

# SOCIAL IMPACT ASSESSMENT

Prepared for NSW Planning Assessment Commission on  
behalf of Sydney Zoo (SSD 7228)

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# Executive Summary

This Social Impact Assessment (the SIA) has been prepared in relation to the NSW Planning and Assessment Commission's (the PAC) consideration of the State Significant Development application for Sydney Zoo (SSD-7228, the application) lodged by Sydney Zoo Pty Ltd (the applicant).

It has been prepared by appropriately qualified and experienced social impact assessors in accordance with guidance contained in the NSW Department of Planning and Environment's (the Department) *Draft Guidelines for Social Impact Assessment* (the SIA Guidelines) and the *NSW Government Guide to Cost Benefit Analysis* (the CBA Guidelines).

## *The SIA*

As requested by the PAC this SIA has assessed the social, education and conservation programs carried out in the locality including those of Featherdale Wildlife Park (Featherdale) and details potentially positive and adverse social impacts to these programs from the proposed Sydney Zoo.

Potential impacts have been considered in view of consultation with people and groups that experience the programs across the localities they operate. This has included assessing the likelihood and significance of impacts and, where relevant, suggesting mitigation and management measures to avoid or minimise potentially adverse social impacts on the programs and enhance potentially positive impacts.

## *The SIA process*

Determining social impacts requires a degree of speculation about what is likely to occur in the event an application is approved, albeit speculation that is informed by empirical evidence and the prevailing circumstances in the relevant localities. The SIA has been informed by:

- > desktop research
- > review and consideration of relevant empirical evidence
- > review and consideration of social impacts assessed through the application process to date
- > engagement with stakeholders from the zoo and wildlife park industry, the tourism sector, and beneficiaries of the social, conservation and education programs
- > a survey of potential Featherdale and Sydney Zoo visitors (n=650).

## *SIA Findings*

The SIA finds there are three potential social impact scenarios arising from development of Sydney Zoo:

Scenario	Description	Overall Assessment	Likelihood	SIA Ranking
<b>Scenario A - the Co-existence Scenario</b>	Sydney Zoo is approved and co-exists with Featherdale	Offers <b>significant social benefits</b> , aligns with and realises relevant policy aims and has <b>no adverse social impacts</b>	Empirical evidence indicates it is the <b>most likely Scenario</b>	<b>Preferred Scenario</b>
<b>Scenario B - The Sydney Zoo Scenario</b>	Sydney Zoo is approved and Featherdale subsequently suffers financial duress that prevents it from operating programs, or Featherdale exits the market	Offers <b>significant social benefits</b> , aligns with and realises relevant policy aims and has <b>some potentially adverse social impacts</b> that are likely to be offset by Sydney Zoo and other zoos and wildlife parks across Sydney and Australia	Empirical evidence indicates it is the <b>least likely Scenario</b>	<b>Next most preferred Scenario</b>
<b>Scenario C - The Status Quo Scenario</b>	Sydney Zoo is not approved and the status quo is maintained	Offers <b>no new social benefits</b> , does not align with or realise relevant policy aims, and has <b>some potentially adverse social impacts</b> in the missed opportunity to deliver the significant social benefits of the co-existence and Sydney Zoo Scenarios	Empirical evidence indicates it is a <b>less likely Scenario</b>	<b>Least preferred Scenario</b>

### Assessment of Net Social Benefit

Having considered the potentially positive and adverse social impacts of these scenarios, **the SIA concludes approval of Sydney Zoo offers a net positive social outcome**. The development of Sydney Zoo offers significant social benefits which, based on the empirical evidence and stakeholder engagement, outweigh potentially adverse social impacts associated with the cessation of Featherdale’s programs or its exiting the market.

In particular, Sydney Zoo’s proposed programs are quite similar to Featherdale’s and those of other zoos and wildlife parks across Western Sydney, Sydney and Australia. Under the Co-Existence Scenario, Sydney Zoo will increase program capacity across the localities. Some capacity may be lost under the highly unlikely Sydney Zoo Scenario in the event Featherdale ceases to provide the programs or exits the market. In any event, Sydney Zoo’s substantially larger size indicates opportunity to replicate this capacity and for a net increase in capacity under this Scenario. The likely net increase in capacity under both the Co-Existence and Sydney Zoo scenarios would not be realised under the Status Quo Scenario. This is further discussed at Section 7.1.

### Social Benefits of Sydney Zoo

The **significant social benefits** of approving Sydney Zoo are:

<b>Government Policy Objectives</b>	Provision of a major new tourism facility in Western Sydney that will: <ul style="list-style-type: none"> <li>&gt; provide a range of employment opportunities, including youth and Indigenous employment; and</li> <li>&gt; meets government policy priorities for the Western Sydney visitor economy and accessible tourism.</li> </ul>
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<b>Tourism Infrastructure</b>	Provision of a major new family-oriented tourism facility that will meet the zoo and wildlife park needs, wants and preferences of Western Sydney
<b>Travel time savings</b>	Provision of a full service zoo experience in Western Sydney that avoids the travel costs this market currently incurs by having to travel to access a similar experience at Taronga Zoo
<b>Wildlife Education</b>	Opportunity for new wildlife education programs that improve education, conservation and behavioural learning outcomes
<b>Advancement of Indigenous Peoples</b>	Opportunity for Aboriginal education programs that improve cultural advancement and tourism outcomes, including employment
<b>Social Service Benefits</b>	Provision of a major new tourism facility in Western Sydney that will provide financial and in-kind contributions to social service and education providers such as Ronald McDonald House, the Westmead Foundation, Western Sydney University and TAFE NSW
<b>Amenity</b>	Provision of a major new tourism facility that will substantially enhance the amenity of Western Sydney for residents and visitors
<b>Western Sydney Parklands Vision</b>	Provision of a major new tourism facility that will realise the vision of the Western Sydney Parklands (WSP) Plan of Management (PoM) and Bungarribee Precinct Master Plan
<b>Western Sydney Parklands Benefits</b>	Generation of revenue for WSP that will fund the future investment pipeline for WSP that will enhance recreation opportunities available to residents and visitors to Western Sydney

Sydney Zoo is already undertaking a number of **management measures** to ensure these social benefits are captured and maximised, including:

<b>Employment Initiatives</b>	Sydney Zoo has committed to employing Indigenous workers. Social benefits may be further enhanced by Sydney Zoo employing people with disabilities, which the facility design is capable of facilitating
<b>Aboriginal Cultural Program</b>	Sydney Zoo has committed to developing an Aboriginal cultural awareness tourism experience in collaboration with Muru Mittigar
<b>Vocational Training</b>	Sydney Zoo encourages employees under the age of 25 to attain relevant qualifications through TAFE vocational education and training (VET) programs
<b>Design</b>	The design of Sydney Zoo is fully accessible for people with disability, and Sydney Zoo's lease conditions require the design of a family oriented facility that provides opportunities for social interaction and education programs
<b>Conservation Funding</b>	Sydney Zoo is establishing a fund to support conservation research and breed for wild release programs
<b>Education Outcomes</b>	Sydney Zoo's exhibits and attractions are designed in accordance with factors found to enhance education, conservation and behavioural learning outcomes for zoo and wildlife park visitors

### **Social Impacts**

The SIA has assessed potentially adverse social impacts associated with cessation of Featherdale's social, education and conservation programs. The SIA concludes **Featherdale's social and education programs are not particularly unique and can be replicated by Sydney Zoo and other zoos and wildlife parks across the localities**. This substantially **reduces the likelihood and consequences of potentially adverse social**

**impacts arising** in the **highly unlikely event the Sydney Zoo Scenario emerges**. The SIA concludes conditions recommended by the Department as presented to the PAC, in particular C8 and C9, generally cover mitigation of potentially adverse social impacts associated with cessation of Featherdale's social and education programs.

The SIA further concludes the **conservation and breeding programs Featherdale participates in have appropriate mitigation and management measures. Most of these are already in place and inherent in the design and operation** of the zoo and wildlife park industry. These measures substantially **reduce the likelihood and consequence of potentially adverse social impacts** from cessation of Featherdale's conservation and breeding programs. Subject to these measures, **potentially adverse social impacts of the Sydney Zoo Scenario can be mitigated**.

To **enhance these measures**, the **SIA recommends** that, in the event of Featherdale's conservation and breeding programs ceasing or its exiting the market as a result of competition with Sydney Zoo, that Sydney Zoo consults with the Zoological Association of Australia (ZAA) to assist in the continuation of the programs or orderly transition of the Featherdale collection to other facilities as appropriate.

Further, the empirical evidence and stakeholder engagement indicates **potentially adverse social impacts of the highly unlikely Sydney Zoo scenario are, for the most part, insignificant and temporary**. Whilst some program capacity may be lost under the Sydney Zoo Scenario, Sydney Zoo's substantially larger size indicates opportunity to replicate this capacity and for a net increase in capacity under this Scenario.

#### *Likelihood of Social Impacts Arising*

The likelihood of Featherdale's programs ceasing and leading to potentially adverse social impacts is assessed as very low.

This is because empirical evidence reviewed and collected by the SIA indicates:

1. **Differentiation** - Sydney Zoo is perceived by potential consumers as sufficiently differentiated from Featherdale, and attendance at Sydney Zoo is therefore not mutually exclusive of Featherdale.
2. **Demand for Featherdale** - A significant proportion of potential consumers indicated they would attend either both Sydney Zoo and Featherdale, or would prefer Featherdale over Sydney Zoo, indicating there remains a viable market for Featherdale.
3. **Market Capacity** - Sydney Zoo will increase overall participation as it provides a value proposition not currently met in the Western Sydney market and which is attractive to this market.

The empirical evidence indicates there is opportunity for **Sydney Zoo and Featherdale to successfully cooperate as a wildlife-based tourism precinct**. Based on this evidence and the stakeholder engagement, the SIA concludes **differences in the Sydney Zoo and Featherdale offers and their location in close proximity to one another can grow visitation at both**. This is discussed at Section 5.1.

As a result, approval of Sydney Zoo has the **potential to result in a net positive benefit** to Featherdale by creating a wildlife based tourism cluster (which is already contemplated by the existing draft development consent conditions) that grows overall visitation, rather than a net negative benefit. Therefore, **it is most likely the Co-existence Scenario will eventuate and potentially adverse social impacts are highly unlikely to materialise**.

### Social Costs and Mitigation Measures

Engagement with industry stakeholders identified the programs offered by Featherdale and Sydney Zoo are not particularly unique, and both are capable of providing them, as are other zoos and wildlife parks across Sydney.

Industry stakeholders further indicated that, between Sydney Zoo and existing zoos and wildlife parks across Sydney, there is already sufficient overlap in, and capacity to replicate, the programs offered by Featherdale. Therefore, any potential adverse social impacts are considered temporary in duration.

Further, it is likely potentially adverse social impacts would not occur until the longer term as it may take some time for Featherdale programs to cease operating due to competitive pressures. Therefore, the general principle of a discount rate (i.e. long term impacts are given less weight than shorter term impacts) has been considered in the assessment.<sup>1</sup>

In the event Sydney Zoo is approved and Featherdale subsequently suffers financial duress that prevents it from operating programs or Featherdale exits the market, the potentially adverse social impacts include loss of: employment opportunities at Featherdale, Featherdale's uniquely and significantly diverse collection of iconic Australian animals, the social interaction opportunities Featherdale provides for the Western Sydney community, Featherdale's contribution to conservation breeding programs particularly the Spotted Tail (Tiger) Quoll Breeding Program, Featherdale's capacity to facilitate work placement opportunities for TAFE and university students, and Featherdale's capacity to educate school children about wildlife.

These potentially adverse social impacts are considered unlikely to arise. This assessment is based on the findings of the empirical evidence, stakeholder engagement and consideration of the capacities of existing zoos and wildlife parks across Sydney and inherent design features of Sydney Zoo.

Potentially adverse social impacts and mitigation measures are outlined in the table overleaf.

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<sup>1</sup> NSW Treasury. (2017). Guide to Cost-Benefit Analysis (TPP17-03). NSW Government: Sydney. Pg1

	Impact 1	Impact 2	Impact 3	Impact 4	Impact 5	Impact 6	
Category	Personal and property rights	People's fears and aspirations	Way of life and Culture	Environment	Personal and property rights	Personal and property rights	
Describe the impact	Loss of employment opportunities for Featherdale employees	Loss of opportunities to engage with iconic Australian animals, particularly international tourists, school children, and vulnerable groups	Loss of social interaction opportunities for Western Sydney community.	Loss of contribution to conservation breeding programs, particularly the Spotted Tail (Tiger) Quoll	Loss of capacity for volunteer work placements for TAFE and university students	Loss of capacity to educate school children about wildlife	
How likely is the impact without mitigation	Unlikely	Unlikely	Unlikely	Unlikely	Unlikely	Unlikely	
Why?	<p>Empirical evidence and consumer survey undertaken as part of the SIA demonstrates Sydney Zoo and Featherdale are sufficiently differentiated in offering a similar but not identical product.</p> <p>Attractions of this nature located in tourism clusters complement one another and do not compete for the same market. This is likely to grow overall visitation to Sydney Zoo and Featherdale.</p> <p>Therefore, competitive pressures are unlikely to be felt by Featherdale leading to loss of employment opportunities.</p>	<p>The Zoo and Aquarium Association (ZAA) requires member institutions to have rehoming plans for collections, and rehoming plans have been successfully implemented in the past.</p> <p>There are a range of other zoos and wildlife parks across Sydney that hold iconic Australian animals.</p>	<p>Consumer survey undertaken as part of the SIA finds unprompted awareness and recall of fond memories at Featherdale is low.</p> <p>If competitive pressures materialize, this would take some time. By this time, Sydney Zoo will have established itself as an opportunity for social interaction and part of the Western Sydney community.</p> <p>Sydney Zoo's design includes extensive opportunities for social interaction.</p>	<p>Featherdale is one of a number of zoos and wildlife parks and private holders of Tasmanian Devils, Spotted Tail (Tiger) Quolls, Bush Stone Curlews and Plains Wanderers across Australia.</p> <p>Because of the distributed operating models of these programs it is unlikely they will cease if Featherdale's contribution is lost.</p> <p>Sydney Zoo also proposes to hold some of these animals such as the Spotted Tail (Tiger) Quolls.</p>	<p>Most zoos and wildlife parks across Sydney offer volunteer work placements for TAFE and university students interested in native animals.</p> <p>Industry stakeholders find placement opportunities for exotic animals are more popular amongst students.</p> <p>Sydney Zoo plans to provide significant capacity for work placements that exceeds Featherdale's capacity.</p>	<p>There are over 30 zoos and wildlife parks across Sydney that offer programs to educate school children about wildlife.</p> <p>Sydney Zoo plans to provide significant capacity for school education programs. This is equal to almost 10% of the 600,000 school children that visit zoos and wildlife parks in Australia every year as part of school programs.</p> <p>Sydney Zoo will provide capacity to educate school children that significantly exceeds Featherdale's capacity.</p>	
Is it likely to be significant with regard to...?	Duration	<p>It would take some time for competitive pressures to result in closure of Featherdale or its programs.</p> <p>By this time, Sydney Zoo may be fully operational. Sydney Zoo is likely to employ more people than Featherdale and there is likely to be a net increase in employment, even if Featherdale exits the market completely.</p> <p>Therefore, the impact is considered temporary in duration.</p>	<p>It would take some time for competitive pressures to result in closure of Featherdale or its programs.</p> <p>From there, cost would be temporary as these opportunities would be replaced by other zoos and wildlife parks across Sydney or Sydney Zoo.</p>	<p>It would take some time for competitive pressures to result in closure of Featherdale or its programs.</p> <p>By this time, Sydney Zoo may be fully operational and this capacity would be replaced by Sydney Zoo.</p> <p>Therefore, the impact is considered temporary in duration.</p>	<p>It would take some time for competitive pressures to result in closure of Featherdale or its programs.</p> <p>From there, cost would be temporary as this contribution would be replaced by other zoos and wildlife parks or Sydney Zoo.</p>	<p>It would take some time for competitive pressures to result in closure of Featherdale or its programs.</p> <p>By this time, Sydney Zoo may be fully operational and this capacity would be replaced by Sydney Zoo and other zoos and wildlife parks across Sydney.</p> <p>Therefore, the impact is considered temporary in duration.</p>	
	Extent	<p>No. Localised, about 50% of Featherdale's 120 or so employees live in the Blacktown Local Government Area, and these jobs represent 0.01% of 123,810 jobs in the LGA as at the 2011 Census.</p>	<p>No. Localised, other zoos and wildlife parks across the Sydney region already hold iconic Australian animals. Industry stakeholders indicate international tourists only visit one native animal experience during their trip and this market operates across the entire Eastern Seaboard.</p> <p>No. 3.3 million visits annually by international tourists to zoos and wildlife parks in Australia. In 2013 there were 800,000 school aged children in Greater Sydney and 354,000 in Western Sydney.</p>	<p>No. Localised, social interaction opportunities are for Western Sydney community.</p> <p>Featherdale figures indicate roughly 3% (n=65,000) of the Western Sydney community (n=2.1million) visit each year.</p>	<p>No. Localised, Sydney Zoo proposes to hold some of these animals and existing zoos and wildlife parks across Sydney also hold them. Number of people impacted is unknown.</p>	<p>No. Localised, other zoos and wildlife parks across Sydney offer volunteer work placements for TAFE and university students interested in native animals.</p> <p>Number of students enrolled in captive animal management programs across Sydney is unknown. Featherdale provides places for approximately 40 students each week.</p>	<p>No. Localised, in 2013 there were 800,000 school aged children in Greater Sydney and 354,000 in Western Sydney. Featherdale has provided education programs to roughly 63,000 students across its 43 years of operation</p>
	Sensitivity	<p>Yes - High social value placed on employment. Ability to adapt or respond is more limited for employees in animal related roles because of lack of specialised animal employment opportunities in Western Sydney and Sydney more broadly.</p> <p>No - Ability to adapt or respond is higher for employees in non-animal</p>	<p>Yes. Stakeholder engagement indicates high social value placed on opportunities for international tourists and school children to engage with iconic Australian animals.</p> <p>No. Stakeholder engagement indicates ability of international tourists to adapt or respond is high as there are a large number of native animal experiences across the</p>	<p>Yes. Consumer survey indicates community members place high value on social interaction aspects of zoos and wildlife parks.</p> <p>No. Ability to adapt or respond is high. Although there is a deficit of arts, culture and recreation infrastructure in Western Sydney, there are still a wide range of opportunities for social interaction.</p>	<p>No. Industry stakeholders indicate the social value of Featherdale's contribution to most of these programs is not particularly high, with the exception of the Spotted Tail (Tiger) Quoll and Plains Wanderer.</p> <p>No. Ability to adapt or respond is high because Sydney Zoo proposes to also hold some of these animals</p>	<p>No. Industry stakeholders indicate social value of work placements for native animals is lower than exotic animals.</p> <p>No. Ability to adapt or respond is high because there are a number of other zoos and wildlife parks across Sydney that already offer volunteer work placements for TAFE and</p>	<p>Yes. Stakeholder engagement and consumer survey indicate social value of educating school children about wildlife is high. Ability of children to adapt or respond is high as experiences are facilitated by school, which have multiple options for these experiences available across Greater Sydney.</p>

		related fields, such as tourism and hospitality, because these low skill employment opportunities are common in Western Sydney and Sydney more broadly.	Eastern Seaboard. Ability of children to adapt or respond is high as experiences are facilitated by school, which have multiple options for these experiences available across Greater Sydney.	Sydney Zoo's design also includes extensive opportunities for social interaction.	such as the Spotted Tail (Tiger) Quolls, and there are other zoos and wildlife parks and private holders of these animals.	university students interested in native animals.	
	Severity	Yes. Intensity of effect is high and may lead to potential decrease in standard of living due to inability to service costs of living.  No. Severity is unlikely to be acute or chronic as it may take some time for Featherdale or its programs to cease due to competitive pressures and lead to loss of employment.	No. Intensity of effect is limited because other zoos and wildlife parks hold iconic Australian animals. International tourists may value interaction with native animals but are unlikely to learn from this experience. Empirical evidence indicates school children are more likely to learn from interaction with rare or unique exotic animals.	No. Intensity of effect is limited. Recall of Featherdale as tourism venue or activity in Western Sydney is low. No. Effect is not acute or chronic as it may take some time for Featherdale or its programs to cease due to competitive pressures. By this time, Sydney Zoo will have established itself as an opportunity for social interaction and part of the Western Sydney community.	No. Intensity of effect is limited because social value of Featherdale's contribution appears to be low.  No. Effect is not acute or chronic as it may take some time for Featherdale or its programs to cease due to competitive pressures.	No. Intensity of potential effect is limited. Although it may lead to inability to complete work placement requirements for students, industry stakeholders indicated it is relatively easy to find work placement opportunities in native animals across Sydney. No. Effect is not acute or chronic as it may take some time for Featherdale or its programs to cease due to competitive pressures.	Yes. Intensity of potential effect is high because empirical evidence indicates school children are more likely to absorb educational messaging at zoos and wildlife parks. No. Effect is not acute or chronic as it may take some time for Featherdale or its programs to cease due to competitive pressures, and there are other options available across Sydney to educate school children about wildlife.
Is the impact likely to be significant overall	No	No	No	No	No	No	No
Is there significant concern among potentially affected people and groups regarding the social impact?	Unknown. Stakeholder engagement not undertaken with Featherdale employees. Attempt to contact Featherdale was made through the SIA but not returned.	Yes. Industry stakeholders indicated the diversity of Featherdale's native animal collection is unique and significant. However, stakeholders also indicated international tourists are unlikely to be aware of Featherdale prior to visiting Australia and likely to only visit one native animal experience during their trip, and school children are more interested in rare or unique exotic animals.	Unknown. Stakeholder engagement indicates Featherdale holds a significant place in the minds of Western Sydney community members. This is not apparent through consumer survey findings.	Yes. Industry stakeholders indicated it would be difficult to replace contribution of Featherdale because of large enclosure space requirements for Spotted Tail (Tiger) Quolls. The only facility in Sydney capable of breeding Plains Wanderers is Taronga Zoo.	No. Industry stakeholders indicated it is relatively easy to find work placement opportunities in native animals across Sydney.	No. Industry stakeholders indicated there are a range of other options across Sydney, and Sydney Zoo plans to provide significant additional capacity to educate school children about wildlife.	
<b>Mitigation</b>							
Proposed Mitigation	Sydney Zoo, and other tourism attractions located nearby collaborate to develop a wildlife-based tourism precinct identity and offer. Sydney Zoo is part of a similar collaboration that has already begun through Western Sydney Business Connection.	In the event of Featherdale's closure, Sydney Zoo to commence discussions with the ZAA to ensure an orderly relocation of Featherdale's collection of native Australian animals.  In the event of Featherdale's closure, Sydney Zoo to enter into discussions with vulnerable people and groups that receive benefit from Featherdale's outreach programs to facilitate opportunities to interact with iconic Australian animals	Sydney Zoo's design already includes extensive opportunities for social interaction.  Sydney Zoo to identify and pursue opportunities for community engagement and outreach, including attendance of local community events.	Sydney Zoo already plans to hold Spotted Tail (Tiger) Quolls as part of collection.  In the event of closure of Featherdale programs, Sydney Zoo to commence discussions with ZAA to identify opportunities to ensure continuation of contribution to breeding programs.	Sydney Zoo already proposes to facilitate work placements that are greater in number and scope than Featherdale.  There are also a number of other zoos and wildlife parks across Sydney that already offer volunteer work placements for TAFE and university students interested in native animals.	Sydney Zoo already proposes to educate school children about wildlife and has infrastructural capacity that significantly exceeds Featherdale's capacity.  There are also a number of other zoos and wildlife parks across Sydney that provide programs to educate school children about wildlife.	
Likely Effectiveness	High. Empirical evidence indicates this will grow visitation at both Sydney Zoo and Featherdale, reducing the likelihood of competitive pressure affecting Featherdale's operations as a result of the approval of Sydney Zoo.  Sydney Zoo is likely to employ more people than Featherdale, resulting in a net increase in employment even if Featherdale exits the market completely.	High. This is because of collection rehoming plan requirements for ZAA members, the success of previous rehoming plans, the likely interest of other zoos and wildlife parks in the Featherdale collection, and the range of other zoos and wildlife parks in the Sydney region that already hold iconic Australian animals held by Featherdale and Sydney Zoo's proposal to also hold a number of these animals.	High. This is because the consumer survey indicates Sydney Zoo is highly attractive to potential consumers and is likely to increase their visitation.  Because visitation is primarily motivated by social interaction, this is likely to increase overall social interaction opportunities.  Further, Sydney Zoo lease conditions already require a family oriented facility that facilitates social interaction.	High. This is because Sydney Zoo is a new large format zoo that has space to incorporate design of the large enclosures required by Spotted Tail (Tiger) Quolls.  Opportunities to facilitate continuation of Featherdale's contribution to breeding programs already exist at the more than a dozen other zoos and wildlife parks that hold these animals across Australia, or are likely to be found at Sydney Zoo given its significant infrastructural capacity.  In addition, existing ZAA policies require member organisations to	High. This is because Sydney Zoo plans to have capacity for a large number of work placement opportunities for TAFE and university students, and there are a number of other zoos and wildlife parks across Sydney that facilitate volunteer work placements for students interested in native animals.	High. This is because Sydney Zoo plans to have capacity to educate a large number of school children, and there are a number of other zoos and wildlife parks across Sydney that provide programs to educate school children about wildlife.  Further, Sydney Zoo lease conditions already require education programs for school children.	

				rehome collections, including breeding populations, in the event of zoo or wildlife park closure.  Together, these measures are likely to mitigate loss of the contribution Featherdale makes to the breeding programs.		
Indicators for monitoring	Progress on development of wildlife-based tourism precinct offer could be monitored via a report as part of the OEMP required in the development consent.	Upon closure of Featherdale, Sydney Zoo to engage with ZAA to understand the status of collection redistribution efforts and support as necessary	Number of visitors attending Sydney Zoo for social interaction.	Upon closure of Featherdale, Sydney Zoo to engage with ZAA to understand status of breeding program continuity and support as necessary.	Number of work placement students at Sydney Zoo interested in native animals.	Number of school children engaged in education programs at Sydney Zoo.
Current Consent provision	Condition C9 of the draft development consent conditions adequately contemplates this mitigation strategy.	Condition C8 (a, d, and e) of the draft development consent conditions adequately contemplates this mitigation strategy by requiring Sydney Zoo's community engagement plan to include adaptive management strategies to address any anticipated or unanticipated social issues that may arise.	Condition C8 (a, c, and e) of the draft development consent conditions adequately contemplates this mitigation strategy by requiring Sydney Zoo to profile the community and include adaptive management strategies to address any anticipated or unanticipated social issues that may arise.  In addition, Sydney Zoo's lease conditions require a family oriented facility that facilitates social interaction.	Condition C8(a, d, and e) of the draft development consent conditions adequately contemplates this mitigation strategy by requiring Sydney Zoo's community engagement plan to include adaptive management strategies to address any anticipated or unanticipated social issues that may arise. In addition, Sydney Zoo's lease conditions also require it to participate in breeding programs for endangered animals.	Condition C8 (a, d, and e) of the draft development consent conditions adequately contemplates this mitigation strategy by requiring Sydney Zoo's community engagement plan to include adaptive management strategies to address any anticipated or unanticipated social issues that may arise. Sydney Zoo's lease conditions also require a facility with educational and interpretive activities.	Condition C8 (a, d, and e) of the draft development consent conditions adequately contemplates this mitigation strategy by requiring Sydney Zoo's community engagement plan to include adaptive management strategies to address any anticipated or unanticipated social issues that may arise. Sydney Zoo's lease conditions also require a facility with educational and interpretive activities.

