2006 and Reece McDougall, Executive Director Heritage Office on 15 September 2006.	Compliant
92	The Plan must address, but not be limited to: <ul style="list-style-type: none"> a) objectives for the management of the cultural landscape, including geology and soils, cultural plantings, bushland, paths and edgings, fences and walls, cemeteries, grave markers, and former landscape features; b) an assessment of the condition of existing cultural plantings (including grassed areas), walls, fences, stormwater drains, paths and edgings, and identification of areas of soil erosion and contamination; c) a prioritised schedule of conservation and/or remediation works to be incorporated into the Conservation Works Program (condition 78); 	Operation	Mawland	The Heritage Landscape Management Plan addresses and includes the items referenced in this condition.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>d) proposed changes to the existing landscape, to be supported by research where necessary;</p> <p>e) proposed management protocols, practices and maintenance works for all landscape features. This should include, but not be limited to:</p> <ul style="list-style-type: none"> • stabilisation of eroded areas • drainage, irrigation and use of fertilisers • treatment of lawn edges and bushland/lawn interfaces, including natural regenerated areas where these have encroached on significant historic sites • monitoring and treatment of trees • species list and guidelines for cultural plantings, including a re-planting strategy • the introduction of new plant or organic materials • materials and construction techniques to be used in landscaping works. <p>f) a bush regeneration program (as defined);</p> <p>g) identify general areas where the planting of new vegetation to provide small-scale shelter habitat for Long-nosed Bandicoots could occur without</p>				

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>significant impact on the cultural landscape (condition 165);</p> <p>h) monitoring requirements; and</p> <p>i) consider the following specific issues:</p> <ul style="list-style-type: none"> • First Class Precinct Plan – options for re-instatement of the covered walkway from Building P6 to Building P5, as required by the DACMP, and potential impacts associated with these; • Third Class / Asiatic Precinct – options for reinstatement of selected former access paths within the precinct as an interpretive tool; • Entry area at Building A2 (refer Schedule 3) – identify appropriate design outcomes for the entry area at Building A2 and consider options such as a courtyard or reversible deck, to balance the new uses for this area with the unadorned nature of the Quarantine Station landscape and the historical and archaeological context of the location; and • Second Cemetery – identify options for formalising access to and within the Second Cemetery, including options for a single stabilised path or constructed walkway. Consideration should be given to: design and materials; and 				

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	potential environmental impacts and mitigative strategies.				
93	<p>All landscape works, excluding minor maintenance works (as defined), are to be undertaken in accordance with the adopted Heritage Landscape Master Plan, with the following exceptions:</p> <ul style="list-style-type: none"> a) car park construction – where an application for b) construction works is approved prior to the adoption of the Plan; and c) the establishment of a stabilised path or walkway in the Second Cemetery (condition 92) – where an application for construction works is approved prior to the adoption of the Plan. 	Operation	Joint	There were no landscaping works undertaken during this reporting period.	Not Triggered
94	The co-proponents shall undertake a review of the Heritage Landscape Master Plan every five years after the commencement date for the duration of the activity. The review shall be undertaken with advice from a heritage landscape specialist and other relevant specialists. On the basis of the review the co-proponents shall, as necessary, prepare a revised Heritage Landscape Master Plan to be submitted to the DEC and the Heritage Council for approval.	Operation	Joint	Next review to be undertaken in 2022.	Not Triggered
Inscriptions / Engravings					
95	The co-proponents shall engage an appropriately qualified and experienced conservation specialist in rock art or stone	Operation	Joint	An Inscription Management Plan was prepared as Appendix C of the Heritage Landscape Management Plan (May 2006).	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>conservator to prepare an Inscriptions Management Plan within 18 months of the commencement date. The plan shall be reviewed by the Heritage Advisor and submitted to DEC and the Heritage Council for approval.</p> <p>The plan will cover the engravings, inscriptions, pit cover engravings and wall inscriptions together with options for managing public access such as fencing and re-alignment of the lower walkway from the Hospital to Wharf Precincts. The plan shall:</p> <ol style="list-style-type: none"> provide a brief description of the location, significance and condition of all engravings and inscriptions within the site; identify the need for further recording or documentation of engravings and inscriptions; outline objectives and strategies for the management of the engravings and inscriptions. In identifying management options, an assessment of potential environmental impacts of works must be undertaken and incorporated into the document. At a minimum, this must address all works requiring direct contact with the surface of inscriptions and engravings, such as cleaning, graffiti removal, taking of moulds and repainting; provide a prioritised schedule of works, including conservation works and a maintenance program, as required, to 			<p>The Plan was approved by Tony Fleming, Deputy Director-General, parks and Wildlife Division on 15 September 2006 and Reece McDougall, Executive Director, Heritage Office on 15 September 2006.</p> <p>https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Parks-plans-of-management-other-documents/quarantine-station-heritage-landscape-management-plan.pdf?la=en&hash=AEB5B9F24B52496A4D0E4D297D0A8A7B2C9925C0</p>	

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	be incorporated into the Conservation Works Program (condition 78); and e) develop an on-going monitoring program to assess the condition of engravings and inscriptions.				
96	The co-proponents shall undertake a review of the Inscriptions Management Plan every five years after the commencement date for the duration of the activity. The review shall be undertaken with advice from relevant specialists. On the basis of the review the co-proponents shall, as necessary, prepare a revised Inscriptions Management Plan to be submitted to the DEC and the Heritage Council for approval.	Operation	Joint	A review of this plan has not been undertaken. Review to be undertaken in 2022.	Non-Compliant
97	No works shall be undertaken on, or in respect to the inscriptions or engravings prior to the adoption of the Inscriptions Management Plan. Any interim arrangements to manage access to the inscriptions for interpretive purposes must be approved by the DEC and the Heritage Council.	Operation	Joint	An Inscription Management Plan was prepared as Appendix C of the Heritage Landscape Management Plan (May 2006). The Plan was approved by Tony Fleming, Deputy Director-General, Parks and Wildlife Division on 15 September 2006 and Reece McDougall, Executive Director, Heritage Office on 15 September 2006. https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Parks-plans-of-management-other-documents/quarantine-station-heritage-landscape-management-plan.pdf?la=en&hash=AEB5B9F24B52496A4D0E4D297D0A8A7B2C9925C0	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
98	All conservation works on the engravings and inscriptions shall be undertaken by an appropriately qualified and experienced conservation specialist. For the rock engravings, this means a qualified and experienced rock art or stone conservator	Operation	Joint	Works have not been completed. The stone mason recommended by the Heritage Council was not willing to undertake the works and the Heritage Council has not approved the works to be undertaken by the University of Sydney.	Non-Compliant
Internal Fitout					
99	<p>The co-proponents shall engage a suitably qualified and experienced person to prepare a site wide plan for internal building fitout within 12 months of the commencement date. The plan shall be reviewed by the Heritage Advisor and submitted to DEC and the Heritage Council for approval. All internal fittings installed across the site must be consistent with the adopted plan.</p> <p>The Plan shall:</p> <ul style="list-style-type: none"> a) outline the specifications and style of all new plumbing, telecommunication and electrical fittings, and floor coverings to be installed across the site. It must include taps, spouts, shower heads, basins, baths, toilets, electrical fittings, carpets and floor tiling, etc, and demonstrate consistency with the relevant policies of the DACMP; and b) outline an approach to sampling of bathroom and toilet fitouts across the site from the 1958-62 period, taking into account the relevant policies of the DACMP. 	Operation	Joint	An Internal Fit Out Plan was prepared in 2005 by Paul Davies Architects Pty Ltd and Cate Young Design. The plan was approved by the Heritage Office on 13 June 2005 and NPWS on 25 January 2006.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
Archaeology					
99A	<p>a) An Excavation Permit must be obtained before the commencement on site of any works involving potential disturbance of relics. An archaeologist (Excavation Director) approved by the Heritage Council must be appointed to undertake all archaeological work.</p> <p>b) The research design outlined in the Quarantine Station Detailed Area Conservation Management Plan (QSDACMP) must form the basis for interpretation of archaeological deposits and relics.</p> <p>c) Provision must be made in a public area of the Quarantine Station site to display relics or other historical or research material relevant to the historical development of the site. This display must be integrated with the Interpretation Plan.</p> <p>d) Should substantial intact archaeological deposits or features not identified in the Archaeological Assessment be discovered, work must cease in the affected area(s) and the Heritage Office contacted for advice. Additional assessment and approval may be required prior to works continuing in the affected area(s) based on the nature of the discovery.</p>	Operation	Joint	<p>An Excavation permit (S60 No 2011/S60/85) for the reconstruction of building P21 and P23 at North Head Quarantine Station was originally issued and approved on 26 March 2012. Subsequently a Section 65a was lodged to vary the design of the proposed new building (S65a/2016/41). Approval for the new design was received on 14 February 2017.</p> <p>Archaeological monitoring was carried out by Austral Archaeology Pty Ltd as part of the ongoing archaeological investigations of the sites of P21 and P23 and followed the test excavations carried out by Austral Archaeology within the footprint of the demolished building in 2016.</p> <p>A report prepared by Austral Archaeology documents the results of the archaeological monitoring carried out during the excavations for the reconstructions of P21 and P23. This report was submitted to the Heritage Council on 17 October 2018. No relics associated with Aboriginal people were recovered in the monitoring works. No archaeological material relating to the 1837 occupation of the site by building P51 and P52 were found during the monitoring of construction trenches at the P23 site.</p>	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>e) The archaeologist must remain present during the course of all excavation works in the archaeologically sensitive areas of the proposed development.</p> <p>f) The archaeologist must be allowed access to archaeological deposits at all times during mechanical excavation and mechanical excavation must cease at the request of the archaeologist, to allow for investigation of archaeological remains.</p> <p>g) Opportunities for public visitation to the site will be provided during the program of archaeological works and, where appropriate, community and student volunteers will be invited to participate in field work.</p> <p>h) The excavation permit will be valid only while the approved excavation is being carried out under the direction of the nominated Excavation Director</p> <p>i) The Excavation Director must carry out the excavation in accordance with the approved research design and methodology. Any substantial deviations from the approved research design (including extent and techniques of excavations) must be approved by the Director, Heritage Office.</p> <p>j) The Excavation Director must take adequate steps to record relics, structures and features discovered on the site during the excavation in</p>			<p>Structural archaeological evidence of the later occupation of the Quarantine Station was identified and evident at both the P21 and P23 sites in the form of sandstone foundations and footings. All of the structural archaeological remains revealed and recorded in the monitoring works have been retained beneath the new building and will be permanently conserved in situ.</p>	

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	accordance with current best practice guidelines and the approved research design.				
	k) The co-proponents must endeavour to ensure that the unexcavated artefacts, structures and features are not subject to deterioration, damage or destruction.				
	l) The co-proponents shall be responsible for the safe-keeping of all relics recovered from the site.				
	m) The Excavation Director shall be responsible for ensuring that the artefacts are cleaned, stabilised, identified, labelled, catalogued and stored in a way that allows them to be retrieved according to both type and provenance.				
	n) The Heritage Council and the Heritage Office reserve the right to inspect the site and records at all times and access any relics recovered from the site.				
	o) The co-proponents shall prepare a final report on the excavation, to publication standard, within one year of the conclusion of the project unless an extension of time is approved by the Heritage Council. Two copies of this report must be submitted to the Heritage Office. A further copy must be retained on site as part of the interpretive collection.				
	p) The final report shall include:				

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<ul style="list-style-type: none"> • an executive summary; • due credit on the title page to the co-proponents paying for the excavation; • an accurate site location and site plan; • historical research, references, and bibliography; • detailed information on the excavation including the aim, the context for the excavation, procedures, analysis, treatment of artefacts (cleaning, conserving, sorting, cataloguing, labelling, scale drawings, photographs, repository); • nominated repository for the items; • detailed response to research questions; and • details of how this information about this excavation has • been publicly disseminated. <p>q) Should any Aboriginal relics be uncovered, or excavation or disturbance of the area occur, work is to stop immediately and the National Parks and Wildlife Service is to be informed in accordance with the NPW Act 1974.</p>				

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
INTERPRETATION					
Interpretation Plan					
100	<p>Prior to the commencement of any new interpretive activities or educational tours on the site, the co-proponents shall submit a final Interpretation Plan to the DEC and the Heritage Council for approval. The Interpretation Plan must be prepared by a suitably qualified and experienced interpretive planner in accordance with the policies and objectives outlined in the QSCMP and DACMP. The plan must detail the approach to presenting the significance of the place and address the following matters:</p> <ul style="list-style-type: none"> a) the interpretation objectives and principles for the site and the proposal; b) a targeted analysis of the significance of the place and the primary and secondary interpretation themes and messages for the site; c) identify the key target audiences for interpretation; d) identify the preferred options for delivery of interpretive programs (eg. signage, guided tours, publications, Internet, etc); and e) detail methods for monitoring and evaluating the implementation of the Plan. 	Operation	Mawland	<p>The Interpretation plan was prepared in 2005 for the site.</p> <p>https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Parks-plans-of-management-other-documents/quarantine-station-interpretation-plan.pdf?la=en&hash=B1E2B03F63BA0EA6A24389D302B447AF7EF645E1.</p>	Compliant
101	The Interpretation Plan shall also address the following site-specific matters:	Operation	Joint	The Interpretation plan addresses and includes the site specific matters as required under this condition.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<ul style="list-style-type: none"> a) the provision of interpretive material in the proposed visitor centre (Buildings A14-17) that allows all visitors to the site to gain an understanding of the context, significance and history of the Quarantine Station; b) opportunities for the establishment of theme museums or displays across the Quarantine Station site; c) interpretation of the full length of the former Funicular route; d) interpretation of Buildings P17, A18, A24 and S6; e) interpretation of earlier landscape conditions (refer condition 90); and f) controlled tour access to the internal areas of accommodation buildings. This includes access to the Dining Room area in Building P5 when this room is not otherwise in use for function-based dining; 				
102	All interpretive activities on the Quarantine Station shall be undertaken in accordance with the approved Interpretation Plan.	Operation	Joint	All activities were undertaken in accordance with the Interpretation Plan.	Compliant
103	The co-proponents shall undertake a review of the Interpretation Plan every five years after the commencement date for the duration of the activity. The review shall be undertaken by a suitably qualified and experienced interpretive planner, in consultation with the Heritage	Operation	Joint	Next review to be undertaken in 2022.	Non-compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>Council. The review shall include, but not be limited to:</p> <ul style="list-style-type: none"> a) the range of interpretive programs being offered at the Quarantine Station. This shall include a review of the content, methods of delivery and consideration of contemporary best practice in interpretation; b) consider relevant results of the visitor monitoring program and adaptive management responses; c) consider the provisions of any current endorsed conservation management plan for the site; and d) provide recommendations for any revisions to the Interpretation Plan. <p>On the basis of the review the co-proponents shall, as necessary, prepare a revised Interpretation Plan to be submitted to the DEC for approval.</p>				
INFRASTRUCTURE					
Further Approvals					
104	A separate application and approval under Part 5 of the EP&A Act 1979 and other relevant legislation will be required for any amplification of the existing water supply and sewerage system. This does not include on-site works identified for the upgrading of the fire hydrant system or the installation of water tanks in the area adjoining the Lower Reservoir.	Operation	Mawland	No applications have been made under Part 5 of the EP&A Act 1979 during this reporting period.	Not Triggered

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
Infrastructure Control Plan					
105	The co-proponents shall prepare a site-wide Infrastructure Control Plan to be submitted within 12 months of the commencement date. The plan shall be prepared in consultation with NSW Fisheries, Environment Protection Authority, Sydney Water, Energy Australia and other relevant authorities. With the exception of the matters detailed in condition 106) c), the plan shall be reviewed by the Heritage Advisor and submitted to DEC and the Heritage Council for approval.	Operation	Mawland	The Infrastructure Control Plan was approved on 05 November 2008 by Sally Barnes (Deputy Director General Head – National Parks and Wildlife).	Compliant
106	<p>The plan shall address, but not be limited to, the following:</p> <ul style="list-style-type: none"> a) an assessment of the location, current capacity and condition of the water supply and sewerage system; b) an assessment of the current condition of the internal roads; c) minimum design standards for internal roads, including the location and design principles for all proposed road infrastructure, including road surfaces, edges, speed humps and signs. These shall take into account all relevant industry standards and codes, as well as the historic heritage value of the roads. d) Notwithstanding the provisions of condition 105) or condition 112), within 6 months of the commencement date the co-proponents shall submit for approval 	Operation	Joint	The Infrastructure Control Plan was approved on 05 November 2008 by Sally Barnes (Deputy Director General Head – National Parks and Wildlife) and includes the information required of this condition.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>of the DEC sufficient information regarding the minimum design standards to enable compliance with conditions 145)-146) and 148);</p> <p>e) provide a scaled map and GIS data layer (condition 66) showing the location and route of all water, sewerage, stormwater, power, telecommunications, roads and any related infrastructure across the site, both existing and disused services. It shall identify materials and likely period of installation, and be linked to a list of upgrade specifications for each infrastructure component;</p> <p>f) provide a schedule and map indicating the location of all significant services to be retained and conserved, as per the requirements of the DACMP;</p> <p>g) a schedule of repair and maintenance works and new works proposed including a prioritisation of works and timeframes. Priority should be given to the identification of any works needed to upgrade or replace the fire hydrant system. The principle of common trenching of services should be adopted for all new works proposed;</p> <p>h) identify strategies to improve stormwater management, including:</p> <ul style="list-style-type: none"> opportunities for reducing stormwater discharge from the site, including options for redirecting 				

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>stormwater discharge away from Quarantine Beach</p> <ul style="list-style-type: none"> • an assessment of works required to secure the stormwater outlet at Quarantine Beach to minimise public safety risk • assess the need to install a flow dissipator into the stormwater outlet at Quarantine Beach. Any design shall must not inhibit fish passage • assess the need to install gross pollutant traps at or near stormwater discharge outlet/s and car-parks; • a monitoring program to allow an on-going assessment of the consumption and capacity of the water supply and sewerage systems. This shall include the identification of triggers for system upgrades; and <p>i) an emergency strategy for utility infrastructure failures or malfunctions, to include sewerage system overloads and overflows, power failures and water supply.</p>				
107	All infrastructure maintenance and upgrade works, excluding minor maintenance repairs or works (as defined) and priority traffic calming measures (conditions 145 -146), shall be undertaken in accordance with the adopted Infrastructure Control Plan.	Operation	Joint	All infrastructure and maintenance works are undertaken in accordance with the Infrastructure Control Plan.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
108	All investigative techniques employed in preparing the Infrastructure Control Plan shall be non-destructive and non-polluting (as defined) and comply with the relevant industry guidelines and standards. Approval from the DEC and other relevant authorities will be required for any techniques that will or may have an environmental impact.	Operation	Joint	All techniques employed in the preparation of the ICP were non-destructive and non-polluting and comply with the relevant industry guidelines and standards.	Compliant
109	The co-proponents shall undertake a review of the Infrastructure Control Plan every five years after the commencement date for the duration of the activity. The review shall be undertaken in consultation with those agencies listed in condition 105) above, relevant public authorities and infrastructure providers. On the basis of the review the co-proponents shall, as necessary, prepare a revised Infrastructure Control Plan to be submitted to the DEC for approval.	Operation	Joint	No review has been undertaken. Next review to be undertaken in 2022. This will include updating the plan to include a digital copy for future reference.	Non-Compliant
Work Sites					
110	Any works requiring the excavation or trenching of areas shall be staged so that the extent of excavation or trenching does not exceed 50 metres at any one time. Any such works shall also be undertaken in accordance with condition 159).	Operation	Joint	Excavations were undertaken for the reconstruction of P21 and P23. These works were supervised by Austral Archaeology under the S60 approval.	Compliant
Asbestos And Rainwater System					
111	The co-proponents shall prepare and implement a sampling and replacement strategy for the AC rainwater system and AC vinyl tiles on the site in accordance with the policies outlined in the DACMP. The strategy shall be reviewed by the	Operation	Joint	There is no replacement strategy for the AC Rainwater System and AC Vinyl Tiles at this stage as treatment and the items remaining in situ has shown to be the safest option.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>Heritage Advisor and submitted to the DEC and the Heritage Council for approval.</p> <p>The strategy shall include a prioritised schedule of replacement works, to be incorporated into the Conservation Works Program (condition 78).</p>			<p>An asbestos register is maintained for the Q Station site and updated regularly.</p> <p>The Project Manager (Max Player) reviewed the asbestos register to ensure all buildings were up to date in compliance with the plan. Information in the review (18 September 2019) is as follows:</p> <ul style="list-style-type: none"> • In the Wharf precinct A14-17 roof; A11/12roof; A9 roof. These buildings have been painted and comply. • Buildings H2; H3; H4; H5; H6; H14 in the Hospital Precinct have asbestos roofs and gutters. All buildings show no sign of paint deterioration and comply. • Buildings H7-11; H15 Isolation precinct have asbestos roofs and are painted and comply, • Building A20 has asbestos roof, gutters and downpipes all have been painted and comply. • Small outbuildings P12/ P18 have asbestos roofs and are painted and comply. • Building A2 has painted asbestos roof and gutters and comply, • Building S6, S14, S15, S16, S4, S7 have asbestos roof and internal wall 	

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
				<p>sheeting, all have been painted and comply.</p> <ul style="list-style-type: none"> • Building A25 Post Office has an asbestos roof and gutters and are all painted and comply. • Building A28/ 29 has an asbestos roof, gutters and wall sheeting all painted and comply. 	
Outdoor Visitor Infrastructure					
112	<p>The co-proponents shall prepare a site-wide-plan for outdoor visitor infrastructure prior to the installation of any outdoor visitor infrastructure. The plan shall be reviewed by the Heritage Advisor and submitted to the DEC and the Heritage Council for approval. The plan shall demonstrate consistency with other relevant site-wide plans such as the Interpretation Plan and Heritage Landscape Master Plan, and address, but not be limited to:</p> <p>a) the proposed location, design and materials of the external lighting system, to include any emergency lighting. Lighting should have regard to the following principles:</p> <ul style="list-style-type: none"> • the avoidance of light spill in areas of high-use Long-nosed Bandicoot foraging habitat (as identified in Illustration 15 of the DACMP or the revised habitat assessment – condition 165) and Little Penguin habitat 	Operation	Joint	<p>The Visitor Management Plan was prepared by Simon McArthur, General Manager, Mawland Hotel Management and Q Station in 2005. The plan was approved by Tony Fleming, Deputy Director-General, Parks and Wildlife Division on 13 July 2005 and Robert Black, DIPNR on 10 August 2005.</p> <p>https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Parks-plans-of-management-other-documents/quarantine-station-visitor--management-plan.pdf?la=en&hash=E5077BAB159853EC5CA8B7DB6C7D2E7336FECE57</p>	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<ul style="list-style-type: none"> the use of lights in the red-orange spectral range in the Wharf Precinct minimising light spill across the site and outside of the site <p>b) the proposed location and design of waste receptacles, including fauna-proof bins;</p> <p>c) the proposed location, design and materials for signage, to include proposed text, style, graphics, and colours;</p> <p>d) a consideration of the environmental impacts of the specific locations and methods of installation for each element of outdoor visitor infrastructure; and</p> <p>e) compliance with relevant industry guidelines, codes, Australian Standards and the Building Code of Australia (BCA).</p>				
113	Prior to the commencement of any works associated with the installation of outdoor lighting, a sample of the proposed lighting of both general outdoor areas and any emergency lighting must be completed in consultation with the Heritage Council and approved by the DEC.	Operation	Joint	<p>No new lights were installed during this reporting period.</p> <p>Broken lights were replaced like for like. Where this was not possible, a light nominated by the contractor to be similar to the existing was installed.</p> <p>Some temporary solar lighting was installed near the stone steps on the Asiatic Area due to guidance concerns. These are approximately 6 cm from the ground level.</p>	Not Triggered
114	The use of laser or neon lighting (with the exception of emergency lighting), food or	Operation	Joint	Two vending machines were installed in 2019 by Mawland at the request of guests for	Non-Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	beverage vending machines, and commercial advertising signage on the site, is not permitted.			snacks and drinks when these services are not available on site.	
115	All outdoor visitor infrastructure works shall be undertaken in accordance with the adopted plan and an approved Precinct Plan.	Operation	Joint	There was no new work undertaken during the reporting period. Only maintenance works were carried out.	Not Triggered
SECURITY					
Security System					
116	<p>The co-proponents shall prepare a whole-of-site Security Plan in consultation with the NSW Police, to be submitted within 12 months of the commencement date. The plan shall be reviewed by the Heritage Advisor and submitted to the DEC for approval. Implementation of the plan must commence within three months of the date of its approval.</p> <p>The plan shall address, but not be limited to:</p> <ul style="list-style-type: none"> a) the DACMP subsidiary policies 16.7.1 – 17.7.6 with respect to locks and hardware across the site; b) a master-key system across the site that enables a consistent approach to keying; c) a monitored alarm system for buildings containing collections, that are periodically used for interpretation or that are remote and difficult to monitor, and security measures for all other buildings (eg. those in daily use); 	Operation	Joint	<p>The Visitor Management Plan includes a Security Plan (Section 6).</p> <p>The Visitor Management Plan was prepared by Simon McArthur, General Manager, Mawland Hotel Management and Q Station in 2005. The plan was approved by Tony Fleming, Deputy Director-General, Parks and Wildlife Division on 13 July 2005 and Robert Black, DIPNR on 10 August 2005.</p> <p>https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Parks-plans-of-management-other-documents/quarantine-station-visitor-management-plan.pdf?la=en&hash=E5077BAB159853EC5CA8B7DB6C7D2E7336FECE57</p>	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	d) enforcement powers under the NPW Act and protocols for dealing with breaches of the Act; e) reporting structure and protocols for dealing with security incidents, to include communication protocols with DEC and the NSW Police; and f) the need for security personnel on site.				
117	The co-proponents shall undertake a review of the Security Plan every five years after the commencement date for the duration of the activity. The review shall be undertaken in consultation with the NSW Police On the basis of the review the co-proponents shall, as necessary, prepare a revised Security Plan to be submitted to the DEC for approval.	Operation	Joint	No review has been undertaken. Next review to be undertaken in 2022.	Non-Compliant
TRANSPORT AND ACCESS					
Access Strategy					
118	The co-proponents shall prepare and submit a final Access Strategy for the site to the DEC and DIPNR for approval within 6 months of the commencement date. The strategy shall be prepared in consultation with the Heritage Council, Manly Council and the State Transit Authority. Once approved, the co-proponents shall implement the Access Strategy. The final Access Strategy must address but not be limited to: a) all available means of access to the site, including details of the ferry service and shuttle bus operation (including	Operation	Joint	The Visitor Management Plan includes details on access to the site (Sections 2, 3, 4 and 5). The Visitor Management Plan was prepared by Simon McArthur, General Manager, Mawland Hotel Management and Q Station in 2005. The plan was approved by Tony Fleming, Deputy Director-General, Parks and Wildlife Division on 13 July 2005 and Robert Black, DIPNR on 10 August 2005. https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>operating times, pick up/set down points, etc) (conditions 138)-142) and 155);</p> <p>b) access provisions within the site, including constraints and management strategies, details of service vehicles, bus and taxi access. Specific consideration shall also be given to access arrangements for the Second Cemetery (condition 124);</p> <p>c) access provisions to the wharf, including the arrival and departure routes for the ferry. These routes shall generally be in accordance with Figure 11.2 in the EIS. The co-proponents shall consult with NSW Fisheries regarding this matter;</p> <p>d) measures to promote public transport and reduce private vehicle access to the site;</p> <p>e) measures to be implemented to prevent additional visitors entering the site once visitor capacities, as specified in condition 120), have been reached;</p> <p>f) measures to ensure that a reasonable proportion of visitors in any one day include day visitors that arrived without pre-booking a tour or other activity;</p> <p>g) measures to provide for disabled, concession and non-English speaking access to the site and to enable participation in site activities;</p>			<p><u>protected-areas/Parks-plans-of-management-other-documents/quarantine-station-visitor--management-plan.pdf?la=en&hash=E5077BAB159853EC5CA8B7DB6C7D2E7336FECE57</u></p>	

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<ul style="list-style-type: none"> h) the provision of disabled access to every precinct. This component of the Access Strategy shall be prepared in accordance with the requirements of the Disability Discrimination Act and any guidelines or standards established under the Act; and i) the visitor monitoring program (condition 156). 				
119	The co-proponents shall undertake a review of the Access Strategy every five years after the commencement date for the duration of the activity. The review shall be undertaken in consultation with the Heritage Council, Manly Council and the State Transit Authority. On the basis of the review the co-proponents shall, as necessary, prepare a revised Access Strategy to be submitted to the DEC and DIPNR for approval.	Operation	Joint	No review has been undertaken. Next review to be undertaken in 2022.	Non-Compliant
Site Visitor Capacity					
120	<p>Visitation to the site and site visitor numbers must be in accordance with the following:</p> <ul style="list-style-type: none"> a) the optimum visitor capacity of the site is 315 people (including staff) at any one time. The co-proponents shall take all reasonable steps to ensure that the optimum visitor capacity (or less) is met for a majority of the time during which the site is publicly accessible; b) the maximum visitor capacity may be increased to 600 people (including staff) for up to 6 hours on up to 20 occasions 	Operation	Joint	<p>Visitation records are held at the Front Office, including recording the number of guests and those attending events on site at any one time.</p> <p>The Sales / Event Department comply with this condition when booking in events and take advice from the NPWS Ranger when necessary.</p> <p>Access to the Beach and Wharf is restricted by closure of the beach and wharf gates at</p>	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>per calendar year. Arrival and departure from these events must be distributed throughout the day period and these events must be held in accordance with the requirements of term 128 b) of the approval;</p> <p>c) evening and night time events and functions are to avoid high value bandicoot foraging habitat. Identification of high value bandicoot foraging habitat is to be determined by NPWS; and</p> <p>d) access to the Wharf and Quarantine Beach is to be prohibited during evening and night time events and functions. This does not preclude normal operations undertaken as part of the restaurant in building A6, including the outdoor eating area.</p>			<p>sunset. The key is held by the General Manager and the Duty Manager in case of emergency.</p>	
120A	<p>Site Travel and Access Plan must be prepared by a suitably qualified consultant, to the satisfaction of the Secretary, that details management measures to be implemented, at a minimum, for at least 5 event sizes, including those presented in Term 120, and is to include detail of the following:</p> <p>a) mode share targets and measures of how these will be implemented, monitored and achieved including details of the financial and human resources required to implement the targets;</p>	Operation	Joint	<p>The Visitor Management Plan includes details on site travel and access to the site (Sections 2, 3, 4 and 5).</p> <p>The Visitor Management Plan was prepared by Simon McArthur, General Manager, Mawland Hotel Management and Q Station in 2005. The plan was approved by Tony Fleming, Deputy Director-General, Parks and Wildlife Division on 13 July 2005 and Robert Black, DIPNR on 10 August 2005.</p> <p>https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-</p>	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>b) anticipated number and types of vehicles arriving at the site and car parking provisions for both staff and visitors;</p> <p>c) the management of the site car park (i.e. car park wardens/ traffic controllers) and management measures to ensure site visitors do not impact upon the parking provisions of North Head;</p> <p>d) detail of arrival and departure times and detail of how impacts of this upon existing traffic flows at North Head will be mitigated; and</p> <p>e) a map clearly delineating site access and parking provisions for various sized events of up to 600 people.</p> <p>The co-proponents must not hold have more than 450 people on site until the Site Travel and Access Plan is approved by the Secretary.</p> <p>The Site Travel and Access Plan must be implemented by the co-proponents for the duration of the Lease agreement.</p>			protected-areas/Parks-plans-of-management-other-documents/quarantine-station-visitor--management-plan.pdf?la=en&hash=E5077BAB159853EC5CA8B7DB6C7D2E7336FECE57	
121	Any proposal to increase the site capacity or the optimum visitor capacity after this time must be publicly exhibited and submitted for the approval of the DEC and DIPNR. The proposal must be accompanied by a clear assessment of the potential impacts of any increase on the significance of the Quarantine Station and justification based on the results of the visitor and site monitoring programs.	Operation	Joint	An increase in site capacity was included as part of the proposal for a modification of the Ministers Approval for the site. This was approved (MP08_0041 MOD 3). The approved capacity is now as per CoPA 120 (above).	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
Pricing					
122	The co-proponents shall ensure that all services and facilities at the site are made available at varying price-scales, commensurate with the standard of service to be provided, to facilitate choice and encourage equitable community access to the site. This shall include, but not be limited to, accommodation, tours, interpretive activities and educational facilities.	Operation	Joint	A range of facilities and prices are available at Q Station. https://www.qstation.com.au/room-options.html https://www.qstation.com.au/conference-packages.html	Compliant
123	Concessional pricing shall be provided for all tours and interpretive activities at the site.	Operation	Joint	Concession rates are available for all tours. https://www.qstation.com.au/ghost-tours.html	Compliant
Access To The Second Cemetery					
124	Based on the options identified in the Heritage Landscape Master Plan [condition 92 i)] suitable arrangements for providing managed access to the Second Cemetery shall be provided within 18 months of the commencement date. If measures for managed access have not been implemented after 18 months regular public access to this area shall cease until such arrangements are in place. In the meantime, access to the Second Cemetery shall be limited to one tour group of up to 25 persons at any one time. If any adverse impacts are identified prior to the access system being implemented, measures to reduce such impacts shall be introduced following consultation with the DEC.	Operation	Joint	The Heritage Landscape Management Plan was prepared by Thompson Berrill Landscape Design Pty Ltd in August 2005. The plan was approved by Simon McArthur, General Manager Mawland Hotel Management and Q Station in May 2006, Tony Fleming, Deputy Director-General Parks and Wildlife Division on behalf of DEC on 15 September 2006 and Reece McDougall, Executive Director Heritage Office on 15 September 2006. Section 5.5.3.12 details management of access to the Second Cemetery.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
Special Events, Functions And Free Open Days					
125	The number of special events or activities requiring overflow parking shall be limited to 6 per year. Special events include uses (eg. re-enactments, festivals, etc) and public open days that are not part of the normal operations (eg. tours) and extend beyond those function, conference, accommodation and restaurant uses identified in the PAR.	Operation	Joint	<p>The following events occurred during the reporting period that required the use of overflow parking:</p> <ul style="list-style-type: none"> Boxing Day (26/12/2018) Hospital Area - 100 People Open Day 28/04/2019 - 238 people Open Day 15/09/2019 - 315 people Invictus Games Event 19/10/2018 - 400 people plus volunteers. This event was approved by the Premier's Office (Letter dated 10/05/2018). 	Compliant
126	At least two free public open days are to be held at the site every year. The open days shall be held on either a weekend or public holiday. They shall include opportunities for people to participate in organised tours and interpretive activities that promote an understanding of the site's values, at no cost. Tours and activities may also be provided that outline the methods of conservation and management being used at the site, also at no cost. A booking system may be used to ensure that the site capacity limits in condition 120) are not exceeded.	Operation	Joint	<p>An open day was undertaken on 28 April 2019 entitled Spanish Flu and on 15 September 2019 entitled Living in Quarantine.</p> <p>During the reporting period there were also free history tours, performances and open areas.</p>	Compliant
127	Special event and public open day proposals are to be submitted to the DEC for approval. The co-proponents shall also consult with the Quarantine Station Community Committee and Manly Council prior to submission to the DEC. Proposals may only proceed if the DEC is satisfied that:	Operation	Joint	Application for the April 2019 Open Day was submitted to DEC on 28 March 2019 and approved on 4 April 2019.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<ul style="list-style-type: none"> a) sufficient traffic and car-parking and pedestrian management measures will be provided (both on and off-site); b) noise and light impacts will be minimised; and c) that the proposal will promote or enhance the interpretation of the place. <p>The DEC may direct the co-proponents to undertake all practicable steps to address the above matters and to ensure that the minimum number of public open days are provided in accordance with condition 126).</p>				
128	<p>Any special events or functions held after sunset shall:</p> <ul style="list-style-type: none"> a) if they are to be held outdoors, be located away from the areas identified as high-use Long-nosed Bandicoot foraging habitat in the DACMP (Illustration 15) or the revised habitat assessment (condition 165); or b) if they are to be held in the Wharf Precinct, must be held indoors. This does not preclude normal operations undertaken as part of the restaurant in building A6, including the outdoor eating area. 	Operation	Joint	All events held after sunset were held in P27, the Boilerhouse Restaurant and A20. All events after sunset were held indoors.	Compliant
Night Tours					
129	For the first three years after the commencement date the maximum number of visitors on night tours shall not exceed 100 persons and 3 tour groups on the site at any one	Operation	Joint	No change to capacity of tour groups required. Capacity is rarely met for tours.	Not Triggered

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	time. After this time any proposal to increase night tour capacities must be submitted for the approval of the DEC. The proposal must be accompanied by a clear assessment of the potential impacts of any increase on the significance of the Quarantine Station and justification based on the results of the visitor and site monitoring programs (particularly monitoring Long-nosed Bandicoot foraging activity).				
130	Night tours are to be undertaken on formed roads, paths or the Funicular stairway, unless part of an approved special interest tour.	Operation	Joint	No night tours are conducted on any part of the site except formed roads and paths.	Compliant
131	Unless approved as part of a special interest tour, measures are to be taken to ensure that night tour patrons do not use spotlights or flash-photography in outdoor areas (with the exception of the lanterns or torches used as part of the ghost tours).	Operation	Joint	A full safety briefing is given at the start of each tour. This covers personal safety, photography, directions and alcohol testing of patrons on night- time tours.	Compliant
132	<p>At the conclusion of any night tours on site, arrangements are to be made to transport visitors in an orderly manner from the conclusion point of the tour to the:</p> <ul style="list-style-type: none"> a) accommodation area (for those visitors staying on site overnight); b) relevant car park (for those visitors departing by car or bus); or c) to the Wharf Precinct (for access to the ferry). <p>This may include, but is not limited to, the use of a shuttle bus or groups led by a guide.</p>	Operation	Joint	All night-time tours end at the Wharf Precinct where patrons are then taken to the car park or public bus stop in a shuttle bus, or at the reception area in CP1 (off site). No ferries visit the Q Station after dark.	Compliant



CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
133	Notwithstanding the provisions of condition 129), the DEC may at any time direct that night tour numbers are reduced, and/or other appropriate measures implemented, if it is satisfied on the basis of monitoring programs that night tours are having adverse impacts on the Long-nosed Bandicoot population. The co-proponents shall comply with any such directions issued by the DEC.	Operation	Joint	No directions were made by OEH (formerly DEC) during the reporting period.	Not Triggered
Special Interest Tours					
134	No special interest tours may be run without the approval of the DEC (this may be undertaken as part an application for a tour operators license under the NPW Act). This will include tours to Store Beach, Cannae Point or other areas of the site (including bushland areas, rocky foreshores, Old Mans Hat and the cemeteries). This excludes the four main tours proposed by the co-proponents in the PAS. In seeking approval for special interest tours, the following information shall be provided to DEC: <ul style="list-style-type: none"> a) proposed frequency and size of tours; b) compliance with the Access Strategy and Interpretation Plan (conditions 118) 100); c) details of the tour activities and route, including buildings and other features to be visited; and d) a statement identifying and addressing any potential environmental issues that may arise, including management of 	Operation	Joint	No Special Interest tours were run during the reporting period.	Not Triggered


CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	visitor safety, and measures to address these.				
135	The co-proponents shall ensure that any approved special interest tours are subject to a specific monitoring and review program to enable assessment of potential visitor impacts.	Operation	Mawland	No Special Interest tours were run during the reporting period.	Not Triggered
School And Educational Programs					
136	Provision shall be made for school groups to have access to the site without the need to stay overnight.	Operation	Joint	School groups visit the Q Station regularly during the school term. Typically, there is approximately 30 – 60 students per excursion which are divided into groups of 10 – 20 dependent on the schools request. There are approximately 3 excursions per week. A pre-excursion briefing from the guides is given prior to the tour and groups are supervised at all times.	Compliant
137	Overnight educational programs must ensure a high-level of student supervision to prevent uncontrolled night activities or access across the site. Students must also be supervised during any periods of student “free-time” during the day and confined to distinct areas of the site, that is there is to be no general or uncontrolled access across the site.	Operation	Joint	Overnight excursions are uncommon except for small specialist classes e.g. art for Year 11 / 12. Strict supervision by teachers and guides is given during this period.	Compliant
Water-Based Access					
138	The ferry service between Manly and the Quarantine Station site shall: a) commence within 6 months of the commencement date or, if this cannot be achieved due to circumstances	Operation	Joint	The ferry service operated to this timetable.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>beyond the reasonable control of the co-proponents, within such other time as the DEC may approve;</p> <p>b) generally arrive and depart between the hours of 9:00 am and 11:00 pm respectively;</p> <p>c) be limited to a maximum of one movement per hour, after sunset, between July and February inclusive, to reduce the potential for impacts on the Little Penguin population. A maximum of 20 movements in one day may occur at other times to encourage water-based access to the site; and</p> <p>d) with the exception of extreme weather events and maintenance periods, be provided on an hourly basis during the peak periods of visitor activity.</p>				
139	<p>The co-proponents shall undertake all practicable measures to ensure that:</p> <p>a) within 3 years of the commencement date, the proportion of visitors accessing the site by the ferry is 40% or greater; and</p> <p>b) within 5 years of the commencement date, the proportion of visitors accessing the site by ferry is between 40% - 50% and stays at this level, or greater, for the life of the project.</p>	Operation	Joint	Less than 40% of arrivals use the ferry system. Most guests arrive by car, public bus or walk from manly. Q Station encourages ferry use as much as possible.	Non-Compliant
140	The wharf facility shall be used in accordance with the following provisions:	Operation	Joint	The lease document between DECCW and Maritime (1 December 1999) sets out the	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>a) the wharf shall only to be used for the casual berthing of the vessel “The Jenner”, or an appropriate vessel of similar dimensions and loadings. Assistance must be provided to persons with mobility limitations;</p> <p>b) the ferry must always dock at the head of the wharf (ie. The north-western end) until such time as any future alterations to the wharf have been assessed and approved by the relevant authorities;</p> <p>c) the ferry shall not moor at the wharf when not in active use (ie. overnight);</p> <p>d) the ferry shall not moor at the wharf during unsuitable weather events (eg. storms, strong winds, large swells);</p> <p>e) the co-proponents shall ensure that there is no access to the wharf as part of the activity by recreational or commercial vessels until such time as any proposed access arrangements for these vessels have been assessed and approved by the relevant authorities. The wharf shall include signage to indicate that access is prohibited unless authorised by the Waterways Authority and DEC; and.</p> <p>f) There shall be no vessel access on the south-western side of the wharf, parallel to Cannae Point</p>			<p>requirements for the use of the Q Station Wharf.</p> <p>Section 27 states: “Mooring of Vessels – The Lessee will not permanently moor any vessel or permit any vessel to be permanently moored at or adjacent to the Premises.”</p> <p>Note: “The Jenner” sank prior to this reporting period.</p>	
141	Minor variations to the provisions of condition 140), a), b) and c) above may be approved by	Operation	Joint	An application to the Office of Environment and Heritage was made on 20 September	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>the Waterways Authority and the DEC, upon receipt of an application from the co-proponents. The application shall address, but not be limited to, safe berthing/mooring arrangements, disabled visitor access, potential impacts on seagrasses (eg. from overshadowing and propeller wash) and Little Penguins.</p> <p>Any significant variations to these conditions, and any variations to condition 140) e), shall (if necessary) require a separate application and approval under Part 5 of the Environmental Planning and Assessment Act 1979 and other relevant legislation.</p> <p>The Waterways Authority and DEC shall consult with NSW Fisheries before any variations are approved.</p>			<p>2018 for the installation of additional fender piles at the wharf to assist with the docking of a large ferry as part of the Invictus Games.</p> <p>A report was prepared by From Architects (Appendix F) detailing that there would be no impacts to the heritage value of the wharf from these works.</p> <p>EcoDivers undertook an assessment of the seagrass in the immediate area (Appendix E) and determined that there would be no adverse effects to the seagrass from the installation of the fender plies.</p> <p>This application was approved on 5 October 2018 following consultation.</p>	
142	When the ferry is not available for use (due to extreme weather events or maintenance) the co-proponents shall provide a shuttle bus or some other means of public transport between the site and Manly.	Operation	Joint	When the ferry is not in use, a shuttle bus is used for transport unless there is only 1 –2 passengers, in which case Q Station organises a taxi for the guests.	Compliant
Road-Based Access					
Private Vehicle Targets					
143	The co-proponents shall undertake all practicable measures to ensure that within 5 years of the commencement date, the proportion of visitors accessing the site by private vehicle does not exceed 50% and stays at this level, or less, for the life of the project.	Operation	Joint	At least 50% of access by guests is by car or private bus arrival. This is calculated by reference to the number of cars in the carpark against bookings. All private bus arrivals must be booked through the Q Station sales office. Q Station suggests water arrival to all guests for conferences and functions.	Non-Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
Management Of Vehicle Access					
144	A 15 km/h speed limit for all vehicles within the site shall be imposed within 3 months of the commencement date.	Operation	Joint	A 15km speed limit is imposed on site which is indicated on site with 15km speed limit signs.	Compliant
145	As a priority measure, traffic calming devices shall be provided within 6 months of the commencement date along the following roads: a) from A26 to CP5; b) from S12 to S5; and c) from A26 to A23 (no traffic calming devices are required between S15 and P13).	Operation	Joint	The traffic calming measures have been installed in accordance with this condition.  	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
					
