

Submission to the Agriculture and  
Environment Committee – *Safer Waterways  
Bill 2017*

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## Background to the current regulatory approach for managing crocodiles

The regulatory approach for managing crocodiles in Queensland is designed on the basis of the:

- location of crocodiles;
- conservation status of crocodiles; and
- risks associated with human-crocodile interactions.

### Location of crocodiles

In Queensland, crocodiles are known to occur throughout the Gulf of Carpentaria, Cape York Peninsula, Torres Strait, and along the east coast. Crocodiles are regularly present as far south as the Boyne River near Gladstone and occasionally as far south as the Mary River.

Estuarine crocodiles most commonly live in the tidal reaches of rivers and associated inlets and wetlands. However, they also occur along beaches and offshore islands in the Great Barrier Reef and Torres Strait, and in freshwater lagoons, rivers, and swamps up to hundreds of kilometres inland from the coast.

As a result there is a possibility that crocodiles may be present in or near almost any water body north from the Gladstone area, all the way to the Northern Territory border. Colloquially, this area is known as ‘croc country’.

### Conservation status

The Australian Government states that “estuarine crocodiles were harvested extensively in the wild throughout northern Australia, during the 1940s, 50s and 60s. A severe reduction in the population resulted in management measures being put in place by all range states and the Commonwealth. Full protection was given to the Salt-water Crocodile in Western Australia in 1970, in the Northern Territory in 1971, and in Queensland in 1974.”<sup>1</sup>

The Western Australian Government estimates that across northern Australia about 300 000 crocodiles were killed during the period from 1945 to 1970.<sup>2</sup> Dr Adam Britton, a professional in crocodile conservation management has estimated that the number of crocodiles killed was 95% of the Australian population<sup>3</sup>.

Consequently, in Queensland, estuarine crocodiles are listed as a ‘vulnerable’ species. This species status means that:

- the population size or distribution of the wildlife has declined, or is likely to decline, to an extent that the wildlife may become endangered because of a threatening process; or
- the population size of the wildlife has been seriously depleted and the protection of the wildlife is not secured; or
- the population of the wildlife is—
  - low or localised; and
  - dependent on habitat that has been, or is likely to be, adversely affected, in terms of quantity or quality, by a threatening process.

The Australian Government also regulates human and crocodile interactions, on account of the species being listed under the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES). The estuarine crocodile is currently listed as both a marine species and migratory species under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

## Population monitoring

Since the cessation of hunting in Queensland there has not been a co-ordinated population monitoring program. Surveys were undertaken from 1994-2000 and 2009-2010, however these were limited to a number of targeted creeks and rivers. Consequently, the size of the crocodile population in Queensland is not currently known and there is limited information on population trends since the ban on hunting in the 1970s.

Conversely, in the Northern Territory, a long-term crocodile population monitoring program has been in effect since the 1970s. This program has resulted in estimates that there are 90 000 to 100 000 non-hatchling crocodiles in the Northern Territory, which is a significant increase relative to the estimated population in 1971 of just 3 000 non-hatchling animals<sup>4</sup>.

## Human-crocodile interactions

There is limited data in relation to crocodile attacks prior to 1975. However, there are some records, with 17 non-fatal and 11 fatal attacks being recorded between 1889 and 1967<sup>5</sup>.

According to statistics compiled on crocodile behaviour<sup>6</sup>, between 1971 and May 2016 there were 112 recorded crocodile attacks across Western Australia, the Northern Territory and Queensland. Of these attacks, 33 (30%) were fatal.

By comparison, between 2000 and 2016, the venomous brown snake caused 23 deaths<sup>7</sup> in Australia and in 13 years there were 27 deaths in Australia as a result of a bee or wasp sting<sup>8</sup>. Across Australia, this equates to approximately 1.438 deaths as a result of a brown snake bite per year and approximately 2.077 deaths from bee or wasp sting per year. Over 60% of deaths from snake-bite occurred in major cities or inner regional areas, and more than half of the deaths were in or around the victim's home<sup>9</sup>.

Snake bite data indicates that in Queensland the average rate of death as a result of a snake bite (more broadly than just brown snakes) is 0.5 deaths per year, per 100 000 people<sup>10</sup>. Applying this average to the population in Cairns and Townsville alone – as estimated in 2011 below – this equates to an average of 2.618 deaths per year from snake bite in Cairns and Townsville. By comparison, there is an average of 0.281 deaths from crocodiles per year in croc country.

Since 1985 there have been 27 confirmed crocodile attacks on humans in Queensland, and one unconfirmed recorded attack. Of these, nine have been fatal.<sup>11</sup> The fatal attacks occurred in 1985, 1986, 1987, 1993, 2005, 2008, 2009, 2016, and 2017. In the same time period, according to shark attack data<sup>12</sup> there have been 81 non-fatal (excluding one at SeaWorld and one on a trawler) and 10 fatal shark attacks on people in Queensland. Of these, 29 non-fatal attacks and six fatal attacks occurred in areas that are within crocodile country.

This equates to an average of 2.844 shark attacks per year in Queensland, with an average of 0.313 attacks being fatal. Of these, an average of 1.094 attacks per year occur in croc country, 0.187 of these being fatal. In comparison, there is on average, 0.844 crocodile attacks per year in croc country, of which 0.281 are fatal. In the Northern Territory, there are records of 21 fatalities from crocodile attacks since 1974 – with four of these deaths occurring in 2014.<sup>13</sup> This equates to an average of 0.488 fatal attacks per year. However, the Northern Territory Government has also identified that there are more crocodiles in the Northern Territory than in Queensland.<sup>14</sup>

## Summary of statistics

The statistics discussed above are presented in Table one.

Table One: summary of average annual attack statistics

Animal	Australia	Northern Territory	Queensland	Croc country
Bees and wasps (fatal)	2.077	--	--	--
Brown snake (fatal)	1.438	--	--	--
Snakes generally (fatal)	--	--	--	2.618 <sup>1</sup>
Sharks (total)	--	--	2.844	1.094
Sharks (fatal)	--	--	0.313	0.188
Crocodiles (total)	2.489	--	(refer croc country)	0.844
Crocodiles (fatal)	0.733	0.488	(refer croc country)	0.281

### Comparative analysis

In summary, this information shows that across Australia the risk of death from a:

- wasp or bee sting is 2.832 times more likely than death from a crocodile attack; and
- brown snake bite is 1.960 times more likely than death from a crocodile attack.

