



NORTH HEAD QUARANTINE STATION

2023 Annual Monitoring Review

By NORTH HEAD SYDNEY PTY LTD

for the period 1/1/2023 to 31/12/2023



Contents

Introduction	3
CoPA Requirements.....	3
Document Version Control.....	3
Section 1 Overview	4
1.1 Executive Summary	4
1.2 IMAMS Program Introduction.....	4
1.3 Overall performance	4
1.4 Summary Indicator Performance	6
1.5 Trends over time	6
1.6 Summary of Management Measures proposed.	7
Section 2 Monitoring Process	8
2.1 Scope of monitoring within Headline Indicators.....	8
2.2 Sustainability Index	8
Section 3 Detailed Indicator Performances 2023.....	9
3.1 Environmental Conditions Index	9
3.2 Environmental indicators where performance is out of acceptable range.....	11
3.3 Cultural Heritage Conditions Index	12
3.4 Cultural heritage indicators where performance is out of acceptable range	15
3.5 Social Conditions Index	17
3.6 Social indicators where performance is out of acceptable range	21
3.7 Economic Conditions Index.....	23
3.8 Economic indicators where performance is out of acceptable range.....	24

Introduction

The site is leased by North Head Sydney from the NSW National Parks and Wildlife Service, the other co-proponent for the conservation and adaptive re-use of the site.

The conditions of planning approval [CoPA] are contained in the Consolidated Consent Quarantine Station North Head (MP08_0041) as modified by MP08_0041 – Mod 3 – 25/05/2018

Condition 216 – 220 outline the Monitoring requirements with CoPA 218 and CoPA219 specifying the contents of this report in line with the Annual Environmental Audit.

This report has been prepared by Helen Drew, Interpretation Officer at Q Station.

CoPA Requirements

- 218 On the basis of the outcomes of the integrated monitoring program, the co-proponents shall subject to DEC (now NPWS) 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.
- 219 As part of the annual environmental report (CoPA221) and comprehensive audit (CoPA226) the co-proponents shall produce a monitoring report outlining results from the integrated monitoring program the report shall include
- a. an analysis of monitoring results and trends collected over time.
 - b. Identify measures taken or proposed to be undertaken to respond to any adverse or unexpected impacts identified.

Document Version Control

Document version	Date	Comment
Draft	29.12.23	Draft submitted to QSCCC, NSW Planning, DPI Fisheries for comment.
Draft 2	22.02.24	Updated with reference from submissions by QSCCC & NSW Planning. Incorporation of NPWS monitored indices mean Environmental, Cultural Heritage Indicators have changed slightly but the overall Sustainability Index remains at 0.89 Summary of proposed management measures included.

Section 1 Overview

1.1 Executive Summary

This report summarises the sustainability of the former North Head Quarantine Station, the environment of the site, its cultural heritage, its tourism activities, and business in the form of Q Station. It covers the period 1st January- 30th December 2023.

This report is based upon the NHQS Integrated Monitoring and Adaptive Management system (IMAMS). This system is designed to monitor the impacts of the Q Station activity upon the site across environmental, cultural, social and economic dimensions.

Section 1, Overview details the IMAMS program, how it works, and describes the overall performance of this monitoring for 2023 and compares this to past Indices.

Section 2, Monitoring Process records the Specific Indicators that have been monitored in 2023.

Section 3 outlines the detailed Specific Indicator monitoring information for the Environmental, Cultural Heritage, Social Conditions and Economic Indices, with commentary for each and adaptive measures suggested for those indicators which have not achieved the acceptable range in 2023.

1.2 IMAMS Program Introduction

The Q Station IMAMS program was conceptualised and approved by DPE and Heritage Office in 2006. The outcomes of monitoring reports since then is captured in the section 1.5 Trends over Time.

If certain predefined environmental, social, cultural, and economic conditions can be simultaneously achieved then the indicative outcome is that the operation is approaching a sustainable level. Each condition's sustainability is based on information collected from the monitoring of specific indicators and represented as a sustainability index. Through ongoing data collection, it is possible to measure how the sustainability of these conditions change over time. The IMAMS framework also contains adaptive response measures for planned changes to management practices to assist in achieving this sustainable operation on site.

In 2023 the 2006 IMAMS plan was reviewed, and changes were made to the specific indicators to be monitored, the monitoring methods and in some cases the benchmarks and acceptable ranges were updated. In the 17 years since the IMAMS' inception changes have occurred to both the CoPA and within the Q Station business operation. In addition monitoring methods have changed as best practise management guidelines have been updated. This 2023 IMAMS report is based on the indicators outlined in the 2023 IMAMS.

In addition to monitoring performance, the IMAM program allows for management decisions to be made through the implementation of adaptive measures. Adaptive measures implemented or proposed are clarified in section 3 Detailed Indicator performance.

1.3 Overall performance

The overall Sustainability Index for 2023 is 0.89. The last year that Index data was available for was in 2020 when an index of 0.95 was achieved. (2020 Annual Environment Report by SNC-Lavalin) Since this time, in May 2022 the ownership of the Q Station business has transitioned from Mawland to North Head Sydney. Overall, the performance of the site was within expectations.