# 1 Introduction

The SIA has been prepared for the PAC on behalf of the applicant.

## 1.1 Process to date

The application is currently before the PAC for assessment. The SIA has been prepared to respond to considerations raised by the PAC in its assessment:<sup>2</sup>

*The Commission also requests that the Applicant:*

- *Provide a detailed and comprehensive social impact assessment, prepared by a suitably qualified person. The social impact assessment must:*
- *Assess the extent of any social, educational and conservation programs currently carried out in the locality (which are relevant to the proposed operations of the Sydney Zoo), including those carried out by Featherdale, and detail the potential positive and negative impacts to these programs and resulting consequences arising from the proposed Sydney Zoo*
- *Describe mitigation measures which can be implemented to address any identified adverse impacts on social, educational and conservation programs in the locality, and*
- *Include the details and results of consultation held with the community and industry organisations in relation to such programs.*

A number of technical studies have been prepared as part of the application process to date. These include an Environmental Impact Statement by JBA (the EIS), a Socio-Economic Impact Assessment by KPMG (the SEIA), and a peer review of the SEIA by HillPDA. A number of responses to these have also been prepared by Urbis on behalf of Featherdale's owner, Elanor Investors Group. The SIA relies on technical information presented in some of the studies, for example community profiles and visitor estimates contained in the SEIA and Urbis submissions.

These studies have been reviewed in preparing the SIA and it is noted they extensively consider potential social impacts. To the extent necessary, the SIA does not replicate social impact considerations of the previous studies, for example, the community profiles already provided in prior studies. In some instances it is necessary to re-consider social impact issues raised by the previous studies in order to appropriately respond to the PAC's request of the SIA.

### *Structure of the SIA*

The SIA is structured as follows:

- > Development context review, including a description of Sydney Zoo and Featherdale features and visitation
- > Social, conservation and education programs of Sydney Zoo and Featherdale, including a comparison of these programs, definition of localities for the SIA, and an overview of similar programs operating across these localities
- > Policy review, including policies relevant to the proposed features and social, conservation and education programs of Sydney Zoo
- > Evidence review, including zoo and wildlife park tourism clusters, visitor markets and behaviours, and conservation and education programs

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<sup>2</sup> Letter from the Department to Sydney Zoo dated 9 February 2017 (p2)

- > Stakeholder engagement findings, including key stakeholder interviews and the survey of potential visitors
- > Assessment of impacts of Sydney Zoo, including the potential positive and negative impacts to programs carried out in the locality
- > Identification of management and mitigation measures, including measures which can be implemented to address any identified potential adverse impacts on programs in the locality.

### *SIA authors*

The SIA has been prepared by Professor Roberta Ryan and Mr Alex Lawrie of the Institute for Public Policy and Governance at the University of Technology Sydney. They are appropriately qualified and experienced to prepare the SIA.

Professor Ryan is a qualified social scientist with a Bachelor of Arts, Bachelor of Social Science and Graduate Diploma in Public Policy. Mr Lawrie is a qualified urban planner with a Bachelor of Planning and Masters of Urban Policy and Strategy.

Professor Ryan and Mr Lawrie have prepared SIAs for various land uses and development types. These include tourism and leisure, resources and energy, liquor and gaming, affordable housing, and the significance of zoos and wildlife parks.

## 1.2 Defining impacts, costs and benefits

The SIA has been prepared in accordance with the Department's *SIA Guidelines* and the *CBA Guidelines*.<sup>3</sup> Both provide guidance on identifying and assessing the costs, benefits and impacts of projects and social impacts in particular.

The definition of costs, benefits and impacts adopted in the SIA follows the *CBA* and *SIA Guidelines*. Impacts are a composite of costs and benefits. The *CBA Guidelines* classify benefits as primary or secondary, and can include savings or avoided costs, government revenues, consumer, producer and labour surpluses and benefits to the broader community. Costs can be capital, recurrent, regulatory, ancillary and negative externalities.

There is a net positive impact if benefits outweigh costs and a net negative impact if costs outweigh benefits. The *CBA Guidelines* note a discount rate is normally applied in assessing costs and benefits, so that more weight is given to present and near-present impacts. The *CBA Guidelines* also note that impacts experienced by the people of NSW should be the primary consideration for impact assessment, and reported separately from impacts experienced locally or in other jurisdictions.<sup>4</sup>

The *SIA Guidelines* note social impacts can be tangible or intangible, cumulative, direct or indirect. Tangible impacts are physically experienced, such as income loss or gain, whereas intangible impacts are perceived to be experienced, such as reputational damage or enhancement.

Cumulative impacts are the successive, incremental and combined impacts of one or more projects, including current and foreseeable projects. Direct impacts are experienced by the producers and consumers of a good or service, and these stem from the value placed on the good or service. The *CBA Guidelines* identify the following common value types:

1. use (how much someone is willing to pay to for a good or to use a service),
2. option (appreciation of the option to have the good or use the service),

<sup>3</sup> Available at: [http://www.planning.nsw.gov.au/Policy-and-Legislation/~/\\_media/8B6753256417468F80E11708762DA11D.ashx](http://www.planning.nsw.gov.au/Policy-and-Legislation/~/_media/8B6753256417468F80E11708762DA11D.ashx) and [http://arp.nsw.gov.au/sites/default/files/TPP17-03\\_NSW\\_Government\\_Guide\\_to\\_Cost-Benefit\\_Analysis.pdf](http://arp.nsw.gov.au/sites/default/files/TPP17-03_NSW_Government_Guide_to_Cost-Benefit_Analysis.pdf)

<sup>4</sup> CBA Guidelines (p13)

3. altruistic (when someone is willing to pay for the good or service being available to someone else), and
4. non-use (where people value something just for its existence)

There are two types of indirect impacts. First round impacts are experienced by third parties as a result of the good or service being consumed and are considered in impact assessment. For example, a coal mine might provide profits to suppliers. Second round impacts are experienced in related markets when the good or service is consumed. For example, profits made by a coal mine supplier are, in turn, used to purchase other supplies. These are typically not considered in impact assessment.

Other impact categories include market or non-market, quantifiable and unquantifiable, and distributed. Distributional impacts are experienced differently by different people or groups and across different localities. In this respect, it is important to identify the likely affected people, groups and locality for different impacts.

In a social impact setting, impacts can include:<sup>5</sup>

TABLE 1 SOCIAL IMPACT CATEGORIES

Category	Description
<b>Way of life</b>	How people live, work, play, and interact with one another on a day-to-day basis
<b>Culture</b>	People's shared beliefs, customs, values, and language or dialect (including Aboriginal culture and connection to country)
<b>Community</b>	Its cohesion, stability, character, services, and facilities
<b>Political systems</b>	The extent to which people are able to participate in decisions that affect their lives, and the resources provided for this purpose
<b>Environment</b>	The quality of the air and water people use; the availability and quality of the food they eat; the level of hazard or risk, dust and noise they are exposed to; the adequacy of sanitation; their physical safety; and their access to and control over resources
<b>Health and wellbeing</b>	People's physical, mental, social, and spiritual wellbeing
<b>Personal and property rights</b>	Particularly whether people are economically affected, or experience personal disadvantage which may include a violation of their civil liberties
<b>Fears and aspirations</b>	Their perceptions about their safety, their fears about the future of their community, and their aspirations for their future and the future of their children

<sup>5</sup> Vanclay, F. (2003). International Principles for Social Impact Assessment. *Impact Assessment & Project Appraisal* 21(1), 5-11 *op cit* SIA Guidelines (p6)

## 2 Development overview

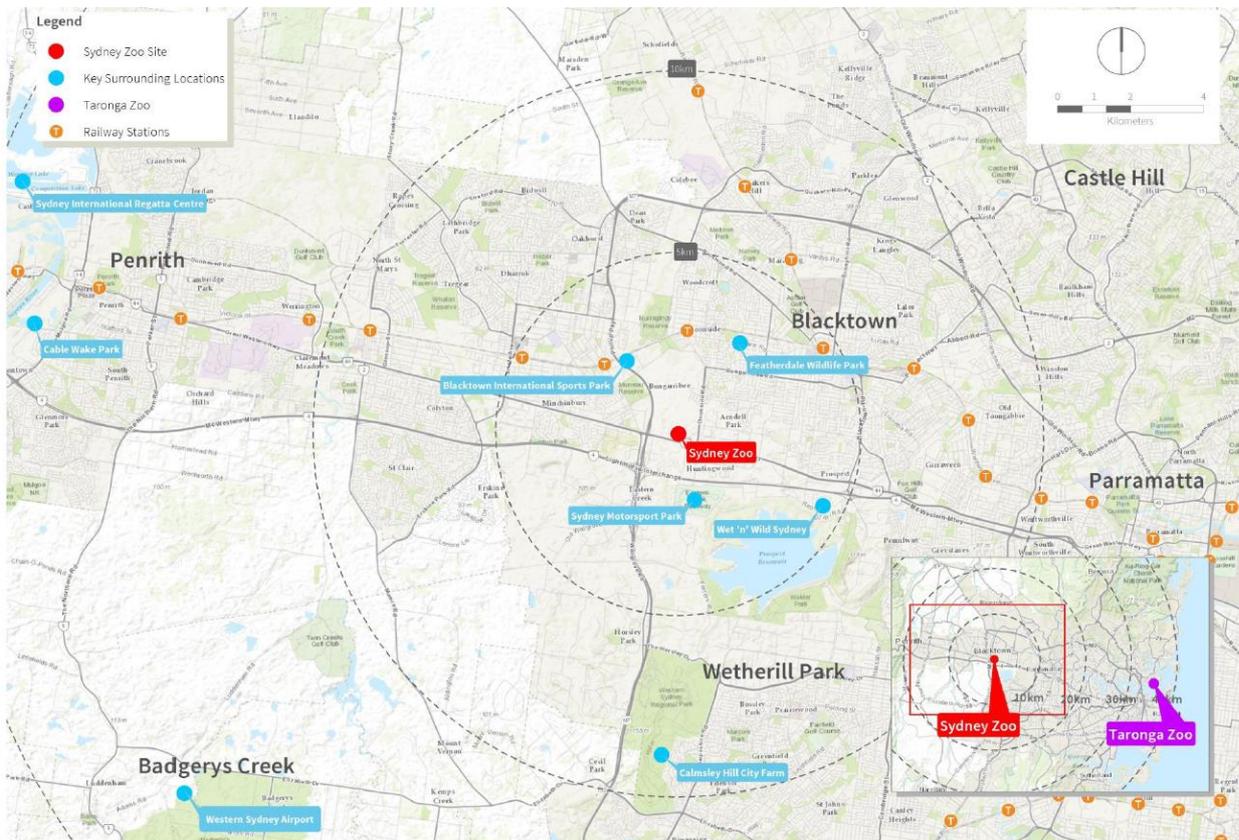
This section reviews the development context, including the features and visitation of Sydney Zoo and Featherdale.

### 2.1 The Sydney Zoo

Sydney Zoo is located in the Blacktown Local Government Area (the LGA), approximately 33km west of the Sydney CBD and 37km west of Taronga Zoo. It is situated on a 16.5Ha site in the Bungarrabee Precinct of the Western Sydney Parklands (WSP), and is approximately 3km from Featherdale. About half of Sydney's 4.6million residents are within 20 minutes' drive of Sydney Zoo, and most of the remaining half is within an hours' drive.

Four major tourism facilities - the Sydney Motorsport Park, Blacktown International Sports Park, Wet'n'Wild Sydney, and Featherdale – are within 5km of the site. Other facilities located within 10km include Calmsley Hill City Farm and the future Western Sydney Airport. The Cables Wake Park and Sydney International Regatta Centre are located within 15km at Penrith.

The nearest wildlife attractions include Featherdale, WILDLIFE Sydney Zoo 33km to the east at Darling Harbour, Taronga Zoo 37km to the east at Mosman, Australian Walkabout Wildlife Park 60km to the north at Calga, Australian Reptile Park 70km to the northeast on the Central Coast, Calmsley Hill City Farm 10km to the southwest, Koala Park Sanctuary 17km to the northeast at West Pennant Hills, and Symbio Wildlife Park 47km to the south at Helensburgh.



Source: JBA Planning, 2016

### **WSP Trust Lease**

Following a competitive tender process the WSP Trust selected Sydney Zoo as preferred tourism facility for the site. The Trust, which owns the land and is a NSW Government entity, has entered into an agreement to lease the site to the applicant.

The agreement stipulates a number of design parameters for Sydney Zoo<sup>6</sup>. These include:

- > Development of a high quality family oriented zoological park
- > Natural experiences providing educational and entertaining interactions with animals
- > Attractions including exotic animals and Australian fauna
- > Educational facilities and interpretive activities
- > Veterinary clinic
- > Management of issues of conservation, habitat protection and indigenous culture preservation.

The Concept Plan approved by WSP Trust requires Sydney Zoo to engage effectively with the community. This is to be achieved through a number of means, including:

- > Local employment opportunities
- > Educational programs on the local Aboriginal and colonial heritage
- > Educational programs on the local natural heritage
- > Development of age appropriate school materials
- > Special needs employment
- > Aboriginal employment
- > Participation in breeding programs for endangered animals
- > Native animal rescue through the veterinary clinic
- > Advanced animal husbandry methods and design
- > Engagement with schools

In addition, the lease also includes specific requirements for Sydney Zoo to:

1. Provide an on-site **education and activities program** in accordance with the Concept Plan that must satisfy the requirements of the General Standards for Exhibiting Animals.<sup>7</sup>
2. Undertake **conservation programs** in accordance with the Concept Plan. The conservation programs may include a mix of activities such as **breeding programs, animal rescue, veterinary clinic services, animal husbandry, animal welfare and research** and must satisfy the requirements of the General Standards for Exhibiting Animals

### **Features**

Sydney Zoo proposes to provide both exotic and native animal exhibits, a restaurant and café, kiosks and associated amenities, picnic areas, gardens and wetlands, service buildings, a retail souvenir store, carparking and ancillary civil works, and a range of social, conservation and education programs. An overview and comparison of these programs to Featherdale and other zoos and wildlife parks across Sydney is provided at Section 3.

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<sup>6</sup> Agreement for Lease Bungarribee Park Sydney Zoo

<sup>7</sup> Issued pursuant to the Exhibited Animals Protections Regulation 2010 (NSW)

An entry fee of [REDACTED] is proposed for a family of four including 2 adults and 2 children. Sydney Zoo also proposes to cater for bus tours, school excursion visits, birthday parties, Christmas parties and corporate events.

The Sydney Zoo site is largely flat and mostly cleared and the facility design focuses on creating immersive, safari like experiences that work with the bushland setting, maximise water reuse and enhance biodiversity. Upon completion, approximately 60% of the Sydney Zoo site is planned to be vegetated in an open space style.

Ensuring full accessibility for people with disability in accordance with the *Disability Discrimination Act 1992* and *Building Code of Australia* is another Sydney Zoo design feature. There are no steps in the facility, all pedestrian pathways are within accessible gradient thresholds, and an elevated walkway in the facility is wheelchair accessible.

### Visitation

Sydney Zoo intends to provide an approximately [REDACTED] experience for up to [REDACTED] visitors at any one time. Anticipated operating hours are [REDACTED] daily, extending to [REDACTED] from mid-December through late-January during the peak summer period.

The SEIA estimates Sydney Zoo will attract between [REDACTED] (low case) and [REDACTED] visitors (high case) annually. Approximately [REDACTED] of Sydney Zoo's visitation is expected during school holidays.

The SEIA's base case estimates about [REDACTED] of Sydney Zoo visitors are expected to be residents of Sydney. The remaining [REDACTED] are expected to be domestic and international tourists, with international tourists staying with friends and relatives the larger share of domestic and international tourists.

About [REDACTED] of Sydney resident visitors are expected to come from the Western Sydney LGAs of Auburn, Bankstown, The Hills, Blacktown, Camden, Campbelltown, Fairfield, Holroyd, Liverpool, Parramatta, and Penrith. Residents of the containing and immediately surrounding LGAs of Blacktown, Holroyd and Fairfield are expected to make up over [REDACTED] of Western Sydney visitors, or about [REDACTED] of all Sydney based visitors to Sydney Zoo. In total, the SEIA estimates Western Sydney visitors will number approximately [REDACTED] annually, or about [REDACTED] of the Western Sydney population of 2.1 million.

### Economy and employment

The SEIA estimates up to 160 jobs will be created during Sydney Zoo's construction. This is expected to generate around \$24million in primary economic benefits and \$36million in secondary benefits.

The SEIA estimates Sydney Zoo will employ between 120 (low case) and 210 (high case) full time and casual staff at full operation, including positions for young job seekers across a range of occupations. This is expected to generate at least \$19million in primary economic benefits and \$26million in secondary benefits during operation. This includes \$3million in tourist spending on goods and services in NSW.

Under its lease terms, Sydney Zoo is required to spend a further [REDACTED] on new exhibits and refurbishments over [REDACTED] years in order to be entitled to occupy the site for the full lease term.<sup>8</sup> This expenditure is over and above initial construction costs and is not included in the SEIA's estimates of economic benefits.

Sydney Zoo is exploring opportunities with Muru Mittigar to employ [REDACTED] Aboriginal rangers to facilitate Indigenous cultural awareness education programs and experiences for visitors. This is

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<sup>8</sup> Agreement for Lease Bungarribee Park Sydney Zoo, cl2.3

part of Sydney Zoo's ■■■ Indigenous employment target. Sydney Zoo is also exploring opportunities with Muru Mittigar for construction supply contracts with Indigenous companies.

## 2.2 Featherdale

Featherdale Wildlife Park is located approximately 3km north of Sydney Zoo and has operated for over 43 years. It opens 9am to 5pm every day, excluding Christmas Day. The entry fee for a family of 2 adults and 2 children is \$85. It employs about 120 people, of which more than half (53%) live in the Blacktown LGA.<sup>9</sup>

### *Features*

Featherdale occupies an area of 3.1Ha and holds over 1,700 specimens across 300 native Australian animal species. Over 70% are birds with the remainder being reptiles, marsupials and mammals.

Featherdale offers interactive experiences with native animals, some of which can be purchased at extra cost above the park entry fee. It also hosts feeding time presentations and guided zookeeper tours. Featherdale includes a kitchen, café and retail store that sells a range of souvenirs and gifts as well as artwork by local Indigenous artists.

Featherdale caters to bus tours, school excursion visits, birthday parties, Christmas parties, corporate events, and has a mobile animal encounter experience. It also has a range of social, conservation and education programs, and an overview of these is provided at Section 3.

### *Visitation*

Featherdale's annual visitation is around 400,000. Just over half (55%) are international visitors and just under half (45%) are domestic visitors. Western Sydney residents make up about 35% of domestic visitors, or 14% of total visitors at 56,000 per year representing less than 3% of the Western Sydney population of 2.1million.<sup>10</sup>

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<sup>9</sup> Elanor Investors Group submission by Urbis, dated 18 October 2016 p.8; Economic and Social Impact Assessment by Urbis dated February 2016 p.16

<sup>10</sup> Elanor Investors Group submission by Urbis, dated 18 October 2016 p.8

### 3 Social, conservation and education programs

The PAC has requested the SIA consider the social, conservation and education programs of Sydney Zoo and Featherdale.

A comparison of these is provided in the following sections, alongside a review of similar programs of other zoos and wildlife parks across the relevant localities.

Information has been sourced from previous documents prepared through the application process, websites and social media, as well as stakeholder engagement.

#### 3.1 Social programs

Sydney Zoo	Featherdale Wildlife Park
> Multi-faith prayer room	No comparator
> Fundraising for charity through the Sydney Zoo Foundation	No comparator
> Community outreach programs such as incursions and animal interactions for special needs children and patients of Westmead Hospital and Ronald McDonald House	> Community outreach program that visits aged care facilities, and participation in other community events > Animal displays for Ngallu Wal Aboriginal Child and Family Centre and elders meeting
No comparator	> Western Sydney community days with NSW Police Force and NSW Fire Service hosted at Featherdale
> Participant in Western Sydney Tourism Network, which aims to grow and promote a regional tourism offer	No comparator
> Ranger program involving placement of Indigenous staff in flexible roles that cover delivery of educational programs, animal welfare and keeping, native planting and grounds maintenance > 10% FTE Aboriginal employment target > Construction supply contracts facilitated by Muru Mittigar	> Local Indigenous artist products for sale in the Featherdale Souvenir Centre > Employment of local Indigenous artists to paint murals throughout Featherdale to encourage cultural awareness > Providing native animals for NAIDOC week celebrations
> Volunteer programs for example such as Seniors to volunteer for wayfinding assistance and information purposes > Mens Shed to be engaged for minor construction works (e.g. bird boxes, bat boxes)	> Friends of Featherdale club facilitating volunteer opportunities for community members
> Free admission to people with special needs, their carers and companions	> Free entry passes to charities and schools to assist with fundraising activities

#### Comparing the programs

The **people and groups** that experience these programs include: the Western Sydney community and school groups, special needs children and their carers/families, the elderly and

Indigenous people. The **locality** they operate across is Sydney, although they tend to be geographically concentrated in Western Sydney and the Blacktown LGA.

The programs are quite similar, for example:

- > Both provide volunteer opportunities for community members. Featherdale provides 44 opportunities. It is not clear how many Sydney Zoo will provide, however it's larger size indicates it has capacity to provide a larger number.
- > Both provide free entry passes to community groups and members. Featherdale provides 1,200 passes annually to assist charities and schools with fundraising. Again, it is not clear how many passes Sydney Zoo will provide, however its larger size and longer opening hours indicate it has capacity to provide a larger number.
- > Both operate community outreach programs for community members to interact with animals. Featherdale provides these for the elderly and Indigenous groups. Sydney Zoo will provide these for special needs and ill children.
- > Both participate in community events. Featherdale participates in about 60 community events annually. Although the number of community events Sydney Zoo will participate in is unknown, its larger size indicates capacity to participate in a larger number. Sydney Zoo has already commenced participating in such events, for example the recent official opening of the WSP Bungaribee Precinct held early April 2017.
- > Both facilitate employment opportunities for Indigenous people. Featherdale's are for artists selling artwork in the souvenir store and painting murals across the facility, and are temporary and less secure. Sydney Zoo has a 10% FTE Indigenous employment target, which will provide more permanent and secure employment through an Aboriginal ranger program.
- > Both operate programs that enhance cultural awareness. Featherdale does this through Indigenous public artwork around the facility, whilst Sydney Zoo will provide education programs in Indigenous culture.

Differences in the programs include:

- > Direct fundraising for community and conservation initiatives through the Sydney Zoo Foundation
- > Provision of a multi-faith prayer room at Sydney Zoo
- > Sydney Zoo's participation in a regional tourism network
- > Featherdale's hosting of community events at the facility

### ***Social programs at other zoos and wildlife parks***

Social programs are common at zoos and wildlife parks across Western Sydney and Sydney:

- > **Taronga Zoo** operates outreach activities through its ZooMobile program. These include mobile child care and preschool lessons, education workshops for primary and secondary schools, Indigenous animal experiences, aged care experiences, and visits to country and regional areas. It also provides animals for community events, and runs a community volunteer program across a range of areas including life sciences, bush regeneration, as well as short term opportunities for young volunteers across a range of areas including animal care, tourism and corporate management.
- > **Symbio Wildlife Park** operates outreach activities through its Mobile Zoo2U program. This includes animal interaction experiences for corporate events, school fetes and incursions across Greater Sydney and the Illawarra. It also hosts community events on site. Symbio has a volunteer program requiring a one day per week commitment. Volunteers are

involved in cleaning enclosures, preparing food and making toys, helping guests, presentations to school groups, and animal walks. Symbio offers a farmyard experience with over 150 animals that addresses sustainable living concepts. Symbio also offers interactive experiences with native animals including koalas, kangaroos, dingoes, echidnas, Tasmanian devils and wombats, which can be purchased over and above the admission fee. Symbio also offers a full day Junior Keeper Camp for school students during school holidays. This includes preparing enrichments for the animals, interactive learning experiences with native mammals and reptiles, feeding a variety of different animals, and helping keepers with daily jobs.

- > **Calmsley Hill Farm** provides informal social programs. Mainly, this includes assisting schools, sporting associations and scouting clubs with fundraising activities by providing free passes.
- > **Australian Reptile Park** also operates outreach activities. This includes animal interaction experiences for corporate events and school fundraisers, and school incursions. The Park has a volunteer program requiring a one day per week commitment. Volunteers are involved in animal care, cleaning and maintenance and the program provides a pathway to employment at the Park. The Park also has all-day interactive programs targeted at children that run during the school term and school holidays, and a group program for the elderly that includes interactive animal experiences.
- > **Koala Park Sanctuary** provides some social programs, including school excursions, guided tours, interactive Koala experiences on site, private group tours, a daily live Stockman Camp Show including sheep shearing, and a mobile Koala interaction experience for off-site events.
- > **Australian Walkabout Wildlife Park** provides a range of social programs. These include hosting community events on site such as the inaugural Central Coast Aboriginal Corroboree and Cultural Festival, interactive petting zoo animal experiences, night time camping and sleep outs for private groups, programs on bush survival skills, birthday parties, school holiday vacation care, education lessons and camps for primary and high school and scouting groups, recycle and reuse programs, community and corporate conservation volunteering programs, wildlife Indigenous culture and birdlife workshops for over 55s and culturally and linguistically diverse groups, promoting the Premier's Reading Challenge, animal safety in the workplace workshops, and corporate teambuilding activities.

## 3.2 Conservation programs

Sydney Zoo	Featherdale Wildlife Park
<ul style="list-style-type: none"> <li>&gt; As part of the Australian Species Management Program (ASMP) administered by ZAA, Sydney Zoo will provide captive breeding space for 35 species, and has space to hold additional ASMP species</li> <li>&gt; This will include both domestic and exotic species. Sydney Zoo has already engaged with ZAA to identify priority programs under the ASMP as part of their species collection efforts.</li> </ul>	<ul style="list-style-type: none"> <li>&gt; As part of the Australian Species Management Program (ASMP) administered by ZAA, Featherdale provides captive breeding space for 24 species</li> <li>&gt; Participant in NSW Wild Capture and Captive Breeding Program for the endangered Plains Wanderer</li> <li>&gt; National Spotted Tail Quoll Breeding and DNA Research Programs</li> <li>&gt; Participant in Tasmanian Devil Breeding Program</li> <li>&gt; Release endangered Bush Stone Curlews back into the wild</li> </ul>

	> Participant in Koala Genome Project
> Strategic research alliance with Western Sydney University in the areas of wildlife habitat creation and population studies, energy efficiency, bushland regeneration, water sensitive urban design, and animal welfare smart monitoring	No comparator
> Animal welfare initiatives with conservation organisations, including fundraising for these initiatives through Sydney Zoo Foundation > Animal rescue and on-site veterinarian care for exotic and native animals including triage of sick, injured and displaced animals > Memorandum of Understanding with WIRES and/or NSW Office of Environment and Heritage to provide rehabilitation services for injured native animals surrendered to Sydney Zoo	> Illegally and legally kept native and exotic species identification and removal service across NSW for NSW National Parks and Wildlife Service and NSW Police Force > Native Animal Rescue Service for injured native animals around Sydney and NSW
No comparator	> Animal sponsorship program for the Southern Cassowary, Saltwater Crocodile, Koala, Tasmanian Devil, Red Kangaroo and Alpine Dingo
> Quarantine facility for import of international animals to add to existing approved NSW facilities (Mogo Zoo, Taronga Zoo and Billabong Zoo)	No comparator
> Retaining and managing the endangered Cumberland Plain Bushland through the Sydney Zoo's design	No comparator

### Comparing the programs

The **people and groups** that experience these programs include: visitors to Sydney Zoo and Featherdale, and other zoos and wildlife parks that receive animals bred by Sydney Zoo or Featherdale under the ASMP. The **localities** they operate across are Sydney, NSW and Australia, although they tend to be concentrated at the NSW and Australia geographies.

