Wildlife Trade Management Plan – Queensland Crocodile Farming

1 January 2014 – 31 December 2017



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1. Introduction

The Wildlife Trade Management Plan – Queensland Crocodile Farming 2014-2017 is supplementary to and should be read in conjunction with the *Nature Conservation (Estuarine Crocodiles) Conservation Plan 2007 and the Management Program 2007-2017* and Saltwater Crocodile Management Plans for the Cairns, Cassowary Coast, Hinchinbrook and Townsville areas.

Queensland's licensing regime for crocodiles was covered by a captive breeding program, approved under the requirements of the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). A captive breeding program approval is restricted to regulated international trade of crocodiles bred in captivity and:

- a) is maintained without relying on augmentation of crocodiles from the wild (subject to the exceptions outlined below);
- b) is managed to reliably produce second-generation offspring;
- c) has a perimeter boundary that is designed and managed to prevent the unintended entry, departure, introduction or removal of crocodiles.

Wild crocodiles can only be introduced into a captive breeding operation if they have been removed from the wild to ensure ongoing genetic viability or to dispose of animals that have been confiscated, seized rescued or removed from the wild for public health and safety.

As highlighted in point (a) above, not all crocodile stock currently held and traded within Queensland under existing licences have been sourced from a 'closed cycle' captive breeding operation. The *Nature Conservation Act 1992* (NCA) and subordinate state legislation provides for the interstate trade in live crocodiles and crocodile products. Whilst the trade is regulated, the practice does result in live crocodiles and/or crocodile products entering Queensland (and subsequently being commercially used) that may have been sourced from legitimate wild harvest or ranching activities in the Northern Territory or Western Australia¹ under approved

¹ There is no requirement under the NCA requiring the crocodile industry to isolate stock bred in captivity from stock acquired interstate and therefore it is unlikely that the industry has a transparent

Commonwealth wildlife trade management plans pursuant to Section 303FO of the EPBC Act. Approval of this management plan as a wildlife trade management plan replaces the captive breeding approval of the Queensland licensing regime.

This Wildlife Trade Management Plan (herein referred to as the plan) does not provide a framework for the management of all crocodiles in Queensland, however it augments the existing state and commonwealth statutory requirements relating to farmed crocodiles as protected wildlife in recognising the movement of legitimately harvested and ranched crocodiles from other Australian states and territories into Queensland. The Wildlife Trade Management Plan – Queensland Crocodile Farming 2014 -2017 as an Appendix to the *Nature Conservation (Estuarine Crocodiles) Conservation Plan 2007 and the Management Program 2007-2017*, satisfies the regulation of the export and import of wildlife and wildlife products under Part 13A, Section 303FO of the EPBC Act.

2. Goals and Objectives

The goal of the plan is to augment the Queensland *Nature Conservation (Estuarine Crocodile) Conservation Plan 2007 and Management Program 2007-2017* by recognising that crocodile farming in Queensland was traditionally a 'closed cycle' captive industry but now incorporates provision for the legitimate use of harvested and ranched crocodiles sourced from the Northern Territory and/or Western Australia as part of the Queensland crocodile farming industry².

The specific objectives of the plan are that:

 Farming of estuarine crocodiles in Queensland does not negatively impact on the conservation of estuarine crocodiles in the wild in Queensland.

mechanism available to differentiate captive bred animals from those that may have been potentially harvested from the wild interstate.

² There is currently a study in the Pormpuraaw area of Cape York Peninsula being conducted under a scientific purposes permit investigating the viability of a commercial harvest which allows limited introduction of wild harvested crocodile eggs into the local crocodile farm industry in accordance with the *Cape York Peninsula Heritage Act 2007*. Any trade in these crocodiles and crocodile products will be dealt with under a separate Wildlife Trade Operation.

- 2. Queensland's crocodile farming industry complies with the *Code of Practice for the humane treatment of wild and farmed Australian crocodiles* and has a strategic compliance program.
- 3. Queensland's crocodile farming industry complies with this Wildlife
 Trade Management Plan and the provisions of the NCA and the *Nature*Conservation (Estuarine Crocodiles) Conservation Plan 2007 and the
 Management Program 2007-2017.