146	The devices shall be in accordance with the endorsed design standards [condition 106) c)], spaced at appropriate distances apart and sign-posted with the speed limit (15 km/h) and Long-nosed Bandicoot warning/awareness signs	Operation	Joint	The traffic calming measures have been installed in accordance with this condition. See pictures above (condition 145)	Compliant
147	Vehicle access to the site is to be managed by an entrance boom gate that only opens when triggered by staff or contractors.	Operation	Joint	A NPWS work certificate was issued on 1 June 2009 for the car park boom gate.	Compliant
148	Barriers delineating the extent of vehicle access with the site are to be provided within 6 months of the commencement date in accordance with Figure 2.1 of the PAS. In accordance with condition 151) c) within 10 years of the commencement date, the barriers on the road below S2, between S2 and A23 and adjacent to A1 must be replaced with a barrier adjacent to A18 (or at a suitable location east of A18).	Operation	Joint	A boom gate has been installed in place of the barriers under approval from NPWS. A NPWS work certificate was issued on 1 June 2009 for the car park boom gate.	Compliant
149	There shall be no vehicle access beyond the barriers described in condition 147) except for: a) vehicles transporting disabled visitors;	Operation	Joint	There is no access to the site past the boom gate except in accordance with this condition.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<ul style="list-style-type: none"> b) vehicles driven by representatives of the co-proponents, service providers and contractors; c) visitors and guests being transported by shuttle-bus, people-mover or some other form of low-scale public transport (not large buses or coaches); and d) emergency vehicles. 				
150	<p>Bus and coach access to the site shall be as follows (see also condition 65(b) and 151):</p> <ul style="list-style-type: none"> a) coaches shall not enter the site beyond CP1; b) until CP1 is completed buses may enter the site and use the loop road from A26 to S12 to S5 and to the temporary bus parking area adjoining A26; and c) after CP1 is completed buses shall also not enter the site beyond CP1. 	Operation	Joint	There is no access to the site past the boom gate except in accordance with this condition	Compliant
Vehicle Parking					
151	<p>On-site car parking shall occur as follows:</p> <ul style="list-style-type: none"> a) CP1 – may provide up to 120 vehicle spaces, constructed in two stages as proposed in the PAS, to be used by day visitors, overnight guests and staff (if necessary); b) CP5 – may provide up to 56 vehicle spaces, constructed in two stages as proposed in the PAS, to be used by staff and overnight guests but no day visitors 	Operation	Joint	CP1 provides space for 120 vehicles. CP5 and the existing administration car park do not operate due to reception being moved to CP1. NB: Only operation and disability vehicles are now allowed on the site.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>(including conference or function participants);</p> <p>c) existing administration car park (opposite S1) – may provide short-stay parking for accommodation check-in on the following basis:</p> <ul style="list-style-type: none"> • accommodation guest use of this parking area shall be gradually decreased between 5 and 10 years of the commencement date, so that within 7.5 years of the commencement date such usage has decreased by 50% (this excludes taxis, delivery and operations vehicles); • use of this parking area by accommodation guests shall be completely phased out within 10 years of the commencement date, to comply with the long-term carefree boundaries of the DACMP; and • during the above periods the co-proponents shall examine and test alternative check-in parking • arrangements, including the option of using the area shown as “Potential Drop Off and Parking” in • Illustration 20 of the DACMP; <p>d) bus and coach parking – the following arrangements shall apply:</p>				

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<ul style="list-style-type: none"> until CP1 is completed buses may only park in the bus parking area adjoining A26, as shown in Figure 2.1 of the PAS; until CP1 is completed coaches may only drop-off visitors at the entrance to the site and park at an off-site location (if necessary); once CP1 is completed, buses and coaches may drop off visitors at CP1 and either park in CP1 or outside the site (if necessary); and once CP1 is completed, there shall be no bus or coach parking elsewhere on the site. 				
152	<p>Overflow parking may be provided:</p> <ol style="list-style-type: none"> as part of up to 6 approved special events per year (condition 125); and during the physical construction stages for the new car parks (ie. during Stages 1 or 2 of CP1 or CP5). Once a stage is complete, no further overflow parking associated with car park construction may occur until the next stage of construction commences. <p>Total overflow parking at any one time shall be limited to up to 50 vehicles and shall be entirely restricted to formed road surfaces (i.e. not grassed areas) between building S14 and the first road junction immediately south-west of the upper reservoir</p>	Operation	Joint	<p>The following events occurred during the reporting period that required the use of overflow parking:</p> <ul style="list-style-type: none"> Boxing Day (26 December 2018) Hospital Area - 100 People Open Day 28 April 2019 - 238 people Open Day 15 September 2019 - 315 people Invictus Games Event 19 October 2018 - 400 people plus volunteers. This event was approved by the Premier's Office (Letter dated 10 May 2018). 	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
153	There shall be no vehicle parking outside of the CP1, CP5, administration area car park, or overflow parking, except for short-term parking for service providers, contractors and the like.	Operation	Joint	No vehicles were parked outside of CP1, CP5, Administration area car park or overflow parking, excluding short term parking, during the reporting period.	Compliant
Car-Park Design					
154	<p>The co-proponents shall ensure that car-parks are designed and constructed in accordance with the following design principles:</p> <ul style="list-style-type: none"> a) designated disabled car parking spaces must be provided onsite in accordance with relevant Australian Standards, the BCA and to achieve compliance with the Disability Discrimination Act; b) secure parking for at least 10 bicycles, plus parking for motorcycles, shall be provided at CP1 (such parking may also be provided at CP5); c) the internal area of car parks shall be generally devoid of any vegetation (with the exception of existing threatened species or communities) that may harbour or provide a foraging resource for fauna (especially Long-nosed Bandicoots); d) vegetation (using local native species) shall be planted and maintained to screen CP1 and CP5. The vegetation screens shall allow for the movement of fauna; e) car parks shall not be enclosed by fencing that may trap individual fauna i.e 	Operation	Joint	<p>Car parks were all constructed prior to operation commencing at the site. No modifications have been made to their design / construction.</p> <p>Vegetation maintenance is carried out by Go Gardening and the Q Station Maintenance Team.</p> <p>There is no fencing around the car parks and lighting has not been altered since the original approval.</p> <p>Note NPWS parking spaces have moved location to within CP1 at the Ranger's request for safety of the vehicles.</p>	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>gaps of sufficient dimensions to allow passage by bandicoots will be provided between and/or under any barriers;</p> <p>f) sufficient low-level lighting shall be provided in the car parks to allow drivers to detect fauna;</p> <p>g) the eastern boundary of CP5 shall be defined by fencing that prevents vehicle access and discourages human access to the adjoining area of Eastern Suburbs Banksia Scrub; and</p> <p>h) any removal of Eastern Suburbs Banksia Scrub required as part of the construction of CP5 shall be offset by the undertaking of habitat regeneration works on an area elsewhere at North Head up to 20 times the size of the area impacted (i.e approximately 0.3 hectares). Details of the area of ESBS to be affected and the areas proposed for regeneration, including regeneration methods consistent with the Heritage Landscape Master Plan, are to be submitted with the construction works application for CP5.</p>				
Shuttle bus					
155	<p>The co-proponents shall provide a shuttle bus service to transport visitors between the Manly Town Centre and the site (see also condition 65). The shuttle bus shall:</p> <p>a) have a minimum capacity of 12 persons per trip;</p>	Operation	Joint	<p>A shuttle bus was available within six months of the commencement date.</p> <p>As there is minimal uptake by visitors and guests and the availability of the public bus</p>	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>b) be operational within 6 months of the commencement date;</p> <p>c) provide a minimum of 3 trips to and from the site (total 6 trips) per day on weekends and public holidays during peak periods of visitor activity or as approved by the DEC. Preference is also to be given to operation of the shuttle bus service during periods of peak night visitation and activity for the Long-nosed Bandicoot.</p> <p>Full details of the shuttle bus operation shall be included in the Access Strategy (condition 118).</p>			route, this shuttle now only runs on an as needs basis.	
Visitor Monitoring					
General					
156	<p>A visitor monitoring program is to be established in accord with Policy AIP 3.2 in the DACMP and submitted for approval as part of the final Access Strategy (condition 118). In addition to the matters specified in AIP 3.2, the program must also make specific provision for the monitoring of:</p> <p>a) visitor numbers, capacities and entry details (eg. booked on a tour, accommodation booking, or unbooked day visitor);</p> <p>b) mode of access to the site;</p> <p>c) visitor profiling (to include age, cultural background, language spoken, geographic origin, disability status);</p>	Operation	Mawland	<p>The Visitor Management Plan includes details of Visitor Monitoring.</p> <p>The Visitor Management Plan was prepared by Simon McArthur, General Manager, Mawland Hotel Management and Q Station in 2005. The plan was approved by Tony Fleming, Deputy Director-General, Parks and Wildlife Division on 13 July 2005 and Robert Black, DIPNR on 10 August 2005.</p> <p>https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Parks-plans-of-management-other-documents/quarantine-station-visitor-management-</p>	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>d) visitor impacts on the site's values, including both physical impacts (such as measurable damage or wear to fabric, impacts on fauna behaviour, etc) and non-physical impacts (such as amenity); and</p> <p>e) measures taken, or proposed to be undertaken, to minimise private vehicle access. This should include the progress or outcomes of any negotiations with other North Head land managers regarding off-site car-parking.</p>			<u>plan.pdf?la=en&hash=E5077BAB159853EC5CA8B7DB6C7D2E7336FECE57.</u>	
157	Where the visitor monitoring program identifies adverse impacts associated with the activity the co-proponents must, in consultation with the DEC, identify and implement appropriate management responses. These may include, but are not limited to, altering any relevant activity, temporarily ceasing specific activities or ceasing some uses altogether if impacts cannot be adequately addressed.	Operation	Mawland	No adverse impacts identified.	Not Triggered
FLORA, FAUNA AND MARINE ENVIRONMENT					
General					
158	<p>The co-proponents shall engage a person(s) trained in basic fauna and flora identification and in possession of the appropriate licences (eg. for fauna handling) to monitor construction activities for the duration of the work. The functions of that person(s) shall include, but are not limited to:</p> <p>a) the inspection of work areas every morning prior to work commencing to</p>	Operation	Mawland	<p>During the reporting period the NPWS Rangers assisted in the removal of Brush Turkeys from the cafe area on a number of occasions.</p> <p>The General Manager Alison Langley was WIRES accredited. During construction works in the reporting period, fauna and flora checks were undertaken by Alison, a NPWS</p>	Compliant


CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	allow the identification and relocation of any fauna species present (fauna are to be re-located to the nearest area of suitable habitat within the site); and b) the regular inspection of work areas at other times to ensure no inadvertent impacts to flora and fauna are occurring. The person(s) is to report directly to the Environmental Manager.			Ranger or the Environment Manager. There were no reported issues during the reporting period.	
159	Any fencing or barriers to be provided for active work areas shall not limit the general movement of fauna across the site. However, sites of specific potential risk to fauna (e.g. Open excavation) shall include measures to prevent fauna access (e.g. limited fencing or covers) and/or to allow their egress/escape (e.g. earth ramps).	Operation	Joint	During reconstruction works for P21 and P23, open excavations were covered every evening by the contractor (Westbury Constructions). Fencing was appropriate site fencing and was regularly inspected by the Environmental Manager and the NPWS Ranger.	Compliant
160	No hollow-bearing trees or threatened flora are to be removed, although limited lopping or trimming may occur with approval from the DEC. Existing Coral trees in the Wharf Precinct shall be the subject of regular inspection and maintenance by a suitably qualified person to ensure safe access to this area for site visitors. Any areas proposed for vegetation clearance or removal are to be surveyed by a suitably qualified person for the presence of hollow-bearing trees and threatened flora, which are to be clearly tagged and identified for retention.	Operation	Mawland	A Coral Tree in Peace Park fell down during the reporting period. It was removed from site for safety in December 2019. Prior to removal it was inspected by a NPWS Ranger and Arborist and was found to contain no wildlife.	Compliant
161	The proposed design and location of any artificial nesting sites or boxes (including for Little Penguins) are to be endorsed by the DEC.	Operation	Joint	No nest boxes were required to be installed during the reporting period.	Not Triggered

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	Nest boxes are to be designed to limit the potential for use by possums.				
162	Details of the methods and approaches to be used in meeting the monitoring requirements specified in the conditions of approval for Long-nosed Bandicoots and Little Penguins will be submitted to the DEC for approval prior to monitoring commencing.	Operation	Joint	See Appendix B – Long-nosed Bandicoot Monitoring North Head, Manly. November 2018. See Appendix C – Manly Little Penguin Recovery Program. 2018/19 Monitoring Report. May 2019.	Compliant
Long-nosed Bandicoot					
General					
163	Within 6 months of the commencement date the co-proponents shall update signage along Darley Road and into the Quarantine Station to strengthen warnings to vehicle drivers regarding the presence of Long-nosed Bandicoots and the need for slow and careful driving (see also conditions 145)-146).	Operation	Joint	New signage designed and erected by co-proponents following this modification. This signage was approved by Ania Dorocinska from Planning and Environment in an email dated 29 March 2019.	Compliant
164	Grassed areas on the site must be kept in good condition. No fertilisers or chemicals should be applied to open grassed areas, except where this is essential to the repair and stabilisation of existing eroded areas and is consistent with the provisions of the approved Heritage Landscape Master Plan (condition 91).	Operation	Joint	Grass is inspected and mowed regularly and watered when necessary. There is no use of fertilisers or pesticides permitted on site.	Compliant
165	Within 12 months of the commencement date the co-proponents shall undertake further assessments to refine the mapping of high-use Long-nosed Bandicoot foraging habitat and to identify suitable potential areas and techniques for habitat enhancement, reconstruction and	Operation	Joint	A Population Viability Analysis on the endangered North Head Long-nosed Bandicoot Population based on long-term data from 2004 will be prepared in 2021.	Non-Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	rehabilitation. The outcomes of the assessment should be informed by the monitoring program specified in Schedule 5 and are to be submitted to the DEC for approval and incorporated into the Heritage Landscape Management Plan (condition 91) prior to any habitat works commencing.			Relevant details will be incorporated into the Heritage Landscape Management Plan, which is subject to review in 2022.	
166	Any works undertaken for the activity that involve the loss of, or damage to, Long-nosed Bandicoot foraging habitat shall be offset by the undertaking of habitat enhancement, reconstruction or rehabilitation works on an area elsewhere at North Head that is at least ten times the size of the area impacted.	Operation	Joint	No works were undertaken that involved loss of or damage to Long-nosed Bandicoot foraging habitat during the reporting period.	Not Triggered
Monitoring					
167	The co-proponents shall implement the monitoring program detailed in Schedule 5.	Operation	NPWS	See Appendix B – Long-nosed Bandicoot Monitoring North Head, Manly. November 2018.	Compliant
Adaptive Management – Foraging Habitat					
168	If the monitoring of bandicoot activity and use of foraging habitat indicates a statistically significant reduction in bandicoot numbers between the control and non-control areas over two consecutive years, measures will be taken, in consultation with the DEC, to reduce the extent of light, noise and activities at relevant locations. Measures may only be reversed or altered with the approval of the DEC (see also condition 133).	Operation	NPWS	<p>No such measures required in reporting period.</p> <p>There were no Long-nosed Bandicoot deaths within the Q Station lease area in 2018 or 2019. In 2017 there were 22 recorded deaths. From this data it appears that the mitigation measures that were implemented including speed bumps, signage, fox baiting</p>	Not Triggered

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
				and indirectly rabbit shooting were successful to help reduce the road mortality numbers.	
Adaptive Management – Road Mortalities					
169	All adaptive management measures presented within Schedule 6 must be implemented and the co-proponents must contribute to the mitigation of potential impacts on the Long-nosed bandicoot population across North Head. This includes, but is not limited to, participation in the North Head Stakeholder Group, or its successors. The co-proponents will actively promote awareness of the need for bandicoot protection across North Head.	Operation	Joint	<p>Mawland is an active member of the North Head Stakeholder Group.</p> <p>See Appendix B – Long-nosed Bandicoot Monitoring North Head, Manly. November 2018.</p> <p>New signage designed and erected by co-proponents following this modification. This signage was approved by Ania Dorocinska from Planning and Environment in an email dated 29 March 2019.</p>	Compliant
169A	The co-proponents must provide signage at the entrance to Sydney Harbour National Park near Parkhill Archway, to indicate the number of Long-nosed Bandicoot road mortalities recorded on North Head. The sign(s) shall include, but not be limited to, a short statement regarding the endangered status of the population, its estimated population size (within North Head), the threat that road deaths pose to its continued survival, the total number of road deaths from the previous year and a running tally of the number of deaths during the current calendar year. The tally shall be updated after each confirmed road death as recorded on the mortality register referred to in Schedule 5. The sign shall also include a 24 hour phone number (see also Term 6) to allow members of the	Operation	Joint	<p>New signage designed and erected by co-proponents following this modification. This signage was approved by Ania Dorocinska from Planning and Environment in an email dated 29 March 2019.</p>	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	public to inform the lessor of any mortalities and what to do if an injured bandicoot is found.				
Calculating The Background Level Of Adult Road Mortalities					
170	For the first year following the commencement date the background adult road mortality level is set at 10 deaths in 6 consecutive months. The background adult road mortality level is to be recalculated at the end of each consecutive year of mortality monitoring as detailed in Schedule 7.	Operation	NPWS	<p>NPWS maintains a register for Long-nosed Bandicoot mortality for the site.</p> <p>There were no Long-nosed Bandicoot deaths within the Q Station lease area in 2018 or 2019. In 2017 there were 22 recorded deaths. From this data it appears that the mitigation measures that were implemented including speed bumps, signage, fox baiting and indirectly rabbit shooting were successful to help reduce the road mortality numbers.</p> <p>There were 8 Long-nosed Bandicoot deaths within the broader North Head area in both 2018 and 2019.</p>	Compliant
Future measures					
171	The Lease shall stipulate requirements regarding the provision of funding to the OEH to undertake a revised population viability assessment (PVA) for the Long-nosed Bandicoot every 6 years from the determination date of Modification 3.	Operation	Joint	The lease document between NPWS and Mawland stipulates the requirements for the provision of funding to OEH to undertake PVA for the Long-nosed Bandicoot every 6 years. The last PVA was undertaken in 2015.	Compliant
172	Based on the revised PVA, the provisions of any adopted recovery plan for the Long-nosed Bandicoot population and following consultations with the co-proponents, the Minister for the Environment may recommend to the Minister for	Operation	Joint	A population viability assessment was not undertaken during this reporting period.	Not Triggered

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	Infrastructure, Planning and Natural Resources that the trigger thresholds, background adult road mortality levels and/or adaptive management measures be revised. Prior to the Minister for Infrastructure, Planning and Natural Resources agreeing to any significant revised measures, the details of the proposal and the PVA are to be made available for public comment.				
173	The co-proponents shall ensure that the undertaking of the activity complies with any revised measures specified in condition 172).	Operation	Joint	A population viability assessment was not undertaken during this reporting period.	Not Triggered
Little Penguins					
General					
174	<p>Prior to the opening of the restaurant in Building A6 for public use or the commencement of ferry services to the site (whichever comes first), and following approval of the detailed designs by the DEC, Permanent barrier fencing (that maintains access for penguins) shall be provided to actively discourage human access to Little Penguin habitat at:</p> <ul style="list-style-type: none"> a) the northern end of Quarantine Station Beach, in the vicinity of the mean high water mark. The fence shall include signage to indicate that no access along the rocky foreshores is permitted; b) the southern end of the Quarantine Station Beach, in the vicinity of the cliff-line and water's edge adjacent to the concrete slipway (W1/A13a). The fence 	Operation	Joint	<p>A fenced beach area, with access prohibited from sunset to sunrise has been provided in accordance with this condition. This provides protection to the little penguin colony.</p> 	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>shall include signage to indicate that no access along the rocky foreshores is permitted; and</p> <p>c) at least 1.5 metres from the western edge of the existing drain adjacent to Building A6 (ie. towards the building). Consideration shall be given to the use of dense plantings, rather than a fence made of timber or other materials, in the design of the barrier.</p> <p>To avoid adverse visual or cultural impacts the fences shall be constructed of suitable materials and to the minimum height and scale necessary to discourage human access. It is not required that the fences be human-proof (e.g. cyclone fencing).</p>			Penguin fencing at the Boilerhouse looking north.	
175	Between sunset and sunrise in the breeding season (July to February inclusive) temporary moveable signage, with appropriate temporary lighting if necessary, shall be provided on Quarantine Beach. The signs are to be located on the beach above the mean high water mark in the approximate vicinity of the intersection of buildings A6 and A7. The signs are to advise visitors that access beyond the signs to the northern part of the beach is not permitted, to minimise potential impacts on wildlife.	Operation	Joint	NPWS varies signage from time to time. No tours take place near Little Penguin habitat.	Compliant
176	No spotlighting for Little Penguins is to occur from the ferry or from within the site, unless it is being undertaken as part of an approved special interest tour.	Operation	Joint	No tours take place near Little Penguin habitat. No spotlighting is permitted during the tour and this is specified at the safety briefing prior to commencement of the tour.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
Monitoring					
177	The co-proponents will negotiate with the DEC an annual contribution to assist the on-going implementation of any monitoring programs established as part of the Little Penguin Recovery Plan. The contribution will be adjusted annually to reflect changes in the CPI.	Operation	Mawland	Contribution was paid on the following dates within the reporting period: <ul style="list-style-type: none"> 5 September 2018 3 June 2019 (although due to a credit, no payment was required to be made). 	Compliant
178	In the event that any monitoring program under the Little Penguin Recovery Plan ceases to operate during the life of the approval, the co-proponents shall be responsible for developing, implementing and funding a monitoring program that specifically monitors the potential impacts generated by activities within the site.	Operation	NPWS	Monitoring programme remains in place.	Compliant
Adaptive management					
179	The co-proponents shall comply with the adaptive management measures detailed in Schedule 8.	Operation	NPWS	Monitoring as part of The Manly Little Penguin Recovery Program was undertaken fortnightly from July 2018 to February 2019 during the 2018/2019 breeding season. The reduced number of breeding adults as a result of the 2015 fox predation incident remained a dampening factor on breeding numbers. This was exacerbated by an unusual period of breeding disturbance for many nests during the middle of the normal season. The combined effect was to make	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
				this the worst breeding season on record for the Manly Little Penguin colony.	
				See below additional details within Schedule 8 including the Manly Little Penguin Monitoring Report.	
Future measures					
180	The co-proponents will provide funding to the OEHL to undertake a review of the long-term monitoring data and to provide recommendations on the long-term sustainability targets for the Manly Little Penguin population every five years from the determination date of Modification 3.	Operation	Joint	Contribution was paid on the following dates within the reporting period: <ul style="list-style-type: none"> 5 September 2018 3 June 2019 (although due to a credit, no payment was required to be made). 	Compliant
181	Based on the revised monitoring and long-term sustainability targets (Term 180) and following consultation with NPWS regarding the Little Penguin population, the Minister for the Environment may recommend to the Secretary that the trigger thresholds and/or adaptive management measures be revised. Prior to the Minister for Planning agreeing to any significant revised measures, the details of the proposal and the 5 year report are to be made available for public comment and consideration.	Operation	NPWS	No recommendations have been made by the Minister for the Environment.	Not Triggered
182	The co-proponents shall ensure that the undertaking of the activity complies with any revised measures specified in condition 181).	Operation	NPWS	No recommendations have been made by the Minister for the Environment.	Not Triggered

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
Marine Environment					
General					
183	Within 6 months of the commencement date the co-proponents shall commence discussions with the Waterways Authority and NSW Fisheries in relation to measures that could be undertaken to restrict or discourage private boat mooring in the immediate vicinity of the site. Other relevant stakeholders shall also be consulted. As a minimum, options for restricting or discouraging mooring should generally target the “patchy seagrass” area shown in Figure 1 of Appendix F of the EIS. However, if critical habitat is declared for the Little Penguin population the provisions of the critical habitat listing will take precedence over any other measures.	Operation	Joint	A notice of declaration of critical habitat for Little Penguins was issued in December 2002.	Compliant
Monitoring					
184	The co-proponents shall develop and implement a program to monitor the density, condition and extent of seagrass beds in the wharf area, in consultation with the Waterways Authority. Details of the methods and approaches to be used in monitoring seagrass beds will be submitted to NSW Fisheries for approval prior to monitoring commencing.	Operation	Mawland	<p>The requirement to monitor seagrass remains as a condition in the Approval. No monitoring program for seagrass has been submitted to and approved by DPI. Irregular assessments of the seagrass have been undertaken in the past. An examination of those assessments would likely reveal that the implemented methodological approach would not meet requirements of the Approval nor DPI Fisheries requirements, as indicated by their recent response to the AERs.</p> <p>A partial letter from DPI is held on file. The letter dated 10 December 2007 from NSW Department of Primary Industries to Simon</p>	Non-Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
				McArthur, General Manager, Mawland Quarantine Station states that “NSW DPI has decided that it is unnecessary to continue the current seagrass monitoring program. In lieu of the monitoring program, NSW DPE is seeking a contribution to the Conservation Trust Fund (CTF) that is reflective of the substantial savings afforded to...”. The exact application of this letter to condition 184 is unconfirmed. Ongoing requirements to monitor the seagrass need to be confirmed with DPI in writing and approval provided, or the condition modified as required.	
185	Implementation of the seagrass monitoring program is to occur prior to commencement of the ferry services to the site. Monitoring must be undertaken by a suitably qualified marine ecologist.	Operation	Joint	<p>One site visit by EcoDivers occurred in July 2018 prior to installation of two additional fender piles adjacent to the wharf to accommodate the ferry service for the Invictus Games ferry arrival.</p> <p>The report (Appendix E) detailed that there would be no adverse impacts to the sea grass from the installation of the two fender piles.</p> <p>A heritage assessment was also carried out on the wharf by From Architects (Appendix F) detailing that there would be no significant impact to the heritage significance of the wharf.</p> <p>A Minor projects approval was given for the installation of the piles by OEH on 8 October 2018.</p>	Compliant
Adaptive Management					

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
186	If the monitoring of the seagrass beds indicates a significant reduction in the density, extent or condition of the seagrass beds, and NSW Fisheries is satisfied that such decreases are either fully or partially related to the activity, the co-proponents must consult with NSW Fisheries to implement appropriate measures to reduce impacts within a specified timeframe, and to provide habitat compensation at a ratio of 2:1.	Operation	Joint	No reduction was identified during monitoring by EcoDivers in July 2018 (Appendix E). The report states that the seagrass is healthy and abundant within the vicinity of the wharf however it remains highly susceptible to significant damage from the primary threat of unregulated boating activity.	Not Triggered
187	The co-proponents shall ensure that the undertaking of the activity complies with any measures specified in condition 186).	Operation	Joint	No reduction has been identified.	Not Triggered
Predator And Pest Control					
188	A Predator and Pest Control Plan shall be prepared and implemented for the site. The Plan shall be submitted to the DEC for approval within 2 years of the commencement date. The plan should address relevant provisions of any adopted recovery plans and threat abatement plans and shall: <ul style="list-style-type: none"> a) detail measures for minimising the risk of predator and pest impacts; and b) detail measures for rapidly responding to identified threats, including an emergency shooting strategy. 	Operation	Joint	A Predator and Pest Control Plan was prepared in 2008.	Compliant
189	Predator and pest control activities shall be undertaken in accordance with the approved plan. Until the plan is prepared and approved the co-proponents shall continue on-going consultation with the DEC regarding predator control measures to be applied	Operation	Joint	A Predator and Pest Control Plan was prepared in 2008.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
190	The co-proponents shall undertake a review of the Predator and Pest Control Plan every five years after the commencement date for the duration of the activity, or earlier if considered necessary by the DEC. The review shall be undertaken in consultation with the DEC and with advice from relevant specialists. On the basis of the review the co-proponents shall, as necessary, prepare a revised plan to be submitted to the DEC for approval.	Operation	Joint	No review of this plan has been undertaken. A review of the plan is to be undertaken in 2022.	Non-Compliant
ENVIRONMENTAL MANAGEMENT PLAN					
191	An Environmental Management Plan (EMP) shall be prepared by the co-proponents and submitted for approval to the DEC and DIPNR, following a review by the Environmental Manager. Once approved, the co-proponents shall implement the EMP	Operation	Joint	<p>As part of the Environmental Management Plan the following plans were prepared for the site:</p> <ul style="list-style-type: none"> • Erosion and Sedimentation Control Plan, May 2005 • Noise Management Plan, May 2005 • Waste Management Plan, May 2005 • Aboriginal Heritage Management Plan, 2008 • Moveable Heritage and Resources Plan 2007 (revision in 2021) • Heritage Landscape Management Plan, 2006 • Infrastructure Control Plan • Predator and Pest Control Plan 2008 • Interpretation Plan 2005 • Internal Fitout Plan 2005 • Inscriptions Management Plan 2005 	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
				<ul style="list-style-type: none"> Visitor Management Plan 2005 <p>Publicly available documents can be found at: https://www.environment.nsw.gov.au/research-and-publications/north-head-quarantine-station-management-plans.</p>	
192	The EMP shall be prepared and approved prior to the commencement of construction works or new operation functions as described in the PAS. Operations already occurring on site prior to the commencement date may continue without an approved EMP, subject to other relevant conditions of this approval having been met. The EMP may be updated and amended with the approval of the DEC to incorporate other strategies, plans and programs required by the conditions of approval.	Operation	Joint	No evidence of approval provided for the EMP.	Non-Compliant
193	<p>The primary function of the EMP is to outline environmental safeguards and procedures to be implemented during the construction and operation stages of the activity. The EMP may also function as an operational control document to guide the implementation of all aspects of the proposal. The EMP shall be prepared in accordance with:</p> <ul style="list-style-type: none"> a) the conditions of this approval; b) all relevant legislation; c) accepted environmental management best practice; and d) shall address all commitments and undertakings made by the co- 	Operation	Joint	As noted in condition 191, the EMP includes numerous sub plans and is used as the operational control document for environmental management onsite.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	proponents for environmental management.				
194	The EMP shall contain, but not be limited to, the matters specified in Schedule 9 and in conditions 197), 199) and 203). Other strategies, plans and programs required by the conditions of approval may be incorporated into the EMP.	Operation	Joint	As noted in condition 191, the EMP includes numerous sub plans and is used as the operational control document for environmental management onsite.	Compliant
195	The EMP shall be reviewed and revised in consultation with the DEC as necessary to incorporate revisions to relevant site-wide strategies, plans and the results of the integrated monitoring program.	Operation	Joint	No review has been undertaken. Next review of the plan will be undertaken in 2022 in consultation with DEC (DPE).	Non-Compliant
SOIL					
196	Prior to any works commencing in areas of potential contamination the co-proponents must submit to the DEC a preliminary investigation prepared in accordance with the “Managing Land Contamination: Planning Guidelines” (DUAP & EPA 1998). After considering the assessment the DEC may require the co-proponents to undertake a detailed investigation in accordance with the Guidelines and/or undertake any necessary remediation work. Areas of potential contamination include those identified in Figure 13.1 of the EIS, the sites of former buildings P22 and H1, and any other areas identified by the co-proponents during the course of the activity.	Operation	Joint	These works were undertaken at commencement of the project.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
197	As part of the EMP, the co-proponents shall prepare and implement an erosion and sedimentation control plan to be implemented for all works that involve ground surface disturbance. The plan will be prepared in accordance with the guideline “Managing Urban Stormwater – Soils and Construction” (DoH 1998), but with adaptations as necessary and appropriate for the Quarantine Station site.	Operation	Mawland	As part of the Environmental Management Plan an Erosion and Sedimentation Control Plan, May 2005 was prepared in accordance with the guidelines.	Compliant
198	Regular inspections of temporary and permanent erosion and sedimentation control devices shall be undertaken during the undertaking of any works involving ground surface disturbance.	Operation	Mawland	Regular inspections of erosion and sediment controls were undertaken by the NPWS Ranger and Environmental Manager during construction of P21 and P23.	Compliant
NOISE					
199	As part of the EMP, the co-proponents shall prepare and implement a noise management plan for both the construction and operation phases of the activity. The plan should include, but not be limited to: <ul style="list-style-type: none"> a) standards to be met, consistent with relevant EPA guidelines; b) noise mitigation measures, including educational signage for visitors entering and exiting the site; c) regular monitoring of both construction and operational activities. This is to include: <ul style="list-style-type: none"> • noise generated from on-site activities, measured both within the site and off-site 	Operation	Mawland	As part of the Environmental Management Plan a Noise Management Plan, May 2005 was prepared for the site.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<ul style="list-style-type: none"> road traffic noise during peak periods of vehicle movements to and from the site, especially in the vicinity of residential areas along Darley Road and Manly Hospital; and <p>d) adaptive management measures.</p>				
200	<p>Noise levels are to be managed and monitored in accordance with the approved noise management plan. If relevant noise standards are exceeded the co-proponents shall take all reasonable steps to ensure that measures are put in place to meet the standards:</p> <ul style="list-style-type: none"> a) for construction works, within 1 week of the exceedance being identified; and b) for operational activities, within 6 months of the exceedance being identified. 	Operation	Joint	<p>Noise levels were monitored during the modification negotiations with Department of Planning in early 2018 by GTA Consultants. They are operationally managed with cut off devices on all audio visual equipment.</p> <p>One complaint was received (See Table 4) from the Penguin Warden stating that during clean up at the Boilerhouse on 10 July 2018, Q Station staff were dancing to music and potentially worrying penguins. Q Station staff were immediately counselled, managers alerted and signage in staff room was improved. It was noted, music was from a phone speaker.</p>	Compliant
201	<p>Amplified music or noise on the site shall be managed on the following basis:</p> <ul style="list-style-type: none"> a) any amplified music or noise or ambient dining music shall not exceed the LAeq noise level of 50 dB(A) as measured up to 20 metres away from the edge of the building in which the music or noise is being generated; b) outdoor amplification may only occur during the day period and must not 	Operation	Joint	<p>Noise levels were monitored during the modification negotiations with DoP. They are operationally managed with cut off devices on all audio visual equipment.</p>	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>exceed LAeq noise level of 50 dB(A), as measured at any point along the existing fence line (as at 2017) to the beach area; and</p> <p>c) ambient dining music in the outdoor eating area adjacent to the Boilerhouse Restaurant (Building A6) during the evening and night time period is restricted to the following times:</p> <ul style="list-style-type: none"> • March to April (inclusive): no restriction; • May to July (inclusive): not permitted at any time; and • August to February (inclusive) not permitted from sunset.\ 				
201A	<p>Within one year of the date of determination of Modification 3, the co-proponents shall provide a Noise Validation Report (NVR) to the satisfaction of the Secretary. The NVR shall:</p> <p>a) be prepared by a suitably qualified acoustic consultant;</p> <p>b) include noise monitoring results collected during the previous twelve months, including results from at least half of the maximum capacity events held within the twelve month period;</p> <p>c) verify compliance with the operational noise limits under Term 201;</p> <p>d) identify mitigation and/or management measures required to ensure</p>	Operation	Joint	Submission of report to Planning on 28 May 2019. Planning requested further monitoring of highest capacity event.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>compliance with the operational noise limits in Term 201;</p> <p>e) include detail of all complaints received by the site from the previous twelve months; and</p> <p>f) include details of ongoing periodic noise testing and complaints handling procedures.</p>				
202	Even if relevant industry and technical standards for noise management are met, the DEC may direct the co-proponents to take appropriate measures to reduce or alter noise levels, or to implement measures earlier than the time-frames specified in condition 200), after considering monitoring information for the Long-nosed Bandicoot and Little Penguin populations. The co-proponents shall comply with any such directions.	Operation	Joint	No such direction has been received.	Not Triggered
WASTE					
203	<p>As part of the EMP, the co-proponents shall prepare and implement a waste management plan to address the handling, stockpiling and disposal of wastes and construction materials during all phases of the activity. The plan shall include, but not be limited to, the following:</p> <p>a) procedures to ensure that demolition and construction materials are stockpiled clear of environmentally sensitive areas;</p>	Operation	Mawland	As part of the Environmental Management Plan a Waste Management Plan, May 2005 was prepared for the site.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	b) waste avoidance and reduction measures, including strategies for recycling and re-use of waste materials; c) procedures for the removal and disposal of waste at an appropriately licensed facility, including asbestos material; d) on-site education and signage to promote and encourage “no feeding” rules for wildlife and appropriate waste disposal procedures; and e) procedures for regular litter inspection and collection.				
204	All handling, stockpiling and disposal of wastes and construction materials shall be undertaken in accordance with the waste management plan and all necessary licenses, permits or other approvals must be obtained by the co-proponents.	Operation	Joint	All handling of waste is undertaken in accordance with the Accor Environmental Policy. https://group.accor.com/en/commitment/positive-hospitality/acting-here https://s3-us-west-2.amazonaws.com/ungc-production/attachments/3079/original/COP.pdf?1262614372	Compliant
SITE MANAGEMENT					
Emergency And Evacuation Plan					
205	Prior to the commencement date the co-proponents shall submit an emergency and evacuation plan for the site to the DEC for approval. The plan will be prepared in consultation with the NSW Ambulance Service, NSW Police and NSW Fire Brigade and shall address, but not be limited to:	Operation	Joint	The Visitor Management Plan includes an Emergency and Evacuation Plan (Section 7) The Visitor Management Plan was prepared by Simon McArthur, General Manager, Mawland Hotel Management and Q Station in 2005. The plan was approved by Tony Fleming, Deputy Director-General, Parks and	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>a) emergency and/or evacuation procedures for a range of incidents, including spillages, boat collisions, fire, bomb threats, power blackout, personal injury, disturbance to human burial sites, etc;</p> <p>b) interim site fire safety measures to be provided until the upgrade of the fire hydrant system has been completed (condition 211);</p> <p>c) safety and emergency signage;</p> <p>d) an emergency alarm system;</p> <p>e) the location of evacuation points and an evacuation procedure;</p> <p>f) regular testing of the system;</p> <p>g) emergency equipment and appropriate storage locations;</p> <p>h) staff training; and</p> <p>i) emergency contact details for relevant staff.</p> <p>Once approved, the co-proponents shall implement the plan.</p>			<p>Wildlife Division on 13 July 2005 and Robert Black, DIPNR on 10 August 2005.</p> <p>https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Parks-plans-of-management-other-documents/quarantine-station-visitor--management-plan.pdf?la=en&hash=E5077BAB159853EC5CA8B7DB6C7D2E7336FECE57</p>	
206	All staff shall be made aware of the plan and its provisions and be trained in the operation of emergency equipment. Records of staff training will be kept by the co-proponents and included as part of the annual environmental report (see condition 221).	Operation	Mawland	All staff take part in an evacuation training during the induction and receive appropriate training specifically for the area of engagement. A record of this is held by the Q Stations HR team.	Compliant
207	The plan is to be displayed at prominent locations within the site and is to clearly highlight	Operation	Joint	A plan is located in every room near the door and in all room compendiums and	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	the recommended actions and 24 hour telephone contacts for emergency situations.			restaurants. A plan is also located at reception.	
208	The co-proponents shall undertake a review of the plan every five years after the commencement date for the duration of the activity or earlier if considered necessary by the DEC. The review shall be prepared in consultation with the agencies specified in condition 205). On the basis of the review the co-proponents shall, as necessary, prepare a revised Emergency and Evacuation Plan to be submitted to the DEC for approval.	Operation	Joint	Next review due in 2022.	Non-Compliant
Fire Safety					
209	The co-proponents shall prepare a fire safety schedule for each building on the site. The schedule shall be submitted to DEC for approval prior to occupation or use of a building on the site for the activity. The schedule shall be prepared in accordance with the NPWS Construction Assessment & Approvals Procedure and the following specific requirements: <ul style="list-style-type: none"> a) be prepared by a Fire Protection Consultant with at least 5 years' experience; b) identify fire safety services to be installed (including type of service, location and other specifications) to 	Operation	Joint	A fire safety schedule was submitted and approved as part of the New Works Certificate issued by NPWS to Mawland for P21 and P23 on 20 December 2018.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>meet BCA standards (or an acceptable alternative);</p> <p>c) identify interim fire safety measures that could be implemented to allow the use of buildings in the short term; and</p> <p>d) provide a statement outlining the potential impact of the work on the heritage significance of the building, and proposed mitigative measures.</p>				
210	No building on the site shall be occupied or used after the commencement date until such time as fire safety measures have been implemented and an interim or final Fire Safety Certificate issued in accordance with the NPWS Construction Assessment and Approvals Procedure. This includes any purposes that were being undertaken prior to the commencement date. In the event of any inconsistency this condition shall prevail over any other condition of approval (with the exception of condition 50).	Operation	Joint	A fire safety schedule was submitted and approved as part of the New Works Certificate issued by NPWS to Mawland for P21 and P23 on 20 December 2018.	Compliant
211	<p>The co-proponents shall also undertake the following fire safety measures:</p> <p>a) all buildings are to be brought up to BCA standards for fire safety (or an acceptable alternative). This shall occur in stages to match the staging plan for works, as amended by condition 31);</p> <p>b) an upgrade of the fire hydrant system to meet NSW Fire Brigade standards shall be completed within 5 years of the commencement date. In the meantime,</p>	Operation	Joint	<p>Celsius Fire are the main contractor providing monthly/6 monthly inspections on all fire suppression equipment. This includes fire extinguishers, fire hose reels, smoke and fire alarms in all rooms and a sprinkler system to all buildings from P1-P12. The central fire hydrant system is also tested.</p> <p>The fire control panels are registered with ADT who monitor all faults and advise Mawland accordingly. If there is a major fault</p>	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>the co-proponents shall ensure that the fire measures detailed in the emergency and evacuation plan (condition 205) are in place and functioning;</p> <p>c) an annual fire safety statement of the site buildings, prepared in accordance with the NPWS Construction Assessment & Approvals Procedure, shall be submitted for DEC approval; and</p> <p>d) the co-proponents shall comply with the terms of any fire safety order issued by or on behalf of the DEC.</p>			<p>in the system from smoke alarms /sprinklers the local fire brigade are alerted and attend to the situation.</p> <p>There have been no incidents and the odd false alarm caused by dust storm/ bird movement.</p>	
Bushfire Management Plan					
212	The co-proponents are to liaise with the DEC and any other relevant authorities to ensure that the provisions of any adopted bushfire management plans applicable to the site are implemented.	Operation	NPWS	A Bushfire Assessment was prepared for the site in July 2006 by Fire Base Consulting Pty Ltd. No review has been undertaken. The assessment will be reviewed in 2022.	Compliant
HOURS OF OPERATION					
213	<p>All construction activities, including entry and departure of heavy vehicles, shall be restricted to the following hours:</p> <p>a) during daylight savings (ie. summer) - 7am – 6pm Monday to Friday, 8am-1pm Saturday;</p> <p>b) at other times (ie. winter) - 7am – 5pm Monday to Friday, 8am-1pm Saturday; and</p> <p>c) Sundays or public holidays - no work is to be undertaken, except for</p>	Construction	Joint	All construction activities were undertaken in accordance with the construction hours specified in this condition. No complaints or incidents were recorded where works were undertaken outside of working hours.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	emergency works or minor, low noise activities such as painting.				
214	<p>The hours of operation for specific uses shall be as follows:</p> <ul style="list-style-type: none"> a) restaurant in A6 – closed to the public by 11.00 pm; b) conferences and functions – no organised visitor activity past 11.00 pm; and c) night tours – the 1918 Night Experience sound and light show to conclude by 11.00 pm. The Late Ghost Tour to conclude by 12.00 midnight. 	Operation	Joint	Booking details are available in the booking registers at reception, the tour desk and the restaurant. These details also contain times for tours and closures. No out of hours operations occurred.	Compliant
215	Service providers and contractor vehicles may only access and exit the site between 7.00 am and 12.00 pm (mid-day). This does not apply to vehicles involved in the undertaking of construction or conservation works.	Operation	Joint	This information is given to all contractors during induction.	Compliant
MONITORING AND AUDITING PROGRAM					
Monitoring					
216	Within twelve months of the commencement date an integrated monitoring program for the activity shall be prepared by the co-proponents and submitted for approval of DEC and DIPNR. The program shall be prepared in consultation with the Heritage Council and other relevant authorities. Implementation of the program shall commence no later than three months from the date of approval of the program.	Operation	Joint	An Integrated Monitoring and Adaptive Management System (IMAMS) programme was developed in 2006 and operated until 2020. A review of this system was requested by DPE. The replacement monitoring system has not yet been approved for use by DPE.	Non-Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>The primary aim of the program shall be to monitor over time the effects of the activity on the significance of the Quarantine Station site and immediately adjoining areas (such as Quarantine Beach and the Wharf), and to identify the need to develop and implement strategies to respond to any adverse impacts identified. An integrated monitoring program shall be implemented for the life of the activity and shall address:</p> <ul style="list-style-type: none"> a) the feature or issue to be monitored; b) how the monitoring will be undertaken (eg. methods) and who will undertake this work; c) frequency of monitoring; and d) a process for reviewing the results of monitoring and identifying measures to be implemented to respond to impacts, and/or to meet the requirements of the approval. 			NPWS engage external consultants to undertake monitoring of threatened species including Long-nosed Bandicoots (Appendix B), Little Penguin (Appendix C) and threatened flora (Appendix D – <i>Acacia Terminalis</i>).	
217	<p>The program shall include, but is not limited to, the following matters:</p> <ul style="list-style-type: none"> a) visitor access information – see conditions 135) and 156); b) the interpretive program, and whether it is achieving its goals (to include consideration of quality of visitor experience, visitor understanding and presentation performance) (condition 100); 	Operation	Joint	An Integrated Monitoring and Adaptive Management System (IMAMS) programme was developed in 2006 and operated until 2020. A review of this system was requested by DPE. The replacement monitoring system has not yet been approved for use by DPE.	Non-Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	c) Aboriginal heritage – including the condition of physical sites (condition 70);				
	d) non-Aboriginal heritage – including the condition of buildings and structures, landscape features, moveable heritage and conservation works progress (conditions 78) and 85);				
	e) flora and fauna - including general monitoring during construction and operation phases, as well as specific strategies for monitoring threatened species, including the Little Penguin and the Long-nosed Bandicoot (conditions 167) and 177)-178);				
	f) seagrasses (condition 184);				
	g) soil and erosion (conditions 197)-198);				
	h) noise (condition 199);				
	i) stormwater management, including water quality (condition 104);				
	j) infrastructure – consumption and capacity (water, sewer, gas, etc – condition 105);				
	k) waste management (condition 203); and				
	l) staff and contractor training – including induction programs (conditions 64) and 65) and emergency training (condition 206)				

