



**DRAFT REPORT**

# Zoological Parks Regulation 2019

## Regulatory Impact Statement

*Prepared for  
Taronga Conservation Society of Australia  
May 2019*

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## *Executive Summary*

### *Background and introduction*

Taronga Conservation Society Australia (Taronga) is a statutory authority constituted under the *Zoological Parks Board Act 1973* (the Act) that operates: Taronga Zoo in Sydney; and Taronga Western Plains Zoo in Dubbo.

The Act provides for various regulation-making powers. The *Zoological Parks Regulation 2014* support the Board's ability to achieve its objectives of community education, biological research and wildlife conservation.

Under the *Subordinate Legislation Act 1992* (SLA), statutory rules are automatically repealed after five years (although the Governor may postpone this automatic repeal for one year, up to a maximum of five times). Under these arrangements, the *Zoological Parks Regulation 2014* will be repealed on 1 September 2019.

These regulations therefore may need to be remade. Under the SLA, a regulatory impact statement (RIS) must be prepared before regulations are made. Hence remaking regulations triggers the requirement for a RIS.

### *The need for government action*

Taronga's activities provide significant benefits to the NSW community, including:

- **User benefits for zoo visitors** — around 990 000 NSW residents visited one of the zoos in 2017-18, with independent reviews suggesting that most were highly satisfied with the experience and relatively few complaints.
- **Conservation benefits** — Taronga is committed to the recovery of native species, the rescue and rehabilitation of injured wildlife and the protection of wildlife in their natural habitats, across Australia and around the world.
- **Heritage benefits** — Taronga zoo has significant heritage value, with some parts of the site (including: the upper and lower entrance gates, the elephant house, aquarium, aviary, floral clock and rustic landscaping elements) listed on the State Heritage Register.
- **Economic benefits** — around 1.1 million interstate and international visitors also visited one of the zoos in 2017-18. To the extent that the zoos were a key factor in encouraging some of these visitors to NSW instead of other destinations or encouraged them to stay longer, the zoos may have generated additional economic activity in NSW through increased demand for other tourism-related services outside of the zoo (such as accommodation and food).

Under the NSW Government's *Guide to Better Regulation*, it is necessary to establish the case for government action (Principle 1). The need for government action is typically justified on the basis of market failures.<sup>1</sup>

The case for government action (i.e. remaking the regulations) is based on:

- The 'negative externalities' associated with some activities on the zoological lands. These activities could potentially:
  - result in harm to animals
  - reduce the enjoyment of other visitors
  - increase maintenance costs
  - result in a loss of heritage value.
- The Board requires the necessary powers to manage the sites to the maximum benefit of the community (including the power to determine visitor fees).

## Objectives

The overarching objectives of additional government intervention are to allow the Board to manage the zoological land in a way that maximises benefits to the community, including by:

- protecting animals — this includes animals in breeding programs and animals on display
- protecting natural features, including lawns, gardens, trees, other vegetation, rocks, soil, and waters
- protecting structures, including fences, roads, paths, drinking fountains, public seating, buildings, cable car, enclosures and preserving structures that have significant heritage value, and
- restricting activities that negatively impact on the enjoyment of other users of the zoological land.

## Options

As outlined in the SLA and the NSW Government's *Guide to Better Regulation*, RISs are required to consider a range of options for achieving the government's objectives.

The options under consideration are as follows.

- **Option 1: No regulation** — the Guide to Better Regulation as discussed above, the existing regulations will be automatically repealed on 1 September 2019. Consequently, without government action, there will be no regulations to support the Board's activities.
- **Option 2: Proposed regulations** — the proposed regulations support the Board's ability to achieve its objectives by:

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<sup>1</sup> NSW Government, *NSW Guide to Better Regulation*, October 2016, p. 11.

- providing the Board with various discretionary powers to manage zoological land, including powers to restrict public access to zoological lands, including by: setting entrance fees; specifying opening times; excluding the public from any part of the zoological park land, and regulating and restricting vehicle access
- prescribing maximum penalties that apply for the various offences
- providing some powers to facilitate enforcement, including: power to direct a person to leave zoological park land; and power to remove a person from zoological park land if they fail to comply with a direction to leave.
- creating offences for visitors, including:
  - ... failing to pay entrance fees, failing to enter through the visitor's entrance, remaining on or entering the site out of hours, failure to pay parking fees, and failing to respect exclusion areas (including for vehicles)
  - ... damaging natural features, structures or animals
  - ... partaking in prohibited activities (e.g. riding skateboard, using a loudspeaker, climbing structures, bathe, wading or swimming, sell or hire or solicit for sale or hire any good or service, take photographs for commercial purposes, distribute advertisements)
  - ... engaging in activities that compromise the safety or enjoyment of other users of zoological land (including the Sky Safari Cable Car), and
  - ... failing to comply with directions.

To a large extent, the proposed regulations are a remake of the existing regulations. Proposed changes are presented in table 3.1.

## 1 Proposed changes to the Regulation

Relevant statutory reference	Nature of the amendment	Reason for the amendment
3(1)	Amend "Aerial Safari cable car" to " <b>Sky Safari cable car</b> " and same amendment where appearing in Regulation	Updated term to aid comprehension.
3(1)	Amend definition of 'Director' to ' <b>the Chief Executive and Executive Director of the Board</b> '.	To give clarity by reflecting actual title of officer.
New 7(b)	<b>Any other part of an animal, plant or living thing that poses a threat to the preservation of any animals, whether natural or introduced, or trees or other vegetation on zoological park land</b>	Required for biosecurity purposes.
New 7(c)	<b>Any unmanned airborne craft, including a drone or other remotely piloted, or otherwise controlled, airborne craft, part of a remotely piloted aircraft and the remote control for a remotely controlled piloted aircraft</b>	Consistent with the balance of 7, Taronga needs to be able to ban any other forms of technology that may represent a danger to wildlife in our care or nuisance to visitors and staff.
New 7(f)	<b>Liquor</b>	As above.
New 11(l)	<b>Enter, open or damage any animal enclosure, holding area or any other structure of any kind containing animals.</b>	To put beyond doubt the ability of Taronga to prevent people from entering enclosures or putting at risk the effectiveness of enclosures.

Relevant statutory reference	Nature of the amendment	Reason for the amendment
New 11(m)	Operate or use any unmanned airborne craft, including a drone or other remotely piloted, or otherwise controlled, airborne aircraft	Consistent with 7(c), Taronga needs to be able to ban any other forms of technology that may represent a danger to wildlife in our care or nuisance to visitors and staff.

Source: Taronga Conservation Society of Australia

## Impacts

The impacts of the proposed regulations are summarised in table 4.1.

### 2 Summary of impacts of proposed regulations

Regulation Type	Relevant regulations	Impact
Restrict access to zoological lands	<ul style="list-style-type: none"> <li>Places, times and conditions of entry (regulation 5)</li> <li>Exclusion of public from areas (regulation 6)</li> <li>Restrict use of Taronga "Pump" Wharf (regulation 12)</li> <li>Regulation of vehicular traffic (regulation 14)</li> <li>Refusal of entry of vehicles (regulation 15)</li> <li>Removal of vehicles (regulation 16)</li> </ul>	<ul style="list-style-type: none"> <li>The benefits include: <ul style="list-style-type: none"> <li>areas can be reserved for carrying out research and breeding programs for the preservation of endangered species or carrying out research programs for the conservation and management of other species</li> <li>areas can be reserved for other revenue raising activities e.g. accommodation products</li> <li>areas can be restricted for building and construction projects</li> <li>animals can have uninterrupted rest or be safely moved between enclosures</li> <li>reduced staffing costs</li> </ul> </li> <li>The costs are the loss of amenity to users of the zoological land from being unable to use the relevant areas for the period of time, or particular areas on the zoological land</li> </ul>
Fees	<ul style="list-style-type: none"> <li>Entrance Fees (regulation 4)</li> <li>Charges payable for bringing vehicles onto, or parking vehicles on, zoological land (regulation 13)</li> <li>Sky safari cable car (regulation 8)</li> </ul>	<ul style="list-style-type: none"> <li>The benefits are: <ul style="list-style-type: none"> <li>Revenue</li> <li>Business development/planning</li> <li>any additional commercial benefits (producer surplus) in excess of the entrance fees.</li> </ul> </li> <li>The cost is any additional administrative burden that arises from setting fees</li> </ul>
Protection of animals	<ul style="list-style-type: none"> <li>Visitors are prohibited from feeding, destroying, capturing, injuring or interfering with any animal (regulation 10)</li> <li>Items prohibited from being brought onto zoological land (regulation 7)</li> <li>Prohibited activities on zoological park land (regulation 11)</li> </ul>	<ul style="list-style-type: none"> <li>The benefits include: <ul style="list-style-type: none"> <li>avoids injury or distress to animals</li> <li>prevents irreversible harm to animals, including endangered species</li> </ul> </li> <li>The cost is the loss of amenity for people that would choose to engage in the relevant activities or bring relevant items to the zoological land</li> </ul>