Whilst in croc country, the risk of:

- attack from a shark is 1.296 times higher than a crocodile attack;
- death from a snake bite is 9.309 times the risk of death from a crocodile attack. This however, is likely to be an underestimate as the statistics are based on population size, and these figures are based on 2011 population estimates from just the Cairns and Townsville areas – not the whole of croc country; and
- death from a crocodile attack in Queensland is 1.736 times lower than the risk of death from a crocodile attack in the Northern Territory.

### Human and crocodile population data

Without population monitoring data in Queensland, it is difficult to know for certain whether crocodile populations have been increasing. However, the human population has greatly increased in croc-country over this time.

In 1976 it was estimated that the Cairns region had a residential population of 128,030 whilst in 2011 it was 269,753. This a 47.5% population increase over this time, and the Cairns region is now the largest population hub in northern Australia.<sup>15</sup> Similarly, in the Townsville region, the estimated 1976 population was 177,240 and had increased by 69.8% to 253, 871 in 2011.<sup>16</sup> On average, between June 2003 and June 2013, the Cairns region has had an average population increase of 4240 people per year and the Townsville region has had an increase of 4200 people per year.<sup>17</sup>

Cairns and Townsville are also popular for recreational water-based activities. For instance, in 2016 it was reported that in Cairns there is one boat registered for every six people whilst in Townsville there is one boat registered per seven people.<sup>18</sup> The level of boat ownership per person in Cairns was the highest in Queensland.<sup>19</sup> By comparison, the average across Queensland is one recreational vessel per 19 people.<sup>20</sup>

The rapid and significant expansion of the human population, the popularity of water-based activities in croc-country, and the suspected recovery in the crocodile population have resulted in an increased likelihood of crocodile sightings and physical interactions between humans and crocodiles.

<sup>1</sup> Based solely on 2011 population data for Cairns and Townsville

## Current regulatory approach for crocodiles

There are a number of obligations under state, national and international law that regulate the management of crocodiles in Queensland.

### Commonwealth/International obligations

Where crocodile products are to be exported, requirements of the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) apply. This convention is applied by the Commonwealth Government through requirements under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). In order to meet these requirements, an approved Wildlife Trade Management Plan (WTMP) is required for Queensland's crocodile industry.

To the extent that harvesting of crocodiles is permitted in Queensland, this must also be reflected in the WTMP – even if the harvested crocodiles will not be part of the export industry. This is required to ensure Australia can satisfy the requirements of CITES and that Queensland's approach for allowing the harvesting of crocodiles from the wild is sustainable. To date, crocodile WTMPs approved by the Commonwealth – for Queensland and the Northern Territory – address this requirement through approving maximum quotas of animals that can be taken from the wild, and the purpose for which they can be taken from the wild.

### Queensland's framework

The current regulatory approach for crocodiles is established through the *Nature Conservation Act 1992*, the Nature Conservation (Administration) Regulation 2006, Nature Conservation (Wildlife Management) Regulation 2006, and the Nature Conservation (Estuarine Crocodile) Plan 2007. The framework for management of crocodiles in Queensland is illustrated in Figure 1, and explained in detail below.

### Nature Conservation Act

The Nature Conservation Act establishes the objectives for the management of native wildlife (plants and animals) in Queensland. These objectives include protection of native wildlife and its habitat, and that the use of wildlife is to be ecologically sustainable.

### Nature Conservation Regulations

The Nature Conservation (Administration) Regulation 2006, Nature Conservation (Wildlife Management) Regulation 2006 – together described as the Nature Conservation Regulations – establish the permit and licencing arrangements for native wildlife in Queensland. These regulations provide for the farming of crocodiles and the harvesting of crocodiles. However, harvesting is only permitted to the extent that the Nature Conservation (Estuarine Crocodile) Plan 2007 allows.

### Farming

From a farming perspective, the production systems for crocodiles are 'closed cycle captive breeding' and 'ranching', as follows:

- closed-cycle farms are captive breeding facilities that are self-sustaining with respect to livestock, with products from crocodiles contained and bred on sight without augmentation from wild specimens.
- ranching is the rearing, in a controlled environment, of animals taken as eggs or juveniles from the wild, where they would otherwise have had a very low probability of surviving to adulthood<sup>21</sup>.

Crocodile farms in Queensland, unlike in the Northern Territory<sup>22</sup>, are predominantly closed-cycle captive breeding facilities. However, there is some augmentation from the wild in the form of eggs and live crocodiles imported into Queensland from the Northern Territory, where crocodile 'ranching' is permitted. Ranching is not permitted in Queensland. Adults are also brought into Queensland crocodile farms through the removal from the wild of problem crocodiles.

The first crocodile farm in Queensland (and Australia) was established by the Federal Government in 1972 at the Edward River Aboriginal Community in north Queensland, prior to the introduction of protections for crocodiles in Queensland<sup>23</sup>. The farm aimed to provide employment for Aboriginal people in remote areas, for which it was successful.

The first commercial crocodile farm in Queensland was established in 1981<sup>24</sup> and there are currently nine licenced wildlife farms for crocodiles in Queensland.

### Value of industry

The value of the industry can be measured in terms of skins, meat, and employment.

#### Skins

Skins are sold on a per centimetre basis from the measurements across the chest<sup>25</sup>. Prices for skins range from around \$600 up to \$1000<sup>26</sup>. Generally, a salted crocodile skin has a basic value of about \$275, after tanning the value increase to about \$600, as a finished product, or series of finished products, the skin is worth upwards of \$1500<sup>27</sup>. Exceptional quality, hand-made, made to order handbags can sell for upwards of \$50 000 – with some exclusive products selling for prices at, or in excess of, \$300, 000<sup>28</sup>.

It is estimated that Australian estuarine crocodiles make up between two and ten percent of the international luxury crocodile leather market<sup>29</sup>.

#### Meat

At three years of age, the meat value of a crocodile is about \$75 - \$100. While a young crocodile carries only about five kilos of quality meat, it is worth about \$20 per kilo<sup>30</sup>.

In 1998, the demand for crocodile meat was higher than supply, and Australia imported approximately 80 tonnes of meat per annum<sup>31</sup>.

#### Employment

The number of people employed by crocodile farms varies according to the size of the venture and operating structure, as well as the extent to which products are processed on site. Detail in relation to each farm's employment would need to be sourced directly from each farm operator.

