

Annual status report 2009

Queensland Eel Fishery



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Fishery profile 2008		
Species targeted Longfin eel and southern shortfin eel	Fishery season January - December	
Accreditation under the EPBC Act Expires 22 September 2009	Monitoring undertaken Commercial logbooks (CFISH)	
Allocation between sectors Predominately commercial	Logbook validation No	
Adult Eel Fishery		
Commercial harvest 25 t	Number of licences active in 2008 25 as of December 2008	
Recreational harvest (2005) Negligible	Number of licences accessing the fishery in 2008 18	
Indigenous harvest Negligible	Fishery symbols E	
Charter harvest Nil reported	Commercial Gross Value of Production (GVP) Approximately \$275 000	
Juvenile Eel Fishery		
Commercial harvest 446kg	Number of licences active in 2008 13 as of December 2008	
Recreational harvest (2005) Nil	Number of licences accessing the fishery in 2008 5	
Indigenous harvest Negligible	Fishery symbols JE	
Charter harvest Nil	Commercial Gross Value of Production (GVP) No Estimate Available ¹	
Key fish resources	Stock status	Risk to stock
Longfin eel (<i>Anguilla reinhardtii</i>)	Not assessed	Not assessed
Southern shortfin eel (<i>Anguilla australis</i>)	Not assessed	Not assessed

¹ GVP is based on price paid to fisher for the juvenile eel product. Some juvenile eel fishers utilise their own grow-out facilities and so are only paid upon sale of adult eels.

Introduction

The Queensland Eel Fishery (QEF) targets the longfin eel, *Anguilla reinhardtii*, and the southern shortfin eel, *Anguilla australis*, in rivers and freshwater impoundments. The QEF is unique in that the resource is harvested at two stages in the lifecycle—the adult stage (eels > 30 cm) and the glass eel/elver stage (eels < 30 cm) for both species. Commercial adult eel (E) trappers collect adult eels from impounded waters²; whereas commercial juvenile eel (JE) fishers take glass eels and elvers from rivers and supply seed stock for grow-out in aquaculture facilities.

The majority of Queensland's wild-caught adult eel catch is exported live to Asia, principally Hong Kong and Taiwan, with a small percentage of adult eels being sold frozen to European markets. A very small proportion of the harvest is sold fresh to local smokehouses which supply the domestic market.

This report covers fishing activity during the 2008 calendar year.

Fishery description

Fishing methods

In Queensland, commercial capture/harvest of adult eels is only permitted using baited eel traps or round traps which are usually set on the bottom of the impoundment. Adult eel traps consist of a single entry mesh funnel and a floated cod-end to hold the captured eels and ensure that captured eels are not over stressed and that air breathing non-target species may access the water surface to breathe. Traps are generally baited with pilchards or mullet.

Specifications on net design and setup are stipulated in the *Fisheries (Freshwater) Management Plan 1999*:

- the maximum size of an eel trap is 2.0 x 0.6 x 0.6 m when set.
- the maximum size of a round trap is a diameter of 1 m and a height of 0.6 m.

² Impounded waters are defined in the *Fisheries (Freshwater) Management Plan 1999*.

- the frame of the trap must be made of a rigid material.
- a trap (other than its pocket) must have a mesh size of at least 25 mm; any rigid mesh on the trap must be at least 22 mm in each of its dimensions.

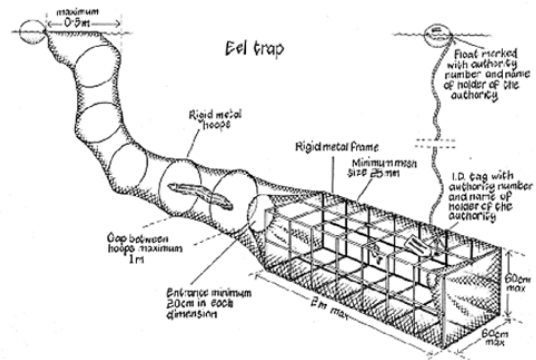


Figure 1: Eel trap used by adult eel trappers.

- a float of at least 150 mm in each of its dimensions must be attached to each trap.
- the trap and trap float must be marked with authority number and full name of the authority holder.
- the tail of the cod end must also be attached to a float or buoy of adequate size so that at least part of the cod end floats at the surface to allow trapped animals access to surface air.