During 2023 the Australian economy faced many challenges with increased cost of living, high petrol prices, 12 increases in the interest rate charge by lenders. The result of these challenges was that consumer and businesses have had to prioritise their financial resources. For visitors, this means less

North Head Quarantine Station 2023 Annual Monitoring Report

discretionary spending and for Q Station an increased focus on managing business costs. Despite these challenges, Q Station scored a 1.00 on its Economic indicator.

Through 2023 Q Station has worked with Heathlands Nursery and Marine Pollution Research to improve the management on site of seagrass monitoring and bushland care resulting in achievement of acceptable ranges for these specific indicators. Four of the specific Environmental indices have been covered by the 2023 NPWS Monitoring Report. The Headline Indicator score of each of the NPWS indicators has been included in this report to attain the overall Environmental Index. Details of specific indices and monitoring can be found in Appendix E NPWS Annual Monitoring Report 2023. Monitoring around noise impacts, particularly off site remains difficult to monitor due to the changes in use around North Head since the activity's inception in 2006. The overall index score of 0.92 for the Environment Index has decreased slightly from 2020's score of 0.94.

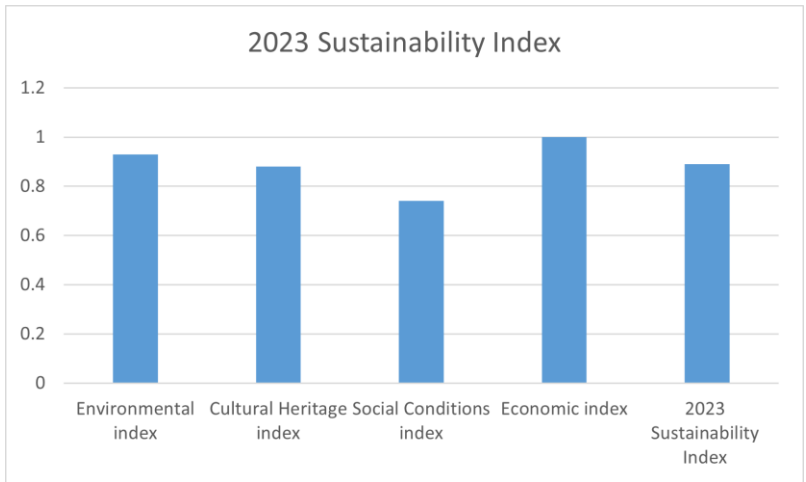
The Cultural Heritage specific indicators resulted in an overall score of 0.90 which has decreased since 2020. Through 2023 much work has been done in the conservation of the buildings and site to ensure for example that paintwork has been renewed and drains are cleared regularly. Conservation works remain an ongoing priority, however the legacy of previous maintenance and conservation strategies mean that there is considerable work to be done.

Post-covid, the Australian tourism industry has faced challenges as many members of the population are holidaying overseas or interstate. The Social index has shown a decrease from its 2020 score of 1.00 to 0.74. Improving engagement with the Quarantine Station site is crucial to ensuring the score of this index is improved. To remain competitive in the tourism market the accommodation rooms need updating. Continued feedback from guests around the lack of air conditioning in the accommodation means that the site is less attractive for overnight stays during summer months. Updating the Visitor Centre to create a reinvigorated space with refreshed exhibition and contemporary tour products is seen as a key approach in improving engagement with the significance of the Quarantine Station site. In the transition from Mawland to NHS ownership some of the business processes around tour bookings and staff training have changed resulting in lower contributing scores. Adaptive measures to improve these indicators have been outlined in Section 3. Arrival to Q Station by water remains a challenging situation for NHS post-covid with the lapse of the ferry service. NHS is committed to continuing negotiations with ferry providers to reinstate this service.

Notwithstanding these challenges the overall performance of the Q Station was acceptable.

1.4 Summary Indicator Performance

Sustainability index	Total number of specific indicators	Index
Environmental index	34	0.92
Cultural Heritage index	26	0.90
Social conditions index	31	0.74
Economic index	11	1.00
Total	101	2023 Index 0.89



1.5 Trends over time

Report	Environmental	Cultural	Social	Economic	Overall
1.10.2007	1.00	0.94	0.88	1.00	0.96
1.4.2008	0.99	0.93	0.98	1.00	0.97
31.12.2008	0.84	0.68	0.87	0.63	0.76
30.6.2009	0.90	0.68	0.91	0.59	0.77
31.12.2009	0.91	0.71	0.87	0.67	0.79
30.6.2010	0.95	0.88	0.86	0.66	0.84
30.12.2010	0.92	0.88	0.92	0.66	0.84
30.12.2011	Audit				0.96
30.12.2012	Audit				0.96
30.12.2013	0.94	0.90	1.00	0.93	0.94
30.12.2014	0.91	0.90	1.00	0.93	0.94
30.12.2015	0.87	0.86	0.98	0.93	0.91
30.12.2016	0.90	0.70	1.00	0.95	0.89
30.12.2017	0.92	0.70	0.96	0.93	0.88
2018					N/A
2019	1.00	0.92	1.00	0.96	0.97
2020	0.94	0.92	1.0	0.92	0.95
2021					N/A
2022					N/A
2023	0.92	0.90	0.74	1.00	0.89

1.6 Summary of Management Measures proposed.

The table below represents a summary of the Specific Indicators which fell outside of the acceptable range during 2023 monitoring and the proposed management measures to be undertaken.