Regulation Type	Relevant regulations	Impact
Protection of natural features and structures	<ul style="list-style-type: none"> <li>Protection of zoological park land (regulation 9)</li> <li>Prohibited activities on zoological park land (regulation 11)</li> <li>Sky safari cable car (regulation 8), a person must not interfere with operation of the cable car</li> </ul>	<ul style="list-style-type: none"> <li>The benefits include:               <ul style="list-style-type: none"> <li>Reduced maintenance costs</li> <li>Potentially prevents irreparable damage to structures of significant heritage</li> </ul> </li> <li>The cost is the loss of amenity for people that would choose to engage in the relevant activities</li> </ul>
Protection of enjoyment and safety of users of zoological lands	<ul style="list-style-type: none"> <li>Prohibited activities on zoological park land (regulation 11)</li> <li>Sky safari cable car (regulation 8), a person must not interfere with the enjoyment or comfort of other persons waiting to travel on the cable car</li> </ul>	<ul style="list-style-type: none"> <li>The benefits could include:               <ul style="list-style-type: none"> <li>visitor safety</li> <li>higher visitor numbers through reputational effects</li> <li>more enjoyable visit for visitors</li> </ul> </li> <li>The cost is the loss of amenity for people that would choose to engage in the relevant activities.</li> </ul>
Ability to respond to incidents	<ul style="list-style-type: none"> <li>Obstruction and failure to comply with directions (regulation 18)</li> <li>Exercise of Board's functions (regulation 19)</li> </ul>	<ul style="list-style-type: none"> <li>The benefits include:               <ul style="list-style-type: none"> <li>any danger to animals, natural features, structures or other users can be quickly neutralised by zoo personnel</li> <li>reduces the response time to an incident as incident may be dealt with 'in-house' rather than having to wait for police or council rangers etc</li> </ul> </li> <li>Costs could potentially arise if external parties (i.e. police or local council) could more effectively respond to the incident</li> </ul>
Ability to deem certain acts not to be offences	<ul style="list-style-type: none"> <li>Certain acts not to be offences if the act was done by a member of staff in the course of his or her employment or under the direction or with the consent of the Board (regulation 20)</li> </ul>	<ul style="list-style-type: none"> <li>The benefits include:               <ul style="list-style-type: none"> <li>allowing some activities to be permitted under exceptional circumstance, on a case by case basis</li> </ul> </li> <li>The cost is the administrative cost of providing consent for certain activities</li> </ul>

Source: CIE.

## Conclusions

Although the costs and benefits of the proposed regulations have not been quantified, it is nevertheless likely that the benefits of the proposed regulations significantly outweigh the costs. The proposed regulations are therefore the preferred option.

# 1 *Background and introduction*

## ***Management of zoological parks***

Taronga Conservation Society Australia (Taronga) is a statutory authority constituted under the *Zoological Parks Board Act 1973* (the Act). Taronga falls within the administration of the NSW Minister for Energy and Environment to whom the Board and Director and Chief Executive report directly.

Taronga operates two sites:

- Taronga Zoo in Sydney — officially opened at its present site in October 1916, displaying animals brought from the old Moore Park Zoo which had been founded by the Royal Zoological Society of New South Wales in 1881. Between 1916 and 1973, the Zoo was administered by the Taronga Zoological Park Trust consisting of 12 members acting in an honorary capacity. This Trust was replaced in 1973 by the Zoological Parks Board of New South Wales appointed under a new Act of Parliament (the *Zoological Parks Board Act 1973*).
- Taronga Western Plains Zoo in Dubbo — opened in February 1977 to fulfil the need for an open-range facility to display predominantly grazing animals. Taronga Western Plains Zoo also provides additional space for the breeding of endangered species and is managed as a division of Taronga.

The two zoos complement each other in achieving Taronga's vision to secure a shared future for wildlife and people, and specific responsibilities in education, conservation, research and recreation.

In 1992 the *Zoological Parks Board (Conservation and Environmental Objectives) Amendment Act 1992* was introduced. The Act redefined the powers and authorities of Taronga through changes to the definition of a zoological park (Section 4) and the powers and authorities of the Taronga Board (Section 15). These changes formally broadened Taronga's role and established defined responsibilities in conservation, research, education and recreation which as stated below, are to:

- 1 carry out research and breeding programs for the preservation of endangered species
- 2 carry out research programs for the conservation and management of other species
- 3 conduct public education and awareness programs about species conservation and management, and
- 4 display animals for educational, cultural and recreational purposes.

The *Zoological Parks Board Act 1973* was also amended in 2008 to formally recognise the organisation as the Taronga Conservation Society Australia (Section 5) and better represent its vision and goals.

## ***Zoological Parks Regulation 2014***

The Act provides for various regulation-making powers. The *Zoological Parks Regulation 2014* support the Board's ability to achieve its objectives of community education, biological research and wildlife conservation. The regulations:

- give the Board power to regulate public access to the zoological lands and determine entrance fees. This supports the Board's financial planning and business development activities
- restrict activities and items to protect animals, natural features, and structures (including those with heritage value) on the zoological sites
- restrict activities and items that may compromise the safety or enjoyment of other users
- give the Board the legal authority to respond to incidents as they arise, including applying penalties
- give the Board power to deem certain acts not to be offences.

Table 1.1 provides further details on the current regulations, including the discretionary powers given to the Board.

### **1.1 Summary of current regulations**

Regulation	Description
Exercise of Board's functions	<ul style="list-style-type: none"> <li>■ A function that is conferred on the Board by the Regulation may be exercised by the Director or by any other member of staff authorised by the Board or the Director to exercise that function</li> </ul>
Powers of the Board	<ul style="list-style-type: none"> <li>■ In relation to public access to the zoological sites, the regulations give the Board power to:               <ul style="list-style-type: none"> <li>– determine entrance fees</li> <li>– identify visitor entrances</li> <li>– specify times during which visitors may remain on the land</li> <li>– exclude the public from any part of the zoological parkland</li> <li>– determine charges payable for bringing vehicles onto, or parking vehicles on, zoological park land</li> <li>– regulate the entry of vehicles onto, and vehicular traffic on zoological parkland by means of notices or barriers, or directions given by its members of staff</li> <li>– refuse to admit a vehicle onto zoological parkland</li> <li>– direct a person to remove from zoological park land any vehicle that is unlawfully on the land and under that person's control</li> </ul> </li> <li>■ In relation to enforcement, the regulations give the Board power to:               <ul style="list-style-type: none"> <li>– direct a person to leave zoological parkland if the persons is contravening any provision of the regulation, or is under the influence of liquor or drugs, or is behaving in an indecent or offensive manner</li> <li>– remove from zoological park land any person who fails to comply with a direction to leave</li> </ul> </li> </ul>
Prohibited Acts	<ul style="list-style-type: none"> <li>■ In relation to public access to the zoological sites, under the regulations visitors must not:               <ul style="list-style-type: none"> <li>– enter zoological parkland without having paid the relevant entrance fee</li> <li>– enter the zoological park land otherwise than by means of a visitor's entrance</li> <li>– enter or remain in zoological park land at any time while that land is closed to the public</li> </ul> </li> </ul>

Regulation	Description
	<ul style="list-style-type: none"> <li>– enter any part of zoological park land in wilful contravention of any such notice or in wilful disregard of any such barrier</li> <li>– ride on the Aerial Safari cable car without paying the relevant charge</li> <li>– moor a vessel to, or fish from any part of the Taronga “Pump” Wharf</li> <li>– bring any vehicle onto, or park any vehicle on, zoological park land without having paid the relevant charge</li> <li>– drive a vehicle onto, or drive or park a vehicle on zoological parkland in wilful contravention of any notice or direction or in wilful disregard of any such barriers or otherwise than on a road set aside for that purpose</li> <li>– cause a vehicle to enter onto zoological parkland if admission is refused by the Board or fail to comply with a direction for removal of vehicle</li> </ul>
	<ul style="list-style-type: none"> <li>■ In relation to the protection of zoological parkland and animals, under the regulations visitors must not: <ul style="list-style-type: none"> <li>– damage or remove any plant or part of a plant</li> <li>– remove or disturb any rock, soil, sand, stone or similar substance</li> <li>– leave or deposit any rubbish or litter, except in a bin provided and designated for that purpose</li> <li>– damage, remove or interfere with any building, structure, notice, sign or other improvement</li> <li>– throw or project any stone or other object</li> <li>– feed any animal</li> <li>– destroy, capture, injure or interfere with any animal</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>■ In relation to visitor behaviour whilst on zoological sites, under the regulations visitors must not: <ul style="list-style-type: none"> <li>– bring onto zoological park land any animal, skateboard, roller skates, inline skates or similar apparatus or any balloons</li> <li>– ride on or use any skateboard, roller skates, inline skates or similar apparatus</li> <li>– interfere with the operation of the Aerial Safari cable car or interfere with the enjoyment or comfort of others waiting for or travelling in the cable car</li> <li>– operate any radio or other electronic device, or play any musical instrument at a volume likely to cause inconvenience to any other person or any animal</li> <li>– operate or use a loudspeaker or public address system</li> <li>– climb on any building, fence, seat, table, enclosure or other structure, bathe, wade or swim in any lake, pond, stream or ornamental water, light any fire</li> <li>– conduct, cause or assist in the conduct of an amusement, entertainment, instruction or performance, whether or not for money or other consideration</li> <li>– sell, hire, expose for sale or hire or solicit for sale or hire any goods, service, article or thing</li> <li>– take photographs or films, or operate a video recorder for commercial purposes</li> <li>– display or distribute and advertisement, sign, bill, poster or other printed matter</li> <li>– obstruct any person (whether or not a member of staff) in the performance of that person’s work or duties on the zoological park land</li> <li>– fail to comply with a direction by a member of staff to evacuate any building on, or part of, zoological park land in response to a fire alarm or any other emergency situation</li> <li>– fail to comply with any other reasonable direction given by a member of staff with respect to zoological park land</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>■ Failure to follow these rules can result in penalties</li> </ul>

Regulation	Description
Certain acts not to be offences	<ul style="list-style-type: none"> <li>■ A person does not commit an offence under the regulation if the act giving rise to the offence was done by a member of staff in the course of his or her employment as such, or under the direction or with the consent of the Board.</li> <li>■ The consent of the Board as referred to in this clause may be given generally or in a particular case</li> </ul>

Source: Taronga Conservation Society of Australia, CIE.