### Nature Conservation (Estuarine Crocodile) Plan 2007

The final element of the framework is the Nature Conservation (Estuarine Crocodile) Plan 2007 (the Conservation Plan). This plan establishes the approach for the management of problem crocodiles, which is administered through the Queensland Crocodile Management Plan (QCMP). Under the Conservation Plan and QCMP, 'problem crocodiles' have the same meaning as 'rogue crocodiles' under the Bill.

The Conservation Plan also has the potential to allow the harvesting of crocodiles. However, the plan is currently silent on this – meaning that crocodile harvesting is not currently permitted.

### Queensland Crocodile Management Plan (QCMP)

The requirements for managing problem crocodiles in the Conservation Plan are complemented by the non-statutory QCMP. This plan provides detailed guidance regarding when, and where, the chief executive may consider that a crocodile is a problem crocodile.

The QCMP was released in 2017, following consultation with key stakeholders and the broader community in 2016. Overall, there was a strong level of support for the Crocodile Management Plans that were already in

place. This consultation process included an online survey of the general community, which received 1961 responses. In summary, the results of the survey of the general community indicated:

- Half of respondents support the notion that crocodile management must be a balance of conservation and public safety.
- Support amongst residents in northern Queensland for removal of aggressive and dangerous crocodiles around urban areas was 76% and support for removal of larger crocodiles around urban areas was 47%.
- Across Queensland, 28% of respondents did not support the removal of aggressive crocodiles around urban areas, and 32% believed that crocodile management should be based heavily on conservation, indicating a preference for removal of fewer crocodiles.
- Approximately 15% of respondents support the widespread removal of crocodiles around urban areas.
- Respondents living near crocodiles had a relatively good knowledge of how to keep themselves safe from crocodiles.

The consultation report for this process is found at

<http://www.ehp.qld.gov.au/wildlife/livingwith/pdf/crocodile-management-consultation.pdf>

The QCMP is not a statutory document but it provides clear guidance to departmental staff and the community on the State's expectations for managing the risks associated with human - crocodile interactions.

In addition to the approach identified in the QCMP, any crocodile may be considered a problem crocodile if the Chief Executive administering the Conservation Plan considers the crocodile:

- is, or is likely to become, a danger to humans; or
- has passed through a crocodile prevention barrier and is, or is likely to become, a danger to aquaculture fisheries resources, stock, or a working dog.

### Crocodile removal

In accordance with the framework established by the QCMP, crocodiles removed from the wild for public safety reasons may be provided to a licenced crocodile farm for breeding or display purposes, or humanely euthanized. Relocating crocodiles from one location to another in the wild does not occur. Additional restrictions on farm relocation apply to an 'icon crocodile', which is a crocodile that is 4m or longer and which has unusual characteristics that distinguish it from other estuarine crocodiles, including, for example, albinism.

On average, between 1995 and 2012, 18 crocodiles were removed from the wild each year. The average number of crocodiles removed increased to 54 between 2013 and 2016, whilst in 2016 the most crocodiles in a year were removed, when 80 crocodiles were removed from the wild. In the period 1 January 2017 to 7 August 2017 a total of 52 crocodiles were removed from the wild.

### Egg harvesting

Commercial egg harvesting occurred for a short period in Queensland in order to stock crocodile farms that were established in the 1980s. Since that time, crocodile farms in Queensland have used either captive breeding, or eggs and juveniles sourced from the Northern Territory to supply their farms. As identified above, commercial harvesting of crocodiles – including eggs – is currently prohibited in Queensland.

Commercial egg harvesting has been undertaken in the Northern Territory since the 1980s in order to supply licensed crocodile farms. The majority of farmed crocodiles in the Northern Territory are from harvested wild eggs, with captive breeding supplying a small number of the total captive population. Wild harvested eggs and hatchlings from those eggs are regularly sold and transferred to Queensland crocodile farms. The sustainability of the Northern Territory's harvest of wild eggs is based on regular and detailed population

monitoring across a number of river systems and the setting of a harvest ceiling using a population and a harvesting simulation model.

Over the last decade a number of crocodile farms in Queensland have expressed an interest in being able to commercially harvest crocodile eggs to supply their farms. A number of entities have also presented proposals for remote indigenous communities to be able to support local employment by commercially harvesting crocodile eggs. These proposals have never been fully realised because there is no population monitoring data available to ensure that Queensland can demonstrate that it meets the IUCN's obligations for the harvest to be sustainable.

However, two research projects have been undertaken since 2008 by Dr Adam Britton from the Northern Territory. The first project assessed the status of the existing wild population and nest areas on the west coast of the Cape York Peninsula. The second project conducted a small-scale experimental harvest of eggs to test whether harvesting eggs in this area could be sustainable. The experimental harvest was authorised under a scientific purposes permit, issued by the Department of Environment and Heritage Protection.

Using this data, and in partnership with Pormpuraaw Aboriginal Regional Council, the Queensland Government is currently investigating establishment of a small-scale experimental egg harvesting pilot for the Edward River Crocodile Farm. In order to allow egg harvesting to occur, even on a limited basis, Queensland would need to gain approval under the EPBC Act for a WTMP which includes egg harvesting.

To gain Commonwealth approval, the Commonwealth Minister must be satisfied about a range of matters, including whether there is sufficient evidence to demonstrate that the harvesting will not be detrimental to the survival of the species or its conservation status, the harvesting will not threaten habitat or biodiversity, and monitoring and data collection will be used to ensure sustainability. This will also need to take into consideration that Queensland has less suitable habitat and lower densities of crocodiles than the Northern Territory.

Allowing for commercial harvesting of crocodiles eggs would also require an amendment to the Nature Conservation (Estuarine Crocodile) Conservation Plan 2007 to allow a commercial wildlife harvest licence to be issued for estuarine crocodiles eggs.