Specific Indicator	Management measure to be undertaken in 2024
Interior and exterior rusting metal elements	Increased vigilance of rust and the incorporation of metal treatments into routine maintenance for 2024
Wharf planking and steps firmly fastened and showing no splits, holes or failure	Temporary repairs will continue whilst funding for larger scale repair is sought
Clearly differentiated cultural landscape representing the early Aviation Phase	Greater clarity is required through the NHQS site wide plans as to how the cultural landscape of the Aviation phase can be achieved with specific landscape management strategies
Visitors who arrive by ferry and water based methods	On going negotiations will take place with ferry providers with the objective of reestablishing this service. The Q Station shuttle will continue to facilitate trips to Manly Wharf
Visitors with a demonstrated awareness of the minimal impact code	Minimal impact code signage has been reviewed and will be replaced early 2024 with emphasis in the reception and wharf areas. Questions in the Visitor survey around the minimal impact code will be refined for greater clarity and to elicit a greater understanding.
Hotel guests participating in a tour	Change to booking process to ensure the question, 'Are you staying at Q Station?' is mandatory, to ensure accurate data is collected. An updated Visitor Centre, with reimagined exhibition content is part of NHS's master plan. In conjunction with this an exciting tour experience to engage visitors with audio- visual content will further drive higher levels of engagement with the site
Operations staff recorded as being induction trained	In 2024 NHS will look to provide an online induction session in addition to face to face sessions, for staff who cannot attend an in person induction session

Section 2 Monitoring Process

2.1 Scope of monitoring within Headline Indicators

The monitoring (IMAM) program is divided into 4 dimensions, within which are headline Indicators as outlined below. Each headline indicator is broken into further Specific Indicators as described in Section 3 2023 Detailed Indicator performance.

Environmental Conditions Headline Indicators	Cultural Conditions Headline Indicators	Social Conditions Headline Indicators	Economic Conditions Headline Indicators
Long nosed bandicoot health	Building condition	Visitor access	Occupancy levels
Fauna and flora impacts	Infrastructure condition	Visitor numbers	Repeat visitors
Little penguin population	Cultural landscape condition	Representation of the leisure market	Revenue
Seagrass health	Moveable heritage	Emotional responses of the leisure market	Yield
Predators and pests	Aboriginal site condition	Satisfaction of the leisure market	Staff retention
Native vegetation health		Customer complaints	Quarantine Site
Noise impacts		Minimal impact code	
Light impacts		Staff and contractor training	
Stormwater quality and quantity		Public perceptions	
Erosion and runoff		Media	
Resource use		Research opportunities	
Waste generation		Public complaints	

2.2 Sustainability Index

The sustainability Index for each condition, measures the combined results of all specific indicators under each headline indicator. For every monitored result recorded to be within the acceptable range a '1' is scored or a '0' if outside of the acceptable range. These are then totalled and recorded as a decimal fraction of the total specific indicators within that condition.

Through analysis of the sustainability indices over time, trends may be identified.

Section 3 Detailed Indicator Performances 2023

3.1 Environmental Conditions Index

2023 Environmental Index is 0.92

The Environmental Index has been scored as a combination of NPWS and NHS monitored indicators. Please see 2023 NPWS Monitoring report for details regarding monitoring of these Specific Indicators ; Long-nosed Bandicoot Population health, Little penguin population health; native vegetation health; and predator and pests.



Clear stormwater drain outside S1



Managed bushland area behind A2



Subtidal seagrass beds comprised mixed Zostera and Posidonia



Visitor Recycling point in Wharf precinct

Within the scope of NHS monitored indicators, the headline indicator of Noise Impacts was the greatest influence on the final outcome. Indicators 19 and 20 both measuring noise measured off site and indicator 21, noise levels generated on site have not been determined in 2023. However no noise complaints have been received in 2023. An external consultant completed a noise report assessing noise levels 20 metres from within the Boilerhouse Restaurant for Indicator 22.

In 2023 a consultant, Marine Pollution Research assessed the seagrass coverage and density to ascertain a new benchmark. This included reviewing past monitoring data back to 1995 to establish a monitoring process. NSW Fisheries have had input into the monitoring which will next occur in Feb 2024.

Resource use at Q Station has been carefully managed with all monitoring falling within the acceptable ranges for these indicators.

There has been no construction through 2023 at Q Station hence Indicator 3 has achieved a score of 1.