### *Automatic repeal arrangements*

Under the *Subordinate Legislation Act 1992* (SLA), statutory rules are automatically repealed after five years (although the Governor may postpone this automatic repeal for one year, up to a maximum of five times). Under these arrangements, the *Zoological Parks Regulation 2014* will be repealed on 1 September 2019.

These regulations therefore may need to be remade. Under the SLA, a regulatory impact statement (RIS) must be prepared before regulations are made. Hence remaking regulations triggers the requirement for a RIS.

The matters that must currently be included in a RIS are outlined in box 1.2.

#### **1.2 RIS requirements under the SLA**

A regulatory impact statement must include the following matters:

- A statement of the objectives sought to be achieved and the reasons for them.
- An identification of the alternative options by which those objectives can be achieved (whether wholly or substantially).
- An assessment of the costs and benefits of the proposed statutory rule (this includes economic and social benefits and costs). Wherever possible, costs and benefits should be quantified. If quantification is not possible, the anticipated impacts of the proposed action and of each alternative should be stated and presented in a way that permits a comparison of the costs and benefits.
- An assessment of the costs and benefits of each alternative option to the making of the statutory rule (including the option of not proceeding with any action), including the costs and benefits relating to resource allocation, administration and compliance.
- An assessment as to which of the alternative options involves the greatest net benefit or the least net cost to the community.
- A statement of the consultation program to be undertaken.

These arrangements are a mechanism to ensure that the regulations are reviewed regularly and remain consistent with best practice regulatory principles (see box 1.3) and

based on the best available evidence.<sup>2</sup> This is designed to result in better policy outcomes for the community.

### 1.3 Better Regulation Principles<sup>3</sup>

**Principle 1:** The need for government action should be established. Government action should only occur where it is in the public interest, that is, where the benefits outweigh the costs.

**Principle 2:** The objective of government action should be clear.

**Principle 3:** The impact of government action should be properly understood by considering the costs and benefits (using all available data) of a range of options, including non-regulatory options.

**Principle 4:** Government action should be effective and proportional.

**Principle 5:** Consultation with business and the community should inform regulatory development.

**Principle 6:** The simplification, repeal, reform or consolidation of existing regulation should be considered.

**Principle 7:** Regulation should be periodically reviewed, and if necessary reformed to ensure its continued efficiency and effectiveness.

## *This report*

This report is a RIS for the proposed *Zoological Parks Regulation 2019*, which are to a large extent, a remake of the existing regulations, with some relatively minor amendments to update and modernise them. The RIS has been prepared to meet the requirements of the SLA and the NSW Government's *Guide to Better Regulation*.

The remainder of this report is set out as follows.

- Chapter 2 sets out the need for government action
- Chapter 3 specifies the objectives and the options to achieve these objectives that are under consideration
- Chapter 4 describes the impacts (including the costs and benefits) of the proposed regulations
- Chapter 5 concludes.

<sup>2</sup> We note that these arrangements form part of the NSW Government's regulatory policy framework, which has recently been reviewed by an Independent Panel who made 26 recommendations with far reaching consequences for regulatory policy in NSW. However, these recommendations are yet to be implemented, hence, the existing requirements still remain in place.

<sup>3</sup> NSW Government, *NSW Guide to Better Regulation*, October 2016, p. 6.

## 2 *The need for government action*

### *The benefits to the community from zoological sites*

The Taronga sites provide significant benefits to the NSW community. These benefits are discussed below.

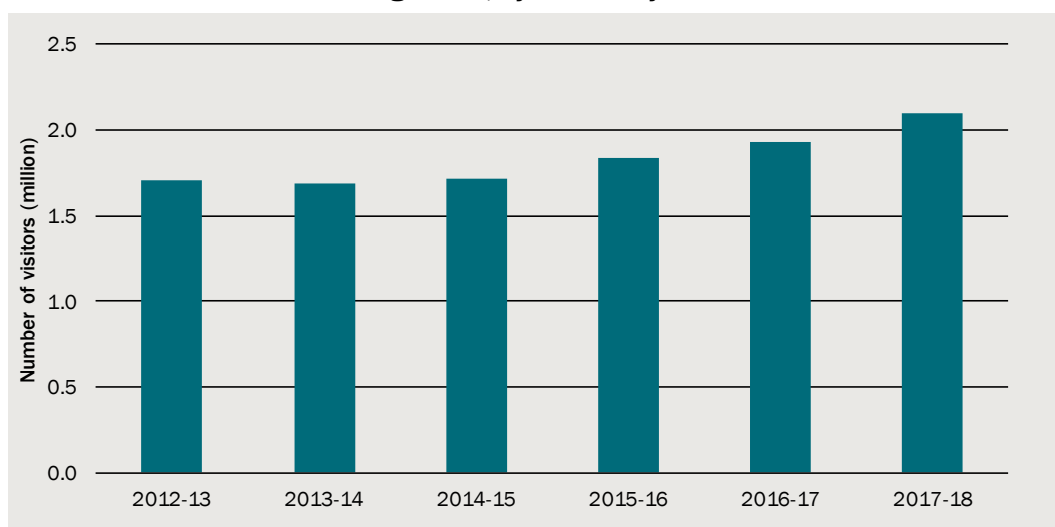
#### *User benefits*

The largest category of benefits to the NSW community provided by the Taronga sites are likely to be the ‘user benefits’. User benefits reflect the value derived from individuals directly interacting with zoological sites. This includes the positive impacts of recreation, enjoyment and education.

These are distinguished from ‘non-user benefits’, which are those that are indirectly realised for individuals regardless of whether they are users of the zoological sites.

The number of visitors to Taronga Zoo and Taronga Western Plains Zoo has been increasing over time (chart 2.1).

#### **2.1 Number of visits to Taronga sites, by financial year**



Data source: Taronga Conservation Society Australia, Annual Report, 2017-18, p 20.

In 2017-18, there were a total of 2.095 million visitors to the two zoological sites (table 2.2). The majority of visitors (87 per cent, or 1.831 million), visited Taronga Zoo while 13 per cent (or 0.264 million) visited Taronga Western Plains Zoo. Most visitors were fee paying guests (1.657 million, or 79 per cent).

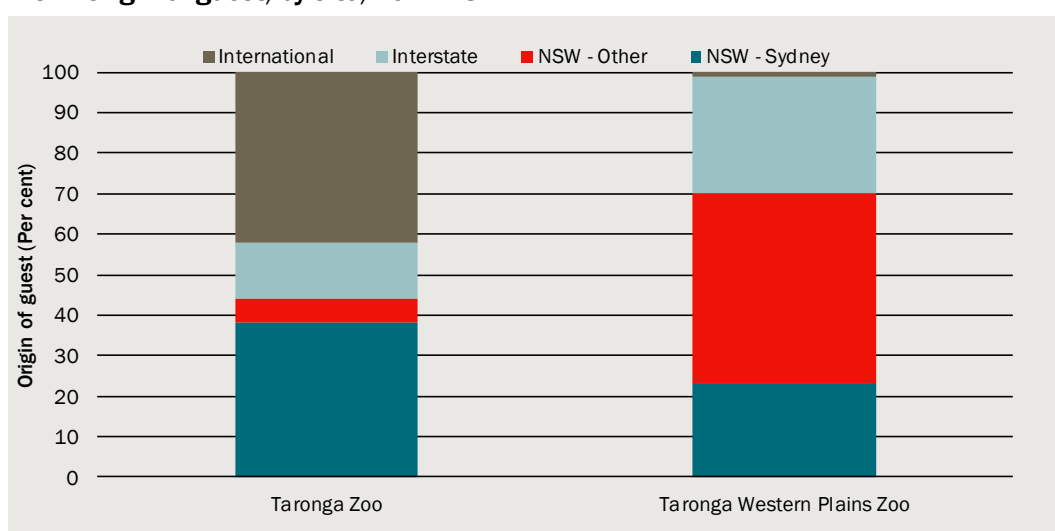
## 2.2 Number of visitors to Taronga sites in 2017-18

Site	Paid admissions	Free of charge	All admissions
	No. (millions)	No. (millions)	No. (millions)
Taronga Zoo	1.425	0.406	1.831
Taronga Western Plains Zoo	0.232	0.032	0.264
<b>Total</b>	<b>1.657</b>	<b>0.438</b>	<b>2.095</b>

Source: Taronga Conservation Society Australia, Annual Report, 2017-18, p 20.

The origin of visitors varies considerably across the two sites. In 2017-18, the majority of visitors to Taronga Zoo were from overseas or Sydney, while most of the visitors to Taronga Western Plains Zoo were from non-Sydney areas of NSW or interstate (chart 2.3).

## 2.3 Origin of guest, by site, 2017-18



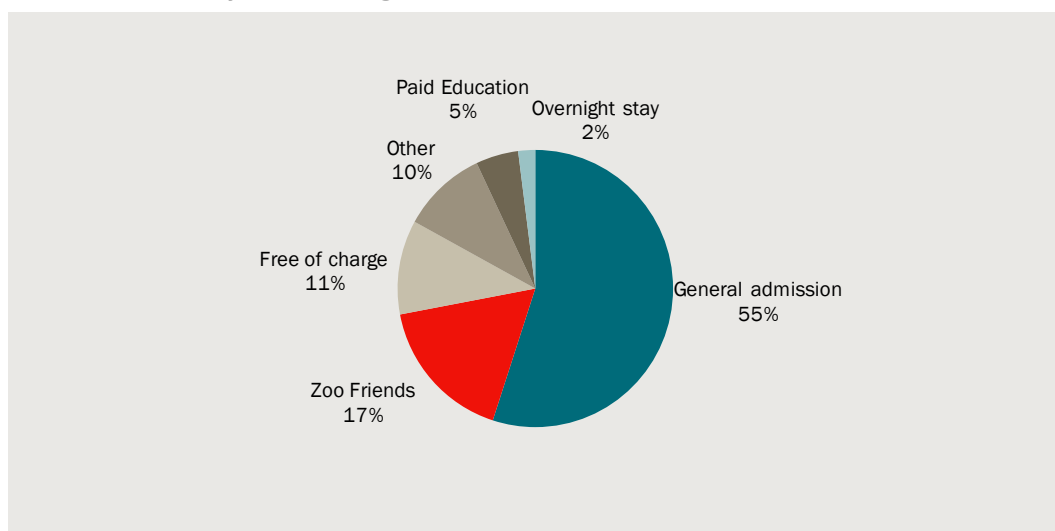
Data source: Taronga Conservation Society Australia, Annual Report, 2017-18, p 20.