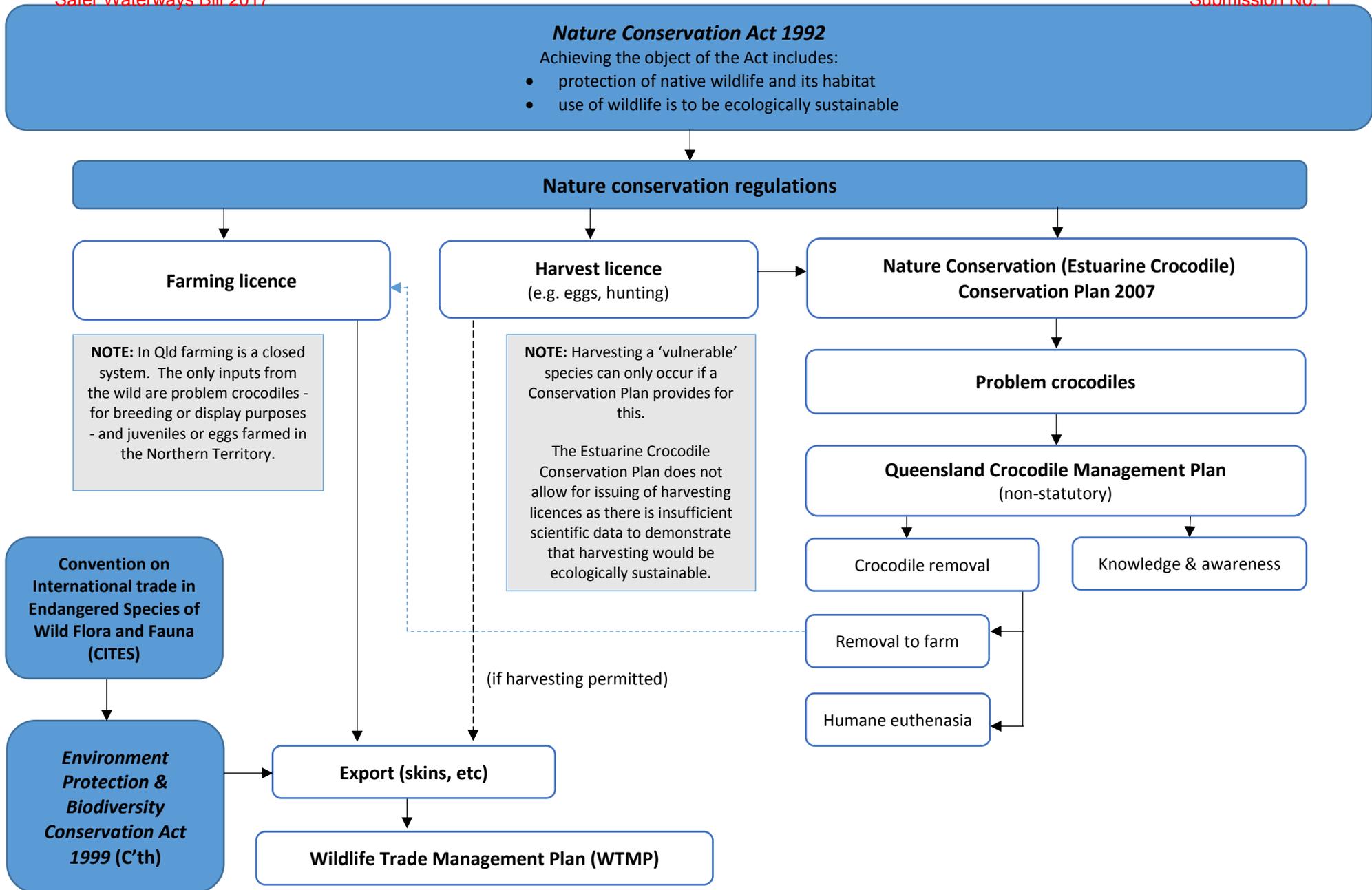


Figure 1: framework for crocodile management in Queensland

## Summary of core proposals

This section provides a high-level summary of the three core proposals that the Department of Environment and Heritage Protection has identified within the Bill. This includes a brief overview of the benefits and imitations of these proposals. Each of the limitations identified in this section is further addressed through the ‘detailed questions and concerns’ section of this submission.

All three of these proposals could be addressed through amendments to the *Nature Conservation Act 1992* and its subordinate legislation, rather than through this Bill. This is summarised in Attachment 1, which provides an overview of the proposals of the Bill, how they are currently addressed under the Nature Conservation Act, and how they could be addressed under the Nature Conservation Act.

### Queensland crocodile authority

Management of crocodiles will be undertaken by the ‘Queensland Crocodile Authority’. This will be a statutory body established under the Act.

### Benefits and limitations

Whilst establishment of the authority and board would provide for semi-independent oversight of crocodile management in Queensland, there are a number of limitations with the current proposal:

- arrangements for funding and resourcing for the authority are currently unclear;
- requiring staff to reside in Cairns will limit officers’ capacity to respond to crocodile sightings as staff currently are distributed throughout the range of crocodile habitat. There are also industrial relations implications in relation to mandating that staff reside in Cairns – despite the Bill declaring that it prevails over other legislation to the extent of any inconsistency;
- the terms for ending of a director’s or board member’s appointment are less robust than those for other statutory authorities and do not adequately address circumstances where a director may fail to meet their obligations under the Act.

### Possible alternative solution

It would be possible to establish a statutory authority for crocodile management through amendments to the *Nature Conservation Act 1992*.

Similarly, the role of the board could be delivered through establishing an advisory committee under section 132 of the *Nature Conservation Act 1992*, or via amendment to the Act to provide for a statutory board.

### Regulation (permits, licences and other authorities)

The Bill requires that the Minister must within 2 months of assent of the Bill, draft subordinate legislation to enable the Queensland Crocodile Authority to implement its objectives. This includes:

- providing appropriate licences, permits and other authorities under the *Nature Conservation Act 1992* to allow the culling, harvesting and farming of crocodiles;
- enabling the director to authorise a person to harvest eggs, kill or relocate rogue crocodiles, and to cull and/or manage other crocodiles; and
- regulating the keep and use of crocodile carcasses taken from the wild.

The Bill proposes that compliance and enforcement powers for the purpose of this Act will rest with the Queensland Police Service.

## Benefits and limitations

It is difficult to ascertain what benefits would be achieved from the Bill's proposed approach to authorities, as it appears that the authorities will be linked to those under the *Nature Conservation Act 1992*. Amendments to the *Nature Conservation Act 1992* and regulations will be required in order to establish the suite of authorities required. However, the exact relationship between the authorities proposed under the Bill and the *Nature Conservation Act 1992* requires clarification.

The proposal to allow members of the public to kill crocodiles may also compromise the existing crocodile farming industry. This is because the Commonwealth would need to agree to the proposed approach and a quota through the Queensland crocodile Wildlife Trade Management Plan (WTMP). The Commonwealth has previously rejected two similar proposals for members of the public to kill crocodiles (termed safari hunting) presented by the Northern Territory. Should the Commonwealth not agree to the proposed approach and the existing WTMP lapse, the farming industry cannot continue with export of any crocodile products until such time that a WTMP is agreed to.