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
218	On the basis of the outcomes of the integrated monitoring program, the co-proponents shall, subject to DEC and any other approvals required as specified in the conditions of approval, use the adaptive management system to adjust the undertaking of the activity to conserve the significance of the site.	Operation	Joint	No adjustment required.	Not Triggered
219	As part of the annual environmental report (condition 221) and comprehensive audit (condition 226), the co-proponents shall produce a monitoring report outlining results from the integrated monitoring program. The report shall: <ul style="list-style-type: none"> a) include an analysis of monitoring results and trends collected over time; and b) identify measures taken or proposed to be undertaken to respond to any adverse or unexpected impacts identified. 	Operation	Joint	Monitoring reports were completed for both the Little Penguins and the Long-nosed Bandicoots during the reporting period. See Appendix B – Long-nosed Bandicoot Monitoring North Head, Manly. November 2018. See Appendix C – Manly Little Penguin Recovery Program. 2018/19 Monitoring Report. May 2019.	Compliant
220	The co-proponents shall undertake a regular review of the overall integrated monitoring program concurrent with or prior to the ongoing comprehensive audits of the activity (condition 228). The review shall be undertaken in consultation with the relevant authorities. On the basis of the review the co-proponents shall, as necessary, prepare a revised program to be submitted to the DEC and DIPNR for approval.	Operation	Joint	Review is pending.	Non-Compliant
Annual Environmental Report					
221	An annual environmental report for the activity shall be prepared by the co-proponents and	Operation	Joint	This report has been prepared to satisfy this requirement.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	submitted to the DEC, DIPNR, NSW Heritage Council, Waterways Authority, NSW Fisheries and the Quarantine Station Community Committee for comment. In reviewing the annual environmental report these organisations are to specifically consider issues associated with visitor impacts arising from the activity.				
222	In submitting the report in accordance with condition 221), the co-proponents shall identify a timeframe for the receipt of comments. As a minimum, the organisations listed in condition 221) shall have 4 weeks to provide comment, starting from the date on which they receive the report. An extension of the timeframe for comments may be agreed between the relevant organisation(s) and the co-proponents.	Operation	Joint	See Section 1.2 for details of stakeholders and review timeframes.	Compliant
223	The co-proponents shall submit the first environmental report approximately 12 months after the commencement date, although this may be adjusted if agreed by the DEC to match the end of the calendar or financial years or to coincide with the staging plan (condition 31), and at annual intervals thereafter. No annual report is required in the year that a comprehensive audit is due (condition 228).	Operation	Joint	The original 2018-19 environmental report was not submitted in accordance with this condition however, it has been prepared and will be submitted in accordance with the direction of Planning Secretary requiring submission by 21 January 2022.	Compliant
224	The annual environmental report shall: <ul style="list-style-type: none"> a) state how the co-proponents have complied with relevant approval conditions; b) include the outcomes of the annual monitoring report (condition 219); 	Operation	Joint	<p>This report has been prepared in accordance with the <i>Compliance Reporting Post Approval Requirements</i> (DPIE, 2020).</p> <p>Details of annual monitoring that has taken place can be found within the appendices of this report.</p>	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>c) state any measures taken or proposed by the co-proponents to respond to issues arising from:</p> <ul style="list-style-type: none"> the integrated monitoring program consultations with the community; and <p>d) state any recommendations from the co-proponents regarding the undertaking of the activity, if considered necessary.</p>				
225	The co-proponents shall take all reasonable steps to comply with any requirements of the DEC, DIPNR, NSW Heritage Council, NSW Fisheries and Waterways Authority in regard to the outcomes of the annual environmental report. The co-proponents shall also consider the recommendations and comments of the Quarantine Station Community Committee and provide a response to the Committee.	Operation	NPWS	See Section 1.2 for details of stakeholders and review timeframes. See Appendix H for stakeholder comments to this report.	Compliant
Audit					
226	A comprehensive audit of the activity shall be prepared by a suitably qualified, experienced and independent person in accordance with the timeframes specified in condition 228), for the duration of the activity. The audit process shall be consistent with ISO 14010 – Guidelines and General Principles for Environmental Auditing and ISO 14011 – Procedures for Environmental Auditing, or updated versions of these.	Operation	Joint	<p>Audit report submitted in 2011 to 2018 (EOFY). SNC Lavalin Atkins (2018) Compliance Audit Report. Quarantine Station, North Head. National Parks and Wildlife Service.</p> <p>The next audit report is due by 1 June 2022.</p>	Compliant
227	The co-proponents shall meet the cost of the comprehensive audit. The appointment of the	Operation	Joint	The next audit report is to be finalised by 1 June 2022. The auditors will be submitted for	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	auditor shall be approved by the DEC and DIPNR.			approval prior to commencement and the co-proponents shall share in the cost of the auditor.	
228	Preparation of the first comprehensive audit report shall coincide with the conclusion of stage 2 of the staging plan (condition 31). Subsequent comprehensive audit reports shall then be undertaken every 5 years after the commencement date, although this may be adjusted if agreed by the DEC to link with the timing of the annual environmental reports (condition 223).	Operation	Joint	<p>Audit report submitted in 2011 and 2018 (EOFY). SNC Lavalin Atkins (2018) Compliance Audit Report. Quarantine Station, North Head. National Parks and Wildlife Service.</p> <p>The next audit report is to be finalised by 1 June 2022.</p>	Compliant
229	<p>The audit shall address, but not be limited to:</p> <ul style="list-style-type: none"> a) the environmental performance of the activity and its effects on the environment; b) compliance by the co-proponents with the approval conditions; c) the adequacy of the integrated monitoring program and EMP; d) the adequacy of measures taken or proposed by the co-proponents to respond to issues arising from: <ul style="list-style-type: none"> • the integrated monitoring program; and • consultations with the community; e) consideration of the key impact predictions made in the EIS and PAS using information from the integrated monitoring program; 	Operation	Joint	<p>Audit report submitted in 2011 and 2018 (EOFY). SNC Lavalin Atkins (2018) Compliance Audit Report. Quarantine Station, North Head. National Parks and Wildlife Service.</p> <p>The next audit report is to be finalised by 1 June 2022 in accordance with the "North Head Quarantine Station (MP08_0041) Monitoring and Auditing Program.</p>	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
	<p>f) the adequacy and functioning of the information management and GIS system (once in place – conditions 66)-69); and</p> <p>g) any other matters considered necessary by the DEC, Heritage Council, Waterways Authority or DIPNR.</p> <p>The audit report may recommend measures or actions to improve the environmental performance of the activity and/or its environmental management and monitoring systems, if these are considered necessary</p>				
230	A draft comprehensive audit report shall be submitted by the auditor to the co-proponents, DEC, DIPNR, NSW Heritage Council, Waterways Authority, NSW Fisheries and the Quarantine Station Community Committee for comment.	Operation	Joint	<p>SNC Lavalin Atkins (2018) Compliance Audit Report. Quarantine Station, North Head. National Parks and Wildlife Service was submitted to key stakeholders on 22 August 2018 for comment.</p> <p>Next audit is due to be finalised by 01 June 2022. The auditor will submit the report to stakeholders for consultation in 2022.</p>	Compliant
231	In submitting the report in accordance with condition 230), the auditor shall identify a timeframe for the receipt of comments. As a minimum, the organisations listed in condition 230) shall have 6 weeks to provide comment, starting from the date on which they receive the report. An extension of the timeframe for comments may be agreed between the relevant organisation(s) and the auditor.	Operation	Joint	SNC Lavalin Atkins (2018) Compliance Audit Report. Quarantine Station, North Head. National Parks and Wildlife Service was submitted to key stakeholders on 22 August 2018 for comment. Comments were received from DPE, DPI and the QSCCC. The findings were discussed with the QSCCC on 14 November 2018.	Compliant

CoPA	Compliance requirement	Development phase	Responsibility (NPWS, Mawland or Joint)	Evidence and comments	Compliance status
				The auditor will submit the next audit report to stakeholders for consultation in 2022 in accordance with this condition.	
232	The auditor shall consider comments received from the organisations listed in condition 230) and prepare and submit a final audit report to the DEC and DIPNR. Based on the outcomes of the final audit report, and after considering any comments provided by the organisations listed in condition 230), the DEC and/or DIPNR may require the co-proponents to address certain matters identified in the audit. The co-proponents shall comply with any such requirements.	Operation	Joint	<p>SNC Lavalin Atkins (2018) Compliance Audit Report. Quarantine Station, North Head. National Parks and Wildlife Service. Comments received were addressed in the final audit report.</p> <p>The auditor will submit the next audit report to stakeholders for consultation in 2022 in accordance with this condition.</p>	Compliant
233	If, after considering the outcomes of the comprehensive audit, the DEC, DIPNR and/or the co-proponents consider that significant revisions to the undertaking of the activity or mitigative measures are required to protect the significance of the site, any such proposed revisions will be submitted to the Minister for Infrastructure, Planning and Natural Resources. Prior to the Minister for Infrastructure, Planning and Natural Resources agreeing to any significant revisions, the details of the proposal are to be made available for public comment. The co-proponents shall comply with any reasonable directions of the Minister.	Operation	Joint	<p>SNC Lavalin Atkins (2018) Compliance Audit Report. Quarantine Station, North Head. National Parks and Wildlife Service. No significant revisions to the undertaking of the activity or mitigative measures were required to be sent to the Minister for Infrastructure, Planning and Natural Resources.</p> <p>The next audit shall be finalised by 01 June 2022 in accordance with this condition.</p>	Compliant

SCHEDULE 2

ELEMENTS OF ACTIVITY NOT APPROVED (CONDITION 17)

The following aspects of the activity are not approved as part of this application

Location	Element refused and additional comments	Compliance Status
Wharf Precinct		
Concrete stormwater pipe at Quarantine Beach.	<ul style="list-style-type: none"> The proposed alterations are not approved as there is insufficient information in the current application to assess the potential environmental impacts. 	This has not been undertaken and is not intended to be undertaken.
Open area between A7, A8 and A11-12	<ul style="list-style-type: none"> Power poles - the removal of overhead power poles is not approved, except where they are to be replaced with new poles of a similar size and materials (DACMP CPP 16.8.2). 	This has not been undertaken and is not intended to be undertaken.
A12	<ul style="list-style-type: none"> The interior wall and ceilings of A12 are not to be re-painted, but may be sealed to prevent deterioration. 	This has not been undertaken and is not intended to be undertaken.
First cemetery	<ul style="list-style-type: none"> markers is not approved. Interpretation of the cemetery should not overtly herald its presence to people moving through the site (Landscape Data Sheet L01, L01a). 	This has not been undertaken and is not intended to be undertaken.
Administration Precinct		
Building S2	<ul style="list-style-type: none"> The extension to the timber verandah is not approved as this would adversely alter the external configuration of the building, which makes a strong aesthetic contribution to the centre and core areas of the site (DACMP Building Data Sheet S02). However, if the preparation of detailed design plans for the building indicates that alterations to the verandah are necessary to accommodate disabled access, then these may occur subject to approval of the design and construction plans. Refer also Schedule 3. 	This has not been undertaken and is not intended to be undertaken.
Building S4	<ul style="list-style-type: none"> Changes to the bathroom fitout are not approved as it is a rare surviving fitout of an early bathroom 	This has not been undertaken and is not intended to be undertaken.

Location	Element refused and additional comments	Compliance Status
	<p>on the site. Any adaptation of the bathroom must retain the fabric specified in DACMP Building Data Sheet S04.</p> <ul style="list-style-type: none"> Reconstruction of the verandah based on research may occur. 	
Building S10	<ul style="list-style-type: none"> Demolition of the verandah structure is not approved, however removal of the AC infills may occur, consistent with DACMP Building Data Sheet S10. 	This has not been undertaken and is not intended to be undertaken.
Building S12	<ul style="list-style-type: none"> The conversion of the laundry to a bathroom is not approved as it is a largely intact and rare example on the site (DACMP Building Data Sheet S12). 	This has not been undertaken and is not intended to be undertaken.
First and Second Class Precincts		
Eastern perimeter of road through First and Second Class	<ul style="list-style-type: none"> Power poles - the removal of overhead power poles is not approved, except where they are to be replaced with new poles of a similar size and materials (DACMP CPP 16.8.2). 	This has not been undertaken and is not intended to be undertaken.
Gravel path from P12 to top of the Funicular stairway	<ul style="list-style-type: none"> The proposal gravel path (as shown in Figure 2.1 of the PAS) is not approved, as this is an area of potential foraging habitat for Long-nosed Bandicoots and in accordance with DACMP Policy GCP13.3.29. 	This has not been undertaken and is not intended to be undertaken.

SCHEDULE 3

ASPECTS OF THE PROPOSAL APPROVED SUBJECT TO MODIFICATION OR DETAILED DESIGN (CONDITION 18)

The following aspects of the proposal are approved, subject to achievement of the specific outcomes and objectives shown in the table and:

- Compliance with the Quarantine Station Archaeological Management Plan (AMP)
- Any necessary approvals being obtained from the NSW Heritage Council; and
- Compliance with the NPWS Construction Assessment and Approvals Procedure

Approved	Specific Outcomes / Objectives	Compliance Status
Cross Precinct Issues		
Various buildings: methods for cooling and heating rooms	<ul style="list-style-type: none"> • Rooms to be used for dining, kitchens, function and conference related purposes, as well as archival or records storage and administration may include appropriate contemporary technologies for cooling and heating, which includes installation of room air-conditioning in accordance with Heritage Council approval dated 2 March 2017 that can be reversed at any time. • Ceiling fans may be installed in other buildings, with preference to fans mounted over the ceiling light to minimise fabric impact. • Details of any proposed cooling and heating systems shall be included in the construction works application for the particular building. The application must demonstrate that the proposed system: <ul style="list-style-type: none"> ○ Will have as little adverse impact on significant fabric as practicable; ○ Will not have significant adverse visual impacts; and • Is clearly capable of being removed, and fabric reinstated, at some future point consistent with the principle of reversibility. 	A New Works Certificate was issued by NPWS on 23 November 2018 to Mawland for the air conditioning works to be completed following completion and a review of the work against all relevant approvals and the CoPA. Works were carried out in the following buildings A28/ 29, A11, P5, P15, P27 and S7. Works were approved by the Heritage Council on 2 March 2017.
Road repairs	<ul style="list-style-type: none"> • No timber kerbs are to be installed as this is contrary to the DACMP policy GCP 13.3.43, which states that new retaining walls (this includes kerbs) 	No works were undertaken in regard to this item during the reporting period.

Approved	Specific Outcomes / Objectives	Compliance Status
	should be sympathetic to neighbouring examples in terms of scale, material and texture.	
Lower Reservoir – water reservoirs/tanks	<ul style="list-style-type: none"> Full details of the proposed design and layout of the water reservoirs and associated infrastructure are to be submitted to the DEC. This shall include evidence of consultation with Sydney Water (condition 16). 	No works have been completed on the reservoirs during the reporting period and to date since the project was approved.
Excavation and installation of second water network for fire purposes	<ul style="list-style-type: none"> Relevant assessments are to be undertaken in accordance with the Archaeological Management Plan. 	No works were undertaken in regard to this item during the reporting period.
Symbolic fences	<ul style="list-style-type: none"> Location and design options for the symbolic fences are to be addressed in the outdoor visitor infrastructure plan (condition 112). Documentary evidence of earlier fences and/or boundary markers must be considered. 	No works were undertaken in regard to this item during the reporting period.
Artificial foraging habitat for Long-nosed Bandicoots – below P1, A28-29, P3, P5, P7 and near CP5	<ul style="list-style-type: none"> Habitat reconstruction and/or rehabilitation shall only occur in accordance with the revised habitat assessment (condition 165). 	No works were undertaken in regard to this item during the reporting period.
Wharf Precinct		
Removal or modification of the existing fence along the beachfront.	<p>Any modification or replacement of the existing fence shall occur in accordance with the following criteria:</p> <ul style="list-style-type: none"> the design and materials will reflect the historic separation of uses and the need to provide adequate security (especially at night), but may allow for improved views and reduced visual impacts; 	No works were undertaken in regard to this item during the reporting period.

Approved	Specific Outcomes / Objectives	Compliance Status
	<ul style="list-style-type: none"> • limited openings in the fence may be provided, but must be capable of being closed for security reasons. Suitable areas include near the wharf and behind building A7; • there shall be no openings at the northern end of the beach in the immediate vicinity of the outdoor eating area at A6, with the exception of openings to assist the movement of Little Penguins. Any existing openings in this area are to remain closed and are not to be available for general public access to the beach; • any openings shall be of the minimum width necessary, but may be capable of being expanded in the event of an emergency; • any openings are to include measures to protect the dunes and grassed areas and to prevent erosion; and • temporary signage is to be provided on the beach during the Little Penguin breeding season, as detailed in condition 175). 	
Waterfront forecourt	<ul style="list-style-type: none"> • Design of sculptures to be approved by DEC. 	No works were undertaken in regard to this item during the reporting period.
A14-17 – Visitor Centre	<ul style="list-style-type: none"> • The theatrettes are to follow the general layout and direction shown in Drawing No. L-A14-17 of the PAS, but options shall be investigated to provide for a greater retention of luggage racks. 	No works were undertaken in regard to this item during the reporting period.
Open area between A7, A8 and A11-12	<ul style="list-style-type: none"> • A5 symbolic presentation - removal of the bitumen to uncover footings is to occur in accordance with the provisions of the AMP. 	No works were undertaken in regard to this item during the reporting period.
A6 – shade structures	<p>Indoors</p> <ul style="list-style-type: none"> • The timber platform may be relocated to another area within A6 if necessary. • The construction works application shall specifically address the following matters: 	No works were undertaken in regard to this item during the reporting period.

Approved	Specific Outcomes / Objectives	Compliance Status
	<ul style="list-style-type: none"> ○ Provide details of access and serving arrangements for sit-down and take-away food provision; ○ Details of the proposed mezzanine, which shall be generally in accordance with the preliminary details provided by the Proponent and NPWS on 14 October 2002, and designed to minimise the mezzanine floor area (eg. By efficient table layouts); ○ Demonstrate that the proposal will have as little adverse impact on significant fabric as practicable; ○ Demonstrate that the exhaust flue will have as little adverse visual impact on the external appearance of the building as practicable; and ○ Demonstrate that the finishes, equipment and services required for the restaurant operation are clearly capable of being removed, and fabric reinstated, at some future point consistent with the principle of reversibility. 	
	<p>Outdoors</p>	
	<ul style="list-style-type: none"> • The boundary of the outdoor eating area must correspond with the beachside building line of A6. • The existing coral trees in the vicinity of the outdoor eating area shall be regularly inspected and maintained in accordance with condition 160. • A shade structure/s over the outdoor eating area beside the Boilerhouse (Building A6) may be provided in accordance with approval granted by NSW Heritage Division (or any subsequent agency). • Individual umbrellas and/or temporary shade structures are permitted in outdoor eating areas, 	

Approved	Specific Outcomes / Objectives	Compliance Status
	<p>including the wharf area, where there is no permanent shade structure.</p> <ul style="list-style-type: none"> Any umbrella or shade structure must be positioned as to minimise, to the maximum extent possible, any adverse visual impact. It shall not contain any third-party advertising to the site and its operation. The colour and nature of shade structures and/or umbrellas is to be neutral and in keeping with the natural environment The colour, type, location, time limits and frequency of use of umbrellas or any shade structure must be approved by the Heritage Council prior to commencing use. 	
A6 – sewer outlet	<ul style="list-style-type: none"> The final route is to be determined following completion of assessments in accordance with the AMP and following approval of the Infrastructure Control Plan (condition 105). 	No works were undertaken in regard to this item during the reporting period.
Construction of stairway over the former funicular railway	<p>The final location of the route is to be determined following the outcomes of an archaeological assessment in accordance with the AMP.</p> <ul style="list-style-type: none"> The stairway width shall be kept to the minimum necessary to comply with BCA requirements. No viewing or landing platforms shall be constructed, except where these may be necessary to achieve compliance with the BCA. Preference shall be given to a metal construction, rather than timber, with the physical footprint of the structure kept to the minimum necessary to comply with the BCA. The structure shall be of a colour that allows it to blend with the surrounding landscape. The entire route of the former Funicular shall be identified and interpreted. Lopping, trimming or removal of vegetation adjoining the stairway shall not occur, except 	No works were undertaken in regard to this item during the reporting period.

Approved	Specific Outcomes / Objectives	Compliance Status
	where this is necessary as part of the stairway construction process or for on-going public safety. Vegetation shall not be removed for the sole purpose of improving views from the stairway.	
Bitumen pathway to hospital	<ul style="list-style-type: none"> Options for managing public access to the inscriptions, including re-alignment of the walkway, are to be considered in development of the Inscriptions Management Plan (condition 95). 	No works were undertaken in regard to this item during the reporting period.
Second Cemetery	<ul style="list-style-type: none"> Options for re-instatement of headstones are to be addressed in the Heritage Landscape Management Plan (condition 91). Any proposal to re-instate headstones must be based on archival evidence regarding the original location of headstones. Where this is not available, the manner of reinstatement must clearly demonstrate this lost knowledge. Any evidence of graves, including clay banking from 1881, shall be retained as per DACMP Landscape Data Sheet L01 and L01a. 	No works were undertaken in regard to this item during the reporting period.
Building S9	<ul style="list-style-type: none"> Research into the construction history of the building is required prior to undertaking any works on this building. The results of this research should form the basis for developing an approach to the ongoing use and maintenance of this building. 	No works were undertaken in regard to this item during the reporting period.
Building P14-16	<ul style="list-style-type: none"> Detailed design work is to be submitted for proposed alterations to the shower and toilet blocks to address the requirements of the DACMP and relevant public health and educational facility requirements. If the public health and educational facility requirements cannot be met without significant departure from the provisions of the DACMP, then the alterations shall not proceed and alternative bathroom and shower arrangements must be made. 	No works were undertaken in regard to this item during the reporting period.

Approved	Specific Outcomes / Objectives	Compliance Status
	<ul style="list-style-type: none"> Alternate options to carpeting within this building (eg. rugs) consistent with DACMP requirements for floors must be submitted. 	
Building P28-29	<ul style="list-style-type: none"> Retention of as much significant fabric as possible in accordance with DACMP Building Date Sheet P28-29. 	No works were undertaken in regard to this item during the reporting period.
Hospital and Isolation Precinct		
H6	<ul style="list-style-type: none"> Details of the approach to rectifying any problems associated with rising damp are to be submitted. 	No works were undertaken in regard to this item during the reporting period.
H7-11 – accommodation	<ul style="list-style-type: none"> Details of options for the retention of the 1914-1916 fabric and at least some of the 1958 fabric, in accordance with DACMP requirements, are to be submitted 	No works were undertaken in regard to this item during the reporting period.
H15	<ul style="list-style-type: none"> The addition of a free standing timber platform above the ground alongside H15 is approved, subject to the submission of design details that demonstrate this would not significantly alter the form of the building, its appearance, starkness in the landscape or its basic amenity (DACMP Building Date Sheet H15). The timber platform shall be designed and constructed to be reversible and should be constructed close to the ground to minimise the need for a balustrade. 	No works were undertaken in regard to this item during the reporting period.
Administration Precinct		
S2	<p>Adaptation must retain as much significant fabric as possible as specified in DACMP Building Data Sheet S02. Particular attention shall be given to:</p> <ul style="list-style-type: none"> retention of as much of the partition layout as practicable; assess options for providing efficient guest access to the building, including swapping the location of the reception and guest lounge rooms as shown in 	No works were undertaken in regard to this item during the reporting period.

Approved	Specific Outcomes / Objectives	Compliance Status
	Drawing No. L-S2 of the draft Site Master Plan (EIS Vol. 3); <ul style="list-style-type: none"> • assess options for disabled access to the building; and • removal of the lattice screen to the eastern verandah. • Refer also Schedule 2. 	
S4	<ul style="list-style-type: none"> • Reconstruction of the verandah shall occur following completion of research regarding an appropriate design. 	No works were undertaken in regard to this item during the reporting period.
A28-29 – visitor shelter	<ul style="list-style-type: none"> • Details of the proposed mural are to be submitted to the DEC for approval. • Provision for the retention of as much original fabric as possible shall be made in finalising detailed design plans for this building in accordance with DACMP requirements. • A sub-floor archaeological assessment is to be completed. 	No works were undertaken in regard to this item during the reporting period.
A20	<ul style="list-style-type: none"> • Details of the proposed sampling approach to conservation of fabric, as per DACMP Building Data Sheet A20, are to be submitted. 	No works were undertaken in regard to this item during the reporting period.
A26 – visitor shelter	<ul style="list-style-type: none"> • Details of the proposed mural are to be submitted to the DEC. 	No works were undertaken in regard to this item during the reporting period.
A2	<ul style="list-style-type: none"> • Final design and material details for the entry area being submitted in accordance with the approved Heritage Landscape Master Plan (condition 91). • Adaptation must retain as much fabric as possible as specified in DACMP Building Data Sheet A02. 	No works were undertaken in regard to this item during the reporting period.
First and Second Class Precincts		
Eastern perimeter of road through First and Second Class	<ul style="list-style-type: none"> • Service trench – assessments must be completed in accordance with the AMP. 	No works were undertaken in regard to this item during the reporting period.

Approved	Specific Outcomes / Objectives	Compliance Status
P1, P2	<ul style="list-style-type: none"> Complete removal of all wall hot water tanks is not appropriate. Details of a sampling strategy must be submitted. 	No works were undertaken in regard to this item during the reporting period.
P1, P2 and P9	<ul style="list-style-type: none"> Corridors in these buildings shall be retained as a functioning part of the building. That is, they will be available for use by guests. Internal doors from rooms into these corridors must not be permanently sealed. 	No works were undertaken in regard to this item during the reporting period.
Re-instatement of badminton base, croquet lawn and tennis court	<ul style="list-style-type: none"> Options for re-instatement are to be addressed in the Heritage Landscape Management Plan (condition 91). 	No works were undertaken in regard to this item during the reporting period.
Building P11, P12	<ul style="list-style-type: none"> Consistent with DACMP Building Data Sheets P11 and P12 the reconstruction of former stairs on the western elevation of buildings and the uncovering of fireplaces must be addressed in the construction works application for these buildings. 	Emergency removal of stairs removed for safety. Replacement of the stairs is under discussion with QSCCC.

SCHEDULE 4

WORKS ASSOCIATED WITH THE WHARF (CONDITION 42)

Condition Number	Condition	Compliance Status
1	<p>The following information shall be provided with the application:</p> <ul style="list-style-type: none"> a) Four copies of detailed dimensioned working drawings, all signed by the co-proponents (or their delegate), complying with the "Guidelines for Waterside Structures" fully and clearly describing all the proposed works and their components; b) A condition survey report that includes <ul style="list-style-type: none"> • Appropriate photographs • A detailed engineering commentary on the structure integrity of appropriate elements of the existing wharf • Appropriate sketches or drawings; c) A diver's inspection and pile inspection report; d) Calculations to verify that the existing wharf is structurally sufficient to carry the proposed loads; e) Correspondence from the operator that the wharf will be satisfactory for its intended use; and f) Details of appropriate lighting to the wharf deck. 	<p>An application to the Office of Environment and Heritage was made on 20 September 2018 for the installation of additional fender piles at the wharf to assist with the docking of a large ferry as part of the Invictus Games. This application was approved on 5 October 2018 following consultation.</p>
2	<p>The following specifications shall be complied with:</p> <ul style="list-style-type: none"> a) Any parts of the existing wharf that require removal must be completely removed from Waterways Authority land. All piles and piers involved are to be completely withdrawn from the bed of the Spring Cove and not cut off. In 	<p>An application to the Office of Environment and Heritage was made on 20 September 2018 for the installation of additional fender piles at the wharf to assist with the docking of a large ferry as part of the Invictus Games. This application was approved on 5 October 2018 following consultation.</p>

Condition Number	Condition	Compliance Status
	<p>accordance with condition 41), where such works require excavation or disturbance of the seabed a separate application and approval under Part 5 of the Environmental Planning and Assessment Act 1979 will be required; and</p> <p>b) All work is to be done in such a way that no construction or demolition debris etc falls, flows or is carried to the bed or waters of the Spring Cove and any such material entering the Cove is to be removed immediately.</p>	
3	<p>Prior to commencement of use of the wharf, the following works must be undertaken to the satisfaction of the Waterways Authority:</p> <p>a) Installation of lifebuoys and ladders on the wharf;</p> <p>b) The top ½ metre of the mooring/fender piles shall be painted and kept painted white: all other elements of the facility shall be left unpainted or, if painting is required, be painted in a mid grey colour with matt finish; and</p> <p>c) Installation of signage indicating that the wharf is for use by the public ferry service only and is not available for private access or mooring.</p>	<p>An application to the Office of Environment and Heritage was made on 20 September 2018 for the installation of additional fender piles at the wharf to assist with the docking of a large ferry as part of the Invictus Games. This application was approved on 5 October 2018 following consultation.</p>

SCHEDULE 5

LONG-NOSED BANDICOOTS – MONITORING REQUIREMENTS (CONDITION 167)

The co-proponents shall undertake the following monitoring program

1. The co-proponents will negotiate with the DEC an annual contribution to assist the on-going implementation of any monitoring programs established as part of the Long-nosed Bandicoot Recovery Plan (once adopted). The contribution will be adjusted annually to reflect changes in the CPI.
2. The following specific elements shall also be monitored by the co-proponents

Element	Timing	Methods	Compliance
Bandicoot activity and use of foraging habitat	To commence within one month of the commencement date	Monitoring will be undertaken using spotlight transects and surveys of Long-nosed Bandicoot diggings on a three monthly basis and will compare areas generally unaffected by the proposal (control areas) with areas potentially affected by the proposal (either by construction activities or visitors).	See Appendix B – Long-nosed Bandicoot Monitoring North Head, Manly. November 2018.
Any enhanced, reconstructed or rehabilitated habitat established in accordance with condition 165)	To commence within one month of the works being completed	See above, but also to include identification of what use bandicoots are making of the enhanced habitat areas, i.e foraging, shelter, nesting.	See Appendix B – Long-nosed Bandicoot Monitoring North Head, Manly. November 2018.
Deaths of Long-nosed Bandicoots attributable to vehicles. Road-deaths are taken to include any bandicoot remains identified on or next to roads	To begin within one month of the commencement date and to occur for the duration of the approval.	<p>Road-death monitoring shall be conducted by an appropriately trained and licensed person on a daily basis, within two hours of sunrise and is to be undertaken by driving set routes at slow speeds.</p> <ul style="list-style-type: none"> • monitored roads are to include all public roads within Sydney Harbour National Park i.e. Blue Fish Road, Collins Beach Road, North Head Scenic Drive from the Parkhill Archway to the North Head look out, and the internal roads with the Quarantine Station. • road deaths are to be recorded on a publicly accessible mortality register, noting basic morphological details (age, sex and condition), the date, the name of the recorder, microchip number of the animal (if present) and the location plotted using a GIS-based map (see also conditions 169A and 66). For the purposes of road 	See Appendix B – Long-nosed Bandicoot Monitoring North Head, Manly. November 2018.

Element	Timing	Methods	Compliance
		<p>mortality monitoring an adult Long-nosed Bandicoot is defined as: female – 450 grams or heavier; male –heavier than 650 grams.</p> <ul style="list-style-type: none"> opportunities are to exist for the public to provide notification of road deaths that can be verified by a dead specimen or adequate photographic evidence. <p>where the cause of death or the age of the individual cannot be determined at the time of notification, the remains are to be collected and stored and a necroscopy undertaken as soon as possible. Costs of the verification process shall be met by the co-proponents.</p>	

SCHEDULE 6

LONG-NOSED BANDICOOTS: ADAPTIVE MANAGEMENT – ROAD MORTALITIES (CONDITION 169)

Trigger	Trigger mechanisms	Compliance Status
Boundary of road mortality monitoring	For the purposes of applying the following trigger mechanisms, Long-nosed Bandicoot road mortalities are those adult mortalities recorded in accordance with the methods specified in Schedule 5 but only for internal roads of the Quarantine Station.	See Appendix B – Long-nosed Bandicoot Monitoring North Head, Manly. November 2018.
Trigger 1	If the level of private vehicle traffic generated by the proposal increases 10% above the projected levels measures shall be introduced to reduce traffic volumes to below these levels and as close as possible to the original projections. Trigger 1 will apply regardless of whether the following triggers have been reached and vica versa (eg. Trigger 2 could occur first, with Trigger 1 occurring at a later stage).	See Appendix B – Long-nosed Bandicoot Monitoring North Head, Manly. November 2018.
Trigger 2	<p>If in any six-month period there are 2 recorded adult road mortalities above the background level then the co-proponents must implement the following measures, unless otherwise agreed by the DEC:</p> <ul style="list-style-type: none"> (a) seek approval from the relevant authorities (including Council if necessary) to install additional traffic calming devices and signage at appropriate locations within or outside of the site as informed by the mortality register (Schedule 5) and GIS (Condition 66); (b) investigate the feasibility of providing road-side fencing to create defined road-crossing points for Long-nosed Bandicoots, particularly using the existing traffic calming devices; and (c) reduce the frequency and alter the timing of functions, conferences and activities (eg. scheduling finishing times of activities to minimise traffic leaving or arriving at the site after sunset). With the exception of any additional traffic calming devices, fencing and signage, the measures may be reversed with approval from the DEC if adult road deaths return to less than 2 above the background level for six consecutive months. 	See Appendix B – Long-nosed Bandicoot Monitoring North Head, Manly. November 2018.
Trigger 3	<p>If the measures in Trigger 2 above have been applied and adult road mortalities continue to exceed 2 deaths above the background level for a further six months then the co-proponents shall also implement the following measures, unless otherwise agreed by the DEC:</p> <ul style="list-style-type: none"> (a) implement a sunset-to-sunrise curfew for overnight guest and day visitor private vehicles arriving at or leaving the site (including CP1 if at least half the mortalities have occurred outside of the site). During the curfew: 	See Appendix B – Long-nosed Bandicoot Monitoring North Head, Manly. November 2018.

Trigger	Trigger mechanisms	Compliance Status
	<ul style="list-style-type: none"> ○ buses and coaches may continue to access the site in accordance with conditions 150) and 151); ○ the shuttle bus may continue to run from CPI to areas within the site; and ○ staff may continue to access and park in CP5 at all times; <p>(b) provide a night shuttle bus service between Manly and the site (or some other means of public transport); and</p> <p>(c) implement measures identified in the assessment of habitat reconstruction and rehabilitation options (condition 165) that have not already been undertaken.</p> <p>The curfew must be implemented within 2 weeks of the six month mortality information becoming available. The curfew may be lifted and the shuttle bus service concluded with approval from the DEC once adult road mortalities return to less than 2 above the background level for six consecutive months.</p>	
Trigger 4	<p>If the measures in Trigger 3 above have been applied and adult road mortalities continue to exceed 2 deaths above the background level for a further six months then the co-proponents shall also implement the following measures, unless otherwise agreed by the DEC:</p> <ul style="list-style-type: none"> • implement a total day and night ban on all guest and visitor private vehicles entering the site (including CP1 if at least half the mortalities have occurred outside the site). During the ban: <ul style="list-style-type: none"> ○ buses and coaches may continue to access the site in accordance with conditions 150) and 151); ○ the shuttle bus may continue to run from CPI to areas within the site; and ○ if at least half the mortalities have occurred inside the site, staff may only park in CP1 (with no restrictions on timing) otherwise staff may continue to access and park in CP5 at all times; and • provide a day and night shuttle bus service between Manly and the site (or some other means of public transport). <p>The ban must be implemented within 4 weeks of the six month mortality information becoming available. The ban and associated restrictions may be lifted with approval from the DEC once adult road mortalities return to less than 2 above the background level for 12 consecutive months.</p>	See Appendix B – Long-nosed Bandicoot Monitoring North Head, Manly. November 2018.
Trigger 5 – potentially catastrophic events	If there are 10 adult road mortalities or more in any one month period or 15 or more in any consecutive three-month period, then all the measures identified in Triggers 2, 3 and 4 shall be implemented, unless otherwise agreed by the DEC. Where these are inconsistent, the more	See Appendix B – Long-nosed Bandicoot Monitoring North Head, Manly. November 2018.

Trigger	Trigger mechanisms	Compliance Status
	<p>restrictive of the measures is to apply).</p> <p>The measures must be implemented within 2 weeks of the mortality information becoming available. The measures may only be reversed with approval from the DEC if adult road mortalities are less than the background level for 12 consecutive months.</p>	

SCHEDULE 7

LONG-NOSED BANDICOOTS – CALCULATING THE BACKGROUND ADULT ROAD MORTALITY LEVEL (CONDITION 170)

The following process shall be followed to enable the existing non-comprehensive monitoring information to be phased out and replaced by the new monitoring information. However, if the provisions of conditions 172) and 173) are enacted then they shall prevail over the following process

Process

- The revised background adult road mortality level is to be established by calculating a weighted average of the pre-commencement adult road mortalities (ie, the existing 10 per six months) with post-commencement recorded adult road mortalities, on the following basis:
- For the second year after the commencement date, the background level = 75% of 10 deaths plus 25% of the average six-monthly post-approval deaths (ie, adult road mortalities recorded during the first year after the commencement date);
- For the third year after the commencement date, the background level = 50% of 10 deaths plus 50% of the average six monthly post-approval deaths (ie. Adult road mortalities recorded in the two years after the commencement date);
- For the fourth year after the commencement date, the background level = 25% of 10 deaths plus 75% of the average six monthly post-approval deaths (ie. Adult road mortalities recorded in the three years after the commencement date); and
- For the fifth year after the commencement date the background level = the average six monthly post-approval deaths as recorded during the four years since the commencement date. This background level will be applied for the remainder for the life of the activity.

SCHEDULE 8

LITTLE PENGUINS: ADAPTIVE MANAGEMENT (CONDITION 179)

Trigger	Trigger Mechanism	Compliance Status
Trigger 1	<p>1) If monitoring indicates that the number of active Little Penguin breeding burrows between Cannae Point and the southern end of Store Beach has significantly decreased over two successive breeding seasons (July to February inclusive), and the DEC is satisfied that such decreases are either fully or partially related to the activity, the DEC may direct the co-proponents to implement appropriate measures. The measures may include, but not be limited to:</p> <ul style="list-style-type: none"> (a) a reduction in the number of lights and their intensity in the Wharf Precinct, particularly in the vicinity of the restaurant in A6; (b) the provision of acoustic barriers in the vicinity of the restaurant at night, especially the outdoor eating area; (c) cessation of outdoor dining in the vicinity of the restaurant in A6 at night during the breeding season (or all year round); (d) restrictions on ferry movements, such as a set period either side of sunset or no movements between sunset and sunrise; and (e) the provision of alternative public transport to the site during times when ferry movements are restricted. <p>If further on-going monitoring indicates that the number of active Little Penguin breeding burrows in this area continues to decrease over subsequent breeding seasons, the DEC may direct the co-proponents to implement further measures.</p> <p>2) The co-proponents shall comply with any directions issued by the DEC in accordance with clause 1. Any measures required to be implemented may be reversed or altered with the approval of the DEC if monitoring indicates that the number of active Little Penguin breeding burrows for the population has increased over two successive breeding seasons.</p> <p>3) If Little Penguin deaths occur in the vicinity of the site as a result of matters reasonably beyond the control of the co-proponents (such as predator attacks, oil spills, etc), the number of active breeding burrows considered for the purposes of clause 1 may be adjusted in consultation with the</p>	See Appendix C – Manly Little Penguin Recovery Program. 2018/19 Monitoring Report. May 2019. This report details breeding number of Little Penguin during the 2018/19 breeding season.

	DEC to account for such impacts (e.g. to account for the likely impact of predator related deaths on lowering the number of active burrows).	
Trigger 2 – potentially catastrophic events	<p>1) If information becomes available that indicates a significant reduction in the size of the Little Penguin population or a significant change to the behaviour of the population within a period of less than two successive breeding seasons, and the DEC is satisfied that the activity is likely to have contributed to that decline or change, the DEC may direct the co-proponents to implement appropriate measures. These may include, but are not limited to, the measures specified in Trigger 1.</p> <p>2) The co-proponents shall comply with any directions issued by the DEC under clause 1. Any measures required to be implemented may be reversed or altered with the approval of the DEC.</p>	See Appendix C – Manly Little Penguin Recovery Program. 2018/19 Monitoring Report. May 2019. This report details breeding number of Little Penguin during the 2018/19 breeding season.

SCHEDULE 9

ENVIRONMENTAL MANAGEMENT PLAN (CONDITION 191)

The EMP shall include the following matters:

- (a) a clear statement of the objectives of the EMP;
- (b) a brief description of the management and the planning framework;
- (c) identification of the statutory and other obligations which the co-proponents must comply with during the undertaking of the activity;
- (d) definition of the roles and responsibilities regarding implementation of the EMP and its various components;
- (e) contact protocols outlining procedures and any notifications to be given before works commence, together with contact details for the relevant project manager;
- (f) induction and training arrangements for contractors and staff;
- (g) community liaison arrangements;
- (h) mapping of key environmental features and proposed environmental safeguards, to include:
 - o topographic features
 - o vegetation cover and threatened species locations/habitat
 - o special items or areas of environmental or heritage sensitivity
 - o suitable locations for construction infrastructure (e.g. machinery and material storage), access ways for vehicles and proposed active work sites
 - o location of sedimentation and erosion controls.

The mapped information should be capable of being incorporated into the GIS system for the site once this is approved and functioning (condition 66).

- (i) specific objectives and strategies for the main environmental management elements. This should, at a minimum, identify what the issue is, compliance and best practice requirements, the action required, who will undertake the action and when. The main elements must include, but are not limited to:
 - o historic heritage
 - o Aboriginal heritage
 - o visitor management, access and traffic
 - o flora and fauna
 - o water quality and hydrological regimes
 - o noise and air quality management
 - o geotechnical issues
 - o erosion and sedimentation
 - o contamination
 - o waste management

- landscaping and rehabilitation
- weed and predator controls
- fire management
- visual issues
- hazards and risks, including measures to ensure public safety during the undertaking of construction and renovation activities (such as temporary fencing)
- energy and resource use and recycling.
- monitoring, inspection and reporting arrangements, including performance criteria, protocols (e.g.: frequency and location) and procedures to follow.

**7.2 Appendix B – Long-nosed Bandicoot Monitoring North Head, Manly.
November 2018.**

**Long-nosed Bandicoot Monitoring
North Head, Manly
November 2018**

Catherine Price and Peter B. Banks

Overview

A total of 55 individual bandicoots (104 captures) were caught during the November 2018 trapping session (12nd– 15th November 2018) from a total of 396 trap-nights. Twenty-two transects of six traps were trapped for three nights each. These results are slightly lower than May 2017 when 60 individuals were trapped and much lower than in November 2016 when 84 individuals were captured across the same 22 transects, but similar to the May 2016 and November 2015 when 47 individuals were captured across the 20 regular transects in 3 nights and 56 individuals were captured from the same 22 transects respectively.

Prior to November 2014, only 20 transects were trapped. Comparisons with the equivalent transects trapped prior to November 2014 reveal that the number of bandicoots trapped increased dramatically in November 2016, when numbers were at an all-time high, but dropped back to a level that is still relatively high but similar to the number trapped in May 2015 (Figure 1). Interestingly, prior to November 2014 the peaks in bandicoot numbers have primarily been driven by increases in the number of males caught. However, between May 2015 and May 2016 the number of males decreased with the number of females remaining relatively stable. The numbers of both males and females peaked dramatically in November 2016 but decreased subsequently. Female numbers have remained stable since May 2017. Female numbers dropped in this survey and there were higher numbers of males trapped for the first time since November 2014.

Bandicoots were caught on 20 of the 22 transects (see Appendix 1 for a map of all transects). In total, 26 females and 29 males were captured across all the trapped transects. The sex ratio was even and not biased towards either sex (two-tailed binomial test, $p=0.7$). This is a shift from previous recent surveys, when the population has shown a female-bias. As is usually the case, the results of the trapping were significantly adult biased with only eight juveniles captured (two-tailed binomial test, $p<0.0001$). Three of the juveniles were female and five were males. Males and females were very similar in their demographic profiles (two-sided Fisher's exact test, $p>0.71$).

Breeding activity

21 out of 26 females (81%) captured were carrying pouch young or lactating, with a total of 29 pouch young recorded on 15 individuals (range: 1-3, average 1.9) and an additional six individuals lactating. Four of the females had never bred, and six showed evidence of previous breeding activity.