In standard economic analysis, the benefits to consumers (or users) of goods and services (in this case the services provided by zoological sites) is measured in terms of 'consumer surplus'. Consumer surplus measures the value each consumer places on consuming a good or service (reflected in their 'willingness to pay' for it) less the price actually paid for it (in the context of users of the zoological sites this would be the admission fee).

In 2017-18, General admission, was the most common ticket type, followed by Taronga's annual pass program 'Zoo Friends' and free of charge admissions (chart 2.4).



## 2.4 Admission type to Taronga sites in 2017-18



Data source: Taronga Conservation Society Australia, Annual Report, 2017-18, p 20.

Aegis Consulting (2010), reported that the value consumers place on zoos and the benefits they provide (including education and conservation) are typically greater than what consumers pay for admissions.<sup>4</sup> This means that consumer surpluses occur (however, these were not quantified). The study also reported that consumers find learning about the animals more satisfying and enjoyable than the novelty experience or entertainment value of simply seeing them. Moreover, the value that consumers place on zoos is represented by:

- the number of people who belong to Zoo Friends Associations and the median price they are willing to pay for membership
- the number of people who volunteer at zoos
- the number of zoo corporate sponsorships, and
- the number of non-corporate donations to zoos.

It is important to note that the latter two of these, could possibly represent non-user benefits.

These indicators, as they apply to the Taronga sites are presented in table 2.5. In 2017-18 there were more than 134 000 Zoo Friends members, 608 volunteers, 61 corporate sponsors and \$9 million worth of donations.

## 2.5 Indicators of the value consumers place on the Taronga sites

Indicator	Value
Number of Zoo Friends members	>134 000
Zoo Friends membership pricing	Adult: \$99/year (online price) or \$110/year (at gate) <sup>a</sup> Family: \$198/year (online price) or \$220/year (at gate) Concession: \$79/year (online price) or \$88 (at gate) <sup>a</sup>

<sup>4</sup> Beri, V., Tranent, A. & Abelson, P. 2010, 'The economic and social contribution of the zoological industry in Australia', *Int Zoo Yb*, vol. 44, pp 192-200.

Indicator	Value
	Child: \$49/year (online price) or \$55 (at gate) <sup>b</sup>
Number of volunteers	608
Number of corporate sponsorships	61
Value of donations (corporate and non-corporate)	\$9 million

<sup>a</sup> includes free membership for two children <sup>b</sup> unless included in an adult or family pass

Note: Taronga Zoo has a once off \$20 joining fee

Source: Taronga Conservation Society Australia, Annual Report, 2017-18, p 20; <https://taronga.org.au/sydney-zoo/zoo-friends#pricing>; <https://www.taronga.org.au/dubbo-zoo/zoo-friends>

Reviews published on travel site TripAdvisor® indicate that most visitors are highly satisfied with their zoo experience. Both zoos have a rating of 4.5 stars out of 5 stars. For Taronga Zoo, 85 per cent of 6 339 reviews had a rating of 'Excellent' or 'Very Good', this was even higher for Taronga Western Plains Zoo, at 92 per cent of 3 307 reviews (chart 2.6). It is important to note that these reviews are by NSW residents, interstate visitors and international visitors alike.

In 2017-18, Taronga Zoo received 404 complaints, mostly concerning visibility of animals and construction. Taronga Western Plains Zoo received 96 complaints, most of which were related to the availability of encounters during peak periods.<sup>5</sup>

## 2.6 Visitor TripAdvisor® ratings of the Taronga sites



Note: There were 6 339 reviews of Taronga Zoo and 3 037 reviews of Taronga Western Plains Zoo

Data source: TripAdvisor®, accessed 2<sup>nd</sup> April 2019.

### Other benefits

In addition to the user benefits outlined above, the Zoological sites also deliver a range of other benefits to the community including:

- conservation
- heritage value, and

<sup>5</sup> Taronga Conservation Society Australia, Annual Report, 2017-18, p 41.

- economic benefits through increased tourism spending.

### *Conservation benefits*

Taronga Zoo is committed to the recovery of native species, the rescue and rehabilitation of injured wildlife and the protection of wildlife in their natural habitats, across Australia and around the world.

There are numerous studies estimating willingness to pay for conservation activities that indicate that this is a valued activity of the zoo. For example, one study found that Australians are willing to pay ~\$12 per year into a conservation fund for threatened bird species, while another study found that willingness to pay to conserve the northern-hairy nosed wombat and koala was between ~\$2.40 and \$1.85 per week, respectively.<sup>6</sup>

### *Heritage value*

Taronga Zoo (Sydney site) has significant heritage value. In particular, the Upper and Lower Entrance Gates, Elephant House, Aquarium, Aviary, Floral Clock and rustic landscaping elements are listed on the State Heritage Register. According to the State Heritage Register, Taronga Zoo:

- is a major social facility and entertainment and recreational venue for Sydney, with international prominence
- is recognised as the leading Australian zoo facility, contains some remarkable and unusual structures, many of them deliberately exotic or grand in their presentation
- demonstrates present and past zoological practices, both for the exhibits and the manner in which they are displayed
- remains a prominent landscape feature in Sydney Harbour, and
- is aesthetically, historically, scientifically and socially rare state-wide.<sup>7</sup>

To some extent, these heritage values would be reflected in the ‘user benefits’ outlined above. The value that many visitors place on Taronga Zoo would reflect the heritage value.

However, in addition to the user benefits, there are various non-use benefits (i.e. benefits to those that do not interact directly with Taronga Zoo), including:

- option values — the value to community members of having the option to visit the sites in the future

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<sup>6</sup> Zander, K., Roberts, D., Ainsworth, G., Meyerhoff, J., Garnett, S., & Roberts, D. 2014, ‘Threatened Bird Valuation in Australia’, *PLoS ONE*, vol. 9, no. 6; Tisdell, C. & Nantha, H. S. 2007, ‘Comparison of funding and demand for the conservation of the charismatic koala with those for the critically endangered wombat *Lasiornis krefftii*’, *Biodiversity and Conservation*, vol. 16, pp 1261-1281; values inflated to December 2018.

<sup>7</sup> NSW Office of Environment and Heritage website, <https://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2060062>, accessed 2 April 2019.

- bequest value — the value associated with the knowledge the sites will be preserved for future generations, and
- existence value — the benefits gained from knowing the sites are conserved.<sup>8</sup>

A survey by the Allen Consulting Group (ACG) shows that more than 90 per cent of respondents strongly agreed or agreed with statements relating to non-use values for heritage assets (chart 2.7).

## 2.7 Community views and perceptions of heritage-related values

Value type	Statement	'Strongly agree' and 'agree'	'Strongly disagree' and 'disagree'	Neither agree or disagree
		Per cent	Per cent	Per cent
Direct use value	Looking after heritage is important to creating jobs and boosting the economy	56.1	11.0	32.9
Indirect use value	My life is richer for having the opportunity to visit or see heritage	78.7	4.6	16.8
Option value	It is important to protect heritage places even though I may never visit them	93.4	1.5	5.0
Existence value	Heritage is part of Australia's identity	92.3	5.3	2.3
	The historic houses in my area are an important part of the area's character and identity	80.2	5.2	14.5
Other non-use value	It is important to educate children about heritage	96.9	0.3	2.8

Data source: The Allen Consulting Group, *Valuing the Priceless: The Value of Historic Heritage in Australia*, Prepared for the Heritage Chairs and Officials of Australia and New Zealand, November 2005, p. viii.

Choice modelling by ACG suggested that on average, the community was willing to pay \$1.35 per person per year (in 2005 dollars) for a 1 per cent increase in the proportion of heritage sites in good condition.<sup>9</sup> Inflating to December 2018 dollars using the national CPI, this is around \$1.86 per person per year.

Based on a NSW population of around 8.02 million,<sup>10</sup> this implies a willingness to pay of around \$14.9 million for a 1 per cent increase in the proportion of heritage sites in good condition.

ACG reported that in 2005 around 20 per cent of heritage sites were in good condition. Taronga Zoo is one of 1 650 sites listed on the State Heritage Register. If the number of heritage sites in good condition has remained constant since 2005, this implies around 330 sites in good condition.

<sup>8</sup> Adapted from Productivity Commission 2006, *Conservation of Historic Heritage Places*, p 14.

<sup>9</sup> The Allen Consulting Group, *Valuing the Priceless: The Value of Historic Heritage in Australia*, Prepared for the Heritage Chairs and Officials of Australia and New Zealand, November 2005, p. 36.

<sup>10</sup> Australian Bureau of Statistics. 3101.0 Australian Demographic Statistics September 2018, available at: <https://www.abs.gov.au/AUSSTATS/abs@.nsf/mf/3101.0>, accessed 2 April May 2019.

This information implies that the NSW community is willing to pay around \$4.5 million per year for Taronga Zoo to be kept in good condition (as the site is 1 of 330 sites the increase in heritage sites in good condition is around 0.3 per cent).

### *Economic benefits*

Under the NSW Government's Guidelines, a CBA should focus on impacts to the NSW community.<sup>11</sup> Hence, this does not include interstate or international visitors.