There are some similarities between the programs, for example:

- > Both provide animal welfare services.
- > Both operate breeding programs under the ASMP.

There are some differences between the programs. For example:

- > Featherdale participates in 24 ASMP breeding or wild release programs for Australian species, including the Tasmanian Devil, Spotted Tail Quoll, Plains Wanderer, and Bush Stone Curlews.
- > The present plan indicates Sydney Zoo will participate in      ASMP Breeding programs for both Australian and exotic species.
- > Sydney Zoo has additional space to hold animals as part of the ASMP programs. It is not clear whether Featherdale has additional space, although it is a smaller facility with a constrained land area that limits the amount of space that could be provided.

- > Sydney Zoo will provide on-site veterinarian care and rehabilitation for exotic and native animals, and a quarantine facility for import of international animals.
- > Sydney Zoo will enter into a strategic alliance with Western Sydney University to research conservation issues. It is understood Featherdale has participated in some conservation research in the past, although this has not been regular or systematic.
- > Sydney Zoo will retain and manage the endangered Cumberland Plain Bushland through incorporation into facility design.
- > Featherdale provides animal sponsorship opportunities. It is not clear whether Sydney Zoo will provide similar opportunities, although most zoos and wildlife parks are involved in these initiatives and it would be highly unusual if it did not. For example, the Australian Walkabout Wildlife Park and Australian Reptile Park both provide community and corporate animal sponsorship opportunities for the Dingo, Wombat, Koala, Platypus, Tasmanian Devil and Eastern Quoll.

### *Understanding the structure of conservation programs*

Breeding species in captivity provides opportunities to reintroduce them into the wild to prevent extinction.

A number of Featherdale and Sydney Zoo conservation programs are described as breeding programs.

Industry stakeholders indicated almost all zoos and wildlife parks have such programs to sustain display collections, or breed specimens for display at other zoos and wildlife parks, and other research indicates these types of programs typically do not result in wild reintroduction.<sup>11</sup>

### *The Australian Species Management Program*

The ASMP is run under the auspices of ZAA. It provides a framework to cooperatively manage animal collections and promote collection sustainability. The ASMP is supported by subject matter experts, located in ZAA member organisations, which nominate to coordinate a species breeding program. There are two types of programs under the ASMP:

- > Managed programs. ZAA selects priority species where coordinated management offers benefits. There are three levels of program management:
  1. **Conservation Program** for species where there is a link to a formal State or national recovery effort
  2. **Population Management Program** for species that are regionally significant and collection sustainability helps support the delivery of conservation advocacy messages and biodiversity awareness
  3. **Monitored Program** for species that are considered regionally significant and require oversight without high-intensity management.
- > Regional collection planning, where ASMP develops a regional collection plan to promote development of collections that are sustainable and provide conservation value

As identified at Section 3.2, Featherdale holds 24 ASMP species, of which 9 can be purchased on the open market by private individuals with licenses, including the Rose-crowned Fruit Dove and Bush Stone Curlew. Of the ASMP species held by Featherdale, 5 are under a Conservation Program, 16 are under the less intensive Population Management Program, and 3 are under

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<sup>11</sup> Aegis Consulting Australia and Applied Economics. 2009. Report on the Economic and Social Contribution of the Zoological Industry in Australia. Australasian Regional Association of Zoological Parks and Aquaria.

the least intensive Monitored Program. Featherdale is coordinator for one ASMP species, the Rose-crowned Fruit Dove which is part of a Population Management Program.

Sydney Zoo proposes to hold ■ ASMP species, including ■ held by Featherdale such as the Tasmanian Devil and Spotted Tail (Tiger) Quolls. In comparison, Taronga Zoo holds 56 ASMP species and is species coordinator for 15.

### *ASMP Institutional Risk Controls*

ASMP breeding programs operate on distributed models that involve the participation of multiple institutions. This serves the function of maximising the housing opportunities for maintenance of genetic diversity, reducing the exposure to program continuity risk should any institution cease to participate in a particular program. In this respect, the likelihood of a species breeding program ceasing as a result of the loss of any one institution is relatively low.

Sydney Zoo and Featherdale are both Associate members of ZAA. ZAA members are required to have policies to identify the means by which collections will be maintained in the event of closure, typically through dispersal to other zoos. Australia's network of zoos and wildlife parks have a history of responsive management of circumstances where institutions close and animals require re-homing.

From 1990, Featherdale was located within 3.5km of Australian Wildlife Park (AWP), which held over 600 mostly native Australian animals. Both facilities operated in competition with one another for 14 years. AWP closed in 2004 because of consistent losses from a range of unforeseeable local, national and international events.<sup>12</sup>

Industry stakeholders indicated that on closure of AWP:

1. No animals were euthanized because of the closure.
2. All animals that were part of an ASMP program were placed with other institutions by the species coordinator.
3. A list was made up of non-ASMP species and circulated amongst all ZAA members. Other parties, where known, were also given the list.
4. Koalas remain a hard to get species and these were all sold within Australia
5. Some animals were sold to private individuals where the law allowed. This included birds wanted by aviculturists, reptiles by reptile hobbyists and breeders. The large Crocodile went to an institution in the USA.
6. Some of the animals at AWP that were not really wanted as they were quite common were absorbed by nearby wildlife parks that held that species – the industry will typically put welfare concerns ahead of commercial imperatives in this regard.
7. The hardest species to relocate was the emus because AWP had a large number of them, but eventually all were rehomed.

### *Conservation*

Australia is required to 'conserve components of biological diversity' under its commitment to the Convention on Biological Diversity (CBD) 1992. Zoos and wildlife parks support conservation by providing 'insurance populations' for species such as the Tasmanian Devil.

Featherdale participates in the Tasmanian Devil Insurance Population (TDIP) program, along with 24 other zoos and wildlife parks, including 8 in NSW. TDIP program participants held over 500 Tasmanian Devils as at May 2013. According to industry stakeholders, Featherdale holds two non-productive Tasmanian Devils. Industry stakeholders confirm this is a similar number to other zoos and wildlife parks across the Sydney area including Taronga Zoo and Symbio Wildlife Park, and less than the approximately 20 held by Australian Walkabout Wildlife Park.

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<sup>12</sup> Smith, Alexandra (17 February 2004). "The lights go out at Wonderland, where millions got their thrills". The Sydney Morning Herald. Retrieved 3 May 2017.

Devils Ark, partly based at the Australian Reptile Park (located at Gosford), is the largest conservation breeding program for Tasmanian Devils and holds over 150 specimens, or about half the breed for wild release population. The second largest holder of breed for wild release Tasmanian Devils is the Save the Tasmanian Devil Program located in Tasmania, which holds just under half the population, followed by Zoos Victoria.

The Koala Genome Project is mapping the genetic blueprint of the Koala. The Project is led by the Australian Museum and Queensland University of Technology alongside other funders including Bioplatforms Australia, the Australia Research Council, and the University of New South Wales. Featherdale is not listed as a participant on the Project website although it has provided Koala specimens for the Project. Industry stakeholders indicated this is not unique and many zoos and wildlife parks have provided specimens for the Project.

### 3.3 Education programs

Sydney Zoo	Featherdale Wildlife Park
<ul style="list-style-type: none"> <li>&gt; Provide work experience placements to Western Sydney high school students, including students with disability, facilitated through Blacktown Council and other regional work placement programs e.g. the Schools Industry Partnership</li> <li>&gt; Work placements for TAFE students, including students with disability, facilitated through Western Sydney Institute. The main area for placements will be Captive Animal Management. Other areas include: tourism guiding; nature conservation; environmental management; animal studies; captive animal management; landscaping and horticulture; retail services; cleaning; service recovery; security; food preparation and handling; and customer relations.</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Work experience program with NSW TAFE for Captive Animal Management students</li> <li>&gt; Work experience program with the NSW Department of Education for students from schools across NSW</li> </ul>
<ul style="list-style-type: none"> <li>&gt; Age and curriculum appropriate environment, science and technology education programs for infant (kindergarten to grade two), primary (grades three to six) and high school students. This includes self-guided excursions for up to 50,000 students, including students with disability, annually. Themes include bush regeneration, urbanisation, and conservation and environment</li> <li>&gt; App-based educational program and partnership with Telstra and Microsoft to improve student engagement and understanding</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Schools Education Program that aligns with State and Commonwealth syllabus for English, Geography and Environment. Themes include animals, living things, endangered species, mammals and animals. Program has been provided to 63,000 students across Featherdale's 43 years of operation.</li> </ul>
<p>No comparator</p>	<ul style="list-style-type: none"> <li>&gt; Vacation / Outside of School Hours Care program</li> </ul>
<ul style="list-style-type: none"> <li>&gt; A cultural awareness program developed and delivered in partnership with Muru Mittigar about Aboriginal people (particularly the Darug), places, resources, connections to places, land, people, animals and our environment, the significance of stories, art,</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Free education talks for Ngallu Wal Aboriginal Child and Family Centre</li> </ul>

bush foods, medicines and technology sustainable Aboriginal living, artefacts, lifestyle and the impacts of colonisation	
> University research support including postgraduate scholarships	No comparator
> Customised training courses with the Western Sydney Institute based on employee requirements for Sydney Zoo	No comparator
No comparator	> Promotes educational programs for Save the Koala Month, National Bilby Day, and Endangered Species Week
> Mobile education program	> Mobile Education Program that visits schools up to 45km from Featherdale

### Comparing the programs

The **people and groups** that experience the programs include: primary and high school students including those seeking work placement, children in out of school hours care, Indigenous people and groups, and Vocational Education and Training (VET) and university students seeking work placement and research opportunities. The **locality** they operate across is Sydney, although they tend to be geographically concentrated in Western Sydney.

There are some similarities between the programs, for example:

- > Both provide work placement for high school, VET and university students. Featherdale provides placements for roughly 40 school and 40 TAFE students.<sup>13</sup> For TAFE students, these are in the area of Captive Animal Management. It is not clear how many placements Sydney Zoo will facilitate however its larger size indicates it has capacity for a larger number. For TAFE students, placements are slated to be in the areas of Captive Animal Management, as well as a range of other areas including tourism and hospitality management.
- > Both provide school education programs that align with State and national curricular. Sydney Zoo provides these in the areas of STEM, the Environment and Indigenous issues, whilst Featherdale provides them in the areas of Geography, English and Environment. Featherdale has provided education programs to roughly 63,000 students across its 43 years of operation.<sup>14</sup> In contrast, Sydney Zoo is slated to provide programs to 50,000 children annually. This represents almost 10% of the 600,000 school children that visit zoos and wildlife parks in Australia every year as part of curriculum based school programs.
- > Both provide a mobile education program. Featherdale provides a mobile education program up to 45km from the facility and a vacation / out of school hours care program. It is not clear how far Sydney Zoo's mobile education program will extend. However, the mobile education program of Taronga Zoo, which is more analogous to Sydney Zoo in size, operates across most of NSW.

There are some differences between the programs, for example:

- > Featherdale promotes education programs for Save the Koala Month, National Bilby Day, and Endangered Species Week. It is not clear whether Sydney Zoo will promote similar programs although most zoos and wildlife parks are involved in these types of initiatives

<sup>13</sup> Elanor Investors Group submission by Urbis, dated 18 October 2016 p.9

<sup>14</sup> *Ibid*

and it would be highly unusual if Sydney Zoo did not, particularly in the context of its proposed fund-raising initiatives.

- > Sydney Zoo has a design philosophy of area subdivisions replicating regions from around the world, with flagship species highlighting conservation messages.
- > Featherdale provides free education talks to attendees of the Ngallu Wal Aboriginal Child and Family Centre.
- > Featherdale provides vacation and out of school hours care. It is not clear whether Sydney Zoo will provide this, however the education programs of most zoos and wildlife parks across Sydney and surrounding areas provide these programs during school holidays and, again, it would be unusual if Sydney Zoo did not.
- > Sydney Zoo will provide Indigenous cultural education programs through its Australian Animals exhibit. Sydney Zoo will use smart technology in its education programs, which aligns with the National Innovation and Science Agenda priority to 'equip students to create and use digital technologies'.
- > Sydney Zoo will provide scholarship opportunities for postgraduate research students.
- > Sydney Zoo will develop customised training courses with the Western Sydney Institute.

### *Education programs at other zoos and wildlife parks*

Education programs are common at zoos and wildlife parks across Western Sydney and Sydney:

- > **WILDLIFE Sydney Zoo** at Darling Harbour offers guided and self-guided excursions for preschool, primary and high school students, including students with disability. These are offered during school term and as school vacation care. Educational resources are designed to align with the national school curriculum. It also offers a volunteer program for students studying animal degrees at TAFE and universities.
- > **Taronga Zoo** has an extensive range of education programs for preschool through to high school students. These include self-guided excursions, guided workshops, Indigenous cultural awareness program and scholarship opportunities, digital education programs such as videoconferencing and iPad apps, a teachers association and resources, onsite school camps, out of school hours and vacation care, as well as the ZooMobile educational outreach programs. Taronga provides specialist training and short course programs, including environmental leadership and animal photography. Taronga also offers accredited training courses such as Certificates I, II and III in Tourism, Certificate II in Animal Studies, including a version for HSC students, and Certificate III in Captive Animals. Taronga facilitates volunteer opportunities for TAFE and university students in the areas of life sciences, bush regeneration, animal science and research, education, and tourism and hospitality. The programs offer different levels of volunteering including short and long term placement as well as opportunities specifically for young people.
- > **Symbio Wildlife Park** offers educational programs for preschool, primary and high school students during school term. This includes an interactive wildlife presentation on native animals and reptiles that discusses the habitat, characteristics for survival, diet and other facts for each species. Symbio also offers a one day per week volunteer placement program for TAFE students over a 4 week trial period with the opportunity to progress to employment, and a two week volunteer placement program for university students. The programs are focused on Captive Animal Management.
- > **Calmsley Hill Farm** offers education and vacation care programs for preschool, primary and high school students during school term and holidays. The programs align with the NSW State Curriculum and are focused on conservation and sustainable living and farming,

agriculture, geography, human society and the environment, and science and technology. Calmsley Hill Farm also offers tailored education programs for TAFE courses.

- > The **Australian Reptile Park** offers education programs for preschool, kindergarten and primary school students. The programs align with the NSW State Curriculum and are focused on science and technology, including lifecycles, ecosystems and conservation. The programs include interactive animal experiences. The Park also provides volunteer placements for TAFE and university students.
- > **Australian Walkabout Wildlife Park** offers education programs for preschool, primary and high school students. The programs align with the NSW State Curriculum and are focused on Aboriginal Studies; Agricultural Technology; Creative Arts; Food Technology; Geography; History; Human Society and its Environment; Performance Arts; Religious Studies; Science; Science and Technology. The Park provides volunteer placements for TAFE and university students, including international and domestic students with on-site residential stay options available. It also provides education programs for TAFE and university students in the areas of Tourism Guiding; Aboriginal Studies; Horticulture; Environmental Studies; Nature Conservation; Wildlife Studies; Landscaping; Captive Animal Management Animal Studies; Environmental Management; and Diploma in Education. The Park also provides volunteer traineeships for rangers and animal keepers enrolled in Certificate II or higher in Captive Animal Care, which require a 2 day per week commitment.

### 3.4 Localities for the SIA

The localities for the SIA are outlined below. These are defined by considering the people and groups that experience the social, conservation and education programs and may experience impacts based on the geographic operating area of the programs.

- > The primary localities for the social programs are defined as the **Blacktown LGA** and **Western Sydney**, and the secondary locality is defined as the **Sydney region**.
- > The primary localities for the conservation programs are defined as the **whole of NSW** and the **whole of Australia**, and the secondary locality is defined as the **Sydney region**.
- > The primary locality for the education programs is defined as **Western Sydney** and the secondary locality is defined as the **Sydney region**.

## 4 Policy Context

This section reviews the policy context for Sydney Zoo.

Sydney Zoo is located in Western Sydney, one of the largest demographic and economic regions in Australia. The region has grown significantly over recent decades and is projected to continue growing over coming decades and take on an increasingly important role in the social, economic and environmental fabric of Sydney, NSW and Australia.

However, the region faces a number of challenges, including pockets of high-socio economic disadvantage and a disconnect between resident labour forces and jobs in the region, which historically have been lower value-add jobs subject to cyclical economic forces and manifested in lower incomes and higher rates of unemployment. Because of the importance of Western Sydney and the challenges it faces, the region has been identified as a strategic priority for economic growth, infrastructure investment and urban development.<sup>15</sup>

Western Sydney's population was approximately 2.1million in 2014, almost a third of NSW, and is forecast to increase a further 1million by 2031. Western Sydney's growth rate is above that for Greater Sydney and the rest of NSW, and the Blacktown LGA that contains Sydney Zoo is projected to grow at an even stronger rate over the next 25 years. Alongside the mismatch between the resident labour force and jobs in the region, this highlights a need for local employment opportunities to support growth in the region.

### 4.1 NSW State Priorities

The State Priorities are the apex of the NSW Government's policy framework. A number of them are relevant to Sydney Zoo:

- > Boosting apprenticeships, including increasing the proportion of people completing apprenticeships and traineeships by 2019, facilitating on the job training and encouraging apprenticeship completions
- > Increasing cultural participation, including growing attendance at cultural venues and events 15% by 2019

NSW has one of the lowest arts, culture and recreation participation rates in Australia, despite these being the fastest growing household budget item, and there are particularly low participation rates for Western Sydney when compared to Eastern Sydney.<sup>16</sup>

Alongside a deficit of arts, culture and recreation venues in Western Sydney compared to Eastern Sydney, this highlights a need for local arts, culture and recreation opportunities to meet the NSW State Priorities and support an increase in participation.<sup>17</sup>

### 4.2 Western Sydney Parklands

The Western Sydney Parklands State Environmental Planning Policy (the WSP SEPP) establishes planning controls that will enable the WSP Trust to develop the WSP into multi-use urban parkland for the Western Sydney region. This includes (*emphasis added*):

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<sup>15</sup> Greater Sydney Commission. (2016). South West District Draft Plan. NSW Government. Sydney.

<sup>16</sup> Deloitte. (2015). *Building Western Sydney's Cultural Arts Economy - a key to Sydney's success*. Retrieved March 18, 2017, from Western Sydney Business Chamber: [http://businesschamber.com.au/Sydney-Business-Chamber/Advocacy/Focus-Western-Sydney/WS-Cultural-Infrastructure-Report\\_Final](http://businesschamber.com.au/Sydney-Business-Chamber/Advocacy/Focus-Western-Sydney/WS-Cultural-Infrastructure-Report_Final); Australian Bureau of Statistics. (2015, December). *Catalogue 5206.0, Australian National Accounts: National Income, Expenditure and Product (NSW)*. Retrieved March 18, 2017, from Australian Bureau of Statistics: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/36E545F4E2B5AE98CA257FC40013B175?opendocument>

<sup>17</sup> *Ibid*

- a) allowing for a diverse range of recreational, entertainment and tourist facilities in the Western Parklands
- b) allowing for a range of commercial, retail, infrastructure and other uses consistent with the Metropolitan Strategy, which will deliver beneficial social and economic outcomes to Western Sydney
- d) protecting and enhancing the natural systems of the Western Parklands, including flora and fauna species and communities and riparian corridors
- e) protecting and enhancing the cultural and historical heritage of the Western Parklands
- g) facilitating public access to, and use and enjoyment of, the Western Parklands
- h) facilitating use of the Western Parklands to meet a range of community needs and interests, including those that promote health and well-being in the community
- i) encouraging the use of the Western Parklands for education and research purposes, including accommodation and other facilities to support those purposes
- k) ensuring that development of the Western Parklands is undertaken in an ecologically sustainable way

In considering development under the SEPP, the consent authority must consider (emphasis added):

- e) the impact on the continuity of the Western Parklands as a corridor linking core habitat such as the endangered Cumberland Plain Woodland,
- i) any plan of management for the parklands, that includes the Western Parklands, prepared and adopted under Part 4 of the Western Sydney Parklands Act 2006, or
- ii) any precinct plan for a precinct of the parklands, that includes the Western Parklands

### **Western Sydney Parklands Plan of Management**

An objective of the WSP Plan of Management 2020 (the PoM) is to promote the parklands as a regional tourism destination. To realise this, the PoM identifies the Bungarribee Precinct as an important recreation, tourism, social and cultural hub within WSP.

Over \$15million in investment is planned for the Bungarribee Precinct over the next 15 years, and the Precinct is crucial to realising the Parkland's vision to play an important role in Western Sydney's tourism offer. Tourism opportunities are also planned for other WSP precincts, including sport and recreation and motorsport based tourism.

The WSP Trust is self-funded and tourism is an important part of its revenue stream that will fund future investment in new infrastructure, facilities, programs and environmental initiatives. A significant portion of the Trust's income is expected to come from long term leases to tourism businesses operating in the WSP.

## **4.3 Youth Employment**

The NSW Strategic Plan for Children and Young People 2016 – 2019 sets out objectives for youth employment.

The Plan identifies a lack of opportunities for work placement, work experience and apprenticeships, difficulties gaining employment without prior experience, and challenges finding casual and part-time work as key concerns for young people.

Disadvantaged young people, such as Aboriginal and Torres Strait Islanders and young people with disabilities, report particular challenges in this transition, including facing discrimination in gaining access to employment due to their background.

The Plan is guided by a number of principles, proposes a number of actions, and outlines several initiatives to address youth employment issues. These include:

- > Supporting children and young people during important life changes such as transitioning from school to further education and employment.
- > Increasing traineeship and apprenticeship completions and job creation are critical levers to support young people to gain access to employment. The Plan sets a target to increase the proportion of people completing apprenticeships and traineeships to 65% by 2019.
- > Developing regional strategies that include actions to support children and young people in their local area, including creating flexible employment, housing and service delivery that responds to changing markets.
- > Providing children and young people with relevant skills for life, including technical and vocational skills, for employment, decent jobs and entrepreneurship. VET can help young people who are disengaged from school by offering a comprehensive focus on applied vocational learning and access to a wide range of vocational pathways in skill shortage areas, which improves options for employment.

#### 4.4 Indigenous Employment and Tourism

All levels of government have a longstanding policy commitment to close the gap in Indigenous employment outcomes. An intergovernmental target has been set to halve the gap in outcomes between Indigenous and non-Indigenous Australians by 2018.<sup>18</sup>

However, the 2015 Closing the Gap report finds no progress has been made on the target and seeks to strengthen opportunities to find practical ways to foster economic prosperity for Aboriginal and Torres Strait Islander businesses.

Nationally, the proportion of employed working age Aboriginal and Torres Strait Islander people declined from 54% in 2008 to 47.5% in 2013. In Western Sydney, the proportion of working age Aboriginal and Torres Strait Island people who are employed increased marginally from 48% in 2006 to 50% in 2011.

##### *Indigenous Tourism*

The NSW Government's Aboriginal Tourism Action Plan 2013-2016 sets a vision to support the development of Aboriginal tourism experiences in NSW. Tourism offers the potential to engender a greater understanding and appreciation of the diversity and richness of Aboriginal culture. The Plan sets a principle that development of Aboriginal tourism occurs in a manner which Aboriginal people endorse and respects their cultural identity.

The Plan notes that whilst domestic demand is low, demand could be generated via visitor exposure to marketing based on Indigenous experiences. This includes experiences that raise awareness of the diversity of Aboriginal culture with its regional identities, communities, languages, local stories and customs. The Plan's goals include:

- > Increasing market awareness of NSW as a destination where Aboriginal culture is strong, vibrant and diverse
- > Sustainable market-ready and export-ready Aboriginal tourism products and experiences
- > Increased awareness, understanding and appreciation of Aboriginal culture in NSW by government, the tourism industry and visitors

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<sup>18</sup> Department of Prime Minister and Cabinet. (n-d). Closing the Gap: Executive Summary. Available at: <http://closingthegap.pmc.gov.au/executive-summary>

The Plan also includes a number of actions such as working with tourism industry stakeholders to highlight Aboriginal-delivered experiences, linking or ‘bundling’ Aboriginal tourism experiences, supporting Aboriginal employment in tourism experiences, and identifying opportunities to utilise the skills of Aboriginal tour guides trained through the TAFE-NSW Cultural Tourism Training Program.

## 4.5 NSW Visitor Economy

The NSW Visitor Economy Taskforce has set a vision to double overnight expenditure in NSW by 2020. The Taskforce identified nature and wildlife experiences as highly appealing to visitors, and a major motivator of travel to and within NSW (Figure 1).

The Taskforce notes nature and wildlife experiences offer a significant opportunity to realise the vision it has set. It finds a need to integrate these experiences with complementary tourism activities and appeal such as arts, culture and events into Destination Management Planning. The Taskforce calls for stronger Government commitment to provide and maintain visitor experiences in identified nature and heritage tourism precincts.

FIGURE 1 APPEAL OF NATURE AND WILDLIFE EXPERIENCES TO NSW RESIDENTS AND VISITORS



Moscardo and Saltzer (2004) have found strong interest amongst tourists to visit wildlife experiences whilst on holidays and the opportunity to see wildlife not normally seen is an important factor when they select holiday destinations.<sup>19</sup> Other studies demonstrate 76% of international tourists are interested or very interested in experiencing native wildlife and more than half prefer to do this by visiting a zoo or wildlife park, rather than tours in the wild.<sup>20</sup>

## 4.6 Disability Inclusion

The NSW Disability Inclusion Plan sets out the NSW Government’s objectives with respect to people with disability. These include:

1. development of positive community attitudes and behaviours towards people with disability

<sup>19</sup> Moscardo, Gianna, and Rebecca Saltzer. "Understanding wildlife tourism markets." Common Ground Publishing, 2004. 167-185.

<sup>20</sup> Aegis Consulting Australia and Applied Economics. 2009. Report on the Economic and Social Contribution of the Zoological Industry in Australia. Australasian Regional Association of Zoological Parks and Aquaria.

2. creation of more liveable communities for people with disability
3. achievement of a higher rate of meaningful employment participation by people with disability through inclusive employment practices
4. more equitable access to mainstream services for people with disability through better systems and processes

The Plan notes people with disability experience fewer opportunities to engage with their community as a result of barriers in the built environment, transport, housing and local supports.

The Plan aims to create liveable communities with increased physical accessibility, opportunities for social engagement and improved quality of personal, social and business interactions. The Plan defines liveable communities as places where people have the opportunity to exercise their rights, to live, learn, work and play, to feel safe and belong, to raise a family and grow old. Improving local access and accessibility for local activities are actions listed under the Plan.

The Plan notes employment rates for people with disability are significantly lower than those without disability, and employment is an area where efforts to create inclusive societies have been less successful. Particular employment barriers include accessing information on job opportunities and the recruitment process, meaningful adjustments and career development opportunities.

The Plan aims to increase the number of people with disability in meaningful employment, which will enable people with disability to exercise choice and control through economic security. To do this, the Plan has an action to look for partners across industry to support employment of people with disability.