The juvenile component of the QEF targets juvenile eels using a variety of different gear types, including fyke nets, dip nets and flow traps. Juvenile traps must contain bycatch reduction devices (BRDs) to minimise impacts on non-target species. The maximum total amount of fishing gear allowed to be used under an authority is:

- one small mesh eel fyke net:
 - with a maximum of two wings (length ≤ 15 m)
 - the fyke net must not exceed 4 m in height, width or diameter
 - the ends of the wings and the cod-end of the net must be marked with a

- reflective float bearing the holder's name and address
 - the net may be fixed by anchor or supported on stakes
 - a float must be attached to the cod-end to ensure that incidentally captured air-breathing animals can access air to breathe.
- three small mesh dip nets
 - three flow traps with an effective bycatch excluder that have been approved by the chief executive prior to use.

Fishing area

Adult eel

The adult eel fishery allows fishing in all Queensland East Coast Drainage Division catchments with the exception of all coastal island catchments (Figure 2). Within this area, trapping of adult eels is only permitted in:



Figure 2: Area open to adult eel trapping including regional delineations.

1. artificially created private impoundments in those catchments listed on an eel authority (for example, a farm dam).

2. an impoundment formed by a dam that is specifically listed on an eel authority (for example, a public owned impoundment such as Cressbrook Dam).

The majority of public impoundments are not open to commercial harvesting, and as such, the fishery comprises mainly private impoundments.

Juvenile eel

The juvenile eel fishery allows fishing in river basins associated with 21 rivers along the east coast of Queensland, which represent less than 10% of Queensland river systems.



Figure 3: Map of permitted juvenile eel fishing rivers.

Fishing is permitted in the Albert, Barron, Brisbane, Burdekin, Burnett, Burrum, Caboolture, Coomera, Currumbin, Fitzroy, Johnstone, Kolan, Logan, Maroochy, Mary, Mooloolah, Mulgrave, Nerang, Noosa, Pine and Tully rivers (Figure 3). Within these basins, juveniles may only be collected at, or downstream of, the most downstream dam or weir³ and up to 200 m either side of the mouth of the approved rivers. Collecting is also allowed in

³ A tidal barrage is not considered a weir for the purpose of these conditions.

tributaries that enter the approved rivers downstream of the most downstream dam or weir for a distance of 1 km upstream of the confluence.

Key Species

As mentioned previously, the QEF targets the longfin eel, *Anguilla reinhardtii*, and the southern shortfin eel, *Anguilla australis*, in rivers and freshwater impoundments.

The longfin eel is distributed along the east Queensland coastline and found throughout eastern states of Australia; abundances are greatest in Queensland and New South Wales. The longfin eel makes up the majority of the adult eel catch in Queensland due to its extensive distribution. The southern shortfin eel is at its northern distribution limit in southern Queensland with higher abundances occurring in southern Australian states.

Southern shortfin and longfin eels are reported to vary in average length at maturity dependant on sex. Longfin eels are reported to grow to an average length at metamorphosis and maturity of 93 cm for females and 56 cm for males (Hoyle and Jellyman 2000). Southern shortfin eel females are believed to mature at approximately 55 cm whilst males mature at the legal size of 30 cm (Todd 1980).

All species of anguillid eels are catadromous, spending the majority of their life cycle in freshwater and estuaries. Adult eels migrate to the Coral Sea to spawn (Aoyama *et al.* 1999; Gooley *et al.* 1999). During the larval stage individuals are transported via the East Australian Current to near shore waters where they metamorphose into unpigmented 'glass eels' (Shiao *et al.* 2001; Beumer 1992). Glass eels then move upstream to grow and develop through a small, pigmented 'elver' stage into the large but still immature 'adult' eels. When adults reach sexual maturity they undergo marked changes in their appearance and become silvery. Anatomy and physiology also alter at sexual maturity and eels undertake a once only downstream migration to the spawning grounds, where it is believed they spawn and subsequently die.

