

# Taronga Institute of Science and Learning

## Operational Management Plan

### Contents

<b>1</b>	<b>Vision and strategic objectives</b>	<b>6</b>
1.1	Vision	6
1.2	Legislative objectives	6
1.3	Strategic objectives	6
<b>2</b>	<b>Organisational structure</b>	<b>7</b>
<b>3</b>	<b>Operations summary</b>	<b>9</b>
3.1	Site details	9
3.2	Overview of activities	9
3.3	Overview of facilities	10
3.4	Hours of operation	11
3.5	Indicative daily operations schedule	11
3.6	Access	12
3.7	Noise management	12
3.8	Safety and security	13
	<b>Program requirements</b>	<b>14</b>
3.9	Learning programs	14
3.9.1	Curriculum aligned school education	14
3.9.2	Community programs	15
3.9.3	Vocational education and training programs	17
3.9.4	Undergraduate and postgraduate university programs	18

3.9.5	Professional training programs .....	20
3.10	Conservation science programs.....	20
3.10.1	Wildlife Health .....	20
3.10.2	Ecology (marine and terrestrial) .....	21
3.10.3	Population Viability .....	21
3.10.4	Behaviour .....	22
3.10.5	Nutrition .....	22
<b>4</b>	<b>Facilities.....</b>	<b>23</b>
4.1.1	Learning facilities.....	23
4.1.2	Conservation science facilities .....	25
4.1.3	Collaboration facilities .....	27
<b>5</b>	<b>Additional operational requirements by division .....</b>	<b>31</b>
5.1	Experience, Education and Community Programs .....	31
5.1.1	Interpretation .....	31
5.1.2	Education and community program administration and concierge .....	31
5.1.3	Taronga guest access .....	31
5.2	Conservation, Research and Life Sciences .....	32

# Taronga Institute of Science and Learning

## Operational Management Plan

5.2.1	Life Sciences operations .....	32
5.2.1.1	Resourcing .....	32
5.2.1.2	Animal welfare .....	32
5.2.1.3	Animal training.....	33
5.2.1.4	Animal handling.....	33
5.2.2	Animal collection plan.....	33
5.2.3	Animal presentation and support facilities .....	35
5.3	People, Culture and Learning .....	36
5.3.1	Change management and staff communications.....	36
5.3.2	Resourcing .....	36
5.3.3	Training and development.....	36
	The learning and development team will provide ongoing support for staff training and development as required to support and ensure continuous improvement of the Taronga Institute operation and program delivery. ....	36
5.3.4	Work Health and Safety .....	37
5.3.5	Volunteers .....	37
5.4	Marketing, Commercial and Fundraising .....	38
5.4.1	Marketing and product development.....	38

# Taronga Institute of Science and Learning

## Operational Management Plan

The Marketing Team will be responsible for marketing and promotion of the Taronga Institute and individual programs. A primary and secondary contact point within the Marketing Team will be established to ensure sufficient coverage and expand organisational knowledge on the range of products in science and learning. ....	38
The selection of content and / or specific programs for promotion will be determined in consultation with relevant managers and the Taronga Institute Project and Business Manager to maximise the benefits of any marketing spend for the Taronga Institute. ....	38
Product development will be the responsibility of the Taronga Institute Project and Business Manager in consultation with relevant program managers. Product development must align with one or more of the objectives of the Taronga Institute to: .....	38
5.4.2 Taronga Foundation fundraising .....	38
The Taronga Foundation will provide ongoing support and advice to secure financial support for the Taronga Institute construction and operation. ....	38
5.4.3 Media and public relations .....	38
The Communications Team will support the operation of the Taronga Institute by identifying suitable opportunities for media and public relations. Opportunities include but are not limited to the commencement of construction of the Taronga Institute, the opening of the Taronga Institute and program specific milestones and achievements.....	38
5.5 Property, Infrastructure and Operations .....	39
5.5.1 Operational support services .....	39
5.5.2 Environmental sustainability.....	39
5.5.3 Asset maintenance.....	40
5.5.4 Facilities maintenance.....	40
5.5.5 Horticulture management.....	40
5.6 Corporate Services and Governance.....	41

**Taronga Institute of Science and Learning  
Operational Management Plan**

5.6.1 Information technology .....41

5.6.2 Records management .....41

5.6.3 Operating budget .....41

5.6.4 Risk management .....42

# 1 Vision and strategic objectives

## 1.1 Vision

Taronga's vision for the Taronga Institute of Science and Learning (Taronga Institute) is to *generate, communicate and apply knowledge* to help secure a shared future for wildlife and people. This vision will be achieved through:

- a. the delivery of high quality learning programs from pre-K to PhD;
- b. the conduct of science investigation, application and communication activities; and
- c. effective collaboration between our people and with our partners in education, research and conservation.

## 1.2 Legislative objectives

The operations of the Taronga Institute will support Taronga to deliver against its legislative objectives as they are defined in the Zoological Parks Board Act 1973 (NSW) and relate to conservation science and learning:

15 (1)(a) – Carry out research and breeding programs for the preservation of endangered species.

15 (1)(b) – Carry out research programs for the conservation and management of other species.

15 (1)(c) – Conduct public education and awareness programs about species conservation and management.

15 (3)(a) – Co-operation with, and providing funds and other assistance to, such scientific and other institutions, governments and other bodies and individuals as the Board may determine in connection with species conservation and management and for other scientific and zoological purposes.

15 (3)(b) – Investigation and carrying out of research into the: design of, and equipment and procedures in, zoological parks; and care and well-being of animals kept in zoological parks.

15 (3)(c) – Provision of educational services for the public (whether in the nature of lectures, , films, publications or otherwise) about species conservation and management, zoological parks and the biology of animals.

## 1.3 Strategic objectives

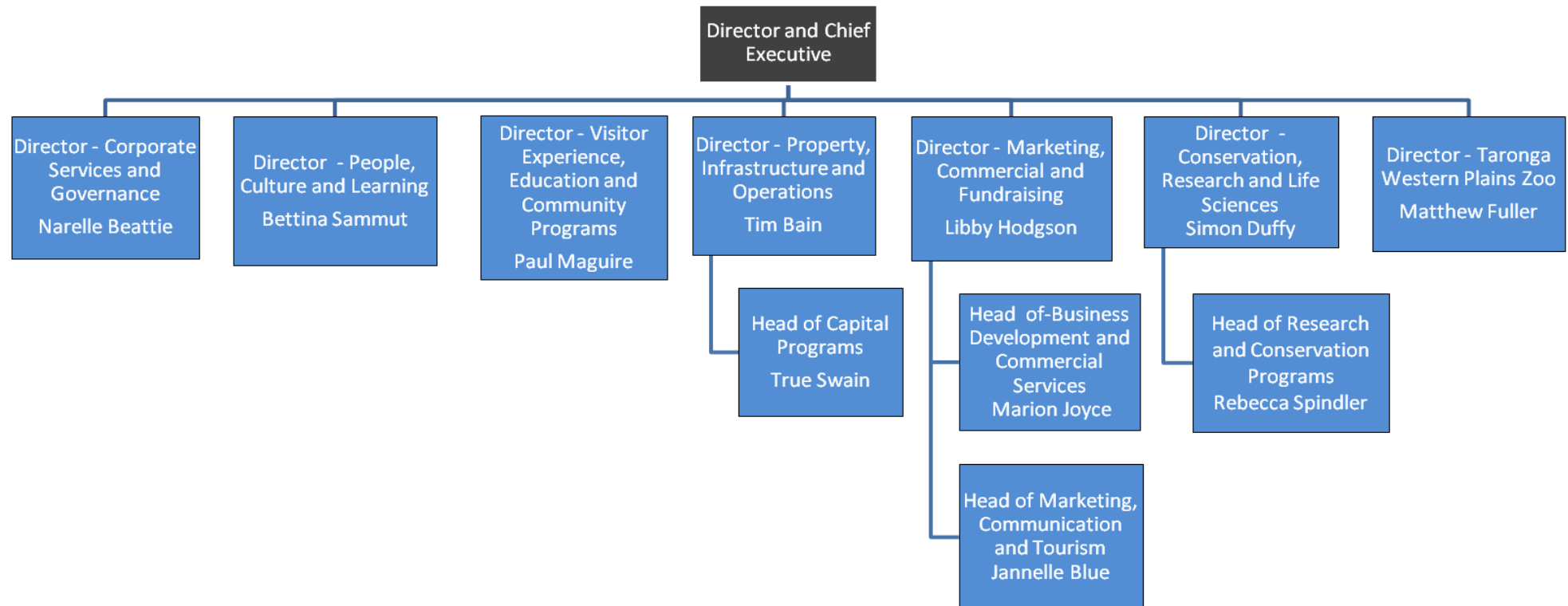
The operations of the Taronga Institute will also support the achievement of Taronga's 2016-2020 Strategic Plan priorities:

- Conservation outcomes
- Wildlife in our care
- Transformational guest experiences
- Excellence in conservation education
- Engage and influence

## 2 Organisational structure

The operation of the Taronga Institute will require input from across the Taronga organisation. Coordination of operational requirements will be the responsibility of the Taronga Institute Project and Business Manager within the People, Culture and Learning Division.