## 4.7 Implications for Sydney Zoo

Sydney Zoo fulfils a wide range of the policies reviewed, as summarised in the table below. For these reasons, Sydney Zoo will deliver beneficial social and economic outcomes for Western Sydney and, in doing so, further the aims of the WSP SEPP and other NSW State Priorities.

Policy	Contribution	Description
<b>NSW State Priorities and WSP SEPP</b>	Recreation Infrastructure and Attendance	Sydney Zoo will provide an entertainment and tourist facility that aligns with WSP SEPP aims. It will also contribute to addressing the deficit of arts, culture and recreation venues and participation in Western Sydney, and meeting NSW State Priorities to increase participation and grow attendance at cultural venues and events
<b>NSW Visitor Economy</b>	Wildlife-based Tourism Destination Precinct	Sydney Zoo will contribute to the NSW Visitor Economy Taskforce vision to double overnight expenditure. Sydney Zoo offers nature and wildlife experiences, which are highly appealing and a major motivator for visitors traveling to and within NSW.  In combination with the WSP, Featherdale and other nearby nature and heritage attractions, such as the North Parramatta Heritage Area and Blue Mountains World Heritage Area, Sydney Zoo will contribute to a nature and heritage tourism destination precinct identity for Western Sydney.
<b>Advancement of Indigenous People</b>	Indigenous Employment	Sydney Zoo will improve Indigenous employment outcomes through its 10% Indigenous employment target. In particular, this will be achieved through Aboriginal-delivered cultural tourism experiences, which offer a major opportunity to improve employment outcomes for Indigenous people. In this respect, Sydney Zoo will contribute to a continuation of improved indigenous

		employment outcomes in Western Sydney, which have been more positive compared to nation-wide outcomes.
<b>Advancement of Indigenous People</b>	Indigenous Tourism	Sydney Zoo will increase market awareness of NSW as a tourism destination where Indigenous culture is strong and diverse. It will raise awareness of Aboriginal regional identities through delivery of cultural awareness programs about the Darug people, places, resources, connections to places, land, people, animals and our environment, the significance of stories, art, bush foods, medicines and technology, sustainable Aboriginal living, artefacts, lifestyle and impacts of colonisation. Delivering this in partnership with Muru Mittigar will ensure Aboriginal tourism occurs in a manner endorsed by Aboriginal people
<b>NSW State Priorities and NSW Strategic Plan for Children and Young People</b>	Youth Employment	Sydney Zoo will improve youth employment outcomes by offering VET opportunities and vocational pathways for school leavers. By offering new apprenticeships and traineeships, as is common across zoos and wildlife parks, Sydney Zoo will contribute to meeting NSW State Priority and NSW Strategic Plan for Children and Young People targets to increase the proportion of young people completing apprenticeships and traineeships
<b>NSW Disability Inclusion Plan</b>	Accessible Design	Sydney Zoo's fully accessible design will help create a liveable community for people with disability living, working and visiting Western Sydney. It will provide these people with opportunities for social interaction and the capacity to exercise their rights to live, learn, work, play and feel a sense of belonging in Western Sydney
<b>WSP Planning Objectives</b>	WSP Revenue	As a tourism operator located in the WSP under a long term lease arrangement, Sydney Zoo will provide revenue for the WSP Trust. This will fund future investment by the Trust in new infrastructure, facilities, programs and environmental initiatives that will improve overall amenity for Western Sydney residents, workers and visitors
<b>WSP SEPP</b>	Environment Preservation	Sydney Zoo will realise the WSP SEPP aims by protecting flora and fauna species, communities and riparian corridors, including the endangered Cumberland Plain Woodland, through the facility's significant landscape design that features over 60% vegetation in an open space style

## 5 Evidence review

To assist with assessing the likelihood of potential social impacts, academic research has been reviewed on the:

1. Relationship between tourism clusters, attraction types and visitor behaviour
2. Outcomes of zoo and wildlife park conservation education programs
3. Visitor markets and experiences of zoos and wildlife parks

In relating the findings of this review to Sydney Zoo, the SIA notes:

Item	Evidence	Sydney Zoo Actions
<b>Tourism Cluster</b>	<p>Close spatial proximity and thematic complementarity make Sydney Zoo and Featherdale compatible attractions.</p> <p>The empirical evidence indicates this is likely to increase overall visitation to the area and means visitors are likely to visit Sydney Zoo and Featherdale, as well as other tourism attractions in the area, during the same trip.</p>	<p>Sydney Zoo, Featherdale and other tourism attractions in the area should seek to co-operate in order to maximise the opportunity for establishment of the tourism cluster in the area.</p>
<b>Educational Value</b>	<p>Educational outcomes are primarily a function of visitor interest in the animals held.<sup>21</sup></p> <p>Higher levels of visitor interest are more likely to translate into positive educational outcomes. Body size, levels of activity, and whether an animal is considered a 'primary' or 'flagship' species all significantly influence interest.</p> <p>The greater these are, the higher the level of interest and translation into educational outcomes.</p>	<p>Sydney Zoo will hold a highly sought after collection of species, many of which can be considered flagship, large in size and have high levels of activity.</p> <p>Sydney Zoo's expected annual visitation by school children is significant and likely to deliver positive outcomes because school children are more likely to absorb education, conservation and behaviour messages that are part of zoo and wildlife park experiences.</p> <p>This is even more likely in Western Sydney given there are lower levels of participation in arts, culture and recreational activities in this locality, as outlined at Section 4.1.</p>
<b>Social Interaction</b>	<p>Because social interaction is a stronger motivator to visit captive wildlife tourism experiences, particularly for domestic visitors, Sydney Zoo should focus on enhancing opportunities for social interaction within the facility design.</p>	<p>This has been included in the current plans through the accommodation of several picnic areas and interactive animal presentation strategies including an amphitheater.</p>
<b>Experience design</b>	<p>To enhance education, conservation and behaviour outcomes, Sydney Zoo should pay close attention to the animals on</p>	<p>Sydney Zoo's open space style design will give the appearance of more naturalistic animal behaviour and an</p>

<sup>21</sup> Moss, A. and Esson, M. 2014. Visitor interest in zoo animals and the implications for collection planning and zoo education programmes. *Zoo Biology*. 29: 715-31

	<p>display, their levels of activity, and ensuring visitors can see a wide variety of animals.</p> <p>These attributes are all more likely to enhance outcomes for novice / generalist wildlife tourists, which are more likely in Western Sydney given lower levels of participation.</p>	<p>untouched natural environment, which also enhance education, conservation and behaviour outcomes.</p> <p>In addition to the potential that Sydney Zoo's proposed design features offer for enhanced outcomes in these areas, they are also more likely to translate into higher levels of visitor satisfaction with Sydney Zoo.</p> <p>It is further noted the exotic species to be held by Sydney Zoo are likely to be considered rare and unique by its mostly domestic visitor market, as discussed at Section 6.1.5. These attributes are also more likely to enhance education, conservation and behaviour outcomes for most visitors.</p>
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## 5.1 Tourism clusters, attractions and visitor behaviour

Spatial clusters of tourism attractions enhance appeal for individual attractions across a broader range of visitor markets.<sup>22</sup> This generates spin-off benefits for individual attractions by increasing total visitation across the cluster and provides a critical mass of activities that encourages visitors to extend their visit by one or more days and make return visits.<sup>23</sup> Co-location of thematically inter-related attractions further extends visitor stay and assists smaller attractions to compete with larger ones through consortia based on a willingness to cooperate (Sternberg 1997 *op cit.* Weidenfeld *et al*, 2011).

Some of the interdependencies between attractions located in clusters include buying groups, retail collectives, joint marketing, enhanced lobbying to government, information exchange and forming shared agendas and common objectives. Previous studies show clustered zoo and wildlife park attractions collaborating in pooling financial resources to procure veterinarian services, sharing questions and concerns, lobbying local and higher levels of government, coordinating advertising and marketing efforts, market development through better bargaining power with tour operators, and joint research and training of staff (Hjalager, 2000; Jackson & Murphy, 2002; Fyall *et al*, 2001; Mackun, 1998 *op cit.* Weidenfeld *et al*, 2011).

However, there are spatial determinants of the likelihood and type of collaboration between clustered attractions. For example, where spatial proximity is high, that is, where two attractions are located close to each other, Weidenfeld *et al* (2011) find collaborative marketing is less likely, and knowledge transfer and joint problem solving more likely, particularly for similar attraction types.

Weidenfeld *et al* (2009) note tourism clusters are important in destination development by generating demand and that complementary and compatible relationships between attractions contribute to a destination's unique character. They find clusters organise spatially and thematically (i.e. by attraction type), and investigated whether this influences tourist movement between attractions, as well as the impact of spatial proximity, attraction density and similarity. This is because tourism clusters are functional, rather than industrial, and tend to emerge in more limited geographic areas, such as amusement park precincts.

<sup>22</sup> Weidenfeld. A., Butler. R., Williams. A. (2009) Clustering and Compatibility of Tourism Attractions. *International Journal of Tourism Research*. 11: 1-16

<sup>23</sup> Weidenfeld. A., Butler. R., Williams. A. (2011) The role of clustering, cooperation and complementarities in the visitors attraction sector. *Current issues in Tourism Research*. 14(7): 595-629

Weidenfeld *et al* find levels of attraction compatibility range from high to low based on the percentage of shared visitors. A high percentage of shared visitors reflects synergies of appeal and visitors being unlikely to visit one attraction without visiting the other in the same trip. Therefore, enhancing the critical mass of similar attractions in a destination has a positive impact on visitors and the cumulative impact of two or more similar attractions generates visits to a destination and a preference for one destination over another. Indeed, Weidenfeld *et al* find the appeal of a cluster is stronger than individual attractions within it, and a strong trip generation effect exists within a short distance from an originating attraction. This means spatial proximity and being located en-route to an attraction or in a logical sequence can draw more visitors to an attraction than would otherwise be the case.

In their study, Weidenfeld *et al* define thematic complementarity as two similar attractions that do not offer an identical product and complement, rather than compete for, the same market. They studied a localised cluster of wildlife parks in Cornwall in the UK offering different types of animals and found very high levels of cooperation between the parks. The study is highly and directly relevant to Sydney Zoo and makes two instructive findings:

- 1) At the local scale, spatial proximity between attractions is positively related to compatibility. This means that, regardless of attraction type, visitors are more likely to visit two attractions if they are located close together. Reasons for this include availability of facilities at one attraction that are not available at the other.
- 2) At the local scale, attractions that are thematically complementary (i.e. three wildlife parks with different animals) are more compatible than combinations of other attractions, say, a wildlife park and an amusement park. This is because visitors prefer an area with multiple similar attractions to reduce the risk of dissatisfaction among individual group members. In these instances, because the attractions appeal to similar markets, visitors are encouraged and more likely to visit multiple attractions because they are similar.

## 5.2 Zoo and wildlife park education programs

Research on zoos and wildlife parks often reports that visitors perceive them as places of entertainment and recreation rather than sites of learning (Ballantyne *et al* 2007). However, visitor surveys suggest learning about animals has overtaken entertainment as one of the principal reasons why people visit.<sup>24</sup> Regardless, whenever people visit zoos and wildlife parks, learning remains a matter of their own choice (Ballantyne *et al* 2007).

### *Factors affecting educational outcomes*

In a 2012 study, Packer and Ballantyne find visitors to non-captive wildlife experiences in Australia place greater importance on learning, whereas visitors to captive experiences place greater emphasis on social interaction.<sup>25</sup> They find this has an influence on short term learning and attitudinal change, which is greater in non-captive than captive settings.

A raft of recent research provides evidence of the educational outcomes of zoos and wildlife parks. For example, Moscardo (2007) concludes from a largescale (n=3121) study of captive, non-captive and controlled wildlife experiences in Australia and New Zealand that there is little support for claims they enhance conservation outcomes.<sup>26</sup> Others, such as Smith, Broad and Weiler (2008 p558), reach similar conclusions and find that, in the limited number of cases

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<sup>24</sup> Aegis Consulting Australia and Applied Economics. 2009. Report on the Economic and Social Contribution of the Zoological Industry in Australia. Australasian Regional Association of Zoological Parks and Aquaria.

<sup>25</sup> Packer, J. and Ballantyne, R. 2012. Comparing captive and non-captive wildlife tourism. *Annals of Tourism Research*. 39(2): 1242-5

<sup>26</sup> Moscardo, G. (2007). Understanding visitor experiences in captive, controlled and non-captive wildlife-based tourism settings. *Tourism Review International*. 11(3):213-224

where new conservation behaviours are adopted, it is likely factors other than the wildlife experience are at play.<sup>27</sup>

Others suggest educational outcomes are a function of visitor interest in the animals held.<sup>28</sup> For example, Moss and Esson find higher levels of visitor interest are more likely to translate into positive educational outcomes. They find body size, levels of activity, and whether an animal is considered a 'primary' or 'flagship' species all significantly influence interest, and that, the greater these are, the higher the level of interest and translation into positive educational outcomes.

In a separate study, Ballantyne *et al* (2007) review the factors impacting learning by zoo visitors. These include observing animals in a natural environment, opportunities for close encounter and observation of animal behaviour, engaging visitor emotions and connecting with visitors' prior knowledge and experiences, using persuasive communication and linking conservation goals to everyday actions, and providing incentives and activities to support behaviour change.

In their Australian study, Ballantyne *et al* find older people, females and repeat visitors are pre-disposed to short term learning and attitudinal change from zoo and wildlife experiences. There were similar findings for long term learning, although first time rather than repeat visitors and international tourists were more likely to experience a longer term impact. The authors suggest this is because Australian and repeat visitors were both more likely to engage in sustainable environmental behaviours prior to their visit.

### *Designing zoo and wildlife park programs and experiences*

Reflecting on the above findings, authors of the studies provide recommendations to enhance the educational value of zoos and wildlife parks. These include:

- > **Animal Selection** - Where species are brought into collections for their perceived educational value, they should be carefully selected based on relative popularity as this has a significant influence on learning outcomes for visitors. As body size, levels of activity and whether an animal is a primary or flagship species are key influences; these should be carefully considered and selected to align with intended outcomes.
- > **Experience Design** - In experience design, zoos and wildlife parks should target not only the desired behaviour but also the underlying beliefs that explain why visitors do not demonstrate this behaviour and constrain intentions for future behaviours. For example, if visitors have strong beliefs that removing roadkill is dangerous for them and their family, this would constrain intended behaviour. In this situation, zoos and wildlife parks should target issues around safety of removing roadkill.
- > **Messaging** - Visitors to captive zoos and wildlife parks are largely motivated by the opportunity to see and engage with animals and to enjoy a recreational experience with friends and family. In view of this, visitors may resist overt attempts to be educated about appropriate behaviour and more subtle messaging should be used.

As an example of a successful approach to designing programs with learning outcomes in mind, Pearson *et al* (2014) evaluated the impact of a campaign that used persuasive communication, linked conservation goals to everyday actions, and provided incentives and activities to support behaviour change. Program communication included an educational video played on-site, a YouTube video that could be accessed off-site, celebrity ambassadors, social media, and a petition.

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<sup>27</sup> Smith, L., Broad, S., Weiler, B. 2008. A closer examination of the impact of zoo visits on visitor behaviour. *Journal of Sustainable Tourism*. 16(5); 544-62

<sup>28</sup> Moss, A. and Esson, M. 2014. Visitor interest in zoo animals and the implications for collection planning and zoo education programmes. *Zoo Biology*. 29: 715-31

Following baseline, midpoint, conclusion and follow up evaluation of the program, Pearson *et al* found significant increases in awareness, attitudes, self-reported intended and actual behaviour change. However, findings were not the same for international visitors. These findings highlight the efficacy of multi-faceted and innovative education programs, as well as the need for different approaches with international visitors.

### 5.3 Zoo and wildlife park visitor markets

Moscardo and Saltzer (2004) have reviewed tourism market studies and find key distinctions between wildlife and other types of tourists (Figure 2).

FIGURE 2 ATTRIBUTES OF WILDLIFE TOURISTS

Study	Major Results
Boxall & McFarlane, 1993 (Participants in a Christmas bird count, Canada)	Wildlife tourists were more likely: <ul style="list-style-type: none"> <li>• To be older</li> <li>• To have higher levels of education</li> </ul>
Pearce & Wilson, 1995 (International tourists to New Zealand)	Wildlife tourists were more likely: <ul style="list-style-type: none"> <li>• To stay longer</li> <li>• To travel further</li> <li>• To spend more</li> <li>• To be younger</li> <li>• To have higher education levels and incomes</li> <li>• To be independent travellers</li> </ul>
Moscardo, 2000 (Tourists to the Whitsundays, Australia)	Wildlife tourists were more likely: <ul style="list-style-type: none"> <li>• To stay longer in the region</li> <li>• To be independent travellers</li> </ul>
Fredline & Faulkner 2001 (International visitors to Australia)	Wildlife tourists were more likely : <ul style="list-style-type: none"> <li>• To be younger</li> <li>• To travel further</li> <li>• To stay longer</li> <li>• To be on a package tour</li> </ul>
Moscardo et al., 2001 (Tourists to Tasmania, Australia)	Wildlife tourists were more likely: <ul style="list-style-type: none"> <li>• To be female</li> <li>• To be younger, independent, longer stay</li> <li>• To use the internet for information</li> </ul>

Others, such as Duffus and Dearden (1990) make a distinction between expert / specialist and novice / generalist wildlife tourists and find expert / specialist tourists are more likely to:

- > Use a wider range of information sources
- > Seek a wider range of species to view
- > Be more interested in interpretation/education
- > Be more interested in rare species
- > Have higher levels of physical activity

#### *Zoo and wildlife park visitor experiences*

In Australia, zoos maintain the second highest level of visitation compared to other cultural activities, such as libraries, museums and art galleries, even though zoo visits come at a cost and admission to libraries, museums and art galleries is generally free.

Zoo visitor surveys indicate benefits to consumers are typically greater than their payment for admission and many visitors have consumer surpluses, which is a strong indicator of the value visitors attribute to zoos.<sup>29</sup> Zoo visitor surveys in Australia also show high levels of satisfaction

<sup>29</sup> Aegis Consulting Australia and Applied Economics. 2009. Report on the Economic and Social Contribution of the Zoological Industry in Australia. Australasian Regional Association of Zoological Parks and Aquaria.

and where satisfaction is lower this is a result of non-animal aspects such as food and beverage outlets, shade and rest areas, as well as parking.<sup>30</sup>

Many of the factors that impact education outcomes are also determinants of visitor satisfaction with zoos and wildlife parks (Ballantyne *et al*, 2007). Ballantyne *et al* (2011) have used factor analysis in a large (n=1,046) study to determine salient aspects of visitor experience.<sup>31</sup> They find two equally weighted factors that determine positive experiences. The first relates to the excitement of seeing live animals, having a good view, seeing plenty of activity, an engaging and enjoyable experience, and a sense of wonder and awe. The second included feeling an emotional connection with animals, reflecting on new ideas about animals and their environments, discussing new information with companions, experiencing something surprising or unexpected, and feeling sad or angry about environmental problems.

In a large scale study (n=5,000) Moscardo and Saltzer (2004) asked visitors about the most important features of zoo and wildlife experiences. Seeing wildlife in a natural environment (67%) and animals behaving naturally (36%) were most important, followed by the rarity and uniqueness of wildlife (33%), opportunities to get close to wildlife (29%), an untouched natural environment (26%) and a large variety of wildlife to see (25%). Touching or handling wildlife (7%), feeling safe (8%) and ease of viewing (10%) were least important.

However, findings vary for visitors from different countries. For example, Asian tourists are more interested in getting close (33%), touching and handling wildlife (12%), and feeling safe (13%), whilst British tourists are more interested in seeing wildlife in a natural environment (73%) and a knowledgeable guide (25%), but less interested in seeing a variety of wildlife (18%).

In all, factors found across several studies to influence visitor satisfaction include:

- > The variety of animals seen;
- > Particular features of the animals;
- > Being able to get close to the wildlife;
- > Seeing large, rare or new species;
- > The natural setting itself; and
- > Being able to learn about the wildlife or the setting

From these findings, Moscardo and Saltzer (2004) suggest the following six factors can be used to measure zoo and wildlife experiences:

1. Intensity or excitement of the experience
2. Authenticity or naturalness of the experience
3. Uniqueness of the experience
4. Amount of visitor control over the experience
5. Popularity of the species
6. Species status in terms of being rare and/or endangered

Moscardo and Saltzer conclude authentic or natural encounters which are unique, intense or exciting and which give a sense of control are likely to be seen as positive by visitors. They relate this to the concept of mindfulness, which includes perceptions of personal control,

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<sup>30</sup> *Ibid*

<sup>31</sup> Ballantyne, R., Packer, J., Falk, J. 2011. Visitors learning for environmental sustainability: Testing short and long term impacts of wildlife tourism experiences using structural equation modelling. *Tourism Management*. 32: 1243-52

excitement, learning and satisfaction, and suggest mindful visitors are more likely to be satisfied and pay greater attention to both the information provided to them and their own behaviour.

Moscard and Saltzer also argue mindful visitors should be more inclined to engage in minimal impact environmental behaviours and pay greater attention to educational strategies and interpretation. They propose a mindfulness model for wildlife tourism (Figure 3), and educational principles for these (Table 2).

FIGURE 3 MINDFULNESS MODEL FOR WILDLIFE BASED TOURISM EXPERIENCE

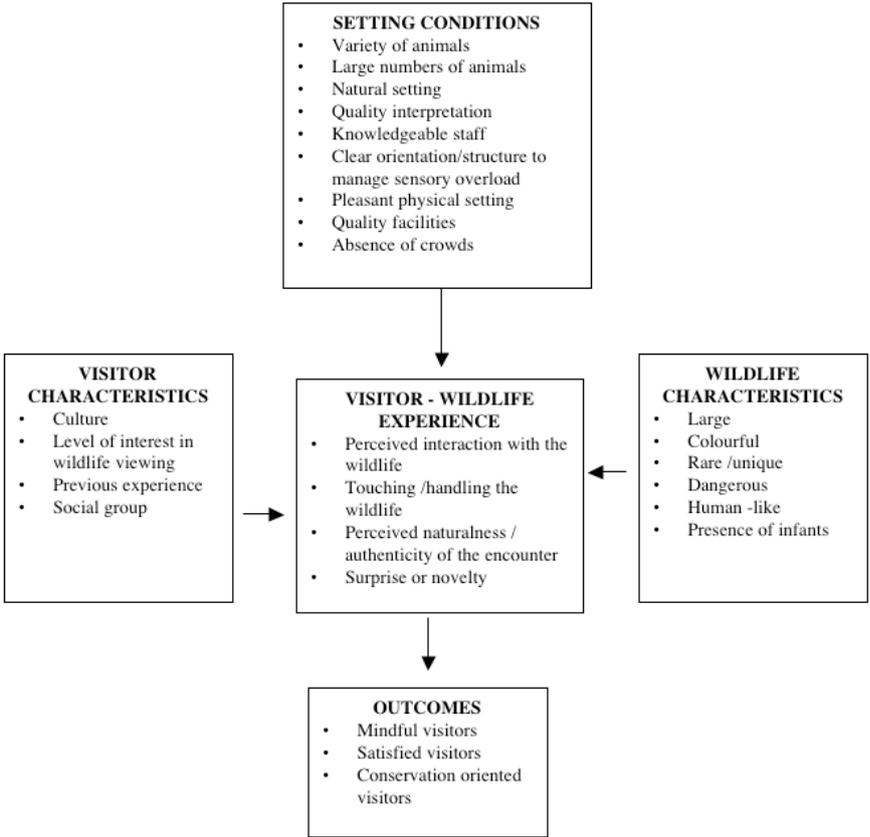


TABLE 2 MANAGEMENT PRINCIPLES FOR WILDLIFE TOURISM EXPERIENCES

Principle	Description
<b>Variety</b>	> wildlife tourism operators and managers do not rely solely on the passive viewing of wildlife and instead offer a range of different styles of activity to support and enhance the wildlife-viewing experience
<b>Participation</b>	> encourages guests to get physically and mentally active, it also gives guests some sense of control over what is happening
<b>Control</b>	> help guests develop their wildlife spotting skills with briefings and introductory sessions. In those settings where many species are likely to be seen, control can also be enhanced by giving assistance to guests to make choices

### 5.4 Implications for Sydney Zoo

Both spatial proximity and thematic complementarity are positively related to attraction compatibility. Further, attraction agglomeration and closer spatial proximity enhances compatibility at the local scale. Where spatial proximity and thematic complementarity come together at this scale, the result is increased overall visits to a destination and preferences for

that destination over others. In these contexts, it is also more likely tourists will visit all attractions at the destination during the same trip.

A range of studies have made findings that cast doubt on the long held, but rarely tested, beneficial education, conservation and behavioural outcomes of zoos and wildlife parks. This correlates with other evidence that shows motivation to visit and the experience of captive wildlife tourism experiences are determined more strongly by social activity, rather than education, conservation and behavioural outcomes for visitors.

Where positive outcomes are achieved in the short or long term, this is mostly a factor of domestic or international visitor type, animals on display, levels of animal activity, and the ability to view a wide variety of animals. New visitors such as school children visiting a zoo for the first time are more likely to experience attitudinal change, although this tapers off over time as the same level of change does not exist for repeat visitors. Further, older female visitors and those pre-disposed to conservation behaviours are more likely to experience positive attitudinal change and learning outcomes.

There are strategies zoos and wildlife parks can use to enhance education, conservation and behavioural outcomes. These include paying close attention to the popularity and features of animals used to communicate education, conservation and behavioural messages, targeting beliefs that constrain intended behaviour rather than messages about the importance of the desired behaviour, more subtle integration of education messages into experience design, and ensuring animals are presented in a natural environment, behave naturally, and are rare or unique wildlife.

A range of factors have consistently been found to affect visitor enjoyment and satisfaction with zoo experiences. These include popularity and rarity of the species, naturalistic animal behaviour and enclosures, and the variety of the animals seen and their level of activity.