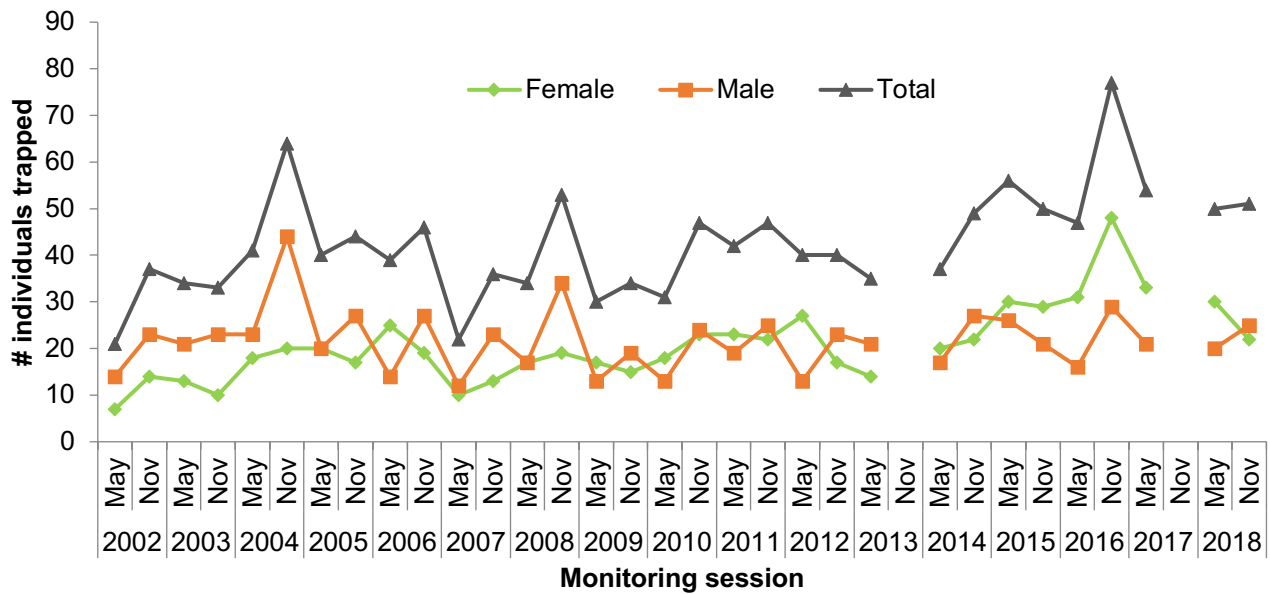


Figure 1: The number of individual bandicoots (total, male and female) captured during May and November 2002 – 2018, based on consistently trapped 20 transects.

New Captures

21 of the 55 bandicoots caught were new (8 females and 13 males) (38%) which is lower than the proportion of new animals caught in May 2017 (48%) and November 2016 (46%) and much lower than the proportion of new animals caught in May 2018 across the whole headland (79%). Of the 21 new animals trapped this session, five were juveniles (3 female and 2 males). The new animals were only caught on 13 of the 22 transects trapped, with no new animals caught on transects 2, 16, 26, 27, 51, 52 or 55. New females occurred on 8 of the 22 transects and new males were also found on 11 of the 22 transects.

Spatial Distribution

Bandicoots were captured at 20 of the 22 transects surveyed in November 2018 (Figure 2). The highest number of individuals trapped on a transect was six individuals, at transect 54. Five individuals were trapped on three transects: transects 38 and 56. Four individuals were trapped on transects 35, 51 and 53.

No bandicoots were caught on Transect 20 and 34, and only one individual was caught on Transects 2, 4, 16, 27 and 28.

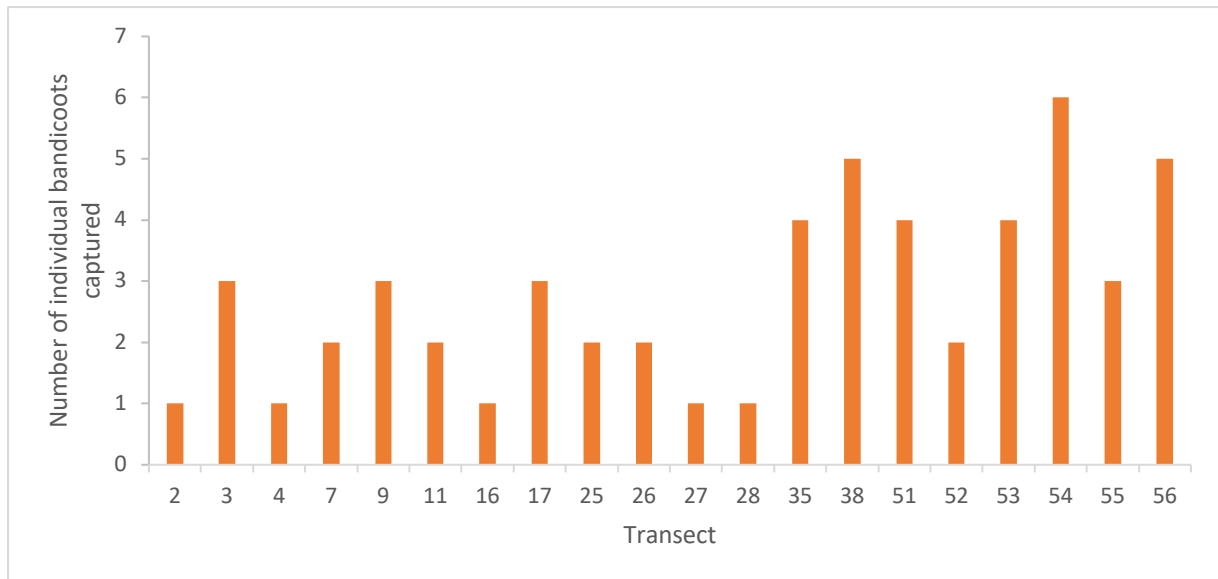


Figure 2: The number of individual bandicoots caught at each transect during the November 2018 monitoring session.

Open vs closed transects

Since November 2014 two additional transects have been trapped (Transects 55 and 56). These are both considered “open” transects, with Transect 55 occurring around the new plantings adjacent to the childcare centre and Transect 56 occurring around the western edge of the old oval.

38 of the 55 bandicoots (69%) were captured on the 13 open transects that were trapped this session, including the two newer transects. This is lower than the proportion trapped in open compared to closed transects reported in May 2017 or November 2016. Excluding the two newer transects, 30 of 47 bandicoots (63%) were caught on the original open transects this session (Figure 3). These results indicate that the population remains biased towards the open transects and the inclusion of two new “open” transects (T55 and T56) where an additional 8 bandicoots were trapped this session further adds this bias. 19 of the 29 males and 19 of the 26 females were found on open transects compared to closed transects. When standardised to account for differences in survey effort in closed and open habitats, almost one and a half times as many animals were captured on open transects as closed transects. Both males and females showed a bias to the open transects. In past years, closed transects have been dominated by males. The increase in females over the past few years likely lead to more competition between females for habitat in the open areas and the increasing use of closed habitat by females. However, in this recent survey it appears that numbers of males may be increasing again and utilising closed habitats while females are disproportionately found in open habitats.

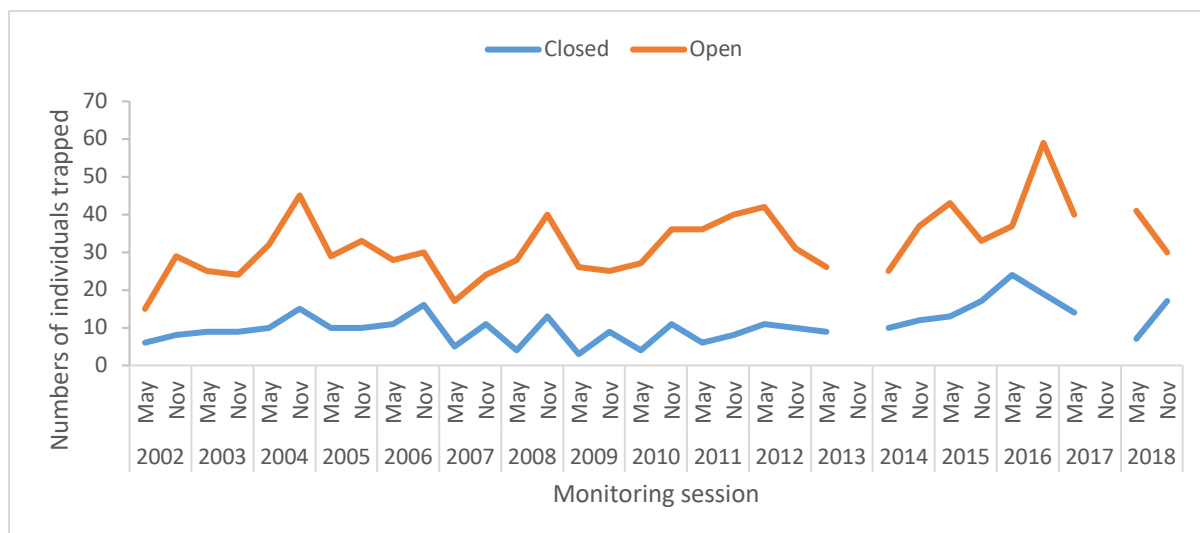


Figure 3: The number of individuals trapped on transects classified as open and closed habitat. The new transects 55 and 56 are excluded. Note: surveys were not undertaken in November 2013 and November 2017.

Non-target captures

Non-target species were captured on 21 of the 22 transects during the trapping session (Figure 4). No non-target species, but only bandicoots were captured on Transect 52. There were 114 captures of non-target species across the 21 transects over the three nights of trapping. Of the 114 captures, only 17 were black rats and 38 were native bush rats (including one trap with a bush and black rat), 47 were common brushtail possums (including two traps with two animals), 9 were blue tongue lizards, 2 were magpies and 1 was a rabbit. These captures represent 29% of the trap nights, which is a similar rate of non-captures as May 2017 and slightly lower than previous sessions (33% non-target captures in November 2016, 50% non-target captures in November 2015). Higher numbers of bush rats than black rats were captures in this session than in previous sessions (May 2017: 41 black rats, 13 bush rats; Nov 2016: 54 black rats, 13 bush rats). On average, approximately 5 traps per transect contained non-target captures over the trapping session, which is the same as in May 2017 (range: 0-12 per 18 trap-nights per transect). None of the non-target species were euthanased following capture, with the likelihood of many individuals being re-trapped on subsequent nights.

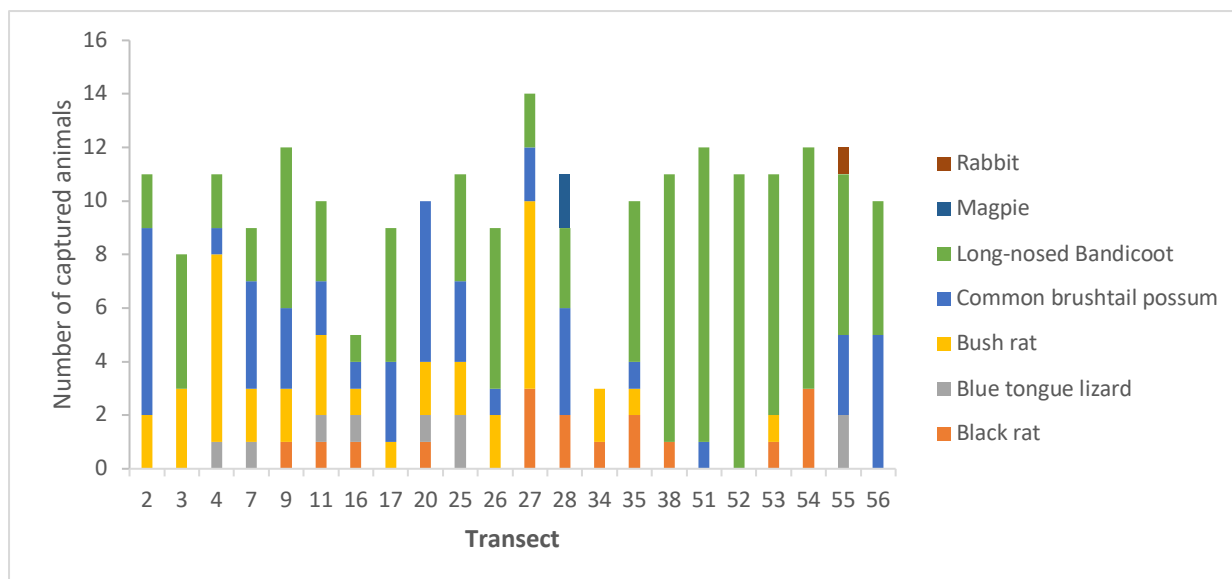


Figure 4: The number of captures of bandicoots and non-target species on each transect during the November monitoring session.

As is usually the case, a high level of animal capture and disturbance to the traps was evident across all transects (Figure 5; Figure 6). Over the 3-night monitoring session, 55% of traps caught an animal, 28% of the traps were disturbed and either left closed or open with bait removed, and approximately 17% of traps were left available. This rate of trap disturbance is lower than in May 2017 (40% of traps disturbed) but similar to November 2016 (30% traps disturbed), but the proportion of available traps is higher than previously (10% traps left available in May 2017, 4.5% in November 2016, and only 6.5% in November 2015).

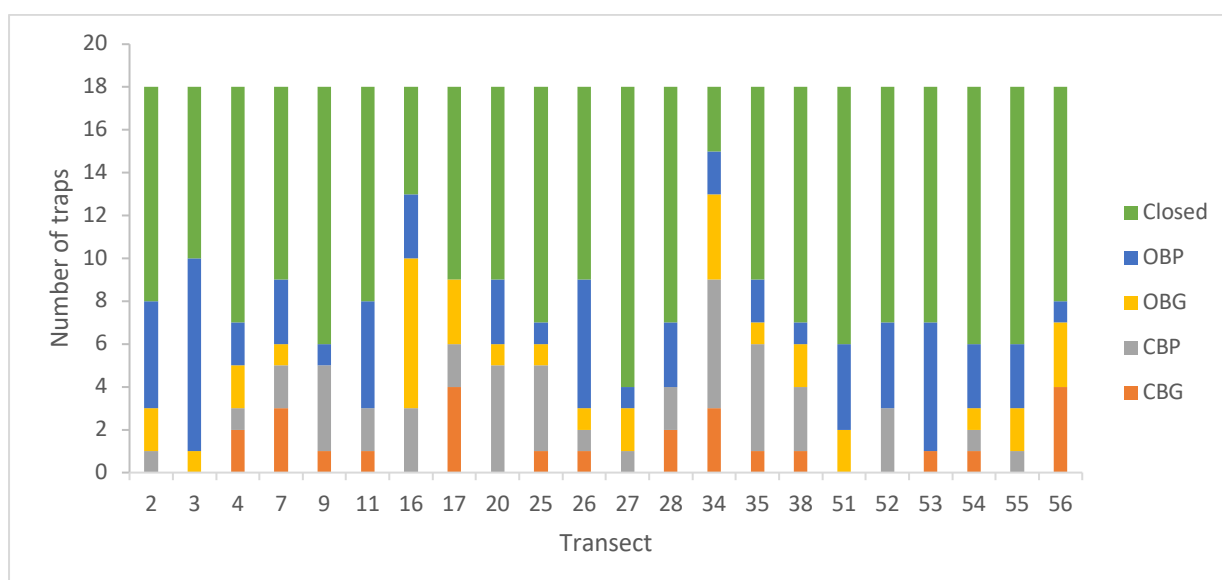


Figure 5: The number of traps per transect that captured an animal (Closed), were closed with the bait gone (CBG), that were closed with the bait present (CBP), that were open with the bait gone (OBG) or were open with the bait present (OBP).

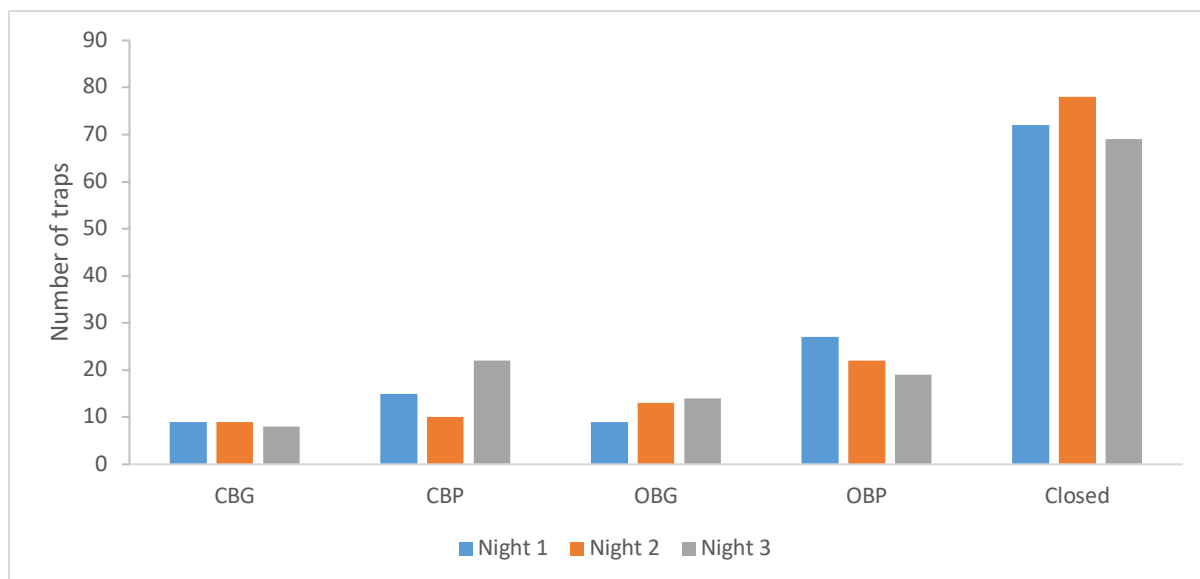


Figure 6: The number of traps in each category over the three nights of trapping. C = animal captured, CBG = closed bait gone, CBP = closed bait present, OBG = open bait gone and OBP = open bait present (trap available).

Captures by Land Tenure

Figure 7 summarises the number of individuals caught across the different land tenures during November 2018.

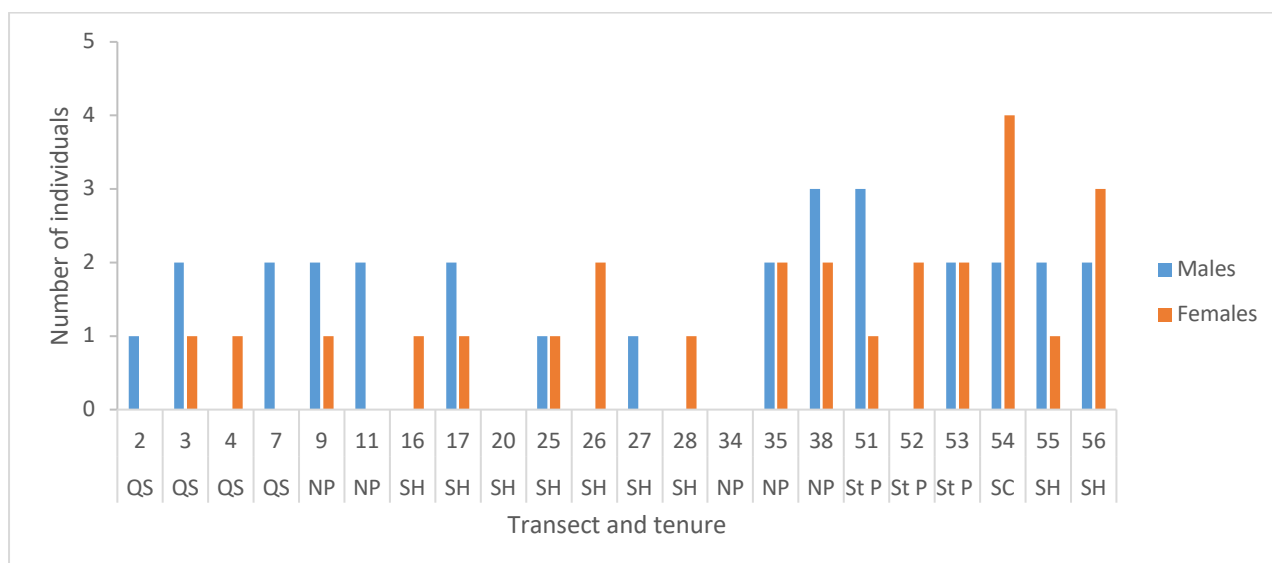


Figure 7: First captures of individual male and female bandicoots by transect and land tenure. QS = Quarantine Station, NP = Sydney Harbour National Park, SH = Sydney Harbour Federation Trust, St P = St Patrick's Estate and SC = Spring Cove.

St Patrick's Estate – T51, 52, 53 and Spring Cove – T54

10 individuals (5M: 5F) were trapped on the three St Patrick's Estate transects and another six individuals (2M: 4F) on the transect adjacent to the Spring Cove development (Transect 54).

Of the animals captured, three (1F:2M) of the animals on St Patrick's Estate and two (1M: 1F) of the animals on Spring Cove were new. The rate of population turnover in this area of the headland is lower than in was in May 2017, when half the animals captured were new.

These results reflect numbers similar to those caught in May 2017, May 2016 and November 2015 after all time high numbers in November 2016 (Figure 8). Female numbers appear to have declined while male numbers have increased slightly in this part of the headland, which is a shift from previous years, although male numbers increased rapidly between May and November 2016.

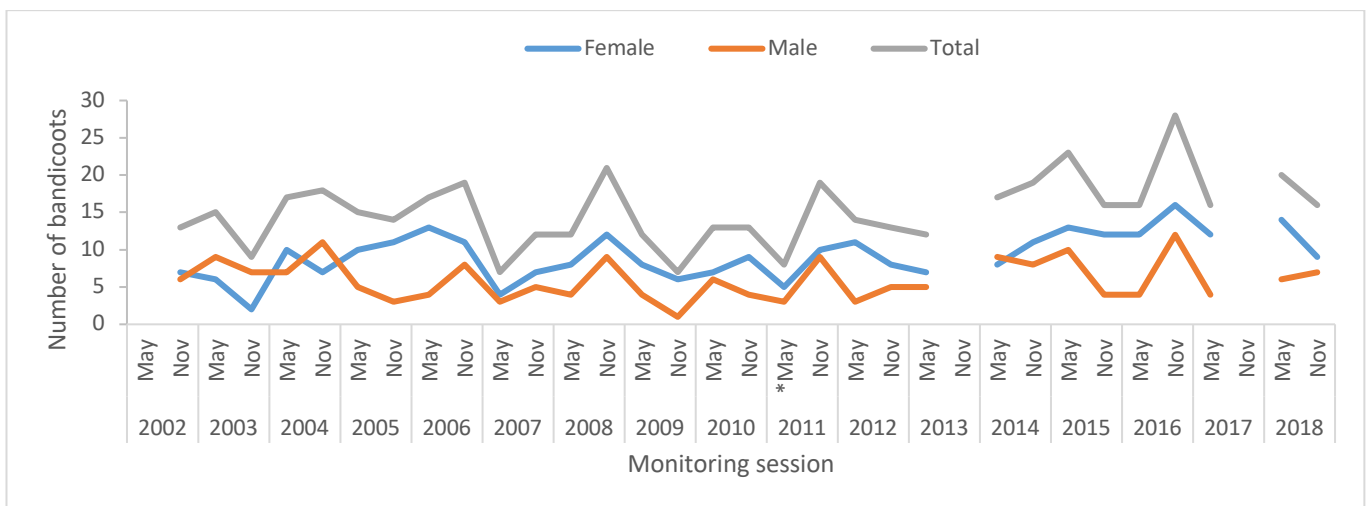


Figure 8: Bandicoot captures on the St Patrick's Estate and Spring Cove transects from May 2002 to May 2017. Note: trapping was not undertaken in November 2013 or November 2017 and May 2011 results have been adjusted to account for two traps placed at grid points.

These four transects are assumed to be the primary source of animals moving into the adjacent urban habitat, however we cannot draw any conclusions about movement between these transects and the urban area as it was not surveyed this session.

Quarantine Station (QS) – T2, 3, 4, 7

Seven bandicoots (2F: 5M) were trapped on the four Quarantine Station transects, which is the lowest number since May 2014. Three of the animals (1F: 2M) were new.

The number of animals captured on these transects is low and has decreased consistently from a peak in November 2016, particularly females (Figure 9). The sex ratio has returned to being dominated by males after a brief period of recording almost equal numbers of males and females.

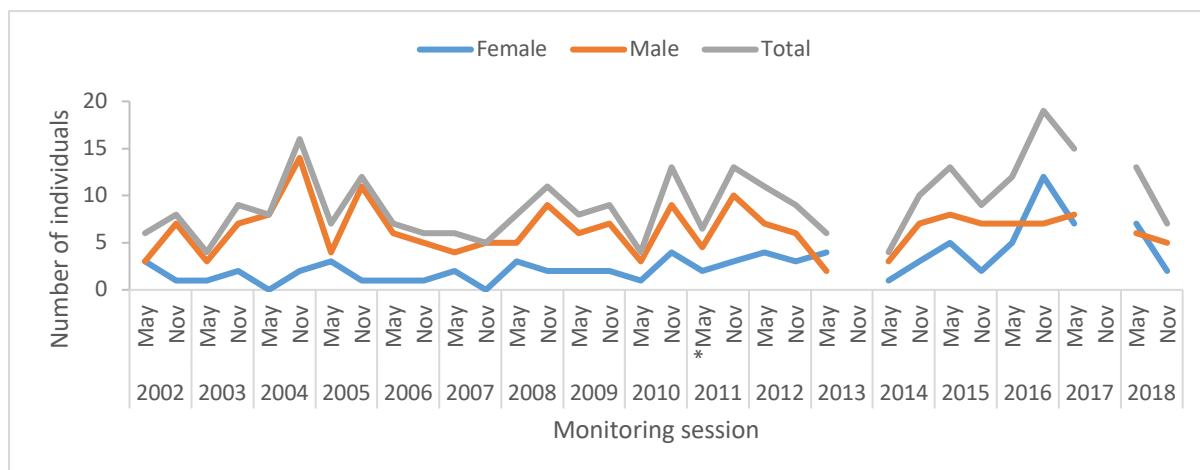


Figure 9: Bandicoot captures on the Quarantine Station transects from May 2002 to November 2018. Note: trapping was not undertaken in November 2013 and November 2017. *May 2011 results have been adjusted to account for two traps placed at grid points.

North Fort (SHFT) – T25, 26, 27

Five bandicoots (3F:2M) were captured on the North Fort transects this session. These results are lower than the peak recorded in November 2016, but numbers have remained stable since May 2018. None of the animals caught this session were new (3M).

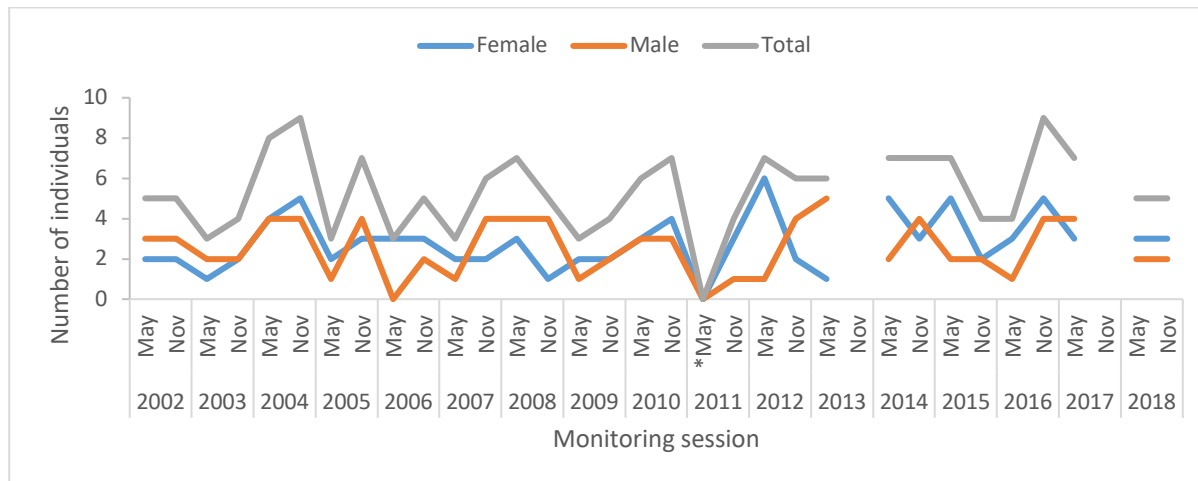


Figure 10: Bandicoot captures on the North Fort transects from May 2002 to May 2017. Note: trapping was not undertaken in November 2013 or November 2017, and May 2011 results have been adjusted to account for two traps placed at grid points.

St Barbara Avenue Firetrail (SHFT) – Transects 16 and 20

Only one female bandicoot was trapped on the St Barbara Avenue Firetrail transects, and it was trapped on Transect 16. It was not a new animal. No animals were trapped on Transect 20. Only one female bandicoot was trapped on these transects in May 2018, on transect 16,

and two individuals were trapped here in May 2017. Four individual bandicoots were trapped here in May and November 2016, and in November 2015.

Scenic Drive – T11 (National Park)

Two male bandicoots were caught on Transect 11. Captures are consistently low on the Scenic Drive T11, and no bandicoots were captured here in May 2018, one in May 2017 and none November or May 2016. In November 2015 only one female bandicoot was captured, and in May 2015 a male and a female were caught here (Anson 2015).

Bluefish Rd – T9 and 38 (NP), 17 and 28 (SHFT)

Twelve bandicoots were captured on the four Bluefish Rd transects. Of these, three (1F:2M) were on T9, three (1F:2M) were on T17, one (1M) was on T28 and five (2F:3M) were on T38. These numbers are similar to the number caught on these transects previously, with 8 animals caught here in May 2018, 11 bandicoots caught here in May 2017, and 13 bandicoots caught here in November 2016. Seven animals were new this session (4F:3M).

Across all four transects there was a high level of trap disturbance and non-target captures, and only five traps were left open and available over the three nights of trapping.

Collins Flat – Transects 34 and 35

Four bandicoots (2F: 2M) were caught on transect 35, but none on transect 34. The two males were new animals. This is a similar number of bandicoots as has been caught in previous sessions. Two animals were caught in May 2018, four in May 2016 and five bandicoots were caught in November 2016.

There was a high rate of trap disturbance on these transects, with only four traps left open and available over the monitoring session.

New transects – SHFT Transects 55 and 56

These transects were first set in November 2014 and have shown relatively high numbers of bandicoots, indicating that the recent plantings are continuing to provide suitable habitat adjacent to open foraging sites. Eight individuals (4F:4M) were captured here this session, with one female and one male being new animals.

In May 2017, six individuals (5F: 1M) were trapped here. These transects were not trapped as part of the May 2016 census, but in November 2015, eight animals were trapped here, in May 2015 four animals were trapped here and in November 2014 twelve animals were captured.

Adverse Incidents

There were two adverse incidents during the monitoring session, both of which have been reported to the OEH Animal Ethics Committee. A furred pouch young, one of a litter of three, was left behind after the mother was released. The joey was taken to a wildlife carer but died after showing initially positive signs. A female bandicoot was euthanased after suffering a traumatic eye injury during microchipping. The handler was experienced and it is assumed that the scruffing and microchipping caused the animal to move suddenly, causing the eye injury. Vets at Taronga Zoo performed an autopsy.

APPENDIX 1 – Map of transects



Figure A: Biannual Long-nosed Bandicoot trapping transects on North Head, including new transects 55 and 56 (taken from Anson 2015).

7.3 Appendix C – Manly Little Penguin Recovery Program. 2018/19 Monitoring Report.

Manly Little Penguin Recovery Program

2018/19 Monitoring Report

May 2019

Report prepared for:
Greater Sydney Branch Parks and Wildlife Group,
OEH and the
Little Penguin Recovery Team



Office of
Environment & Heritage
NSW National Parks & Wildlife Service



Acknowledgements

This report was prepared by Dr Lisa O'Neill, consultant under contract to the Office of Environment and Heritage (OEH). The breeding of Little Penguins *Eudyptula minor* at Manly was monitored in 2018/19 for the Little Penguin Recovery Team and OEH.

OEH staff from Harbour Area, Parks & Wildlife Group and Metropolitan Branch, Regional Operations Group assisted in the monitoring program in 2018/19.

The Little Penguin Recovery Team developed the objectives of the monitoring program and continues to review the program and its results.

Executive Summary

The breeding of Little Penguins *Eudyptula minor* at Manly was monitored during the 2018/19 breeding season fortnightly from July 2018 until February 2019.

The reduced number of breeding adults as a result of the 2015 fox predation incident remained a dampening factor on breeding numbers this season. This was exacerbated by an usual period of breeding disturbance for many nests during the middle of the normal season, with some adults abandoning breeding attempts, and the loss of some eggs and chicks at this time. Breeding did re-establish some weeks later but the impact on final breeding numbers was considerable. The combined effect was to make this the worst breeding season on record for the Manly Little Penguin colony.

Breeding was low at most sites, and again there was no breeding at the AIPM site. The number of nests active (where breeding occurred or there were signs of nest having been investigated with a view to breeding) was similar at most sites to the last few years. However number of eggs and chicks were low at all sites, and at many sites the lowest seen in many years. Even Store Beach which has shown good signs of increased natural breeding in recent years, showed a dramatically poor year.

The results of the 2018/19 breeding season was lower than any of the three previous years, which were already the worst in the time of our records. All monitored measures were low: number of breeding pairs (28), number of eggs laid (63), number of fledglings (43) and number of active nests (55). Only number of active nests showed any similarity to the last few years. The unusual cessation of much of the breeding in the first two weeks of September contributed to the low breeding success, though some few individual pairs were able to continue breeding during this time.

A summary of the results of the Manly Little Penguin monitoring program for 2018/19 is shown in Table 1 below. Full results are provided in Appendix 1.

The continuing poor results overall are not surprising after the extensive losses to the breeding population from the fox incursion in the 2015 pre-breeding season. The low level of the population now means there is little buffer to cover other factors which could lead to what would normally be just a relatively poor breeding season. Observations early in the season seemed to suggest the season was on track for breeding similar to last year but in early September breeding was impacted at multiple sites. As the breeding disturbance was not isolated to any particular area, and there was no sign of any land based cause, it was likely due to an oceanic phenomenon, as yet unidentified.

Given the very limited activity around the AIPM site during the season, the penguin attraction sound system installed at AIPM had very little chance of any success. The sound system will be used again next season, hopefully with more promising results.

The results for the 2018/19 season are presented relative to five-year running means from 2009/10 onward. This helps to illustrate trends or changes in the population over the long term. Means are presented \pm one standard deviation as a statistical indication of variability about the mean. All monitored indicators from this season are below the expected range (mean \pm one standard deviation) based on experience in the previous five years of normal breeding.

Breeding measures are based on all burrows or cavities where breeding activity (the presence of eggs or chicks) was indicated, within the sites monitored. These figures are conservative and do not include potential nests where the nest site could not be located. The results presented are therefore an underestimate of the total local penguin population and breeding results. Rather, they provide a representative sample of the population monitored in a consistent manner at the same sites each year since 2002.

The following figures provide a view of the results of the 2018/19 breeding season relative to seasons since 2002.

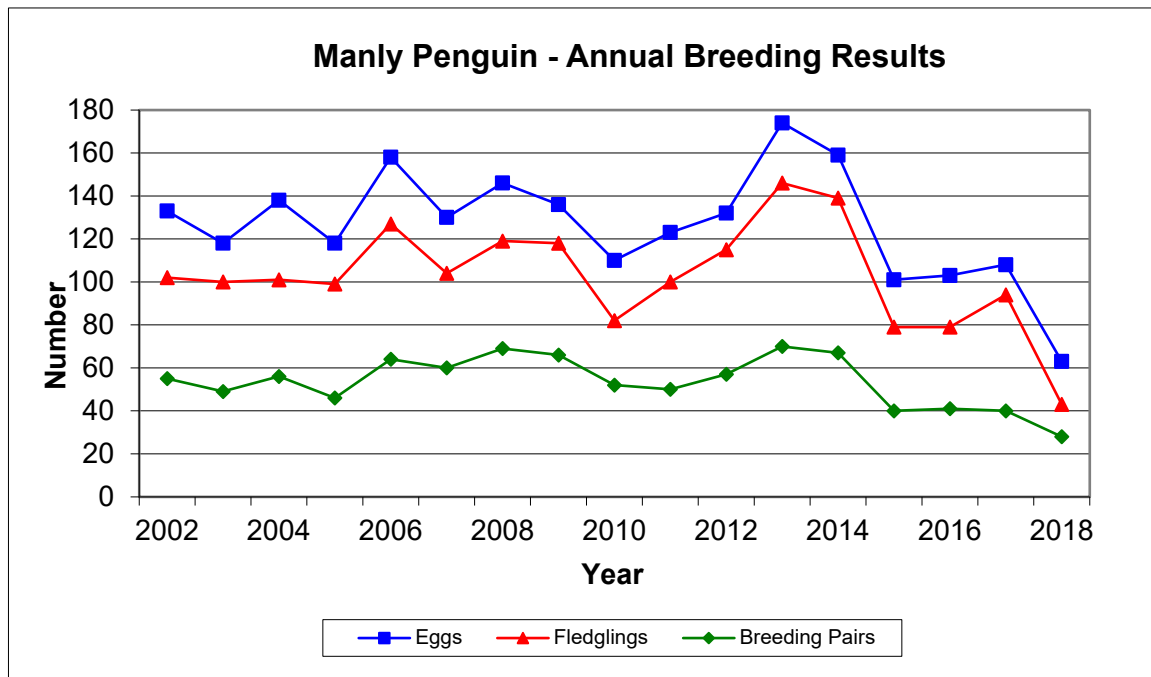


Figure 1: Annual breeding results of Manly Little Penguin monitoring from 2002.

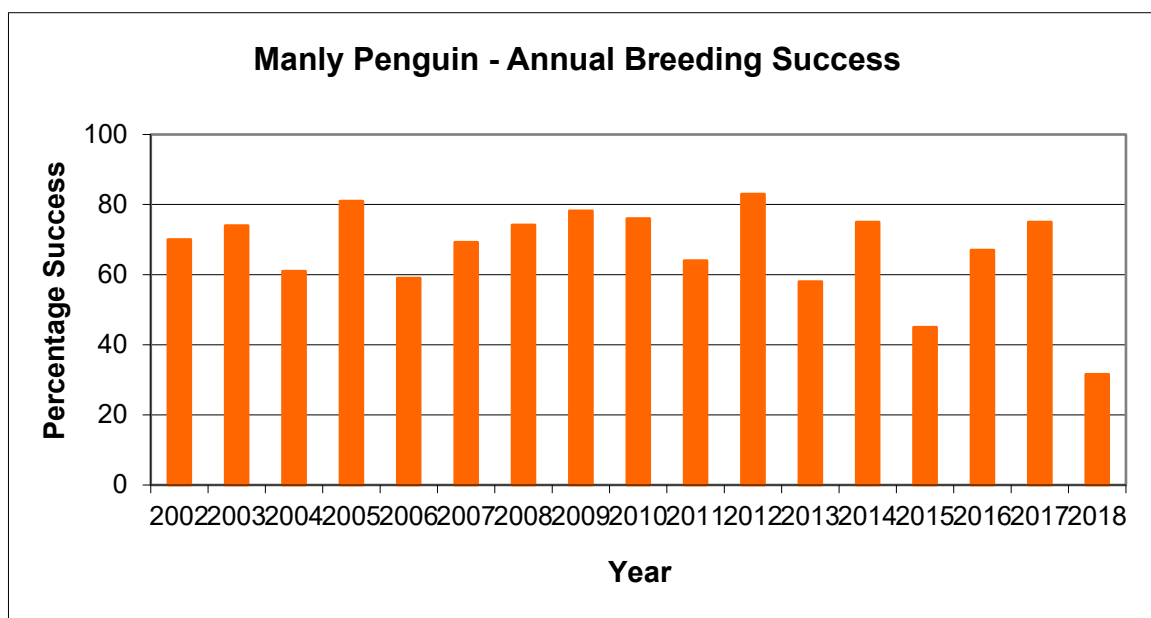


Figure 2: Annual breeding success of Manly Little Penguin nests monitored from 2002.

Table 1: Summary of breeding results from 2018/19 nest monitoring of the Manly Little Penguins.

	2018/19	Mean \pmS.D. 2013/14- 17/18	Mean \pmS.D. 2012/13- 16/17	Mean \pmS.D. 2011/12- 15/16	Mean \pmS.D. 2010/11- 14/15	Mean \pmS.D. 2009/10- 13/14
Total active nests	55	75 \pm 22	81 \pm 19	87 \pm 14	91 \pm 9	88 \pm 4
Total breeding pairs	28	52 \pm 15	55 \pm 14	57 \pm 12	59 \pm 9	59 \pm 9
Total eggs laid	63	129 \pm 35	134 \pm 33	138 \pm 29	140 \pm 26	135 \pm 24
Total chicks fledged	43	107 \pm 33	112 \pm 32	116 \pm 28	116 \pm 27	112 \pm 24
Breeding success *	32%	64 \pm 13%	66 \pm 15%	65 \pm 15%	71 \pm 10%	72 \pm 10%

* Calculated on a subset of total eggs and fledglings, see definitions on page vii.

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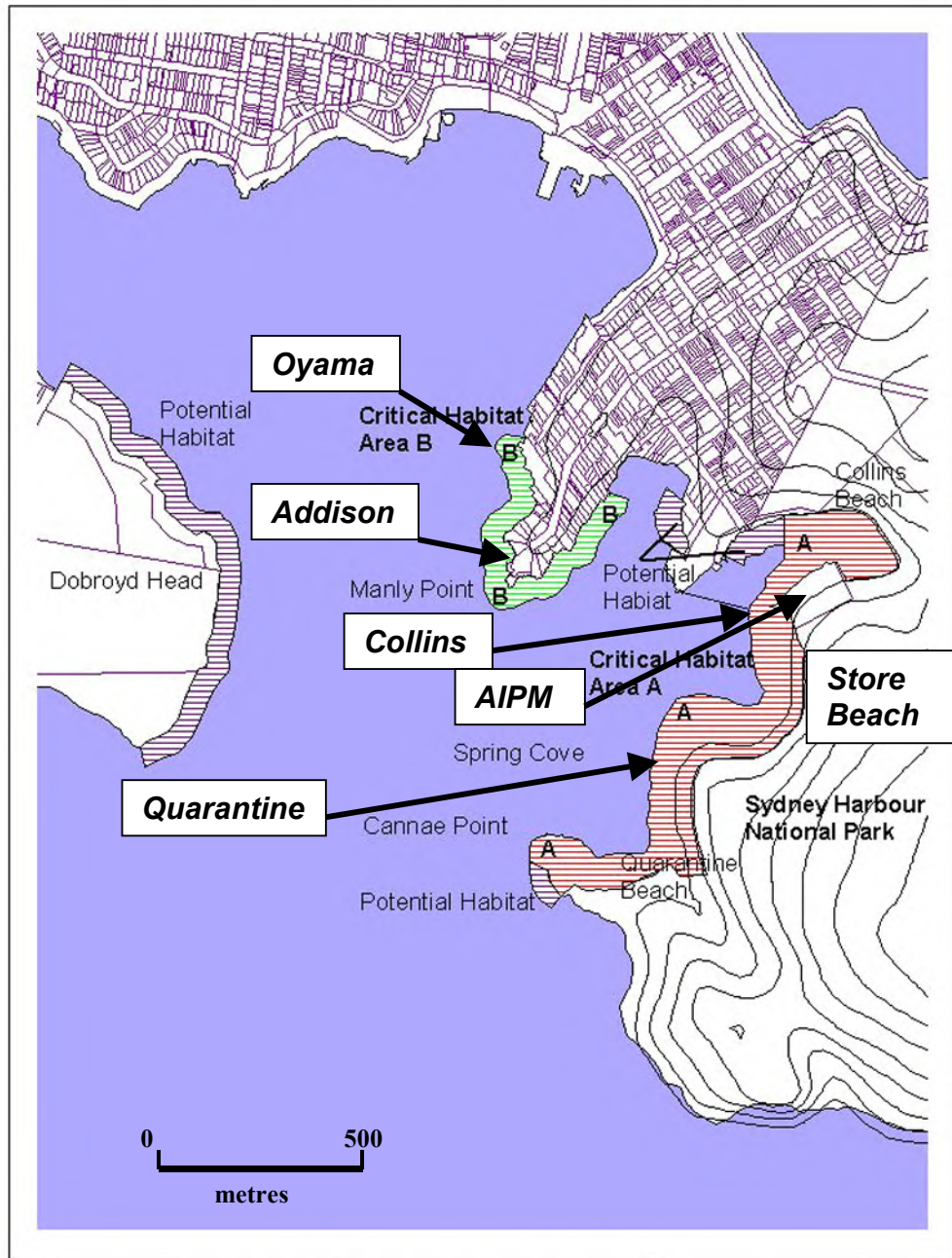
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Definitions and abbreviations

The following is a list of abbreviations and definitions used within this report. Also included is a locality map (Figure 3) showing sites named within the text.