Visiting the zoos may be a key factor that encourages some tourists to visit NSW, rather than an alternative destination or alternative forms of consumption. This may also encourage other tourists to spend longer in NSW than they otherwise would have.

If Taronga sites encourage additional visitors to NSW or encourage some visitors to stay longer in NSW, there will be some additional benefits to the NSW economy from increased demand for other tourism-related services, such as accommodation, restaurants and other related services.

In 2005, Applied Economics and Aegis Consulting Australia estimated the contribution of Taronga and Western Plains Zoos to the economy of NSW at \$102 million (2005 values), comprising expenditure by the zoos, expenditure on access to the zoos and expenditure by international and interstate visitors.<sup>12</sup> Inflating to December 2018 dollars using the national CPI, this is around \$142 million.

### *The case for government action*

Under the NSW Government's Guide to Better Regulation, it is necessary to establish the case for government action (Principle 1). The need for government action is typically justified on the basis of market failures.<sup>13</sup>

The case for government action (i.e. remaking the regulations) is based on:

- 1 the 'negative externalities' associated with some activities on the zoological lands, and
- 2 the regulation providing the Board with the necessary powers to manage the sites to the maximum benefit of the community.

### *Negative externalities*

Negative externalities arise where some activities impose a cost on others. This includes:

- damage of animals — this includes destroying, capturing, injuring, feeding or interfering with any animal

<sup>11</sup> NSW Treasury, *NSW Government Guide to Cost-Benefit Analysis*, Policy and Guidelines Paper TPP 17-03, March 2017, p. iii.

<sup>12</sup> Applied Economics & Aegis Consulting. 2005, 'Contribution of Taronga and Western Plains Zoos to the Economy of New South Wales', prepared for the *Zoological Parks Board of NSW*.

<sup>13</sup> NSW Government, *NSW Guide to Better Regulation*, October 2016, p. 11.

- damage of natural features — this includes lawns, gardens, trees other vegetation, rocks, soil, and waters
- damage of structures — including fences, roads, paths, drinking fountains, public seating, buildings, enclosures and heritage structures, and
- activities that reduce the enjoyment or safety of other users of the zoological lands.

The extent to which people engage in these activities in the absence of the regulations cannot be observed and is therefore not known. Nevertheless, there is evidence to suggest that the costs could be significant, suggesting a strong case for government intervention to manage these risks.

- **Potential for loss or harm to animals** — the zoological sites are home to over 4 000 animals from over 350 species.<sup>14</sup> Certain activities such as climbing on enclosures, the presence of balloons, loud noises, feeding animals and capturing animals (amongst other things) may startle, disturb, distress or injure animals on zoological lands.
- **Potential for loss of enjoyment and reduced safety for users** — as discussed above, the zoological sites attract thousands of visitors each year. If some members of the community engage in activities that disturb the visitor experience, this may reduce user enjoyment and harm the reputation of the sites. Examples of such activities include riding of skateboards on footpaths, leaving rubbish, damaging building and structures or holding a public demonstration.
- **Potential for increased maintenance costs** — the cost of maintaining zoological lands to a high standard is significant. In 2017-18, maintenance costs comprised 6 per cent of recurrent resource expenses.<sup>15</sup> If some members of the community engage in activities that damage natural features or structures, these costs will be higher (although it is not clear to what extent).
- **Potential for loss of heritage value** — as discussed above, Taronga Zoo is a heritage-listed site. Activities that damage sites with significant heritage value could potentially reduce some of these heritage benefits.

### *Maximising benefits to the NSW community*

The regulations also provide the Board with the power to manage the sites to the maximum benefit of the NSW community. This includes the power to determine visitor fees. Admission fees are a significant income stream for the zoological sites. In 2017-18, admission income comprised a third (or 34 per cent) of income for Taronga programs (chart 2.8). The Board have indicated that when considering Taronga's pricing, numerous factors are used to guide decision making, including:

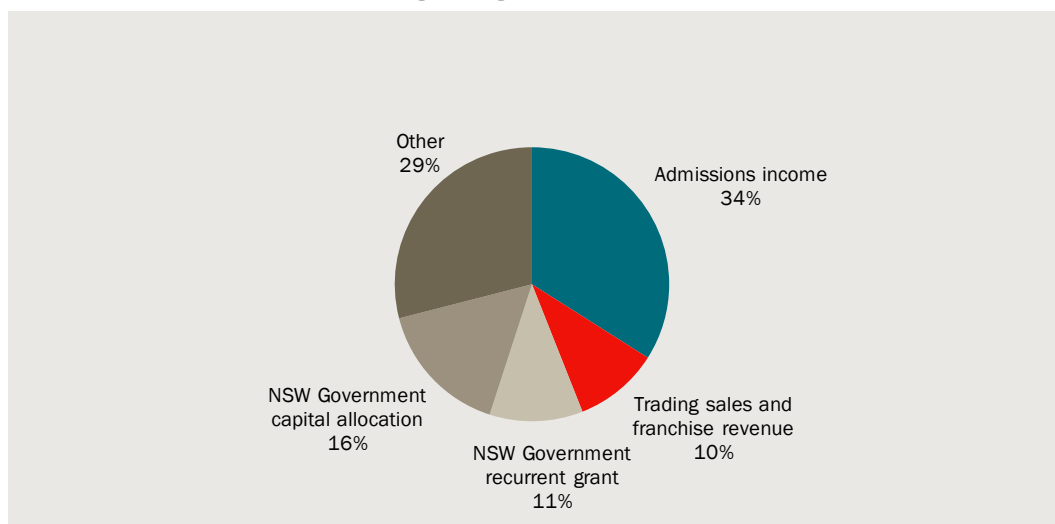
- the underlying cost recovery financial model
- the current economic climate
- historical admission patterns
- visitor research, and

<sup>14</sup> Taronga, 'Our animals', available at: <https://taronga.org.au/dubbo-zoo/animals>

<sup>15</sup> Taronga Conservation Society Australia, Annual Report, 2017-18, p 23

- competitor analysis.

## 2.8 Source of income for Taronga Programs



Note: Other includes sponsorship and foundation

Data source: Taronga Conservation Society Australia, Annual Report, 2017-18, p 23.

If the Board was not able to determine fees, either:

- fees would be set externally (such as by the Minister) — this would be a cumbersome process and may lead to uncertainty around expected revenue from fees (which is an important component of Taronga’s cost recovery financial model); or
- fees would remain constant over time — this would mean that the admissions income would decline in real terms (i.e. adjusted for inflation) over time. This could either:
  - lead to increased reliance on government support to pay for program costs. Currently, direct government support per visitor is \$17.18 for Taronga Zoo and \$34.73 for Taronga Western Plains Zoo;<sup>16</sup>
  - require the Board to reduce its activities, compromising its ability to achieve its objectives and reducing the benefits of these activities to the NSW community; or
  - lead to the loss of ability to adjust fees in a timely manner, for instance, to set short term discounting if faced with an unexpected reduction in visitors or to encourage visitors during slower periods (for example, outside of school holiday periods in the winter months).

<sup>16</sup> Taronga Conservation Society Australia, Annual Report, 2017-18, p 55.

### 3 *Objectives and options*

#### *Objectives*

Under the *Zoological Parks Board Act 1973 No 34* (section 15), the Board may establish, maintain and control parks for the following purposes:

- 1 carrying out research and breeding programs for the preservation of endangered species
- 2 carrying out research programs for the conservation and management of other species
- 3 conducting public education and awareness programs about species conservation and management, and
- 4 displaying animals for educational, cultural and recreational purposes.

In this regard, the overarching objectives of additional government intervention are to allow the Board to manage the zoological land in a way that maximises benefits to the community, including by:

- protecting animals — this includes animals in breeding programs and animals on display
- protecting natural features, including lawns, gardens, trees, other vegetation, rocks, soil, and waters
- protecting structures, including fences, roads, paths, drinking fountains, public seating, buildings, cable car, enclosures and preserving structures that have significant heritage value, and
- restricting activities that negatively impact on the enjoyment of other users of the zoological land.

#### *Options*

As outlined in the SLA and the NSW Government's *Guide to Better Regulation*, RISs are required to consider a range of options for achieving the government's objectives.

According to the *Guide to Better Regulation*, a RIS should consider the option of taking no action or maintaining the status quo.<sup>17</sup> In the context of remaking regulations that will be automatically repealed under the provisions of the SLA, 'no action' and 'maintaining the status quo' are not the same thing.

- If the NSW Government took 'no action', the current regulations would be automatically repealed. This would mean that there would be no regulations to support the Board's objectives.

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<sup>17</sup> NSW Government, *NSW Guide to Better Regulation*, October 2016, p. 12.



- On the other hand, ‘maintaining the status quo’ would involve remaking the regulations.

Both these options therefore need to be considered. Other options suggested in the *Guide to Better Regulation* include:

- non-regulatory approaches like provision of information, self-regulation, quasi-regulation or co-regulation, and
- creating markets or developing market-based instruments, such as through imposing government charges or creating financial liability for the detrimental effects of an activity or performance based versus prescriptive regulatory approaches.

The requirement to consider policy options that are generally considered to be more ‘light-handed’ is to ensure that regulation achieves its objectives without being unnecessarily restrictive. As outlined above, the main problems that potentially warrant government action relate to activities and behaviours that potentially harm animals, reduce user enjoyment, increase maintenance costs and adversely impact heritage value. In general, these activities are not amenable to non-regulatory approaches or market-based incentives.

Based on this discussion, the two options being considered are outlined below.

### ***Option 1: No regulation***

As discussed above, the existing regulations will be automatically repealed on 1 September 2019. Consequently, without government action, there will be no regulations to support the Board’s activities.

Under this option, some of the activities covered by the regulations are likely to be covered by other laws (particularly those activities in relation to endangering animals and damaging features or structures on Taronga sites). However, Taronga would lack powers to enforce these laws and would therefore need to rely on the police or local council for enforcement. A delay in response due to this reliance could result in irreparable damage.

