# Recreational Fishing Freshwater Trust Expenditure Committee Outcomes - Meeting 30, 2 September 2008

## 1. Apologies

There were no apologies recorded.

## 2. Confirmation of outcomes from previous RFFTEC meeting

The draft outcomes of the 29th RFFTEC meeting with corrections (previously circulated) were accepted as a true and accurate record of that meeting. **Moved:** Kevin McKinnon Seconded: Brian Hale. **Carried.** 

## 3. Action Items from meeting 28

Given the recent implementation of the GLS licensing system the feasibility of the 3 day licensing option will be considered when the fishing licence is next reviewed. The Committee was advised that the motor vehicle travel allowance had been recently increased in alignment with the Consumer Price Index. NSW DPI and the Central Acclimatisation Society had objected to the proposed road closure near "Triamble Reserve", which was under investigation by NSW Lands. All other action items had been completed.

## 4. Recreational Fisheries Management report

DPI advised that the Wild Harvest Fisheries Branch was recently restructured to ensure best service delivery. A new Fisheries Operations Branch has been created and Mr Peter Turnell has been appointed Acting Director of the Branch. The position of Manager, Commercial Fisheries and Manager, Recreational Fisheries report to the Acting Director.

DPI advised that the Trust Investment Plan would be subject to annual review to account for any variations in revenue and to direct funds towards new emerging priorities, if required. An annual community expression of interest for Trust funded programs would continue to be advertised by DPI in the future.

## 5. Trust program updates

# a. Recreational Fishing Fee Administration program update

DPI advised that the Recreational Licensing System will be integrated to the Government Licensing Service on 1 September 2008. This will enable a number of enhancements to be made. If you purchase a one year or three year licence online, over the phone, at a Touch agent, you will now receive a plastic licence in the post. Licence renewal letters, with 5 easy options to pay, will also be sent to one and three year licenceholders. If fishers renew their licence using their renewal letter, they will also receive a plastic licence in the post. Anglers will continue to be able to purchase their licences through the statewide network of fishing fee agents.

## b. Survival of freshwater fish after catch and release angling

This program is using recreational angling events and aquarium experiments to estimate the survival of fish that are caught and released during live weigh-in events using lures and regular fishing with both lures and baits. In the last two years, 3 events involving bass, 2 events involving golden perch and 1 event involving golden perch and Murray cod have been attended. One experiment involving Australian bass has taken place in the ponds at the Grafton Aquaculture Research Station. So far this work has demonstrated that most fish caught and released (approximately 93%) survive. Factors affecting survival include anatomical hook location, bait type, size of fish and water temperature (Australian bass), Water temperature, air exposure and live-well size (golden perch) and air exposure and live-well size (Murray cod). A non technical summary entitled "Post-

release mortality, gonadal development and somatic condition of angled Australian bass has been completed and published in NAFA magazine. Future research will investigate the lethal and sub lethal effects of barotrauma and multiple catch and release on key species, the fate of released Murray cod greater than 70cm total length, the fate of released freshwater catfish and methods for improving the post-release survival of all species, with a view to establishing guidelines for handling practices that maximise survival while minimising physiological impacts.

## c. Effectiveness of stocking research

Sampling of Australian bass stockings in the Snowy River have shown that these fish have grown from 25mm at time of stocking (November 2007) to around 120mm by July 2008. Dietary information from other resident species such as eels and congolli are being collected to determine food availability and dietary overlap with stocked bass. Calcein is being trialled as a non-lethal, non toxic batch marking technique for Australian bass, which, will be also be applied to future batch markings of golden perch and Murray cod. Samples of Australian bass, Murray cod and golden perch have been collected from commercial hatcheries across NSW for micro chemical analyses to determine the presence / absence of unique hatchery chemical markers of fish. A report entitled "An assessment of the trout fishery in Oberon Dam and the Fish River" was distributed to Committee members. Assessment of both trout populations in the Fish River Creek over the past seven years has shown strong natural recruitment of both species, with annual spawning runs composed exclusively of wild fish. Juvenile cohorts were sampled in each year, suggesting some level of natural recruitment annually that is not reliant on stocking. Brown trout had not been stocked in the dam since 1998. Whilst recruitment may not occur each year, the results of the study appear to indicate that existing population levels of both species are sufficient to maintain an effective recreational fishery.