Sexual differentiation in eels appears to be influenced by a number of environmental factors (Zeller and Buemer 1995). Females generally occur

further upstream (lower salinity and lower population densities), grow larger and mature later than males. Males tend to occur more frequently in downstream brackish and estuarine areas (Buemer 1992). There are no easily distinguishable visual differences between male and females (Moffatt and Voller 2002).

A recently published study and unpublished conclusions from postgraduate research suggest panmixia in juvenile eel populations (Kang-Ning and Wann-Nian 2007; Moore 2008). Both southern shortfin and longfin eel species are believed to belong to a single panmictic genetic stock; this recognises that the recruitment of juveniles within the species distribution is random.

Main management methods used

Queensland Primary Industries and Fisheries (QPIF) manages the QEF in accordance with ecologically sustainable development principles. The fishery management methods differ between the adult and juvenile components of the QEF.

The adult wild-caught eel component of the fishery is managed under the *Fisheries (Freshwater) Management Plan 1999*, which is subordinate legislation to the *Queensland Fisheries Act 1994*. Fishing activity in this component of the fishery is also controlled by the *Fisheries Regulation 2008*.

The collection and grow-out of juvenile eels is currently controlled through conditions attached to Commercial Harvest Fishery Licenses under the *Fisheries Act 1994*, Development Approvals for Aquaculture under the *Integrated Planning Act 1997* and the 'Policy for Management Arrangements for the Commercial Harvesting and use of Juvenile Eels' (The Juvenile Eel Policy).

A range of input and output controls are in place to manage the harvesting of eels including:

- a minimum size limit (30 cm) for commercial adult eel collectors and recreational fishers
- a recreational in-possession limit for freshwater eels (combined limit of 10 for all species)

- restrictions on which waters are open to collection activities
- a limit on the number of authorities issued to access the fishery:
 - the adult eel fishery has 39 authorised fishers and is closed to new applicants
 - the juvenile eel fishery is restricted to 13 authorities
- restrictions on the type and design of apparatus and number of each gear type that can be used (Figure 1)
- restrictions on the use of juvenile eels (may be sold to authorised aquaculture facilities within Australia only).

Catch statistics

Commercial catch data is maintained by QPIF in the Commercial Fisheries Information System (CFISH) via compulsory monthly catch returns in the fishery logbooks. The figures below represent the latest and up to date logbook figures processed by QPIF databases.

Commercial – Adult eel

Annual reported catch of adult eels has remained steady since 2007, with approximately 25 t of adult eel harvested during 2008. Effectively the Queensland Eel Fishery harvest appears to have reached a plateau; following a steady five year decline (Figure 4).

The 2008 effort year exhibits high fishing effort with a total of 884 fishing days reported (Table 1); this level of effort is similar to the number of fishing days reported in 2007.

The overall increase in effort seen in 2007 and 2008 can be attributed to the continued reduction in fishable waters and the associated reduction in eel migration into impoundments; all of which make it increasingly harder for fishers to harvest large quantities of eel. Trappers are fishing more often to meet desired catch levels and demand.

Catch per unit effort (CPUE) has remained consistent since 2007. Approximately 25kg/day of adult eels

were harvested in 2008 (Figure 4). CPUE (kg/day) is not representative of natural adult eel stocks as adult eels are harvested only from artificial impoundments.

Table 1: Boats and days fished in the adult eel fishery 2002-08 (Source: QPIF CFISH database as at 12 May 2009).

Year	Boats	Days	Weight (t)
2002	24	380	54
2003	22	361	43
2004	19	267	41
2005	18	262	31
2006	17	219	18
2007	15	864	25
2008	18	884	25

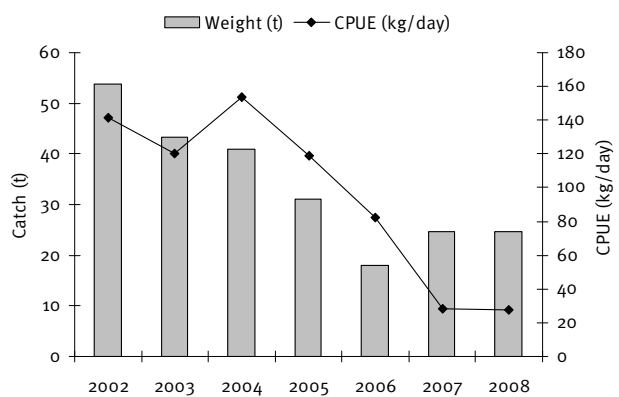


Figure 4: Queensland adult eel reported annual catch and CPUE 2002-08 (Source: QPIF CFISH database as at 12 May 2009).