### ***Option 2: Proposed regulations***

The second option considered is the proposed regulations. In general, the proposed regulations support the Board’s ability to achieve its objectives as follows.

- The proposed regulations provide the Board with various discretionary powers to manage zoological land, including powers to restrict public access to zoological lands, including by:
  - setting entrance fees
  - specifying opening times
  - excluding the public from any part of the zoological park land, and
  - regulating and restricting vehicle access
- The proposed regulations prescribe maximum penalties that apply for the various offences

- The proposed regulations provide some powers to facilitate enforcement, including:
  - power to direct a person to leave zoological park land
  - power to remove a person from zoological park land if they fail to comply with a direction to leave.
- The proposed regulations create offences for visitors, including:
  - failing to pay entrance fees, failing to enter through the visitor's entrance, remaining on or entering the site out of hours, failure to pay parking fees, and failing to respect exclusion areas (including for vehicles)
  - damaging natural features, structures or animals
  - partaking in prohibited activities (e.g. riding skateboard, using a loudspeaker, climbing structures, bathe, wading or swimming, sell or hire or solicit for sale or hire any good or service, take photographs for commercial purposes, distribute advertisements)
  - engaging in activities that compromise the safety or enjoyment of other users of zoological land (including the Sky Safari Cable Car), and
  - failing to comply with directions.

To a large extent, the proposed regulations are a remake of the existing regulations. Proposed changes are presented in table 3.1.

### 3.1 Proposed changes to the Regulation

Relevant statutory reference	Nature of the amendment	Reason for the amendment
3(1)	Amend "Aerial Safari cable car" to " <b>Sky Safari cable car</b> " and same amendment where appearing in Regulation	Updated term to aid comprehension.
3(1)	Amend definition of 'Director' to ' <b>the Chief Executive and Executive Director of the Board</b> '.	To give clarity by reflecting actual title of officer.
New 7(b)	<b>Any other part of an animal, plant or living thing that poses a threat to the preservation of any animals, whether natural or introduced, or trees or other vegetation on zoological park land</b>	Required for biosecurity purposes.
New 7(c)	<b>Any unmanned airborne craft, including a drone or other remotely piloted, or otherwise controlled, airborne craft, part of a remotely piloted aircraft and the remote control for a remotely controlled piloted aircraft</b>	Consistent with the balance of 7, Taronga needs to be able to ban any other forms of technology that may represent a danger to wildlife in our care or nuisance to visitors and staff.
New 7(f)	<b>Liquor</b>	As above.
New 11(l)	<b>Enter, open or damage any animal enclosure, holding area or any other structure of any kind containing animals.</b>	To put beyond doubt the ability of Taronga to prevent people from entering enclosures or putting at risk the effectiveness of enclosures.
New 11(m)	<b>Operate or use any unmanned airborne craft, including a drone or other remotely piloted, or otherwise controlled, airborne aircraft</b>	Consistent with 7(c), Taronga needs to be able to ban any other forms of technology that may represent a danger to wildlife in our care or nuisance to visitors and staff.

Source: Taronga Conservation Society of Australia

## 4 *Impacts*

To meet the RIS requirements, the impacts of the proposed regulation (and any alternative options) must be assessed and where possible, quantified.

### *Approach to assessing the impacts*

As outlined above, the proposed regulations give the Board various powers, including the power to:

- restrict public access to zoological lands, including by setting opening times, and restricting particular areas
- determine entrance fees
- prohibit activities that may interfere with animals, natural features or structures or compromise the safety and enjoyment of other users

The impacts of the regulations therefore depend on how the Board exercises these powers. As the proposed regulations are largely a remake of the existing regulations (with some relatively minor amendments), it is reasonable to assume that the decisions made by the Board in how it has exercised these powers over recent years is a reasonable indicator of how it would continue to exercise these powers over the five-year regulatory period.

In the cost-benefit analysis, the ‘no regulation’ option will be used as the baseline, against which the costs and benefits of the proposed regulations will be assessed.

Where appropriate, costs and benefits will be estimated in net present value terms over the five-year regulatory period. Future costs and benefits are discounted to present value terms using a real discount rate of 7 per cent, consistent with NSW Treasury CBA guidelines.<sup>18</sup>

### *The impact of the proposed regulations*

In general, the regulations (relative to the baseline) can be categorised as follows.

- Regulation to control public access to the zoological lands
- Regulation regarding fee setting
- Regulations to protect:
  - animals on zoological land

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<sup>18</sup> NSW Treasury, *NSW Government Guide to Cost-Benefit Analysis*, Policy and Guidelines Paper TPP 17-03, March 2017, p. 15.

- natural features on zoological land, and
- structures on zoological land.
- Regulation that restricts activities that may compromise the safety or enjoyment of other users
- Regulation that enables the zoo to respond to incidents as they arise
- Regulation that enables the Board to deem certain acts not to be offences.

The impacts of each group of regulations are summarised in table 4.1.

#### 4.1 Summary of impacts of proposed regulations

Regulation Type	Relevant regulations	Impact
Restrict access to zoological lands	<ul style="list-style-type: none"> <li>■ Places, times and conditions of entry (regulation 5)</li> <li>■ Exclusion of public from areas (regulation 6)</li> <li>■ Restrict use of Taronga “Pump” Wharf (regulation 12)</li> <li>■ Regulation of vehicular traffic (regulation 14)</li> <li>■ Refusal of entry of vehicles (regulation 15)</li> <li>■ Removal of vehicles (regulation 16)</li> </ul>	<ul style="list-style-type: none"> <li>■ The benefits include:               <ul style="list-style-type: none"> <li>– areas can be reserved for carrying out research and breeding programs for the preservation of endangered species or carrying out research programs for the conservation and management of other species</li> <li>– areas can be reserved for other revenue raising activities e.g. accommodation products</li> <li>– areas can be restricted for building and construction projects</li> <li>– animals can have uninterrupted rest or be safely moved between enclosures</li> <li>– reduced staffing costs</li> </ul> </li> <li>■ The costs are the loss of amenity to users of the zoological land from being unable to use the relevant areas for the period of time, or particular areas on the zoological land</li> </ul>
Fees	<ul style="list-style-type: none"> <li>■ Entrance Fees (regulation 4)</li> <li>■ Charges payable for bringing vehicles onto, or parking vehicles on, zoological land (regulation 13)</li> <li>■ Sky safari cable car (regulation 8)</li> </ul>	<ul style="list-style-type: none"> <li>■ The benefits are:               <ul style="list-style-type: none"> <li>– Revenue</li> <li>– Business development/planning</li> <li>– any additional commercial benefits (producer surplus) in excess of the entrance fees.</li> </ul> </li> <li>■ The cost is any additional administrative burden that arises from setting fees</li> </ul>
Protection of animals	<ul style="list-style-type: none"> <li>■ Visitors are prohibited from feeding, destroying, capturing, injuring or interfering with any animal (regulation 10)</li> <li>■ Items prohibited from being brought onto zoological land (regulation 7)</li> <li>■ Prohibited activities on zoological park land (regulation 11)</li> </ul>	<ul style="list-style-type: none"> <li>■ The benefits include:               <ul style="list-style-type: none"> <li>– avoids injury or distress to animals</li> <li>– prevents irreversible harm to animals, including endangered species</li> </ul> </li> <li>■ The cost is the loss of amenity for people that would choose to engage in the relevant activities or bring relevant items to the zoological land</li> </ul>
Protection of natural features and structures	<ul style="list-style-type: none"> <li>■ Protection of zoological park land (regulation 9)</li> </ul>	<ul style="list-style-type: none"> <li>■ The benefits include:               <ul style="list-style-type: none"> <li>– Reduced maintenance costs</li> </ul> </li> </ul>

Regulation Type	Relevant regulations	Impact
	<ul style="list-style-type: none"> <li>Prohibited activities on zoological park land (regulation 11)</li> <li>Sky safari cable car (regulation 8), a person must not interfere with operation of the cable car</li> </ul>	<ul style="list-style-type: none"> <li>Potentially prevents irreparable damage to structures of significant heritage</li> <li>The cost is the loss of amenity for people that would choose to engage in the relevant activities</li> </ul>
Protection of enjoyment and safety of users of zoological lands	<ul style="list-style-type: none"> <li>Prohibited activities on zoological park land (regulation 11)</li> <li>Sky safari cable car (regulation 8), a person must not interfere with the enjoyment or comfort of other persons waiting to travel on the cable car</li> </ul>	<ul style="list-style-type: none"> <li>The benefits could include:               <ul style="list-style-type: none"> <li>visitor safety</li> <li>higher visitor numbers through reputational effects</li> <li>more enjoyable visit for visitors</li> </ul> </li> <li>The cost is the loss of amenity for people that would choose to engage in the relevant activities.</li> </ul>
Ability to respond to incidents	<ul style="list-style-type: none"> <li>Obstruction and failure to comply with directions (regulation 18)</li> <li>Exercise of Board's functions (regulation 19)</li> </ul>	<ul style="list-style-type: none"> <li>The benefits include:               <ul style="list-style-type: none"> <li>any danger to animals, natural features, structures or other users can be quickly neutralised by zoo personnel</li> <li>reduces the response time to an incident as incident may be dealt with 'in-house' rather than having to wait for police or council rangers etc</li> </ul> </li> <li>Costs could potentially arise if external parties (i.e. police or local council) could more effectively respond to the incident</li> </ul>
Ability to deem certain acts not to be offences	<ul style="list-style-type: none"> <li>Certain acts not to be offences if the act was done by a member of staff in the course of his or her employment or under the direction or with the consent of the Board (regulation 20)</li> </ul>	<ul style="list-style-type: none"> <li>The benefits include:               <ul style="list-style-type: none"> <li>allowing some activities to be permitted under exceptional circumstance, on a case by case basis</li> </ul> </li> <li>The cost is the administrative cost of providing consent for certain activities</li> </ul>

Source: CIE.