An organisational chart is included below and the key functions performed by each division listed on the following page.



**Taronga Institute of Science and Learning  
Operational Management Plan**

Corporate Services and Governance	People, Culture and Learning	Experience, Education and Community Programs	Property, Infrastructure and Operations	Marketing, Commercial and Fundraising	Conservation, Research and Life Sciences	Taronga Western Plains Zoo
<ul style="list-style-type: none"> <li>- Finance</li> <li>- Information Technology</li> <li>- Records</li> <li>- Procurement</li> <li>- Legal</li> <li>- Governance</li> <li>- Audit</li> <li>- Risk Management</li> <li>- Insurances</li> </ul>	<ul style="list-style-type: none"> <li>- Human Resources</li> <li>- Payroll</li> <li>- Work Health and Safety</li> <li>- Industrial Relations</li> <li>- Volunteer Programs</li> <li>- Training and Development</li> <li>- Taronga Institute of Science and Learning</li> <li>- Taronga Training Institute</li> </ul>	<ul style="list-style-type: none"> <li>- Visitor Operations</li> <li>- Visitor Experience</li> <li>- Education</li> <li>- Community Conservation</li> <li>- Roar and Snore</li> <li>- Aboriginal Programs</li> <li>- DOCS Programs</li> <li>- Interpretations and Site Coordination</li> </ul>	<ul style="list-style-type: none"> <li>- Facilities Management</li> <li>- Sky Safari</li> <li>- Cleaning</li> <li>- Security</li> <li>- Environmental Sustainability</li> <li>- Horticulture and Browse</li> <li>- Capital program development</li> <li>- Capital Contracts Management</li> <li>- Waste Management</li> <li>- Heritage Management</li> </ul>	<ul style="list-style-type: none"> <li>- Admissions</li> <li>- Foundation/Fundraising</li> <li>- Sponsorship</li> <li>- Zoo friends Memberships</li> <li>- Marketing</li> <li>- Tourism</li> <li>- Communications/ Media /PR</li> <li>- Business Development</li> <li>- Commercial Operations</li> <li>- Events/Concerts</li> <li>- Retail</li> </ul>	<ul style="list-style-type: none"> <li>- Conservation Programs</li> <li>- Animal Care and Welfare</li> <li>- Research Programs</li> <li>- Veterinary Care &amp; biosecurity</li> <li>- Recovery Programs</li> <li>- Pathology</li> <li>- Curatorial and Records</li> <li>- Wildlife Rehabilitation</li> <li>- Nutrition and Food Prep</li> <li>- Pest Management</li> <li>- Behaviour Enrichment</li> </ul>	<ul style="list-style-type: none"> <li>- TWPZ Operations</li> <li>- Facilities &amp; Asset Mgmt</li> <li>- Life Sciences Operation</li> <li>- Commercial Operations</li> <li>- Catering / Functions, &amp; Events, Retail, Hire &amp;</li> <li>- Visitor Operations</li> <li>- Visitor Experience</li> <li>- Zoofari Lodge</li> <li>- Billabong Camp Savannah Cabins</li> </ul>

## 3 Operations summary

### 3.1 Site details

The Taronga Institute will be located on the site of the existing Education Centre at Taronga Zoo. This location was identified and selected on the basis that it:

- is easily accessible for Taronga Institute user groups – three (3) access points can be activated to manage the movement of people entering and exiting the Taronga Institute to mitigate noise and other impacts on Taronga’s immediate neighbours;
- is in close proximity to public transport and the Taronga Zoo car park;
- provides a direct connection to the Zoo for Taronga Institute users (e.g. school classes that will split their day between formal learning in the Taronga Institute and a self-guided exploration of the Taronga Zoo site); and
- provides a strong visual connection for general visitors to Taronga Zoo and will increase awareness of the Taronga Institute and Taronga’s science and learning activities.

### 3.2 Overview of activities

The following activities will be undertaken at the Taronga Institute:

- a. Learning programs – learning programs fall into four (5) broad categories:
  - curriculum aligned school education
  - community programs
  - vocational education and training
  - undergraduate and postgraduate university programs
  - professional training

Refer Section 4.1 for additional information.

- b. Conservation science programs – Taronga undertakes scientific investigation, application and communication across six (6) core scientific disciplines:
  - Wildlife health
  - Terrestrial ecology
  - Marine ecology
  - Population dynamics and viability

- Behavioural ecology
- Nutritional ecology

Refer Section 4.1.2 for additional information.

c. Collaboration between our people and our partners in education, research and conservation

The Taronga Institute will support cross-disciplinary collaboration and information sharing between our education and research teams, and between our people and partners in education, research and conservation. Program specific collaborations are detailed in Sections 4.1.3 and essential facilities requirements detailed in Section 5 that will enable and foster the culture and ethos of collaboration on which the Taronga Institute has been built.

### 3.3 Overview of facilities

The Taronga Institute will be located on the site of the current Education Centre in the North West corner of Taronga Zoo. It has the following facilities that support our activities:

Learning facilities	Conservation science facilities	Collaboration facilities
<ul style="list-style-type: none"> <li>- Three (3) Immersive classrooms</li> <li>- Three (3) Senior classrooms</li> <li>- One (1) digital classroom</li> <li>- One (1) lecture theatre</li> <li>- One (1) teaching laboratory</li> </ul>	<ul style="list-style-type: none"> <li>- One (1) research laboratory</li> <li>- One (1) dirty specimen preparation area</li> <li>- One (1) cryovats store</li> <li>- One (1) wildlife health microscope / scanner room and store</li> <li>- One (1) behavioural studies room</li> <li>- One (1) food enrichment room</li> </ul>	<ul style="list-style-type: none"> <li>- Taronga offices for 78 people</li> <li>- External offices for 30 people</li> <li>- Four (4) meeting rooms</li> <li>- Eight (8) quiet rooms</li> <li>- One (1) collaborative space</li> </ul>
Refer Section 5.1.1 for additional information	Refer Section 5.1.2 for additional information	Refer Section 5.1.3 for additional information.

Animal presentation and support facilities are detailed in Section 6.2.3.

### 3.4 Hours of operation

As per the current operation of the Taronga Education Centre, the Taronga Institute will be operational:

- Monday to Friday – 7am to 8pm
- Saturday and Sunday – 7am to 5pm

The following additional requirements for access to and operation of the Taronga Institute are specifically noted as falling outside the standard hours of operation:

- Staff access: Taronga staff will have access to the Taronga Institute as required for office and laboratory based work. Access will be managed by in accordance with existing procedures for staff access to the Taronga Zoo site outside the standard hours of operation.
- Zoosnooz: The Zoosnooz program will operate on weeknights and accommodate up to 42 students in the Taronga Institute. Students will sleep in the Taronga Institute Senior Classrooms with a designated 'lights out' time of 9:30pm to assist with noise management. The morning tour program for participating students will commence at 7:00am. Refer Section 4.1.1 for additional details on the Zoosnooz program.
- Lectures and presentations: Taronga will hold lectures and presentations in the Taronga Institute Lecture Theatre. Wherever possible they will be held within standard hours of operation however it may be necessary to run evening events for specific student or community groups that are unable to attend Taronga Zoo during the day. Entry / exit from the Taronga Institute for event participants after hours will be via access point #2 (refer (Section 3.5) to assist with noise management. Refer Section 4.1.4 for additional details of lectures and presentations.