3. Legislative Framework

3.1 International

Australia is a signatory to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Populations of both the Australian freshwater crocodile (*Crocodylus johnstoni*) and the Australian estuarine crocodile (*Crocodylus porosus*) are listed in CITES Appendix II, which includes species not necessarily threatened with extinction, but in which trade must be controlled in order to avoid utilisation incompatible with their survival. The CITES Appendix II listing requires any international trade of the abovementioned species to be regulated through the issue of appropriate documentation such as CITES import or export permits. An export permit may be issued only if it has been determined that the specimen was legally obtained and the export will not be detrimental to the survival of the species as prescribed under Section 303CG of the EPBC Act.

Countries that are a party to CITES have also agreed to accept export and re-export permits or other applicable CITES certificates for trade in crocodilian skins and parts only if they are tagged in accordance with a tagging system that complies with the provisions of CITES Resolution Conference 11.12 or any subsequent revisions to the resolution as they occur during the term of the plan.

Each skin must bear an Australian CITES Management Authority tag on export from Australia. CITES tags are sourced from the Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC) and are distributed by the Department of Environment and Heritage Protection (EHP) to licensed

crocodile farms and meat processing premises. These tags bear Commonwealth export marks in compliance with the requirements of CITES.

3.2 Commonwealth

The Commonwealth Minister responsible for the Environment has responsibility for the Management Authority responsible for the issue of export and re-export permits.

It is a requirement of the EPBC Act Part 13A, Section 303CH, that the proposed export of a CITES Appendix II specimen is exported in accordance with an approved wildlife trade management plan.

The Commonwealth Minister responsible for the Environment may declare a Wildlife Trade Management Plan only if satisfied that:

- the plan is consistent with the objects of Part 13A of the EPBC Act; and
- there has been an assessment of the environmental impact of the activities covered by the plan, including (but not limited to) an assessment of:
 - o the status of the species to which the plan relates in the wild; and
 - o the extent of the habitat of the species to which the plan relates; and
 - o the threats to the species to which the plan relates; and
 - the impacts of the activities covered by the plan on the habitat or relevant ecosystems.
- the plan includes management controls directed towards ensuring that the impacts of the activities covered by the plan on:
 - o a taxon to which the plan relates; and
 - o any taxa that may be affected by activities covered by the plan;
 - any relevant ecosystem (for example, impacts on habitat or biodiversity); and
 - o are ecologically sustainable.
- the activities covered by the plan will not be detrimental to:
 - o the survival of a taxon to which the plan relates; or
 - o the conservation status of a taxon to which the plan relates; or
 - any relevant ecosystem (for example, detriment to habitat or biodiversity).

- the plan includes measures to:
 - mitigate and/or minimise the environmental impact of the activities covered by the plan; and
 - monitor the environmental impact of the activities covered by the plan;
 and
 - respond to changes in the environmental impact of the activities covered by the plan.

DSEWPaC was also responsible for the development of the *Code of Practice on the Humane Treatment of Wild and Farmed Australian Crocodiles* (the National Code), endorsed by the then Natural Resource Management Ministerial Council (NRMMC) on 21 May 2009.

3.3 State

The Queensland Government, through EHP, administers legislation relevant to nature conservation and crocodiles. The relevant state legislation and statutory instruments include the:

- Nature Conservation Act 1992
- Nature Conservation (Wildlife Management) Regulation 2006
- Nature Conservation (Administration) Regulation 2006
- Nature Conservation (Wildlife) Regulation 2006
- Nature Conservation (Estuarine Crocodile) Conservation Plan 2007
- Code of Practice of the Australasian Regional Association of Zoological Parks and Aquaria Queensland, Part E, 'Australian Crocodiles and American Alligators' (NCA 1992)
- Code of Practice for Crocodile Farming (NCA 1992)
- Code of Practice for the taking, handling and transportation of crocodiles (NCA 1992)
- Cape York Peninsula Heritage Act 2007

The Queensland Government, through the Department of Agriculture, Fisheries and Forestry (DAFF), administers the *Animal Care and Protection Act 2001* as the state legislation relevant to animal welfare.