North Head Quarantine Station 2023 Annual Monitoring Report

ENVIRONMENTAL INDEX					
2023 Environmental Index				0.92	
monitoring responsibility	Indicator number	2023 specific indicator	Specific indicator Score	Headline Indicator Score	Headline Indicator
NPWS	1 and 2	Combined specific Indicator score from details in Appendix E NPWS Annual Monitoring report 2023		1	Long Nosed Bandicoot population health
NHS	3	Inadvertent impact to flora and fauna from construction activity	1	1	Flora and fauna impacts
NPWS	4-6	Combined specific Indicator score from details in Appendix E NPWS Annual Monitoring report 2023		1	Little penguin population health
NHS	7	Aerial coverage of seagrass beds off Quarantine Wharf and Beach	1	1	Seagrass health
NHS	8	Seagrass density off Quarantine Wharf and Beach	1		
NPWS	9-11	Combined specific Indicator score from details in Appendix E NPWS Annual Monitoring report 2023		0.67	Predators and Pests
NPWS	12-14	Combined specific Indicator score from details in Appendix E NPWS Annual Monitoring report 2023	1	1	Native vegetation health
NPWS	15-16	New Specific Indicators proposed in 2023 IMAMS program for future monitoring - Asset Protection Zone (fuel hazard and width)	No data		
NHS	17	Weed coverage within selected bushland areas (including ESBS)	1		
NHS	18	Construction noise levels	1	0.4	Noise impacts
NHS	19	Traffic noise levels on Darley Road by Parkhill Gate	0		
NHS	20	Noise levels off site generated by on site activities	0		
NHS	21	Noise levels on site generated by on-site activities	0		
NHS	22	Amplified indoor music or noise levels from Boilerhouse	1		
NHS	23	Light spill on the northern end of Quarantine Beach	1	1	Light impacts
NHS	24	Light spill in Bandicoot habitat	1		
NHS	25	Debris in drains and stormwater catchment impacting water quality	1	1	Stormwater quality and quantity
NHS	26	Significant spills or discharges (including sewage overflows)	1		
NHS	27	Sites showing active erosion	1	1	Erosion and runoff
NHS	28	Water consumption	1	1	Resource use
NHS	29	Electricity consumption	1		
NHS	30	Sewage output	1		
NHS	31	Non-recyclable waste removed	1		
NHS	32	Recyclable paper and cardboard removed	1		
NHS	33	recyclable co-mingle waste removed	1		
NHS	34	New Specific Indicator -Recyclable food waste removed	1		
Totals				10.07	11

3.2 Environmental indicators where performance is out of acceptable range

Specific Indicators 19, 20 and 21 were not within acceptable limits as no monitoring of these took place in 2023.

3.3 Cultural Heritage Conditions Index

2023 Cultural Heritage Index is 0.90

The Cultural landscape index for 2023 is lower than that achieved in 2020 which was 0.92. Specific indicators relating to building condition fell within the acceptable range except for 'Interior and Exterior rusting metal elements.'

The visual monitoring of different building indicators provides much non quantifiable data. For example, determining brick buildings which have greater than 10% of their brickwork that needs repointing is not a straightforward assessment. Generally, brickwork is in good condition as shown by images below but there are areas of buildings which do require work. Similarly monitoring the erosion of the supporting sandstone pillars gives data which whilst falling within the acceptable monitoring range, also indicates work to be done in the future. Again, see images below. Monitoring dry rot of decking boards is difficult as much is covered by carpet, but what was visible fell within the acceptable range.

The major element of the headline indicator, Infrastructure Control where monitoring fell outside the acceptable range was for the wharf. 22% boards or steps were found to need repair, outside the acceptable range of 5%.

Monitoring the cultural landscape by assessing views out of the site is difficult to quantify. Images at the defined locations given in the 2006 Heritage Landscape Management plan are compared and included below. Further adaptive measures are recommended.

The Condition of the midden within the Wharf precinct is covered with Appendix E NPWS Annual Monitoring report 2023.

Building Condition Images



Sandstone pillars in good condition -P3



Sandstone pillar in poor condition P1



Light fixture with rust P11



Brickwall with pointing in good condition P6

North Head Quarantine Station 2023 Annual Monitoring Report



P9 demonstrating window functionality, roof and paintwork condition



A20 Brickwork in good condition

Infrastructure Condition



Concrete path behind P10 in good condition



Concrete steps beside A25 in good condition



Cleared building drain-P7



Clear stormwater drain -P13

Cultural Landscape



Fencing behind S10 in poor condition



Fencing around A2 in good condition



Himalaya inscription 2018



Himalaya inscription 2023

North Head Quarantine Station 2023 Annual Monitoring Report

CULTURAL HERITAGE INDEX					
2023 Cultural Index				0.90	
monitoring responsibility	Indicator number	2023 specific indicator	Specific indicator Score	Headline Indicator Score	Headline Indicator
NHS	35	Functioning of all smoke alarms within buildings	1	0.92	Building condition
NHS	36	Roofs showing no sign of deterioration likely to permit water to enter the building	1		
NHS	37	Absence of asbestos cement fretting, cracking or breaking of roofs and roof guttering	1		
NHS	38	Sandstone pillars supporting buildings and touching the building base with more than 75% of their original width	1		
NHS	39	Buildings showing no more than 10% of their brick mortar requiring re- pointing	1		
NHS	40	Presence of moisture entry into internal buildings	1		
NHS	41	Functionality of doors and locks	1		
NHS	42	Window functionality	1		
NHS	43	Timber buildings showing no signs of active termites	1		
NHS	44	Dry rot in timber verandah posts, balustrades and decking	1		
NHS	45	Building exteriors showing loose or damaged sections	1		
NHS	46	Buildings showing cracked or peeling painted wooden surfaces	1		
NHS	47	Interior and exterior rusting metal elements	0		
NHS	48	Incidents resulting in damage to historic heritage (accidental or malicious)	1		
NHS	49	functioning building drains	1	0.83	Infrastructure Condition
NHS	50	Operational historic stormwater drains	1		
NHS	51	Ground settlement underneath roads, paths and structures	1		
NHS	52	Concrete steps and pathways showing cracking or spalling	1		
NHS	53	Road surface and edges alongside historic drains and walls showing no damage	1		
NHS	54	Wharf planking and steps firmly fastened and showing no splits, holes or failure	0		
NHS	55	Clearly differentiated cultural landscape representing the early Aviation Phase	0	0.75	Cultural landscape
NHS	56	Fencing that remains structurally stable	1		
NHS	57	Cultural planted trees(including coral trees) showing no signs of active termites, disease or damage	1		
NHS	58	Condition Assessment ranking for specific inscriptions.	1		
NHS	59	Proportion of moveable heritage items that are allocated to high priority conservation treatment	1	1	Moveable heritage
NPWS	60	Condition of midden in Wharf Precinct	1	1	Aboriginal sites condition
Totals				4.5	5