ABBBS	Australian Bird and Bat Banding Scheme.
Active nest	any nest site showing recent signs of activity: birds, faeces, feathers or nesting material during the breeding season.
AIPM	Australian Institute of Police Management.
Breeding success	the percentage of eggs that produce fledglings. Only nests with a complete visual history from before the laying of the first egg are used.
OEH	Office of Environment and Heritage (incorporating the NSW National Parks and Wildlife Service).
Double brooding	where a second clutch of eggs is laid in the same nest following the hatching and rearing of a first clutch. If the identity of the parents is unknown, it is assumed that all eggs within the nest belong to the same breeding pair.
Fledglings	penguin chicks six weeks old or more.



Little Penguin Critical Habitat Map

Figure 3: Locality map showing site names.

1. Methods and analysis

Methods

Monitoring for the 2018/19 breeding season began in July 2018 and ceased early in February 2019 when the last known chicks from the monitoring nests were ready to fledge. Breeding was monitored in the areas of known penguin nests at Oyama Avenue, Addison Road, Collins Beach and AIPM (together these two areas are referred to as the Collins Flat site), Store Beach and Quarantine Station (see Figure 3).

Nests and potential sites at Manly Wharf, Federation Point and Little Manly Beach were also monitored, although to maintain consistency with prior records, these nests are not included in the monitoring totals. Observations from these nests are shown separately in Section 10. Breeding south of Cannae Point, or at sites where access to burrows on private property would invade people's privacy (mainly at Manly Point) was not monitored. It is probable that there are additional nests undetected within the monitored localities, and some known nests are inaccessible hence can't be adequately monitored. Those nests which can be regularly monitored are considered to be a representative sample of the total Manly penguin population, and the same nests are monitored each year to maintain a consistent sample. The proportion of all Manly penguin burrows monitored as part of this program is probably close to 75%.

Breeding measures in this report are based on all accessible burrows or cavities where breeding activity (the presence of eggs or chicks) was observed within the sample sites described above. These figures are conservative and the results presented are necessarily an underestimate of the total penguin population and breeding outcome.

Known potential nest sites were checked every six weeks for penguin activity, and those where breeding activity was noted were checked at least fortnightly. Nests were monitored for signs of activity, numbers of eggs, chicks and fledglings. Individual adults were identified where possible. Nest site activity was based on direct observations of birds, eggs or the presence of nesting material or fresh excrement at nest sites.

Breeding penguins were identified where possible by their microchip transponders (fitted from 2004). Birds were caught when necessary to allow identification or to fit a microchip. Birds were caught by hand or using a hooked crook for deep or inaccessible nests. A *Trovan* scanner and microchip transponders were used to identify individual birds. At six to eight weeks old, all accessible fledgling chicks were fitted with a microchip.

It was assumed that any second clutch attempted in a burrow was by the same breeding pair (double brooding) after a first clutch had been raised, unless another individual was identified breeding in that nest.

Egg numbers are based on the number of observed eggs, or on a count back from chicks hatched from inaccessible or partially obscured nest sites. Egg numbers do not include nests where adults could be seen lying prone in the nest but the contents could not be assessed and the eggs, if any, failed to hatch.

Fledgling numbers are based on the number of observed fledglings, plus a minimum of one fledgling for each inaccessible nest site that showed indirect evidence of the presence of well-developed chicks, such as calling of chicks from within their nesting cavity, or down at the nest entrance.

Breeding success is measured from a specific subset of all nests. Only those nests where the number of eggs are known, and fate of each egg could be determined from the beginning of incubation through to fledging or prior loss of the chick(s) are used. And of those, only first clutches laid by a pair are used in the calculation. Breeding success is the number of known fledglings as a percentage of known eggs laid from first clutch nests.

Appendix 1 shows figures for all breeding parameters collected during monitoring of the Manly penguin population since the 2002/03 breeding season. While monitoring data has been collected since the 1998/99 breeding season, the 1998/99 to 2001/02 breeding season data is not directly comparable with data collected since due to different survey methodology. The method used prior to the 2002/03 breeding season

overestimated the biological parameters monitored. For example, higher numbers of active nests recorded prior to the 2002/03 season reflect inclusion of all nests showing any sign of activity, whether it related to breeding or other activities. From 2002/03, when the use of some of these 'active nests' was examined more closely, they were found to be non-breeding, loafing or moulting sites and were therefore excluded from future counts. Differences in method and interpretation of other data prevent meaningful comparison between the pre- and post-2002/03 periods, therefore only data from the breeding seasons of 2002/03 are presented in Appendix 1.

Analysis

Consistent monitoring since 2002 has shown considerable natural annual variation in breeding results for the Manly Little Penguin population. Against this range of variation it can be difficult to detect long term trends or changes in breeding results when comparing annual results. Therefore the results for the 2018/19 breeding season have been analysed relative to five-year running means calculated using data from the 2009/10 season onwards.

A five-year running mean (\pm one standard deviation) has been adopted to allow calculation of the range of variability that can be considered 'normal'. A five-year period was chosen because the extent of natural variation means that a longer term view is needed to encompass the range of both poorer and better breeding seasons and to allow a more informed and balanced view of the long term trends in the penguin population. As the results from each new breeding season are incorporated in the new figure, the calculation period moves forward by a year with one year dropping off the end to retain only five years of data. For example, the results for the 2018/19 breeding season have been compared to the means and range of variability from five previous five-year periods (2009/10 to 2013/14, 2010/11 to 2014/15, 2011/12 to 2015/16, 2012/13 to 2016/17 and 2013/14 to 2017/18).

Annual data for all measured variables for each season from 2002/03 to the current season are shown in Appendix 1.

2. Active nest sites

The total number of nest sites showing activity in the 2018/19 season (55) was the same as last year and similar to the year prior. It remains dramatically lower than the number of active nests recorded in the years prior to the fox attack. There were again a number of nest sites visited by birds where no nesting was attempted, likely due to a lack of a suitable mate. The reduced level of activity is well below the previously expected normal range of variability (mean \pm standard deviation) shown in Table 2.

Table 2: Number of active nest sites at each locality in the 2018/19 season and five-year running means (\pm standard deviation) from the 2009/10 season.

	2018/19	Mean \pm S.D. 2013/14 – 2017/18	Mean \pm S.D. 2012/13 – 2016/17	Mean \pm S.D. 2011/12 – 2015/16	Mean \pm S.D. 2010/11 – 2014/15	Mean \pm S.D. 2009/10 – 2013/14
Quarantine	14	19 \pm 5	21 \pm 5	21 \pm 4	23 \pm 3	22 \pm 2
Store Beach	7	12 \pm 2	11 \pm 3	9 \pm 4	8 \pm 4	6 \pm 3
Collins Flat	6	10 \pm 6	11 \pm 5	14 \pm 4	15 \pm 2	14 \pm 2
Addison Rd	12	18 \pm 7	22 \pm 7	25 \pm 4	25 \pm 4	26 \pm 5
Oyama Ave	16	16 \pm 3	17 \pm 3	18 \pm 3	20 \pm 2	21 \pm 3
Total	55	75 \pm 22	81 \pm 19	87 \pm 14	91 \pm 9	88 \pm 4

3. Breeding pairs

Numbers of breeding pairs monitored this year (28) were dramatically lower than normally expected, and even lower than last year. Oyama Avenue was the site least impacted by the fox attack and shows here as the site with most consistent breeding over the years as a result. Collins Flat/AIPM was badly hit by the fox attack and the average numbers in the last few years show the dramatic drop and the greatly increased variability as a result. Breeding at other sites was well below the expected range of variability calculated from previous five-year periods (Table 3).

Four pairs produced a second clutch of eggs, dramatically fewer than in the last couple of years.

Table 3: Number of breeding pairs at each locality in the 2018/19 season and five-year running means from the 2009/10 season.

	2018/19	Mean \pm S.D. 2013/14 - 2017/18	Mean \pm S.D. 2012/13 - 2016/17	Mean \pm SD 2011/12 - 2015/16	Mean \pm SD 2010/11 - 2014/15	Mean \pm SD 2009/10 - 2013/14
Quarantine	8	14 \pm 3	15 \pm 3	16 \pm 2	16 \pm 2	16 \pm 2
Store Beach	3	8 \pm 2	8 \pm 3	7 \pm 3	6 \pm 4	4 \pm 3
Collins Flat	3	6 \pm 4	8 \pm 5	9 \pm 4	10 \pm 2	10 \pm 2
Addison Rd	5	12 \pm 6	13 \pm 5	14 \pm 4	15 \pm 3	16 \pm 4
Oyama Ave	9	11 \pm 2	11 \pm 2	11 \pm 2	12 \pm 2	14 \pm 4
Total	28	52 \pm 15	55 \pm 14	57 \pm 12	59 \pm 9	59 \pm 9

4. Eggs

Number of eggs laid this year in monitored nests (63) was the lowest on record, and well below what would be expected based on the five-year average (Table 4). Collins Flat again recorded no breeding in pre-fox nest sites, with the few eggs recorded being in new nests begun since that time. Prospecting pairs had been seen at nests in all sites with indications that egg laying was imminent early in the season, but many of these were abandoned or at least absented for weeks after that, leading to dramatically fewer eggs laid than the activity at the start of the season had suggested.

Table 4: Number of eggs at each locality in the 2018/19 season and five-year running means from the 2009/10 season.

	2018/19	Mean \pm SD 2013/14 - 2017/18	Mean \pm SD 2012/13 - 2016/17	Mean \pm SD 2011/12 - 2015/16	Mean \pm SD 2010/11 - 2014/15	Mean \pm SD 2009/10 - 2013/14
Quarantine	18	39 \pm 6	40 \pm 6	42 \pm 5	41 \pm 6	40 \pm 6
Store Beach	6	22 \pm 5	21 \pm 7	18 \pm 7	16 \pm 9	11 \pm 7
Collins Flat	6	14 \pm 10	17 \pm 12	19 \pm 10	22 \pm 6	21 \pm 7
Addison Rd	10	27 \pm 14	29 \pm 13	32 \pm 10	33 \pm 9	34 \pm 10
Oyama Ave	23	28 \pm 3	23 \pm 3	27 \pm 3	28 \pm 3	29 \pm 5
Total	63	129 \pm 35	134 \pm 33	138 \pm 29	140 \pm 26	135 \pm 24

5. Fledgling

Fledgling numbers (43) were less than half that recorded last year (94), and lower than in any other year on record (Table 5).

Table 5: Number of fledglings at each locality in the 2018/19 season and five-year running means from the 2009/10 season.

	2018/19	Mean \pm SD 2013/14 - 2017/18	Mean \pm SD 2012/13 - 2016/17	Mean \pm SD 2011/12 - 2015/16	Mean \pm SD 2010/11 - 2014/15	Mean \pm SD 2009/10 - 2013/14
Quarantine	8	30 \pm 6	31 \pm 7	33 \pm 5	32 \pm 7	32 \pm 7
Store Beach	5	18 \pm 5	16 \pm 7	15 \pm 7	13 \pm 8	9 \pm 5
Collins Flat	3	12 \pm 11	15 \pm 12	16 \pm 11	18 \pm 7	17 \pm 7
Addison Rd	8	24 \pm 13	26 \pm 12	29 \pm 9	30 \pm 8	31 \pm 9
Oyama Ave	19	24 \pm 3	23 \pm 3	23 \pm 2	23 \pm 2	24 \pm 4
Total	43	107 \pm 33	112 \pm 32	116 \pm 28	116 \pm 27	112 \pm 24

6. Breeding success

Breeding success for the 2018/19 season was 32% based on first egg clutches from 10 nests with known contents (see Section 1 for further explanation of this measure).

These 10 first clutches produced 19 eggs resulting in 6 fledglings. The resulting breeding success of 32% was unusually low. Many of these known first clutches were being incubated at the time when many nests were abandoned, so it is not representative of the success of the whole season in this case.

Due to low sample sizes for each locality the breeding success figures by specific localities have not been presented. The breeding success of this sample is generally considered a reasonable estimate of the success for the population as a whole. In this season, it appears to be biased to a poorer success than generally experienced

Table 6: Breeding success of known first-clutch nests in the 2018/19 season and five-year running means from the 2009/10 season.

2018/19 breeding success	Mean \pm SD 2013/14 - 2017/18	Mean \pm SD 2012/13 - 2016/17	Mean \pm SD 2011/12 - 2015/16	Mean \pm SD 2010/11 - 2014/15	Mean \pm SD 2009/10 - 2013/14
32%	64 \pm 13%	66 \pm 15%	65 \pm 15%	71 \pm 10%	72 \pm 10%

7. Store Beach

The previously steady increase in breeding at Store Beach was reduced by the fox kills and human disturbance associated with the fox management program in 2015. The combination of these reduced numbers and the seasonal glitch in breeding this year, produced the lowest breeding experienced in many years. The number of breeding pairs have decreased from 11 at its peak, to three this year (compared to six, nine and seven in the three prior years). These three pairs laid three clutches (six eggs), and five fledglings successfully raised. The poor season here started with fewer nests being investigated for breeding, then some of those were abandoned during September and breeding was not then started at all. This may reflect the likely young age or inexperience of many of the breeders at this site. They may have been less able to withstand the unusual conditions of the season. As the high fledging rate here shows, those that were able to commence breeding at this site, were very successful.

8. Recoveries and recruitment

Since 2004, birds have been individually identified using *Trovan* wildlife transponder microchips. This year seven penguins (2 adults, 5 fledglings) were microchipped as part of the monitoring program. A total of 728 birds from the Manly population have now been fitted with microchip transponders.

This season, one Manly penguin fledgling from previous seasons returned to the colony as a non-breeder. A total of 52 fledglings have returned to Manly since 2000, 37 of which have bred, some of them over a number of seasons.

Analysis of previous banding records of Little Penguins shows low rates of recapture of fledglings from the Manly population returning as adults, suggesting limited local recruitment to the population. It is also important to note that the number of nests where birds are sufficiently accessible to enable microchips to be retrieved, limits recruitment estimates.

9. Mortality

In 2018, Taronga Wildlife Hospital records show 32 Little Penguins were admitted to the clinic. This is double the admissions generally seen in the last few years, excluding admissions related to the 2015 fox predation incident. Of the 32 admissions, 18 resulted in deaths (eleven were dead on arrival, three died in care and four were euthanased), 13 were treated and later released into the wild and one was retained in the zoo collection. There was also a bird brought to the zoo at the end of 2017 not previously recorded in the 2017 Manly Little Penguin Monitoring Report, which was retained in the zoo collection.

Most of the penguins brought to the zoo were found in Sydney Harbour (21). Nine birds were from southern Sydney beaches and two were found on the Central Coast/Newcastle area.

Taronga Wildlife Hospital records have been summarised to the following causes of death: three trauma, six sick and/or emaciated, seven unknown as too decomposed to determine a cause of death, one unreported and one boat strike.

None of the 32 penguins admitted were microchipped Manly birds. Within the known Manly penguin population, it has previously been estimated that about half of the birds are microchipped, so it would be reasonable to expect a similar proportion of microchips to be found amongst admitted penguins if they are part of the Manly colony. The lack of microchipped admissions suggests that, as we have seen in previous years, many of

the penguins brought to the zoo are not part of the known breeding Manly Little Penguin population.

10. Additional sites

In addition to breeding at sites monitored as part of this program, Little Penguins also breed or have bred in small numbers at other sites around northern Sydney Harbour, including Little Manly Beach, Manly Wharf and Federation Point. These three sites have been monitored in addition to the standard monitoring sites for the past three seasons. There were no observed breeding attempts at Federation Point or Little Manly Beach this season, although local residents did report penguins visiting Little Manly Beach regularly. One successful nest was confirmed at Manly Wharf this season, as in previous years. The chicks of this pair were taken into care at Taronga Zoo during the season.

Community wardens again worked voluntarily at Manly Wharf, organised by a volunteer co-ordinator under supervision of OEH staff. The use of wardens provides an important educational tool for beach and foreshore users, with volunteer wardens providing information and advice to the public and acting as a deterrent to disturbance of penguins. Most onlookers are respectful of the need to not disturb the penguins.

11. Discussion

Breeding results were again poor this year. While the fox predation incident of 2015, has caused a dramatic reduction in our base numbers of breeding penguins, it was not the only factor contributing to this extremely poor season.

The total number of nest sites showing activity this season (55) was the same as last year and similar to the year prior. It remains dramatically lower than the number of active nests recorded in the years prior to the fox attack. This suggests that had the unusual oceanic event not interfered with normal breeding, this season may have been similar to levels of the last two years.

We are investigating what oceanic factors may have caused the sudden abandonment of courting birds, incubating parents and a few pairs with chicks in early September 2018. Some pairs did manage to maintain breeding during this time, but many abandoned their breeding attempts entirely. At Quarantine Station, four chicks died and one egg was abandoned in the space of a few weeks. Pairs that appeared to be about to lay at Store Beach failed to do so at exactly the same time. It is more difficult to determine numbers abandoned at other sites, as few nests are easily accessible to be sure of nest contents at those sites and more breeding information is gained as chicks or signs of chicks become obvious as the season progresses.

The population had prior to the fox attack been regularly around the high 50s or low 60s breeding pairs but it is possible that the 40 or so breeding pairs experienced over the last few years are our new normal base. Growth will again occur only slowly over time from this base. We hope the natural breeding expansion we had seen at Store Beach, and successful uptake of the sound system at AIPM will start to increase numbers of breeding penguins using the Manly area back toward levels we had seen previously. We expect, from our prior monitoring at this site, that the process will be slow but we believe growth will occur, as it has in the past, and should continue with careful management and monitoring.

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Appendix 1

Table 1: Summary of breeding season results by year

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Total active nests	84	98	101	96	85	86	87	88	107	68	57	55	55
Total breeding pairs	64	60	69	66	52	50	57	70	67	40	41	40	28
Total eggs laid	158	130	146	135	110	123	132	174	159	101	103	108	63
Total chicks fledged	127	104	119	118	82	100	115	146	139	79	79	94	43
Breeding success	59%	69%	74%	78%	76%	64%	83%	58%	75%	45%	67%	75%	32%

Table 2: Number of active nest sites at each locality by year

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Quarantine	18	22	25	23	23	19	22	23	26	17	15	14	14
Store Beach	2	4	6	3	4	4	6	11	14	10	13	10	7
Collins Flat	23	19	15	12	13	16	12	14	18	8	4	5	6
Addison Rd	20	30	27	33	20	27	28	22	28	19	12	11	12
Oyama Ave	21	23	28	25	22	20	19	18	21	14	13	15	16
Total	84	98	101	96	82	86	87	88	107	68	57	55	55

Table 3: Number of breeding pairs at each locality by year.

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Quarantine	11	14	23	16	13	17	16	16	18	12	12	11	8
Store Beach	1	1	1	2	3	4	4	9	11	6	9	7	3
Collins Flat	18	11	7	8	9	8	12	11	10	2	3	5	3
Addison Rd	16	20	20	21	13	11	15	19	17	9	7	7	5
Oyama Ave	18	14	18	19	14	10	10	15	11	11	10	10	9
Total	64	60	69	66	52	50	57	70	67	40	41	40	28

Table 4: Number of eggs at each locality by year.

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Quarantine	31	37	54	38	31	44	41	45	46	34	34	35	18
Store Beach	1	1	2	4	6	12	12	21	28	17	26	16	6
Collins Flat	39	24	15	16	17	15	27	29	20	4	6	10	6
Addison Rd	46	42	42	42	27	26	29	47	37	20	13	18	10
Oyama Ave	41	26	33	35	29	26	23	32	28	26	24	29	23
Total	158	130	146	135	110	123	132	174	159	101	103	108	63

Table 5: Number of fledglings at each locality by year

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Quarantine	25	30	40	34	19	33	35	38	34	24	24	28	8
Store Beach	1	1	1	2	6	12	9	14	26	13	20	15	5
Collins Flat	32	17	10	14	10	12	23	27	20	0	6	8	3
Addison Rd	40	35	39	38	24	23	26	42	34	18	11	16	8
Oyama Ave	29	21	29	30	23	20	22	25	25	24	18	27	19
Total	127	104	119	118	82	100	115	146	139	79	79	94	43

7.4 Appendix D – *Acacia terminalis* subsp. *Terminalis* (Sunshine Wattle) 2018 Monitoring Report – 2019 Update. July 2019

**Acacia terminalis subsp.
Terminalis
(Sunshine Wattle)**

2018 Monitoring Report

2019 Update

Sydney Harbour National Park, North Head, Middle Head,
Georges Heights and Chowder Head

Author: Tony Garman

July 2019

1. Introduction

1.1. Background

Acacia terminalis terminalis is one of four subspecies of the Sunshine Wattle (*Acacia terminalis*). It is listed as endangered on the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 and on the NSW Threatened Species Conservation Act 1995.

A Recovery Plan was prepared for the subspecies in 2010 and was intended to be implemented over five years. Although this date has passed, the plan is still the most relevant source material for the in-situ conservation of this subspecies across its known range. It also identifies the actions that relate to NPWS responsibilities for the known populations within its reserve system to ensure long-term viability.

In 2017 NPWS commissioned a survey and report in response to Objective 4 of the Recovery Plan which is “to promote surveys, research and monitoring to assist with the management of [the subspecies]” through the identification and management of threats. Action 4.1 requires the NPWS “to undertake surveys of known but recently unsurveyed sites to confirm the presence or absence of *A. t. terminalis* and continue to monitor known sites.” (DECCW 2010 I and 18).

The 2017 Report was also prepared in response to the desired outcomes of Sydney Harbor National Park Plan of Management 2012 which include conserving the natural values of the park. Key project 2 in the plan notes a strong commitment ‘to the management of threatened species, populations and communities whose future is largely or wholly dependent on Sydney Harbour National Park, to ensure the long-term persistence of viable populations.’ Implementation of actions in relevant recovery plans, threat abatement plans and the priorities action statement are to receive a high priority.

The 2017 survey reviewed sites in the Manly and Mosman LGAs on the northern side of Sydney Harbour. This survey was conducted between 20th February and 1st April and the *2017 Monitoring Report* [1] was produced.

A more limited survey was conducted between 23rd April and 15th June 2018, covering sites in the Manly and Mosman LGAs. This survey was documented in the *2018 Monitoring Report* [2].

This has been further updated with the results of a survey conducted between 6th June and 16th July 2019. This survey reviewed only sites reviewed previously that had some *Acacia terminalis terminalis*, and in part was conducted with Erica Mahon from NPWS who was taking tissue samples for analysis by the Royal Botanic Gardens.

The surveys were conducted when the plants were in bud, full flower or late flower. At each site the number of plants was recorded, along with overall health and an analysis of the existence of the threats identified in the *Recovery Plan*. These findings were then compared with the historical record as recorded in *the spreadsheet*.

The Recovery Plan identified 27 Populations and 53 Sites with 38 of these Sites being in the 2018 survey area covering the Manly and Mosman LGAs on the northern side of Sydney Harbour. Two of these Sites were not observed. The other 36 Sites are reported on in this document.

2. Executive Summary

2.1. Findings

The 2018 report found that the surveyed population was significantly (60%) smaller than reported in the Recovery Plan with 15 of the 38 sites no longer having any plants counted. A further 11 showed significant decreases since the initial plan.

The report identified the major threats as:

- Fire and other disturbance (specifically, lack of)
- Habitat loss and fragmentation
- Weed invasion

It also noted that surveying was made much difficult than it needed to be because the locations reported had used obsolete mapping data, were sometimes inaccurate and there was limited information on how to reach the sites.

This 2019 Update identifies a further population decline of almost 25% in the year, and an increased identification of hybridisation and /or the presence of other subspecies as a threat to the continued existence of the subspecies in the surveyed areas.

During the 2019 survey new areas containing *Acacia terminalis terminalis* were found. The initial plan did not contain any recommendations or processes for adding new areas, so these have been reported separately.

2.2. Recommendations

The 2018 Report contained a number of recommendations, including:

- Focus on viable sites, to maximise efficiency of resource allocation
- Introduce fire or other disturbance, to trigger renewal
- Enhance weed management, to reduce competition
- Update bush regeneration practices, so that bush regenerators, councils and other land managers are not accidentally removing *Acacia terminalis terminalis*
- Consider targeted planting in areas where conditions are good for
- Enhance rabbit controls, to reduce rabbits as a threat
- Review and revise register, to accommodate the changes in the population and to simplify future surveying

From the findings of the 2019 survey, additional recommendations are:

- Confirm the presence and identification of hybrids and /or other subspecies from the tissue samples taken, and then develop and implement a policy for dealing with known hybrids and / or other subspecies
- Extend the survey, to identify new sites containing *Acacia terminalis terminalis*.

3. Summary of Findings

3.1. Findings from 2018

3.1.1. Population and Distribution

The findings from this survey and the trends over time suggest a significant decline in the overall population and distribution of *Acacia terminalis terminalis* on the northern side of Sydney Harbour. Specific observations include:

- The surveyed population is now only approximately 40% of the population reported in the Recovery Plan.
- 70% of all plants counted were on a single Site (At1d, north of Bluefish Drive on North Head)
- 15 Sites had no *Acacia terminalis terminalis* and a further 7 had only 1 or 2 plants
 - 5 of these Sites are considered to have been compromised to the extent that it is unlikely that *Acacia terminalis terminalis* will grow there again.
- Only 8 Sites had 10 or more plants, and 2 of those had a marked decrease compared with previous counts.

Table 1 - Change in Site populations since 2010

Change in Site population	Increase	Stable	Decrease	None Found	Insufficient data
Number of Sites	5	4	11	15	3

This decline is further emphasized in the table below which reproduces Table 1 from the Recovery Plan, and adds current data. The table shows the breakout of the 14 Populations in the Survey Area by size class, counting mature specimens in each Population.

Table 2 - Change in Population by size class from 2010 to 2018

Population size class	0	<10	11-50	51-100	>100	Not Inspected
Number of populations (2010)	0	1	4	2	3	4
Number of populations (2018)	5	4	3	1	1	

3.1.2. Threats

All of the threats identified in the Recovery Plan are implicated in the decline noted above, with the exception of “Dieback from *Phytophthora cinnamomi*” which was not apparent to the observers. The major threats are seen to be:

- Fire and other disturbance (specially, lack of)
- Habitat loss and fragmentation
- Weed invasion

Table 3 - Analysis of identified threats

Threat	Summary of Threat	Impact on Survey Area
Habitat loss and fragmentation	The subspecies already occurs only in small and fragmented sites, and many of these are subject to further development	A major threat. Some sites have been lost to development and the impacts of fragmentation means others will be lost as the existing plants age and die. A number of sites in Mosman appear to have been impacted by bush care activities with evidence of planting of other native species, but no observed <i>Acacia terminalis terminalis</i> .
Weed invasion	Direct competition from weeds and some natives, as well as impact from disruption to life cycle process.	This is a major impact at a number of sites, implicated in the disappearance of <i>Acacia terminalis terminalis</i> from some sites and a major ongoing threat to others.
Dieback from Phytophthora cinnamomi	Potential issue – not known whether the subspecies is susceptible.	Not observed
Access & visitation issues	Disturbance caused by formal and informal track creation, and subsequent weed invasion, habitat degradation, risk of dumping, fires, etc	Not observed as an issue – if anything the disturbance caused by track creation has aided some recruitment, although this may still cause issues in the future if weed invasion and habitat degradation occur. It remains a risk in pockets that are close to public areas such as ovals.
Fire and other disturbance	Inappropriate fire regimes causing population declines, with fire exclusion as a greater risk than too much fire.	None of the surveyed sites have evidence of recent fire activity, and most have limited other positive disturbance. Many of these are extremely unlikely to experience such disturbance due to their location (urbanisation). Leaf build up, thick lower and middle cover and extensive upper cover is common at many sites. One site recorded as having recent fire activity is At1d(i) – North Head, north of Bluefish Drive (“very hot burn in November 2003”), which is also the only site recording large numbers of the subspecies. A number of sites with obvious recent disturbance are also relatively prosperous (specifically At2a, At2b, At2c and At8b) which are along constructed paths).
European rabbits	Rabbits known to favour <i>Acacia terminalis terminalis</i> and particularly seedlings. Also damage from burrows a risk	This is not an obvious issue at most sites. The main exception is Quarantine Station with a noticeable large rabbit population, and with a significant reduction in observed <i>Acacia terminalis terminalis</i> and with no smaller plants. Other sites near grassed areas such as public ovals are also at risk.

Threat	Summary of Threat	Impact on Survey Area
Hybridisation	Hybridisation with other subspecies of <i>Acacia Terminalis</i> is known and considered likely where these are in close proximity.	There are 3 sites where potential hybrids were observed, and one site (the Military School at North Head) where other subspecies of <i>Acacia Terminalis</i> have been planted.

3.1.3. Site details

There are a number of issues with the recorded data for the various sites that have made surveying more complex and difficult than it needs to be.

This data has been provided in the form of a spreadsheet extracted from the NPWS Wildlife Atlas. The data, spreadsheet and source Atlas database are subsequently termed “The Register” in this report.

AGD66

The location data is recorded using AGD66 references which have become obsolete. GPS trackers no longer use these references and instead use GDA94. This leads to location differences of around 100m in this area of NSW.

Accuracy

Many of the locations recorded on the database are not accurate, even after translation. Text in some fields mentions locations being moved to match the description, but in many cases:

- the description does not match the location
- the location cannot be accessed and the description is not sufficient to work out where the plants are most likely to be

For example, At13c is a Site on Curraghbeena Head, Mosman. The location data puts it close to the water’s edge, on private property. The location says “Curraghbeena Park”, and plants were actually found near the side of a road opposite the park, about 10m from the park and 30m from the location data.

Areas or Sites

Locating plants is complicated by an inconsistent approach to areas where there are a number of plants. In some cases the reference is to a specific plant and in others the reference is to a zone where there are multiple plant sites. Unless the surveyor is familiar with the site they are not certain on arrival whether they are looking for plants in one place or over a range.

As examples:

- At7 is a Population in Mosman which is also the only Site in that Population, and is in a small road reserve. No plants have actually been recorded there.
- At2 is a Population around the former Military Barracks at North Head, with 3 Sites (At2a, At2b and At2c). Site At2a has 2 sub-sites – At2a(i) and At2a(ii). At2a(i) refers to a 200m long strip of land either side of a path.
- At1 is a Population which covers a large range of North Head and has 12 Sites (At1a to At1l). One of those Sites (At1d) is further subdivided into 8 Locations (At1d(i) to At1d(viii)). One of those Locations is At1d(i) which covers a large area of land, although mainly includes plants close to a 500m long wall.

In short:

- Entries in *The Register* can refer to either a Population, a Site or a sub-site
- Entries can be either a specific point where plants were found, or a line of up to 200m along which plants may be found, or an area covering several hundred square metres.

3.1.4. Directions

The Register assumes a good working knowledge of the survey area and provides inconsistent but generally incomplete guidance on accessing the various locations.

Most plants are found on or near paths or roads. Particularly for those near paths, knowing where to get on the path and how to get there can be instrumental in saving many hours of survey time, and may also make the difference between whether plants are found or not.

For example:

At9 is a Population on Middle Head with 9 Sites. Three of these sites are accessible from the same walking track, but there are three very different ways and locations that they are most effectively accessed:

- At9c is on a walking track that descends from Middle Head Road to Balmoral Oval. It is easily reached and the plants are easily found if you know where on Middle Head Road the track starts, and that you need to walk about 50m down stairs to get to the Site.
- At9b has exactly the same location as At9c, but is assumed from its description to be nearby in HMAS Penguin, a Navy base with strict access controls. How to reach the site should one be able to get in to the base is not clear. There has been no survey there since 2006.
- At9a is on Balmoral Oval which is most easily accessible from The Esplanade at Balmoral Beach. On a map one might also think it is accessible from roads to the east but these turn out to be part of HMAS Penguin. It is also accessible from the walking track that descends from Middle Head road, but that is 200m down and up around 200 steps.

3.2. Updated Findings from 2019

Plant numbers in mapped locations have continued a marked decline of 25% from just 1 year ago, with corresponding increases in dead and senescent plants and decreases in small (<30cm) plants.

- In the Manly LGA, counted plant numbers dropped 25% from 569 to 427 in mapped locations.
- In Mosman, the decrease was 27%, from 75 to 55 individuals.

The major threat observed in these locations continues to be the lack of disturbance from fire or any other cause. This has allowed slower growing plants to establish themselves and, in many cases, to crowd out the *Acacia terminalis terminalis*. Given the nature of *Acacia terminalis terminalis*, as a “subspecies requiring disturbance to trigger recruitment”, a “fire sensitive obligate seeder”, and with a lifespan of 8-20 years [1], this is to be expected: undisturbed sites first identified in 2010 would now be expected to have aging plants with limited opportunity for recruitment. Numbers would be expected to decline.

An increasingly apparent threat is hybridisation, most likely with *Acacia terminalis* ssp. *Augustifolia*. Hybrids and / or different subspecies of *Acacia terminalis* have been identified as a real or potential threat in 5 out of 11 current sites on North Head and 6 out of 9 in Mosman. This includes sites where hybrids and / or different subspecies have clearly been actively planted rather than self-seeded.

Some new plants have been found in areas of North Head not previously recorded as having *Acacia terminalis terminalis*. This included a number of large plants which are clearly more than a year or two old, so were missed in earlier surveys.

4. Recommendations

Site specific recommendations are contained in Appendix B, with the major themes outlined below. Most of the recommendations below were initially made in the 2018 Report and have either been updated or added following the 2019 survey.

4.1. Focus on viable sites

The survey area contains 66 recorded locations, most of which are single points, but which can be up to 500m². In many of these locations, there are no longer any *Acacia terminalis terminalis*, and this is unlikely to change given the characteristics of the location.

Examples include:

- At1f – part of St Patricks Estate where recent developments have removed all known *Acacia terminalis terminalis*
- At1k – part of Quarantine Station, now in a heavily overgrown forest-like area
- At7 – Road reserve in Mosman which is now replanted and weed infested

There are other locations where there is still some *Acacia terminalis terminalis*, but the long term viability of the subspecies in these areas is unlikely. Areas include:

- At1c – initially 10 plants on an isolated traffic island in the Sydney Water site. Now only 1 remains, surrounded by mature leptospermum and banksia.
- At9f – once more than 16 plants, now only 2. The area is heavily forested and shaded.

Activity to regenerate *Acacia terminalis terminalis* at these sites is unlikely to be successful and would most likely be a waste of scarce resources.

These locations should therefore be removed from the register to allow resources to be focused on the areas that do have potential.

Note that there are other examples of sites that have no *Acacia terminalis terminalis* remaining but which have the right features for future presence.

The recommendations below focus on viable sites.

4.2. Introduce fire or other disturbance

The Recovery Plan noted that the subspecies “should be considered a fire sensitive obligate seeder” and that “*A.t.terminalis* is susceptible to population declines (and potentially local extinctions) as a result of inappropriate disturbance regimes.”

It recommends “a minimum fire-free interval of 6-12 years” and a maximum period of 20 years.

With the recovery plan being prepared in 2010 and monitoring in most Sites going back to 2006 and 2001, this minimum period has now expired and in many cases the maximum period is probably also in the past.

The major recommendation is to review all fire plans for viable sites with a view to applying controlled burns in the near term where possible.

A specific location to focus on is At8a(i) recorded in 2006 as having over 300 plants following a “very high intensity burn two years prior”, but now having no *Acacia terminalis terminalis* and instead

being inundated with weeds such as lantana, privet, and asparagus fern. The site is considered too heavily infested for weed management to be the initial action.

4.3. Manage the threat of hybridisation

The Recovery Plan states that “Hybridisation with other subspecies of *A. terminalis* is potentially a major threat to *A.t.terminalis*.” and recommends “the removal of inappropriate *Acacia terminalis* plantings”.

At least 11 sites were identified as potentially having either a different subspecies of *Acacia terminalis* (probably *Acacia terminalis Augustifolia*) or hybrids.

One issue faced when dealing with this is the definitive identification of variants. A number of tissue samples (both of suspected variants and plants believed to be *Acacia terminalis terminalis*) were taken on the 2019 survey and sent to the Botanic Gardens. These should be analysed to confirm whether they are variants, and from this to clarify identification of the subspecies so that surveyors and land managers can do so without resorting to tissue samples.

Assuming confirmation that there are other subspecies and / or hybrids, then the Recovery Plan’s recommendation of removal of these plantings should be carried out, noting that a number of these are on land not managed by OEH.

4.4. Enhance weed management

There are several Sites where weed invasion (including native plants) is threatening both the existing *Acacia terminalis terminalis* and potential new recruits, and where weed removal would be appropriate.

Examples include:

- At1h, along the eastern wall bounding Quarantine Station and a pipeline extending north east to Collins Beach Road. Clearing and other disturbance in these areas has resulted in plants being recorded in new locations, including some new recruits. However there is also weed presence, including privet, that needs to be dealt with before it becomes unmanageable.
- At1d(i), along the boundary wall with St Patricks. There is *Acacia terminalis terminalis* all along the wall except one location where there is a patch of lantana which could be readily targeted for removal.
- At1j (specifically At1j(v)) where previously identified recruits have failed to survive in an area with a lot of blady grass, mother of millions, and pampas grass was in evidence.

4.5. Update bush regeneration practices

There are some sites, mainly in LGAs, where *Acacia terminalis terminalis* is no longer recorded but the area has been well tended by local bush care groups. Examples here include At9a, At13a and At14 in Mosman.

While it is not known whether these activities have actually removed existing *Acacia terminalis terminalis*, it is likely that weed control measures, and the alteration of the environment (including “mesic shift”) have impacted on actual and potential recruitment.

If these and similar sites are to remain viable then the groups involved in these areas need to be trained to recognise *Acacia terminalis terminalis* and to promote its growth and recruitment.

A very specific case is for Site At2c, the Former Military School where there appear to be plantings of other subspecies of *Acacia Terminalis*, probably *Acacia Terminal Angustifolia* in a number of locations. To avoid the risk of hybridisation these plants should be removed.

4.6. Consider targeted planting

The Recovery Plan states:

... given the high cost and risk associated with the technique, translocation should only be considered as a last resort when all other management options are deemed inappropriate or have failed

and:

Translocation is not currently considered necessary for the survival of *A.t.terminalis* as the in-situ conservation measures proposed in this recovery plan are expected to meet the conservation needs of the subspecies.

and:

However, 're-stocking' or 're-introduction' should be considered at sites that experience a substantial decline in population size ...

Given the significant decline in plant numbers and the increased existence of threats to the remaining sites, where sufficient seed banks have been collected consideration should be given to growing stocks of *Acacia terminalis terminalis* (for example in Council nurseries) to replenish areas where previously identified *Acacia terminalis terminalis* is no longer present but the habitat is suitable.

A specific example could be to replace the *Acacia Terminal Angustifolia* at Site At2c

4.7. Enhance rabbit controls

In the Recovery Plan, Specific objective 3 is "To identify and minimise the threats operating at sites where *A.t.terminalis* occurs" and includes the threat abatement measure:

- installing tree guards around seedlings and ensuring that rabbit control programs are aimed at areas where *A.t.terminalis* seedlings are found

Only one Site, Atj in Quarantine Station had an obvious exposure to large numbers of rabbits, but this site has seen a reduction in plants from 32 to 7 since 2006, with no small plants. Rabbit control programs should be stepped up here, in conjunction with weeding programs and tree guard should be considered for any seedlings or small plants found.

4.8. Survey new locations

The Recovery Plan noted that "It is likely that our current understanding of the distribution of *A.t.terminalis* is not complete.", and the 2019 survey did find some areas with *Acacia terminalis terminalis* which had not previously been identified on the register.

This includes:

- 22 plants on the track from Shelly Beach carpark to Blue Fish track (near site At1e)
- 1 large healthy plant by the roundabout at the top of Quarantine Station, near site At1i
- 7 plants at the end of a new boardwalk by Chowder Bay, near site At4a.

Given the subspecies' propensity to germinate near areas of disturbance, it is likely that there are more such areas, and these should be identified and managed in the same way that the initial set has been.

The process for doing so needs to be identified:

- This is a large area and a full scale survey would require resources that are not available
- However, land managers may well be aware of areas of recent disturbance, and these could be added to a register of "potential sites"
- Similarly, new sites could be identified by small scale searches in likely areas as part of the main survey.

This would need to be accompanied by a more flexible approach to recording known locations (see below).

4.9. Review and revise register

There are a number of changes that could be made to the Register to make future surveys easier, to improve the quality of information, and to allow for changes to the known locations of plants.

- Change all locations to their GSDA94 equivalent
- Remove records for locations no longer considered viable
- Add directions to reach the locations
- Support areas of land (polygons) where appropriate, as well as specific locations
- Adopt a structured nomenclature such as:
 - Populations are numbered At<n> and are only an aggregator of Sites – ie have no location data or plants counts of their own.
 - Each Population has at least one Site.
 - Sites are numbered At<n><a> and may cover an area of land tracked as a polygon, in which case they would have no plant counts of their own.
 - Each Site may have Locations.
 - Locations are numbered At<n><a><i> and record specific plant locations within a polygonal Site, or may be a small polygon (small enough that a surveyor would be able to see plants in that Location from any starting point.

Appendix A. Summary of survey data

The table below summarises the status of the 38 Sites in the Survey Area and for each one identifies:

- Location and Local Government Area
- Historic plant counts and counts in the Recovery Plan, where different
- Current Survey counts
- A colour coded assessment of the Population Status:
 0. Red - There were no plants found
 1. Yellow - The population has declined to only one or two individuals
 2. Yellow Green - The population has declined markedly
 3. Pale Green - The population is stable but small (one or two individuals)
 4. Mid Green - The population has increased but is less than 20 individuals
 5. Dark Green – A healthy population of at least 20 plants
- A colour coded assessment of the overall threat status which is an average of the specific risks, ranging from:
 - High (5.0, Red) – site is no longer considered viable
 - Low (1.0, Dark Green) – site is in good health (note that the lowest actual rating is 2.0)
- A colour coded assessment of the impact of each of the 6 specific risks (ie not including PC):
 - HL – Habitat Loss
 - W – Weeds
 - A – Access
 - F – Fire and other disturbance
 - R – Rabbits
 - H – Hybridisation
- Each specific risk is rated from 5 (High, Red) to 1 (Low, Dark Green) as follows:
 - 5 The threat has already severely impacted the site and there is no reasonable prospect of it being removed
 - 4 The threat has impacted the site and could shortly destroy it, removal of the threat is complex
 - 3 The threat is impacting the site but either the site can continue as is in the short to medium term, or removal of threat is feasible
 - 2 The threat has had some impact on the site, or may do so, but removal is feasible
 - 1 There is little or no evidence of the threat for this site

A.1. Manly LGA

Site Code	Location	Count - Historic	Count - Plan	Count - 2018	Count - 2019	Pop Status	Threat Status	HL	W	A	F	R	H
At1a	Sydney Harbour NP (North Head) - Bluefish Point track	15	2	1	1	1	2.0	2	3	1	3	2	1
At1b	North Head STP	60	22	24	19	4	2.2	2	2	2	4	2	1
At1c	North Head STP (traffic island)		10	3	1	1	2.7	4	3	2	5	1	1
At1d	Sydney Harbour NP (North Head - north of Bluefish Dr)		several hundred	445	302	4	2.0	1	2	3	2	2	2
At1e *	North of 1880s wall		3	4	5	4	1.8	1	2	3	2	2	1
At1f	St Patricks Estate, Manly	87	?	0	0	0	5.0	5					
At1g	Sydney Harbour NP (North Head) - west of Collins Beach Road	2	2	0	0	0	2.7	4	4	2	3	1	2
At1h	Sydney Harbour NP (North Head) - east of Collins Beach Road	5	9	6	2	2	2.5	2	5	1	3	3	1
At1i *	Sydney Harbour NP (North Head) - Quarantine Station (Stonemasons Yard)	2	0	0	0	0	5.0	5					
At1j *	Sydney Harbour NP (North Head) - Quarantine Station (Lower Reservoir - south)		32	7	13	3	4.2	3	4	4	5	5	4
At1k	Sydney Harbour NP (North Head) - Quarantine Station (Quarantine Beach Rd 1)	2	0	0	0	0	5.0	5					
At1l	Sydney Harbour NP (North Head) - Quarantine Station (Isolation Wards 1)		2	2	4	3	3.0	4	2	3	4	4	1
At2a	Former Military School, North Head (along memorial track - north)		13	44	50	5	2.0	1	2	3	2	2	3
At2b	Former Military School, North Head (along stonewall firebreak)		19	13	13	4	2.7	3	2	3	2	3	3
At2c	Former Military School, North Head (entrance to new walkway)		13	20	12	3	3.2	3	2	3	3	3	5

Note that for At1e, At1i, and At1j, new locations were found – the data in the table above refer to like for like comparisons.