EHP monitors compliance with the NCA, and as a function of considering an application to renew a licence, is obligated to consider compliance with any relevant Australian or international code, instrument, protocol or standard or any relevant intergovernmental agreement. Animal welfare issues related to crocodile farming fall under the NCA in the *Code of Practice for Crocodile Farming* and the *Code of Practice for the taking, handling and transportation of crocodiles* (NCA Codes); and under the *Animal Care and Protection Act 2001* in the *Code of Practice on the Humane Treatment of Wild and Farmed Australian crocodiles* (the National Code). The *Animal Care and Protection Act 2001* falls under the responsibility of DAFF. The standards for animal welfare prescribed in the NCA Codes are more stringent than the National Code. EHP monitors compliance with the NCA Codes, which therefore encompasses requirements under the National Code.

Crocodiles in Queensland are protected wildlife and cannot be taken, kept or used without an appropriate authority. The type of authority is specific to the activity. Crocodile farming and/or processing is subject to the issue of either a Wildlife Farming licence or a Commercial Wildlife licence. Currently, there is no take from the wild in Queensland other than the removal of crocodiles for public health or safety. However, it should be noted that the *Cape York Peninsula Heritage Act* 2007 (CYPHA) allows Indigenous people to take, keep and use estuarine crocodile eggs under a scientific purposes permit³. Harvesting of crocodile eggs from the wild is not currently approved in Queensland and hence is not relevant to this management plan.

Disposal of live crocodiles by sale to other licensed farms or zoos within or between states is subject to the provisions of a wildlife movement advice or wildlife movement permit issued under the NCA, as is the movement of meat or carcasses. Live crocodiles are defined as whole living animals of any age or size class demographic including eggs. Skin products that have been processed and have been appropriately tagged and are accompanied with appropriate Australian CITES export permits do not

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³ There is currently a study in the Porpuraaw area of Cape York Peninsula being conducted under a scientific purposes permit investigating the viability of a commercial harvest which allows limited introduction of wild harvested crocodile eggs into the local crocodile farm industry in accordance with the *Cape York Peninsula Heritage Act 2007*. Any trade in these crocodiles and crocodile products will be dealt with under a separate Wildlife Trade Operation

require a wildlife movement advice or wildlife movement permit issued under the NCA.

4. Species Conservation Status

The freshwater crocodile (*Crocodylus johnstoni*) is listed as a Schedule 6 Least Concern reptile under the NCA, which is a reptile indigenous to Australia, other than a reptile that is extinct in the wild, endangered, vulnerable or near threatened wildlife. The estuarine crocodile (*Crocodylus porosus*) is listed as a Schedule 3 Vulnerable reptile under the NCA.

The Australian Government lists both the freshwater crocodile and the estuarine crocodile as a Marine species under Division 4, Subdivision A, Section 248 of the EPBC Act and as a Migratory species listed under the provisions of Division 2, Subdivision A, Section 209 of the EPBC Act. The Migratory species listing offers both crocodile species national protection as Matters of National Environmental Significance under the EPBC Act independent of any individual State regulated take and use of the species. This means that under the EPBC Act an action will require approval from the federal minister if the action has, will have, or is likely to have, a significant impact on a matter of national environmental significance. More information on significant impacts on matters of national environmental significance can be found at http://www.environment.gov.au/epbc/publications/nes-guidelines.html

5. Threats and Impacts

Crocodiles are representative of a group of animals which are under threat from illicit harvesting and habitat degradation throughout much of its range world-wide. Its listing as 'Vulnerable' under the NCA means that estuarine crocodiles (hereafter referred to as crocodiles) are vulnerable to extinction in Queensland if threatening processes continue. Current processes that threaten crocodiles in Queensland include (see Fukuda et al. 2007; Messel and Vorlicek, 1986; Read et al. 2004):

- urban, rural residential and agricultural development;
- clearing of riparian vegetation;
- feral pest predation and weed incursions into nesting habitat;

- deliberate killing, such as by illegal shooting;
- accidental mortality from commercial and recreational fish netting in estuaries;
- disturbance by motor boats.