3.4 Cultural heritage indicators where performance is out of acceptable range

Headline Indicator	Building Condition				
Specific Indicator	Interior and exterior rusting metal elements				
Benchmark	90%	Acceptable range	75-90%	2023 result	65%
2023 Comment			Trends over time		
Determining which elements have been monitored in the past was unclear. 2023 monitoring identified building steps handrails, light fittings, post supports and airflow vents to be appropriate. Some buildings had none of these elements as originals have been replaced. Of existing elements most showed some rust to a greater or lesser degree.			The 2020 report determined that >75% of elements were without active rust.		
			Adaptive measures		
			Increased vigilance of rust and the incorporation of metal treatments into routine maintenance for 2024.		

Headline Indicator	Infrastructure Condition				
Specific Indicator	Wharf planking and steps firmly fastened and showing no splits, holes or failure				
Benchmark	90%	Acceptable range	95-100%	2023 result	77%
2023 Comment			Trends over time		
The IMAM monitoring method describes a method of counting planks which need repair and expressing as a proportion of the whole. For the monitoring purposes planks were counted which included those which have received temporary repairs. This has decreased the overall % of the wharf area where holes, splits or failure may occur.			2020 report determined that 95% of wharf area was in acceptable condition.		
			Adaptive measures		
			Temporary repairs will continue whilst funding for larger scale repair is sought.		

Headline Indicator	Cultural landscape				
Specific Indicator	Clearly differentiated cultural landscape representing the early Aviation Phase				
Benchmark	55%	Acceptable range	60-80%	2023 result	unclear
2023 Comment			Trends over time		
Comparison of views out of the site in 2006 and 2023 are given below. This has been taken from the 2006 HLMP which determines that one way to monitor the adherence to the Aviation phase is described by views an and out of the site from defined locations.			In 2020 this indicator was not achieved. The growth of ESBS was given as the primary reason. As an endangered ecological community, further strategies to balance the cultural and environmental focuses of the site need to be outlined.		
			Adaptive measures		
			Greater clarity is required through the NHQS site wide plans as to how the cultural landscape of the Aviation phase can be achieved with specific landscape management strategies.		

North Head Quarantine Station 2023 Annual Monitoring Report

Views out of the Q Station site, referencing Aviation phase

View in 2006

View in 2023

From road above S15



View to City and North harbour from 2nd Class Precinct



View from Wharf



View towards city from Hospital Precinct



3.5 Social Conditions Index

2023 Social Index is 0.74

Representation of the leisure market, visitors demonstrating an awareness of the visitor minimal impact code, visitor access and staff/contractor training were headline indicators which affected the overall Social index.

Hotel guests participating in a tour was only 23 %, which is below the defined acceptable range within the IMAM. Changes in booking process and a dated Visitor Centre in need of revitalising and updating have affected this score. Changes are also planned to tour experiences offered. Adaptive measures are recommended below.

Indicators 61, 64, and 66 were all outside of the acceptable range but as access methods to be encouraged a 1 has been assigned to each. Private vehicle arrival scored a 60% from Visitor Arrival surveys conducted. No ferry service has been available to Q Station through 2023. See further commentary below.



Left; Quarantine Wander tour group at Hospital precinct



Above; Visitor facilities within Wharf precinct; inscription barrier & interpretation, Shower block open (with barrier & interpretation) for visual inspection , seating for café.