A.2. Mosman LGA

Site Code	Location	Count - Historic	Count - Plan	Count - 2018	Count - 2019	Pop Status	Threat Status	HL	W	A	F	R	H
At3a	Parriwi Park, sandstone plateau above Spit Road, Mosman.	0	48	2	2	1	2.5	3	3	2	3	2	3
At3b	Parriwi Park, east of Parriwi Road, Mosman.	1	1	3	1	4	2.5	2	2	2	3	2	4
At3c	The Spit Reserve, Mosman	1	3	0	0	0	3.2	4	2	4	5	3	1
At4a *	Quakers Hat Park (east), Mosman	3	330	30	16	3	2.7	2	3	2	4	2	3
At5	Quakers Hat Bay Reserve, Mosman	1	2	0	0	0	5.0	5					
At6	Quakers Hat Bay Reserve, Bay Street, Mosman.	Small	?	0	0	0	5.0	5					
At7	Road Reserve 29, Mosman Local Government Area, Almora Street.	0	?	0	0	0	3.0	4	4	1	5	3	1
At8a	Sydney Harbour NP (Middle Head forts east)	0	304	0	0	0	2.5	2	5	3	2	2	1
At8b	Sydney Harbour NP (Obelisk Bay)	>10	214	20	16	2	2.7	2	4	3	2	2	3
At9a	Balmoral Oval, Mosman	0	?	0	0	0	3.2	4	4	4	4	2	1
At9b	HMAS Penguin, western boundary	0	13	?	?								
At9c	Walkway to Balmoral Oval	0	2	2	2	3	2.2	3	2	2	4	1	1
At9d	north of Training Command Centre, Georges Heights	>79	13	0	0	0	3.3	4	3	4	4	3	2
At9e	Training Command Centre, Georges Heights	26	13	0	0	0	3.5	4	3	4	4	3	3
At9f	Sydney Harbour NP (Chowder Bay Rd)	>16	2	8	2	2	3.3	4	5	2	3	2	4
At9g	Camouflaged Fuel Tanks (north), Georges Heights	0	18	5	3	3	2.7	2	4	3	3	2	2
At10	Bradley Bushland Reserve, Middle Head Road, Mosman	1 (possibly planted)	?	0	0	0	2.5	4	3	1	4	2	1
At11a	Sydney Harbour NP (Taylors Bay Reserve)		9	2	N/C	1	2.5	2	3	3	3	3	1
At12	Sydney Harbour NP (Ashton Park)	11	8	1	2	1	3.3	3	4	3	4	3	3
At13a	Sirius Cove, Mosman	0	?	0	0	0	3.3	4	4	3	4	3	2
At13b	Road Reserve 47, Mosman Local Government Area, end of Mcleod Street, S of Mosman Bay.	1	?	?	?								
At13c	Curaghbeena Park, Mosman	0	?	2	2	3	2.3	3	2	3	4	1	1
At14	Reid Park, Mosman	0	?	0	0	0	3.7	4	4	4	4	4	2

Note that for At4a a new locations was found – the data in the table above refer to like for like comparisons.

Appendix B. Location survey data

The tables below provide the specific counts, habitat notes and recommendations for each of the Locations listed in the Register. Where other locations were identified they have been added as close as possible to the existing locations.

B.1. Manly LGA

The table below records the survey data for the locations on North Head.

Site	<30cm	>30cm	Dead	Current Status	Historical	Threats observed	Recommendation
At1a		1		Healthy, but weeds (lantana and mother of millions) and thick native vegetation smothering. Unlikely to recruit without action. Not counted	15 plants in 2006.	Fire exclusion, Weeds	Disturb Weeding
At1b	3 1	21 18		Spread over about 50m ² , Healthy area with Leptospermum and senescent banksia, also mother-of-millions. Recent large planting nearby with Leptospermum and banksia	Originally 60 plants, with 22 in 2006.	Fire exclusion	Register update - polygon
At1c	4 0	2 1		On a vegetated traffic island, with mature Leptospermum and banksia, quite shaded, unlikely long term future	10 plants, of which 7 were immature.	Fire exclusion Small site	
At1d(i)	29 6	407 284	43 30	Recorded as being the length of the wall beside St Pats to Bluefish Point (about 600m). Large numbers, but fewer immature than 2017. One area with lantana. New track in part of area. Bushcare activity along wall. Recently weeded, population aging and decreasing. 1 possible hybrid noted at entrance – appears to have been planted there.	"Several hundred" originally, about 550 in 2017, with a burn on 2003 credited with the germination.	Low threat. No habitat destabilisation	Register update - polygon Weeding
At1d(ii)	2 0	4 8	0 1	Plants found in 3 spots along 30m of the path either side of the coordinates. Healthy plants, in flower. Area to east of track has had a recent burn, so it may be source of new recruits in coming years	Not clearly separated from At1d(i)	Limited - healthy site	Register update - polygon

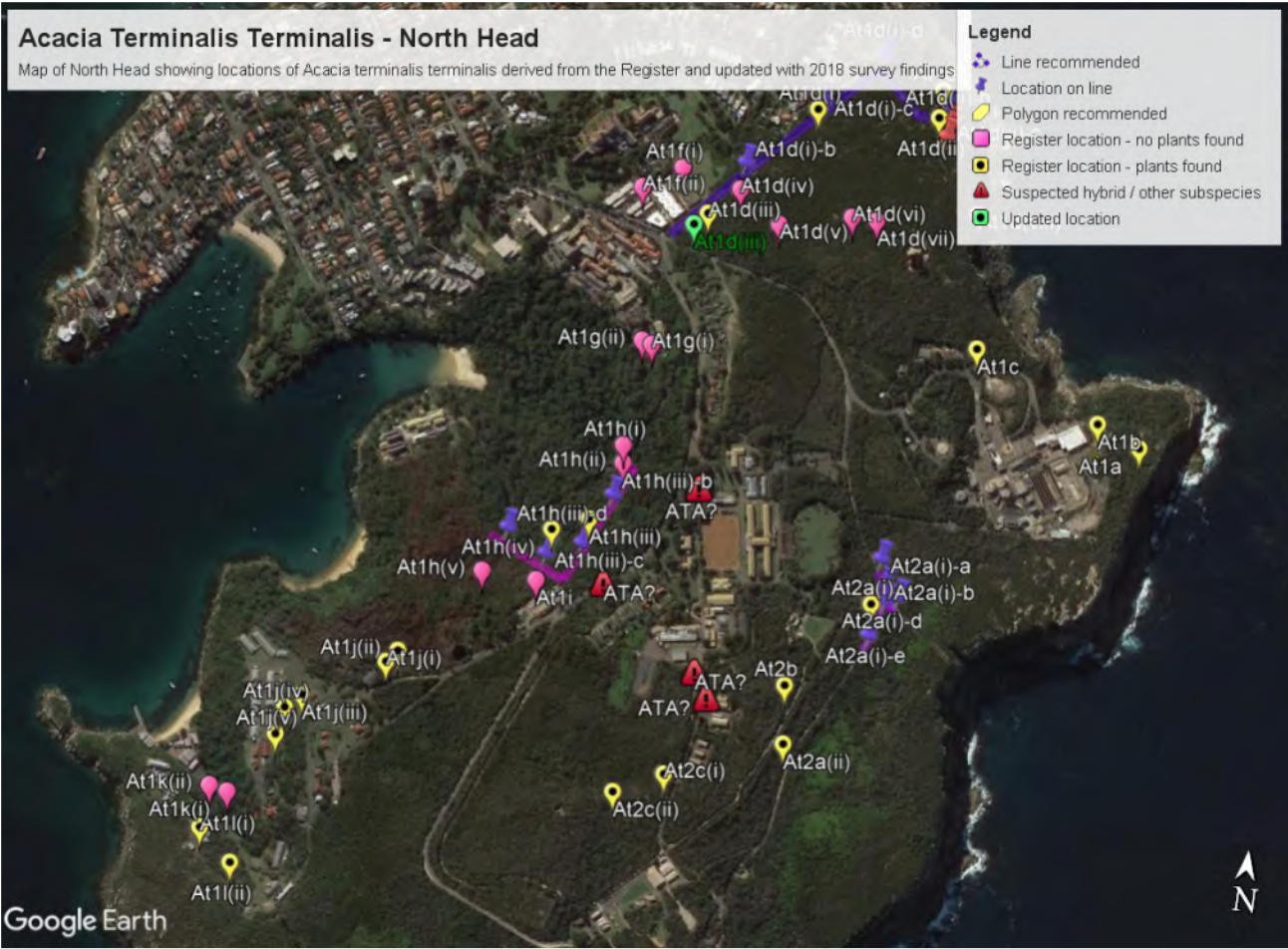
Site	<30cm	>30cm	Dead	Current Status	Historical	Threats observed	Recommendation
At1d(iii)		3 4		Plants by road verge - assumed to be this site. There may have been more off the road, but not checked.	Not clearly separated from At1d(i), but Atlas says 10 plants over 300m ²	Limited - healthy site	
At1d(iv)	0	0		Sites in interior of scrubland, with no obvious trails - not searched. May have been considered part of At1d(i)	Nothing published.	Limited - healthy site	Register update - remove?
At1d(v)							
At1d(vi)							
At1d(vii)							
At1d(viii)							
At1e	1	3		Healthy plants either side of track, in mature scrub	3 counted	Fire exclusion	
At1e(ii)	2	20		Newly found on track from Shelly Beach carpark to Blue Fish track. Generally healthy, 0.5 - 1.5m, in bloom		Limited - healthy site	Register update - include
At1f(i)		0		None found - areas developed since previous count, not likely any more	87 originally	Development	Register update - remove
At1f(ii)							
At1g(i)		0		None found - site was side of fire trail, now overgrown now with blady grass and garden escapees	2 previously	Fire exclusion, Weeds	
At1g(ii)							
At1h				The various records comprising At1h can be seen as 2 paths - one along the sewerage pipe from the QS wall to Collins Beach Road and the other heading north-west on the northern side of wall towards AIPM			Register update - polygon
At1h(i)		0		None found - overgrown. Collins Road end of sewerage pipe	3 mature	Habitat loss - forestation	Register update - remove
At1h(ii)		0		None found - overgrown. Collins Road end of sewerage pipe	8 mature		
At1h(iii)	4 0	5 2		Path along sewerage pipe from wall to Collins Beach Road, a few ATT sites, lots of weed (privet, etc), also potential other subspecies. Also a few plants along wall, in various spots - again possible hybrids. Area beside wall appears to have been cleared. Natives and privet now dominating area – no longer a good site.	1 immature, references to walking track which is no longer there	Weeds, Hybridisation Habitat Loss	Weeding
At1h(iv)		0		None found - overgrown with blady grass	Just 1 - site data seems inaccurate	Fire exclusion, Weeds	Weeding
At1h(v)		0		Not looked for - inaccessible area	Just 1		Weeding

Site	<30cm	>30cm	Dead	Current Status	Historical	Threats observed	Recommendation
At1i		0		None found - car park and overgrown	2, but not located since 2006	Development	Register update - remove
At1i(ii)		1		Mature specimen in full flower by roundabout			Register update - include
At1j(i)		0		None found	3 in 2006, 1 later	Fire exclusion, Weeds, Rabbits	Weeding, Rabbit control
At1j(ii)	0 1	4 0		Healthy and in flower Trittering along roadside has recently removed the mature specimen.	6 in 2006,	Fire exclusion, Weeds, Rabbits Habitat loss	Weeding, Rabbit control
At1j(iii)		0		Cleared area, no plants	Just 1	Development	Weeding, Rabbit control
At1j(iv)	1	5		Both sides of road. No sign of recruits - needs some TLC Includes possible hybrid	12 immature	Fire exclusion, Weeds, Rabbits Hybridisation	Weeding, Rabbit control Remove non-ATT
At1j(v)		4 2		Surrounded by blady grass, Mother of millions and pampas. Nearby plot of planted hybrid / other subspecies	11 immature		
At1j(vi)	2	1		Large plant, 2.5m just flowered, behind back of building. Also 2 recent recruits - ~3cm high			
At1k(i) At1k(ii)		0		Shaded heavily grown area, no longer a likely spot for ATT	2, but no data and not found since 2006	Forestation	Register update - remove
At1l(i)	1	1	1	Mature, flowering New recruit observed below mature plant.	Just 1	Road maintenance	Monitor
At1l(ii)		4 2		Mature, flowering - on rocky outcrop Newly found on opposite side of road	Just 1	Limited - healthy site	Monitor
At2a(i)	3 4	35 40		found in 5 spots over about 200m, along wall, and on path either side of wall Generally mature plants up to 2m with late bloom. Some suspected ATA/hybrid.	13 plants	Fire exclusion, track maintenance, Hybridisation	Register update - polygon
At2a(ii)	1	5		Healthy plants found either side of track Spread along track north of path to Gun Emplacement 1 & 2.	No data	Fire exclusion, track maintenance	Monitor
At2b	0 1	43 12		What was a firebreak is now a bike track, so recreational use a threat	19 along a firebreak	Recreational use	Monitor

Site	<30cm	>30cm	Dead	Current Status	Historical	Threats observed	Recommendation
At2c(i)		0		A number of other subspecies (confirmed Paul Ibbotson) found in Barracks Precinct - some have been planted.	2 plants	Hybridisation	Bush regen - remove
At2c(ii)		20 12		5 dying, 9 near track and 6 about 5m off. Some large, all flowering. <i>Aging population, appears to be planted ATA nearby</i>	11 plants	<i>Lack of disturbance, Hybridisation</i>	Register update – polygon <i>Remove non-ATT</i>

The map below is from Google Maps and shows the geographic location of the North Head locations recorded in the Register together with:

- Recommended introduction of polygons as either lines or areas, including locations on the lines where plants were observed, where relevant
- Which locations had no plants observed
- Other locations where plants were observed
- Locations where hybrid plants or other *Acacia Terminalis* subspecies were observed.



B.2.Mosman LGA

The table below records the survey data for the locations in the Mosman LGA.

Site	<30cm	>30cm	Dead	Last	Threats observed	Recommendation
At3a		2		Healthy, but overgrown in area with no recent disturbance <i>Possible hybrids</i>	Fire exclusion, Hybridisation	Disturb
At3b		3 1		Possible other AT / hybridisation <i>Likely hybrid, surrounded by pittosporum</i>	Hybridisation, Fire exclusion	Disturb
At3c		0		Overgrown area with no recent disturbance	Fire exclusion	Disturb
At4a(i)	4 1	48 7		On cliff edge on north side of track <i>On side track off the main track. Signs of senescence</i>	Fire exclusion	
At4a(ii)		8		Possible ATA / hybrid	Hybridisation, Fire exclusion	Confirm ATT
<i>At4a(iii)</i>	1	6		<i>By new boardwalk, mainly mature, 2 with seed pods</i>	<i>Fire exclusion</i>	
At5		0		Overtaken by garden expansion / overflow?	Weeds	Register update - remove?
At6		0		Overgrown, weeds	Weeds	Register update - remove?
At7		0		On steps down from Arbutus St, overgrown with weeds	Weeds	Register update - remove?
At8a(i)		0		Lantana, privet, asparagus fern	Weeds	Disturb
At8a(ii)		0		Not located		Confirm location
At8b	2 3	48 13		End of track by B801 battery, surrounded by tick bush, banksia, both sides of track, 5 in flower. None around fort itself <i>Suspected hybrids included in count</i>	Hybridisation, Access	None
At9a		0		Front of creek planted out with lomandra and bladey grass	Habitat loss	Register update - remove?
A9b				DoD side of fence - not accessed		
At9c		2		Mature, in flower - side of walking track to Headland Park <i>1 senescent, spent flowers, new seed pods</i>	Lack of disturbance	None

Site	<30cm	>30cm	Dead	Last	Threats observed	Recommendation
At9d(i)		0		Small ATA, not ATT	Hybridisation	Confirm subspecies
At9d(ii)		0		Nothing found		Confirm location
At9d(iii)		0		Overgrown with bracken and Pittosporum	Habitat loss	Register update - remove?
At9e(ii)		0		Nothing found		Confirm location
At9e(iii)		0		Nothing found		Confirm location
At9f	0 3	5 2		Near car park Chowder 4, but possibly ATA / hybrid Probable hybrids	Hybridisation	Confirm subspecies
At9g(i)		1		90cm high, finished flowering, kikuyu around	Weeds	Weeding
At9g(ii)		3 4		Mature, in flower, lots of weed around Some fungal growth on plants and dieback	Weeds	Weeding
At9g(iii)		1		Being suffocated by weed	Weeds	Weeding
At9g(iv)		0		Nothing found	Weeds	Weeding
At9g-a		1		Healthy 1m plant, just finished flowering		Register update - add?
At10		0		Good potential site, but actual area covered with chopped down casuarina	Habitat loss	Keep monitoring
At11a(ii)		0		Heavy undergrowth (lomandra, pittosporum)	Habitat loss	Keep monitoring
At11a(iii)		0		Tea tree, eucalypt, lomandra	Habitat loss	Keep monitoring
At11a(iv)		0		Rocky outcrop with healthy native scrub around	Habitat loss	Keep monitoring
At11a(v)		0		Some dead trees in area, but otherwise good native scrub	Habitat loss	Keep monitoring
At11a(vi)		2		60cm plants on north side of track about 5m apart. Heavy native plant growth around.	Habitat loss	Keep monitoring

Site	<30cm	>30cm	Dead	Last	Threats observed	Recommendation
At12a		1		Mature, 3m, in flower, surrounded by blady grass.	Habitat loss, Weeds	
At12b		1		Suspected ATA	Hybridisation	
At13a(i)		0		Regeneration area, heavy lower and middle cover	Habitat loss	Update bush regen advice
At13a(ii)		0		Leaf mulch, lomandra, grevilliea	Habitat loss	Update bush regen advice
At13b		0		Location appears to be near garden replanted with lilli pilli	Habitat loss	Register update - remove?
At13c		2		Location incorrectly recorded. Actual site is just south of Curraghbeena Park on the opposite side of the road. One 2m specimen and one 60cm with possible elongated petiole.	Habitat loss Senescence	Register update - update location?
At14		0		Bush care area, heavy lower and middle cover	Habitat loss	Update bush regen advice

Appendix C. Terminology

Subspecies	refers specifically to <i>Acacia Terminalis Terminalis</i>
Site	Areas defined in the Recovery Plan on the basis of tenure or management boundaries. Populations may consist of a number of Sites . Sites are numbered At<n><a> - eg At3a. Note that some Sites have many recorded locations where the Subspecies has been found. There are referred to as “locations” or “sites” (lower case).
Population	In the Recovery Plan, records within 300 metres of each other have been defined as one Population as dispersal of the subspecies is unlikely to exceed this distance. Populations are identified by the Site Code At<n> - eg At4
Survey Area	The area surveyed both in the 2017 survey and the 2018 survey, covering all 14 Populations north of Sydney Harbour, from At1 to At14, all in the Mosman and Manly LGAs
The Register	The NPWS Wildlife Atlas records pertaining to <i>Acacia Terminalis Terminalis</i> , specifically as provided to the surveys via the Recovery Plan and a spreadsheet extract.

Appendix D. References

Recovery Plan Recovery Plan for the Sunshine Wattle (*Acacia terminalis* subsp. *terminalis*)

Authors: Martin Bremner and Ann Goeth

April 2010

[1] 2017 Monitoring Report

[2] 2018 Monitoring Report

Sydney Harbor National Park Plan of Management 2012

7.5 Appendix E –Seagrass in Quarantine Bay – Impact of installation of adjacent piles to heritage wharf. EcoDivers, 2018.

eco divers

volunteer marine conservation organisation - Manly NSW

Max Player

Director

Mawland Quarantine Station Pty Limited

13 September 2018

Sea grass in Quarantine Bay- Impact of installation of adjacent piles to heritage wharf

Attached is EcoDivers July 2018 Report on Sea Grass in Quarantine Bay adjacent to the Quarantine Wharf. We have been provided with the attached plans in respect of the proposed piles to stand proud of the heritage wharf. I have inspected the proposed area of placement.

I confirm that the proposed location, installation and presence of the additional piles as per plans will not adversely impact the seagrass. I understand this letter will be used to support an application for approval of these works.

Seagrass is healthy and abundant in the area as per the above Report.

I note that installation of the piles is imminent and urgent, and have no objection to same.

We will continue to dive in the area and monitor both flora and fauna species.

Yours

Dave Thomas

President – eco divers

Form QCR5.1.4 -- STRUCTURAL DRAWING REGISTER & TRANSMITTAL

General Arrangement
Manly Q-Station Wharf

<input type="checkbox"/>	INFORMATION	<input type="checkbox"/>	APPROVAL	<input checked="" type="checkbox"/>	DISTRIBUTION
<input type="checkbox"/>	REQUESTED	<input type="checkbox"/>	CHECK & RETURN	<input type="checkbox"/>	CO-ORDINATION

PROJECT NUMBER: 17309

DATE	20	30																	
	04	07																	
	18	18																	

	TO	ATTENTION	DELIVERY ADDRESS
X	THE MAWLAND GROUP	MR MAXWELL PLAYER	Max Player <mplayer@mawlandgroup.com.au>

DISTRIBUTION	COPIES
THE MAWLAND GROUP	P P
SHEET SIZE	A1 A1

P : PDF C : CAD B : BIM

DRAWING STATUS																			
PRELIMINARY	X	X																	
TENDER																			
CONSTRUCTION CERTIFICATE																			
CONSTRUCTION																			

Dwg. No.	DRAWING TITLE	REVISION																	
DA01	GENERAL ARRANGEMENT	A																	
S1	CONSTRUCTION NOTES AND GENERAL ARRANGEMENT	A																	
S2	MANLY Q-STATION WHARF NEW FENDER PILES	A																	

DELIVERY METHOD

ISSUED BY: RH

<input type="checkbox"/>	COURIER	<input type="checkbox"/>	COLLECTION	<input type="checkbox"/>	HAND	<input type="checkbox"/>	WEBSITE
X	EMAIL	<input type="checkbox"/>	FAX	<input type="checkbox"/>	MAIL	<input type="checkbox"/>	DISK

TLB Engineers accepts no responsibility or liability for the dimensional accuracy or completeness of the information contained in any editable files issued under this transmittal.

SEAGRASS INFORMATION UPDATE

QUARANTINE STATION
JULY 2018

ECO DIVERS

SUMMARY

Following a request to update the current status of seagrass in the Bay, divers conducted a visual survey of the area on Tuesday the 17th July 2018.

The group has been involved in seagrass surveys and research for the past eight years in Sydney Harbour, with Quarantine Bay being one of the areas studied.

Seagrass is a marine plant and grows much like grass on land, it is not seaweed [macro algae] and requires a different set of conditions to grow and survive, the main one being its need for sunlight for photosynthesis, hence it grows best in shallow protected areas.

Three main species are found in the region:

- 1 – *halophile ovalis* – paddle shaped
- 2 – *zostera capricorni* – long thin grass
- 3 – *posidonia australis* – long thick grass

All three species are found in the Bay. While currently the grass is dormant in the colder water / conditions, increases in water temperature hours of sunlight, water clarity and nutrients provide a growing and expanding season of 3 to 4 months over summer. This however this is also when the most damaging activity occurs.

The main threat to seagrass is recreational boat anchoring / mooring. This also has an added downside of introducing and spreading invasive species of macro algae *calurpa taxifolia* ! A quantity was observed adjacent to the seagrass bed on the northern side of the wharf.

Geographically the bay is an ideal seagrass habitat, protected from the predominant southerly swell and wind, the seabed is fairly stable [seagrass also helps to maintain this] close to the heads for better water quality and with a gently sloping sea floor that has a large area of ideal depth range 2-7m.

Limited restrictions on activity and anchoring in the bay have allowed for two main areas to have surviving “established seagrass beds” [south of the wharf and north of the wharf] running parallel to shore. These can be seen in the drone images attached. From above the seagrass shows as dark shadows with a clear edge definition to open sand areas. Underwater this is a different story as colonising seagrass is everywhere but not dense enough to show up on aerial photos.

Public moorings have been installed at the northern end of the Bay and several surviving buoys indicate a penguin habitat area, which by default protects some seagrass but there is no designated actual protection for seagrass in the area despite DPI legislation and *posidonia* being a critically endangered species in the region.

It was observed that all three species intermix in the seagrass beds with overlapping posidonia occupying the deeper water thinning out to mainly halophola in the shallows. Clumps of posidonia can be observed away from the main area, these are the remnants of larger covered areas that have been reduced dramatically by boating activity. All three species appear to be in good condition and can be seen in the photo below with a fan bellied leather jacket.



The image below showing the anchor scar was take 5m inside the habitat protection marker directly north of the wharf !





The two photos above [courtesy of Q'Station] show the seagrass beds on either side of the wharf.

Outside the penguin habitat markers there is no protection for seagrass and only small clumps exist, while there is legislation against damaging sea grass, it is not enforced. Knowledge and awareness of the importance of seagrass by recreational boaters is poor at best and largely ignored.

The area in front of the wharf has minimal seagrass as the water is deeper and that area has been used by vessels for 100 plus years and the seafloor is loose sand and has not sustained any observed growth over the past eight years.

Increased non-anchoring areas and enforcement of existing legislation is required to ensure some chance of survival and expansion of existing seagrass here and in other such areas.

This bay has some of the best surviving *Posidonia australis*, a protected species that is slow growing and once disrupted doesn't survive.

As an example of the kind of damage one boat can do.. if a boat anchors in or near seagrass dropping the anchor and setting the anchor creates a furrow that can be 10s of metres long. Then just 5m of anchor chain on the seafloor for 6 hours creates a 10m diameter circle of cleared sand.

A suggested buffer zone of at least 30m to help protect the juvenile / colonising / expanding seagrass is required .. in addition to any anchoring restriction, a short google image search for "anchor damage to seagrass" shows extensive and comprehensive reduction in seagrass areas over a short period of time. [Rose Bay Manly Cove / Little Manly Cove]

Furthermore trials conducted on repopulation of seagrass in damaged areas showed poor return % in areas that had a long term scouring as the seabed was so disrupted and barren that it no longer supports growth ie: around block and chain moorings or permanent anchorages.

So roughly the same conditions exist at Quarantine Bay as in the past with the seagrass occupying a narrow strip along the shore featuring all three endemic species, seasonal fluctuations occur in growth and coverage but it remains highly susceptible to significant damage from the primary threat of unregulated boating activity.

David Thomas
Eco Divers – Jul 2018

7.6 Appendix F –Heritage Review – Wharf Fender Piles, Quarantine Station, North Head (SHR 01003). FORM Architects, 2018

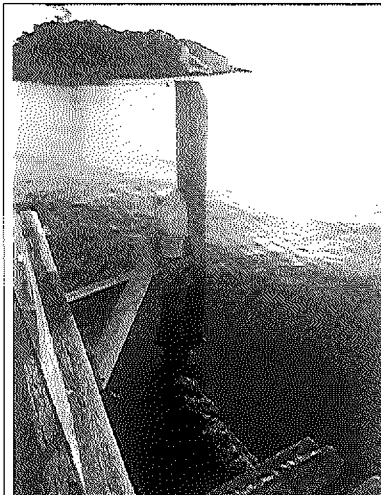


Plate 3: the natural erosion of the hardwood timber piles, embarkation steps and wharf structure is visible here and appears fragile in the face of impacts. One of the proposed piles would be installed on the outside of the pile seen in this photograph (refer engineers plan in Plate 7)

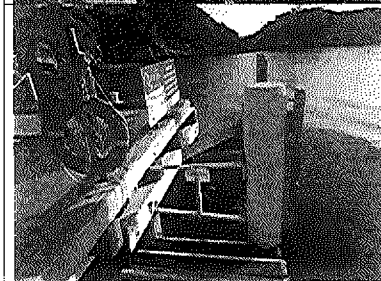


Plate 4: view of the embarkation steps from the dock of the wharf.

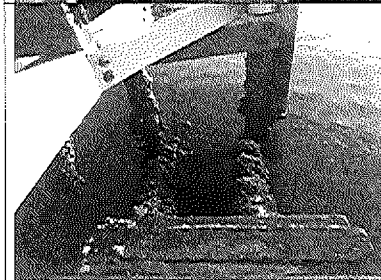
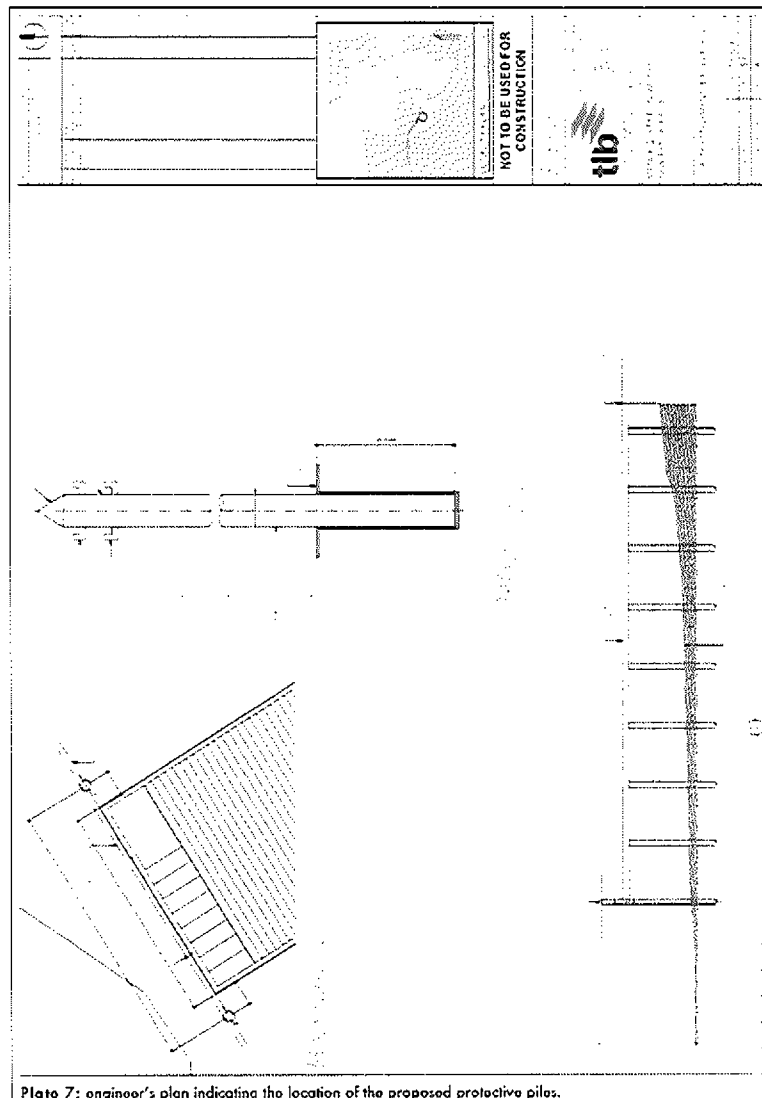


Plate 5: view of the embarkation steps as attached to the pile and showing the sort of growth that forms on the structure.



Plate 6: View along the face of the wharf. The proposed piles would be forward of this line (refer engineers plan in Plate 7).



In view of the condition of the wharf the proposed piles are necessary if the Wharf is to be maintained for ongoing use for arrival and departure of guests to the Quarantine Station. The placement and visual impact of the piles would create minimal intrusion and will be readily identifiable as being protective rather than being part of the

original fabric of the wharf. The plans provided indicate that there will be no attachment between the proposed piles and the wharf with the piles being reported as having been designed to absorb all impacts in isolation.

The ecology of the sea floor in the vicinity of the wharf and, although this is not within the scope of a heritage impact assessment, I can report that a management report for the preservation of sea grasses, in the vicinity of the proposed pile locations, has been commissioned by Mawland.

The installation of the protective Wharf Fender Piles will not be at the detriment of the significance of the historic wharf. If you have any questions and/or seek clarification, please do not hesitate to contact me on (02) 8765 8800.

Yours sincerely,
FORM architects (aust) Pty Ltd

Ron Edger B Arch FAIA nsworb 5022
Principal/Director

7.7 Appendix G – IMAMS Report July 2018 to December 2019.

Monitoring Report

North Head Quarantine Station

July 2018 – December 2019



Mawland Quarantine Station

Building S7 QStation

North Head Scenic Drive Manly

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EXECUTIVE SUMMARY OF MONITORING RESULTS AND RECOMMENDATIONS

This report summarises the health of the site known as the former North Head Quarantine Station, its tourism activities and business over the period July 2018 -December 2019.

Monitoring for 2018 is covered in the 2018 extensive Environmental Audit that was undertaken and can be accessed at

<https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Parks-management-other/compliance-audit-report-quarantine-station-north-head.pdf>

The contents of this document are based on four major indicators being Environmental, Cultural, Social and Economic.

For the future Mawland has recommended to DPIE that the provisions of the Lease and Conditions of Approval relating to the Annual Sustainability Report and Environmental Monitoring be dealt with in a simpler document.

Negotiations continue between NPWS and Mawland as to cooperation between the Co-proponents as to infra structure renewal and replacement.

Overall performance

During this period there were excellent performances in achieving environmental, cultural and social sustainability, but Mawland remains concerned as to the economic performance sustainability of the site. Anecdotally Mawland believes that this could be due to matters highlighted in the previous IMAMS reports and this report.

The overall sustainability index was 0.97 out of 1. Poor performing headline indicators driving the poorer indices were;

- Cultural Landscape condition
- Occupancy levels and Profitability

Reasons for Economic performance

The economic performance of QStation during this reporting period has still not reached that of comparable properties in the market segment. Notwithstanding this Mawland notes that the systems which have been installed as part of the ACCOR Management Programme have continued to assist in more efficient financial management and better returns going forward are expected.

Mawland still has major concerns that the extensive and complex environmental compliance has soaked up significant management expertise that would normally be focussed on further business stimulus and cost management. Time taken by the senior management team as well as the Directors in meeting NPWS administrative obligations is both costly and time consuming

and requires refinement in the future. Our concerns have been forwarded to the DPIE with changes suggested to the conditions.

REPORT

1.0 Introduction

This Report is generated by an Integrated Monitoring and Adaptive Management System (IMAMS) which monitors the sustainability of tourism activity across the environmental, cultural, social and economic dimensions. If the integrated following set of environmental, cultural, social and economic optimal conditions can be simultaneously achieved, then the operation could be nearing a full state of sustainability. The IMAMS measures how close the operation is to this position, and if necessary introduces changes to management practices to bring it closer. Monitoring is performed by the individual departments of Mawland and the NPWS Environmental Manager.

Key Indicators:

Environmental	Cultural	Social	Economic
The key elements of the natural environment are maintained Operational consumption of resources is efficient	Cultural heritage is maintained in good condition	Visitation patterns reflect forecasts Customer's expectations are met Visitors recognise key site values and protocols The operation has a positive profile among stakeholders and the local community	The Q Station business is financially viable Business partnerships are mutually beneficial



2. INTEGRATED MONITORING SYSTEM (IMAMS)



3. ADAPTIVE MANAGEMENT SYSTEM (AS REQUIRED)

This report has been prepared to meet the requirements of Conditions of Approval 216-225 and has been prepared for feedback by the DPIE and the Quarantine Station Community Committee (QSCC).

1.1 Sustainability Index

The Sustainability Index Measures the combined results of all the specific indicators that suggest the health of the natural, cultural, social and economic environment. The maximum score possible is one, the equivalent of 100%. In this report a tick indicates compliance.

Figure 1.2 shows that there were excellent performances in all headline indices.

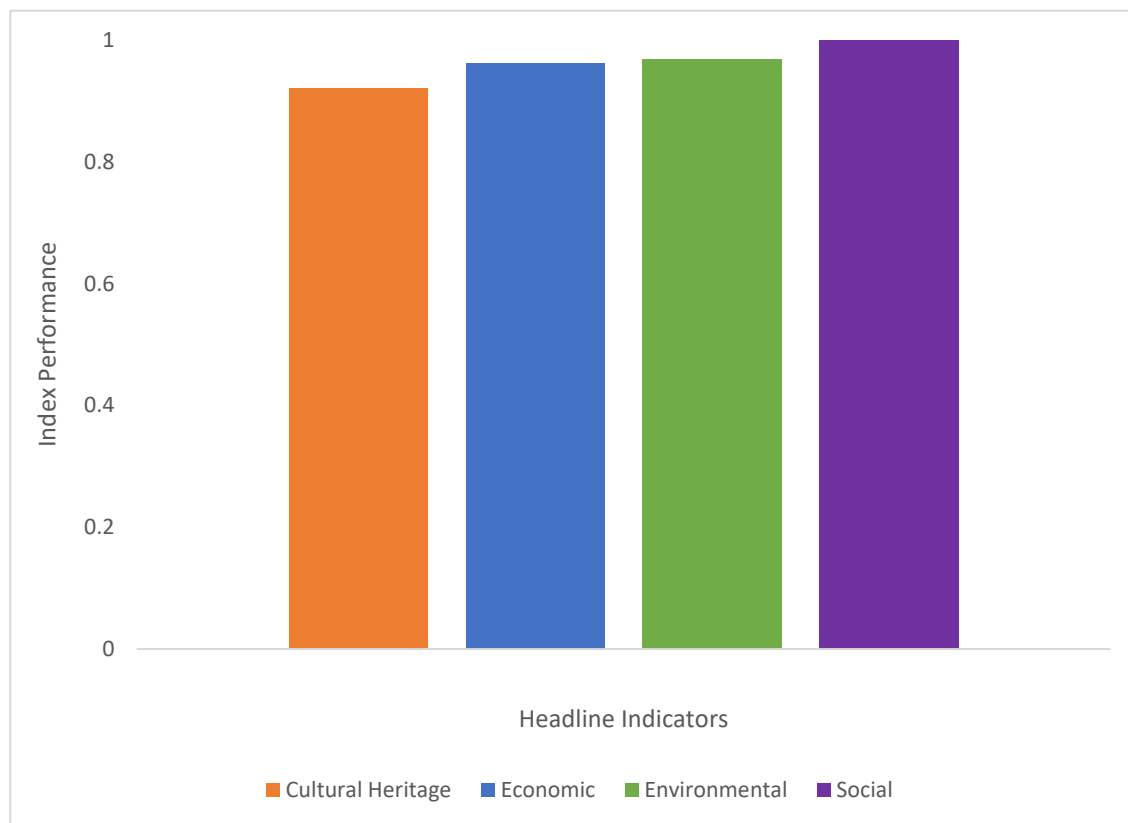


Figure 1.2 Sustainability Index

2.0 Indicator Performance

Table 2.1 presents the performance of the headline indicators that created each Sustainability Index.

Table 2.1 – Headline indicator performance and subsequent overall Sustainability Index for performance for January to December 2019

Sustainability indices	Jan - Dec 2019
Environmental index	1.0
Cultural Heritage Index	0.92
Social Conditions	1.0
Economic Index	0.96

Table 2.2 – Indicator performance for January to December 2019

Cultural Heritage	0.92
Aboriginal sites condition	1
Building condition	1
Cultural landscape condition	0.5
Infrastructure condition	1
Moveable heritage collection condition	1
Economic	0.960784
Customer database	1
Customer feedback systems	1
DEC Quarantine Station partnership	1
Marketing performance	1
Occupancy levels	0.9
Profitability	0.857143
Rate	1
Repeat visitors	1
Staff retention	1
Yield	1
Environmental	1.0
Erosion and runoff	1
Fauna impacts	1
Light impacts	1
Little Penguin population health	1
Long-nosed Bandicoot population health	1
Native vegetation health	1
Noise impacts	1
Predators and pests	1
Resource use	1
Seagrass health	1
Stormwater quality and quantity	1
Waste generation	1
Social	1
Customer complaints	1

Local employment	1
Media	1
Minimal Impact Code	1
Partnerships	1
Public complaints	1
Public perceptions	1
Representation of leisure target market	1
Research opportunities	1
Satisfaction of the target market	1
Staff and contractor training	1
Visitor access	1
Visitor numbers	1

2019 Where Indicator Performance is Outside of Acceptable Range

Mawland and DPIE Comments

This section analyses the specific indicators that performed outside of their acceptable range. There is an individual table for each indicator, which provides the result against the acceptable range and whether the result is directly related to QStation tourism operation (DR), not related to same (NR) or if uncertain (UC).