### *Restriction of access to zoological lands*

The regulations support the Board's ability to restrict access to zoological lands. This includes restricting the place, times and conditions of entry, the exclusion of the public from certain areas, restricting use of the Taronga "Pump" Wharf, and the regulation, refusal of entry and removal of vehicles. Table 4.2 presents a summary of the associated regulations.

#### **4.2 Restriction of access to zoological lands**

Regulation	Description
Regulation 5	Places, times and conditions of entry
Regulation 6	Exclusion of public from areas by means of notices or barriers
Regulation 12	A person must not moor a vessel to, or fish from, and part of the wharf known as the Taronga "Pump" Wharf situated at Taronga Zoological park land

Regulation	Description
Regulation 14	Regulation of vehicular traffic by means of notices, barriers or directions given by members of staff
Regulation 15	The Board may refuse to admit a vehicle onto zoological park land
Regulation 16	The Board may direct a person to remove from zoological park land any vehicle that is unlawfully on the land and under that person's control

Source: Taronga Conservation Society of Australia.

The costs and benefits of allowing the Board to restrict access to zoological lands are difficult to quantify.

Nevertheless, allowing the Board to restrict access to the zoological sites leads to a number of benefits:

- restricting opening hours means that animals can have uninterrupted rest or be safely moved between enclosures and that staffing costs can be kept lower than if the sites were open continuously
- restricting the places of entry and regulating parking sites means that the Board can ensure that all visitors pay the appropriate fees (both admission and parking)
- excluding members of the public from certain areas allows the Board to undertake building and construction projects, other revenue raising activities (e.g. accommodation), dedicate areas to research and conservation activities and ensure visitor safety

The absence of these regulations could jeopardise visitor safety, hinder projects (e.g. new construction) and increase operational costs to an unsustainable level.

The costs of these regulations are the loss of amenity to users of the zoological land from being unable to use the relevant areas for the period of time, or particular areas on the zoological land. However, the primary reason visitors attend zoos is to learn about and see animals, hence visitors would be most interested in areas of the zoo where animals are on display. Therefore, it is expected that the cost associated with these regulations would be low.

### ***Determining fees***

The regulations support the Board's ability to determine the entrance fees from time to time. This includes setting entrance fees (including access to the Sky Safari cable car) and charges payable for bringing vehicles onto, or parking vehicles on, zoological land. The regulations associated with these activities are presented in table 4.3.

#### **4.3 Determining fees**

Regulation	Description
Regulation 4	Board may determine entrance fees payable by persons with respect to zoological park land, these fees may differ according to such factors as the Board may determine
Regulation 8	To access the Sky Safari cable car, persons must have paid the relevant charge

Regulation	Description
Regulation 13	Board may determine charges payable for bringing vehicles onto, or parking vehicles on zoological park land, these charges may differ according to such factors as the Board may determine

Source: Taronga Conservation Society of Australia.

Regulations that give the Board the power to determine the various charges for the commercial services provided to the community are likely to mean that these fees are adjusted (generally upwards) more frequently than would otherwise be the case. To some extent, fee increases are a transfer from visitors to Taronga (i.e. the benefit to Taronga from increased revenue is exactly offset by increased costs to visitors), although higher fees may also discourage some from visiting. However, visitor fees can also be temporarily discounted, for instance, as a special offer during historically low visitor periods. Moreover, this power is used to differentiate fees for different markets, for example, charges for international tourists where admission is incorporated into tour fees or tickets that are bought through an agent or reseller.

Taronga is mostly self-funded (although there are some grants from the NSW Government). The power to set fees is therefore considered crucial to provide financial certainty for business development/planning.

Without the power to change fees, fees could potentially decline over time in real terms, leaving Taronga with a funding shortfall. Given that admission fees are such a large component of income (as previously discussed), this is likely to mean that either:

- the NSW Government would need to meet the funding shortfall, or;
- Taronga would need to reduce costs, compromising its ability to achieve its objectives of community education, biological research and wildlife conservation.

Alternatively, fees would need to be changed through an external process (such as set by the Minister through regulation). This is likely to be a more cumbersome and costly process.

### ***Protection of animals***

The regulation supports the Board's ability to protect animals within the zoological sites. This includes restricting visitor interaction with animals and prohibiting certain activities and items. Table 4.4 presents a summary of the relevant regulations.

#### **4.4 Protection of animals**

Regulation	Description
Regulation 7	<p>Items prohibited from being brought onto zoological land including any:</p> <ul style="list-style-type: none"> <li>■ animal</li> <li>■ any other part of an animal, plant or other living thing that poses a threat to the preservation or protection of any animals, whether natural or introduced, or trees or other vegetation on zoological park land</li> <li>■ any unmanned airborne craft, including a drone or other remotely piloted, or otherwise controlled, airborne craft, part of a remotely piloted aircraft and the remote control for a remotely piloted aircraft</li> </ul>

Regulation	Description
	<ul style="list-style-type: none"> <li>any skateboard, roller skates, inline skates or similar apparatus</li> <li>balloons</li> <li>liquor</li> </ul>
Regulation 10	Visitors are prohibited from feeding, destroying, capturing, injuring or interfering with any animal
Regulation 11	<p>Prohibited activities on zoological park land including <sup>a</sup>:</p> <ul style="list-style-type: none"> <li>enter, open or damage any animal enclosure, holding area or any other structure of any kind containing animals</li> <li>ride on or use any skateboard, roller skates, inline skates or similar apparatus</li> <li>operate any radio or other electronic device, or play any musical instrument at a volume likely to cause inconvenience to any other person or animal</li> <li>operate or use a loudspeaker or public address system</li> <li>climb on any building, fence, seat, table, enclosure or other structure</li> <li>bathe, wade or swim in any lake, pond, stream or ornamental water</li> <li>light any fire</li> <li>hold or address a function, public meeting, demonstration or gathering</li> <li>operate or use any unmanned airborne craft, including a drone or other remotely piloted, or otherwise controlled, airborne craft</li> </ul>

<sup>a</sup> only activities under this regulation that are related to the protection of animals have been listed

Source: Taronga Conservation Society of Australia.

The costs and benefits of the regulation aimed at protecting animals are difficult to measure.

- That said, these regulations do not appear to be restrictive as they mostly cover activities that most members of the community would not expect to engage in at the zoo. As such, the costs to the community are expected to be low.
- The regulations nevertheless provide the Board with a means of preventing any members of the community that would otherwise choose to engage in activities that could cause emotional distress or physical harm to animals. This includes:
  - destroying capturing, injuring or interfering with any animal
  - feeding animals
  - conducting certain activities or bringing items on to the zoological site, for instance, bringing another animal or biological specimen onto the site, entering, opening or damaging any animal enclosure, holding area or any other structure of any kind containing animals, and operating any radio or other electronic device, or playing any musical instrument at a volume likely to cause inconvenience to the animal

On this basis, it is highly likely that the benefits of these regulations outweigh the costs.

#### *Avoids injury, distress or irreversible harm to animals*

The extent to which more effective enforcement facilitated by the regulations reduces instances of harm to animals by users is unknown. However, it is expected that the regulations will safeguard animal welfare.



### *Cost of restrictions*

The cost of a restriction on what people can do is notionally a cost to those individuals that would otherwise be free to pursue those actions and would choose to do so. The cost of restrictions on the behaviour of users of the zoological sites depends on the extent to which users would engage in such behaviour in the absence of the regulations. This also depends on the extent to which people expect to be able to engage in these behaviours.

It is unlikely that most users of the zoological sites would expect to be able to engage in the sorts of behaviours covered by these regulations. As such, the costs would be low.

Furthermore, some of the activities covered by these regulations amount to animal cruelty and would therefore be covered by other laws. To that extent, the impact of the regulations is to provide the Board with enforcement powers they would not otherwise have. This is likely to improve the effectiveness of enforcement; in the absence of the regulations, the Board would need to rely on the police.

It would also be unusual to attempt to measure the cost of the enjoyment prospective animal cruelty offenders may receive from the act of harming animals on zoological sites in a CBA.

### *Change in enforcement costs*

The Board has advised that the additional enforcement costs associated with the regulations are minimal. In particular, the Board would employ security regardless of whether it has the regulatory powers to impose penalties and take other enforcement actions.

In this regard, the regulations do not add to the Board's costs to any significant extent. More likely, without the regulations, the Board would need to rely on the police for enforcement. Giving that Board enforcement powers could therefore reduce the call on police resources as well as improve the effectiveness of enforcement.

### *Protection of natural features and structures*

The regulation supports the Board's ability to protect natural features and structures on zoological sites. This includes prohibiting certain activities and items. Table 4.24.5 presents a summary of the relevant regulations.

## **4.5 Protection of natural features and structures**

Regulation	Description
Regulation 8	Sky safari cable car, a person must not interfere with operation of the cable car
Regulation 9	Protection of zoological park land, a person must not: <ul style="list-style-type: none"> <li>▪ damage or remove any plant or part of a plant</li> <li>▪ remove or disturb any rock, soil, sand, stone or similar substance</li> <li>▪ leave or deposit any rubbish or litter, except in a bin provided and designated for that purpose</li> <li>▪ damage, remove or interfere with any building, structure, notice, sign or other improvement</li> </ul>

Regulation	Description
	<ul style="list-style-type: none"> <li>▪ throw or project any stone or other object</li> </ul>
Regulation 11	<p>Prohibited activities on zoological park land including <sup>a</sup>:</p> <ul style="list-style-type: none"> <li>▪ enter, open or damage any animal enclosure, holding area or any other structure of any kind containing animals</li> <li>▪ ride on or use any skateboard, roller skates, inline skates or similar apparatus</li> <li>▪ climb on any building, fence, seat, table, enclosure or other structure</li> <li>▪ bathe, wade or swim in any lake, pond, stream or ornamental water</li> <li>▪ light any fire</li> <li>▪ display or distribute any advertisement, sign, bill, poster or other printed media</li> <li>▪ operate or use any unmanned airborne craft, including a drone or other remotely piloted, or otherwise controlled, airborne craft</li> </ul>

<sup>a</sup> only activities under this regulation that are related to the protection of natural features and structures have been listed

Source: Taronga Conservation Society of Australia.