Above; 2023 Q Station After Dark tour brochure



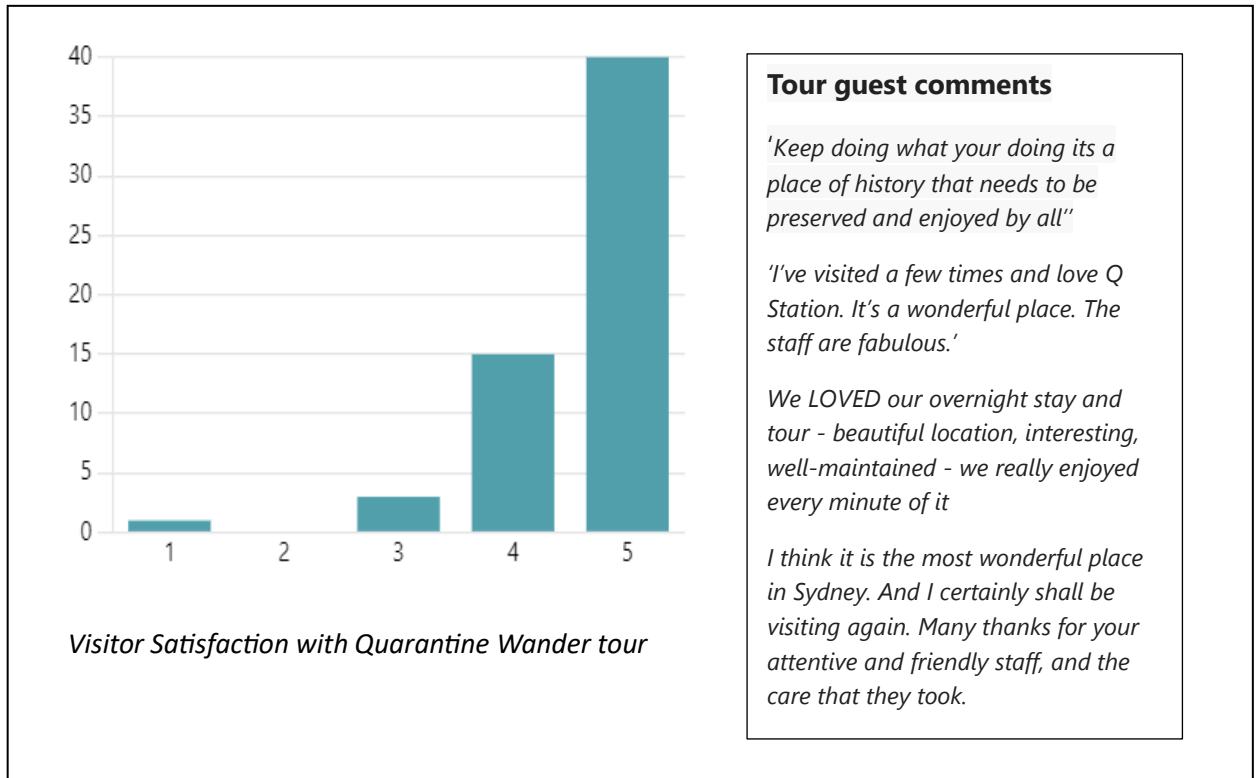
Above; inside A12 Showerblock



Quarantine Wharf

Indicators 75 and 76 within Headline indicator Emotional Responses of leisure target market were both 100%, outside the upper acceptable range of 80% and 95%. Again a 1 has been assigned as this demonstrates huge success for the interpretative program.

Guest and Visitor engagement and satisfaction with their accommodation or tour was high. Out of 59 responses to a Quarantine wander tours survey, 55 responses scored their experience with a 4 or 5 out of 5.



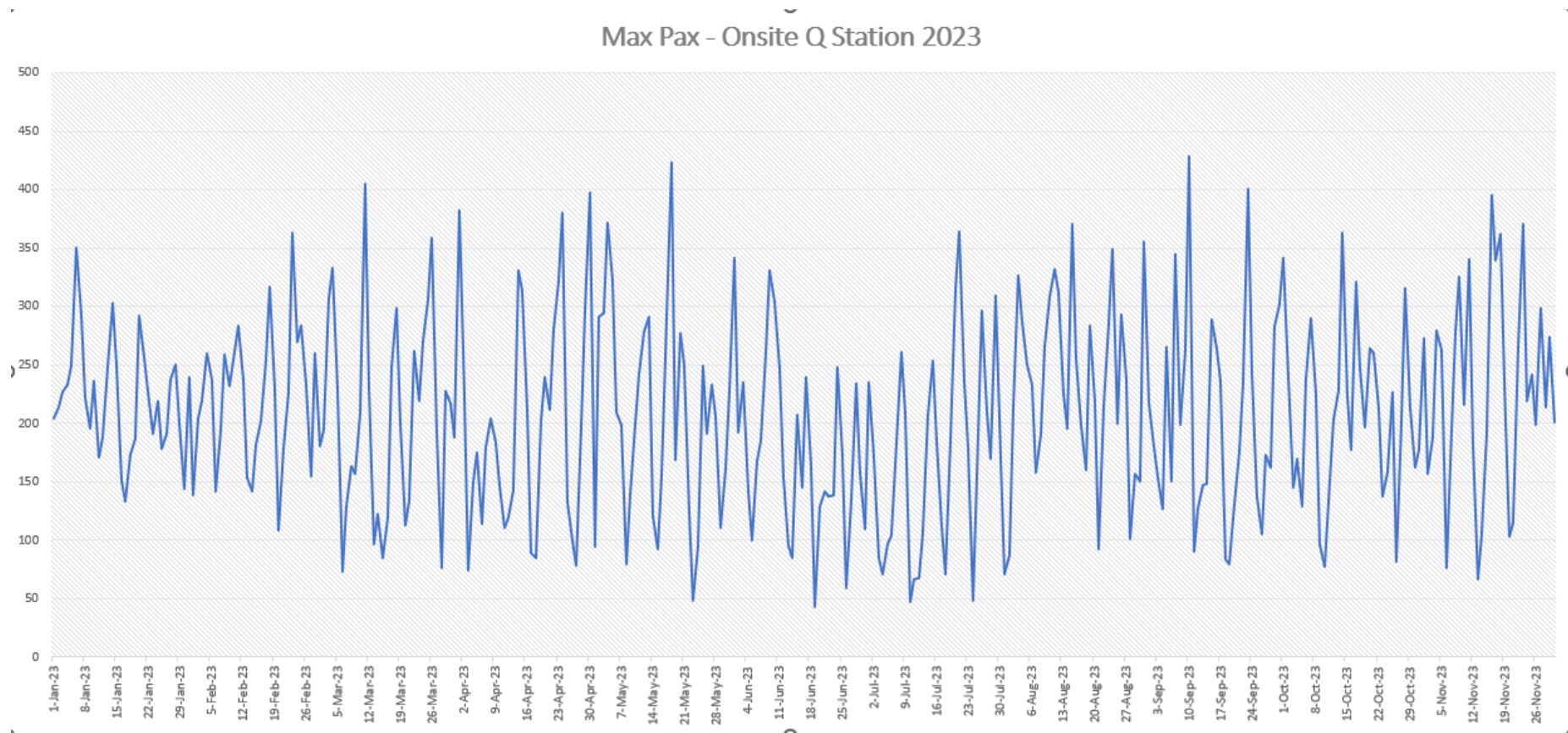
Detailed analysis in the monitoring of the number of people on site has revealed that the average maximum number of people on site was 206, which falls below the acceptable range of 290-450. The graph on the following page shows the fluctuations of total visitor numbers on site over the year.