CULTURAL INDICATORS

Headline Indicator	Cultural Landscape Condition				
Specific Indicator	Acceptable range	Result	DR	NR	UC
54. Clearly differentiated cultural landscape representing the Aviation Phase	>80% of landscape area	Not achieved		✓	
Comment			Adaptive Management Response		
The aviation phase cannot be represented in the future due to regrowth of ESB in some areas.			See previous reports- educative interpretation of guests increased		
Headline Indicator	Cultural Landscape Condition				
Specific Indicator	Acceptable range	Result	DR	NR	UC
57. Painted inscriptions showing colour over the majority of painted surface	>80% of painted inscriptions	Achieved but faint		✓	
Comment			Adaptive Management Response		
The inscriptions last received conservation in 2007-2008. Ongoing research and investigation by archaeologists, historians and geologists is part of ARC Project 2013-15.			Potential repainting of 9% of suite inscriptions, subject to receipt of Heritage approval and professor/ student availability		

ECONOMIC INDICATORS

Headline Indicator	Occupancy Levels				
Specific Indicator	Acceptable range	Result	DR	NR	UC
111. Comparative occupancy to relevant NSW properties	Confidential to MQS and the DPIE	Improving	✓		
Comment			Adaptive Management Response		

We are slightly behind but monitor reasons and are attempting to address these in marketing			Continue Monitoring of customer comments and in particular of the reasons given for conferences tendered for, which occur elsewhere		
Headline Indicator			Yield		
Specific Indicator	Acceptable range	Result	DR	NR	UC
139. Average spend per conference & function customer	Confidential to MQS and the DPIE	Improving	✓		
Comment			Adaptive Management Response		
Steady from previous year			Upgrade products and packages by adding new add-ons eg bonding and art activities, whale watching and indigenous tour availability.		
Headline Indicator	Profitability				
Specific Indicator	Acceptable range	Result	DR	NR	UC
140. Overall Food costs	Confidential to MQS and the DPIE	Improving	✓		
Comment			Adaptive Management Response		
Food costs are under control			Continued work on cutting waste and local product use		
Headline Indicator	Profitability				
Specific Indicator	Acceptable range	Result	DR	NR	UC
142. Overall labour costs	Confidential to MQS and the DPIE	Improving			
Comment			Adaptive Management Response		
Transport costs still a concern affecting profitability			Continued attempts to encourage guests yo rely less on shuttle buses on site		

END OF SUMMARY

ENVIRONMENTAL INDICATORS

Headline Indicators	Summary of Specific Indicator	Acceptable range	Performance	Comments
Long-nosed Bandicoot population health	1. Long-nosed Bandicoot abundance		✓	
	3. Adult long-nosed bandicoot deaths attributable to vehicles (5 triggers)	Trigger 1 is traffic based	Jan-June ✓ July-Dec ✓	Mawland notes that ultimately any bandicoot mortalities in areas outside of the Lease boundary (such as Darley Road) are ultimately outside of the control of Mawland.
		Trigger 2: 2 adult mortalities above background levels for a 6-month period		
		Trigger 3: 4 adult mortalities above background levels (2 in first 6 months and 2 in the second).		
		Trigger 4: 6 adult mortalities above background levels, 2 in first 6 months, 2 in the second & 2 in third)		
		Trigger 5: 10 or more adult mortalities in any '1 month or 15 or more in any consecutive 3-month period (above background levels)		
Fauna impacts	4. Fauna deaths attributable to vehicles	0-12 deaths per year	✓	
	5. Animals moved from work sites	0-20 animals moved per year	✓	
	6. Inadvertent impacts to flora and fauna from construction activity	0-6 impacts per year	✓	
Little Penguin	7. Active Little Penguin breeding burrows (2 triggers)	>6 active burrows	✓	In 2019 the Quarantine site recorded 7

population health				active burrows as part of the Manly Little Penguin Recovery Program
Seagrass health	8. Seagrass patchiness off Quarantine Wharf	25-45% cover	✓	
Predators and pests	9. Number of foxes and cats	0-1 fox, 0-1 cats Jan-Mar Apr -June Jul-Sept Oct -Dec	✓ ✓ ✓ ✓	1 cat and 1 fox detected within the lease area. The result is within the acceptable range.
	10. Number of rabbits	0-26 individuals Jan-March Apr -June July – Sept Oct -Dec	✓ ✓ ✓ ✓	Mawland remains concerned about the number of rabbits on site.
	11. Number of black rats	<16% of headland population Jan-June Jul -Dec	✓	
Native vegetation health	12. Number of Sunshine Wattle	>12 individuals	✓	
	13. Number of Camfield's Stringybark	>1 individual	✓	
	14. ESBS regeneration	>600m ²	✓	
	15. Fuel load in bushland	<15 tons per hectare	✓	
	16. Flora displaying dieback	0-10% variation of existing level (2006)	✓	No significant dieback recorded around car park 1 or 5.
	17. Weed coverage	0-25% variation	✓	MQS to monitor. Q Station Gardening Contractors are continually undertaking vegetation/bushland maintenance

				in accordance with the Bushland Maintenance Plan.
Noise impacts	18. Construction noise	0-45dB(A)	NA	
	19. Traffic noise	0-62 dB(A) (7am-10pm) 0-57 dB(A) (10pm- 7am)	✓	
	20. Operations noise outside site	0-50dB(A)	✓	
	21. Operations noise inside site	0-45 dB(A)	✓	
	22. Amplified indoor music or noise levels	0-50 dB(A)	✓	
Light impacts	23. Light spill on Quarantine Beach	<0.1 lux	✓	
	24. Light spill in Bandicoot habitat	<0.1 lux	✓	
Stormwater quality and quantity	25. Suspended solids in storm water	<20NTU	✓	
	26. Sites with oil or grease in storm water	<5% of sites	✓	
	27. Significant spills or discharges including sewage overflows	0-1 spill per year	✓	
Erosion and runoff	28. Sites showing active erosion	0-5 sites	✓	
Resource use	29. Water consumption	24.3.3-46.8 kl/d	✓	
	30. Electricity consumption	72-85KWH (per month)	✓	
Waste generation	31. Sewage output	< 4212 kl/quarter	✓	
	32. Non-recyclable waste	<80m3 per month	✓	
	33. Recyclable paper	<60 m³ month	✓	
	34. Recyclable glass	<42m³ month	✓	

CULTURAL HERITAGE

Headline indicators	Specific Indicator	Acceptable range	Performance	Comment
Building condition	35. Smoke alarm functionality	>90% alarms functioning	✓	
	36. Roof deterioration	>90% of all buildings in good condition	✓	
	37. Asbestos cement fretting	>90% of all buildings containing asbestos without fretting	✓	
	38. Sandstone pillars	>80% of all sandstone pillars in good condition	✓	
	39. Brick mortar requiring re-pointing	>95% of all buildings not requiring repointing	✓	
	40. Moisture entry into internal buildings	<10% buildings with leaks	✓	
	41. Functionality of doors and locks	>95% of all doors and locks functioning	✓	
	42. Window functionality	>95% of all windows functioning	✓	
	43. Termite presence in timber buildings	>80% of all buildings with wood without termites	✓	
	44. Dry rot in timber veranda posts, balustrades and decking	>80% of all buildings without dry rot	✓	
	45. Building exteriors showing loose or damaged sections	>80% of all buildings without loose or damaged sections	✓	
	46. Cracked or peeling painted wooden surfaces	>95% of all buildings without cracked or peeling paint	✓	
	47. Interior and exterior rusting elements	>75% of elements without active rust	✓	
	48. Incidents resulting in damage to historic heritage (accidental or malicious)	0-6 incidents per year	✓	
Infrastructure condition	49. Building drains	>95% drains fully functioning	✓	
	50. Stormwater drains	>95% drains	✓	
	51. Concrete steps and pathways showing cracking or spalling	<20% without spalling or cracking	✓	

	52. Road surface and edges alongside historic drains and walls showing no damage	>85% showing no damage	✓	
	53. Wharf planking and steps firmly fastened and showing no signs of splits, holes or failure	>95% of wharf area	✓	
Cultural landscape condition	54. Clearly differentiated cultural landscape representing the Aviation Phase	>80% of landscape area	X Not applicable	The aviation phase cannot be represented in the future due to regrowth of ESB in some areas. This was addressed in the last Audit. Mawland does not consider this to be non-compliance
	55. Fencing that remains structurally stable	>95% of fences	✓	
	56. Culturally planted trees (including coral trees) showing no signs of damage, disease or pests	>90% of cultural planted trees	✓	One coral tree in wharf area fell during this period. Ongoing discussions re replacement options
	57. Painted inscriptions showing colour over the majority of painted surface	>80% of painted inscriptions	x	The inscriptions received conservation in 2007-2008. Ongoing research and investigation by archaeologists, historians and geologists was part of ARC Project 2013-15 Ongoing discussions with Heritage about approval pathway for approval to repaint
Moveable heritage collection condition	58. Proportion of moveable heritage items that are allocated to high priority conservation treatment	<10% of moveable heritage items	✓	

Aboriginal sites condition	59. Grass cover and absence of active erosion of midden in Wharf Precinct	<10% of midden area	✓	
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SOCIAL /VISITATION / COMMUNITY INVOLVEMENT

Headline indicators	Specific Indicator	Acceptable range	Performance	Comment
Visitor access	60. Visitors who arrive by Manly Q-Station shuttle bus	Tentatively 2-5%	✓	
	61. Visitors who arrive by water transport	From year 3, 40-50%	✓	In 2019 the EcoHopper stopped at QStation 8x per day in peak season and usage is being monitored. Public take up was favourable
	62. Visitors who arrive by private vehicle	From year 3, 50-60% From Year 5 <50%	✓	
	63. Private vehicles entering core precinct	28,000-30,000 vehicles per annum	✓	Note significant reduction in vehicle usage in site due to relocation of Reception in 2013
	64. Visitors who enter site by private vehicle at sensitive traffic periods	28-41 vehicles between 830pm-midnight per night	✓	Note significant reduction in vehicle usage in site due to relocation of Reception in 2013
	65. Number of times overflow parking area used	2-6 times per annum	✓	
Visitor numbers	66. Visitors on site at any one time	<450 people	✓	
	67. Visitors within Wharf Precinct at any one time (peak periods)	<250 people	✓	
	68. Participants on tours	200-500 participants per week	✓	
	69. Number of students undertaking education programs	>100 students per month	✓	
	70. Number of visitors to the visitor centre	400-600 people per week	✓	

Headline indicators	Specific Indicator	Acceptable range	Performance	Comment
Representation of leisure target market	71. Leisure target market undertaking interactive tours at any one time	>45% of customers	✓	
	72. Leisure target market staying overnight	>60% of customers	✓	This is increasing but we are still not achieving leisure 60%+except for weekends.
	73. Leisure market on Adult Ghost Tour that perceived crowding reduced satisfaction	<10% of customers	✓	Note that tours are being regularly re-named, reconfigured and refreshed to meet customer expectation and provide better product, which promotes return visit
	74. Leisure market that felt intended emotional response during the Spirit Investigator	>70% of customers	✓	Note tour renamed to Extreme Ghost
	75. Leisure target markets that believe that they have learnt something about one of the emphasised themes on the Interpretive tour experience.	>60% of customers	✓	
Satisfaction of the target market	76. Leisure market that were satisfied or very satisfied with Interpretive Tour Experience	>50% of customers	✓	Note that some tours are being re-named, reconfigured and refreshed to meet customer expectation and provide better product, which promotes return visit.
	77. Leisure market that were satisfied or very satisfied with Defiance	>60% of customers	n/a	No longer relevant
	78. Leisure market that were satisfied or very satisfied with Spirit Investigator	>50% of customers	✓	

Headline indicators	Specific Indicator	Acceptable range	Performance	Comment
	79. Leisure market who were satisfied or very satisfied with their overnight stay	>50% of customers	✓	
	80. Leisure market were satisfied or very satisfied with the Boilerhouse restaurant service	>50% of customers	✓	
	81. Leisure market who were satisfied or very satisfied with the Boilerhouse restaurant food quality	>50% of customers	✓	
	82. Conference organisers who were very satisfied with the conference service	>50% of customers	✓	
	83. Conference delegates who were very satisfied with the venue	>50% of customers	✓	
	84. Education market were very satisfied with their experience	>60% of customers	✓	
	85. Education market who believed that the program met their curriculum requirements	>60% of customers	✓	
Customer complaints	86. Customer complaints about operational issues	<11 per annum	✓	
Minimal Impact Code	87. Visitors aware of Minimal Impact Code	>50% of customers	✓	
Staff and contractor training	88. Operations staff recorded as being induction trained	>90% of staff currently employed	✓	
	89. Construction contractors recorded as being induction trained	>90% of contractors	✓	
Public perceptions	90. Visitors who believe the Quarantine Station is being adequately conserved	20-50% year 1-3 50-80% year 4+	✓	
	91. Visitors who believe there is adequate public access to the Quarantine Station	20-50% year 1-3 50-80% year 4-5	✓	
	92. Visitors aware that DPIE are present on-site	20-50% year 1-3 50-70% year 4-5	✓	
	93. Visitors aware the ongoing on-site role of the DPIE	20-40% year 1-3 40-60% year 4-5	✓	

Headline indicators	Specific Indicator	Acceptable range	Performance	Comment
	94. Visitors who recognise QS as part of Sydney Harbour National Park	20-50% year 1-3 50-70% year 4-5	✓	
Media	95. Proportion of visitors and guests who heard about Q Station through a media article	>10% of visitors and guests	✓	
	96. News stories about Quarantine Station	>5 stories per month	✓	
Partnerships	97. Partnerships and initiatives involving stakeholder groups	3 to 6 partnerships per annum	✓	including Stakeholders' Meetings/ National Parks Foundation/ Manly Art Gallery/Bear Cottage/Local Public and Private Schools and the Police /National Landscapes Committee/ TTF-Adaptive Reuse Enquiry/
	98. Occupancy of Quarantine Station Community Committee at meetings	>70% per annum	Jan-June ✓ July-Dec ✓	
Research opportunities	99. Proportion of enquiries for access to the moveable heritage and resource collection that were serviced	>90% per annum	✓	
Public complaints	100. Complaints from the general public or stakeholders	12 or less per annum	✓	
Local employment	101. Q Station positions occupied by local population	>40% of positions at any one time	✓	

ECONOMIC-

See comments above about the economic sustainability of the business. The following matters are subject to constant operational review and are largely commercial in confidence.

Headline economic indicator	Specific economic indicator	Acceptable range	Performance	Comments
Customer feedback systems	102. Proportion of completed accommodation feedback forms to number of customers	Confidential to MQS and the DPIE	✓	Feedback is now provided on line through ACCOR "Trust You" System which ensures that monitoring forms are sent to every registered/booked patron.
	103. Proportion of completed Boilerhouse Restaurant feedback forms to number of customers	Confidential to MQS and the DPIE	✓	In aggregate. Feedback is now provided on line through ACCOR "Trust You" System which ensures that monitoring forms are sent to every registered/booked patron
	104. Proportion of completed conference feedback forms to number of customers	Confidential to MQS and the DPIE	✓	Feedback is now provided on line through ACCOR "Trust You" System which ensures that monitoring forms are sent to every registered/booked patron . Conference organisers are debriefed for input after every conference.
	105. Proportion of completed tour feedback forms to number of customers	Confidential to MQS and the DPIE	✓	Feedback is now provided on line through ACCOR "Trust You" System which ensures that monitoring forms are sent to every registered/booked patron
Marketing performance	106. Business conversion from database mailouts	Confidential to MQS and the DPIE	✓	Solid performance in this area
Customer database	107. Converted leads supplied by conference marketing contractor	Confidential to MQS and the DPIE	✓	
Occupancy levels	108. Room nights sold	Confidential to MQS and the DPIE	✓	Rooms are increasing in occupancy levels.

Headline economic indicator	Specific economic indicator	Acceptable range	Performance	Comments
	109. Length of stay	Confidential to MQS and the DPIE	✓	
	110. Overall room occupancy level	Confidential to MQS and the DPIE	✓	Requires ongoing marketing and price.
	111. Comparative occupancy to relevant NSW properties	Confidential to MQS and the DPIE	X	We are slightly behind
	112. Shared bathroom room occupancy	Confidential to MQS and the DPIE	✓	Cannot sell unless personalised- in Modification Application
	113. Personal bathroom Occupancy	Confidential to MQS and the DPIE	✓	Still difficult but OK for some conference market.
	114. Ensuite Bathroom occupancy	Confidential to MQS and the DPIE	✓	
	115. Cottages occupancy	Confidential to MQS and the DPIE	✓	
	116. Ghost Tour occupancy	Confidential to MQS and the DPIE	✓	
	117. Conference Occupancy	Confidential to MQS and the DPIE	✓	
Repeat visitors	118. Leisure market guests on repeat visit	Confidential to MQS and the DPIE	✓	Increasing especially local market
	119. Leisure market tour customers on repeat visit	Confidential to MQS and the DPIE	✓	Increasing
	120. Education market on repeat visit	Confidential to MQS and the DPIE	✓	Ongoing marketing
	121. Conference market who have returned for a repeat visit	Confidential to MQS and the DPIE	✓	Ongoing marketing
Revenue	122. Visitor Centre revenue	Confidential to MQS and the DPIE	✓	
	123. Tours revenue	Confidential to MQS and the DPIE	✓	
	124. Education revenue	Confidential to MQS and the DPIE	✓	
	125. Accommodation revenue	Confidential to MQS and the DPIE	✓	
	126. Revenue per available room (REVPAR)	Confidential to MQS and the DPIE	✓	Improving
	127. Comparative REVPAR to relevant properties in NSW	Confidential to MQS and the DPIE	✓	Improving but dominance of

Headline economic indicator	Specific economic indicator	Acceptable range	Performance	Comments
				cruising market is of interest
	128. Conference & function revenue	Confidential to MQS and the DPIE	✓	
	129. Boilerhouse restaurant revenue	Confidential to MQS and the DPIE	✓	
	130. Total revenue	Confidential to MQS and the DPIE	✓	Commercial in confidence but improving
	131. Proportion of Visitor Centres customers that made a purchase	Confidential to MQS and the DPIE	✓	
Rate	132. Average room rate	Confidential to MQS and the DPIE	✓	
	133. Comparative ARR to relevant NSW properties	Confidential to MQS and the DPIE	✓	
	134. Average room rate- Cottages	Confidential to MQS and the DPIE	✓	
Yield	135. Average spend per cover at the Boilerhouse restaurant	Confidential to MQS and the DPIE	✓	
	136. Average spend per Visitor Centre customer	Confidential to MQS and the DPIE	✓	
	137. Average spend per interactive tour customer	Confidential to MQS and the DPIE	✓	
	138. Average spend per education program participant	Confidential to MQS and the DPIE	✓	Market showing need to reduce prices due to demand from schools for budget product
	139. Average spend per conference & function customer	Confidential to MQS and the DPIE	✓	
Profitability	140. Overall Food costs	Confidential to MQS and the DPIE	✓	
	141. Overall beverage costs	Confidential to MQS and the DPIE	✓	
	142. Overall labour costs	Confidential to MQS and the DPIE	x	Transport costs still a concern affecting profitability
	143. Overall other expenses	Confidential to MQS and the DPIE	✓	Contained due to diligence of financial overview
	144. Open accounts as a percentage of revenue	Confidential to MQS and the DPIE	✓	

Headline economic indicator	Specific economic indicator	Acceptable range	Performance	Comments
	145. Proportion of revenue to operating expenses	Confidential to MQS and the DPIE	✓	
	146. Net Operating Profit	Confidential to MQS and the DPIE	✓	Improving but not yet to peak
Staff retention	147. Employee turnover	Confidential to MQS and the DPIE	✓	
	148. Proportion of casual to permanent employees	Confidential to MQS and the DPIE	✓	
	149. Staff OH&S incidents	Confidential to MQS and the DPIE	✓	
DEC Quarantine Station partnership	150. Rental allocation to DPIE from year 3 onwards	Confidential to MQS and the DPIE	✓	Confidential to MQS and the DPIE and the subject of current negotiations
	151. Environmental incidents	0-5 incidents per year	✓	
	152. Lease breach notifications	0-3 notifications per year	✓	NIL received

7.8 Appendix H – Consultation Correspondence December 2021

SN0243077
QSconsultAER_DPI

15/12/2021

Carla Ganassin
Fisheries Manager - Aquatic Ecosystems Unit
NSW Department of Primary Industries
Block E, Level 3
84 Crown Street
Wollongong NSW 2500

Via email: carla.ganassin@dpi.nsw.gov.au

Dear Carla,

Q Station Annual Environment Reports - Invitation to review reports and provide comments

SNC-Lavalin has been engaged by the National Parks and Wildlife Service (NPWS) and Mawland Quarantine Station Pty Ltd (Mawland) to prepare the latest Annual Environment Reports for the Quarantine Station (Q Station), located in Sydney Harbour National Park at North Head, Manly. These reports cover the reporting periods, from July 2018 – December 2019 and January 2020 – December 2020.

These reports have been developed to meet the Ministers Conditions of Planning Approval (CoPA) for the site, under approval MP08_0041 and subsequent modification (MP08_0041 MOD 3). The reports have also been prepared in accordance with the Compliance Reporting Post Approval Requirements (Department of Planning, Industry and Environment, 2020).

Planning approval for the site was granted in 2003, with NPWS and Mawland as co-proponents. In 2006, the site was leased to Mawland who operate the Q Station and coordinate the day-to-day activities. With reference to condition terms, the site is currently in Operational mode.

In accordance with Conditions 221, 224-225 of the CoPA, copies of the Annual Environment Reports are to be made available to selected stakeholders for their review and comment. You are invited to comment on these reports and in accordance with Condition 221, it is requested that stakeholders review the documentation with regard to 'issues associated with visitor impacts arising from the activity'.

Please find the Annual Environment Reports attached for your review. A previous draft of the July 2018 – December 2019 report was prepared and distributed for comment by the co-proponents, however, the attached July 2018- December 2019 report has been prepared to replace the previous version and ensure compliance with all CoPA.

It would be greatly appreciated if you could please provide any comments or remarks on these reports by 14 January 2022. To streamline this process, a comments template is enclosed. On completion of your review, please return the completed comments template or other correspondence to the email noted below by 14 January 2022. If no response is received by this date, it will be assumed that you do not wish to provide any comments or feedback on the reports.

If you have any questions, please do not hesitate to contact me on 0405 635 333 or at cheryl.cahill@atkinsglobal.com.

Yours sincerely,

SNC-LAVALIN ATKINS



Cheryl Cahill

Senior Environmental Consultant

Environmental Services

Engineering, Design and Project Management

Enclosed: Annual Environmental Report, July 2018 – December 2019
 Annual Environmental Report, January 2020 – December 2020
 Comments Template

SN0243077
QSconsultAER_DPIE

15/12/2021

Rob Sherry
Department of Planning and Environment
4 Parramatta Square
12 Darcy Street
Parramatta NSW 2150

Via email: Rob.Sherry@planning.nsw.gov.au

Dear Rob,

Q Station Annual Environment Reports - Invitation to review reports and provide comments

SNC-Lavalin has been engaged by the National Parks and Wildlife Service (NPWS) and Mawland Quarantine Station Pty Ltd (Mawland) to prepare the latest Annual Environment Reports for the Quarantine Station (Q Station), located in Sydney Harbour National Park at North Head, Manly. These reports cover the reporting periods, from July 2018 – December 2019 and January 2020 – December 2020.

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Yours sincerely,

SNC-LAVALIN ATKINS



Cheryl Cahill

Senior Environmental Consultant

Environmental Services

Engineering, Design and Project Management

Enclosed: Annual Environmental Report, July 2018 – December 2019
 Annual Environmental Report, January 2020 – December 2020
 Comments Template

SN0243077
QSconsultaER_HNSW

15/12/2021

Heritage NSW
Level 6
10 Valentine Ave
Parramatta NSW 2150

Via email: HERITAGEMailbox@environment.nsw.gov.au

To whom it may concern,

Q Station Annual Environment Reports - Invitation to review reports and provide comments

SNC-Lavalin has been engaged by the National Parks and Wildlife Service (NPWS) and Mawland Quarantine Station Pty Ltd (Mawland) to prepare the latest Annual Environment Reports for the Quarantine Station (Q Station), located in Sydney Harbour National Park at North Head, Manly. These reports cover the reporting periods, from July 2018 – December 2019 and January 2020 – December 2020.

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Yours sincerely,

SNC-LAVALIN ATKINS



Cheryl Cahill

Senior Environmental Consultant

Environmental Services

Engineering, Design and Project Management

Enclosed: Annual Environmental Report, July 2018 – December 2019
 Annual Environmental Report, January 2020 – December 2020
 Comments Template

SN0243077
QSconsultAER_QSCCC

15/12/2021

Sandy Hoy
QSCCC Chairperson
Parkland Planners - Principal
PO Box 41
FRESHWATER NSW 2096

Via email: sandy@parklandplanners.com.au

Dear Sandy,

Q Station Annual Environment Reports - Invitation to review reports and provide comments

SNC-Lavalin has been engaged by the National Parks and Wildlife Service (NPWS) and Mawland Quarantine Station Pty Ltd (Mawland) to prepare the latest Annual Environment Reports for the Quarantine Station (Q Station), located in Sydney Harbour National Park at North Head, Manly. These reports cover the reporting periods, from July 2018 – December 2019 and January 2020 – December 2020.

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Yours sincerely,

SNC-LAVALIN ATKINS



Cheryl Cahill

Senior Environmental Consultant

Environmental Services

Engineering, Design and Project Management

Enclosed: Annual Environmental Report, July 2018 – December 2019
 Annual Environmental Report, January 2020 – December 2020
 Comments Template

SN0243077
QSconsultAER_TfNSW

15/12/2021

Meredith Morris
Portfolio Leasing Manager
Transport for NSW
231 Elizabeth Street
Sydney NSW 2000

Via email: meredith.morris@transport.nsw.gov.au

Dear Meredith,

Q Station Annual Environment Reports - Invitation to review reports and provide comments

SNC-Lavalin has been engaged by the National Parks and Wildlife Service (NPWS) and Mawland Quarantine Station Pty Ltd (Mawland) to prepare the latest Annual Environment Reports for the Quarantine Station (Q Station), located in Sydney Harbour National Park at North Head, Manly. These reports cover the reporting periods, from July 2018 – December 2019 and January 2020 – December 2020.

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Yours sincerely,

SNC-LAVALIN ATKINS



Cheryl Cahill

Senior Environmental Consultant

Environmental Services

Engineering, Design and Project Management

Enclosed: Annual Environmental Report, July 2018 – December 2019
 Annual Environmental Report, January 2020 – December 2020
 Comments Template

7.9 Appendix I – Consultation Responses January 2022

Alex Bamford

From: Cahill, Cheryl
Sent: Sunday, 16 January 2022 4:13 pm
To: Rebecca Yit; Alex Bamford; sstanton
Cc: Smith, Alistair
Subject: FW: Q Station - annual reports - re-sending file link
Attachments: Quarantine Station report (SC comments).docx

Hi Bec, Suzanne and Alex,

Also attached are comments from DPI Fisheries, received later on Friday evening.

Regards,
Cheryl

From: Sarah Conacher <sarah.conacher@dpi.nsw.gov.au>
Sent: 14 January 2022 20:35
To: Cahill, Cheryl <Cheryl.Cahill@atkinsglobal.com>
Subject: Re: Q Station - annual reports - re-sending file link

Hi Cheryl,

I've attached my comments table for the Q Station annual reports.

Please let me know if you have any questions regarding my comments.

Kind regards,
Sarah

From: Cahill, Cheryl <filetransfrcn@atkinsglobal.com>
Sent: Friday, 14 January 2022 10:49 AM
To: Sarah Conacher <sarah.conacher@dpi.nsw.gov.au>
Subject: Q Station - annual reports - re-sending file link

Hi Sarah,

Please find attached the reports, DPI letter and comment template for reviewing the Q Station annual compliance reports.

Thanks and regards,

Cheryl

Files attached to this message

Filename	Size	Checksum (SHA256)
comments template.docx	95.9 KB	79c1dae6cd77ea5a907ef4881e7aad7dcdaa71f6276a6a3b62d9c6497655167b

Filename	Size	Checksum (SHA256)
DPI fisheries 15122021.pdf	408 KB	d11abee75f9468a85955a1ba247023ec5b7a36f5170665fb74b1dd22d08fc7a5
North Head Q Station - Annual Environmental Report - July 18 to Dec 19 Final.pdf	12.7 MB	b80b5bb799394ac67d2ebb68ddfd1a0ea2259b0222ecb0b562fcb682869c968c
North Head Q Station Annual Environmental Report Jan to Dec 2020 Final 20211215.pdf	37.5 MB	c1fd2b765fae5200f91377f5e6dbb5c298fc70a824475ee891261ba9ddcab508

Please click on the following link to download the attachments:

<https://FiletransferCN.atkinsglobal.com/message/KhnhtM7cdRtHSBgFyxm7gf>

This email or download link can be forwarded to anyone.

The attachments are available until: **Friday, 28 January.**

Message ID: KhnhtM7cdRtHSBgFyxm7gf

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At Atkins - member of the SNC-Lavalin Group, we work flexible hours around the world. Although I have sent this email at a time convenient for me, I don't expect you to respond until it works for you.

Comments Template for Q Station Annual Environment Reports

Review undertaken by

Name: Sarah Conacher

Agency or Committee: DPI Fisheries

It would be greatly appreciated if any comments or remarks are provided by 14 January 2022 for inclusion in the final report.

In accordance with Condition 221, it is requested that stakeholders review the documentation with regard to 'issues associated with visitor impacts arising from the activity'.

Report (2018/2019 or 2020)	Page Number	Report Section or Condition number	Comment
2018/19	6	Section2 - condition 228	Comment: SNC Lavalin Atkins (2018) Compliance Audit Report recommended that the mooring exclusion zone at Quarantine Beach be extended. DPI Fisheries supports this recommendation. What action has been taken in relation to this?
2018/19	6	Section2 - condition 228	"Eco Divers regularly review the sea grass cover and have not identified any issues of concern in the reporting period." Comment: Please provide this monitoring data/mapping for Fisheries to review.
2018/19	6	Section2 - condition 228	"A report prepared by EcoDivers in July 2018 – Report on Sea Grass in Quarantine Bay adjacent to the Quarantine Wharf details the proposed additional piles adjacent to the wharf to accommodate the ferry service for the Invictus Games ferry arrival. The report detailed that there would be no adverse impacts to the sea grass. A Minor projects approval was given for the installation of the piles by OEH on 8/10/2018." Comment: Please provide the EcoDivers 2018 report to DPI Fisheries for review.

			<p>Any proposed piling in the waterway requires consultation with, and potentially a Part 7 permit from DPI Fisheries in accordance with s199, 201 and 205 of the Fisheries Management Act. Fisheries is not aware of any consultation regarding this proposal.</p> <p>Additionally, DPI Fisheries must be consulted in relation to any changes in ferry frequency, routes, turning circles, or changes to vessel type, as these all have the potential to impact on the seagrass beds around the wharf.</p> <p>The seagrass around the ferry wharf is <i>Posidonia australis</i>, listed as an endangered population under State and Federal legislation.</p>
2018/19	100	Section 7.1 - Appendix A - Compliance Table - Condition 141	<p>"An application to the Office of Environment and Heritage was made on 20/09/2018 for the installation of additional fender piles at the wharf to assist with the docking of a large ferry as part of the Invictus Games. This application was approved on 5 October 2018 following consultation."</p> <p>Comment: Was DPI Fisheries consulted in relation to this proposal? Approval or permits may be required from DPI Fisheries in accordance with s199, 201 and 205 of the Fisheries Management Act.</p> <p>DPI Fisheries must be consulted in relation to any changes in ferry frequency, routes, turning circles, or changes to vessel type, as these all have the potential to impact on the seagrass beds around the wharf.</p>
2018/19	120	Section 7.1 - Appendix A - Compliance Table - Condition 184	<p>"One site visit by EcoDivers occurred in July 2018 prior to installation of additional pile adjacent to the wharf to accommodate the ferry service for the Invictus Games ferry arrival. The report detailed that there would be no adverse impacts to the sea grass. A Minor projects approval was given for the installation of the piles by OEH on 8 October 2018."</p> <p>Was DPI Fisheries consulted in relation to this proposal? Approval or permits may be required from DPI Fisheries in accordance with s199, 201 and 205 of the Fisheries Management Act.</p> <p>DPI Fisheries must be consulted in relation to any changes in ferry frequency, routes, turning circles, or changes to vessel type, as these all have the potential to impact on the seagrass beds around the wharf.</p>
2018/19	120	Section 7.1 - Appendix A -	<p>"No reduction has been identified. Report prepared by EcoDivers in July 2018 states that the seagrass is healthy and abundant within the vicinity of the wharf."</p> <p>Comment:</p>

		Compliance Table - Condition 186	The 2018 report should be provided to DPI Fisheries to determine the health of the seagrass.
2018/19	120	Section 7.1 - Appendix A - Compliance Table - Condition 185	<p>"185 Implementation of the seagrass monitoring program is to occur prior to commencement of the ferry services to the site. Monitoring must be undertaken by a suitably qualified marine ecologist."</p> <p>"One site visit by EcoDivers occurred in July 2018 prior to installation of additional pile"</p> <p>Comment: A seagrass monitoring program should involve multiple survey events to compare the health and distribution of the seagrass over time. DPI Fisheries understands that Covid lockdowns may have interfered with field work in 2020 and 2021. Please confirm that the seagrass monitoring program will be commencing in 2022.</p>
2018/19	119	Section 7.1 - Appendix A - Compliance Table - Condition 183	<p>"Within 6 months of the commencement date the co-proponents shall commence discussions with the Waterways Authority and NSW Fisheries in relation to measures that could be undertaken to restrict or discourage private boat mooring in the immediate vicinity of the site."</p> <p>Comment: Did consultation with DPI Fisheries occur? What measures have been implemented to discourage private boat mooring?</p>
2020	7	Section 2 - Previous report actions	<p>"Seagrass monitoring to be scheduled in 2022."</p> <p>Comment: Noted. Thank you.</p>
2020	283	IMAMS Report (Monitoring Report)	<p>Environmental Headline Indicator - Seagrass Health - Seagrass patchiness off Quarantine Wharf: Acceptable range = 25 - 45% coverage Performance - achieved</p> <p>Comment: How was the the acceptable range of 25 - 45% coverage determined? The upper limit on the acceptable range should be 100% How was performance measured during this period when no surveys were undertaken? Acceptable range should also include a density parameter and a species composition parameter.</p>



Member of the SNC-Lavalin Group

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(Add more rows as required)

On completion of your review, please return the completed comments template or other correspondence to cheryl.cahill@atkinsglobal.com

Thank you for your time

Alex Bamford

From: Cahill, Cheryl
Sent: Friday, 14 January 2022 7:43 pm
To: Rebecca Yit; Alex Bamford; sstanton
Cc: Smith, Alistair
Subject: FW: Q Station Annual Environmental Reports - Invitation to review reports and provide comments
Attachments: Quarantine Station North Head - Annual Reports Letter - 14.01.2022.pdf

Hi Bec, Suzanne and Alex,

Please find letter from DPIE regarding comments on the annual reports.

Yesterday, she called briefly and discussed the various aspects noted, and warned that a formal letter would be issued, and if needed to call to discuss. She was very friendly and wanted to call to advise that the letter may come across negatively. She also stated that efforts to meet the deadline should be made and any issues after this time can be addressed through a report addendum.

Thanks,
Cheryl

From: Alex McGuirk <Alex.McGuirk@dpie.nsw.gov.au>
Sent: 14 January 2022 17:28
To: Cahill, Cheryl <Cheryl.Cahill@atkinsglobal.com>
Subject: RE: Q Station Annual Environmental Reports - Invitation to review reports and provide comments

Hi Cheryl,

As discussed yesterday, please see attached the Department's comments (as the successor to DIPNR) on the annual environmental reports.

Please don't hesitate to contact me on 8289 6865 or via email to discuss,

Alex McGuirk

Senior Compliance Officer

Planning & Assessment | Department of Planning & Environment

T 02 8289 6865 | M 0427 749 597 | E alex.mcguirk@dpie.nsw.gov.au

Locked Bag 5022 | PARRAMATTA NSW 2124

www.dpie.nsw.gov.au



From: Cahill, Cheryl <Cheryl.Cahill@atkinsglobal.com>
Sent: Wednesday, 12 January 2022 3:01 PM
To: Rob Sherry <Rob.Sherry@planning.nsw.gov.au>
Subject: RE: Q Station Annual Environmental Reports - Invitation to review reports and provide comments

Hi Rob,

I was following up on the Q Station annual compliance reports previously provided and wish to remind you that the deadline for receipt of comments is this Friday 14th January 2022 COB. If you need me to re-send the documents (as the link would have expired), please let me know via return email.

Thanks and regards,
Cheryl

Cheryl Cahill, *B Bus, BAppSc (EnvSc)*
Senior Environmental Consultant
Environment & Geoscience
Engineering, Design and Project Management

Tel: +61 2 8239 8700
Mob: 0405 635 333

SNC-Lavalin Atkins
Level 17
55 Clarence St
Sydney | NSW | Australia | 2000



snclavalin.com

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From: Cahill, Cheryl
Sent: 15 December 2021 15:15
To: Rob.Sherry@planning.nsw.gov.au
Subject: RE: Q Station Annual Environmental Reports - Invitation to review reports and provide comments

Hi Rob,

I have recently sent you a large file transfer link to download files associated with the Q Station Annual Environmental Reports. These were sent to you as the dominated agency representative for review and comment.

The file transfer link will expire on 29/12/21, so please ensure the reports are downloaded prior to this time.

If you have any questions or want any clarifications, please feel free to contact me via email or 0405 635 333.

Thanks and regards,
Cheryl

Cheryl Cahill, *B Bus, BAppSc (EnvSc)*
Senior Environmental Consultant
Environment & Geoscience
Engineering, Design and Project Management

Tel: +61 2 8239 8700
Mob: 0405 635 333

SNC-Lavalin Atkins
Level 17
55 Clarence St



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From: Cahill, Cheryl <filetransfrcn@atkinsglobal.com>

Sent: 15 December 2021 14:40

To: Rob.Sherry@planning.nsw.gov.au

Subject: Q Station Annual Environmental Reports - Invitation to review reports and provide comments

Dear Rob,

Please refer to the attached files.

SNC-Lavalin has been engaged by the National Parks and Wildlife Service (NPWS) and Mawland Quarantine Station Pty Ltd (Mawland) to prepare the latest Annual Environment Reports for the Quarantine Station (Q Station), located in Sydney Harbour National Park at North Head, Manly. These reports cover the reporting periods, from July 2018 – December 2019 and January 2020 – December 2020.

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If you have any questions, please do not hesitate to contact me on 0405635333 or at cheryl.cahill@atkinsglobal.com.

Regards,

Cheryl Cahill

Files attached to this message

Filename	Size	Checksum (SHA256)
North Head Q Station - Annual Environmental Report - July 18 to Dec 19 Final.pdf	12.7 MB	b80b5bb799394ac67d2ebb68ddfd1a0ea2259b0222ecb0b562fcb682869c968c
North Head Q Station Annual Environmental Report Jan to Dec 2020 Final 20211215.pdf	37.5 MB	c1fd2b765fae5200f91377f5e6dbb5c298fc70a824475ee891261ba9ddcab508
DPIE 15122021.pdf	408 KB	4758dc0d2fcdf258bc8c549fff8d5a2a8a0d698cfc6b12756385406cf1e6b1e4
comments template.docx	95.9 KB	79c1dae6cd77ea5a907ef4881e7aad7dcdaa71f6276a6a3b62d9c6497655167b

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The attachments are available until: **Wednesday, 29 December.**

Message ID: qV1KhHR8pqSAsp5eld2Mfn

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Cheryl Cahill
SNC-Lavalin Rail & Transit Pty Ltd
Level 17, 55 Clarence Street
Sydney NSW 2000
via email: cheryl.cahill@atkinsglobal.com

Our ref: 08_0041
Your ref: SN0243077

14 January 2022

Dear Cheryl

Subject: Quarantine Station North Head (08_0041) – Annual Environmental Reports

Thank you for your letter dated 15 December 2021 enclosing the Quarantine Station North Head annual environmental reports for 2018/2019 and 2020 required under conditions 221 to 225 of the Minister's approval (08_0041, last modified 25/05/2018).

As set out in the Secretary's Direction issued 8 November 2021, the annual environmental reports must be prepared consistent with the *Compliance Reporting Post Approval Requirements* (DPIE, 2020) (the *Requirements*).

As set out in condition 224 of the Minister's approval, *The annual environmental report shall:*

- a) *state how the co-proponents [National Parks and Wildlife Service and The Mawland Group] have complied with relevant approval conditions;*
- b) *include the outcomes of the annual monitoring report (condition 219);*
- c) *state any measures taken or proposed by the co-proponents to respond to issues arising from:*
 - *the integrated monitoring program*
 - *consultations with the community; and*
- d) *state any recommendations from the co-proponents regarding the undertaking of the activity, if considered necessary.*

The Department considers that whilst the annual environmental reports are substantially consistent with the *Requirements* and part a of condition 224, they do not contain the information required by parts b, c and d of Condition 224. Moreover, the annual monitoring reports (conditions 224b / 219) are not consistent with the required monitoring program (which has been identified within the annual environmental reports as a non-compliance condition 217) and contain insufficient monitoring data to support the performance scores provided.

Further, the Department considers that to improve consistency with the *Requirements*:

- the compliance status summary (section 3) should clearly identify the total number of conditions assessed and the number of conditions assessed as compliant, non-compliant and not triggered. Each non-compliance identified in the compliance table (Appendix A) must be included in the compliance status summary. For each non-compliance, the details set out in section 3.1.3 of the *Requirements* must be provided. This includes but is not limited to the date the non-compliance occurred, was identified, was reported to regulators and action was completed.

- the table of previous actions in the 2018/19 report (section 2) should identify all actions arising from the previous report, being the 2018 comprehensive audit report which identifies actions in Tables 1, 3 and 4, as well as Table 5 (which largely but not wholly consolidates the earlier tables). The table of previous actions must use the condition number related to the non-compliance rather than the condition number related to the previous report. For example, for unauthorised clearing the condition numbers are 90-94 or 174-176 (as per previous report Table 1) rather than 228.

The Department also reminds the co-proponents that the annual environmental reports are due via the Major Projects Portal by 21 January 2022. However, the Department considers that the four-week comment period required by condition 222 has not been satisfied due to the comment period provided incorporating the two week end of year shutdown period.

Therefore, the Department requests you extend the comment period for a further four weeks (or as otherwise agreed with the relevant party) and revise the reports in response to this letter and any other comments received. The Department will formalise this with the co-proponents via the Major Projects Portal, with the comments and revised reports due via the Major Projects Portal by 4 March 2022.

Should you have any questions in relation to the contents of this letter, please contact Ms Alex McGuirk, Senior Compliance Officer, via compliance@planning.nsw.gov.au.

Yours sincerely,



Thomas Minchin

A/Team Leader Compliance – Government Projects

Planning & Assessment | Department of Planning and Environment

Alex Bamford

From: Cahill, Cheryl
Sent: Monday, 17 January 2022 1:45 pm
To: Smith, Alistair
Subject: FW: Request for Comment Q Station Reports

From: Cahill, Cheryl
Sent: 12 January 2022 14:37
To: Tracy Appel <Tracy.Appel@environment.nsw.gov.au>; Mary Ann Hamilton <MaryAnn.Hamilton@environment.nsw.gov.au>
Subject: RE: Request for Comment Q Station Reports

Hi Tracy and Mary Ann,

Thanks for your response and interest in Q Station.

Yes, I note that the consultation deadlines were tight and not ideal over the Christmas shutdown period.

The Q Station annual reports had previously been submitted by NPWS/ Mawland and were rejected by DPIE as they did not meet the required compliance report format, recently updated by DPIE in the Compliance Reporting Post Approval Requirements Guidelines (May 2020). Updated reports were required to be submitted by 21st January 2022, which is the reason for the imposed consultation deadline.

However, if you require more time, would the 11th February 2022 be sufficient? Any comments provided will be submitted to DPIE as an addendum after the report submission date.

If you require any further information or need the reports to be resent (via the file transfer link, as the link would have expired by now), please let me know.

Thanks and regards,
Cheryl

Cheryl Cahill, B Bus, BAppSc (EnvSc)
Senior Environmental Consultant
Environment & Geoscience
Engineering, Design and Project Management

Tel: +61 2 8239 8700
Mob: 0405 635 333

SNC-Lavalin Atkins
Level 17
55 Clarence St
Sydney | NSW | Australia | 2000



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From: Tracy Appel <Tracy.Appel@environment.nsw.gov.au>
Sent: 22 December 2021 12:57
To: Cahill, Cheryl <Cheryl.Cahill@atkinsglobal.com>
Cc: Mary Ann Hamilton <MaryAnn.Hamilton@environment.nsw.gov.au>
Subject: Request for Comment Q Station Reports

Hi Cheryl,

Thank you for email regarding Q Station Report. I note you have asked for comment by the 14 January 2022. With the whole of government shutdown over the Christmas New Year and staff on leave and the implementation of a new Heritage NSW structure, we would appreciate if you would be able to provide an extension to the date by which comment is required. This will allow HNSW the opportunity to review the reports (dating back to 2018) and provide comment if required. Please contact Heritage NSW Acting Manager Mary Ann Hamilton on 9873 8565 or Director Steve Meredith on 0455 079 190 in the new year to discuss.

Regards,

Tracy Appel

M.Herit Cons

A/Senior Team Leader

North Metro

Heritage, Community Engagement, Department of Premier and Cabinet

Level 6, 10 Valentine Avenue Parramatta 2150 * Locked Bag 5020, Parramatta NSW 2124

T: 02 9873 8559 | tracy.appel@environment.nsw.gov.au

Heritage NSW and coronavirus (COVID-19)

Heritage NSW has taken steps to protect the safety, health and wellbeing of our staff, communities and customers. Whilst our offices remain open, we have put in place flexible working arrangements for our teams across NSW and continue to adapt our working arrangements as necessary. Face-to-face meetings and field work/site visits with our customers are subject to rules on gatherings and social distancing measures. We thank you for your patience and understanding at this time.



**Premier
& Cabinet**

I acknowledge and respect the traditional custodians and ancestors of the lands I work across

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Alex Bamford

From: Cahill, Cheryl
Sent: Tuesday, 18 January 2022 11:30 am
To: Smith, Alistair
Subject: FW: Q Station 2018-2020 Environmental Reports comments Sandy Hoy
Attachments: Q Station 2018-2020 Environmental Reports comments Sandy Hoy.pdf

Good morning,

See attached comments from Sandy, as chairperson of the QSCCC.

Cheers

From: sandy@parklandplanners.com.au <sandy@parklandplanners.com.au>
Sent: 07 January 2022 20:08
To: Cahill, Cheryl <Cheryl.Cahill@atkinsglobal.com>
Subject: Q Station 2018-2020 Environmental Reports comments Sandy Hoy

Hi Cheryl

Please find attached my comments on the Q Station 2018-2020 reports.

I am away for work next week. If you have any questions about my comments please email or call me.

Regards,
Sandy

Sandy Hoy
Director
Parkland Planners

ph. (02) 9452 6377
mob. 0411 191 866

sandy@parklandplanners.com.au
PO Box 41, FRESHWATER NSW 2096
www.parklandplanners.com.au

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Comments Template for Q Station Annual Environment Reports

Review undertaken by

Name: Sandy Hoy

Agency or Committee: Chair, Quarantine Station Community Consultative Committee (QSCCC)

It would be greatly appreciated if any comments or remarks are provided by 14 January 2022 for inclusion in the final report.

In accordance with Condition 221, it is requested that stakeholders review the documentation with regard to 'issues associated with visitor impacts arising from the activity'.

Spelling errors I picked up while reading the reports are listed below. Suggest doing a final spellcheck to find out if there are more occurrences.

Report (2018/2019 or 2020)	Page Number	Report Section or Condition number	Comment
2018/2019	ToC and p.3		Change 'Mandis' to 'Manidis'. [I worked at Manidis Roberts Consultants in the 1990s]
2018/2019	16	Table 4	<p><i>Summary: The Q Station did not seek approval from DPIE for the planned Open Day on 28 April 2019. Approval was sought through NPWS when it should have been directed to DPIE. This complaint was received prior to the open day occurring. No public complaint was received regarding this incident Approval was sought from DPIE immediately.</i></p> <p><i>Response: DPIE approved the open day to proceed on 4 April 2019. Open day on 28 April proceeded with NPWS participation. Mawland continue to seek approval from DPIE for all future open days.</i></p> <p>I am surprised that this situation was registered as a complaint by NPWS and included in this report. Given the need for Mawland to obtain approvals for various management and operational matters from NPWS and from DPIE, NPWS could have simply advised Mawland that they needed to obtain approval for the Open Day from DPIE and not from NPWS. From the timeframes given it seems that Mawland informed NPWS and then DPIE of the Open Day in plenty of time, at least 3-4 weeks before the Open Day.</p>
2018/2019	16	Table 4	Please change Robyn 'Sans' to 'San'.
2018/2019		CoPA 56-60	Conditions of Planning Approval 56-60 and the IMAMS no. 98 refer to the QSCCC. Before the DPIE's change in report template and contents the QSCCC Annual Report I am required to prepare for DPIE was included as an Appendix in the environmental reports. As no. 98 of the IMAMS in particular refers

			to the attendance of QSCCC meetings which is included in the Annual Report, I suggest that a link to the Feb 2019-Feb 2020 Annual Report on the DPIE website is included in this section. https://www.planning.nsw.gov.au/-/media/Files/DPE/Reports/CCC-annual-reports/2019/quarantine-station-manly-ccc-report-2019.pdf?la=en
2018/2019	p.93	CoPA 123	Change 'Complaint' to 'Compliant'. Suggest doing a spellcheck to find out if there are more occurrences.
2018/2019	p.94	CoPA 126	Change 'Complaint' to 'Compliant'. Suggest doing a spellcheck to find out if there are more occurrences.
2020		General comment	The impacts of COVID on Q Station operations in 2020 unfortunately meant that more non-compliances than usual that were outside Mawland's control occurred and were recorded.
2020	ToC and p.3		Change 'Mandis' to 'Manidis'. [I worked at Manidis Roberts Consultants in the 1990s]
2020	p. 12		Change 'Dragan' to 'Dargan'. Suggest doing a spellcheck to find out if there are more occurrences.
2020	p.18	CoPA 4	Change 'Rsources' to 'Resources'
2020	p. 17-18 and elsewhere		Final edit: make sure table headings and text are on the same page
2020	p. 38-39		Change 'Dragan' to 'Dargan'. Suggest doing a spellcheck to find out if there are more occurrences.
2020		CoPA 56-60	Conditions of Planning Approval 56-60 and the IMAMS no. 98 refer to the QSCCC. Before the DPIE's change in report template and contents the QSCCC Annual Report I am required to prepare for DPIE was included as an Appendix in the environmental reports. As no. 98 of the IMAMS in particular refers to the attendance of QSCCC meetings which is included in the Annual Report, I suggest that links to the Feb 2019-Feb 2020 and Feb 2020-Feb 2021 Annual Reports on the DPIE website are included in this section. https://www.planning.nsw.gov.au/-/media/Files/DPE/Reports/CCC-annual-reports/2019/quarantine-station-manly-ccc-report-2019.pdf?la=en https://www.planning.nsw.gov.au/-/media/Files/DPE/Reports/CCC-annual-reports/2021/Manly-Quarantine-Station---2021.pdf
2020		CoPA 59	Please add that the QSCCC May 2020 meeting was not held because Q Station was closed due to COVID 19.
2020	p. 85		Change 'Manger' to 'Manager'

(Add more rows as required)

On completion of your review, please return the completed comments template or other correspondence to cheryl.cahill@atkinsglobal.com

Thank you for your time

Alex Bamford

From: Cahill, Cheryl
Sent: Friday, 14 January 2022 7:45 pm
To: Rebecca Yit; Alex Bamford; sstanton
Cc: Smith, Alistair
Subject: FW: Q Station Annual Environmental Reports - Invitation to review reports and provide comments
Attachments: Q Station Annual Environmental Report - TfNSW comments - 14.01.2022.pdf

Hi Bec, Alex and Suzanne,

See attached comments from TfNSW (Maritime) on the annual reports.