### 3.5 Indicative daily operations schedule

Time	Operations
07:00 – 09:00am	Staff entry
07:00am	Zoosnooz morning program commences
07:30 – 06:00pm	Community program delivery (e.g. Zoo Adventures holiday workshops; Youth at the Zoo)
09:00 – 08:00pm	Tertiary program delivery (e.g. university workshops and vocational education and training programs)
10:00 – 02:00pm	School Education Workshop delivery
04:00 – 06:00pm	Staff exit
Evening	<i>As required</i> – Lectures and presentation events for student or community groups unable to attend Taronga Zoo during the day
09:30pm	Zoosnooz 'lights out'
Services	Cleaning and other support services will take place during Taronga Institute hours of operation

### 3.6 Access

There will be three (3) access points for the Taronga Institute. Operational parameters and restrictions are summarised below.

	Access Point #1 (Primary)	Access Point #2 (Secondary)	Access Point #3 (Secondary)
Location	Within Taronga Zoo grounds next to the Koala Walkabout	Adjacent to the overflow carpark and current Lecture Theatre entrance	Taronga Zoo security portal
Hours of operation	Summer: 09:30 – 5:00pm Winter: 09:30 – 4:30pm	Closed, except for specific evening events outside Taronga Zoo operating hours (exit time should not be later than 10:00pm)	24 hour monitoring by Taronga security staff (refer Section 3.7 below)
User groups	Program participants (e.g. school and university workshop students) Taronga Zoo guests	Event attendees	Taronga staff and volunteers; Student interns; Contractors

### 3.7 Noise management

The Taronga Institute will also operate in accordance with the NSW Industrial Noise Policy (January 2000) and the Acoustic Report prepared for the Development Application.

As for programs currently run in the Education Centre, the following actions will also be taken to assist with the management and mitigation of noise impacts:

- all education and community programs run at the Taronga Institute will be supervised by Taronga staff;
- school and other youth groups will be accompanied by teachers and/or designated carers;
- guest entry to and exit from the Taronga Institute will be from within Taronga Zoo grounds (access point #1) during Taronga Zoo opening hours (summer hours 9:30 – 5pm; winter hours 9:30 – 4:30pm);
- guest entry to and exit from the Taronga Institute outside Taronga Zoo opening hours will be via access point #2. This will provide direct access to the Taronga car park and bus stop on Bradleys Head Road to minimise noise impacts and enable guests to quickly exit the Taronga Zoo site;
- staff / student entry to and exit from the Taronga Institute outside Taronga Zoo opening hours will be via access point #3. This will provide direct access to the Taronga staff car park and coach parking bays to minimise noise impacts and enable staff and students to quickly exit the Taronga Zoo site; and
- amplified music will not be used with the Taronga Institute site.

For the Zoosnooz overnight program, 'lights out' procedures will assist in restricting noise outside the standard hours of operation. The building will also serve as a physical barrier against any residual noise with students sleeping inside three (3) classrooms in the building. Taronga will also undertake a noise monitoring program at set intervals after the commencement of Zoosnooz operations in the Taronga Institute to 'ground truth' noise impact predictions.

Taronga will implement signage at access points #2 and #3 noting the requirement to minimise noise impacts on our neighbours if leaving the Taronga Institute outside Taronga Zoo operating hours.

### **3.8 Safety and security**

The Taronga Zoo site has 24 hour security. Security staff, access control and CCTV collectively provide for effective monitoring of the Taronga Zoo site and the security and safety of animals in our care, our staff and our guests. The following arrangements will be in place to support the Taronga Institute operations.

- Security staff:
  - must hold a Security License (1A1C);
  - provide 24 hour coverage of the Taronga Zoo site per the below rostering schedule;

Shift #1	Shift #2	Shift #3	Shift #4	Shift #5
05:00 – 12:00	06:00 – 14:00	12:00 – 19:00	14:00 – 22:00	22:00 – 06:00

- monitor the Taronga access control system and attend specific locations in the event of intruder or fire alarms;
- secure access points to the Taronga Zoo site at the end of each day;
- undertake the role of Chief Warden outside Taronga Zoo opening hours as part of which they are responsible for coordinating any afterhours emergencies (e.g. first aid).
- Access control: access to the site outside Taronga Zoo opening hours is controlled by Taronga's access control system (Gallagher Security). Entry and exit is permitted at designated points only and monitored by Taronga's security staff (refer above). Access to buildings within the Taronga Zoo site is also monitored and restricted from 19:00 to 06:00 when alarms are activated unless manually overridden by security staff in the event facilities are being used.
- CCTV: there are a number of CCTV cameras on the Taronga Zoo site. Camera placement and the distribution and use of footage is undertaken in accordance with the NSW legislative framework for surveillance. A register of CCTV cameras is maintained and available on the Taronga Zoo intranet.

## Program requirements

### 3.9 Learning programs

The Taronga Institute will be the operating base for all learning programs run at Taronga Zoo. Learning program development and delivery will be the responsibility of various managers within the Experience, Education and Community Programs Division and the People, Culture and Learning Division. Program responsibilities are noted in Section 4.1.1 below.

An indicative program list and basic operational details is below. Detailed program procedures will be developed at least 6 months prior to the opening of the Taronga Institute by the relevant manager in consultation with the Taronga Institute Project and Business Manager.

#### 3.9.1 Curriculum aligned school education

School Workshops	
<b>Description</b>	School workshops are delivered to students from Kindergarten to Year 12. The program is aligned to the NSW Schools Early Stage 1 to Stage 6 Curriculum as well as being in the process of alignment with the National Curriculum. Students also complete a self-guided visit of the Zoo before and / or after their workshop. Workshops are run in partnership with the Department of Education and Catholic Education Office.
<b>Responsible manager</b>	Manager, Education
<b>Hours of operation</b>	10:00 – 2:00pm
<b>PAX per annum</b>	Up to 60,000
<b>Access point</b>	Access point #1
<b>Facilities required</b>	Immersive classrooms; Senior classrooms; Lecture Theatre; Animal encounters
<b>Operational considerations</b>	Scheduling – room availability (etc)

Self-guided school visits	
<b>Description</b>	School groups complete a self-guided tour of the Zoo utilising education resource material made available by Taronga.

**Taronga Institute of Science and Learning**  
**Operational Management Plan**

<b>Responsible manager</b>	Manager, Education
<b>Hours of operation</b>	09:30 – 05:00pm
<b>PAX per annum</b>	Up to 60,000
<b>Access point</b>	Access point #1
<b>Facilities required</b>	Nil. May access the Taronga Institute atrium but will not require access to specialist facilities.
<b>Operational considerations</b>	Encouraging and facilitating access to the Taronga Institute to promote science education if students are not participating in a workshop

<b>Zoosnooz</b>	
<b>Description</b>	An extended learning experience for school students including behind-the-scenes tours and sleepover at the Zoo.
<b>Responsible manager</b>	Manager, Education
<b>Hours of operation</b>	05:00 – 9:30pm (lights out); 07:00 – 5:00pm (Monday to Friday nights only)
<b>PAX per annum</b>	Up 8,000
<b>Access point</b>	Access point #1
<b>Facilities required</b>	Senior classrooms; Animal encounters; Bathroom (toilet / shower) facilities overnight; Bag store
<b>Operational considerations</b>	Meals (breakfast and dinner) – students will be eating at Backyard to Bush (B2B) and the concert lawns Sleeping arrangements – students will sleep on inflatable camping mattresses in the senior classrooms Bathrooms – students are expected to shower before their visit to Taronga but will have access to toilets. Showers are available in the Taronga Institute in the event of an emergency

**3.9.2 Community programs**

<b>Zoo Adventures</b>	
<b>Description</b>	A school holiday program for 5 to 10 year olds that give children the opportunity to experience the sights and sounds of the Zoo.
<b>Responsible manager</b>	Manager, Aboriginal and Community Programs