The costs and benefits of the regulation aimed at protecting natural features and structures are difficult to measure.

- These regulations do not appear to be overly restrictive as they mostly cover activities that most members of the community would not expect to engage in at the zoo. As such, the costs to the community are likely to be low.
- However, the regulations provide the Board with a means of preventing any members of the community that would otherwise choose to engage in activities that damage natural features or structures on the zoological sites. These activities could potentially increase maintenance costs or permanently damage heritage features.

On this basis, it is likely that the benefits of these regulations outweigh the costs.

### *Reduced maintenance costs*

The extent to which more effective enforcement facilitated by the regulations reduces maintenance costs is not known. That said, even if the regulations reduce maintenance costs by 1 per cent per year, this would be around \$69 000 per year. Over the five-year regulatory period, this would be around \$304 000 in present value terms (using a discount rate of 7 per cent).<sup>19</sup>

### *Preservation of heritage assets*

As previously discussed, Taronga Zoo (Sydney site) has significant heritage value. In particular, the Upper and Lower Entrance Gates, Elephant House, Aquarium, Aviary, Floral Clock and rustic landscaping elements are listed on the State Heritage Register. According to the State Heritage Register, Taronga Zoo:

- is a major social facility and entertainment and recreational venue for Sydney, with international prominence

<sup>19</sup> Taronga Conservation Society Australia, Annual Report, 2017-18, p 15 of Financial Statements. In 2017-18, expenditure on maintenance was \$6 938 000.

- is recognised as the leading Australian zoo facility, contains some remarkable and unusual structures, many of them deliberately exotic or grand in their presentation
- demonstrates present and past zoological practices, both for the exhibits and the manner in which they are displayed
- remains a prominent landscape feature in Sydney Harbour, and
- is aesthetically, historically, scientifically and socially rare state-wide.<sup>20</sup>

The nature of these assets means that it may not be possible to repair damage caused by activities covered by the regulations to the original condition.

We previously estimated that non-use values (such as existence, bequest and option values) could be ~\$4.5 million per year. This partly relates to the preservation of heritage assets.

### *Cost of restrictions*

As above, the major cost of restricting activities on the zoological sites is the cost to those individuals that would otherwise be free to pursue those actions and would choose to do so.

In line with this, it is unlikely that most users of the zoological sites would expect to be able to engage in the sorts of behaviours covered by these regulations. As such, the costs would be low.

Furthermore, some of the activities covered by these regulations amount to vandalism and would therefore be covered by other laws. To that extent, the impact of the regulations is to provide the Board with enforcement powers they would not otherwise have. This is likely to improve the effectiveness of enforcement; in the absence of the regulations, the Board would need to rely on the police.

As with the case of animal cruelty, it would also be unusual to attempt to measure the cost of the enjoyment prospective vandals may receive from the act of vandalising natural features or structures on zoological sites in a CBA.

### *Change in enforcement costs*

As above, the additional enforcement costs associated with the regulations are minimal as the Board would employ security regardless of whether it has the regulatory powers to impose penalties and take other enforcement actions.

### *Protection of enjoyment and safety of users of zoological lands*

Some activities can reduce the safety and enjoyment of other users of the zoological sites (i.e. impose costs on others). The regulations support the Board's ability to improve the

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<sup>20</sup> NSW Office of Environment and Heritage website, <https://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2060062>, accessed 2 April 2019.

safety and enjoyment of users of the zoological sites by restricting the activities shown in table 4.6.

#### 4.6 Protection of enjoyment and safety of users

Regulation	Description
Regulation 8	Sky safari cable car, a person must not interfere with the enjoyment or comfort of other persons waiting to travel on the cable car
Regulation 11	<p>Prohibited activities on zoological park land including:</p> <ul style="list-style-type: none"> <li>enter, open or damage any animal enclosure, holding area or any other structure of any kind containing animals</li> <li>ride on or use any skateboard, roller skates, inline skates or similar apparatus</li> <li>operate any radio or other electronic device, or play any musical instrument at a volume likely to cause inconvenience to any other person or animal</li> <li>operate or use a loudspeaker or public address system</li> <li>climb on any building, fence, seat, table, enclosure or other structure</li> <li>bathe, wade or swim in any lake, pond, stream or ornamental water</li> <li>light any fire</li> <li>hold or address a function, public meeting, demonstration or gathering</li> <li>conduct, cause or assist in the conduct of amusement, entertainment, instruction or performance, whether or not for money or other consideration</li> <li>sell, hire, expose for sale or hire or solicit for sale or hire any goods, service, article or thing</li> <li>take photographs or films, or operate a video recorder for commercial purposes</li> <li>display or distribute any advertisement, sign, bill, poster or other printed media</li> <li>operate or use any unmanned airborne craft, including a drone or other remotely piloted, or otherwise controlled, airborne craft</li> </ul>

Source: Taronga Conservation Society of Australia.

These regulations allow the Board to restrict activities and items on the zoological sites that may impact on other users. The benefits and costs are difficult to measure.

Visitors attend zoos to learn about and see animals, not to undertake activities that they could undertake elsewhere (for instance, in a public park or at home). It is therefore likely that the benefits of the regulations outweigh the costs.

#### *Enjoyment and safety of users*

The potential benefits of the regulations that protect the enjoyment and safety of users include:

- increased visitor safety
- higher visitor numbers through reputational effects
- more enjoyable experience for visitors.

The extent to which the proposed regulations would increase the enjoyment of visitors (and encourage more visitors) depends on:

- the extent to which some visitors would engage in the activities covered by the regulations in the absence of the regulations, and

- the extent to which these activities would impact on the enjoyment and safety of other visitors.

Based on information currently available, this is not known. Furthermore, understanding the extent to which the restricted activities would reduce the enjoyment of other visitors would require detailed survey work.

#### *Cost of restricting activities*

As above, the major cost of restricting activities on the zoological sites is the cost to those individuals that would otherwise be free to pursue those actions and would choose to do so.

In general, the sorts of activities covered by the regulations in this category are more consistent with the types of activities that people may undertake in a park which they could freely access any day, not a zoo, which they would visit infrequently and have paid entry to. This suggests that the cost associated with these regulations would be low.

#### *Change in enforcement costs*

As for the protection of animals, natural features and structures, the additional enforcement costs associated with the regulations are minimal as the Board would employ security regardless of whether it has the regulatory powers to impose penalties and take other enforcement actions.

#### *Ability to respond to incidents*

The regulations also provide the Board with the means of enforcing the above regulations through:

- requiring that a person comply with any reasonable direction in relation to the regulations (regulation 17)
- requiring that a person who fails to comply with directions given leaves the zoological site if directed to do so (regulation 18)
- allowing the removal of a person who has failed to comply with a direction to leave the zoological sites (regulation 18), and
- allowing authorised persons to issue penalties (which are specified for each regulation).

The potential benefits of the regulations that allow the Board to respond to incidents include:

- any danger to animals, natural features, structures or other users can be quickly neutralised by zoo personnel
- reduces the response time to an incident as incident may be dealt with 'in-house' rather than having to wait for police or council rangers etc

Costs could potentially arise if external parties (i.e. police or local council) could more effectively respond to the incident.

### ***Ability to deem certain acts not to be offences***

The regulation supports the Board's ability to deem certain acts to not be offences. This includes if the act was done by a member of staff in the course of his or her employment or under the direction or with the consent of the Board (regulation 20).

The potential benefits of allowing the Board to deem certain acts not to be offences include:

- allowing some activities to be permitted under exceptional circumstance, for instance, on a case by case basis

The cost is the administrative cost of providing consent for certain activities.

## 5 Conclusion

The proposed regulations are largely a remake of the existing regulations (with some relatively minor amendments to update and modernise them) that effectively give the Board the power to continue to manage the zoological land in a way that maximises benefits to the community. In particular, the proposed regulations:

- give the Board power to regulate public access to the zoological lands and determine entrance fees
- restrict activities and items to protect animals, natural features, and structures (including those with heritage value) on the zoological sites
- restrict activities and items that may compromise the safety or enjoyment of other users
- give the Board power to respond to incidents as they arise, including applying penalties, and
- give the Board power to deem certain acts not to be offences.

Although the costs and benefits of the proposed regulations have not been quantified, it is nevertheless likely that the benefits of the proposed regulations significantly outweigh the costs. The proposed regulations are therefore the preferred option.

To this end, the proposed regulations assist the Board to continue in:

- carrying out research and breeding programs for the preservation of endangered species
- carrying out research programs for the conservation and management of other species
- conducting public education and awareness programs about species conservation and management
- displaying animals for educational, cultural and recreational purposes
- protecting natural features and structures including heritage sites, and
- protecting user enjoyment and safety.

The actual impact of the regulations is probably minimal as relatively few members of the public are likely to engage in the activities covered by these regulations.

A small number of people engaging in the sorts of activities covered by these regulations could impose a relatively large cost in terms of harm to animals, additional maintenance costs, irreversible loss of heritage value and reduced user enjoyment and safety. The regulations give the Board the power to impose penalties on people engaging in activities or bringing items onto the zoological sites that are in contravention to the regulation, and issue and enforce directions, including directions to leave the zoological sites.



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