Thanks,
Cheryl

From: Meredith Morris <meredith.morris@transport.nsw.gov.au>
Sent: 14 January 2022 15:09
To: Cahill, Cheryl <Cheryl.Cahill@atkinsglobal.com>
Cc: Joseph Pascuzzo <Joseph.Pascuzzo@transport.nsw.gov.au>
Subject: RE: Q Station Annual Environmental Reports - Invitation to review reports and provide comments

Hi Cheryl

Please find attached comments regarding the Q Station Annual Environmental Reports for 2018/2019 and 2020 on behalf of Transport for NSW as landlord of the wharf.

Kind regards
Meredith

Meredith Morris
Portfolio Leasing Manager | Maritime Commercial & Community
Property Asset Management
Commercial, Performance & Strategy
Infrastructure & Place | **Transport for NSW**

T 8849 2577 M 0434 904 256
33 James Craig Road, Rozelle NSW 2039



**Transport
for NSW**

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From: Cahill, Cheryl <Cheryl.Cahill@atkinsglobal.com>
Sent: Wednesday, 12 January 2022 2:52 PM
To: Meredith Morris <meredith.morris@transport.nsw.gov.au>
Subject: RE: Q Station Annual Environmental Reports - Invitation to review reports and provide comments

Hi Meredith,

I was following up on the Q Station annual reports previously provided and wish to remind you that the deadline for receipt of comments, prior to finalisation of the reports for issue to DPIE, is this Friday 14th January 2022 COB. If you need me to re-send the documents (as the link would have expired), please let me know via return email.

Thanks and regards,
Cheryl

Cheryl Cahill, B Bus, BAppSc (EnvSc)
Senior Environmental Consultant
Environment & Geoscience
Engineering, Design and Project Management

Tel: +61 2 8239 8700
Mob: 0405 635 333

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From: Meredith Morris <meredith.morris@transport.nsw.gov.au>
Sent: 17 December 2021 15:56
To: Cahill, Cheryl <Cheryl.Cahill@atkinsglobal.com>
Subject: RE: Q Station Annual Environmental Reports - Invitation to review reports and provide comments

Hi Cheryl

Thank you for your email.

I will ensure the documents are downloaded prior to 29/12/21 and provide a response as soon as possible.

Regards

Meredith Morris
Portfolio Leasing Manager | Maritime Commercial
Property Asset Management
Commercial, Performance & Strategy
Infrastructure & Place | **Transport for NSW**

T 8849 2577 M 0434 904 256
33 James Craig Road, Rozelle NSW 2039



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for NSW**

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From: Cahill, Cheryl <Cheryl.Cahill@atkinsglobal.com>
Sent: Wednesday, 15 December 2021 3:17 PM
To: Meredith Morris <meredith.morris@transport.nsw.gov.au>
Subject: RE: Q Station Annual Environmental Reports - Invitation to review reports and provide comments

Hi Meredith,

I have recently sent you a large file transfer link to download files associated with the Q Station Annual Environmental Reports. These were sent to you as the dominated agency representative for review and comment.

The file transfer link will expire on 29/12/21, so please ensure the reports are downloaded prior to this time.

If you have any questions or want any clarifications, please feel free to contact me via email or 0405 635 333.

Thanks and regards,
Cheryl

Cheryl Cahill, *B Bus, BAppSc (EnvSc)*
Senior Environmental Consultant
Environment & Geoscience
Engineering, Design and Project Management

Tel: +61 2 8239 8700
Mob: 0405 635 333

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From: Cahill, Cheryl <filetransfercn@atkinglobal.com>

Sent: 15 December 2021 14:42

To: meredith.morris@transport.nsw.gov.au

Subject: Q Station Annual Environmental Reports - Invitation to review reports and provide comments

Dear Meredith,

Please refer to the attached files.

SNC-Lavalin has been engaged by the National Parks and Wildlife Service (NPWS) and Mawland Quarantine Station Pty Ltd (Mawland) to prepare the latest Annual Environment Reports for the Quarantine Station (Q Station), located in Sydney Harbour National Park at North Head, Manly. These reports cover the reporting periods, from July 2018 – December 2019 and January 2020 – December 2020.

In accordance with Conditions 221, 224-225 of the CoPA, copies of the Annual Environment Reports are to be made available to selected stakeholders for their review and comment. You are invited to comment on these reports and in accordance with Condition 221, it is requested that stakeholders review the documentation with regard to 'issues associated with visitor impacts arising from the activity'.

It would be greatly appreciated if you could please provide any comments or remarks on these reports by 14 January 2022. To streamline this process, a comments template is enclosed. On completion of your review, please return the completed comments template or other correspondence to the email noted below by 14 January 2022. If no response is received by this date, it will be assumed that you do not wish to provide any comments or feedback on the reports.

If you have any questions, please do not hesitate to contact me on 0405635333 or at cheryl.cahill@atkinsglobal.com.

Regards,

Cheryl Cahill

Files attached to this message

Filename	Size	Checksum (SHA256)
comments template.docx	95.9 KB	79c1dae6cd77ea5a907ef4881e7aad7dcd71f6276a6a3b62d9c6497655167b
TfNSW 15122021.pdf	409 KB	331170eb4f0d982819d36597931f40bceec8d425e44f50d27a28ddf7ba3775312
North Head Q Station - Annual Environmental Report - July 18 to Dec 19 Final.pdf	12.7 MB	b80b5bb799394ac67d2ebb68ddfd1a0ea2259b0222ecb0b562fcb682869c968c
North Head Q Station Annual Environmental Report Jan to Dec 2020 Final 20211215.pdf	37.5 MB	c1fd2b765fae5200f91377f5e6dbb5c298fc70a824475ee891261ba9ddcab508

Please click on the following link to download the attachments:
<https://FiletransferCN.atkinsglobal.com/message/6szzFgv5QJRUqD9hM0uety>

This email or download link can be forwarded to anyone.

The attachments are available until: **Wednesday, 29 December.**

Message ID: 6szzFgv5QJRUqD9hM0uety

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Comments Template for Q Station Annual Environment Reports

Review undertaken by

Name: Meredith Morris, Portfolio Leasing Manager

Agency or Committee: Transport for NSW, Property Asset Management

It would be greatly appreciated if any comments or remarks are provided by 14 January 2022 for inclusion in the final report.

In accordance with Condition 221, it is requested that stakeholders review the documentation with regard to 'issues associated with visitor impacts arising from the activity'.

Report (2018/2019 or 2020)	Page Number	Report Section or Condition number	Comment
2018/2019	38	Compliance: Wharf – no.41	We are concerned that no works were undertaken on the wharf even though it was evident that some wooden planks and sleepers needed replacement and the main area of the wharf was unable to be used
2020	34	Compliance: Wharf – no.41	No works were undertaken on the wharf during the subject year and we are concerned that the repairs to the wharf surface have not been progressed and the main area of the wharf remains unusable.

On completion of your review, please return the completed comments template or other correspondence to cheryl.cahill@atkinsglobal.com

Thank you for your time

7.10 Appendix J – Consultation Correspondence January 2022

SN0243077
QSconsultaER_METROLALC

19/01/2022

Metropolitan Local Aboriginal Land Council
PO Box 1103,
Strawberry Hills
NSW 2012

Via email: metrolalc@metrolalc.org.au

To whom it may concern,

Q Station Annual Environment Reports - Invitation to review reports and provide comments

SNC-Lavalin has been engaged by the National Parks and Wildlife Service (NPWS) and Mawland Quarantine Station Pty Ltd (Mawland) to prepare the latest Annual Environment Reports for the Quarantine Station (Q Station), located in Sydney Harbour National Park at North Head, Manly. These reports cover the reporting periods, from July 2018 – December 2019 and January 2020 – December 2020.

These reports have been developed to meet the Ministers Conditions of Planning Approval (CoPA) for the site, under approval MP08_0041 and subsequent modification (MP08_0041 MOD 3). The reports have also been prepared in accordance with the Compliance Reporting Post Approval Requirements (Department of Planning, Industry and Environment, 2020).

Planning approval for the site was granted in 2003, with NPWS and Mawland as co-proponents. In 2006, the site was leased to Mawland who operate the Q Station and coordinate the day-to-day activities. With reference to condition terms, the site is currently in Operational mode.

In accordance with Conditions 221, 224-225 of the CoPA, copies of the Annual Environment Reports are to be made available to selected stakeholders for their review and comment. You are invited to comment on these reports and in accordance with Condition 221, it is requested that stakeholders review the documentation with regard to 'issues associated with visitor impacts arising from the activity'.


Please find the Annual Environment Reports attached for your review. A previous draft of the July 2018 – December 2019 report was prepared by the co-proponents, however, the attached July 2018- December 2019 report has been prepared to replace the previous version and ensure compliance with all CoPA.

It would be greatly appreciated if you could please provide any comments or remarks on these reports by 16 February 2022. To streamline this process, a comments template is enclosed. On completion of your review, please return the completed comments template or other correspondence to the email noted below by 16 February 2022. If no response is received by this date, it will be assumed that you do not wish to provide any comments or feedback on the reports.

If you have any questions, please do not hesitate to contact me on 0405 571 909 or at alistair.smith@atkinsglobal.com.

Yours sincerely,

SNC-LAVALIN ATKINS



Alistair Smith

Head of Environmental Services – Principal Planner
Australia

Engineering Services

Enclosed: Annual Environmental Report, July 2018 – December 2019
 Annual Environmental Report, January 2020 – December 2020
 Comments Template

SN0243077
QSconsultaER_DPI

19/01/2022

Fisheries Manager - Aquatic Ecosystems Unit
NSW Department of Primary Industries
Block E, Level 3
84 Crown Street
Wollongong NSW 2500

Via email: sarah.conacher@dpi.nsw.gov.au

Dear Sarah,

Q Station Annual Environment Reports - Invitation to review reports and provide comments

Further to our phone conversation yesterday and letter of 15 December 2021, National Parks and Wildlife Service (NPWS) and Mawland Quarantine Station Pty Ltd (Mawland) have been granted an extension of time for the submission of the Annual Environmental Reports for Q Station covering the following two periods:

- July 2018 – December 2019
- January 2020 – December 2020

As a consequence The Department of Planning and Environmental have also requested that we extend the period for comment due to the initial consultation period including the Christmas/New Year shutdown period. Your original comments already received dated 14 January 2022 will be taken into consideration. However, if you wish to submit any further comment following additional time for review can you please do so by no later than 16 February 2022. If no response is received by this date, it will be assumed that you do not wish to provide any further comments or feedback on the reports.

Following review of your initial comments the July 2018 – Report on Sea Grass in Quarantine Bay adjacent to the Quarantine Wharf undertaken by EcoDivers is now included as an appendix to the July 2018 – December 2019 report for your reference.

If you have any questions, please do not hesitate to contact me on 0405 571 909 or at alistair.smith@atkinsglobal.com.

Yours sincerely,

SNC-LAVALIN ATKINS



Alistair Smith

Head of Environmental Services – Principal Planner
Australia

Engineering Services

Enclosed: Annual Environmental Report, July 2018 – December 2019
 Annual Environmental Report, January 2020 – December 2020

SN0243077
QSconsultAER_HNSW

15/12/2021

Heritage NSW
Level 6
10 Valentine Ave
Parramatta NSW 2150

Via email: MaryAnn.Hamilton@environment.nsw.gov.au

Dear Mary Ann,

Q Station Annual Environment Reports - Invitation to review reports and provide comments

Further to our phone conversation today and letter of 15 December 2021, National Parks and Wildlife Service (NPWS) and Mawland Quarantine Station Pty Ltd (Mawland) have been granted an extension of time for the submission of the Annual Environmental Reports for Q Station covering the following two periods:

- July 2018 – December 2019
- January 2020 – December 2020

As a consequence The Department of Planning and Environmental have also requested that we extend the period for comment due to the initial consultation period including the Christmas/New Year shutdown period. If you wish to submit comments following additional time for review can you please do so by no later than 16 February 2022. If no response is received by this date, it will be assumed that you do not wish to provide any further comments or feedback on the reports.

I also now enclose the most up to date draft reports for your reference.

If you have any questions, please do not hesitate to contact me on 0405 571 909 or at alistair.smith@atkinsglobal.com.

Yours sincerely,

SNC-LAVALIN ATKINS



Alistair Smith

Head of Environmental Services – Principal Planner
Australia

Engineering Services

Enclosed: Annual Environmental Report, July 2018 – December 2019
 Annual Environmental Report, January 2020 – December 2020

SN0243077
QSconsultAER_QSCCC

19/01/2022

Sandy Hoy
QSCCC Chairperson
Parkland Planners - Principal
PO Box 41
FRESHWATER NSW 2096

Via email: sandy@parklandplanners.com.au

Dear Sandy,

Q Station Annual Environment Reports - Invitation to review reports and provide comments

Further to our phone conversation yesterday and letter of 15 December 2021, National Parks and Wildlife Service (NPWS) and Mawland Quarantine Station Pty Ltd (Mawland) have been granted an extension of time for the submission of the Annual Environmental Reports for Q Station covering the following two periods:

- July 2018 – December 2019
- January 2020 – December 2020

As a consequence The Department of Planning and Environmental have also requested that we extend the period for comment due to the initial consultation period including the Christmas/New Year shutdown period. Your original comments already received dated 7 January 2022 will be taken into consideration. However, if you wish to submit any further comment following additional time for review can you please do so by no later than 16 February 2022. If no response is received by this date, it will be assumed that you do not wish to provide any further comments or feedback on the reports.

I also now enclose the most up to date draft reports for your reference.

If you have any questions, please do not hesitate to contact me on 0405 571 909 or at alistair.smith@atkinsglobal.com.

Yours sincerely,

SNC-LAVALIN ATKINS



Alistair Smith

Head of Environmental Services – Principal Planner
Australia

Engineering Services

Enclosed: Annual Environmental Report, July 2018 – December 2019
 Annual Environmental Report, January 2020 – December 2020

7.11 Appendix K – Consultation Responses February 2022

Alex Bamford

From: Sarah Conacher <sarah.conacher@dpi.nsw.gov.au>
Sent: Monday, 31 January 2022 7:24 pm
To: Smith, Alistair
Subject: RE: Q Station Annual Environmental Reports

Hi Alistair,

Thanks for providing the Seagrass Report from Eco Diver in 2018. Whilst informative, the report isn't the same standard of report that proponents would typically submit for development assessment (such as installation of new piles). Ecological consultants would typically perform an underwater survey and provide the methodology for seagrass assessment, using quadrats or tape measures. The survey would typically map the area of distribution for each species of seagrass and identify the length and density of the seagrass. For example:

Seagrass species were given the following codes:

Hal – *Halophila ovalis* (paddleweed)

Pos – *Posidonia australis* (strapweed)

Zos – *Zostera capricorni* (eelgrass)

The level of patchiness was also estimated using three categories:

A – Individual strands or small clumps (< 2 m diameter);

B – Medium sized patches (2 - 10 m diameter); or

C – Beds of relatively even distribution (> 10 m diameter).

Estimates of seagrass density were made by ranking each observation point using three categories:

1 – Low density (< 15% seabed cover);

2 – Medium density (15% - 50% seabed cover); or

3 – High density (> 50% cover).

Leaf length of seagrass was categorised as follows:

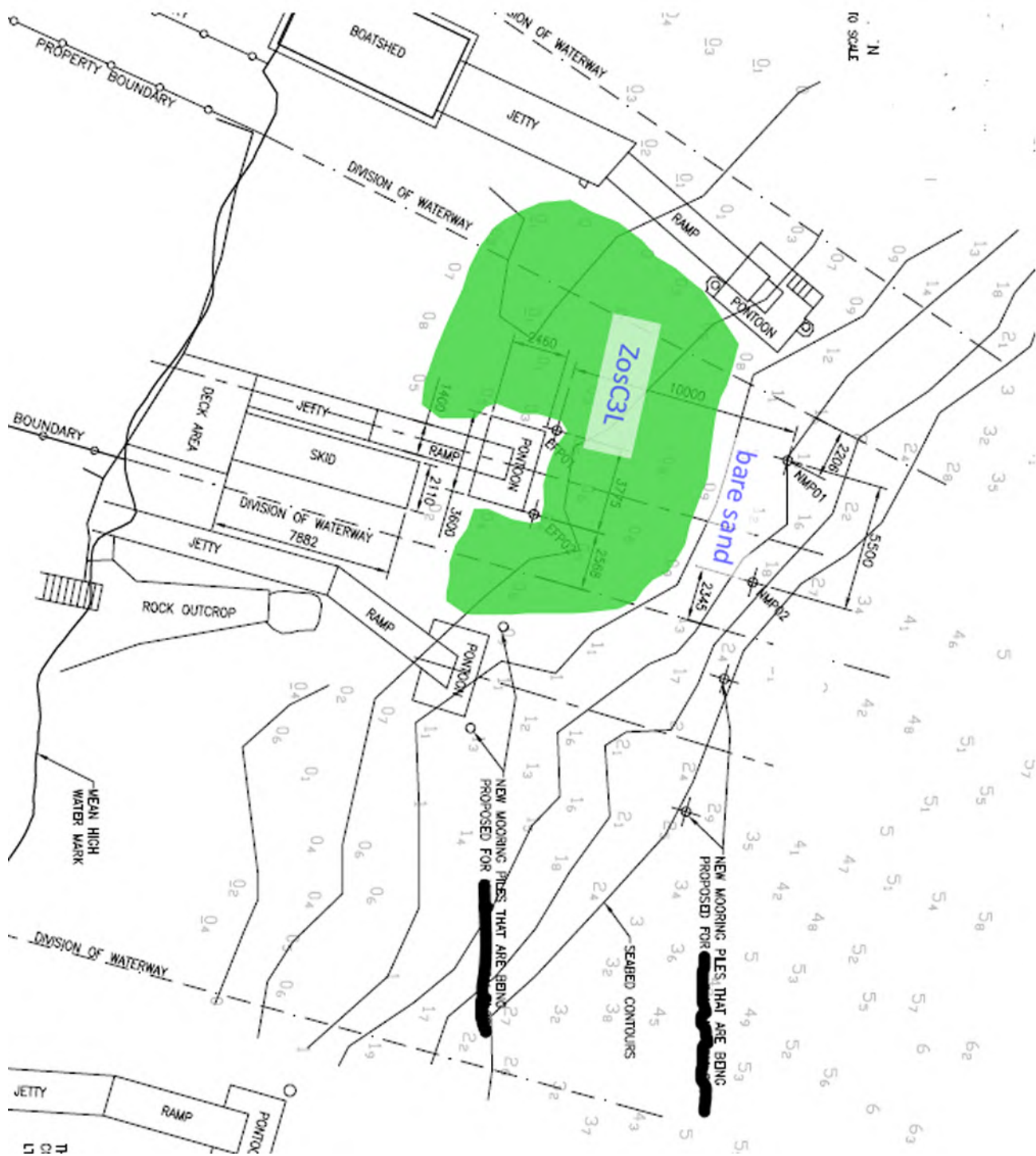
Halophila – S (short < 1 cm), M (medium 1 cm – 3 cm), L (long > 3 cm);

Posidonia – S (short < 15 cm), M (medium 15 cm – 30 cm), L (long > 30 cm); or

Zostera – S (short < 5 cm), M (medium 5 cm – 15 cm), L (long > 15 cm).

These codes provide a description of the seagrasses within an area and are useful in determining the nature and ecological value of any seagrasses likely to be affected by the proposed works. For example, seagrass with shorter leaves and a lower density (e.g. ZosC1S) may have less ecological value compared with seagrass with longer leaves and a higher density (ZosC3L).

The seagrass map is then overlaid with the proposed development (e.g. a wharf, jetty or piles) to determine if there's any overlap or potential impact during construction or operation. Below is an example of a seagrass survey that we use to assess development proposals:



It's hard to compare changes in the seagrass (distribution, density or length) over time without detailed mapping. I'm not sure if this level of mapping is required for the routine reporting of the Q-Station, but is it required in order to assess development proposals.

Kind regards,
Sarah

Sarah Conacher | Fisheries Manager – Coastal Systems Unit
NSW Department of Primary Industries | Fisheries
12 Shirley Rd, Wollstonecraft NSW
ALL MAIL TO: DPI Fisheries, Attn: R. Philips, 1243 Bruxner Hwy, Wollongbar NSW 2477
T: 02 8437 4981 | M: 0419 314 437 | E: sarah.conacher@dpi.nsw.gov.au

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<https://www.dpi.nsw.gov.au/fishing/habitat/protecting-habitats/toolkit>

Submit permit applications via email to: ahp.central@dpi.nsw.gov.au

Turnaround times: from date of receipt of application, please allow up to 28 days for Land Owners Consent, Permits and Consultations. Please allow up to 40 days for Integrated Development Applications.



DPI Fisheries acknowledges that it stands on Country which always was and always will be Aboriginal land. We acknowledge the Traditional Custodians of the land and waters, and we show our respect for Elders past, present and emerging. We are committed to providing places in which Aboriginal people are included socially, culturally and economically through thoughtful and collaborative approaches to our work.

From: Smith, Alistair <Alistair.Smith@atkinsglobal.com>

Sent: Friday, 28 January 2022 3:12 PM

To: Sarah Conacher <sarah.conacher@dpi.nsw.gov.au>

Subject: RE: Q Station Annual Environmental Reports

Sarah,

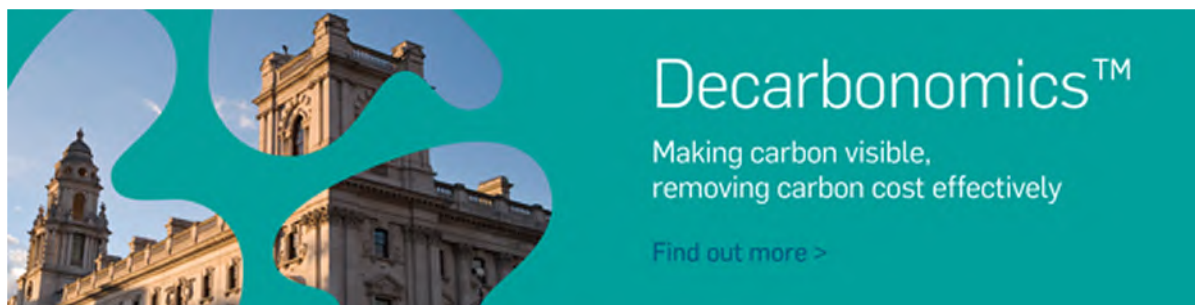
Attached again separately here also

Regards

Alistair Smith *MRRP (Dist.), BSc., NZPI*
Head of Environmental Services – Principal Planner
Australia
Engineering Services

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Atkins, member of the SNC-Lavalin Group
Level 17, 55 Clarence Street, Sydney, NSW 2000, Australia



ATKINS

Member of the SNC-Lavalin Group

Company



From: Sarah Conacher <sarah.conacher@dpi.nsw.gov.au>

Sent: 28 January 2022 15:08

To: Smith, Alistair <Alistair.Smith@atkinsglobal.com>

Subject: RE: Q Station Annual Environmental Reports

Hi Alistair,

Did you end up sending through the Seagrass Assessment undertaken by EcoDivers in 2018?
I can't seem to locate it in my inbox.

Thanks,
Sarah

Sarah Conacher | Fisheries Manager – Coastal Systems Unit

NSW Department of Primary Industries | Fisheries

12 Shirley Rd, Wollstonecraft NSW

ALL MAIL TO: DPI Fisheries, Attn: R. Philips, 1243 Bruxner Hwy, Wollongbar NSW 2477

T: 02 8437 4981 | M: 0419 314 437 | E: sarah.conacher@dpi.nsw.gov.au

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<https://www.dpi.nsw.gov.au/fishing/habitat/protecting-habitats/toolkit>

Submit permit applications via email to: ahp.central@dpi.nsw.gov.au

Turnaround times: from date of receipt of application, please allow up to 28 days for Land Owners Consent, Permits and Consultations. Please allow up to 40 days for Integrated Development Applications.



DPI Fisheries acknowledges that it stands on Country which always was and always will be Aboriginal land. We acknowledge the Traditional Custodians of the land and waters, and we show our respect for Elders past, present and emerging. We are committed to providing places in which Aboriginal people are included socially, culturally and economically through thoughtful and collaborative approaches to our work.

From: Smith, Alistair <filetransfercn@atkinsglobal.com>

Sent: Wednesday, 19 January 2022 9:57 PM

To: Smith, Alistair <alistair.smith@atkinsglobal.com>

Subject: Q Station Annual Environmental Reports

All - I have resent the same attachments for Q Station - because as soon as I sent it because I did not enter an expiry date in our file transfer system it automatically gave it a one day expiry! So not much use if any of you are away for one day tomorrow! Otherwise these files are exactly the same as the ones I just sent.

Regards

Alistair Smith

Files attached to this message

Filename	Size	Checksum (SHA256)
North Head Q Station - Annual Environmental Report - Jan to Dec 2020 (18-01-22).pdf	34.7 MB	064adbba7085efb4fdcc473a0b56d62d3bedb28a78e677e72a7f98fbce1ea0d3
North Head Quarantine Station - Annual Environmental Report - July 18 to Dec 18 (18-01-22).pdf	11.7 MB	bcc4cc87550230029eaa8579491762a5e8f53021e619e3141384e62eb76badfb

Please click on the following link to download the attachments:

<https://FiletransferCN.atkinsglobal.com/message/FQ65qLPYdaU3TOnidvLCfO>

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The attachments are available until: **Wednesday, 2 February.**

Message ID: FQ65qLPYdaU3TOnidvLCfO

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Alex Bamford

From: Smith, Alistair <Alistair.Smith@atkinsglobal.com>
Sent: Monday, 21 February 2022 2:10 pm
To: Alex Bamford
Subject: FW: Q Station 2018-2020 Environmental Reports comments

FYI

From: sandy@parklandplanners.com.au <sandy@parklandplanners.com.au>
Sent: 18 February 2022 18:11
To: Smith, Alistair <Alistair.Smith@atkinsglobal.com>
Subject: RE: Q Station 2018-2020 Environmental Reports comments

Hi Alistair

No further comments about the environmental reports have been received from QSCCC members.

Regards,
Sandy

Sandy Hoy
Chair
Quarantine Station Community Consultative Committee

ph. 0411 191 866
sandy@parklandplanners.com.au
PO Box 41, FRESHWATER NSW 2096

From: sandy@parklandplanners.com.au <sandy@parklandplanners.com.au>
Sent: Thursday, 20 January 2022 3:48 PM
To: 'Smith, Alistair' <Alistair.Smith@atkinsglobal.com>
Subject: RE: Q Station 2018-2020 Environmental Reports comments Sandy Hoy

All good Alistair, thank you

Regards,
Sandy

From: Smith, Alistair <Alistair.Smith@atkinsglobal.com>
Sent: Thursday, 20 January 2022 12:19 PM
To: sandy@parklandplanners.com.au
Subject: RE: Q Station 2018-2020 Environmental Reports comments Sandy Hoy

Hi Sandy,

If you are able to download and distribute amongst your members please that would be appreciated.

Amended comments template attached.

I would appreciate a co-ordinated response from the QSCCC rather than comments to be received from all members

Regards

Alistair Smith *MRRP (Dist.), BSc., NZPI*
Head of Environmental Services – Principal Planner
Australia
Engineering Services

☐ +61 2 8239 8700 ☐ +61 405 571 909

Level 17, 55 Clarence Street, Sydney, NSW 2000, Australia

Company

From: sandy@parklandplanners.com.au <sandy@parklandplanners.com.au>
Sent: 20 January 2022 11:06
To: Smith, Alistair <Alistair.Smith@atkinsglobal.com>
Subject: RE: Q Station 2018-2020 Environmental Reports comments Sandy Hoy

Hi Alistair

Thank you for your email advising of an extension of time for the QSCCC to make comments on the Q Station Annual Environmental Reporting.

I sent the QSCCC members (6 QSCCC community members, NPWS, Mawland) the information and links to documents as discussed with Cheryl Cahill in December. Given that I needed to have had a unique code linked to my email address to access the documents via your link, I now realise that the QSCCC members may not have been able to access the documents because they also needed a unique code linked to their emails.

Could you please resolve this problem so the QSCCC members can access your documents. Otherwise I can send the reports to them via Hightail or similar.

The comments template sent by Cheryl is attached. Could you please adapt your comments sheet with the revised closing date and contact email if you are now the contact person.

Given that my comments made on 7 January are mine and not on behalf of the QSCCC, and that respondents are listed in the reports, would you prefer that I ask the QSCCC members to send you their comments directly, or that they send their comments to me and I compile them and send them to you as a combined QSCCC response?

Happy to discuss over the phone if easier.

Regards,
Sandy

Sandy Hoy

Chair
Quarantine Station Community Consultative Committee

ph. 0411 191 866
sandy@parklandplanners.com.au
PO Box 41, FRESHWATER NSW 2096

From: Smith, Alistair <Alistair.Smith@atkinsglobal.com>
Sent: Wednesday, 19 January 2022 6:08 PM
To: sandy@parklandplanners.com.au
Subject: RE: Q Station 2018-2020 Environmental Reports comments Sandy Hoy

Sandy,

Further to our conversation yesterday, please find attached a letter addressing the opportunity for additional comments on the Q Station Annual Environmental Reporting, if QSCCC would like to make any further comments. As I mentioned if you are able to provide comment prior to 16 February 2022, which is the date given in the letter then that would be very much appreciated.

The reports with their respective appendices will be file transferred to you given their size

Any questions feel free to give me a call.

Regards

Alistair Smith *MRRP (Dist.), BSc., NZPI*
Head of Environmental Services – Principal Planner
Australia
Engineering Services

☐ +61 2 8239 8700 ☐ +61 405 571 909



Level 17, 55 Clarence Street, Sydney, NSW 2000, Australia



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From: sandy@parklandplanners.com.au <sandy@parklandplanners.com.au>
Sent: 07 January 2022 20:08
To: Cahill, Cheryl <Cheryl.Cahill@atkinsglobal.com>
Subject: Q Station 2018-2020 Environmental Reports comments Sandy Hoy

Hi Cheryl

Please find attached my comments on the Q Station 2018-2020 reports.

I am away for work next week. If you have any questions about my comments please email or call me.

Regards,
Sandy

Sandy Hoy
Director
Parkland Planners

ph. (02) 9452 6377
mob. 0411 191 866

sandy@parklandplanners.com.au
PO Box 41, FRESHWATER NSW 2096
www.parklandplanners.com.au

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From: Cathy G <griffin.cathy@gmail.com>
Sent: Friday, 21 January 2022 5:13 pm
To: Sandy Hoy
Cc: Chad Weston; Rebecca Yit; Max Player; Suzanne Stanton; Adele Heasman; Candy Bingham; Doug Sewell; Jenny Wilson; Virginia Macleod; Smith, Alistair
Subject: Re: FW: Quarantine Station Annual Environmental Reports 2018-19 and 2020 - Invitation to Comment

thanks Sandy,
I have read the report and have no comments to record. Congratulations to the team who prepared the report.
Regards
Cathy Griffin

On Thu, Jan 20, 2022 at 4:44 PM <sandy@parklandplanners.com.au> wrote:

Dear QSCCC members

Further to my email below, NPWS and Mawland have been granted an extension of time to submit the Q Station Annual Environmental Reports covering July 2018-December 2019 and January 2020-December 2020. DPIE has also requested, because the initial consultation period was over Christmas and New Year and closing on 14 January, that the stakeholder consultation period be extended to 16 February 2022.

I made comments on both reports on 7 January as the initial closing date of 14 January coincided with a work trip last week. My comments, and others from relevant government departments, have been included in revised versions of both reports which I will send to you via Hightail because of their large file size.

If you wish to comment on the revised environmental reports please use the included comments template in Word and email it to me by **Monday 14 February**. SNC-Lavalin Atkins prefers that I compile the comments from QSCCC members and that I send them the 'combined' comments by Wednesday 16 February.

If you have any questions about this please let me know.

Regards,

Sandy

Sandy Hoy

Chair

Quarantine Station Community Consultative Committee

ph. 0411 191 866

sandy@parklandplanners.com.au

PO Box 41, FRESHWATER NSW 2096

From: sandy@parklandplanners.com.au <sandy@parklandplanners.com.au>

Sent: Wednesday, 15 December 2021 5:01 PM

To: 'Chad Weston' <Chad.Weston@environment.nsw.gov.au>; Rebecca Yit <Rebecca.Yit@environment.nsw.gov.au>; Max Player <mplayer@mawlandgroup.com.au>; Suzanne Stanton <sstanton@mawlandgroup.com.au>; 'Adele Heasman' <Adele.Heasman@parliament.nsw.gov.au>; Cathy Griffin <griffin.cathy@gmail.com>; 'Candy Bingham' <candy.bingham@northernbeaches.nsw.gov.au>; 'jenwilson@fastmail.com.au' <jenwilson@fastmail.com.au>; 'Virginia Macleod' <virginia.macleod@gmail.com>

Cc: 'cheryl.cahill@atkingglobal.com' <cheryl.cahill@atkingglobal.com>

Subject: Quarantine Station Annual Environmental Reports 2018-19 and 2020 - Invitation to Comment

Dear QSCCC members

You are invited to review and comment on the newly revised Quarantine Station Annual Environmental Reports for the reporting periods July 2018 – December 2019 and January 2020 – December 2020.

Please see below for the file transfer link to the reports and a comments template, which should be downloaded by 29 December.

<https://FiletransferCN.atkingglobal.com/message/IKKknVXvX8ysnhdB6XgUz3>

Message ID: IKKknVXvX8ysnhdB6XgUz3

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If you miss the 29 December deadline please let me know and I will send you the reports using another link.

Your comments on the reports are welcome by **14 January 2022**. To streamline this process, a comments template (.docx Word document) is enclosed as one of the four documents in the download. On completion of your review, please return the completed comments template or other correspondence to Cheryl Cahill at cheryl.cahill@atkinsglobal.com by 14 January 2022.

The original reports covering 2018 to 2020 were deemed non-compliant by DPIE earlier this year. As a result the Quarantine Station co-proponents (NPWS and Mawland) have been working together with consultants SNC-Lavalin to prepare and produce the reports which comply with DPIEs latest reporting guidelines. The latest documentation represents a revision of material previously presented to the committee for their review in 2021. The newly revised reports contain additional detail not provided in the original reports and have been formatted with the aim of assessing compliance of activities against the Conditions of Planning Approval for Quarantine Station.

In accordance with Conditions 221, 224-225 of the CoPA, copies of the Annual Environment Reports are to be made available to selected stakeholders for their review and comment. You are invited to comment on these reports and in accordance with Condition 221, it is requested that stakeholders review the documentation with regard to 'issues associated with visitor impacts arising from the activity'.

If you have any questions regarding the reports please don't hesitate to contact Bec Yit at Rebecca.Yit@environment.nsw.gov.au

Regards,

Sandy

Sandy Hoy

ph. (02) 9452 6377

mob. 0411 191 866

PO Box 41, FRESHWATER NSW 2096

Alex Bamford

From: Meredith Morris <meredith.morris@transport.nsw.gov.au>
Sent: Tuesday, 18 January 2022 5:34 pm
To: Smith, Alistair
Subject: RE: Q Station Annual Environmental Reports - Invitation to review reports and provide comments
Attachments: Q Station Annual Environmental Report - TfNSW comments - 14.01.2022.pdf

Hi Alistair

I confirm that we do not require further time to review the Annual Environmental Reports for Q Station provided on 15 December 2021.

Regards

Meredith Morris
Portfolio Leasing Manager | Maritime Commercial & Community
Property Asset Management
Commercial, Performance & Strategy
Infrastructure & Place | **Transport for NSW**

T 8849 2577 M 0434 904 256
33 James Craig Road, Rozelle NSW 2039



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From: Smith, Alistair <Alistair.Smith@atkinsglobal.com>
Sent: Tuesday, 18 January 2022 1:49 PM
To: Meredith Morris <meredith.morris@transport.nsw.gov.au>
Subject: RE: Q Station Annual Environmental Reports - Invitation to review reports and provide comments

Meredith,

As discussed in our phone conversation today, further to our letter of 15 December 2021, National Parks and Wildlife Service (NPWS) and Mawland Quarantine Station Pty Ltd (Mawland) have been granted an extension of time for the submission of the Annual Environmental Reports for Q Station covering the following two periods:

- July 2018 – December 2019
- January 2020 – December 2020

In addition to this the Department of Planning, Industry & Environmental (DPIE) requested that we extend the period of stakeholder consultation for comment due to the original consultation period being provided over the Christmas/New Year shutdown period. They requested that we extend it for a further 4 weeks (or as agreed otherwise with the relevant party).

I note your comments received 14 January (attached) following the original consultation period, and confirm these will be responded to in the final report delivered to DPIE. As we discussed you stated you were happy that you had adequately reviewed the reports in making your comments and do not require further time/review of the reports for the periods mentioned above. If you could please confirm this is the case by reply email that would be appreciated so we can record that.

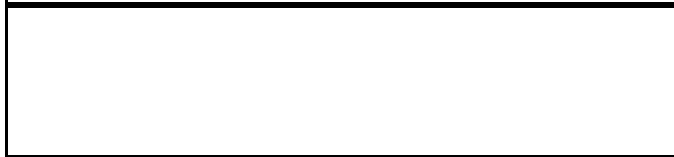
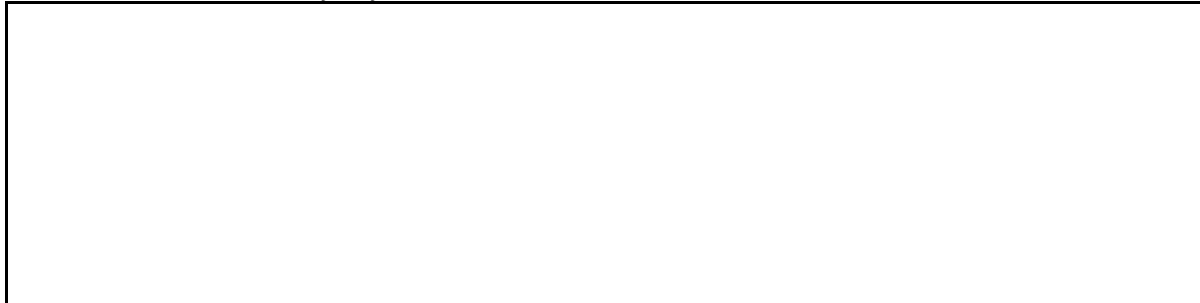
Regards

Alistair Smith *MRRP (Dist.), BSc., NZPI*
Head of Environmental Services – Principal Planner
Australia
Engineering Services

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From: Cahill, Cheryl <Cheryl.Cahill@atkinsglobal.com>

Sent: 14 January 2022 17:45

To: Rebecca Yit <Rebecca.Yit@environment.nsw.gov.au>; Alex Bamford <alex@BamfordConsultants.net>; sstanton <sstanton@mawlandgroup.com.au>

Cc: Smith, Alistair <Alistair.Smith@atkinsglobal.com>

Subject: FW: Q Station Annual Environmental Reports - Invitation to review reports and provide comments

Hi Bec, Alex and Suzanne,

See attached comments from TfNSW (Maritime) on the annual reports.

Thanks,

Cheryl

From: Meredith Morris <meredith.morris@transport.nsw.gov.au>

Sent: 14 January 2022 15:09

To: Cahill, Cheryl <Cheryl.Cahill@atkinsglobal.com>

Cc: Joseph Pascuzzo <Joseph.Pascuzzo@transport.nsw.gov.au>

Subject: RE: Q Station Annual Environmental Reports - Invitation to review reports and provide comments

Hi Cheryl

Please find attached comments regarding the Q Station Annual Environmental Reports for 2018/2019 and 2020 on behalf of Transport for NSW as landlord of the wharf.

Kind regards
Meredith

Meredith Morris
Portfolio Leasing Manager | Maritime Commercial & Community
Property Asset Management
Commercial, Performance & Strategy
Infrastructure & Place | **Transport for NSW**

T 8849 2577 M 0434 904 256
33 James Craig Road, Rozelle NSW 2039



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From: Cahill, Cheryl <Cheryl.Cahill@atkinglobal.com>
Sent: Wednesday, 12 January 2022 2:52 PM
To: Meredith Morris <meredith.morris@transport.nsw.gov.au>
Subject: RE: Q Station Annual Environmental Reports - Invitation to review reports and provide comments

Hi Meredith,

I was following up on the Q Station annual reports previously provided and wish to remind you that the deadline for receipt of comments, prior to finalisation of the reports for issue to DPIE, is this Friday 14th January 2022 COB. If you need me to re-send the documents (as the link would have expired), please let me know via return email.

Thanks and regards,
Cheryl

Cheryl Cahill, *B Bus, BAppSc (EnvSc)*
Senior Environmental Consultant
Environment & Geoscience
Engineering, Design and Project Management

Tel: +61 2 8239 8700
Mob: 0405 635 333

SNC-Lavalin Atkins
Level 17
55 Clarence St
Sydney | NSW | Australia | 2000



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From: Meredith Morris <meredith.morris@transport.nsw.gov.au>
Sent: 17 December 2021 15:56
To: Cahill, Cheryl <Cheryl.Cahill@atkinglobal.com>
Subject: RE: Q Station Annual Environmental Reports - Invitation to review reports and provide comments

Hi Cheryl

Thank you for your email.

I will ensure the documents are downloaded prior to 29/12/21 and provide a response as soon as possible.

Regards

Meredith Morris
Portfolio Leasing Manager | Maritime Commercial
Property Asset Management
Commercial, Performance & Strategy
Infrastructure & Place | **Transport for NSW**

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33 James Craig Road, Rozelle NSW 2039



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From: Cahill, Cheryl <Cheryl.Cahill@atkinsglobal.com>
Sent: Wednesday, 15 December 2021 3:17 PM
To: Meredith Morris <meredith.morris@transport.nsw.gov.au>
Subject: RE: Q Station Annual Environmental Reports - Invitation to review reports and provide comments

Hi Meredith,

I have recently sent you a large file transfer link to download files associated with the Q Station Annual Environmental Reports. These were sent to you as the dominated agency representative for review and comment.

The file transfer link will expire on 29/12/21, so please ensure the reports are downloaded prior to this time.

If you have any questions or want any clarifications, please feel free to contact me via email or 0405 635 333.

Thanks and regards,
Cheryl

Cheryl Cahill, *B Bus, BAppSc (EnvSc)*
Senior Environmental Consultant
Environment & Geoscience
Engineering, Design and Project Management

Tel: +61 2 8239 8700
Mob: 0405 635 333

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From: Cahill, Cheryl <filetransfercn@atkinsglobal.com>

Sent: 15 December 2021 14:42

To: meredith.morris@transport.nsw.gov.au

Subject: Q Station Annual Environmental Reports - Invitation to review reports and provide comments

Dear Meredith,

Please refer to the attached files.

SNC-Lavalin has been engaged by the National Parks and Wildlife Service (NPWS) and Mawland Quarantine Station Pty Ltd (Mawland) to prepare the latest Annual Environment Reports for the Quarantine Station (Q Station), located in Sydney Harbour National Park at North Head, Manly. These reports cover the reporting periods, from July 2018 – December 2019 and January 2020 – December 2020.

In accordance with Conditions 221, 224-225 of the CoPA, copies of the Annual Environment Reports are to be made available to selected stakeholders for their review and comment. You are invited to comment on these reports and in accordance with Condition 221, it is requested that stakeholders review the documentation with regard to 'issues associated with visitor impacts arising from the activity'.

It would be greatly appreciated if you could please provide any comments or remarks on these reports by 14 January 2022. To streamline this process, a comments template is enclosed. On completion of your review, please return the completed comments template or other correspondence to the email noted below by 14 January 2022. If no response is received by this date, it will be assumed that you do not wish to provide any comments or feedback on the reports.

If you have any questions, please do not hesitate to contact me on 0405635333 or at cheryl.cahill@atkinsglobal.com.

Regards,

Cheryl Cahill

Files attached to this message

Filename	Size	Checksum (SHA256)
comments template.docx	95.9 KB	79c1dae6cd77ea5a907ef4881e7aad7dcdaa71f6276a6a3b62d9c6497655167b
TfNSW 15122021.pdf	409 KB	331170eb4f0d982819d36597931f40bcec8d425e44f50d27a28ddf7ba3775312

Filename	Size	Checksum (SHA256)
North Head Q Station - Annual Environmental Report - July 18 to Dec 19 Final.pdf	12.7 MB	b80b5bb799394ac67d2ebb68ddfd1a0ea2259b0222ecb0b562fcb682869c968c
North Head Q Station Annual Environmental Report Jan to Dec 2020 Final 20211215.pdf	37.5 MB	c1fd2b765fae5200f91377f5e6dbb5c298fc70a824475ee891261ba9ddcab508

Please click on the following link to download the attachments:

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The attachments are available until: **Wednesday, 29 December.**

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