A lack of suitable nesting habitat has been identified as a primary factor limiting the recovery of crocodile populations in Queensland (Read et al. 2004). Rehabilitation or restoration of degraded habitats (including control of feral animals and weeds), and prevention of clearing of riparian habitats, is important to restore, enhance or maintain existing nesting habitat.

The effects of climate change will also have implications for habitat protection. Potential impacts include increased egg mortality from storm surges/flooding, changes in sex ratio arising from temperature changes in nesting areas and changes in distribution and/or range. Drought can have a significant but not long-lasting impact on crocodile populations unless coupled with other factors. Heavy rainfall and subsequent flooding, particularly associated with cyclones can cause localised egg and juvenile mortality (Webb and Smith 1987).

Crocodile farming in Queensland has no impact on Queensland wild populations with no ranching (i.e. the taking of eggs or crocodiles from the wild and being grown or used for commercial purposes) of eggs or juveniles occurring at present within Queensland. However, ranching of crocodiles/eggs sourced from farms interstate, where harvesting is ecologically sustainable, and complies with an approved Commonwealth wildlife trade management plan pursuant to Section 303FO of the EPBC Act, does occur.

A limited number of crocodiles that have been taken from the wild for public heath and safety are also introduced into farming operations.

6. Take from the Wild in Queensland

A total of 1,768 crocodiles (including 1,008 eggs) were collected in the wild in the 1970s to establish breeding stock in the first three crocodile farms established in Queensland. Thereafter, no additional crocodiles have been removed from the wild in Queensland specifically to stock farms.

Unlike the Northern Territory and Western Australia, the Queensland Government does not have an approved program for the wild harvest or ranching of crocodiles.

There is currently no take from the wild in Queensland except for crocodiles that pose a public heath or safety risk (refer Section 3.3 above).

A crocodile that poses a public health or safety risk is an estuarine crocodile that:

- is found in zone 1 or zone 2 as defined in a Saltwater Crocodile Management Plan;
- has attacked or is about to attack or is behaving aggressively towards a person;
- is determined by EHP to pose a potential threat to human safety or wellbeing because of the crocodiles location or behaviour;
- has passed a crocodile prevention barrier and has attacked or is about to attack
 or is behaving aggressively towards stock, working dogs or agricultural
 fisheries resources.

Note that in Zone 1 areas the objective is to prevent crocodiles from entering the zone and remove all saltwater crocodiles that enter. Physical barriers (weirs, rock walls) are required between the zone and any known populations of saltwater crocodiles. These zones may only be in place for part of the year (for example the dry season).

Management approaches reduce the risk of crocodile attacks but can never guarantee 100% safety in natural waters. At present there is only one designated seasonal zone 1 area.

In zone 2 areas the objective is to remove any saltwater crocodiles 2 metres (m) or greater in length or a crocodile of any length that displays aggressive behaviour once a sighting is confirmed. At any given point in time, this zone may have undetected large crocodiles in it or large crocodiles that have been sighted but have not yet been removed. This zone has 4 main types of areas included in it i.e. open coastal waters

and their associated beaches, inland waters, designated urban areas and around boat ramps. In open coastal waters it is not practical to capture animals and the removal technique is generally to encourage their movement out of the zone. This zone focus is on urban and high use areas.

Crocodiles that are removed from the wild are transferred to commercial crocodile farms and zoological institutions or may be euthanized. These crocodiles are not returned to the wild. The *Nature Conservation (Estuarine Crocodiles) Conservation Plan 2007 and the Management Program 2007-2017* provides for up to 75 animals per year to be removed from the wild under this program, however, historical data indicates that an average of only 12 animals are removed from the wild each year (Table 1).

Table 1. Number of estuarine crocodiles removed from the wild per year in Queensland between 1998 and 2012.

Year	Number of crocodiles
2012	7
2011	12
2010	6
2009	11
2008	7
2007	12
2006	7
2005	13
2004	16
2003	10
2002	22
2001	19
2000	19
1999	12
1998	5

7. CITES Tags

CITES tags are sourced from DSEWPaC and distributed by EHP to licensed crocodile farms and meat processing premises. Each skin must be tagged as soon as practicable after removal from the crocodile carcass. The tag must remain attached whether the skin is in an unprocessed or tanned state (that is the tag must remain attached during and after the tanning process). Skins must be tagged in accordance with a tagging system that complies with the provisions of CITES Resolution Conference 11.12 or any subsequent revisions to the resolution as they occur during the term of the plan.