Recreational

Negligible levels of freshwater eels are retained by the recreational sector. The most recent estimates are those collected during the RFISH 2005 diary survey. Refer to the Recreational section of the 2008 QEF Annual Status Report for previous figures and catch statistics.

Indigenous

Negligible levels of freshwater eels are retained by the Indigenous sector. Estimates for Indigenous fisheries harvest are not current; the most recent estimates of eel harvest were compiled in the 2000-01 National Recreational and Indigenous Fishing Survey (NRIFS). Refer to the Indigenous section of the 2008 QEF Annual Status Report for previous figures and catch statistics.

Commercial – juvenile eel

Annual reported catch of juvenile eels decreased from 582 kg in 2007 to 446 kg in 2008 (Figure 5). This decline follows an increase in juvenile eel harvest between 2004 and 2007.

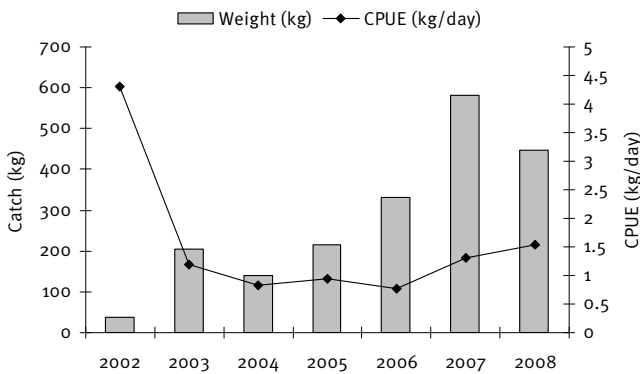


Figure 5: Total reported commercial catch (kg) and effort (days fished) in the Juvenile Eel Fishery 2002–08 (Source: QPIF CFISH database as at 12 May 2009).

CPUE (kg/day) has steadily increased between 2006 and 2008 (Figure 5).

During 2008 there were a total of 13 approved licence holders in the juvenile fishery, from which, only five were recorded as actively fishing. This figure has decreased from the seven licences which reported juvenile eel catch for the 2007 effort year.

Fishing days decreased from the previous effort year, with 2008 reporting a total of 288 days fished; this decrease in fishing effort is the direct result of fewer active licences.

Figure 5 shows a variance in annual reported catch of juvenile eels ranging between 19 kg (2002) and 582 kg (2007). Fluctuations in annual catches of juvenile eels are normal. The juvenile eel fishery is temporal in nature with seasonal, weather and tidal cycles imposing natural restrictions and significant variation in both catch and fishing effort. The variation in total catch from year to year is related to the high variability in abundance of juvenile eels entering individual river systems.

Spatial issues/trends – Adult eels

During 2008, the majority of adult eel catch and effort occurred in the Fraser-Burnett and Moreton regions (Figure 2). This is similar to spatial patterns seen in each of the past ten years.

Spatial issues/trends – Juvenile eels

The collection of juvenile eels is concentrated at specific river locations that favour collection (such as waterway barriers). In 2008 juvenile eels were harvested from six of the 21 rivers where collection is permitted. To protect the confidentiality of the active license holders in 2008, QPIF cannot report against the specific rivers that were fished.

Socio-economic characteristics and trends

The majority of eels, including wild-caught adult eels and juvenile eels grown on farms to export size, are exported live to Asia. In 2008, fishers were typically paid \$10/kg to \$12/kg for wild-caught adult eels and \$18/kg for juveniles that had been grown to a marketable size in captivity⁴. Prices have slightly increased from estimates given in the 2007 QEF Annual Status Report.

Biological and ecological information

Monitoring Programs

Long Term Monitoring Program

The freshwater Long Term Monitoring Programs (LTMP) objective is to monitor population changes of key recreational and commercial species as well as changes in species diversity and abundance, water quality and habitat conditions in freshwater river systems. Monitoring in the freshwater river systems is performed through boat-mounted electrofishing.