Headline Indicator, Minimal Impact code did not achieve the acceptable limit. See suggested adaptive measure response outlined below.

Headline Indicator, Staff and Contractor training did not achieve the acceptable range for IMAM monitoring. 3 out of the specific indicators had no data- either new indicators with no 2023 data or in the case of construction contractors, no construction has taken place. See suggested adaptive measure response outlined below for staff training.

North Head Quarantine Station 2023 Annual Monitoring Report

Total maximum visitor numbers on any day throughout the year at Q Station in 2023.



North Head Quarantine Station 2023 Annual Monitoring Report

SOCIAL CONDITIONS INDEX					
2023 Social index				0.74	
monitoring responsibility	Indicator number	2023 specific indicator	Specific indicator Score	Headline Indicator Score	Headline Indicator
NHS	61	Visitors who arrive by Q Station shuttle bus	1	0.88	Visitor access
NHS	62	Visitors who arrive by ferry and water based methods	0		
NHS	63	Visitors who arrive by private vehicle	1		
NHS	64	Visitors who arrive by taxi / uber or chartered coach	1		
NHS	65	Visitors who either walk or cycle to the site	1		
NHS	66	Visitors who arrive by public transport	1		
NHS	67	Vehicles entering the site	1		
NHS	68	Overflow parking area use	1		
NHS	69	Visitors on site at any one time	1	1	Visitor numbers
NHS	70	Visitors within the Wharf Precinct during the day at the time of tours	1		
NHS	71	Participants on all tours and education programs annually	1		
NHS	72	Hotel guests participating in a tour	0	0	Representation of the leisure market
NHS	73	Visitors sensing feelings of isolation and serenity.	1	1	Emotional responses of leisure target market
NHS	74	Visitors' perception that crowding reduced satisfaction.	1		
NHS	75	visitors who felt an emotional response during their tour	1		
NHS	76	Visitors that have learnt something about an interpretative theme during their tour	1		
NHS	77	Visitors that were very satisfied with their tour	1	1	Satisfaction of the leisure market
NHS	78	Hotel guests who were very satisfied with their overnight stay	1		
NHS	79	Net promoter score	1	1	Customer complaints
NHS	80	Visitors with a demonstrated awareness of the Minimal impact code	0	0	Minimal impact code

North Head Quarantine Station 2023 Annual Monitoring Report

NHS	81	Operations staff recorded as being induction trained	0	0	Staff and contractor training
NHS	82	Construction contractors recorded as being induction trained	N/A		
NHS	83	All staff are aware of emergency evacuation plan	N/A		
NHS	84	All staff employed for over 12 months have completed a refresher induction	N/A		
NHS	85	Visitors who believe that the Quarantine Station is being adequately conserved	1	1	Public perceptions
NHS	86	Visitors who believe that there is adequate public access to the Quarantine Station	1		
NHS	87	Visitor recognition of the ongoing on- site role of the NPWS at the Quarantine Station	1		
NHS	88	Visitor who know that the Quarantine Station is part of the Sydney Harbour National Park	1		
NHS	89	positive news stories about Q Station	1	1	Media
NHS	90	Public bookings to access archives and artifacts	1	1	Research opportunities
NHS	91	Complaints from the general public or stakeholders	1	1	Public Complaints
Totals				8.88	12

3.6 Social indicators where performance is out of acceptable range

Headline Indicator	Visitor access				
Specific Indicator	Visitors who arrive by ferry and water based methods				
Benchmark	0	Acceptable range	40-50%	2023 result	0
2023 Comment	Trends over time				
Through 2023 no ferry service has been available. NHS remains committed to providing this access for all guests and continues to pursue opportunities to implement this service.	Post- covid the ferry service to Q Station has not been reestablished, resulting in the non achievement of the acceptable range for this indicator which has been acceptable for some monitoring periods in the past. The 2020 report indicated 2019 use of ferry.				
	Adaptive measures				
	On going negotiations will take place with ferry providers with the objective of reestablishing this service. The Q Station shuttle will continue to facilitate trips to Manly Wharf.				