Relating these findings to Sydney Zoo, the SIA notes:

Item	Evidence	Sydney Zoo Actions
<b>Tourism Cluster</b>	<p>Close spatial proximity and thematic complementarity make Sydney Zoo and Featherdale compatible attractions.</p> <p>The empirical evidence indicates this is likely to increase overall visitation to the area and means visitors are likely to visit Sydney Zoo and Featherdale, as well as other tourism attractions in the area, during the same trip.</p>	<p>Sydney Zoo, Featherdale and other tourism attractions in the area should seek to co-operate in order to maximise the opportunity for establishment of the tourism cluster in the area.</p>
<b>Educational Value</b>	<p>Educational outcomes are primarily a function of visitor interest in the animals held.<sup>32</sup></p> <p>Higher levels of visitor interest are more likely to translate into positive educational outcomes. Body size, levels of activity, and whether an animal is considered a 'primary' or 'flagship' species all significantly influence interest.</p> <p>The greater these are, the higher the level of interest and translation into educational</p>	<p>Sydney Zoo will hold a highly sought after collection of species, many of which can be considered flagship, large in size and have high levels of activity.</p> <p>Sydney Zoo's expected annual visitation by school children is significant and likely to deliver positive outcomes because school children are more likely to absorb education, conservation and behaviour messages</p>

<sup>32</sup> Moss, A. and Esson, M. 2014. Visitor interest in zoo animals and the implications for collection planning and zoo education programmes. *Zoo Biology*. 29: 715-31

	outcomes.	<p>that are part of zoo and wildlife park experiences.</p> <p>This is even more likely in Western Sydney given there are lower levels of participation in arts, culture and recreational activities in this locality, as outlined at Section 4.1.</p>
<b>Social Interaction</b>	<p>Because social interaction is a stronger motivator to visit captive wildlife tourism experiences, particularly for domestic visitors, Sydney Zoo should focus on enhancing opportunities for social interaction within the facility design.</p>	<p>This has been included in the current plans through the accommodation of several picnic areas and interactive animal presentation strategies including an amphitheater.</p>
<b>Experience design</b>	<p>To enhance education, conservation and behaviour outcomes, Sydney Zoo should pay close attention to the animals on display, their levels of activity, and ensuring visitors can see a wide variety of animals.</p> <p>These attributes are all more likely to enhance outcomes for novice / generalist wildlife tourists, which are more likely in Western Sydney given lower levels of participation.</p>	<p>Sydney Zoo's open space style design will give the appearance of more naturalistic animal behaviour and an untouched natural environment, which also enhance education, conservation and behaviour outcomes.</p> <p>In addition to the potential that Sydney Zoo's proposed design features offer for enhanced outcomes in these areas, they are also more likely to translate into higher levels of visitor satisfaction with Sydney Zoo.</p> <p>It is further noted the exotic species to be held by Sydney Zoo are likely to be considered rare and unique by its mostly domestic visitor market, as discussed at Section 6.1.5. These attributes are also more likely to enhance education, conservation and behaviour outcomes for most visitors.</p>

## 6 Stakeholder engagement and consumer survey

Stakeholder engagement has informed the SIA. Some stakeholders were familiar with the specific social, conservation and education programs of Sydney Zoo and Featherdale, whereas others were not and provided more general commentary on the extent and operation of similar programs at other zoos and wildlife parks.

Featherdale was contacted by the SIA authors to provide input into the SIA however this was not taken up.

The following types of stakeholders were interviewed:

- > Experts from the zoo and wildlife park industry including peak bodies, ASMP Species coordinators, and other individuals involved in species recovery efforts (n=6)
- > Former employees of Featherdale (n=2) and current employees of Sydney Zoo (n=2)
- > International tourism operators and local tourism organisations (n=3)
- > Beneficiaries of social and education programs including social service and animal education providers (n=4)
- > Other zoos and wildlife parks in Sydney (n=2)
- > Accessible communities and tourism for people with disability (n=1)

An online survey of potential visitors (n=650) was also undertaken. The sample matched the local Sydney Zoo visitor forecasts of the SEIA and included mostly Western Sydney residents (n=570) with the remainder (n=80) coming from the greater Sydney area. Respondents were sampled according to family composition, age, gender and income.

### 6.1 Engagement findings

Issues canvassed through the engagement included:

- > The value of zoos and wildlife parks, and the social, conservation and education programs of Sydney Zoo and Featherdale and other zoos and wildlife parks
- > The tourism market in Western Sydney and Sydney, and potential implications of Sydney Zoo for this market and Featherdale
- > Other social costs and benefits associated with the three social impact scenarios (i.e. Co-existence, Sydney Zoo, and the Status Quo)

Engagement findings are reported thematically in the following sections.

As an overall summary, the stakeholder interviews indicated few of the programs offered by Sydney Zoo or Featherdale are unique, or that either group is uniquely capable of providing them. Stakeholders suggested there is significant overlap in the types of programs offered by zoos and wildlife parks both in Sydney and across the industry more generally. Stakeholders indicated most conservation and breeding programs are cooperative efforts amongst multiple institutions, and there are a number of private organisations involved in similar programs. Because of this distributed model, stakeholders further indicated it is not likely conservation programs would cease as a result of Featherdale not continuing to participate in them and that potential social cost is unlikely because any lost capacity could be replaced within the industry or by private organisations.

The consumer survey found Sydney Zoo's offer is quite different to Featherdale's and appeals strongly to Western Sydney residents because of its nature as a full service zoo offer that includes exotic animals and difficulties accessing a similar experience at Taronga Zoo. The

survey also found Sydney Zoo is likely to increase zoo visitation for people that do not visit zoos regularly. Through a series of visitation scenarios, the survey found a majority of Western Sydney residents would visit both Sydney Zoo and Featherdale, or prefer Featherdale over Sydney Zoo. Based on these findings, it is likely the close proximity and differentiated offer of Sydney Zoo and Featherdale will increase visitation at both and unlikely Featherdale will suffer loss of visitation leading to financial duress that prevents it from operating programs. Therefore it is most likely the Co-existence Scenario will eventuate.

### *Value of zoos and wildlife parks*

Stakeholders identified a range of values fulfilled by zoos and wildlife parks. These include educating children about animals and respect for nature, encouraging environmental and conservation behaviours, and providing friends and family with opportunities to spend time with one another.

With respect to educating children about animals and respect for nature and encouraging environmental and conservation behaviours, stakeholders drew few distinctions between the capacity of Sydney Zoo and Featherdale to deliver these positive social outcomes. One exception was Featherdale's capacity to educate children about Australian native animals, such as the Tasmanian Devil and Koala. Stakeholders noted this capacity is a function of Featherdale's uniquely and significantly diverse collection of native Australian animals.

In view of this, stakeholders identified a potential social cost from loss of the collection under the Sydney Zoo Scenario, but that this cost would be temporary in nature. This is because this capacity can be fulfilled by other zoos and wildlife parks across Sydney that already hold Australian native animals, and because zoos and wildlife parks are required to have collection rehoming plans in the event of closure, as happened with the Australian Wildlife Park (see Section 3.2.2).

*There are a lot of organisations out there that would be very interested in the Featherdale collection. Zoos and wildlife parks always have rehoming plans and, as what happened with AWP, its collection would be snapped up very quickly. (former Featherdale employee)*

*The collection at Featherdale is the largest single one in Australia in terms of native species diversity, so that would be a loss because the collection in total is highly significant. There is a lot of stuff you just cannot go out and collect now. (individual involved in species recovery effort)*

*Zoos overestimate how much they educate people. I went to Disney in Orlando and saw all the conservation stuff they have - talking trees and everything - no one can do that better than Disney and the second lowest performing part of the whole operation is the conservation stuff. (animal education expert)*

With respect to providing an opportunity for friends and family to spend time with one another, stakeholders suggested the longevity of Featherdale's operation is unique. In particular, it was suggested many Western Sydney community members have visited Featherdale over the years and hold fond memories of it.

In view of this, stakeholders identified a social cost to the way of life and culture of this community from potential loss of Featherdale under the Sydney Zoo Scenario. To avoid this, stakeholders indicated Sydney Zoo and Featherdale could work together to build a wildlife tourism destination precinct and, based on prior experiences, were confident this would avoid the closure of Featherdale and potential social costs of this Scenario.

*Featherdale has a legacy. Everyone went there as a kid, everyone grew up with it and knows it. It would be horrible to see it go. I do hope Sydney Zoo and Featherdale can end up working together, having both would be such a wonderful addition to the area. (local tourism organisation)*

*It would be pretty sad if Featherdale closed down. It would be in with the new, out with the old. Featherdale has a good history and done a lot of wonderful things over the years. (wildlife park in*

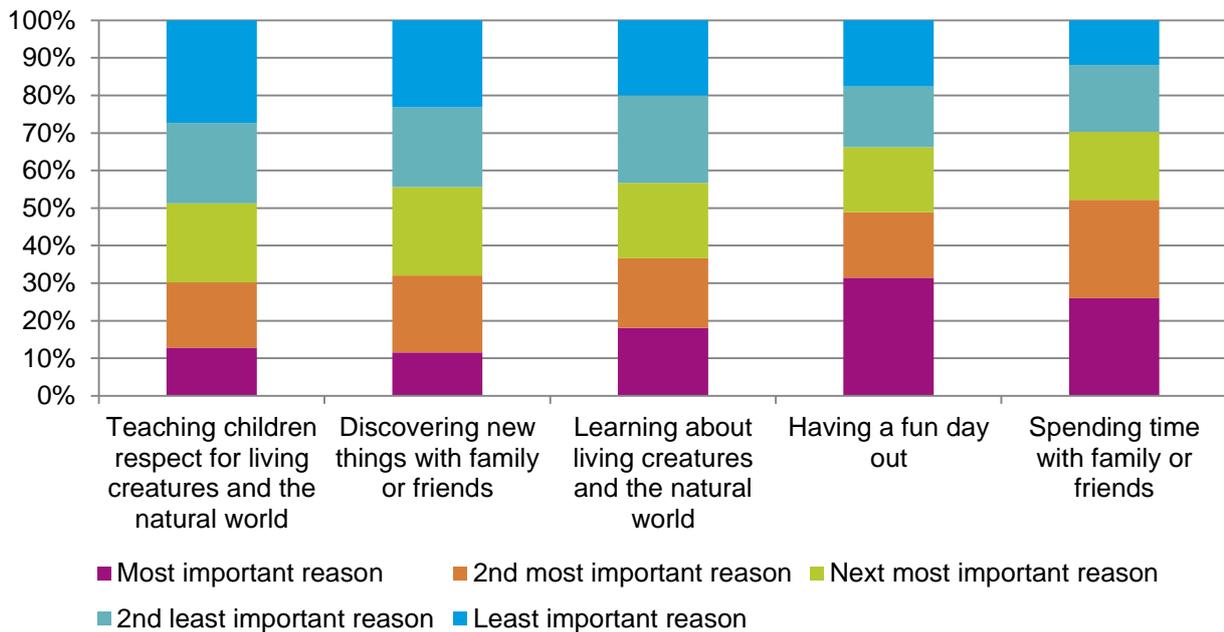
Sydney)

*People go to Featherdale for an hour or so. It is an institution in Western Sydney, no doubt about that.* (international tourism operator)

*The ideal outcome would be Featherdale wanting to be a participant in a regional wildlife tourism offer for that area. It is regrettable Featherdale appears to not want to be part of that.* (international tourism operator)

Survey respondents were asked to rank which of five reasons were most to least important motivators for visiting zoos and wildlife parks. Social interaction, such as having a fun day out and spending time with family or friends, was most important and educational and conservation reasons were less important (Figure 4).

FIGURE 4 REASONS FOR VISITING ZOOS AND WILDLIFE PARKS



### Awareness of Sydney Zoo and Featherdale

Survey respondents were asked in an open ended question to identify the top 5 tourism venues and activities that come to mind in Sydney and, separately, Western Sydney.

Unprompted awareness of Featherdale as a tourism venue or activity at the Sydney scale was low, with 29 mentions out of 2,548 responses (1%). In contrast, Taronga Zoo received 151 mentions (5%) out of a total 2,548 responses. This indicates Featherdale does not hold a particularly prominent place in respondents' minds as a tourism venue or activity at this scale, and that Taronga Zoo, which is more analogous to Sydney Zoo, holds a more prominent place.

Unprompted awareness of Featherdale as a tourism venue or activity at the Western Sydney scale was somewhat higher, with 126 mentions (7.5%) out of a total 1,670 responses. This indicates Featherdale holds a more prominent place in respondents' minds at this scale.

Sydney Zoo received 8 mentions out of the total 4,218 responses across both the Sydney and Western Sydney questions. This is not surprising given Sydney Zoo is not yet in existence.

Respondents were asked in a separate open ended question to specifically identify zoo and wildlife parks in Sydney. Featherdale received 271 mentions (15%) out of a total 1,459 responses, compared to 420 mentions (28%) for Taronga Zoo, and Sydney Zoo received 14 mentions (1%).

Respondents were then asked to identify zoos or wildlife parks in Sydney they have visited over the last 5 years. Of the 733 mentions, about 18% (n=134) mentioned Featherdale, and about 50% (n=368) mentioned Taronga Zoo. Those that had visited Featherdale and Taronga Zoo were then asked to rate them across a range of attributes (Figure 5, Figure 6).

FIGURE 5 VISITOR RATING OF FEATHERDALE

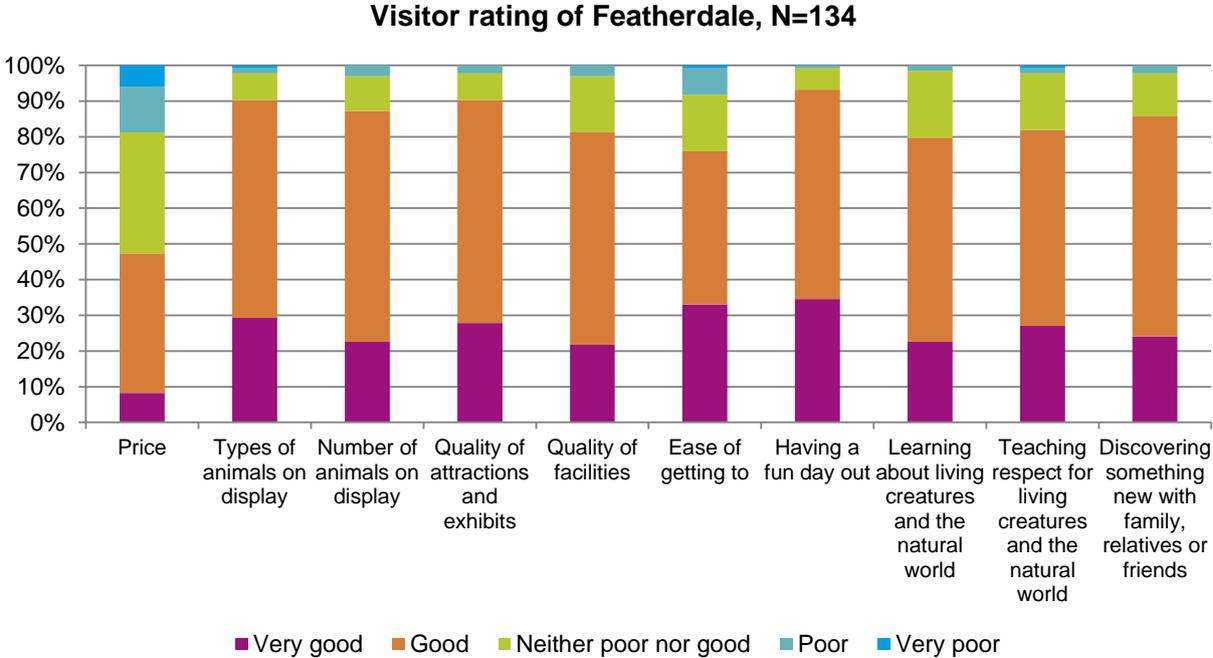
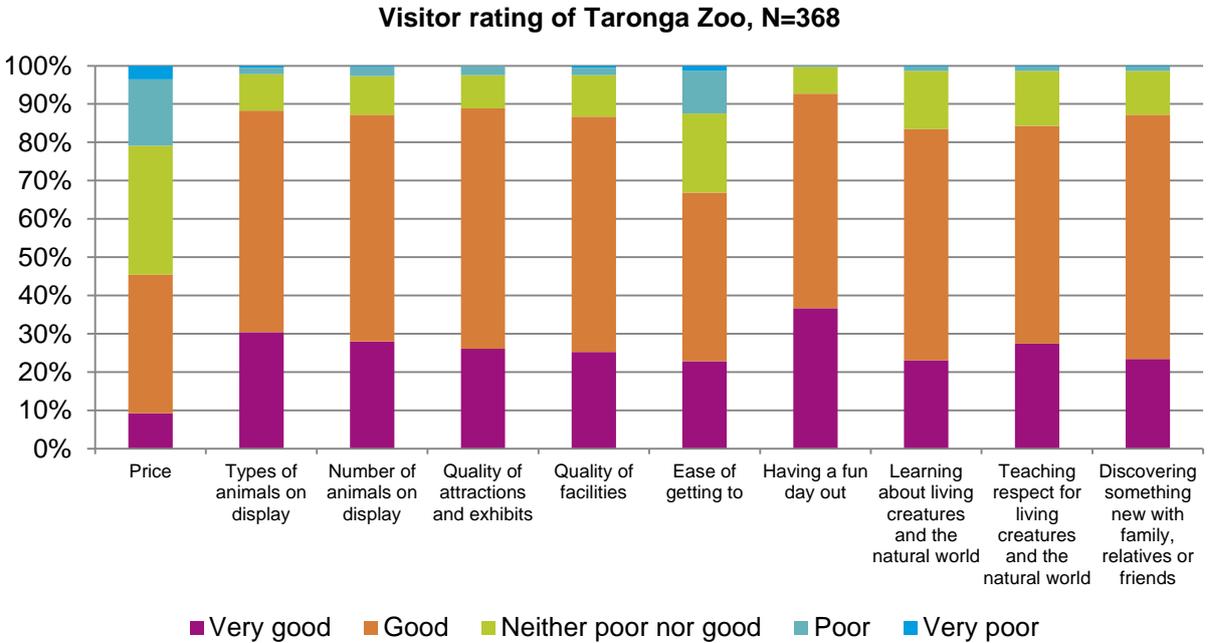


FIGURE 6 VISITOR RATING OF TARONGA ZOO



Of those that identified Featherdale and Taronga Zoo, but had not visited in the last 5 years, the main reasons for not visiting were price (11% / 27%), haven't thought about it (41% / 22%), and difficulties accessing (18% / 21%). Featherdale's higher rating of 'haven't thought about it'

indicates that, whilst it might be a more prominent tourism destination within Western Sydney, it is not particularly top of mind when thinking about wildlife tourism.

### **Social programs**

Stakeholders were asked to comment on the social programs of zoos and wildlife parks, and Sydney Zoo and Featherdale in particular. Again, they drew strong similarities and few distinctions between them.

Featherdale's contribution to the community was identified as important, particularly its involvement in community events and providing animal interaction experiences for vulnerable, disadvantaged people and groups through its mobile outreach program.

*Featherdale's community outreach programs are great. They participate in community events and are always there bringing in animals and reaching out, offering tickets to visiting dignitaries when they visit the area etc. (local tourism organisation)*

Stakeholders also emphasised the important contribution of Sydney Zoo's social programs in supporting vulnerable and disadvantaged people and groups. This included employment, tourism and recreation for people with disability, tourism-based employment opportunities for Indigenous people, and fundraising and other support for organisations working with sick children, such as free passes for children and their families, opportunities to interact with and learn about animals and exotic animals in particular, and hosting fundraising events on-site. Sydney Zoo's contribution to a growing network of major tourism attractions in the Western Sydney region was also identified as significant.

*The opportunity for those children to do some normal family things, you cannot put a price on that or what it means to families to step away from a clinical environment. That is what we are looking to do with Sydney Zoo – behind the scenes tour, education experiences – something extra for the kids to learn about animals. (social service provider)*

*The kids love the animals. The cute and cuddly ones are great but they aren't 'real animals', it is the big ones they like to see, you get kids saying they want to see a tiger because they are from the country and see koalas everywhere. To have access to the animals Sydney Zoo is talking about would be great. (social service provider)*

*Those more localized opportunities in Western Sydney are hugely important because it is in the comfort zone for these families, it is more difficult for them to get to similar opportunities in the city. Taronga Zoo holds families back because it is difficult to get to. Plus the landscape and plan of Sydney Zoo and the flatness is amazing, it is going to make it so much easier for families to get around. (social service provider)*

*We need to fundraise to keep our doors open and we need the Sydney Zoo opportunity to tap into things it will have, such as a function facility for hosting our corporate partners that can help promote the zoo as a destination for corporate facilities whilst also fundraising for our activities. (social service provider)*

*Based on initial discussions, Sydney Zoo would be at the higher end of our donor spectrum. This is a partnership and a relationship, it is not about logo slapping. It is about working with them and making sure it is beneficial for our families. (social service provider)*

*We don't have any other zoo or wildlife park partners. We are really looking forward to this partnership with Sydney Zoo based on a strong synergy of Western Sydney. To have a partner of this sort means we can provide new services to patients and families. It is phenomenal to have an opportunity like Sydney Zoo that want to provide an avenue of philanthropy. (social service provider)*

### **Conservation programs**

Stakeholders suggested conservation programs are very common for zoos and wildlife parks. Whilst most found it difficult to comment on specific programs of Sydney Zoo and Featherdale, they suggested Featherdale's capacity in these areas has diminished in recent times and that

Sydney Zoo offers significant capacity for additional conservation research and animal welfare initiatives in Sydney.

*Featherdale has had a lot of staff turnover the last few years and its capacity is not what it used to be. (former Featherdale employee)*

Stakeholders familiar with some of Featherdale's more prominent conservation programs, such as the Tasmanian Devil, Plains Wanderer and Bush Stone Curlew programs, indicated the contribution is not particularly significant. This is because these programs operate on a distributed model, other zoos, wildlife parks and private organisations make more significant contributions, or, in the case of the Plains Wanderer and Bush Stone Curlew, the species is relatively easy to breed or substantial numbers are held in private ownership.

*Sydney Zoo has a lot of capacity to grow because of its location. It is a much needed facility for Western Sydney. In contrast, Featherdale is completely constrained and unable to expand. (international tourism operator)*

*What is really cool about Sydney Zoo is the spacious, open living areas for animals. Other zoos are restricted for this type of space. (ASMP species coordinator)*

*The main contributors to the Tassie Devil program are on NSW Central Coast, Tasmania and Melbourne. The Devils held by Featherdale are no longer reproductive, and there are no plans for Featherdale to breed them under the ASMP. (ASMP species coordinator)*

*The issue for Bush Stone Curlews is educating farmers on land management practices. A private organization is doing the conservation work for the Bush Stone Curlew and they have advised the zoo industry doesn't need to do anything to assist conservation efforts for this bird. (individual involved in species recovery effort)*

*There are less than a dozen Plains Wanderers held in captivity, mostly at Taronga and a couple at Featherdale, but there are stacks in private collections and they are very easy to breed. (individual involved in species recovery effort)*

*Koalas are suffering badly in the wild. A loss of people who are helping to breed captive communities would be a loss, but the argument is what is the point of captive communities if they are not going into the wild? (other wildlife park in Sydney)*

*Featherdale has an unbelievable opportunity to breed birds for wild release but they haven't done anything with it. They have been weighed in the balance and found wanting. (individual involved in species recovery effort)*

*In every aspect the Featherdale breeding programs have diminished quite significantly, there is no significant program for any species. (former Featherdale employee)*

*There are similar programs being run by other institutions and they could pick it up. The Australian Reptile Park is doing great work with koalas and other organisations would be able to continue the legacy. (former Featherdale employee)*

*Featherdale are forced to do some of the breeding programs because you have to have captive self-sustaining populations of animals, you cannot collect from the wild anymore so you have to develop captive self-sustaining population but the main beneficiary is the zoo themselves. (individual involved in species recovery effort)*

Further, whilst the Bush Stone Curlew is subject to a NSW Office of Environment and Heritage species action program, it does not include any activities with zoos or wildlife parks, such as breed for wild release. In addition, stakeholders indicated most zoos and wildlife parks holding Koalas have provided DNA samples as part of the Koala Gnome Project and this is not unique to Featherdale.

*There is no formal program for the Bush Stone Curlew. Where zoos are involved it is purely about the interest of individual keepers. (former Featherdale employee)*

*The Bush Stone Curlew is endangered in the south but it is everywhere up in Queensland. (individual*

involved in species recovery effort)

*Other zoos and wildlife parks have provided Koala DNA samples. Featherdale has one of the largest collections of Koalas although Taronga has more animals than they do. Featherdale has about 30 or so but a lot are aged animals with chlymidia or viruses that can't be bred. (former Featherdale employee)*

However, Featherdale's contribution to the Spotted Tail Quoll Breeding Program was identified as significant because it is one of the main captive breeding providers, although there are a large number in private ownership across Australia, and other zoos and wildlife parks hold them. Industry stakeholders could not confirm the existence of a Spotted Tail Quoll DNA Research Program.

*Featherdale are a major player in the Spotted Tail Quoll, they breed a lot and provide them to zoos and wildlife parks all over Australia. No one in the Sydney area breeds them, although there are about a dozen other organisations across Australia that do and you can have a Spotted Tail Quoll privately and there are a lot in private ownership. (ASMP species coordinator)*

*I have heard briefly about the idea of a Spotted Tail Quoll DNA Research Program, but involvement in that program is a big call to make when there is no information on it. (ASMP species coordinator)*

*Anecdotally, a lot of people have been asking for Quolls and there is this reputation Featherdale has them but over the last 2 years it hasn't produced as many quolls. (former Featherdale employee)*

### **Education programs**

With respect to education programs, stakeholders noted the existing density of wildlife education programs and providers in Sydney. They also emphasised the significant contribution of Featherdale and Sydney Zoo to school education programs, as well as voluntary work placement opportunities for TAFE and university students. In particular, the additional capacity Sydney Zoo will provide for school programs for the underserved Western Sydney community was viewed as significant, as was the diversity of its volunteer work placement opportunities and inclusion of exotic animals that tend to be more popular with TAFE and university students.

*There are about 30 zoos, parks and other organisations across Sydney that take on students. Featherdale is quite significant. Possibly 30% of students are at Featherdale. It is the single biggest workplace. (animal education provider)*

*Featherdale do a lot of school excursions and they do that well. (other wildlife park in Sydney)*

*Most TAFE and university students like the idea of exotic animals and there is a more limited offer for that in Sydney, so Sydney Zoo will fill that gap in the market very well. (animal education provider)*

*Very few places have sufficient capacity for the number of children under 12 living in Western Sydney. It is a huge market and Sydney Zoo can and would want to tap into that. I would imagine Sydney Zoo is going to be quite strong in markets like kindergarten and school groups. (local tourism organization)*

*At Sydney Zoo you could have students studying hospitality, tourism management and the various aspects of the park that aren't animal related. There is quite a substantial opportunity for that. It is not just the zoo but everything else – all the retail and customer service that go along with it. A new very large player would be coming on board. (animal education provider)*

### **Tourism and visitation**

It has been previously suggested by Urbis on behalf of Elanor Investors (Featherdale) that Sydney Zoo will draw visitors away from Featherdale, which will lead to a social cost from loss of social, conservation and education programs (i.e. the Sydney Zoo Scenario). In view of this, the relationship of Sydney Zoo and Featherdale to the Western Sydney and Sydney tourist markets is a centrally relevant issue for the SIA to consider in assessing the likelihood of the three Scenarios emerging and potential social costs.

Tourism operators and other stakeholders familiar with these markets suggested Sydney Zoo’s product offer is quite different to Featherdale’s and likely to appeal strongly to Western Sydney residents, particularly families with young children, because of difficulties accessing a similar experience at Taronga Zoo.