**Taronga Institute of Science and Learning**  
**Operational Management Plan**

<b>Hours of operation</b>	07:30 – 06:00pm (school holidays only)
<b>PAX per annum</b>	Up to 2,000
<b>Access point</b>	Access point #1
<b>Facilities required</b>	Immersive classrooms; Senior classrooms; Animal encounters; Lecture theatre
<b>Operational considerations</b>	Parent drop off / pick up location including for after hours care; should be proximate to the Zoo Adventures 'home base'

<b>Youth at the Zoo (YATZ)</b>	
<b>Description</b>	An annual program for 13 to 19 year olds, YATZ gives participants the chance to participate in a range of activities at the Zoo including working with Taronga keepers.
<b>Responsible manager</b>	Manager, Aboriginal and Community Programs
<b>Hours of operation</b>	07:00 – 5:00pm (weekends and school holidays only)
<b>PAX per annum</b>	Up to 1,000
<b>Access point</b>	Access point #3
<b>Facilities required</b>	Immersive classrooms; Senior classrooms; Animal encounters; Lecture Theatre; Collaborative space; Bag Store
<b>Operational considerations</b>	Scheduling – room availability (etc)

<b>Wildlife Workshops</b>	
<b>Description</b>	Wildlife Workshops are delivered to international school students visiting Sydney. They combine in-ground activities, interactive classroom style lessons and educational shows to provide an environment in which international school students come face to face with Australian native animals and develop their English language skills.
<b>Responsible manager</b>	Manager, Aboriginal and Community Programs
<b>Hours of operation</b>	09:00 – 05:00pm
<b>PAX per annum</b>	Up to 2,000
<b>Access point</b>	Access point #1

<b>Facilities required</b>	Immersive classrooms; Senior classrooms; Animal encounters
<b>Operational considerations</b>	Scheduling – room availability (etc)

<b>Burbangana</b>	
<b>Description</b>	A joint initiative of Taronga and the Department of Family and Community Services (DFaCS). The program gives young indigenous and non-indigenous people aged from 12 to 17 who are in care the opportunity to engage in activities in and around the Zoo. Participants are referred directly to Taronga by Community Services and attend the program for 12 weeks.
<b>Responsible manager</b>	Manager, Aboriginal and Community Programs
<b>Hours of operation</b>	09:00 – 05:00pm
<b>PAX per annum</b>	Up to 15
<b>Access point</b>	Access point #3
<b>Facilities required</b>	Quiet Room; Animal encounters
<b>Operational considerations</b>	Availability of a designated quiet space for participants to use as required

### 3.9.3 Vocational education and training programs

<b>Certificate Courses</b>	
<b>Description</b>	Delivery of accredited training courses in Animal Care and Management (Certificate II Animal Studies; Certificate III Captive Animals) and Tourism (Certificate I Tourism (Australian Indigenous Culture); Certificate II Tourism; Certificate III Tourism).
<b>Responsible manager</b>	Manager, Learning and Development
<b>Hours of operation</b>	09:00 – 08:00pm
<b>PAX per annum</b>	Up to 500
<b>Access point</b>	Access point #3
<b>Facilities required</b>	Senior classrooms; Collaborative space

<b>Operational considerations</b>	Scheduling – room availability (etc)
-----------------------------------	--------------------------------------

Accredited short courses	
<b>Description</b>	Accredited special interest short courses are delivered to members of the public in specific subject areas (e.g. Animal First Aid and Care of Primates).
<b>Responsible manager</b>	Manager, Learning and Development
<b>Hours of operation</b>	09:00 – 05:00pm
<b>PAX per annum</b>	Up to 250
<b>Access point</b>	Access point #1
<b>Facilities required</b>	Senior classrooms
<b>Operational considerations</b>	Scheduling – room availability (etc)

Non-accredited short courses	
<b>Description</b>	Non-accredited special interest short courses are delivered to members of the public in specific subject areas (e.g. photography).
<b>Responsible manager</b>	Manager, Learning and Development
<b>Hours of operation</b>	09:00 – 05:00pm
<b>PAX per annum</b>	Up to 250
<b>Access point</b>	Access point #1
<b>Facilities required</b>	Senior classrooms
<b>Operational considerations</b>	Scheduling – room availability (etc)

### 3.9.4 Undergraduate and postgraduate university programs

#### Undergraduate workshops

## Taronga Institute of Science and Learning Operational Management Plan

<b>Description</b>	90 minute workshops are delivered to undergraduate students and include a targeted Taronga Zoo site visit and problem-based learning exercise. Students can complete a self-guided visit of the Zoo before and / or after their workshop.
<b>Responsible manager</b>	Taronga Institute Project and Business Manager
<b>Hours of operation</b>	09:00 – 08:00pm
<b>PAX per annum</b>	Up to 2,000
<b>Access point</b>	Access point #1
<b>Facilities required</b>	Lecture theatre; Senior classrooms; Teaching laboratory
<b>Operational considerations</b>	Resourcing – impact of teaching load on existing staff positions

### Intensive undergraduate / postgraduate study programs

<b>Description</b>	Month long, skills based study programs for undergraduate and postgraduate students. Study programs will utilise the Taronga Institute for classroom / lab based teaching as well as the Taronga Zoo site and field locations for practical skills training.
<b>Responsible manager</b>	Manager, Research
<b>Hours of operation</b>	09:00 – 05:00pm (Monday to Friday)
<b>PAX per annum</b>	Up to 180
<b>Access point</b>	Access point #3
<b>Facilities required</b>	Senior classrooms; Teaching laboratory; Collaborative space
<b>Operational considerations</b>	Access to Taronga science staff noting demands for field work; scheduling and impact on use of senior classrooms and teaching laboratory during this time

### Lectures and presentations

<b>Description</b>	Taronga will host ad hoc lectures and presentations that relate directly to Taronga's research and conservation activities.
<b>Responsible manager</b>	Taronga Institute Project and Business Manager
<b>Hours of operation</b>	06:00 – 10:00pm

<b>PAX per annum</b>	2,400
<b>Access point</b>	Access point #1 (during Taronga Zoo operating hours); Access point #2 (after hours)
<b>Facilities required</b>	Lecture theatre; Atrium; Senior classrooms
<b>Operational considerations</b>	After hours entry / exit; noise impacts – refer sections 3.6 and 3.7

### 3.9.5 Professional training programs

Professional training programs will take the same form as undergraduate and postgraduate university programs. Refer Section 4.1.4.

### 3.10 Conservation science programs

The Taronga Institute will be the operating base for conservation science programs run at Taronga Zoo. It is noted that some programs including but not limited to wildlife health will continue to use Taronga Wildlife Hospital facilities for some components of investigative research. Taronga staff may also continue to use specialist facilities at partner universities that are not provided for in the Taronga Institute.

Conservation science programs are run by Taronga staff who also supervise postgraduate research students to provide project-specific support. Postgraduate research students will be accommodated within the Taronga Institute and will have access to office and research facilities as required and agreed with their Taronga supervisor.

Conservation science program development will be the responsibility of the Manager Research and Conservation within the Conservation, Research and Life Sciences Division.

An indicative program list and basic operational details is below. Detailed program procedures will be developed at least 6 months prior to the opening of the Taronga Institute by the Manager Research and Conservation in consultation with the Taronga Institute Project and Business Manager.

#### 3.10.1 Wildlife Health

<b>Summary of activities</b>	Disease detection, monitoring, management, prediction and prevention; <ul style="list-style-type: none"> <li>- Disease detection and diagnosis</li> <li>- Outbreak investigation</li> </ul>
------------------------------	---

	<ul style="list-style-type: none"> <li>- Ecology of agents causing wildlife disease</li> <li>- Impacts of wildlife disease</li> <li>- Investigating ecological changes leading to disease</li> <li>- Preventative veterinary medicine</li> </ul>
<b>Facilities required</b>	Microscope / scanner room and store; Teaching laboratory; Senior classrooms; Office space
<b>Operational considerations</b>	Proximity to the Taronga Wildlife Hospital – will move between the two spaces depending on the nature of work being undertaken. Proximity to the service driveway for the loading / unloading of materials after being in the field.