8. Permits

8.1 Wildlife Movement Advices and Permits

The disposal of live crocodiles by sale to and from licensed farms or zoos is subject to the provisions of a wildlife movement advice or wildlife movement permit issued under the NCA.

The movement of a appropriately tagged whole skin into, within or out of Queensland requires a wildlife movement permit or wildlife movement advice issued under the NCA unless accompanied with a CITES export permit issued by the Australian CITES Management Authority.

Movements of carcasses and meat intrastate or interstate must only occur in accordance with a wildlife movement permit or wildlife movement advice issued under the NCA.

8.2 CITES Export Permits

A CITES export permit, or appropriate authority, issued by DSEWPaC is required to legally export crocodilian specimens. Any commercial shipment of tagged skins or other natural crocodile products or derivatives (e.g. teeth, skulls) that are destined for export from Australia must be authorised with an Australian CITES export permit, which may be issued by the Commonwealth on application. A whole tagged skin that is accompanied with an Australian CITES export permit from the CITES Management Authority of Australia does not require a wildlife movement permit. The export permit should be retained by the owner of the crocodile product as proof of its

legal acquisition. A permit is not needed to legally export or import up to four manufactured crocodilian products worn on the person or carried in accompanied baggage for personal purposes. However, to help with customs clearances the CITES Management Authority of Australia has instituted personal baggage permits.

Further information on export requirements and how to apply for permits can be found at: http://www.environment.gov.au/biodiversity/wildlife-trade/index.html.

9. Compliance, Monitoring and Reporting

Section 88 of the NCA restricts the taking of estuarine crocodiles. A person must not take, use or keep an estuarine crocodile other than under a conservation plan applicable to the animal, or a licence, permit or other authority issued or given under a regulation, or an exemption under a regulation. An estuarine crocodile that occurs within protected estate (National Park, Conservation Park etc.) is further protected by the provisions of Section 62 of the NCA whereby a person, other than an authorised person, must not take, use, keep or interfere with a cultural or natural resource of a Protected area.

Any breach of the NCA or its subordinate legislation will be considered in the context of the EHP enforcement guidelines. The enforcement guidelines are readily available on the EHP web site. EHP has a wide range of enforcement measures available to it and each piece of legislation has its own suite of enforcement measures, but generally they consist of the following:

- encouraging voluntary compliance through education and self regulation;
- strategic compliance audits and site impact programs;
- working with other agencies;
- verbal warnings and warning letters;
- infringement notices;
- administrative and court orders to stop an activity or to take action to remedy a breach;
- cancellation, suspension or amendment of a licence, lease or other permits; and
- prosecution.

The holder of a Wildlife Farming Licence or a Commercial Wildlife Licence for processing crocodile product must maintain records in an approved form (that is a EHP record book or record and return book; or an electronic record system approved by EHP) and submit annual return data to EHP in an approved form (that is a EHP return of operations form).

To monitor compliance with the NCA and relevant legislation EHP will undertake the following:

- implement an annual program of targeted site inspections to audit farm stock,
 processed products and facility infrastructure;
- co-ordinate site inspections with DAFF in relation to animal welfare compliance;
- monitor and report on the movement of live crocodiles into and out of the state
 using movement advices required under the *Nature Conservation (Wildlife Management) Regulation 2006 (section 24)* and investigate any anomalies in
 unusual live crocodile movements.
- o investigate any alleged breaches of the NCA in relation to the commercial take, keep and use of crocodiles in Queensland.
- o regularly liaise with the Western Australian and Northern Territory governments to improve the detection of non-compliance.
- ensure the assessment and approval of new applications for wildlife farming licences are subject to the proponent complying with the *Code of Practice for Crocodile Farming* under NCA.