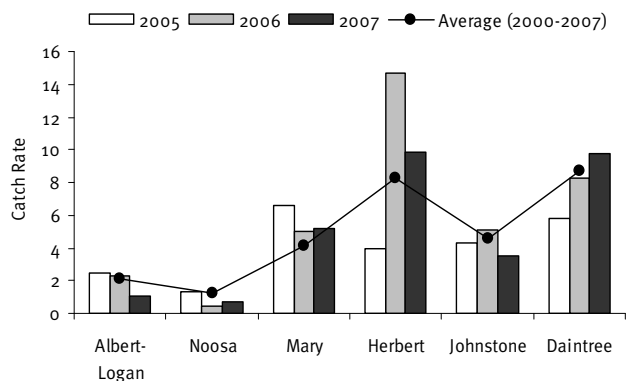


Figure 6: Catch rate of longfin eels for monitored freshwater river systems (2005-07); includes an average catch rate per river for all years (2000-07).

⁴ Based on consultation with commercial fishers.

Catch rates are determined by calculating the number of longfin eels recorded per 30 minutes of 'on time' fishing. Inter-annual variability in catch trends over the monitoring period (Figure 6) are a result of multiple factors external to fishing pressure such as natural fluctuations in eel populations and recruitment, and environmental factors such as drought.

The freshwater component of LTMP was suspended in 2007-08 and its future is currently under review. QPIF is considering the feasibility of alternatives focused on the eel fishery.

Bycatch

There are no by-product species taken in the Queensland Eel Fishery as eels are the only freshwater fish permitted to be taken for trade or commerce. Adult eel traps have been designed to minimise the likelihood of interactions with non-target species and to reduce the impacts on any individuals captured.

Previous research demonstrated that bycatch in the juvenile eel fishery is generally low and consists of small, abundant and common species (Gooley and Ingram 2002).

Interactions with protected species

A Species of Conservation Interest (SOCl) logbook was adopted within both the adult and juvenile eel fishery in November 2006 to facilitate reporting of any interactions with protected species.

Adult eel fishery

In 2008 there were a total of 1 333 reported interactions with freshwater turtles; of the freshwater turtle interactions, 98% were released alive (Table 2).

The majority (32%) of the interactions with freshwater turtles occurred in the Brisbane River catchment in south east Queensland. Options for amending eel trap design, with the aim of reducing interactions with SOCl, will be considered during the review of the *Fisheries (Freshwater) Management Plan 1999* scheduled to occur in 2010.

Table 2: Interactions with species of conservation interest reported during 2008.

Common Name	No. released alive	No. released dead	Total no. of interactions
Freshwater turtle	1 303	30	1 333

Juvenile eel fishery

In 2008, there were no reported interactions with species protected under the EPBC Act.

Ecosystem Impacts

The impact of the eel fishery on the ecosystem is considered to be low. The apparatus used is considered to have minimal impact on the physical environment and non-target species. Restrictions on the number of traps and the locations in which they can be used in are implemented to minimise potential impacts. The use of the apparatus designs that are sensitive to the environment and non-target species is encouraged. The trapping of adult eels occurs mainly in artificially created environments (e.g. farm dams) and therefore the adult eel fishery has negligible impact on the ecosystems of natural waterways.

Man-made barriers such as dams or weirs may affect migration of fish to a variable degree, from short delays to complete obstruction depending on the dimensions and characteristics of the barriers (Northcote 1998). In Queensland, barriers to eel passage upstream such as dams, weirs and barrages have the potential to reduce recruitment into upstream freshwater environments where female eels develop and grow. QPIF has completed a cost-benefit analysis of the potential to facilitate juvenile eel recruitment upstream past waterway barriers. Refer to the 'Current Sustainability status and concerns' section of this report (p.12).

Sustainability Assessment

Performance against fishery objectives

QPIF applied the QEF Performance Measurement System (PMS) to the adult and juvenile eel fishery following submission to DEWHA in February 2007.

The PMS was developed in consultation with representatives from the commercial fishing sector, other fishery stakeholders, fishery managers, researchers and assessment and monitoring staff to ensure that objectives were meaningful, defensible, precautionary and measureable against available data. The PMS was approved by a delegate of the

Chief Executive and is a formal instrument for measuring the performance of this fishery.