### 3.10.2 Ecology (marine and terrestrial)

<b>Summary of activities</b>	<p>The study of relationships between environments, species, impacts of human use and benefits of conservation action. Activities include:</p> <ul style="list-style-type: none"> <li>- Species role in ecosystem</li> <li>- Impact on ecosystem of species decline and loss</li> <li>- Impact of environment and climate change on ecosystem processes</li> <li>- Conservation prioritisation</li> <li>- Reintroduction biology</li> <li>- Invasive species impact and control</li> <li>- Impact of human activities on biodiversity</li> </ul>
<b>Facilities required</b>	Research laboratory; Dirty specimen preparation area; Teaching laboratory; Senior classrooms; Office space
<b>Operational considerations</b>	Proximity to the service driveway for the loading / unloading of materials after being in the field. Technical laboratory requirements – refer Section 4.2

### 3.10.3 Population Viability

<b>Summary of activities</b>	<p>The investigation of individual reproductive potential population biology and viability. Activities include:</p> <ul style="list-style-type: none"> <li>- Non-invasive assessment of population viability</li> <li>- Strategic banking</li> </ul>
------------------------------	--

	<ul style="list-style-type: none"> <li>- Assessment of population and ecosystem resilience</li> <li>- Assessment of population resilience</li> <li>- Understanding population and habitat connectivity</li> <li>- Maintaining genetic diversity of wild and managed populations</li> </ul>
<b>Facilities required</b>	Research laboratory; Cryovot store; Teaching laboratory; Senior classrooms; Office space
<b>Operational considerations</b>	Technical laboratory requirements – refer Section 4.2

### 3.10.4 Behaviour

<b>Summary of activities</b>	<p>The study of behavioural patterns and how behaviour can both indicate and impact on welfare and conservation status. Activities include:</p> <ul style="list-style-type: none"> <li>- Investigating reliable indicators of welfare</li> <li>- Human – Animal Interactions</li> <li>- Animal welfare science – positive indices of welfare</li> <li>- Human-wildlife conflict resolution</li> <li>- Modes of animal Communication</li> <li>- Behavioural Ecology</li> </ul>
<b>Facilities required</b>	Behavioural ecology room; Enrichment room; Teaching laboratory; Senior classrooms; Office space
<b>Operational considerations</b>	Proximity to Taronga Zoo site for observations Frequent collaboration between students – requirement for designated breakout spaces

### 3.10.5 Nutrition

<b>Summary of activities</b>	<p>The investigation of minimum nutrient requirements, impact on health and reproduction and the impact of disease and changing environments. Activities include:</p> <ul style="list-style-type: none"> <li>- Investigating baseline, species and individually-specific requirements</li> <li>- Feeding strategies and behaviour</li> <li>- Plasticity of food choices</li> </ul>
------------------------------	--

	<ul style="list-style-type: none"> <li>- Digestive physiology and anatomy</li> <li>- Improving health through nutrition</li> <li>- Nutritional ecology/geometry</li> </ul>
<b>Facilities required</b>	Enrichment room; Teaching laboratory; Senior classrooms; Office space
<b>Operational considerations</b>	Proximity to food preparation

## 4 Facilities

Preliminary design requirements have been established for Taronga Institute facilities and will be finalised prior to the issuing of construction tender documentation. Operating policies and procedures for Taronga Institute facilities will also be finalised at least 6 months prior to the opening of the Taronga Institute once detailed design requirements are known; preliminary operating information is included below as a reference point.

Development of operating policies will be responsibility of the Taronga Institute Project and Business Manager in consultation with program managers.

### 4.1.1 Learning facilities

Immersive classrooms	
<b>Description</b>	Immersive learning environments that combine the traditional classroom with unique exhibit spaces. Provide opportunities for curriculum based learning and animal encounters,
<b>No # spaces</b>	3
<b>User group/(s)</b>	Primary and secondary school students; community programs
<b>Capacity (PAX)</b>	30
<b>Access restrictions</b>	Taronga Institute Teacher or Keeper must accompany all groups into the immersive classrooms Note: <i>bookings will be via a central electronic system that can be accessed by all Taronga divisions and used for all Taronga classrooms</i>
<b>Operational considerations</b>	Primary focus and goal is the delivery of up to four (4) school education workshops each day; other requests will need to be reviewed and managed in this context. Alternate encounter experiences within the Taronga Institute precinct will need to be identified for VIPs that are unable to access the classrooms due to school education priorities.

	Scheduling and technology – both systems must be simple and straightforward to use
--	--

Senior classrooms	
<b>Description</b>	Tutorial style classrooms that can accommodate a broad range of senior students (school, vocation education and training and university)
<b>No # spaces</b>	3
<b>User group/(s)</b>	Various
<b>Capacity (PAX)</b>	30
<b>Access restrictions</b>	Nil – <i>note: bookings will be via a central electronic system that can be accessed by all Taronga divisions and used for all Taronga classrooms</i>
<b>Operational considerations</b>	Scheduling and technology – both systems must be simple and straightforward to use Recording of lecture and presentations may be required.

Digital classroom	
<b>Description</b>	Basic facility for the preparation, recording and editing of content to be used in education programs or for distribution to Taronga's wider stakeholder group (e.g. via website)
<b>No # spaces</b>	1
<b>User group/(s)</b>	Taronga staff
<b>Capacity (PAX)</b>	4
<b>Access restrictions</b>	Nil – <i>note: bookings will be via a central electronic system that can be accessed by all Taronga divisions and used for all shared spaces</i>
<b>Operational considerations</b>	Scheduling and technology – both systems must be simple and straightforward to use Interface with technology managed by partner agencies (e.g. Department of Education)

Lecture theatre	
<b>Description</b>	University style lecture theatre for the delivery of presentations to large groups

## Taronga Institute of Science and Learning Operational Management Plan

<b>No # spaces</b>	1
<b>User group/(s)</b>	Various
<b>Capacity (PAX)</b>	200
<b>Access restrictions</b>	Nil – <i>note: bookings will be via a central electronic system that can be accessed by all Taronga divisions and used for all shared spaces</i>
<b>Operational considerations</b>	Scheduling and technology – both systems must be simple and straightforward to use Recording of lecture and presentations may be required.

Teaching laboratory	
<b>Description</b>	Teaching laboratory to support science education programs for secondary school students and university students.
<b>No # spaces</b>	1
<b>User group/(s)</b>	University students (Undergraduate; Honours; Masters; PhD); secondary school students; Taronga science staff
<b>Capacity (PAX)</b>	36
<b>Access restrictions</b>	Access will be restricted – maintained via access control ('swipe') system or lock and key. Students will be able to enter under the supervision of Taronga Education or Science staff.
<b>Operational considerations</b>	Scheduling of use to ensure availability / access for student programs and spill over for Taronga science staff for investigations not requiring PC2 facilities.

### 4.1.2 Conservation science facilities

Research laboratory	
<b>Description</b>	The research laboratory will accommodate genetics and specimen processing work across all science disciplines (as required).
<b>No # spaces</b>	1
<b>User group/(s)</b>	Taronga science staff and students researchers (Honours; Masters; PhD)
<b>Capacity (PAX)</b>	20
<b>Access restrictions</b>	Access will be restricted – maintained via access control ('swipe') system or lock and key.

<b>Operational considerations</b>	The research laboratory will be capable of PC2 certification and available for use by scientists from all disciplines (as required). All users must adhere to the PC2 operational guidelines that will be developed for users of the laboratory.
-----------------------------------	--

Dirty specimen preparation area	
<b>Description</b>	Dirty specimen preparation area will be used for preparation of specimens (e.g. faecal matter) for investigation in the research lab.
<b>No # spaces</b>	1
<b>User group/(s)</b>	Taronga science staff and students researchers (Honours; Masters; PhD)
<b>Capacity (PAX)</b>	4
<b>Access restrictions</b>	Access will be restricted – maintained via access control ('swipe') system or lock and key
<b>Operational considerations</b>	Functionally, the specimen preparation should be located for easy access from the service driveway (possibly through the field equipment store) for incoming material.

Cryovat store	
<b>Description</b>	The cryovat store will be used to preserve and store genetic material (e.g. coral cells) in liquid nitrogen.
<b>No # spaces</b>	1
<b>User group/(s)</b>	Taronga science staff and students researchers (Honours; Masters; PhD)
<b>Capacity (PAX)</b>	4
<b>Access restrictions</b>	Access will be restricted – maintained via access control ('swipe') system or lock and key.
<b>Operational considerations</b>	Cryovat store will accommodate LN2 under bench vessels; the floor finish in the cryovat store must be appropriate for the LN2 use making it difficult to accommodate other uses in the same space.