As the Bill provides that it prevails over other legislation to the extent of any inconsistency, there are also concerns that activities undertaken by members of the public will not be held accountable to the standards for humane treatment of animals under the *Animal Care and Protection Act 2001*. Additionally, in order to satisfy the Commonwealth for the purpose of the Wildlife Trade Management Plan, compliance with the Australian code – Code of practice for the humane treatment of wild and farmed Australian crocodiles – would be required.

Further, it would be difficult to establish a suitable quota of crocodile and crocodile eggs to be harvested as there is no recent population data on Queensland's crocodiles. In the absence of this, it may be a challenge to demonstrate to the Commonwealth that the proposed approach is sustainable and in keeping with Australia's obligations under the Convention on International Trade in Endangered Species (CITES).

It is also unknown how an increase in quota may affect the viability of existing farms. An increase in the take of crocodiles and eggs from the wild could compromise the market value of farmed crocodile products should there be a surge in supply but not demand. Economic forecasting may be required to determine if this is a risk to the existing industry.

There are also details that remain unclear about the proposed approach, including:

- how the suite of proposed activities is intended to link to authorities under the *Nature Conservation Act 1992* and whether there is duplication in drafting of the proposed permitted activities
- what compliance and enforcement powers are intended to be exercised by the Queensland Police Service (QPS), how these relate to powers under the *Nature Conservation Act 1992* and why QPS is the preferred entity for the exercise of these powers
- whether sufficient regard has been given to whether members of the public can seek to manage crocodiles in watercourses that are unallocated state land
- whether increasing the potential scope of crocodile harvesting will trigger a 'controlled action' under the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999*.

## Possible alternative solutions

It would be possible to give effect to a revised permit and licencing framework for crocodile management through amendments to the Nature Conservation Regulations.

## Crocodile Reserves

The director has the power to declare and manage an area of land as a crocodile reserve for the purpose of protecting particular crocodiles in, or relocated to, the reserve. The declaration is conditional on persons who have an interest in the land providing consent.

The Bill does not provide any further detail about tenure protection mechanisms, or what activities will be permitted within a reserve.

## Benefits and limitations

It is not clear what the benefits or limitations are of establishing crocodile reserves as there is insufficient detail to determine the intent of these reserves, or the effect of creating such a reserve. For example, it is not clear:

- what resourcing would be made available to the authority to manage the reserves
- whether the reserves are intended to be:
  - a stand-alone tenure
  - binding on the landowner and any future successors in title
  - noted on title
  - subject to specific management requirements and management plans, and if so whether these need to be approved by the director of the authority
- whether declaration of a reserve could constitute a Future Act under the *Native Title Act 1993*
- what is the intended interpretation of 'interest in the land' (e.g. is it intended to cover registered interests, land subject to a lease, mining interest, geothermal tenure or GHG authority, land that is a forest entitlement area etc?)

Consequently, the Bill currently does not provide sufficient detail to allow for implementation of crocodile reserves.

## Possible alternative solution

It would be possible to provide for reserves for crocodile management through amendments to the *Nature Conservation Act 1992* and Nature Conservation Regulations.

## Fundamental legislative principles

Although the Honourable Member for Dalrymple, Mr Knuth, identified that there is no violation of fundamental legislative principles, there is the potential that the Bill is not consistent with the following fundamental legislative principles – that the Bill:

- makes rights and liberties, or obligations, dependent on administrative power only if the power is sufficiently defined and subject to appropriate review; and
- is unambiguous and drafted in a sufficiently clear and precise way.

Detail about the potential inconsistencies with these fundamental legislative principles is provided below.

## Rights and liberties

In the terms of appointment for the director in section 10, the Bill states that 'for matters not provided for under this Act, the person is appointed as a director on the terms of appointment decided by the Minister'. Similar wording is used in clause 17 in relation to board members.

However, as there is limited detail in the Bill about the terms of appointment, no clear requirement for the regulations to state these requirements and the Bill prevails over other legislation to the extent of an inconsistency, there is the potential that the Minister would have unrestricted power when it comes to the terms and conditions of appointments.

### Unambiguous drafting

Although the drafting has employed plain English, there are elements of the Bill that as currently drafted, may not be legally effective to achieve the desired policy outcomes. Further detail about these concerns is provided in a clause-by-clause analysis in the subsequent section 'The Bill's proposals'.

## The Bill's proposals

This section of the submission discusses the detail of a number of proposals in the Bill. It identifies:

- a number of detailed questions and concerns in relation to the intended operation of the Bill that, should it become an Act, will need to be resolved in order to ensure effective implementation; and
- alternative ways of achieving the objective, including through current legislation.

### Commencement within four months of assent (clause 2)

Should the Act commence four months after the day of assent, as proposed, the regulations and necessary amendments to the State's Wildlife Trade Management Plan (WTMP) will not be in effect. Consequently, while the Act will be in effect, there will not be sufficient power for the authority to allow the issuing of any permits or direct the removal of any crocodiles.

### Possible alternative solution

A possible solution is for the Act to commence by proclamation – allowing all regulatory and administrative arrangements to be in effect before commencement.

Alternatively, many of the key elements of the Bill could be delivered through the framework established under the Nature Conservation Act, as identified above and in Attachment 1.

### Overriding other legislation to the extent of an inconsistency (clause 4)

Clause 4 proposes that to the extent of an inconsistency, the Bill would prevail over any other legislation. However, this raises concerns for interactions with a number of pieces of legislation.

#### *Animal Care and Protection Act 2001*

It is arguable that allowing any person to take, kill, or cull a crocodile in the wild, as per clause 11, has the potential to result in practices that are inhumane. This may be in contravention of the minimum requirements for the responsible care and use of animals set out under the *Animal Care and Protection Act 2001*, administered by the Department of Agriculture and Fisheries.

This may also have implications for the Commonwealth's approval of a WTMP. This is because the Commonwealth Minister cannot approve a WTMP unless satisfied that the plan fulfils a series of requirements – including those pertaining to animal welfare. If the Act, and consequently a WTMP approved in the context of the Act, do not sufficiently address animal welfare, it is possible that the Commonwealth will not approve the export of crocodile products from Queensland.

### Possible alternative solution

A possible solution is that the Act not prevail over requirements of the *Animal Care and Protection Act 2001*.

### Weapons Act 1990

The Bill does not require that a person seeking an authority to shoot crocodiles be suitably authorised under the Weapons Act.