*Featherdale is native and native only. Sydney Zoo and the nature of its animals appear very different in terms of size and scope. (local tourism organization)*

*When you look at demography of the visitors to Taronga, very few come from Western Sydney because it is so hard to get to and they don’t get repeat visitation. (animal education provider)*

*The Western Sydney market would be keen to get to Sydney Zoo because it is in their backyard, and they don’t have to travel as far as they do to Taronga. There is nothing for kids to do in the area, which is why Sydney Zoo would be a good thing. It would be one of the main attractions because of its sheer size and uniqueness, we don’t have exotic animals. (local tourism organization)*

*Other organisations, not just Sydney Zoo, have recognised there is unmet demand for this sort of facility in Western Sydney. Even Taronga recognizes it is not meeting its market in Western Sydney because of its location as the only significant zoo in Sydney located all the way over in Mosman. It’s a hard to get to place even if you are on that side of town. (animal education provider)*

*All of the market research shows Western Sydney is after family based, close to home activities to do with the kids that are outdoor and about interacting with nature. (local tourism organization)*

*The fact Sydney Zoo has exotics is an important distinction. Sydney Zoo is more like Taronga, it will never be like Featherdale. You wouldn’t start a zoo in this location without exotics because you wouldn’t be meeting the needs of Western Sydney. It is serving a much bigger market than Featherdale because it has exotics. (international tourism organization)*

*For the Visiting Friends and Relative domestic market staying in Western Sydney, Sydney Zoo would be very attractive. They could go to Featherdale for a lesser price or quicker experience and do Sydney Zoo for the longer experience. But, at the same time, the VFR market has been going to Featherdale for a long time, they like it and know it and there is no reason they would automatically go somewhere else. (international tourism organization)*

*The market research on the Visiting Friends and Relatives market shows they want to be able to showcase their own area – Western Sydney – people are looking to be able to entertain their visitors locally. (local tourism organization)*

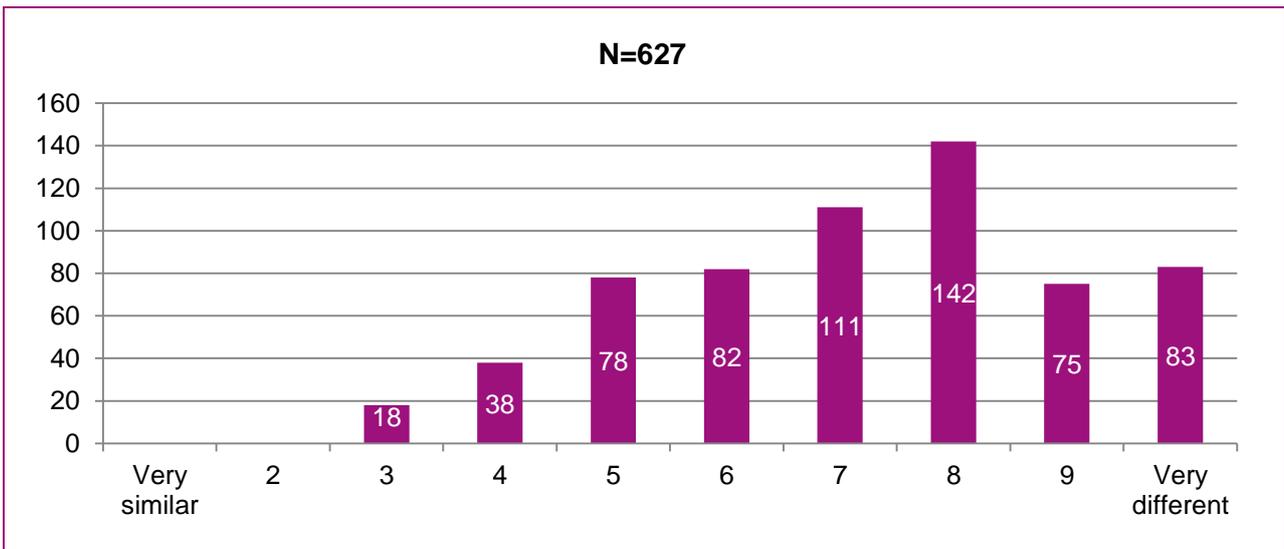
Through the online survey, potential visitors were given a description of Sydney Zoo and Featherdale and asked to rate how similar or different they considered them to be. Most indicated the offers are very, if not quite, different (Figure 7).

FIGURE 7 VISITOR PERCEPTION OF SIMILARITY AND DIFFERENCE OF SYDNEY ZOO AND FEATHERDALE OFFER

***Featherdale is an established wildlife park in Doonside, Western Sydney that has operated for 43 years. Featherdale has free parking for 100 cars. Featherdale features a wide range of Australian birds such as emus, parrots and eagles and animals such as kangaroos, koalas, Tasmanian devils and crocodiles. There is a café and gift shop. It costs \$85 for a family pass and takes around 2 hours to visit.***

***Sydney Zoo is a potential new zoo located in Western Sydney near the M7/M4 junction. It has free parking for around 1000 cars. Sydney Zoo will feature a wide range of exotic animals such as lions, tigers, elephants, and gorillas. Australian animals such as kangaroos and koalas will be also displayed. There will be a restaurant, 2 café/kiosks, children’s play areas /picnic areas and a gift shop. It will cost between \$90 and \$100 for a family pass and will take approx. 4 hours to visit.***

**Q. Using the scale below, please indicate how similar or different you consider Featherdale Wildlife Park and Sydney Zoo to be.**



Tourism operators indicated international tourists visiting Sydney are motivated to see native Australian animals that can rarely be seen in their home country, rather than exotic animals that can be viewed at most zoos around the world. Tourism operators also suggested the international tourist market for zoos and wildlife parks in Australia operates across the entire eastern seaboard because these tourists tend to only visit one when in Australia.

The operators have found Featherdale to be very successful in securing this market because it has existed for many decades, features a significant diversity of native Australian animals, and is conveniently located along the trip to the Blue Mountains. They also noted Featherdale successfully co-existed with the strongly native animal focused Australian Wildlife Park located close by for over a decade.

*They compete right up and down the east coast. If international groups do one in South East Queensland, they aren't likely to do another across the rest of the eastern seaboard. You cannot reduce it to competition between Featherdale and Sydney Zoo because that ignores the market geography. (international tourism organization)*

*International tourists aren't interested in lions and tigers, they don't come to Australia to see that. (international tourism organization)*

*Both Featherdale and Australian Wildlife Park survived, and AWP was even more focused on native Australian animals. (international tourism organization)*

*I would be astonished if Sydney Zoo opens and Featherdale closes. You see it up on the Gold Coast. There are two parks at Currumbin and Paradise Valley offering a similar but distinct enough experience and both have competed for 20 years quite successfully. One assumption would be that Featherdale improves its offer and invests a lot more and that can only be a good thing. (international tourism organization)*

Tourism operators and other stakeholders suggested the addition of Sydney Zoo to the Western Sydney tourism offer may shift market dynamics. This would involve the creation of a drawcard for international tourists to visit Western Sydney if they are interested in seeing both exotic and native animals during their visit. In this context, it was suggested Sydney Zoo would be complementary to Featherdale and visitors would be more likely to visit both during the same trip.

*There has always been the argument that if you stick a Pizza Hut next to a McDonalds, the whole market grows. There is certainly evidence to suggest that happens in tourism – you build one hotel, two hotels, three hotels you create a bigger market in total. (international tourism organization)*

*A full service zoo would definitely expand Western Sydney's visitor offer. It would increase the visibility and offer of all the facilities in Western Sydney – the Penrith adventure products, the WSP motorsports*

*precinct, Wet'n'Wild etc. – there has always been a Western Sydney offer but it has not been an obvious destination, Sydney Zoo would create that. (international tourism organization)*

*If Sydney Zoo didn't exist that would be a great shame. It is a smart idea. When we were looking at the domestic market everyone was quite conscious of how poor zoo and wildlife park visitation numbers are for Western Sydney residents. (animal education provider)*

*It will be a great day out. Right next to Western Sydney Parklands and the playground. These things could work together as a tourism cluster. There is a history of cooperative marketing in the area. In the summer you could have Wet'n'Wild and Sydney Zoo package, how fantastic would that be. (local tourism organisation)*

*Sydney Zoo would create a destination product, a regional tourism offer with Featherdale and all the other facilities located around WSP. The pie would grow completely for everyone. (international tourism organization)*

In summary, stakeholders find Sydney Zoo's primary appeal will be to Western Sydney residents where participation in arts, culture and recreation activities is at lower levels compared to Eastern Sydney. They also find Taronga Zoo is likely to remain a more appealing proposition for international tourists. This is because the Taronga Zoo experience typically involves a ferry ride across Sydney Harbour and picturesque views of the Sydney skyline. In all, this aligns with Sydney Zoo's forecast balance of domestic and international visitors.

*In simple terms, the domestic market is Sydney Zoo and the international market is Featherdale, though it is never that black and white. Sydney Zoo will succeed in attracting Western Sydney residents. They wouldn't be doing it to take market share from Featherdale, you wouldn't spend all of this money for that reason, Sydney Zoo wouldn't survive because the economics of that proposition just don't stack up. (international tourism organization)*

*A key point of difference between Sydney Zoo and Featherdale is Sydney Zoo has exotics and is a different offer. Taronga is a strongly exotic zoo but the highlights are still the kangaroo and koala. Australia's unique animals are always the key offer made to international visitors. Sydney Zoo will not take that away from Featherdale nor Taronga Zoo. (international tourism organization)*

To test the views of tourism operators and other stakeholders, survey respondents were given a description of Featherdale and Sydney Zoo and asked to indicate their intended behaviour under three separate visitation scenarios.

When given the option of **only visiting either Featherdale or Sydney Zoo**:

- > A majority of potential visitors chose **Sydney Zoo only** (Figure 8). This is likely because they are strongly attracted to the Sydney Zoo offer (Figure 9), the type and number of animals on display is an important feature of zoos or wildlife parks for them (Figure 10), they are more interested in seeing exotic animals (Figure 11), and are looking for a longer, rather than shorter, zoo experience (Figure 12). Further, potential Western Sydney visitors that have not visited a zoo or wildlife park in Sydney over the last 2 to 5 years indicated Sydney Zoo would likely increase their attendance (Figure 13).
- > When presented with this scenario, **a quarter chose Featherdale only**. If current Western Sydney visitation for Featherdale (about 65,000) and base case Western Sydney visitor estimates for Sydney Zoo (about [REDACTED]) are taken to be the total visitor market for Western Sydney, then Featherdale would account for 13% of this market and Sydney Zoo would account for [REDACTED]%. When compared to the survey findings, this indicates there is, in fact, potential for Featherdale's Western Sydney market to grow further.

FIGURE 8 VISITATION SCENARIO 1

**Imagine you are looking to visit a zoo or wildlife park in Western Sydney and you can only visit Featherdale or Sydney Zoo.**

**Q. Which would you prefer to visit?**

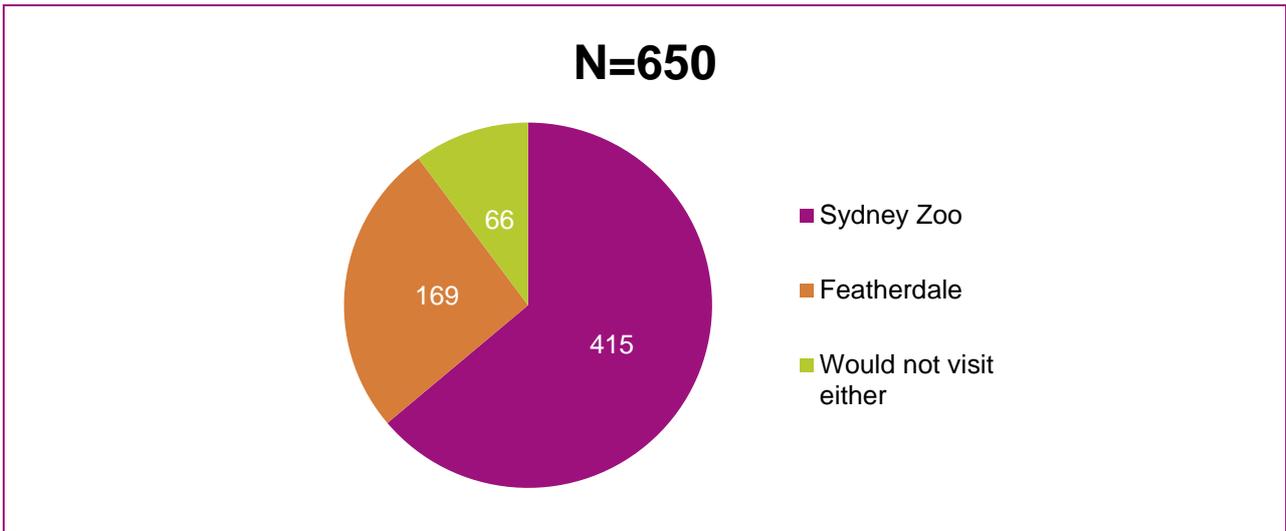


FIGURE 9 ATTRACTIVENESS OF SYDNEY ZOO OFFER

**Q. There is a proposal to construct a new zoo in Western Sydney featuring lions, tigers, elephants and other exotic animals. How would you rate this proposal, N=650**

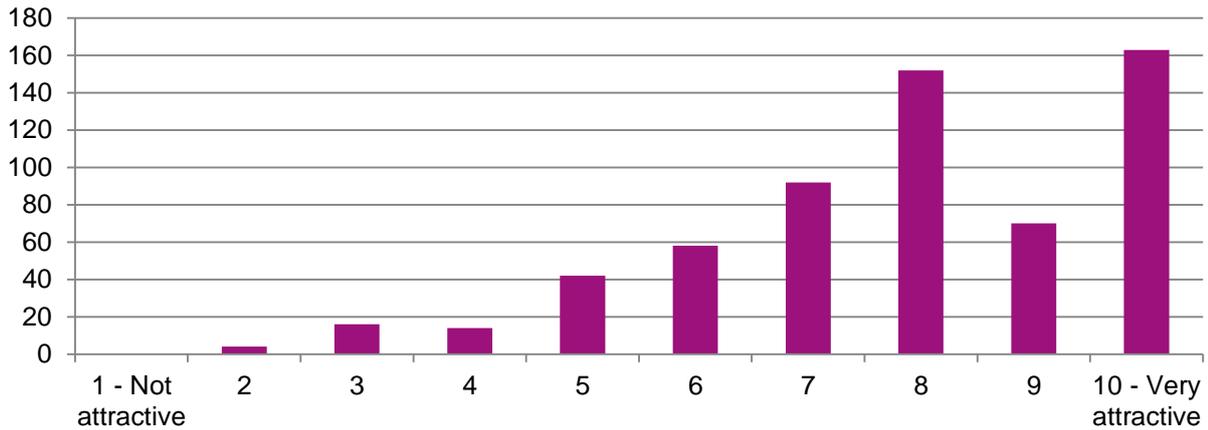


FIGURE 10 RELATIVE IMPORTANCE OF ZOO AND WILDLIFE PARK FEATURES

**Q. From the following zoo and wildlife park features, please indicate how important or not each is to you personally, N=650**

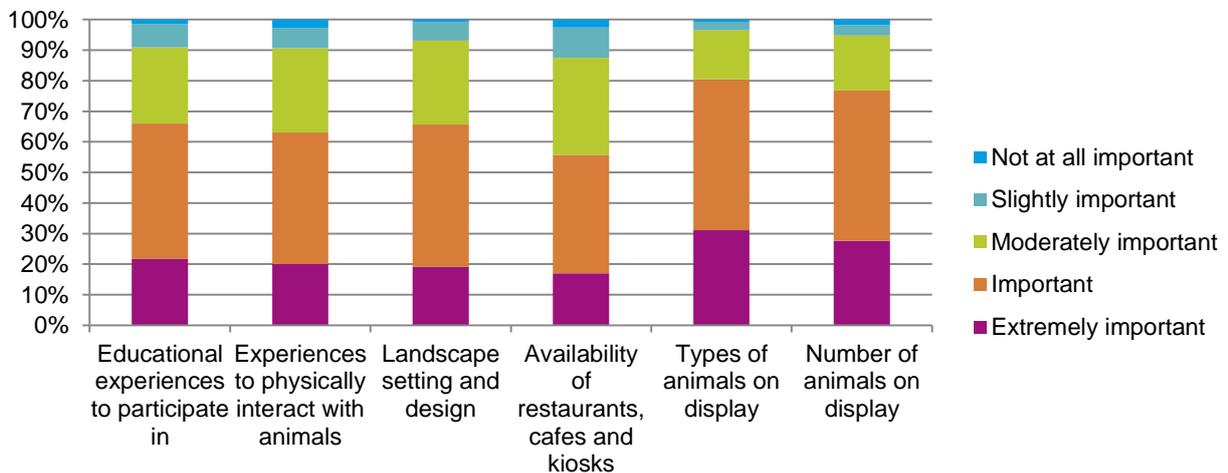


FIGURE 11 ONLINE SURVEY RESPONDENT ANIMAL PREFERENCES

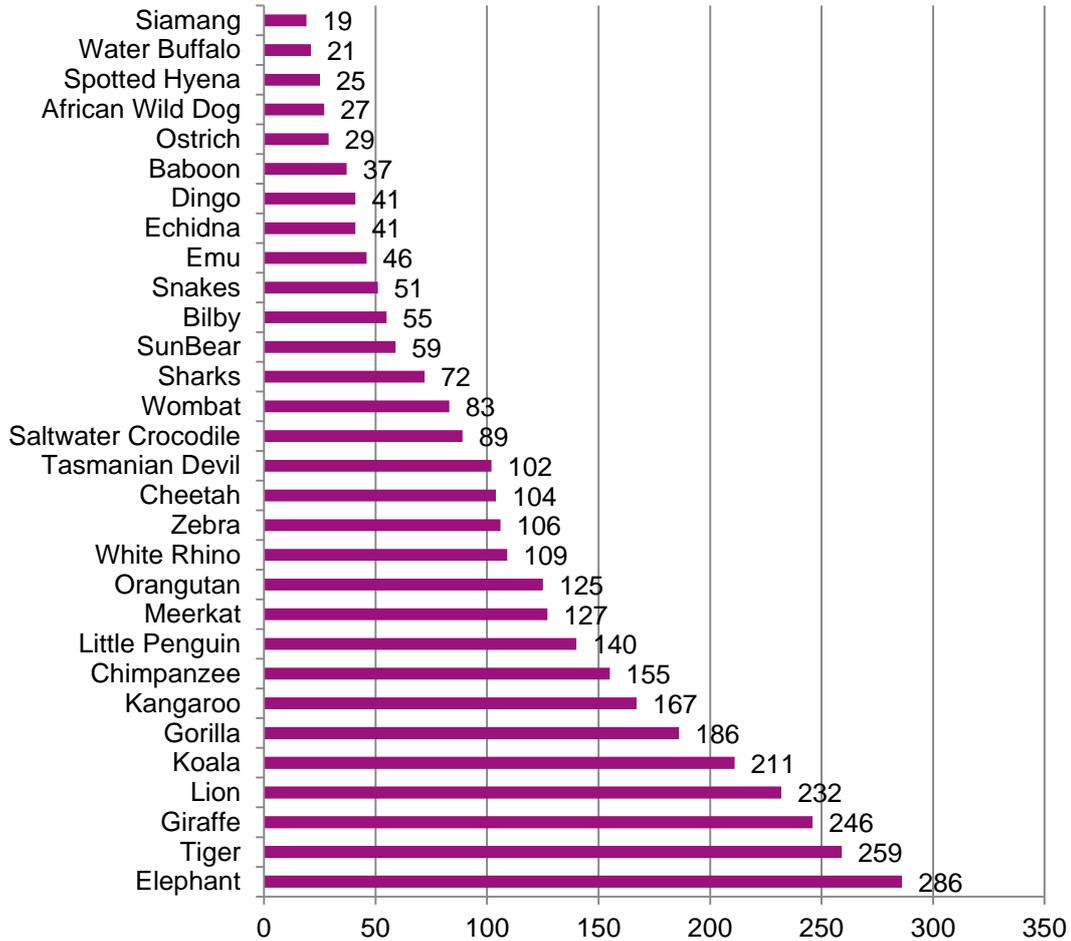


FIGURE 12 PREFERRED LENGTH OF ZOO OR WILDLIFE PARK EXPERIENCE

**Q. Please use the scale below to indicate what type of experience you are looking for from a zoo or wildlife park, N=650**

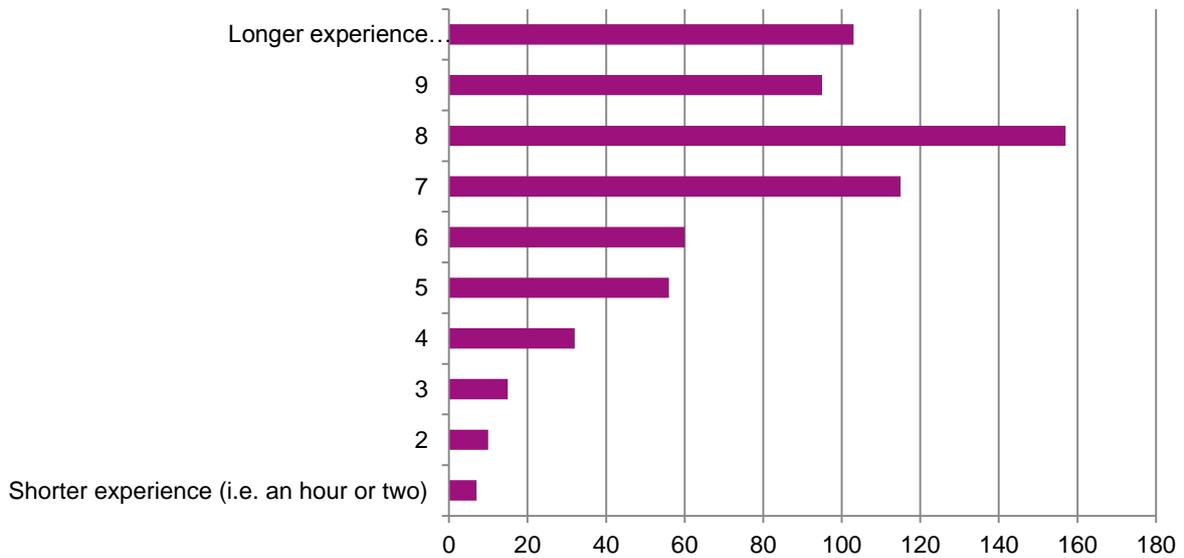
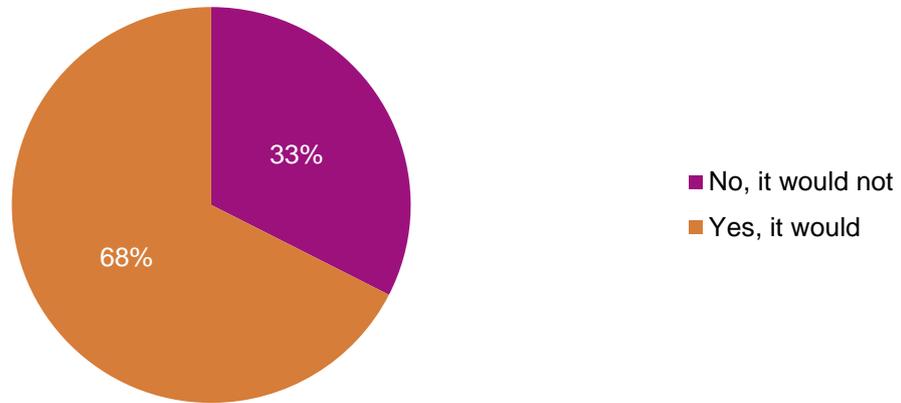


FIGURE 13 IMPACT OF SYDNEY ZOO ON ZOO AND WILDLIFE PARK VISITATION

**Q. If a new zoo featuring lions, tigers, elephants and other exotic animals was located in Western Sydney, would your zoo attendance increase or not?, N=400**



When presented with the next two scenarios and given the *option of visiting either or both Sydney Zoo and Featherdale*:

- > A majority choose *both Sydney Zoo and Featherdale* (Figure 14). These findings hold when potential visitors are asked to plan a zoo or wildlife experience for visiting friends or relatives, with the majority again indicating they would visit *both Sydney Zoo and Featherdale* (Figure 15). When considered in the context of the strong difference visitors perceive between the offers, this appears to confirm the views of stakeholders and empirical evidence that Sydney Zoo and Featherdale are compatible attractions and likely to grow the overall market. In total, more than half indicated they would attend either *both Sydney Zoo and Featherdale*, or *prefer Featherdale over Sydney Zoo*. Again, when compared to current and forecast visitation for Featherdale and Sydney Zoo, this suggests there is potential for the Featherdale market to grow.

FIGURE 14 VISITATION SCENARIO 2

*Now, again imagine you are looking to visit a zoo or wildlife park in Western Sydney and you can visit both Featherdale and Sydney Zoo. They are located within a 10 minute drive of each other. There is also a large waterpark, motor racing precinct and major parkland within a 20 minute drive.*

**Q. What would you do?**

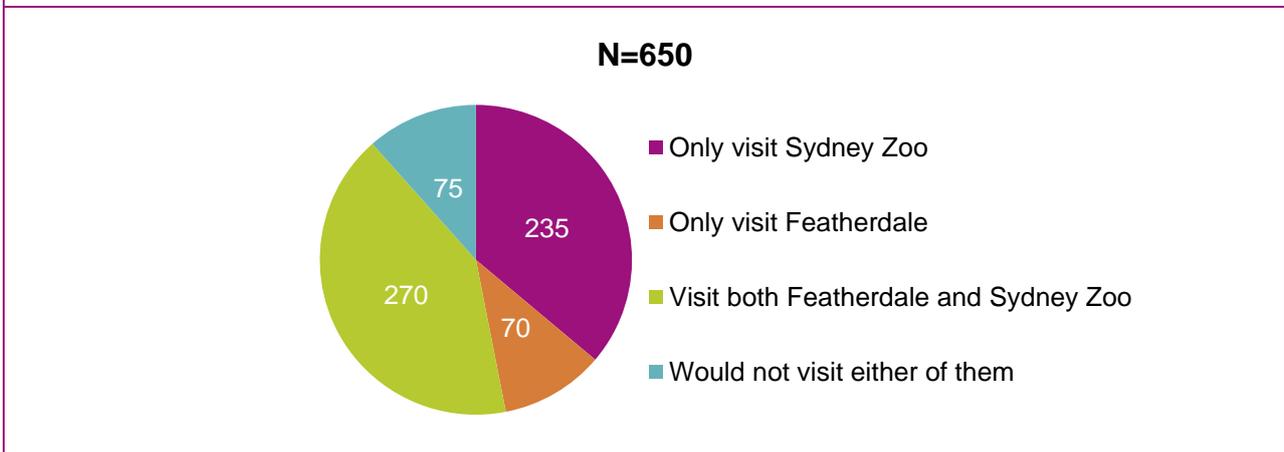
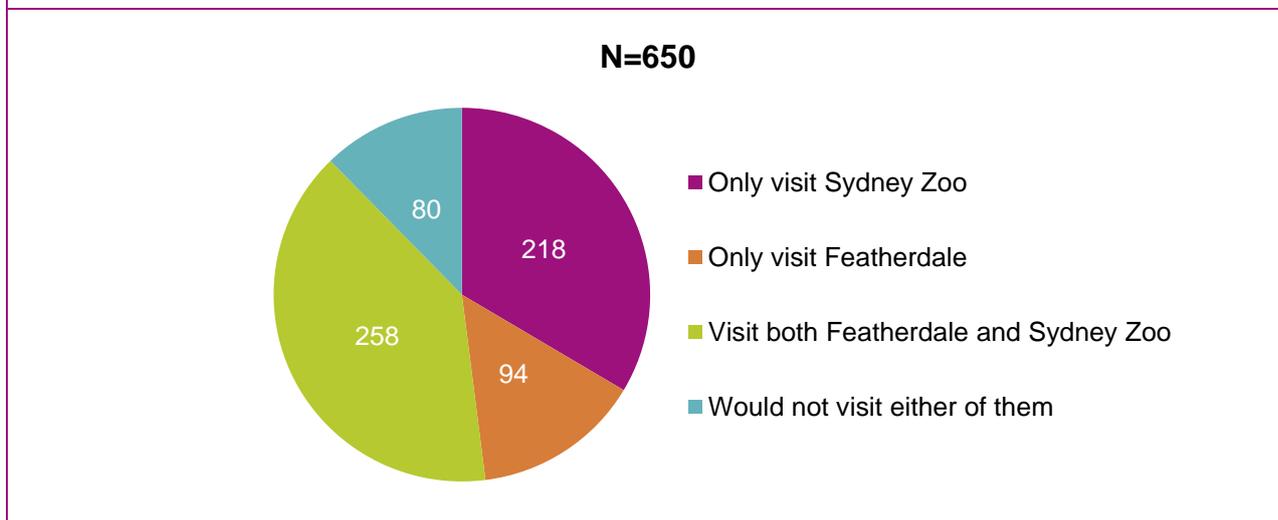


FIGURE 15 VISITATION SCENARIO 3

*Now, imagine you had to develop a day out for a family member or friend visiting from interstate or overseas. They have expressed an interest in seeing zoos and wildlife parks whilst in Sydney.*

**Q. Where would you take them?**



### Other social costs and benefits

In addition to social costs and benefits identified in the above sections, stakeholders were asked to consider others. In response, stakeholders identified potential loss of employment at Featherdale under the Sydney Zoo Scenario, creation of significant new employment opportunities under the Co-existence and Sydney Zoo Scenarios, and missed recreation and employment opportunities for Western Sydney, Indigenous people and people with disability under the Status Quo Scenario. The impact of the Status Quo Scenario on WSP revenue was also considered a cost as it would impede the WSP Trust’s financial capacity to invest in planned new facilities and infrastructure that will enhance the amenity of Western Sydney.