Wildlife health microscope / scanner room and store	
<b>Description</b>	Wildlife disease investigation and teaching
<b>No # spaces</b>	1
<b>User group/(s)</b>	Taronga science staff and students researchers (Honours; Masters; PhD)

<b>Capacity (PAX)</b>	20
<b>Access restrictions</b>	Access will be restricted – maintained via access control ('swipe') system or lock and key.
<b>Operational considerations</b>	Slide scanner is highly sensitive; will be impacted by movement and vibration. Physical separation of the microscope and scanner is important to ensure the quality of digital slides produced.

Behavioural studies room	
<b>Description</b>	Research and observation room including for monitoring of CCTV footage and audio to support behavioural investigations.
<b>No # spaces</b>	1
<b>User group/(s)</b>	Taronga science staff and students researchers (Honours; Masters; PhD)
<b>Capacity (PAX)</b>	10
<b>Access restrictions</b>	Access will be restricted – maintained via access control ('swipe') system or lock and key.
<b>Operational considerations</b>	CCTV monitors may need to be screened from public view in particular instances (e.g. animal births)

Food enrichment room	
<b>Description</b>	Designated space for the creation of food and other enrichment items for wildlife in Taronga's care
<b>No # spaces</b>	1
<b>User group/(s)</b>	Taronga life sciences staff and volunteers; YATZ and other education program participants
<b>Capacity (PAX)</b>	12
<b>Access restrictions</b>	Nil – it will be necessary to ensure (and encourage) access for Life Science staff from across the Taronga Zoo site
<b>Operational considerations</b>	Scheduling of use will be important to ensure availability / access for life sciences staff and program use

#### 4.1.3 Collaboration facilities

##### Staff offices

<b>Description</b>	Activity based work environment for up to 78 staff, volunteers and student researchers
<b>No # spaces</b>	1
<b>User group/(s)</b>	Taronga staff, volunteers and students on extended placements at the Zoo
<b>Capacity (PAX)</b>	78
<b>Access restrictions</b>	Access will be restricted – maintained via access control ('swipe') system or lock and key.
<b>Operational considerations</b>	Change management process and technology support required to move to activity based working – refer Section 5.1.3.

External offices	
<b>Description</b>	Activity based work environment for up to 30 staff representing external agencies and Taronga's partners in conservation, research and education
<b>No # spaces</b>	1
<b>User group/(s)</b>	Zoo and Aquarium Association; Taronga conservation partners
<b>Capacity (PAX)</b>	30
<b>Access restrictions</b>	Access will be restricted – maintained via access control ('swipe') system or lock and key.
<b>Operational considerations</b>	Physical separation of office space from Taronga is necessary to ensure agencies can retain independence; access points and common areas will be shared.

Meeting rooms	
<b>Description</b>	Formal meeting spaces to accommodate 12 – 25 people
<b>No # spaces</b>	4
<b>User group/(s)</b>	Taronga staff
<b>Capacity (PAX)</b>	12 – 25
<b>Access restrictions</b>	Nil – <i>note: bookings will be via a central electronic system that can be accessed by all Taronga divisions and used for all Taronga meeting rooms</i>
<b>Operational considerations</b>	Scheduling and technology – both systems must be simple and straightforward to use

Quiet rooms	
<b>Description</b>	Informal meeting / work spaces
<b>No # spaces</b>	8
<b>User group/(s)</b>	Taronga staff
<b>Capacity (PAX)</b>	4
<b>Access restrictions</b>	Nil – <i>note: quiet rooms will not be bookable and some may need to be accessed via the staff offices that are restricted (refer above)</i>
<b>Operational considerations</b>	Ensuring staff and teams do not monopolise quiet rooms – maximum use of 2 hours to be prescribed Technology – must be simple and straightforward to use

Collaborative space	
<b>Description</b>	Informal meeting / work spaces
<b>No # spaces</b>	1
<b>User group/(s)</b>	Taronga staff, volunteers and students
<b>Capacity (PAX)</b>	50
<b>Access restrictions</b>	Nil
<b>Operational considerations</b>	Potential noise and disruption from the atrium – this will likely occur during the period of school workshops only (10 – 2pm); will be mitigated by ensuring all groups are accompanied within the building Mixed user groups – change management process regarding the sharing of space with staff, volunteers and students

Atrium	
<b>Description</b>	Primary entry and interpretation point for the building
<b>No # spaces</b>	1
<b>User group/(s)</b>	Various
<b>Capacity (PAX)</b>	N/a

**Taronga Institute of Science and Learning**  
**Operational Management Plan**

<b>Access restrictions</b>	Nil
<b>Operational considerations</b>	Potential noise and disruption from the atrium – this will likely occur during the period of school workshops only (10 – 2pm); will be mitigated by ensuring all groups are accompanied within the building Mixed user groups – change management process regarding the sharing of space with staff, volunteers and students

## 5 Additional operational requirements by division

### 5.1 Experience, Education and Community Programs

#### 5.1.1 Interpretation

The Manager Interpretation will be responsible for the development of the Taronga Institute interpretation strategy in consultation with the Taronga Institute Project and Business Manager and Management Team representatives responsible for Taronga Institute programs. The interpretation strategy will align with the broad framework developed by the Taronga Institute Student and Visitor Experience Working Group and will need to be accessible and relevant for a broad range of user groups.

Emotions to tap into	The intent <i>IS</i>	The intent <i>ISN'T</i>
<ul style="list-style-type: none"> <li>- I am part of the solution</li> <li>- I can make a difference; I can do that</li> <li>- Not on my watch</li> <li>- Ownership (of the problem and the solutions)</li> </ul>	<ul style="list-style-type: none"> <li>- To inspire</li> <li>- To empower</li> <li>- Fascination and awe</li> <li>- Greater understanding</li> <li>- To convey optimism and hope</li> </ul>	<ul style="list-style-type: none"> <li>- Portraying problems as too big for individuals to be meaningful contributors to the solution</li> <li>- To scare the audience</li> </ul>

#### 5.1.2 Education and community program administration and concierge

#### 5.1.3 Taronga guest access

Taronga guests will not have free access to the Taronga Institute. For guests wishing to visit the Taronga Institute, volunteers will conduct tours. It is currently anticipated that these tours will be available twice daily during the hours of operation of the Taronga Institute to raise the level of awareness of Taronga's conservation science and learning activities, and interpret activities being undertaken within the Taronga Institute.

## **5.2 Conservation, Research and Life Sciences**

### **5.2.1 Life Sciences operations**

#### **5.2.1.1 Resourcing**

The Animal Presentation Precinct will have responsibility for the care of wildlife in the Taronga Institute.

A resourcing plan will be developed at least 12 months prior to the opening of the Taronga Institute by the Precinct Manager in consultation with the Manager Life Sciences Operations, Manager Human Resources and members of the Taronga Zoo Management Team who have responsibility for the delivery and performance of programs in the Taronga Institute. This includes but is not limited to:

- Taronga Institute Project and Business Manager
- Education Manager
- Community and Aboriginal Programs Manager
- Director Experience, Education and Community Programs
- Director People, Culture and Learning
- Director Conservation, Research and Life Sciences

The resourcing plan will be developed to ensure appropriate care for wildlife in the Taronga Institute and training and conditioning as required. The resourcing plan must also support:

- the operation of the three(3) immersive classrooms; and
- use of the encounters yard as an outdoor classroom or for behind-the-scenes experiences.

#### **5.2.1.2 Animal welfare**

As a conservation organisation with responsibility for the care of wildlife, Taronga ensures that at all times the needs, interests and welfare of wildlife in our care is a primary consideration. Taronga's specific commitments to animal welfare are detailed in the 'Taronga Animal Welfare Charter' which establishes a framework for the care of wildlife at our Zoos including wildlife in the Taronga Institute.