### Possible alternative solution

Do not allow any permits issued in accordance with the Act, to be inconsistent with weapons licencing requirements.

### Establishment of the Queensland Crocodile Authority (clause 5)

The Bill proposes that management of crocodiles will be undertaken by the 'Queensland Crocodile Authority', which will be established under the Act as a statutory body. Whilst establishment of the authority and board would provide for semi-independent oversight of crocodile management in Queensland, the arrangements for funding and resourcing the authority are currently unclear.

Should establishment and operation rely on current departmental allocations, as suggested by the explanatory notes, it will likely not provide any greater benefit for crocodile management than the status quo. This is because it is likely that there will be additional administrative and overhead costs associated with establishment and operation of the authority than the status quo. For example – there will likely be additional costs in order to establish an office for the Authority, establish and maintain administrative systems and procedures for the Authority, and potentially relocate staff who do not currently reside in Cairns (this is discussed further in relation to clause 6).

### Possible alternative solution

It would be possible to establish a statutory authority through amendments to the Nature Conservation Act, rather than through a stand-alone Act. Alternatively, the functions of the authority could be established in an advisory manner through the existing provisions for establishing advisory committees under section 132 of the Nature Conservation Act.

### Location of the Authority (clause 6)

Requiring staff of the authority to reside in Cairns will limit officers' capacity to respond to crocodile sightings, as staff currently are distributed throughout the range of crocodile habitat. There are also industrial relations implications in relation to mandating that staff reside in Cairns – particularly as the Bill declares that it prevails over other legislation to the extent of any inconsistency – as referred to earlier in this submission.

Further, it is not clear whether it is intended that the employees will be existing wildlife management staff undertaking this work – who will be required to move to Cairns – or whether their current jobs would be replaced by these positions.

In addition to this, should staff be required to reside in Cairns, there needs to be a clear definition of spatial scale for Cairns. For example, does this relate to the Cairns Regional Council boundary, the Cairns electorate, the Cairns statistical local area, or another boundary?

### Possible alternative solution

Remove the requirement for public servants employed by the Authority to reside in Cairns, and by implication, to work in Cairns.

### Appointment of director, terms and ending of appointment (clauses 9 and 10), Terms and ending of appointments (clause 17)

The Bill identifies that the director and board members will be appointed under this Act and that the director and board members may be appointed on the terms decided by the Minister. However, there is no detail for the relationship of the Authority or the terms of these appointments to the *Crime and Corruption Act 2001*, *Financial Accountability Act 2009*, *Statutory Bodies Financial Arrangements Act 1982*, or the *Corporations (Queensland) Act 1990*. For examples of how this has been addressed for other authorities and appointments in legislation, refer to the Queensland Racing Integrity Commission established under the *Racing Integrity Act 2016* or the Wet Tropics Management Authority under the *Wet Tropics World Heritage Protection and Management Act 1993*.

Further, as the Bill states that it will override other legislation to the extent of any inconsistency, there is a risk that the terms of appointment determined by the Minister could be legitimately inconsistent with these Acts.

### Possible alternative solution

Provide further detail about the relationship of the Authority, the terms of the director's and board members' appointments with the *Crime and Corruption Act 2001*, *Financial Accountability Act 2009*, *Statutory Bodies Financial Arrangements Act 1982*, and the *Corporations (Queensland) Act 1990*.

### Terms and ending of appointment (clauses 10 and 17)

#### Suitability of appointed persons

The provisions providing for the Minister to terminate the appointment of a director or board member do not sufficiently address all circumstances where a director or board member may no longer be suitable for the position. For example, similar provisions under the *Wet Tropics World Heritage Protection and Management Act 1993* also include where the person is neglectful of his/her duty, and where the person contravenes a provision of the Act without reasonable excuse.

### Possible alternative solution

Provide additional provisions to address circumstances where the director or board member is neglectful of duty or contravenes a provision of the Act without reasonable excuse.

### Terms and ending of appointment (clauses 10 and 17), conduct of meetings (clause 22)

It is not clear what requirements – if any – should be imposed on a director or board member should there be a real or perceived conflict of interest for the person in relation to a matter that the Authority is dealing with.

### Functions of the director (Clause 11)

The proposed functions of the director give rise to a number of questions about how these functions can be properly exercised. These are detailed in the below table.

Clause reference	Query
11(1) (b) and (d)	Has consideration been given to how the director can establish a suitable quota for eggs and crocodiles, having regard to obligations under CITES, when there is currently no clear population data for Queensland? Quotas will need to be included in a WTMP and provided for the Commonwealth's approval. Should the Commonwealth disagree with proposed quotas, the Commonwealth may not endorse the WTMP. If no WTMP is in effect at a point in time, it would shut-down the current farms and international market until such time that a WTMP is agreed to.
11(1)(h)	Many waterways in the State are 'unallocated state land' and thus do not fall within the tenures listed as suitable for the purpose of clause 11(h). Is it the intent that management of crocodiles in these waterways be undertaken in accordance with clause 11(i)?
11(1) (h) and (i)	<p>It is not clear how the powers to authorise the killing of crocodiles under clause 11(h) is different to the powers allowing the take of crocodile under 11(i).</p> <p>If (i) is allowing display, interaction, take, keep, and use of crocodiles (which includes allowing killing and other management of crocodiles) in any part of the State, what additional benefit is being provided by clause (h)?</p>
11(1) (e) and (i)	<p>Clause (e) allows the harvesting of eggs anywhere in the state, whilst clause (i) deals with all other aspects of the take, keep and use of crocodile eggs. However, under the Bill there is no definition of 'take' for the purpose of crocodile eggs. Is it the intent that take be considered to include harvest in relation to eggs, or that harvest and take are separate activities?</p> <p>If so, what benefit is there in having both clauses (e) and (i) if they are both achieving the same outcome?</p>
11(1) (h) and (i)	Where a person is authorised on non-freehold land could this constitute a future act for the purposes of the <i>Native Title Act 1993</i> ?
11(1) (h) and (i)	The Commonwealth has twice refused proposals by the Northern Territory Government to allow private citizens to kill crocodiles. The grounds for this refusal have included the potential for inhumane outcomes. What consideration has been given to mitigating the potential for actions to be inhumane – particularly given the Bill will override requirements of the Animal Care and Protection Act to the extent of any inconsistencies? Further, what consideration has been given to the likelihood of the Commonwealth agreeing to this proposal?
11(1) (j)	<p>Dealing with crocodiles 'as far as possible' is a test that may not always be practical to meet. What is the intended outcome of this requirement?</p> <p><i>A possible alternative solution</i> is to allow the crocodile to be dealt with 'as far as practicable'.</p>
11(1) (k)	Whilst offences will likely be identified in the Regulations, what offences will the police deal with, and how will these interact with the offence provisions under the Nature Conservation Act – which is the Act that the Bill intends will be the mechanism for issuing licences, permits and other authorities?
11(2)	<p>How does this provision – related to the risk of extinction – align with:</p> <ul style="list-style-type: none"> <li>the explanatory notes' statement that the aim of the Bill includes 'protecting crocodiles from becoming endangered as a species';</li> </ul>