*There would be social impacts of people losing jobs. If they could gain employment at Sydney Zoo that would be nice. That would be quite sad and hope it wouldn't come down to that. A challenge for Featherdale is that it is owned by investors and if it is no longer a good investment that is the position it comes to. (other wildlife park in Sydney)*

*WSP would have very limited avenues to replace that revenue stream so it would either reduce the free facilities that can be provided like picnic grounds, cycling tracks and bushland. That whole timeline of planned investment would be pushed out by 5 or 6 years and what is being proposed over the next couple of years would not happen. It would have such a negative impact and WSP would be back to square one. (local tourism organisation)*

## 6.2 Summary of Findings

As an overall summary, the stakeholder interviews indicated few of the programs offered by Sydney Zoo or Featherdale are unique, or that either group is uniquely capable of providing them. Stakeholders suggested there is significant overlap in the types of programs offered by zoos and wildlife parks both in Sydney and across the industry more generally. Stakeholders indicated most conservation and breeding programs are cooperative efforts amongst multiple institutions, and there are a number of private organisations involved in similar programs. Because of this distributed model, stakeholders further indicated it is not likely conservation programs would cease as a result of Featherdale not continuing to participate in them and that potential social cost is unlikely because any lost capacity could be replaced within the industry or by private organisations.

The consumer survey found Sydney Zoo's offer is quite different to Featherdale's and appeals strongly to Western Sydney residents because of its nature as a full service zoo offer that includes exotic animals and difficulties accessing a similar experience at Taronga Zoo. The survey also found Sydney Zoo is likely to increase zoo visitation for people that do not visit zoos regularly. Through a series of visitation scenarios, the survey found a majority of Western Sydney residents would visit both Sydney Zoo and Featherdale, or prefer Featherdale over Sydney Zoo. Based on these findings, it is likely the close proximity and differentiated offer of Sydney Zoo and Featherdale will increase visitation at both and unlikely Featherdale will suffer loss of visitation leading to financial duress that prevents it from operating programs. Therefore it is most likely the Co-existence Scenario will eventuate.

These findings indicate potentially significant social benefits under the Co-existence and Sydney Zoo Scenarios and some potential social costs under the Sydney Zoo Scenario although, for the most part, these costs are temporary in nature and can be mitigated. They further indicate no significant social benefits under the Status Quo Scenario and social costs in the missed opportunity to realise the significant social benefits of the Co-existence and Sydney Zoo Scenarios.

### *Summary of Consumer Survey*

The survey provided the following key findings:

- > Sydney Zoo's offer is considered to be quite different to Featherdale's, and appeals strongly to Western Sydney residents because of it is a full service zoo offer and difficulties accessing a similar experience at Taronga Zoo
- > People that do not visit zoos regularly would increase their visitation as a result of the development of Sydney Zoo
- > When given the option of visiting either or both Sydney Zoo and Featherdale a majority indicated they would attend both Sydney Zoo and Featherdale or prefer Featherdale over Sydney Zoo
- > When asked to plan a zoo or wildlife experience for visiting friends or relatives a majority of survey respondents indicated they would visit both Sydney Zoo and Featherdale

Based on these findings, it is concluded there is opportunity for ***Sydney Zoo and Featherdale to successfully cooperate as a wildlife-based tourism precinct***. It is further concluded ***differences in the Sydney Zoo and Featherdale offers and their location in close proximity to one another can potentially grow visitation at both***.

As a result, approval of Sydney Zoo has the ***potential to result in a net positive benefit*** to Featherdale by creating a wildlife based tourism cluster (which is already contemplated by the existing draft development consent conditions) that grows overall visitation. Therefore, ***it is most likely the Co-existence Scenario will eventuate and potentially adverse social impacts are highly unlikely to materialise***.

### *Summary of Stakeholder Interviews*

- > Tourism operators noted Featherdale successfully co-existed with the strongly native animal focused Australian Wildlife Park (AWP) located close by for over a decade
- > Stakeholder interviews identified some potential social costs should Featherdale cease to operate, although these are mostly temporary and can be mitigated. They include loss of the contribution Featherdale has made to the way of life and culture of the Western Sydney community, loss of Featherdale's uniquely and significantly diverse collection of native Australian animals, loss of Featherdale's contribution to conservation breeding programs particularly the Spotted Tail (Tiger) Quoll, loss of Featherdale's education programs, and loss of employment opportunities.

- > Whilst Featherdale may have made a significant contribution to the way of life and culture of Western Sydney over the years, the survey indicates these memories do not appear top of mind for the community. The loss of Featherdale's uniquely and significantly diverse collection is likely to be temporary given ZAA measures already in place to rehome collections in the event of institution closure, the past success of such measures when the AWP closed, and likely significant interest of other zoos and wildlife parks in the Featherdale collection.
- > Featherdale is one of a number of institutions and private holders of Spotted Tail Quolls and, in concert with rehoming measures, this would mitigate the cost of losing Featherdale's contribution to the Breeding Program, which has diminished in recent years. With respect to Featherdale's education programs, Sydney Zoo and existing wildlife education programs in Sydney, which are mostly focused on native animals, have sufficient capacity to replace this contribution.
- > Further, social costs under the Sydney Zoo Scenario are based on the assumption that Featherdale will close down. Empirical evidence from the UK, experience of other wildlife based tourism precincts in Australia, co-existence of Featherdale alongside AWP for over a decade, and the engagement findings strongly indicate this assumption will not play out. Therefore, the SIA assesses the potential social costs that may stem from the Sydney Zoo Scenario are unlikely to materialise.

## Conclusions

Sydney Zoo will provide the Western Sydney community, including people with disability, new opportunities for social interaction and complement the contribution Featherdale makes to the way of life and culture of Western Sydney. It will meet unmet demand for full-service zoo experiences in Western Sydney, which this community currently incurs a cost to access at Taronga Zoo. In alleviating this cost, Sydney Zoo will increase zoo and wildlife park visitation for the under-serviced Western Sydney community. Further, this community is likely to be highly satisfied with Sydney Zoo given it meets their stated preferences for animal types, provides rare and unique animals not currently available in Western Sydney, is a longer format zoo experience, and has a heavily landscaped setting.

Sydney Zoo will provide significant additional capacity for zoo and wildlife education programs, including volunteer placements, in Sydney for school children, TAFE and university students, and community members. These programs will build TAFE and university student skills and provide pathways for employment opportunities in a wide range of areas, not just animal studies. The programs will also provide exotic animal placement opportunities, for which there is currently a need in Sydney. In providing significant additional capacity for school education programs and in concert with its focus on rare and unique animals and naturalistic animal enclosures, Sydney Zoo will build positive environmental and conservation behaviours amongst school children.

Sydney Zoo will enhance the Western Sydney tourism offer by creating a wildlife-based destination tourism precinct. It will do this by complementing Featherdale's Australian native animal offer with exotic animals and will grow overall visitation to the precinct. Sydney Zoo will also provide a wide range of employment opportunities for the Western Sydney community, including Indigenous people and people with disability, and contribute to the current and future amenity of Western Sydney by providing a revenue source for the WSP.

The findings indicate no new social benefits and potentially significant social costs under the Status Quo Scenario. These include missed opportunity to realise the social benefits of the Co-existence and Sydney Zoo Scenarios. Whilst the Status Quo Scenario guarantees avoidance of potentially adverse social impacts, it is likely these can be mitigated under this Scenario subject to particular management measures, most of which are already in place.

## 7 Assessment

This final section draws together information contained in the previous sections to assess potential social impacts of Sydney Zoo. It also suggests management and mitigation measures to enhance or maximise social benefits and, where relevant, avoid or minimise potentially adverse social impacts.

### 7.1 Programs assessed

The SIA has considered the social, conservation and education programs of Sydney Zoo and Featherdale (summarised below) as well as those of other zoos and wildlife parks across the relevant localities.

#### Social programs

Sydney Zoo	Featherdale Wildlife Park
> Multi-faith prayer room	No comparator
> Fundraising for charity through the Sydney Zoo Foundation	No comparator
> Community outreach programs such as incursions and animal interactions for special needs children and patients of Westmead Hospital and Ronald McDonald House	<ul style="list-style-type: none"> <li>&gt; Community outreach program that visits aged care facilities, and participation in other community events</li> <li>&gt; Animal displays for Ngallu Wal Aboriginal Child and Family Centre and elders meeting</li> </ul>
No comparator	> Western Sydney community days with NSW Police Force and NSW Fire Service hosted at Featherdale
> Participant in Western Sydney Tourism Network, which aims to grow and promote a regional tourism offer	No comparator
<ul style="list-style-type: none"> <li>&gt; Ranger program involving placement of Indigenous staff in flexible roles that cover delivery of educational programs, animal welfare and keeping, native planting and grounds maintenance</li> <li>&gt; 10% FTE Aboriginal employment target</li> <li>&gt; Construction supply contracts facilitated by Muru Mittigar</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Local Indigenous artist products for sale in the Featherdale Souvenir Centre</li> <li>&gt; Employment of local Indigenous artists to paint murals throughout Featherdale to encourage cultural awareness</li> <li>&gt; Providing native animals for NAIDOC week celebrations</li> </ul>
<ul style="list-style-type: none"> <li>&gt; Volunteer programs for example such as Seniors to volunteer for wayfinding assistance and information purposes</li> <li>&gt; Mens Shed to be engaged for minor construction works (e.g. bird boxes, bat boxes)</li> </ul>	> Friends of Featherdale club facilitating volunteer opportunities for community members
> Free admission to people with special needs, their carers and companions	> Free entry passes to charities and schools to assist with fundraising activities

Potential positive and adverse social impacts to the social programs carried out by Featherdale (as summarised above) and other zoos and wildlife parks in the locality as a result of Sydney Zoo include:

- > Increased capacity for fundraising for community and conservation initiatives through the Sydney Zoo foundation under the Co-existence Scenario. Some fundraising capacity may be lost under the highly unlikely Sydney Zoo Scenario in the event Featherdale ceases to provide free entry passes to assist with fundraising activities. However, Sydney Zoo's larger size, financial fundraising activities, as well as in-kind commitment to providing free entry passes indicate opportunity for a net increase in fundraising capacity under the Sydney Zoo Scenario. This likely net increase would not be realised under the Status Quo Scenario.
- > Increased number of free entry passes for community members under the Co-existence Scenario. Some capacity may be lost under the highly unlikely Sydney Zoo Scenario in the event Featherdale ceases to offer free entry passes. However, Sydney Zoo's commitment to providing free passes and larger size indicate opportunity for a net increase in free passes to the community under the Sydney Zoo Scenario. This likely net increase would not be realised under the Status Quo Scenario.
- > Increased capacity for community outreach programs to facilitate social interaction with wildlife under the Co-existence Scenario. Some capacity may be lost under the highly unlikely Sydney Zoo Scenario in the event Featherdale's community outreach programs cease to operate. However, Sydney Zoo's commitment to a community outreach program and larger size indicate opportunity for a net increase in capacity for outreach activities under the Sydney Zoo Scenario. This likely net increase would not be realised under the Status Quo Scenario.
- > Increased capacity for wildlife based volunteering opportunities for community members under the Co-existence Scenario. Some capacity may be lost under the highly unlikely Sydney Zoo Scenario in the event Featherdale's volunteering programs cease to operate. However, Sydney Zoo's larger size indicates it has capacity to facilitate a net increase in volunteering opportunities under the Sydney Zoo Scenario. This likely net increase would not be realised under the Status Quo Scenario.
- > Increased capacity to facilitate wildlife-based community events under the Co-existence Scenario. Some capacity may be lost under the highly unlikely Sydney Zoo Scenario in the event Featherdale ceases to participate in community events. However, Sydney Zoo's demonstrated commitment to participating in such events and larger size indicates it has capacity to facilitate a net increase in participation in community events under the Sydney Zoo Scenario. This likely net increase would not be realised under the Status Quo Scenario.
- > Increase in permanent and secure Indigenous employment opportunities under the Co-existence Scenario through Sydney Zoo's 10% FTE Indigenous employment target. Some temporary and less secure Indigenous employment opportunities may be lost under the highly unlikely Sydney Zoo Scenario in the event Featherdale's Indigenous employment opportunities cease. However, Sydney Zoo's larger size and the FTE target indicate it has capacity to facilitate a net increase in more permanent and secure Indigenous employment under the Sydney Zoo Scenario. This likely net increase would not be realised under the Status Quo Scenario.

## Conservation programs

Sydney Zoo	Featherdale Wildlife Park
<ul style="list-style-type: none"> <li>&gt; As part of the Australian Species Management Program (ASMP) administered by ZAA, Sydney Zoo will provide captive breeding space for 35 species, and has space to hold additional ASMP species</li> <li>&gt; This will include both domestic and exotic species. Sydney Zoo has already engaged with ZAA to identify priority programs under the ASMP as part of their species collection efforts.</li> </ul>	<ul style="list-style-type: none"> <li>&gt; As part of the Australian Species Management Program (ASMP) administered by ZAA, Featherdale provides captive breeding space for 24 species</li> <li>&gt; Participant in NSW Wild Capture and Captive Breeding Program for the endangered Plains Wanderer</li> <li>&gt; National Spotted Tail Quoll Breeding and DNA Research Programs</li> <li>&gt; Participant in Tasmanian Devil Breeding Program</li> <li>&gt; Release endangered Bush Stone Curlews back into the wild</li> <li>&gt; Participant in Koala Genome Project</li> </ul>
<ul style="list-style-type: none"> <li>&gt; Strategic research alliance with Western Sydney University in the areas of wildlife habitat creation and population studies, energy efficiency, bushland regeneration, water sensitive urban design, and animal welfare smart monitoring</li> </ul>	No comparator
<ul style="list-style-type: none"> <li>&gt; Animal welfare initiatives with conservation organisations, including fundraising for these initiatives through Sydney Zoo Foundation</li> <li>&gt; Animal rescue and on-site veterinarian care for exotic and native animals including triage of sick, injured and displaced animals</li> <li>&gt; Memorandum of Understanding with WIRES and/or NSW Office of Environment and Heritage to provide rehabilitation services for injured native animals surrendered to Sydney Zoo</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Illegally and legally kept native and exotic species identification and removal service across NSW for NSW National Parks and Wildlife Service and NSW Police Force</li> <li>&gt; Native Animal Rescue Service for injured native animals around Sydney and NSW</li> </ul>
No comparator	<ul style="list-style-type: none"> <li>&gt; Animal sponsorship program for the Southern Cassowary, Saltwater Crocodile, Koala, Tasmanian Devil, Red Kangaroo and Alpine Dingo</li> </ul>
<ul style="list-style-type: none"> <li>&gt; Quarantine facility for import of international animals to add to existing approved NSW facilities (Mogo Zoo, Taronga Zoo and Billabong Zoo)</li> </ul>	No comparator
<ul style="list-style-type: none"> <li>&gt; Retaining and managing the endangered Cumberland Plain Bushland through the Sydney Zoo's design</li> </ul>	No comparator

Potential positive and negative impacts to the conservation programs carried out by Featherdale (as summarised above) and other zoos and wildlife parks in the locality as a result of Sydney Zoo include:

- > Increased capacity for ASMP conservation breeding programs under the Co-existence Scenario. Some capacity may be lost under the highly unlikely Sydney Zoo Scenario in the event Featherdale's breeding programs cease to operate. However, Sydney Zoo's larger size and commitment to providing space for 35 ASMP species indicate opportunity for a net increase in ASMP conservation breeding program capacity under the Sydney Zoo Scenario. This likely net increase would not be realised under the Status Quo Scenario.
- > Increased capacity for wildlife conservation research under the Co-existence Scenario. Some capacity may be lost under the highly unlikely Sydney Zoo Scenario in the event Featherdale's conservation research programs cease to operate. However, participation of other Sydney and Australian-based zoos and wildlife parks in these research programs combined with Sydney Zoo's commitment to conservation research indicate opportunity for a net increase under the Sydney Zoo Scenario. This would not be realised under the Status Quo Scenario.
- > Increased capacity for animal rescue, welfare and sponsorship activities in Sydney under the Co-existence Scenario. Some animal rescue and sponsorship capacity may be lost under the highly unlikely Sydney Zoo Scenario in the event Featherdale's activities in this space cease to operate. However, Sydney Zoo's larger size and lease requirements indicate opportunity for a net increase in capacity for these types of activities under the Sydney Zoo Scenario. This likely net increase would not be realised under the Status Quo Scenario.
- > Increased capacity for animal import quarantine facilities in Sydney under the Co-existence and Sydney Zoo Scenarios. This would not be realised under the Status Quo Scenario.
- > Retention and management of the endangered Cumberland Plain Bushland, which meets the aims of the WSP SEPP, under the Co-existence and Sydney Zoo Scenarios. This would not be realised under the Status Quo Scenario.

### Education programs

Sydney Zoo	Featherdale Wildlife Park
<ul style="list-style-type: none"> <li>&gt; Provide work experience placements to Western Sydney high school students, including students with disability, facilitated through Blacktown Council and other regional work placement programs e.g. the Schools Industry Partnership</li> <li>&gt; Work placements for TAFE students, including students with disability, facilitated through Western Sydney Institute. The main area for placements will be Captive Animal Management. Other areas include: tourism guiding; nature conservation; environmental management; animal studies; captive animal management; landscaping and horticulture; retail services; cleaning; service recovery; security; food preparation and handling; and customer relations.</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Work experience program with NSW TAFE for Captive Animal Management students</li> <li>&gt; Work experience program with the NSW Department of Education for students from schools across NSW</li> </ul>
<ul style="list-style-type: none"> <li>&gt; Age and curriculum appropriate environment, science and technology education programs for infant (kindergarten to grade two), primary (grades three to six) and high school students. This includes self-guided excursions for up to 50,000 students, including students with</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Schools Education Program that aligns with State and Commonwealth syllabus for English, Geography and Environment. Themes include animals, living things, endangered species, mammals and animals. Program has been provided to 63,000 students across</li> </ul>

<p>disability, annually. Themes include bush regeneration, urbanisation, and conservation and environment</p> <p>&gt; App-based educational program and partnership with Telstra and Microsoft to improve student engagement and understanding</p>	<p>Featherdale's 43 years of operation.</p>
<p>No comparator</p>	<p>&gt; Vacation / Outside of School Hours Care program</p>
<p>&gt; A cultural awareness program developed and delivered in partnership with Muru Mittigar about Aboriginal people (particularly the Darug), places, resources, connections to places, land, people, animals and our environment, the significance of stories, art, bush foods, medicines and technology sustainable Aboriginal living, artefacts, lifestyle and the impacts of colonisation</p>	<p>&gt; Free education talks for Ngallu Wal Aboriginal Child and Family Centre</p>
<p>&gt; University research support including postgraduate scholarships</p>	<p>No comparator</p>
<p>&gt; Customised training courses with the Western Sydney Institute based on employee requirements for Sydney Zoo</p>	<p>No comparator</p>
<p>No comparator</p>	<p>&gt; Promotes educational programs for Save the Koala Month, National Bilby Day, and Endangered Species Week</p>
<p>&gt; Mobile education program</p>	<p>&gt; Mobile Education Program that visits schools up to 45km from Featherdale</p>

Potential positive and negative impacts to the conservation programs carried out by Featherdale (as summarised above) and other zoos and wildlife parks in the locality as a result of Sydney Zoo include:

- > Increased capacity for work experience placements for school children and TAFE students under the Co-existence Scenario. Some capacity may be lost under the highly unlikely Sydney Zoo Scenario in the event Featherdale's work placement programs cease to operate. However, Sydney Zoo's larger size indicates opportunity for a net increase in capacity for work experience placements, particularly for exotic species for which there is currently an under-supply in Sydney, under the Sydney Zoo Scenario. This likely net increase would not be realised under the Status Quo Scenario.
- > Increased capacity to educate children of school age about wildlife under the Co-existence Scenario. Some capacity may be lost under the highly unlikely Sydney Zoo Scenario in the event Featherdale's school education programs cease to operate. However, Sydney Zoo's larger size indicates opportunity for a net increase in capacity to educate school children about wildlife under the Sydney Zoo Scenario. This likely net increase would not be realised under the Status Quo Scenario.
- > Increase in capacity for Indigenous cultural awareness under the Co-existence Scenario. Some capacity may be lost under the highly unlikely Sydney Zoo Scenario in the event Featherdale's Indigenous education talks cease to operate. However, Sydney Zoo's dedicated cultural awareness program and larger size indicates it has capacity to facilitate a

net increase in Indigenous cultural awareness under the Sydney Zoo Scenario. This likely net increase would not be realised under the Status Quo Scenario.

- > Increase in capacity to support university students researching wildlife and improved skills of wildlife industry employees in Sydney under the Co-existence and Sydney Zoo Scenarios. This would not be realised under the Status Quo Scenario.
- > Increase in capacity to promote third party wildlife education programs under the Co-existence Scenario. Some capacity may be lost under the highly unlikely Sydney Zoo Scenario in the event Featherdale's third party wildlife education promotional programs cease to operate. However, the high likelihood Sydney Zoo will participate in this type of activity as is very common amongst zoos and wildlife parks, combined with its larger size indicate it has capacity to facilitate a net increase in third party promotional opportunities under the Sydney Zoo Scenario. This would not be realised under the Status Quo Scenario.
- > Increase in capacity to support university students researching wildlife and improve skills of wildlife industry employees under the Co-existence and Sydney Zoo Scenarios. This would not be realised under the Status Quo Scenario.
- > Increase in capacity to for mobile wildlife education programs under the Co-existence Scenario. Some capacity may be lost under the highly unlikely Sydney Zoo Scenario in the event Featherdale's mobile education program ceases to operate. However, the high likelihood Sydney Zoo will participate in this type of activity, as is very common amongst zoos and wildlife parks, combined with its larger size indicate it has capacity to facilitate a net increase in promotional opportunities for these programs under the Sydney Zoo Scenario. This would not be realised under the Status Quo Scenario.

## 7.2 Impact Scenarios

The SIA finds there are three potential impact scenarios arising from development of Sydney Zoo:

Scenario	Description	Overall Assessment	Likelihood	SIA Ranking
<b>Scenario A - the Co-existence Scenario</b>	Sydney Zoo is approved and co-exists with Featherdale	Offers <b>significant social benefits</b> , aligns with and realises relevant policy aims and has <b>no adverse social impacts</b>	Empirical evidence indicates it is the <b>most likely Scenario</b>	<b>Preferred Scenario</b>
<b>Scenario B - The Sydney Zoo Scenario</b>	Sydney Zoo is approved and Featherdale subsequently suffers financial duress that prevents it from operating programs, or Featherdale exits the market	Offers <b>significant social benefits</b> , aligns with and realises relevant policy aims and has <b>some potentially adverse social impacts</b> that are likely to be offset by Sydney Zoo and other zoos and wildlife parks across Sydney and Australia	Empirical evidence indicates it is the <b>least likely Scenario</b>	<b>Next most preferred Scenario</b>
<b>Scenario C - The Status Quo Scenario</b>	Sydney Zoo is not approved and the status quo is maintained	Offers <b>no new social benefits</b> , does not align with or realise relevant policy aims, and has <b>some potentially adverse social impacts</b> in the missed opportunity	Empirical evidence indicates it is a <b>less likely Scenario</b>	<b>Least preferred Scenario</b>

		to deliver the significant social benefits of the Co-existence and Sydney Zoo Scenarios		
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### Co-existence Scenario

The Co-existence Scenario involves the approval of Sydney Zoo and continued operation of Featherdale. It is the preferred Scenario because it offers significant social benefits that align with and realise the aims of relevant policy frameworks, and has no significant social costs.

### Likelihood of Scenario

Based on the empirical evidence and engagement findings the Co-existence Scenario is the most likely Scenario.

Empirical evidence indicates that close spatial proximity and thematic complementarity make Sydney Zoo and Featherdale compatible attractions. Further, the evidence indicates this is likely to increase overall visitation to the area and means visitors are likely to visit both during the same trip.

This is strongly supported by stakeholder and consumer survey feedback which provided the following observations:

- > Sydney Zoo's offer is considered to be quite different to Featherdale's, and appeals strongly to Western Sydney residents because of it is a full service zoo offer and difficulties accessing a similar experience at Taronga Zoo
- > People that do not visit zoos regularly would increase their visitation as a result of the development of Sydney Zoo
- > When given the option of visiting either or both Sydney Zoo and Featherdale a majority indicated they would attend both Sydney Zoo and Featherdale or prefer Featherdale over Sydney Zoo
- > When asked to plan a zoo or wildlife experience for visiting friends or relatives a majority of survey respondents indicated they would visit both Sydney Zoo and Featherdale
- > Tourism operators noted Featherdale successfully co-existed with the strongly native animal focused Australian Wildlife Park located close by for over a decade

Based on the empirical evidence and engagement findings, it is concluded **the location of Sydney Zoo and Featherdale in close proximity to one another can grow visitation at both**. Consequently, it is **further concluded Featherdale is unlikely to suffer loss of visitation that could lead to financial duress**. Therefore, **it is highly likely the Co-existence Scenario will eventuate**. Having considered the social benefits and potentially adverse social impacts of this Scenario, **the SIA concludes** that it **offers a net positive social outcome**.

### Supportive measures

The strong likelihood of the Co-existence Scenario eventuating is enhanced by Sydney Zoo's involvement in a regional tourism network, facilitated by the Western Sydney Business Connection, to grow and promote Western Sydney as a tourism precinct and this is further required by Condition C9 in the Department's Draft Development Consent.

### Benefits of Scenario

The social benefits of this Scenario are described below.