Taronga has a robust process for the reporting and review of any welfare concerns identified by our people. Specific actions to be taken include:

- completion of an 'Animal Welfare Incident Report' by any member of staff that has a welfare concern for investigation and mitigation within 3 days; and
- where possible, develop species specific criteria and processes to measure welfare; and
- daily monitoring of wildlife in the Taronga Institute by Animal Presentation Precinct Keepers as part of daily operations.

### **5.2.1.3 Animal training**

Animal training will be the responsibility of Animal Presentation Precinct Keepers. All animal training will be undertaken in accordance with the 'Animal Training and Conditioning Policy' and reviewed at least bi-annually to ensure:

- animal welfare; and
- the delivery of unique experiences that inspire students and other guests to become champions for wildlife.

The primary focus for training is the Taronga Institute immersive classrooms collection (refer Section 6.2.2 )The primary operational goal of training is that four (4) school education workshops can be run in each immersive classroom each day as part of which the collection are trained to demonstrate natural behaviours. This will require:

- preliminary training and conditioning at a designated location/(s) during Taronga Institute construction;
- an allowance of time for training and conditioning in the Taronga Institute immersive classrooms before workshops commence; and
- ongoing training and conditioning including but not limited to training for the development of any additional programs in the Taronga Institute immersive classrooms.

Appropriate allowances for animal training will be included in the resourcing plan for the Taronga Institute.

### **5.2.1.4 Animal handling**

Animal handling will be undertaken in accordance with the Animal Handling Procedure Manual. The Taronga Institute Unit Supervisor will be responsible for reviewing the Animal Handling Procedure Manual bi-annually to ensure its ongoing relevance and suitability for the delivery of Taronga Institute programs and guest experiences that rely on the Taronga Institute animal collection.

The Aboriginal and Community Programs Manager will also be responsible for ensuring that animal handling procedures are known and understood by program delivery staff.

## **5.2.2 Animal collection plan**

The Taronga Institute animal collection has two (2) primary components:

- Immersive classrooms collection
- Guest experience collection

The number of individuals of each species will be determined by the Animal Presentation Precinct Curator in accordance with the *Exhibited Animals Protection Act* and in consultation with the Manager, Animal Population, Health and Welfare.

Animals will be sourced from the existing Education Centre collection, wider Taronga and Taronga Western Plains Zoo collection or via acquisition if required. As is currently the case, animals that are admitted to the Taronga Wildlife Hospital but are not fit for release to the wild may also be acquired for the Taronga Institute immersive classrooms collection.

Taronga Institute immersive classrooms collection

The immersive classrooms collection plan has been developed with the primary objective of supporting the delivery of curriculum aligned school education programs. Subject to adherence with the 'Animal Handling Procedure Manual' and Taronga Institute procedures the immersive classrooms can also be used to support other programs as required.

An indicative list of species to be included in each of the three (3) immersive classrooms is below. *Note: this list may change based on the availability of species.*

Classroom #1 (Arid)	Classroom #2 (Woodland)	Classroom #3 (Rainforest)
<ul style="list-style-type: none"> <li>- Bilby</li> <li>- Short-beaked Echidna</li> <li>- Budgerigar</li> <li>- Zebra Finch</li> <li>- Bearded Dragon</li> <li>- Children's Python</li> <li>- Flinders Ranges Scorpion</li> </ul>	<ul style="list-style-type: none"> <li>- Short-beaked Echidna</li> <li>- Quokka</li> <li>- Sugar Glider</li> <li>- Tawny Frogmouth</li> <li>- Superb Parrot</li> <li>- Cunningham skink</li> <li>- Black-headed Python</li> <li>- Cane Toad</li> <li>- Giant Burrowing Cockroach</li> </ul>	<ul style="list-style-type: none"> <li>- Cotton-top Tamarin</li> <li>- Nicobar/ Fruitdoves</li> <li>- Noisy Pitta</li> <li>- Spotted Python</li> <li>- Green Iguana</li> <li>- Chaco Tortoise</li> <li>- Green-tree Frog</li> </ul>

Taronga Institute guest experience collection

The guest experience collection will support:

- education programs at the Taronga Institute that are not run in one of the three (3) immersive classrooms
- guest experiences across the Taronga Zoo site (e.g. Roar and Snore animal encounters); and
- the Zoomobile program which delivers education workshops to school and community groups unable to visit Taronga Zoo.

As for the immersive classrooms, the guest experience collection must be managed in accordance with the 'Animal Handling Procedure Manual' and Taronga Institute procedures.

A non-exhaustive list of species for the guest experience collection is below. *Note: this list may change based on the availability of species.*

- Swamp Wallaby
- Red Kangaroo
- Koala
- Quokka
- Emu

- Short-beaked Echidna
- Reptiles – snakes and lizards (various)
- Amphibians – frogs (various)

### 5.2.3 Animal presentation and support facilities

The Taronga Institute includes a range of animal presentation and support facilities. Preliminary design requirements have been established and will be finalised prior to the issuing of construction tender documentation. Operating policies and procedures will also be finalised at least 6 months prior to the opening of the Taronga Institute once detailed design requirements and the animal collection are known; operating requirements will be based on the current operating procedures for the Taronga Education Centre and include :

- work procedures for Taronga Institute keepers;
- husbandry routines for the Taronga Institute; and
- animal handling procedure manual for the Taronga Institute.

Development of operating policies and procedures will be responsibility of the Precinct Manager, Animal Presentation Precinct and Manager, Life Sciences Operations.

### **5.3 People, Culture and Learning**

#### **5.3.1 Change management and staff communications**

Change management and staff communications on the Taronga Institute will be the responsibility of the Taronga Institute Project and Business Manager.

A change management plan will be developed to ensure the successful implementation of the Taronga Institute covering 5 stages of the change process:

- Stage 1: Preliminary engagement and planning pre-construction (current activities);
- Stage 2: Implementation of temporary arrangements (enabling works);
- Stage 3: Construction;
- Stage 4: Transfer of staff and programs to the Taronga Institute; and
- Stage 5: Ongoing operations.

Within the Plan, specific requirements will be documented for each of the four (4) key functions that will be impacted by the Taronga Institute development:

- learning programs;
- science programs;
- visitor experience; and
- Taronga operational, staff and animal holding requirements.

To support the change management and communication process, an Implementation Team will be responsible for delivering the changes identified as part of the Taronga Institute Project. The Implementation Team will include senior staff with responsibility for the delivery of programs and processes that will be impacted by the Taronga Institute, and people that will be impacted by the Taronga Institute.

#### **5.3.2 Resourcing**

A resourcing plan for the Taronga Institute will be developed at least 12 months prior to the opening of the Taronga Institute.

The human resources team will review and advise on the proposed resourcing plan noting the following potential risks:

- redeployment and / or changes to staff positions;
- any proposed increase to staff numbers and the salaries and wages budget; and
- changes in relevant industrial instruments.

#### **5.3.3 Training and development**

The learning and development team will provide ongoing support for staff training and development as required to support and ensure continuous improvement of the Taronga Institute operation and program delivery.

#### 5.3.4 Work Health and Safety

Taronga is committed to providing a safe and healthy environment for our people and visitors. Workplace health and safety is an essential part of Taronga's operations, uniting our duty of care with the continuous improvement of our systematic and comprehensive safety management system, TarongaSAFE. It is everyone's responsibility to contribute towards a positive safety culture and through consultation develop systems for a safe workplace.

Taronga's work health and safety framework will be applied to the Taronga Institute and a comprehensive work health and safety review of the facility undertaken prior to opening. Relevant documentation (e.g. Safe Work Method Statements (SWMS), risk assessments) will be also be prepared for specific activities and programs prior to opening, and reviewed within 6 months.

#### 5.3.5 Volunteers

The volunteering strategy for the Taronga Institute will be determined in consultation with the Volunteer Coordinator at least 12 months prior to the development of the Taronga Institute. Taronga Institute Volunteers will be recruited and training completed prior to opening.

Specific volunteering opportunities that have been identified include:

- Guest tours and interpretation: Taronga Institute volunteers will conduct of tours of the Taronga Institute for members of the public visiting Taronga Zoo. It is currently anticipated that these tours will be available twice daily during the hours of operation of the Taronga Institute to raise the level of awareness of Taronga's conservation science and learning activities, and interpret activities being undertaken within the Taronga Institute.
- Education experience: Education Experience Volunteers will support the Taronga Education Team to deliver authentic and innovative education programs onsite at Taronga Zoo including at the Taronga Institute. Specific tasks will include but are not limited to: meeting student groups on arrival; providing information about Taronga education programs, conservation activities, the Zoo and its animals; participating in interpretation activities; spot guiding (providing information and navigation to school groups in the Zoo); and conducting teacher surveys.