	<ul style="list-style-type: none"> <li>obligations under the EPBC Act for crocodiles as a listed migratory species (i.e. a person must not take an action that has, will have, or is likely to have, a significant impact on the species); and</li> <li>obligations under CITES that trade will not be detrimental to the survival of the species in the wild?</li> </ul>
11 generally	Has consideration been given to the likelihood of allowing wider-spread killing of crocodiles and harvesting of eggs to trigger a 'controlled action' for the species' status as a migratory species under the EPBC Act? Or, is it envisioned that this will be the responsibility for each prospective applicant to consider and self-refer to the Commonwealth if required?
11 generally	Has consideration been given to the likelihood of killing and egg harvesting occurring on State land constituting a future act under the <i>Native Title Act 1993</i> , or is it envisioned that this will be the responsibility for each prospective authority holder to consider and address as required?

### Annual report (clause 23) and quarterly reports (clause 24)

Under these clauses, the authority needs to report on the number and location of eggs harvested at the time of the report, whilst reporting for all other matters is linked to the particular year or quarter.

In practice, this could be difficult to achieve, as there would be timeframe lags between the data at the time of writing the report and data at the time the report is approved and made available.

#### Possible alternative solution

Align reporting timeframes for egg harvesting with all other matters (i.e. for the quarter or year).

### Implementing action to achieve policy objectives (Clause 27)

#### Tabling of the subordinate legislation

The requirement to table subordinate legislation within two months from assent is insufficient time for a draft regulation to be prepared.

Firstly, the regulation cannot be drafted until such time as the Act is assented, as it provides the head of power for the regulation to be made.

Secondly, the standard Government approval processes for significant subordinate legislation to be prepared and subject to approvals is greater than two months. This is because following the requirements of the 'Queensland Government Guide to Better Regulation' for public engagement and consultation, as well as drafting, and then approvals processes can take at least six months – longer if a Regulatory Impact Statement is required.

Further, if consideration needs to be given to complex policy matters – such as linkages with the Native Title Act, or with land title requirements for crocodile reserves, this will take time to resolve.

Consequently, the two month period is not sufficient to allow compliance with the 'Guide to Better Regulation' and to follow drafting and approval processes.

#### Possible alternative solution

That the requirement for the subordinate legislation be tabled within two months of assent be removed, or at least altered to twelve months from date of assent.

### Detailed requirements for the subordinate legislation

The proposed requirements of the subordinate legislation, as detailed in subsection (2), give rise to a number of questions requiring clarification in order to ensure that the regulations can be properly drafted and effectively implemented. These are detailed in the below table.

Clause reference	Query
27(2)	How are the authorities under sub-clause (2)(b), (c), (f), and (g) different to permits that may be issued under sub-clause (2)(a) and what offence provisions should be relevant to these authorities?
27(2)(e)	<p>There is a risk that despite best efforts, a rogue crocodile may evade killing or relocation. If this occurs, there will be non-compliance with this provision.</p> <p><i>A possible alternative solution</i> is to amend the provision to ensure that even where best efforts are undertaken to ensure a rogue crocodile is dealt with, there is no non-compliance with the Act should the crocodile evade killing or relocation.</p>
27(2)(e)(ii)(B)	<p>This clause limits the ability of any farms that have a licence in effect before the Act commences to take on a relocated crocodile, as their licences would not be issued by the director of the authority. This creates an arbitrary and unfair restriction on these farms, should they wish to take on one of these animals.</p> <p><i>A possible alternative solution</i> is to remove the restriction on farms with licences in effect before the Act commences, thus allowing them to take on relocated crocodiles.</p>
27(2) (f) and (g)	It is unclear, other than some tenure variations, what the intent is for these dual provisions that appear to address the same issue.
27(2)(h)	<p>Killing by shooting or harpooning can, in some circumstances, be an inhumane outcome.</p> <p><i>A possible alternative solution</i> is that the Act, or the Regulation provisions should ensure that the activity is undertaken humanely, and in accordance with the Australian Government's 'Code of Practice for the humane treatment of wild and farmed Australian crocodiles'.</p>
27(2)(i)	<p>Ensuring the carcass is used so that 'as far as possible' no part is wasted is a test that may not always be practical to meet.</p> <p><i>A possible alternative solution</i> is to amend this to 'as far as practicable'.</p>
27(2)(j)	<p>There is a risk that the proposed approach to limiting foreign ownership is inconsistent with Free Trade Agreement commitments to the national treatment of foreign investment. Is this the intent of this provision?</p> <p><i>It is recommended</i> that advice be sought from Trade and Investment Queensland or the Commonwealth Department of Foreign Affairs and Trade to ensure that the Bill is not inconsistent with these requirements.</p>
27(2)(j)	There is a risk that the proposed approach to limiting foreign ownership of farms will jeopardise market competition and attractiveness in Queensland, given the lack of such restrictions in the Northern Territory.
27(2)(j)	There is a risk that the proposed approach to limiting foreign ownership of farms will unfairly bias the market towards those farms that already have a level of foreign ownership relative to Australian-owned farms.