- > Provision of a major new tourism facility in Western Sydney that will further the aims of a number of key policies for the NSW and Commonwealth Governments, including:

- NSW Disability Inclusion Plan – provision for people with disability of improved opportunities for social interaction and the capacity to exercise their rights to live, learn, work, play and feel a sense of belonging in Western Sydney
  - NSW Visitor Economy Taskforce Vision - contribution to the vision to double overnight expenditure and to the creation of a nature and heritage tourism destination precinct identity for Western Sydney
  - Advancement of Indigenous People – provision of employment opportunities for Indigenous people through Aboriginal-delivered cultural tourism experiences that will contribute to Closing the Gap Indigenous employment policy aims
  - NSW State Priority and NSW Strategic Plan for Children and Young People - provision of improved employment opportunities for youth employment outcomes by offering VET opportunities and vocational pathways for school leavers
- > Provision of a major new family-oriented tourism facility that meets the zoo and wildlife park needs, wants and preferences of Western Sydney residents.
  - > Provision of a full service zoo experience in Western Sydney that avoids the travel costs this market currently incurs by having to travel to access a similar experience at Taronga Zoo.
  - > Opportunity for new wildlife education programs that improve education, conservation and behavioural learning outcomes.
  - > Opportunity for Aboriginal cultural awareness programs that increase market awareness of NSW as a destination where Aboriginal culture is strong and diverse and ensure Aboriginal tourism occurs in a manner endorsed by Aboriginal people.
  - > Provision of a major new tourism facility in Western Sydney that will provide financial and in-kind contributions to social service and education providers such as Ronald McDonald House, the Westmead Foundation, Western Sydney University and TAFE NSW.
  - > Provision of a major new tourism facility that will substantially enhance the amenity of Western Sydney to residents and visitors to Western Sydney.
  - > Provision of a major new tourism facility that will realise the vision of the WSP SEPP, the WSP Plan of Management (PoM) and Bungarabee Precinct Master Plan.
  - > Generation of revenue for WSP that will fund the future investment pipeline for WSP that will enhance recreation opportunities available to residents and visitors to Western Sydney.

### ***Social impacts***

No potentially adverse social impacts associated with this Scenario have been identified.

### ***Management measures***

Sydney Zoo is already undertaking a number of management measures to ensure these social benefits are captured and maximised, including:

- > Sydney Zoo has committed to employing Indigenous workers. Although the Sydney Zoo facility design accommodates people living with a disability and the Sydney Zoo lease requires special needs employment, Sydney Zoo has not put in place a formal disability employment policy and this is recommended to maximise social benefits.
- > Sydney Zoo has committed to developing an Aboriginal cultural awareness tourism experience in collaboration with Muru Mittigar. This is supported by Conditions C21 and C22 in the Draft Development Consent prepared by the Department.

- > Sydney Zoo encourages employees under the age of 25 to attain relevant qualifications through TAFE vocational education and training (VET) programs.
- > Sydney Zoo's lease conditions require the design of a family oriented facility that provides opportunities for interaction and education programs. The lease also requires Sydney Zoo to engage effectively with the community through a number of means including employment and education programs.
- > Sydney Zoo is establishing a fund to support conservation research and breed for wild release programs.
- > Sydney Zoo's exhibits and attractions are designed in accordance with the factors found to enhance education, conservation and behavioural learning outcomes for visitors.

### *The Sydney Zoo Scenario*

The Sydney Zoo Scenario involves the approval of Sydney Zoo and subsequent closure of Featherdale programs due to competitive pressures. It is the next most preferred Scenario because the approval of Sydney Zoo offers significant social benefits and aligns with the aims of relevant policies as outlined above. Whilst this Scenario has some potentially adverse social impacts attached to it, for the most part these are not significant and are temporary in nature.

### *Likelihood of Scenario*

As outlined above, it is highly unlikely the Sydney Zoo Scenario will eventuate and accordingly, **potential adverse impacts associated with this Scenario are highly unlikely to materialise**. This is further enhanced if the measures described below are in place.

### *Supportive measures*

The supportive measures outlined above should be adopted to enhance the likelihood of the social benefits of the Co-existence Scenario occurring.

### *Benefits of Scenario*

The social benefits of the Sydney Zoo Scenario are the same as those for the Co-existence Scenario described above.

### *Social impacts*

Potential adverse social impacts include: loss of employment opportunities at Featherdale, Featherdale's uniquely and significantly diverse collection of iconic Australian animals, the opportunities Featherdale provides for social interaction for the Western Sydney community, Featherdale's contribution to conservation breeding programs, Featherdale's capacity to facilitate work placement opportunities for TAFE and university students, and Featherdale's capacity to educate school children about wildlife. Potential adverse impacts and mitigation measures are outlined in the table at the end of this section.

Industry stakeholders identified the programs offered by Featherdale or Sydney Zoo are not particularly unique, and both are capable of providing them. Stakeholders further indicated that, between Sydney Zoo and existing zoos and wildlife parks across Sydney, there is already sufficient overlap in, and capacity to replicate, the programs offered by Featherdale. Therefore, potential adverse impacts are considered temporary in duration.

Further, it is likely potentially adverse impacts would not occur until the longer term as it may take some time for Featherdale programs to cease operating due to competitive pressures. Therefore, the general principle of a discount rate (i.e. long term impacts are given less weight than shorter term impacts) has been considered in the assessment of potentially adverse impacts.

### Net Social Benefit

The development of Sydney Zoo offers significant social benefits, which, based on the empirical information and stakeholder interviews outweigh potentially adverse social impacts associated with the cessation of Featherdale’s programs or its exiting the market. Sydney Zoo will meet the needs, wants and preferences of this community for a full service offer that is not currently available in Western Sydney. In contrast, the programs offered by Featherdale are not particularly unique, and both Featherdale and Sydney Zoo are capable of providing them as are other zoos and wildlife parks across Sydney.

### Mitigation Measures

The table below describes mitigation measures for potentially adverse social impacts. It is noted the empirical evidence and stakeholder engagement indicate these impacts are highly unlikely to materialise (i.e. the Co-existence Scenario is most likely to eventuate).

As previously mentioned, the programs offered by Featherdale are not particularly unique, and both Featherdale and Sydney Zoo are capable of providing them as are other zoos and wildlife parks across Sydney. It is noted these programs operate on a distributed model across the relevant localities and, therefore, potentially adverse social impacts are the loss of the Featherdale contribution to the program, rather than the program itself.

Accordingly, the mitigations are directed at potentially adverse social impacts of the lost contribution Featherdale makes to the programs across the relevant localities. If the impacts do materialise (i.e. the Sydney Zoo Scenario) and the Featherdale programs cease to operate or it exits the market, the SIA is satisfied appropriate mitigation measures to replicate this contribution across the localities are already in place via the draft conditions of consent or are inherent in the design and operations of Sydney Zoo and the zoo and wildlife park industry.

Social impact	Mitigation
<b>Loss of socio-economic benefit from employment opportunities for Featherdale employees</b>	<p>Sydney Zoo, and other tourism attractions located nearby collaborate to develop a wildlife-based tourism precinct identity and offer. Sydney Zoo is part of a similar collaboration that has already begun through Western Sydney Business Connection.</p> <p>Condition C9 of the draft development consent conditions adequately contemplates this mitigation strategy.</p>
<b>Loss of opportunities to engage with iconic Australian animals, particularly international tourists, school children, and vulnerable groups</b>	<p>In the event of Featherdale’s closure, Sydney Zoo to commence discussions with the ZAA to ensure an orderly relocation of Featherdale’s collection of native Australian animals.</p> <p>In the event of Featherdale’s closure, Sydney Zoo to enter into discussions with vulnerable people and groups that receive benefit from Featherdale’s outreach programs to facilitate opportunities to interact with iconic Australian animals</p> <p>Condition C8(a, d, and e) of the draft development consent conditions adequately contemplates this mitigation strategy by requiring Sydney Zoo’s community engagement plan to include adaptive management strategies to address any anticipated or unanticipated social issues that may arise.</p>
<b>Loss of social interaction opportunities for Western Sydney</b>	<p>Sydney Zoo’s design already includes extensive opportunities for social interaction. Sydney Zoo to identify and pursue opportunities for community engagement and outreach, including attendance at local community events.</p>

community.	Further, Sydney Zoo's lease conditions require a family oriented facility that facilitates social interaction.
Loss of contribution to conservation breeding programs, particularly the Spotted Tail (Tiger) Quoll Breeding Program	<p>Because of the distributed operating models for these programs it is unlikely they will cease if Featherdale's contribution is lost. Sydney Zoo also proposes to hold some of these animals such as the Spotted Tail (Tiger) Quolls.</p> <p>In the event of closure of Featherdale programs, Sydney Zoo should commence discussions with ZAA to identify opportunities to ensure continuation of contribution to breeding programs. Condition C8(a, d, and e) of the draft development consent conditions adequately contemplates this mitigation strategy by requiring Sydney Zoo's community engagement plan to include adaptive management strategies to address any anticipated or unanticipated social issues that may arise. In addition, Sydney Zoo's lease conditions also require it to participate in breeding programs for endangered animals.</p>
Lost capacity for volunteer work placements for TAFE and university students	<p>Sydney Zoo already proposes to facilitate work placements that are greater in number and scope than Featherdale. There are also a number of other zoos and wildlife parks across Sydney that already offer volunteer work placements for TAFE and university students interested in native animals.</p> <p>Condition C8(a, d, and e) of the draft development consent conditions adequately contemplates this mitigation strategy by requiring Sydney Zoo's community engagement plan to include adaptive management strategies to address any anticipated or unanticipated social issues that may arise. Sydney Zoo's lease conditions also require a facility with educational and interpretive activities.</p>
Lost capacity to educate school children about wildlife	<p>Sydney Zoo already proposes to educate school children about wildlife and has infrastructural capacity that significantly exceeds Featherdale's capacity. There are also a number of other zoos and wildlife parks across Sydney that provide programs to educate school children about wildlife.</p> <p>Condition C8(a, d, and e) of the draft development consent conditions adequately contemplates this mitigation strategy by requiring Sydney Zoo's community engagement plan to include adaptive management strategies to address any anticipated or unanticipated social issues that may arise. Sydney Zoo's lease conditions also require a facility with educational and interpretive activities.</p>

### *The Status Quo Scenario*

The Status Quo Scenario involves Sydney Zoo not being approved and Featherdale continuing to operate. There are **no new social benefits** attached to this Scenario. It has **significant social costs** and does not align with relevant policy frameworks. The **social costs** of this Scenario are lost opportunity to deliver the social benefits of the co-existence and Sydney Zoo Scenarios.

### *Management and mitigation measures*

To avoid the social costs associated with this Scenario, the SIA recommends the PAC approves Sydney Zoo alongside the recommended mitigation measures.

### 7.3 Overall assessment

Having considered the social benefits and costs of these Scenarios, **the SIA concludes the approval of Sydney Zoo offers a net positive social outcome.**

**In circumstances where Sydney Zoo may contribute to closure of Featherdale programs (i.e. the Sydney Zoo Scenario), the empirical evidence reviewed and stakeholder engagement identifies *potentially adverse social impacts are, for the most part, insignificant and temporary in nature.***

Subject to particular measures, the ***identified potentially adverse social impacts of this Scenario can likely be mitigated***, and ***most of these measures are already in place.*** A number of further measures have been recommended to minimise these potential impacts.

### 7.4 DP&E recommended conditions as mitigations

The SIA concludes the conditions recommended by the NSW Department of Planning and Environment as presented to the PAC generally cover mitigation of potentially adverse social impacts associated with the ***social and education programs***, in particular conditions C8 and C9. In addition, mitigation measures for potentially adverse social impacts are also already contemplated by Sydney Zoo lease requirements.

The conditions do not cover potential adverse impacts associated with the ***conservation programs***. However, the SIA is satisfied appropriate measures are already in place to mitigate these potential adverse impacts, for example, the collection rehoming plan requirements for ZAA members. In addition, the SIA recommends that, in the event of Featherdale's programs closing or Featherdale exiting the market as a result of competitive pressures with Sydney Zoo, Sydney Zoo consult with ZAA to assist in either the orderly transition of the Featherdale collection and breeding programs to other facilities or continuation of the relevant programs as appropriate.

	Impact 1	Impact 2	Impact 3	Impact 4	Impact 5	Impact 6	
Category	Personal and property rights	People's fears and aspirations	Way of life and Culture	Environment	Personal and property rights	Personal and property rights	
Describe the impact	Loss of employment opportunities for Featherdale employees	Loss of opportunities to engage with iconic Australian animals, particularly international tourists, school children, and vulnerable groups	Loss of social interaction opportunities for Western Sydney community.	Loss of contribution to conservation breeding programs, particularly the Spotted Tail (Tiger) Quoll	Loss of capacity for volunteer work placements for TAFE and university students	Loss of capacity to educate school children about wildlife	
How likely is the impact without mitigation	Unlikely	Unlikely	Unlikely	Unlikely	Unlikely	Unlikely	
Why?	<p>Empirical evidence and consumer survey undertaken as part of the SIA demonstrates Sydney Zoo and Featherdale are sufficiently differentiated in offering a similar but not identical product.</p> <p>Attractions of this nature located in tourism clusters complement one another and do not compete for the same market. This is likely to grow overall visitation to Sydney Zoo and Featherdale.</p> <p>Therefore, competitive pressures are unlikely to be felt by Featherdale leading to loss of employment opportunities.</p>	<p>The Zoo and Aquarium Association (ZAA) requires member institutions to have rehoming plans for collections, and rehoming plans have been successfully implemented in the past.</p> <p>There are a range of other zoos and wildlife parks across Sydney that hold iconic Australian animals.</p>	<p>Consumer survey undertaken as part of the SIA finds unprompted awareness and recall of fond memories at Featherdale is low.</p> <p>If competitive pressures materialize, this would take some time. By this time, Sydney Zoo will have established itself as an opportunity for social interaction and part of the Western Sydney community.</p> <p>Sydney Zoo's design includes extensive opportunities for social interaction.</p>	<p>Featherdale is one of a number of zoos and wildlife parks and private holders of Tasmanian Devils, Spotted Tail (Tiger) Quolls, Bush Stone Curlews and Plains Wanderers across Australia.</p> <p>Because of the distributed operating models of these programs it is unlikely they will cease if Featherdale's contribution is lost.</p> <p>Sydney Zoo also proposes to hold some of these animals such as the Spotted Tail (Tiger) Quolls.</p>	<p>Most zoos and wildlife parks across Sydney offer volunteer work placements for TAFE and university students interested in native animals.</p> <p>Industry stakeholders find placement opportunities for exotic animals are more popular amongst students.</p> <p>Sydney Zoo plans to provide significant capacity for work placements that exceeds Featherdale's capacity.</p>	<p>There are over 30 zoos and wildlife parks across Sydney that offer programs to educate school children about wildlife.</p> <p>Sydney Zoo plans to provide significant capacity for school education programs. This is equal to almost 10% of the 600,000 school children that visit zoos and wildlife parks in Australia every year as part of school programs.</p> <p>Sydney Zoo will provide capacity to educate school children that significantly exceeds Featherdale's capacity.</p>	
Is it likely to be significant with regard to...?	Duration	<p>It would take some time for competitive pressures to result in closure of Featherdale or its programs.</p> <p>By this time, Sydney Zoo may be fully operational. Sydney Zoo is likely to employ more people than Featherdale and there is likely to be a net increase in employment, even if Featherdale exits the market completely.</p> <p>Therefore, the impact is considered temporary in duration.</p>	<p>It would take some time for competitive pressures to result in closure of Featherdale or its programs.</p> <p>From there, cost would be temporary as these opportunities would be replaced by other zoos and wildlife parks across Sydney or Sydney Zoo.</p>	<p>It would take some time for competitive pressures to result in closure of Featherdale or its programs.</p> <p>By this time, Sydney Zoo may be fully operational and this capacity would be replaced by Sydney Zoo.</p> <p>Therefore, the impact is considered temporary in duration.</p>	<p>It would take some time for competitive pressures to result in closure of Featherdale or its programs.</p> <p>From there, cost would be temporary as this contribution would be replaced by other zoos and wildlife parks or Sydney Zoo.</p>	<p>It would take some time for competitive pressures to result in closure of Featherdale or its programs.</p> <p>By this time, Sydney Zoo may be fully operational and this capacity would be replaced by Sydney Zoo and other zoos and wildlife parks across Sydney.</p> <p>Therefore, the impact is considered temporary in duration.</p>	<p>It would take some time for competitive pressures to result in closure of Featherdale or its programs.</p> <p>By this time, Sydney Zoo may be fully operational and this capacity would be replaced by Sydney Zoo and other zoos and wildlife parks across Sydney.</p> <p>Therefore, the impact is considered temporary in duration.</p>
	Extent	<p>No. Localised, about 50% of Featherdale's 120 or so employees live in the Blacktown Local Government Area, and these jobs represent 0.01% of 123,810 jobs in the LGA as at the 2011 Census.</p>	<p>No. Localised, other zoos and wildlife parks across the Sydney region already hold iconic Australian animals. Industry stakeholders indicate international tourists only visit one native animal experience during their trip and this market operates across the entire Eastern Seaboard.</p> <p>No. 3.3 million visits annually by international tourists to zoos and wildlife parks in Australia. In 2013 there were 800,000 school aged children in Greater Sydney and 354,000 in Western Sydney.</p>	<p>No. Localised, social interaction opportunities are for Western Sydney community.</p> <p>Featherdale figures indicate roughly 3% (n=65,000) of the Western Sydney community (n=2.1million) visit each year.</p>	<p>No. Localised, Sydney Zoo proposes to hold some of these animals and existing zoos and wildlife parks across Sydney also hold them. Number of people impacted is unknown.</p>	<p>No. Localised, other zoos and wildlife parks across Sydney offer volunteer work placements for TAFE and university students interested in native animals.</p> <p>Number of students enrolled in captive animal management programs across Sydney is unknown. Featherdale provides places for approximately 40 students each week.</p>	<p>No. Localised, in 2013 there were 800,000 school aged children in Greater Sydney and 354,000 in Western Sydney. Featherdale has provided education programs to roughly 63,000 students across its 43 years of operation</p>
	Sensitivity	<p>Yes - High social value placed on employment. Ability to adapt or respond is more limited for employees in animal related roles because of lack of specialised animal employment opportunities in Western Sydney and Sydney more broadly.</p> <p>No - Ability to adapt or respond is higher for employees in non-animal related fields, such as tourism and</p>	<p>Yes. Stakeholder engagement indicates high social value placed on opportunities for international tourists and school children to engage with iconic Australian animals.</p> <p>No. Stakeholder engagement indicates ability of international tourists to adapt or respond is high as there are a large number of native animal experiences across the Eastern Seaboard. Ability of children</p>	<p>Yes. Consumer survey indicates community members place high value on social interaction aspects of zoos and wildlife parks.</p> <p>No. Ability to adapt or respond is high. Although there is a deficit of arts, culture and recreation infrastructure in Western Sydney, there are still a wide range of opportunities for social interaction. Sydney Zoo's design also includes</p>	<p>No. Industry stakeholders indicate the social value of Featherdale's contribution to most of these programs is not particularly high, with the exception of the Spotted Tail (Tiger) Quoll and Plains Wanderer.</p> <p>No. Ability to adapt or respond is high because Sydney Zoo proposes to also hold some of these animals such as the Spotted Tail (Tiger)</p>	<p>No. Industry stakeholders indicate social value of work placements for native animals is lower than exotic animals.</p> <p>No. Ability to adapt or respond is high because there are a number of other zoos and wildlife parks across Sydney that already offer volunteer work placements for TAFE and university students interested in</p>	<p>Yes. Stakeholder engagement and consumer survey indicate social value of educating school children about wildlife is high. Ability of children to adapt or respond is high as experiences are facilitated by school, which have multiple options for these experiences available across Greater Sydney.</p>

		hospitality, because these low skill employment opportunities are common in Western Sydney and Sydney more broadly.	to adapt or respond is high as experiences are facilitated by school, which have multiple options for these experiences available across Greater Sydney.	extensive opportunities for social interaction.	Quolls, and there are other zoos and wildlife parks and private holders of these animals.	native animals.	
Severity		Yes. Intensity of effect is high and may lead to potential decrease in standard of living due to inability to service costs of living.  No. Severity is unlikely to be acute or chronic as it may take some time for Featherdale or its programs to cease due to competitive pressures and lead to loss of employment.	No. Intensity of effect is limited because other zoos and wildlife parks hold iconic Australian animals. International tourists may value interaction with native animals but are unlikely to learn from this experience. Empirical evidence indicates school children are more likely to learn from interaction with rare or unique exotic animals.	No. Intensity of effect is limited. Recall of Featherdale as tourism venue or activity in Western Sydney is low. No. Effect is not acute or chronic as it may take some time for Featherdale or its programs to cease due to competitive pressures. By this time, Sydney Zoo will have established itself as an opportunity for social interaction and part of the Western Sydney community.	No. Intensity of effect is limited because social value of Featherdale's contribution appears to be low.  No. Effect is not acute or chronic as it may take some time for Featherdale or its programs to cease due to competitive pressures.	No. Intensity of potential effect is limited. Although it may lead to inability to complete work placement requirements for students, industry stakeholders indicated it is relatively easy to find work placement opportunities in native animals across Sydney. No. Effect is not acute or chronic as it may take some time for Featherdale or its programs to cease due to competitive pressures.	Yes. Intensity of potential effect is high because empirical evidence indicates school children are more likely to absorb educational messaging at zoos and wildlife parks. No. Effect is not acute or chronic as it may take some time for Featherdale or its programs to cease due to competitive pressures, and there are other options available across Sydney to educate school children about wildlife.
Is the impact likely to be significant overall	No	No	No	No	No	No	No
Is there significant concern among potentially affected people and groups regarding the social impact?	Unknown. Stakeholder engagement not undertaken with Featherdale employees. Attempt to contact Featherdale was made through the SIA but not returned.	Yes. Industry stakeholders indicated the diversity of Featherdale's native animal collection is unique and significant. However, stakeholders also indicated international tourists are unlikely to be aware of Featherdale prior to visiting Australia and likely to only visit one native animal experience during their trip, and school children are more interested in rare or unique exotic animals.	Unknown. Stakeholder engagement indicates Featherdale holds a significant place in the minds of Western Sydney community members. This is not apparent through consumer survey findings.	Yes. Industry stakeholders indicated it would be difficult to replace contribution of Featherdale because of large enclosure space requirements for Spotted Tail (Tiger) Quolls. The only facility in Sydney capable of breeding Plains Wanderers is Taronga Zoo.	No. Industry stakeholders indicated it is relatively easy to find work placement opportunities in native animals across Sydney.	No. Industry stakeholders indicated there are a range of other options across Sydney, and Sydney Zoo plans to provide significant additional capacity to educate school children about wildlife.	
<b>Mitigation</b>							
Proposed Mitigation	Sydney Zoo, and other tourism attractions located nearby collaborate to develop a wildlife-based tourism precinct identity and offer. Sydney Zoo is part of a similar collaboration that has already begun through Western Sydney Business Connection.	In the event of Featherdale's closure, Sydney Zoo to commence discussions with the ZAA to ensure an orderly relocation of Featherdale's collection of native Australian animals.  In the event of Featherdale's closure, Sydney Zoo to enter into discussions with vulnerable people and groups that receive benefit from Featherdale's outreach programs to facilitate opportunities to interact with iconic Australian animals	Sydney Zoo's design already includes extensive opportunities for social interaction.  Sydney Zoo to identify and pursue opportunities for community engagement and outreach, including attendance of local community events.	Sydney Zoo already plans to hold Spotted Tail (Tiger) Quolls as part of collection.  In the event of closure of Featherdale programs, Sydney Zoo to commence discussions with ZAA to identify opportunities to ensure continuation of contribution to breeding programs.	Sydney Zoo already proposes to facilitate work placements that are greater in number and scope than Featherdale.  There are also a number of other zoos and wildlife parks across Sydney that already offer volunteer work placements for TAFE and university students interested in native animals.	Sydney Zoo already proposes to educate school children about wildlife and has infrastructural capacity that significantly exceeds Featherdale's capacity.  There are also a number of other zoos and wildlife parks across Sydney that provide programs to educate school children about wildlife.	
Likely Effectiveness	High. Empirical evidence indicates this will grow visitation at both Sydney Zoo and Featherdale, reducing the likelihood of competitive pressure affecting Featherdale's operations as a result of the approval of Sydney Zoo.  Sydney Zoo is likely to employ more people than Featherdale, resulting in a net increase in employment even if Featherdale exits the market completely.	High. This is because of collection rehoming plan requirements for ZAA members, the success of previous rehoming plans, the likely interest of other zoos and wildlife parks in the Featherdale collection, and the range of other zoos and wildlife parks in the Sydney region that already hold iconic Australian animals held by Featherdale and Sydney Zoo's proposal to also hold a number of these animals.	High. This is because the consumer survey indicates Sydney Zoo is highly attractive to potential consumers and is likely to increase their visitation.  Because visitation is primarily motivated by social interaction, this is likely to increase overall social interaction opportunities.  Further, Sydney Zoo lease conditions already require a family oriented facility that facilitates social interaction.	High. This is because Sydney Zoo is a new large format zoo that has space to incorporate design of the large enclosures required by Spotted Tail (Tiger) Quolls.  Opportunities to facilitate continuation of Featherdale's contribution to breeding programs already exist at the more than a dozen other zoos and wildlife parks that hold these animals across Australia, or are likely to be found at Sydney Zoo given its significant infrastructural capacity.  In addition, existing ZAA policies require member organisations to rehome collections, including breeding populations, in the event of zoo or wildlife park closure.	High. This is because Sydney Zoo plans to have capacity for a large number of work placement opportunities for TAFE and university students, and there are a number of other zoos and wildlife parks across Sydney that facilitate volunteer work placements for students interested in native animals.	High. This is because Sydney Zoo plans to have capacity to educate a large number of school children, and there are a number of other zoos and wildlife parks across Sydney that provide programs to educate school children about wildlife.  Further, Sydney Zoo lease conditions already require education programs for school children.	

				Together, these measures are likely to mitigate loss of the contribution Featherdale makes to the breeding programs.		
Indicators for monitoring	Progress on development of wildlife-based tourism precinct offer could be monitored via a report as part of the OEMP required in the development consent.	Upon closure of Featherdale, Sydney Zoo to engage with ZAA to understand the status of collection redistribution efforts and support as necessary	Number of visitors attending Sydney Zoo for social interaction.	Upon closure of Featherdale, Sydney Zoo to engage with ZAA to understand status of breeding program continuity and support as necessary.	Number of work placement students at Sydney Zoo interested in native animals.	Number of school children engaged in education programs at Sydney Zoo.
Current Consent provision	Condition C9 of the draft development consent conditions adequately contemplates this mitigation strategy.	Condition C8 (a, d, and e) of the draft development consent conditions adequately contemplates this mitigation strategy by requiring Sydney Zoo's community engagement plan to include adaptive management strategies to address any anticipated or unanticipated social issues that may arise.	Condition C8 (a, c, and e) of the draft development consent conditions adequately contemplates this mitigation strategy by requiring Sydney Zoo to profile the community and include adaptive management strategies to address any anticipated or unanticipated social issues that may arise.  In addition, Sydney Zoo's lease conditions require a family oriented facility that facilitates social interaction.	Condition C8(a, d, and e) of the draft development consent conditions adequately contemplates this mitigation strategy by requiring Sydney Zoo's community engagement plan to include adaptive management strategies to address any anticipated or unanticipated social issues that may arise. In addition, Sydney Zoo's lease conditions also require it to participate in breeding programs for endangered animals.	Condition C8 (a, d, and e) of the draft development consent conditions adequately contemplates this mitigation strategy by requiring Sydney Zoo's community engagement plan to include adaptive management strategies to address any anticipated or unanticipated social issues that may arise. Sydney Zoo's lease conditions also require a facility with educational and interpretive activities.	Condition C8 (a, d, and e) of the draft development consent conditions adequately contemplates this mitigation strategy by requiring Sydney Zoo's community engagement plan to include adaptive management strategies to address any anticipated or unanticipated social issues that may arise. Sydney Zoo's lease conditions also require a facility with educational and interpretive activities.



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