## 5.4 Marketing, Commercial and Fundraising

### 5.4.1 Marketing and product development

The Marketing Team will be responsible for marketing and promotion of the Taronga Institute and individual programs. A primary and secondary contact point within the Marketing Team will be established to ensure sufficient coverage and expand organisational knowledge on the range of products in science and learning.

The selection of content and / or specific programs for promotion will be determined in consultation with relevant managers and the Taronga Institute Project and Business Manager to maximise the benefits of any marketing spend for the Taronga Institute.

Product development will be the responsibility of the Taronga Institute Project and Business Manager in consultation with relevant program managers. Product development must align with one or more of the objectives of the Taronga Institute to:

- formalise and enhance the integration of existing conservation science and learning capabilities;
- expand capacity to contribute to conservation science and learning, including the delivery of zoo based accredited vocational training and further education;
- establish a direct and tangible link between conservation science and learning in-situ and in the grounds at Taronga Zoo;
- create purpose built and immersive facilities to enhance and promote Taronga's conservation science and learning activities;
- influence the community and partners to act and contribute to wildlife conservation as an innovative place of international and national significance for wildlife education and research; and
- contribute towards increasing the existing business revenue and net contribution by 5% per annum, reducing cash operating costs, and / or increasing Taronga's fundraising capacity.

### 5.4.2 Taronga Foundation fundraising

The Taronga Foundation will provide ongoing support and advice to secure financial support for the Taronga Institute construction and operation.

### 5.4.3 Media and public relations

The Communications Team will support the operation of the Taronga Institute by identifying suitable opportunities for media and public relations. Opportunities include but are not limited to the commencement of construction of the Taronga Institute, the opening of the Taronga Institute and program specific milestones and achievements.

## 5.5 Property, Infrastructure and Operations

### 5.5.1 Operational support services

#### Cleaning

The Taronga Institute will need to be cleaned on a regular basis. Elements of the building will have different requirements with a cleaning schedule and resourcing plan (if required) to be developed at least 6 months prior to the opening of the Taronga Institute. It is expected that cleaning requirements will be categorised as falling into one of five (5) areas:

- staff and offices, quiet rooms and the digital classroom;
- meeting rooms and senior classrooms;
- immersive classrooms;
- research laboratories; and
- collaborative and public access spaces including the atrium.

Prior to developing the cleaning schedule and resourcing plan (if required) it will be necessary to agree the terms of any contractual cleaning arrangement with the Department of Education to avoid duplication of resources and maximise the presentation of the Taronga Institute for visiting students and partner organisations.

#### Security

Taronga Institute security will be integrated into existing Taronga Zoo security procedures. Specific operational requirements will be identified and document at least 6 months prior to the opening of the Taronga Institute including any requirement for locking / unlocking of the building.

Access to certain parts of the building will be restricted and managed to the extent possible as part of Taronga's existing access control system. It is anticipated that these locations will include:

- staff offices;
- external offices; and
- research laboratories.

There may also be a requirement to restrict access to some of the animal presentation and support facilities. This will be determined in consultation with the Precinct Manager, Animal Presentation Precinct and Manager, Life Sciences Operations.

### 5.5.2 Environmental sustainability

Taronga is committed to reducing the environmental footprint of our Zoos including via environmentally sustainable design, construction and operation of new facilities.

At least 6 months prior to the opening of the Taronga Institute the Manager Environmental Sustainability will:

- set clear targets for resource use and efficiency of the new building; and
- develop workplace procedures to reduce the operational footprint of the Taronga Institute.

Communication of workplace procedures will be integrated into the broader operational plan and change management process for the Taronga Institute.

### **5.5.3 Asset maintenance**

Taronga Zoo is committed to minimising asset liabilities in terms of the costs for ongoing operation and maintenance. Asset maintenance will be the responsibility of the Manager Infrastructure with the goal of assets remaining productive at the lowest possible long term costs.

To meet operational requirements and minimise asset maintenance costs, Taronga will provide for the following in the Taronga Institute design:

- materials based on ease of maintenance, affordability, safety and availability locally;
- elements (e.g. light fittings) that can be replaced safely and without significant interference with Taronga Institute operations; and
- appropriate access panels and service vehicle access to the Taronga Institute site to support ongoing maintenance.

### **5.5.4 Facilities maintenance**

Facilities management will be the responsibility of the Manager Facilities.

The Facilities Manager will develop a facilities management plan at least 6 months prior to the opening of the Taronga Institute. Support will be provided by the assigned Capital Works Project Manager and Taronga Institute Project and Business Manager as required. The facilities management plan will include the following items:

- emergency access points;
- access to undertake maintenance;
- stock and delivery access;
- waste management;
- garbage collection;
- storage;
- maintenance and service arrangements for the Taronga Institute.

### **5.5.5 Horticulture management**

The operational management and maintenance of plants in and around the perimeter of the Taronga Institute will be the responsibility of the Horticulture Team. Specific requirements for horticulture management are listed below:

- soil and plants to be supplied only from established suppliers;
- maintenance weeding will be undertaken regularly (at least annually) to present re-establishment of weed species; and
- annual assessment of species will be completed to identify plants in poor health. Where possible, seeds may be collected and grown as a replacement resource.

## 5.6 Corporate Services and Governance

### 5.6.1 Information technology

The Taronga Institute will have a significant requirement for information technology to support our people and program delivery. A detailed statement of requirements will be developed and finalised prior to the issuing of construction tender documentation including:

- IT infrastructure requirements including wifi coverage;
- software and systems including phone system requirements (*note: this will be undertaken as part of a wider review of Taronga's PABX phone system*);
- physical assets including laptops, projectors and screens; and
- where possible, maintenance requirements with a view to ensuring information technology resources remain relevant and productive at the lowest possible long term costs.

As part of statement of requirements, it will be necessary to agree the terms of any contractual arrangements with the Department of Education regarding the use of existing or potential future technologies to facilitate communication with NSW public schools. Consultation with key external stakeholders should also be undertaken to ensure information technology decisions align with the direction of future Taronga Institute partners (e.g. Department of Education; Catholic Education Office; universities).

Operating policies and procedures for Taronga Institute information technology will be finalised at least 6 months prior to the opening of the Taronga Institute once infrastructure, software and systems, and physical asset choices have been confirmed. This will include a resourcing plan (if required) to ensure the operation and maintenance of information technology within the Institute. As necessary, it will also include references to the interface between Taronga Institute and broader site-wide information technology solutions (e.g. room booking systems).

### 5.6.2 Records management

Records management will be undertaken in accordance with existing Taronga policies and procedures. Existing systems will also be used to ensure consistency across the organisation.

The Taronga Records Manager will be consulted periodically during construction and prior to the opening of the Taronga Institute to minimise requirements for hard copy file storage within the new facility. Wherever possible, information should be digitised or stored in secure, designated locations off site. Some storage will be available within the Institute for hard copy documents that must be held on site.

### 5.6.3 Operating budget

Indicative operating costs for the ongoing management and maintenance of the Taronga Institute were developed for submission as part of the Final Business Case for the Taronga Institute. A detailed review and reforecast (as required) will be developed at least 12 months prior to the opening of the Taronga Institute. Operating costs will fall within identified operational budgets in the following divisions:

## Taronga Institute of Science and Learning Operational Management Plan

- People, Culture and Learning
- Education, Experience and Community Programs
- Research, Conservation and Life Sciences

The Taronga Institute Project and Business Manager will be responsible for working with relevant cost centre managers and divisional Directors to develop the Taronga Institute Operating Budget including appropriate forecasts for:

- staffing costs;
- IT / AV forecast costs;
- utilities forecast costs;
- maintenance forecast costs; and
- other operational forecast costs.

### 5.6.4 Risk management

A risk register has been developed for the Taronga Institute and includes key operational risks. The register will be reviewed at least every six (6) months and at critical project milestones.