The designated performance measures and the fishery's adherence to them are outlined below in Table 3.

Table 3: Performance measures in the juvenile and adult eel fisheries.

Element of Eel Fishery	Performance Measure	Performance
Juvenile eels	The proportion of nominated rivers fished exceeds the highest historical proportion of rivers fished (2002-05), for both elvers and glass eels.	<i>Triggered</i> The highest historical proportion (2002-05) of nominated rivers fished is 24%; equivalent to five of the 21 nominated rivers. In 2008, six rivers were fished (including one non-permitted river) exceeding the highest historical proportion by 5%.
Juvenile eels	Annual catch exceeds the highest historical annual catch (2002 – 05), for both elvers and glass eels.	<i>Triggered</i> In 2008, 446 kg of juvenile eels were harvested. This exceeds the highest historical annual catch (2002-05) of 214 kg (Figure 5); however this is less than the reported annual catch of 582 kg in 2007.
Juvenile eels	Annual effort per river shows a continual increasing or decreasing trend for three consecutive years, for both elvers and glass eels.	<i>Triggered</i> One of the six rivers fished during the 2008 effort year shows a continual decline in the number of days fished over the last three consecutive years (177 days in 2006, 16 days in 2007 and 3 days in 2008). The river location information cannot be provided due to the less than five licence confidentiality agreement between QPIF and the QEF licence holders.
Juvenile eels	The risk ranking assigned to bycatch species issues in the ERA process increased from the previous assessment of the juvenile eel fishery.	<i>Not measured</i> The ERA was finalised in July 2007. It is proposed that the ERA be reviewed every three years.
Juvenile eels	Interactions with threatened, endangered or protected species (TEP species) show an increasing trend over three years in the juvenile eel fishery.	<i>Not triggered</i> SOCI log books were introduced in November 2006. Hence there is only two full fishing years of TEP species

Element of Eel Fishery	Performance Measure	Performance
		data (2007 and 2008).
Juvenile eels	The risk ranking assigned to TEP species issued in the ERA process increased from the previous assessment of the juvenile eel fishery.	<i>Not measured</i> The ERA was finalised in July 2007. It is proposed that the ERA be reviewed every three years.
Juvenile eels	For each river monitored in the LTMP Freshwater Surveys (east coast only) in which the JE Fishery operates - there is a consistent decreasing trend in the number of fish species recorded annually in the LTMP over a three year period.	<i>Not measured</i> LTMP freshwater surveys were not conducted in 2008.
Adult eels	Total annual catch of adult eels exceeds the highest reported historical annual catch (from 1996 to 2005).	<i>Not triggered</i> Figure 4 in this document demonstrates that annual catch of adult eels in 2008 remained below the highest reported historical annual catch.
Adult eels	Annual effort in the adult eel fishery shows a continual decreasing trend for three consecutive years.	<i>Not triggered</i>
Adult eels	The risk ranking assigned to bycatch species issues in the ERA process increased from the previous assessment of the adult eel fishery	<i>Not measured</i> The ERA was finalised in July 2007. It is proposed that the ERA be reviewed every three years.
Adult eels	Interactions with TEP species show an increasing trend over three years in the adult eel fishery.	<i>Not measured</i> SOCl log books were introduced in November 2006. Hence there is only two full fishing years of TEP data (2007 and 2008).
Adult eels	A risk ranking for TEP species in the ERA increases from the previous assessment of the adult eel fishery.	<i>Not measured</i> The ERA was finalised in July 2007. It is proposed that the ERA be reviewed every three years.

QPIF became aware of three trigger events in May 2009. Within three months of becoming aware that a review event has been triggered, QPIF is required to finalise a clear timetable for implementation of appropriate management responses. This process is currently underway and will be reported on in the 2010 QEF Annual Status Report.

Responses to 2007 effort year triggers

The 2008 annual status report for eel identified one performance measure triggered by activity in the 2007 fishing year. QPIF have considered the factors contributing to the triggers in consultation with the Freshwater Management Advisory Council (Freshwater MAC) including fisheries scientists,

recreational fishers, conservation and industry members and found that they do not currently present an immediate risk to the sustainability of the eel fishery in Queensland. No further management action regarding the triggered performance measures is required at this stage.

