

A statement for the purposes of approved conservation advice  
(s266B of the *Environment Protection and Biodiversity Conservation Act 1999*)

**Approved Conservation Advice for**  
***Elusor macrurus* (Mary River Turtle)**

This Conservation Advice has been developed based on the best available information at the time this conservation advice was approved.

**Description**

*Elusor macrurus*, Family Chelidae, commonly known as the Mary River Turtle or the Mary River Tortoise, is dark brown with a greyish underbody and broadly oval shell with a median notch. Males have a very long and laterally compressed tail, a feature unique among freshwater turtles.

**Conservation Status**

The Mary River Turtle is listed as **endangered**. This species is eligible for listing as endangered under the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) (EPBC Act) as, prior to the commencement of the EPBC Act, it was listed as endangered under Schedule 1 of the *Endangered Species Protection Act 1992* (Cwlth). The Mary River Turtle is also listed as endangered under the *Nature Conservation Act 1992* (Queensland) and under the *Nature Conservation (Wildlife) Regulation 2006* (Queensland).

**Distribution and Habitat**

The Mary River Turtle is endemic to the Mary River in south-eastern Queensland. It occurs from Kenilworth, approximately 260 km from the mouth of the river, to the area upstream of the Mary River Tidal Barrage at Tiaro, approximately 60 km from the mouth of the river (Cogger et al., 1993; Cann & Legler, 1994; Cann, 1998; Flakus, 2002). The Mary River Turtle occurs within the Burnett Mary (Queensland) Natural Resource Management Region.

Like other turtles with cloacal respiration, the Mary River Turtle occurs in flowing, well-oxygenated sections of streams. Its habitat consists of riffles (particularly productive parts of a river that are shallow with fast-flowing, aerated water) and shallow stretches alternating with deeper, flowing pools. It generally does not occur in impoundments (Flakus, 2002; Tucker et al., 1999).

The distribution of this species is not known to overlap with any EPBC Act-listed threatened ecological communities.

**Threats**

The main identified threats to the Mary River Turtle include predation and lack of recruitment; changes in hydrology and streamflow due to dams and weirs; and habitat loss/degradation through soil and water pollution, invasive weeds, clearing for agriculture and trampling of nest sites by cattle.

**Research Priorities**

Research priorities that would inform future regional and local priority actions include:

- Determine the turtle's population dynamics, demography (maturity, growth, survival and reproductive cycle), and nesting success.

## **Regional and Local Priority Actions**

The following regional and local priority recovery and threat abatement actions can be done to support the recovery of the Mary River Turtle.

### Habitat Loss, Disturbance and Modification

- Monitor known populations to identify key threats.
- Monitor the progress of recovery, including the effectiveness of management actions and the need to adapt them if necessary.
- Identify and protect areas critical to the survival of the species, such as nesting sites.
- Involve sand mining lessees in protection of critical habitat.
- Ensure road widening and maintenance activities (or other infrastructure or development activities as appropriate) in areas where the Mary River Turtle occurs do not adversely impact on known populations.
- Manage any disruptions to water flows.
- Suitably control access to areas of critical habitat to minimise impacts on habitat and nesting.
- Continue protection of Mary River Turtle eggs from illegal collection.
- Investigate formal conservation arrangements such as the use of covenants, conservation agreements or inclusion in reserve tenure.

### Trampling, Browsing or Grazing

- Continue protection of Mary River Turtle eggs from trampling.

### Animal Predation

- Undertake predator control in nesting areas of the Mary River Turtle.

### Conservation Information

- Raise awareness of the Mary River Turtle within the local community.

### Enable Recovery of Additional Sites and/or Populations

- Develop a headstart program to increase hatchling survival and allow recruitment into the population, including moving clutches to safe incubation sites, creating new sandbanks for nesting, re-planting macrophytes after flood scouring, and introducing snags to pools.

This list does not necessarily encompass all actions that may be of benefit to the Mary River Turtle, but highlights those that are considered to be of highest priority at the time of preparing the conservation advice.

## **Information Sources:**

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Cogger, HG, Cameron, EE, Sadler, RA & Egger, P 1993, *The Action Plan for Australian Reptiles*, Australian Nature Conservation Agency, Canberra.

Environmental Protection Agency (EPA) 2007, A-Z of Animals, Mary River Turtle, Queensland Government. Viewed 18 January 2007,

<[http://www.epa.qld.gov.au/nature\\_conservation/wildlife/az\\_of\\_animals/mary\\_river\\_turtle/](http://www.epa.qld.gov.au/nature_conservation/wildlife/az_of_animals/mary_river_turtle/)>

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Tucker, AD, Priest, T, Guarino, E & Couper, P 2000, 'Turtle biodiversity in regard to regional conservation planning: additional recommendations for mitigation', *Cumulative Effects of Dams and Weirs on Freshwater Turtles*: Fitzroy, Kolan, Burnett and Mary Catchments, Report for Queensland Parks & Wildlife Service, Bundaberg.