The Queensland Government has an approved *Nature Conservation (Estuarine Crocodile) Conservation Plan and Management Program (2007-2017)* which is subordinate legislation under the *Nature Conservation Act 1992*. The current plan (Wildlife Trade Management Plan) is an addition to the above to address international trade in crocodiles. EHP measures compliance with the *Nature Conservation (Estuarine Crocodile) Conservation Plan and Management Program (2007-2017)*.

EHP will submit a report to DSEWPaC each year the plan is in operation. The report will be based on the previous calendar year and will be submitted by 30 June in the succeeding year. The report will provide a summary of:

- the number of crocodiles removed from the wild for public health and safety and details of the fate of each crocodile
- the number of live crocodiles imported into the State; and
- industry compliance statistics including:
 - o number of premises inspected;
 - number of offences and type detected, and any enforcement action undertaken; and
 - o any joint enforcement undertaken with other agencies.

EHP will review the plan no later than 12 months prior to the expiry of this plan to assess its success in meeting its goals and objectives. The success of the plan to meet its goals and objectives will be assessed against performance indicators.

EHP does not report on crocodile products imported into Queensland. This is undertaken by other agencies. Information on crocodiles removed from the wild is reported daily on EHP's web site. Crocodile sightings are updated weekly through EHP's 'CrocWatch' program.

Performance Indicators

- 1. The assessment and approval of new applications for wildlife farming licences are subject to the proponent complying with the *Code of Practice* for *Crocodile Farming* under NCA.
- 2. The requirements of the *Code of Practice on the Humane Treatment of Wild and Farmed Australian Crocodiles* (the National Code) is a condition on all licences.
- 3. A copy of the National Code is distributed to all new licence holders.
- 4. There is an annual program of targeted site inspections to audit farm stock, processed products and facility infrastructure in place.
- 5. Site inspections, coordinated with DAFF, are undertaken in relation to animal welfare compliance as necessary.
- 6. Appropriate action on any suspected breaches of the NCA Codes is undertaken. Note: the matter will be referred to the relevant authority to ensure action is taken under the *Animal Care and Protection Act 2001* if appropriate.
- 7. The movement of live crocodiles into and out of the state is monitored and reported. Anomalies in unusual live crocodile movements are investigated.
- 8. All alleged breaches of the NCA in relation to the commercial take, keep and use of crocodiles in Queensland are investigated.
- 9. Liaison is undertaken on a strategic basis with the Western Australian and Northern Territory governments to improve the detection of non-compliance.
- 10. An annual report is submitted to the Australian Government by 30 June each year.
- 11. The Wildlife Trade Management Plan is reviewed by 31 December 2016.

10. Conditions

The Wildlife Trade Management Plan - Queensland Crocodile Farming 1 January 2014 – 31 December 2017 is an Approved Wildlife Trade Management Plan. Conditions applying to the Wildlife Trade Management Plan are:

- 1. Crocodiles obtained from another state or territory must originate from an approved source under the Environment Protection and Biodiversity Conservation Act 1999.
- 2. An annual report as noted in Section 9 of the management plan must be submitted to the Australian Government Department of the Environment by 30 June of each year for the previous period of 1 July to 30 June.
- 3. Approval of this program is valid until 30 December 2017.

11. References

Fukuda, Y, Whitehead, P., and Boggs, G. (2007). Broad-scale environmental influences on the abundance of saltwater crocodiles (*Crocodylus porosus*) in Australia. *Wildlife Research* 34, 167–176.

Messel, H. and Vorlicek, G.C. (1986). Population dynamics and status of *Crocodylus porosus* in the tidal waterways of northern Australia. *Australian Wildlife Research* 13, 71-111.

Read, M.A., Miller, J.D., Bell. I.P., and Felton, A. (2004). The distribution and abundance of the estuarine crocodile, *Crocodylus porosus*, in Queensland. *Wildlife Research* 31, 527–534.

Webb, G.J.W. and Smith, A. (1987). Life history parameters, population dynamics and the management of crocodilians, pp. 199–210 in Wildlife Management: Crocodiles and Alligators, G.J.W. Webb, S.C. Manolis and P.J. Whitehead (eds). Surrey Beatty and Sons, Sydney.