Current Sustainability status and concerns

The QEF is maintained through a multitude of precautionary management arrangements which are aimed towards maximising the probability that the Queensland eel resource will remain ecologically sustainable in the long term. QPIF manages the adult eel fishery principally through extensive spatial closures (harvesting only in publicly owned and privately owned artificial impoundments). Trapping is excluded from natural waterways ensuring an appreciable proportion of the population are able to mature and migrate to spawn without being exposed to commercial fishing pressure. The adult eel component of the QEF is a closed fishery to new applicants with a limited number of active fishers; restricting the maximum effort level and therefore protecting resource availability. Similarly, harvesting of glass eels and elvers is only permitted in a small number of rivers/ estuaries (21 rivers which represents less than 10% of river systems in Queensland).

Anecdotal evidence and past research suggests that bycatch in both the adult and juvenile eel fishery is low. The gear utilised in the adult eel fishery is highly selective and observed bycatch in the juvenile eel fishery has been mostly limited to abundant and common species of glassfish (Gooley and Ingram 2002). A Species of Conservation Interest (SOCI) logbook was implemented in both the juvenile and adult eel fisheries in November 2006 and the resulting data are discussed in the 'Interactions with Protected Species' section of this annual status report.

There is some concern about the effect of waterway barriers on eel migration. As part of QPIF's management of this issue, an economic cost-benefit analysis titled 'Benefit-Cost Analysis for Proposed Juvenile Eel Recruitment Past Waterway Barriers' (Maroske 2009) was employed to investigate the

benefits associated with proposed juvenile eel recruitment past waterway barriers. A trap-and-transport fish passage system was identified as the most appropriate method to facilitate juvenile eel recruitment upstream (in terms of efficient eel passage and cost effectiveness). The trap-and-transport juvenile eel passage system is a structure specific to the characteristics of migrating juvenile eels and employs the use of a short elver pass (ramp that juvenile eels can climb up) and collection container. The juvenile eels that enter the collection chamber are then physically transported upstream past the waterway barrier. Analysis of the trap-and-transport passage system revealed that the likelihood of the mechanism succeeding in improving juvenile recruitment upstream was dependent upon its design, which in turn was based on available resources. Overall, the analysis suggested that the high costs associated with building and maintaining an effective juvenile eel passage system would have to result in significantly increased eel recruitment for it to be an economically worthwhile initiative. As a result it is difficult to justify the facilitation of trap-and-transport passage systems in the eel fishery as this exercise is not considered economically feasible, given the current lack of available resources and the total value of the fishery.

Research

Recent research and implications

QPIF are not aware of any research specific to the QEF during the reporting year.

Collaborative research

There has been no collaborative research this year.

Fishery management

Compliance report

During 2008, five inspections were conducted in the Queensland Eel Fishery including two commercial fishing vessels. Two offences were detected.

Offences are reported as either a Fisheries Infringement Notice (FIN) or Caution (FIN Caution or

official caution). There were no offences prosecuted during the reporting period.

Table 4: Queensland Eel Fishery Offences

OFFENCE	FIN	Caution
Fail to comply with a requirement to keep or give documents/information in the approved form (logbook)	1	0
Did an act only an authority holder can do (take fish from waters not stated on an authority)	0	1
TOTAL	1	1

A compliance risk assessment was conducted for this fishery in March 2007 in order to determine compliance priorities and allow the most effective use of Queensland Boating and Fisheries Patrol resources. Please refer to the 2008 QEF Annual Status Report for further information on the outcomes of the compliance risk assessment.

Changes to management arrangements in the reporting year

No changes to management arrangements were made within the adult or the juvenile eel fishery in 2008.

Implementation of the *Policy for the Removal of Excess Fishing Capacity in Queensland's Line, Crab, Beam Trawl and Eel Fisheries* is currently underway and anticipated to be completed by late 2009. QPIF plans to review the management arrangements for the adult eel fishery once the removal of latent effort process has been undertaken.

Complementary management

Formal discussions with New South Wales and Victorian fisheries agencies in regards to complementary management have not yet occurred. However, officers from different jurisdictions regularly participate in informal contact.

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Image

Long fin eel – *Anguilla reinhardtii*