There are also details in the Bill that require the subordinate legislation to address, but which are not included in clause 27, as follows:

Clause reference	Query
11(1)(i)	Whilst clause 11(1)(i) provides that the director may allow authorities to be granted to take crocodiles, there is no corresponding requirement for a permit to take to be included in the draft regulation. Is it intended that 'take' will be addressed through linkage to authorities under the <i>Nature Conservation Act 1992</i> as per 27(2)(a)? If so, how does this authority vary from authorities to kill under 27(2)(c), (f) and (g)?
11(1)(i)	Whilst clause 11(1)(i) provides that the director may allow authorities to be granted to display, interact with, keep, or use crocodiles, there is no corresponding requirement for such authorities to be included in the draft regulation. Is it intended that these will be addressed through linkage to authorities under the <i>Nature Conservation Act 1992</i> as per 27(2)(a)?
Definition of 'take'	<p>It is unclear how general authorities to take crocodiles (e.g. under section 11(1)(i)) align with authorities to kill crocodiles as per the regulation requirements in section 27(2)(h).</p> <p>For example, as per section 27(2)(h) an 'authority to kill' a rogue crocodile can only occur by harpoon or shooting, however should an 'authority to take' be issued the animal may be killed or wounded by other mechanisms as per the broad definition of 'take' – some of which may be inhumane.</p>

## Schedule 1

Throughout the Bill references are made to the 'department', but which department is not clarified or defined.

### Possible alternative solution

Suggest a definition be added referring to the department administering the wildlife management requirements of the *Nature Conservation Act 1992*.

## Attachment 1

Element	Safer Waterways Bill 2017	Nature Conservation framework	
		Current	Possible amendments
Establishment of statutory body to manage crocodiles	Establishment of the Queensland Crocodile Authority.  Director is to be appointed by the Legislative Assembly.	Not applicable	Could be achieved via amendment to the NC Act.
Establishment of statutory advisory committee to manage crocodiles	Board supporting the Qld Crocodile Authority provides advice on crocodile management.  Board is to be appointed by the Legislative Assembly.	Not applicable	Could be achieved via amendment to the NC Act.  Alternative could be establishing a non-statutory advisory committee – similar to the Species Technical Committee – under section 132 of the NC Act
Removal of rogue crocodiles	The Authority is responsible for removal of all rogue crocodiles	EHP is responsible for removal of all problem crocodiles – which is defined the same as rogue crocodiles	Nil required, except for possible name change to ‘rogue crocodile’ under the Conservation Plan.
Allowing the take, keep and use of crocodiles on private land (including killing and hunting)	Landholders, people authorised by a landholder, and anybody generally can seek a permit for this.  Authorities will be authorities under the NC Act or another Act prescribed by regulation. This will require amendments to authorities under the regulations and an amended WTMP.	Currently only permitted if undertaken by an authorised officer.	This will require amendments to authorities under the regulations and an amended WTMP.

Element	Safer Waterways Bill 2017	Nature Conservation framework	
		Current	Possible amendments
Allowing the harvest, keep and use of crocodile eggs on private land	<p>Landholders, people authorised by a landholder, and anybody generally can seek a permit for this.</p> <p>Authorities will be authorities under the NC Act or another Act prescribed by regulation. This will require amendments to authorities under the regulations and an amended WTMP.</p>	Currently not permitted.	This will require amendments to authorities under the regulations and an amended WTMP.
Allowing the take, keep and use of crocodiles on State land (including killing and hunting)	<p>Anybody can seek a permit for this. <i>(Note: Multiple provisions seem to address this)</i></p> <p>Authorities will be authorities under the NC Act or another Act prescribed by regulation. This will require amendments to authorities under the regulations and an amended WTMP.</p> <p>Consideration may need to be given to biodiscovery requirements and whether this is a Future Act under the Native Title Act.</p>	Currently only permitted if undertaken by an authorised officer.	<p>This will require amendments to authorities under the regulations and an amended WTMP.</p> <p>Consideration may need to be given to biodiscovery requirements and whether this is a Future Act under the Native Title Act.</p>
Allowing the harvest, keep and use of crocodile eggs on State land	<p>Anybody can seek a permit for this. <i>(Note: Multiple provisions seem to address this)</i></p> <p>Authorities will be authorities under the NC Act or another Act prescribed by regulation. This will require</p>	Currently not permitted.	<p>This will require amendments to authorities under the regulations and an amended WTMP.</p> <p>Consideration may need to be given to biodiscovery requirements and whether this is a Future Act under the Native Title Act.</p>

Element	Safer Waterways Bill 2017	Nature Conservation framework	
		Current	Possible amendments
	<p>amendments to authorities under the regulations and an amended WTMP.</p> <p>Consideration may need to be given to biodiscovery requirements and whether this is a Future Act under the Native Title Act.</p>		
Ensure carcasses are not wasted	All killed crocodiles need to be used to the greatest extent possible.	This is not a requirement.	Amendments could be made to the Conservation Plan if required.
Ensure all suspected offences are followed up	Authority to refer these to the Qld Police Service	Offences are established under the NC Act and Regulations. Powers rest with EHP conservation officers and Qld Police Service officers can be appointed as conservation officers under the Act.	Further offences could be added if required.
Research and routine surveying of crocodile populations and distribution, including eggs	Authority is required to ensure this occurs	Program has commenced	Nil required
Establish 'managed crocodile reserves'	<p>Authority can establish and manage crocodile reserves.</p> <p>However, further information is required on the function and purpose of these – for instance whether there is a need for it to be on title, if it is binding on landholders, what management requirements may need to be established under Regulations, and if on State land if there are biodiscovery requirements</p>	This is not a requirement.	<p>Amendments could be made to facilitate establishment of such reserves.</p> <p>However, further information is required on the function and purpose of these – for instance whether there is a need for it to be on title, if it is binding on landholders, and what management requirements may need to be established under</p>

Element	Safer Waterways Bill 2017	Nature Conservation framework	
		Current	Possible amendments
	and whether this is a Future Act under the Native Title Act.		Regulations, and if on State land if there are biodiscovery requirements and whether this is a Future Act under the Native Title Act.
Promote economic benefits of farming and egg harvesting	Authority is required to ensure this occurs.	This does not occur as egg harvesting is currently not permitted.	This can be achieved through non-statutory education and media campaigns, once egg harvesting is permitted.
The take and killing of crocodiles must be humane	<p>This may not be required, as the Act prevails over any inconsistencies that there may be with other legislation (such as the Animal Care and Protection Act).</p> <p>This could be achieved through the Regulations requiring compliance with the Australian Crocodile Code – which will also be required for an amended WTMP.</p>	This is currently required through the Conservation Plan and Codes of Practice.	Nil required.
Quarterly and annual reporting on crocodiles remove from the wild, attacks, number of eggs harvested, licences issued, etc	Authority is required to ensure this occurs	Some reporting already occurs on attacks and permits issued.	Reporting could be amended to align with the Bill's proposal. Resourcing implications for permit holders and EHP staff may need to be investigated.

## Reference end notes

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