Headline Indicator	Minimal impact code				
Specific Indicator	Visitors with a demonstrated awareness of the minimal impact code				
Benchmark	50%	Acceptable range	50-70%	2023 result	30%
2023 Comment	Trends over time				
Monitoring data was collected through 2 visitor surveys, one for history tour guests and one for on site visitors. The on site visitor data revealed a greater understanding of recognised actions to assist in minimising impacts to the site.	In the 2020 Monitoring report >50% score was achieved for this specific indicator				
	Adaptive measures				
	Minimal impact code signage has been reviewed and will be replaced early 2024 with emphasis in the reception and wharf areas. Questions in the Visitor survey around the minimal impact code will be refined for greater clarity and to elicit a greater understanding.				

North Head Quarantine Station 2023 Annual Monitoring Report

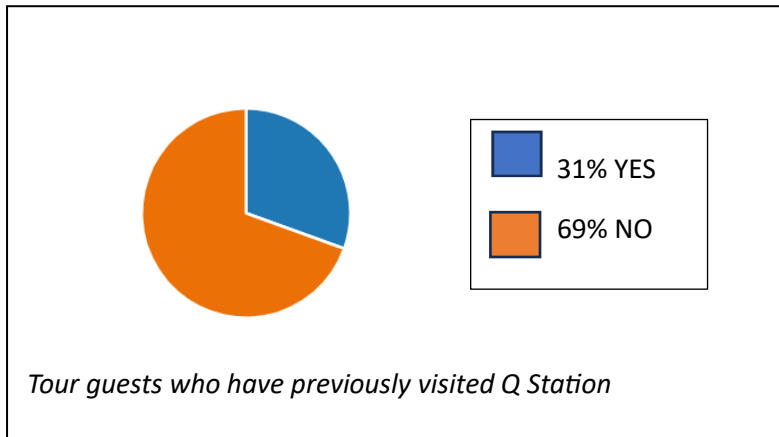
Headline Indicator	Representation of the Leisure market				
Specific Indicator	Hotel guests participating in a tour				
Benchmark	20%	Acceptable range	45-75%	2023 result	23%
2023 Comment			Trends over time		
<p>Monitoring data was collected through the tour booking system and revealed 5133 guests booked were staying at Q Station whilst participating in a tour. Through 2023 the question which determined this outcome was an optional one during the booking process.</p> <p>An outdated Visitor Centre is also seen as part of the reason for fewer visitors attending tours. The area needs re-energising to provide an attractive and exciting start point to engage visitors to want to participate in a tour.</p>			<p>In the 2020 Monitoring report the acceptable range was achieved for this specific indicator with a score of >45%. Changes to booking process are thought to be responsible.</p>		
			<p>Adaptive measures</p> <p>Change to booking process to ensure the question, 'Are you staying at Q Station?' is mandatory, to ensure accurate data is collected.</p> <p>An updated Visitor Centre, with reimagined exhibition content is part of NHS's master plan. In conjunction with this an exciting tour experience to engage visitors with audio- visual content will further drive higher levels of engagement with the site.</p>		

Headline Indicator	Staff and Contractor Training				
Specific Indicator	Operations staff recorded as being induction trained				
Benchmark	90%	Acceptable range	90-100%	2023 result	81.9%
2023 Comment			Trends over time		
<p>A new induction process has been established through 2023. The primary difficulty in not achieving the minimum 90% mark is in offering suitable times for all staff who work a variety of shifts including casual staff who work evenings or weekends only.</p>			<p>In the 2020 Monitoring report scored >90% for this specific indicator.</p>		
			<p>Adaptive measures</p> <p>In 2024 NHS will look to provide an online induction session in addition to face to face sessions, for staff who cannot attend an in person induction session.</p>		

3.7 Economic Conditions Index

2023 Economic Index is 1.00

A score of 1 in the Economic Index is the result of achieving acceptable ranges in all the Specific indicators. Room and public tour occupancy were both strong despite the challenging Australian economic climate. Repeat visitation on Quarantine Wander tours was 30.5% which was slightly above the acceptable range 10-30%- a 1 was scored for this indicator, despite being out of range.



The length of hotel guest stay was averaged at 1.7 nights and the total number of bed nights sold for 2023 was solidly within the acceptable range.



Guest Accommodation; Cottage S4 and Accommodation Block P9

Staff tenure was also within the prescribed acceptable range. Whilst there were many new staff employed through 2023 at Q Station there are a number of staff who have very long tenure with the business which averaged out at a tenure of 2.4 years.

NPWS will include Environmental Incidents and Lease Breach monitoring data in there 2023 NPWS Monitoring report.

North Head Quarantine Station 2023 Annual Monitoring Report

ECONOMIC INDEX					
2023 Economic Index					1.00
monitoring responsibility	Indicator number	2023 specific indicator	Specific indicator Score	Headline Indicator Score	Headline Indicator
NHS	92	Bed nights sold	1	1	Occupancy levels
NHS	93	length of hotel guest stay	1		
NHS	94	overall room occupancy	1		
NHS	95	Occupancy across all public tours	1		
NHS	96	Visitors who have previously been to the Quarantine Station site	1	1	Repeat visitors
NHS	97	Total revenue	1	1	Revenue
NHS	98	Average room rate	1	1	Yield
NHS	99	Average Spend Per Guest based on Total Revenue	1		
NHS	100	Average Staff tenure	1	1	Staff retention
NHS	101	Environmental incidents	1	1	Quarantine Station site
NPWS	102	Lease breach notifications	1		
Totals				6	6

3.8 Economic indicators where performance is out of acceptable range.

No Economic specific Indicators' performance was out of acceptable range in 2023.