# d. Investigation of catfish genetics in inland NSW

To date, catfish have been successfully sampled from the Castlereagh River (20 samples) Macintyre River (12 samples), Colombo Creek (19 samples) and Burrendong Dam (24 samples). Further field trips have been planned this year to target catchments that are still lacking in samples. Samples are also being obtained from other DPI sites within NSW, as well other State Government agencies in Victoria and Queensland. A catfish microsatellite library has been developed to enable genetic analysis of the species across a range of catchments in NSW. Data from the NSW DPI Freshwater Fish Research Database has been extracted to identify sites where catfish are known to be recruiting naturally and sites where they are present but where recruitment is limited or absent. NSW DPI and museum data has been used to identify sites where catfish are known to have been formerly present but are now absent. Aquatic habitat will be mapped at each of these fish locations to define those habitat features the discriminate between the three site groups. Habitat mapping will commence once field collection of DNA has been completed.

# e. Conservation genetics of perches and basses in NSW

Sampling of populations of the four species: Australian bass, estuary perch, Macquarie perch and golden perch has been completed. The mtDNA data for Macquarie perch shows that Macquarie perch is highly subdivided with high levels of genetic diversity and divergence and contains several management units, with historical retention of populations along the eastern drainages and more recent expansion in the Murray-Darling Basin. Prospective management units include the Lachlan catchment, the Murrumbidgee catchment, the remainder of the Murray Darling Basin, the Kangaroo River (genetically distinct but possibly extinct new coastal species), the Upper Nepean, the Wollondilly and lower Nepean, the Colo catchment and Webbs catchment. Australian bass and Estuary perch show much less structure along their distribution i.e. populations

are genetically indiscriminate. However, estuary perch shows evidence for a recent separation between tributary populations south and north of the Clyde River and there is evidence of hybridization of the two species in the Gippsland region. Golden perch shows substantial connectivity within the Murray Darling Basin with a high degree of mixture between populations i.e. genetic zonation is unnecessary. The Fitrzroy and Lake Eyre Basins appears to contain genetically distinct populations of golden perch.

### f. Tournament assessment project

The project is investigating and removing the possible biases and characteristics of sample catch and effort data and make appropriate changes to sampling and analysis to improve the usefulness of these data for future analysis. This will involve improving the current angler registration systems, reconciling the angler's catch records into a new database to allow for more in depth analysis of data and improving the overall catch card design to reduce reporting problems by providing a mechanism for reporting on angler teams, angler perception and avidity. Data is collected from 19 freshwater events in total. Monitoring of all of the above noted events will continue in the 2008/09 financial year. An article on the Basscatch project is being drafted for input into the October issue of NSW Fishing Monthly.

## g. Bass Stocking Predator Impact Modelling

A design for a predator impact model (PIM) has been completed which will be used as a tool to measure the optimal stocking density (OSD) of Australian bass in freshwater impoundments. This will be achieved by estimating the carrying capacity of the dam i.e.; the amount of food and habitat that is available divided by the amount of food and habitat needed for optimal survival of individuals. The PIM will use published bioenergetic and growth models, life-history parameters, and size-specific habitat and diet data to calculate demand, predatory impact and OSD. Research entails calculating the area of suitable habitat in freshwater impoundments to be stocked with Australian bass and quantifying the diet, age, weight and habitat use of bass and measuring the abundance and distribution of bass' prey, to estimate optimal stocking densities.

Bass impoundments along south coast have been selected and the marking techniques, site selection, stocking & sampling procedures have been determined. Currently researchers are collecting data from Brogo Dam for the PIM. Trial model simulations will then be run for bass in Brogo, using collected information and a range of hypothetical scenarios. Bass will then be stocked at experimental densities to test the estimates of the validity of the PIM, using growth and survival of stocked fish.

# 6. New Trust Fund applications

The following Trust applications had been received by DPI since the last meeting and were reviewed by the Expenditure Committee:

# Programs supported by RFFTEC

Platform: Aquatic habitat protection and rehabilitation

Program	Proponent	2008/09
Yass railway weir management program aims to remove willows from	Yass Landcare	\$17,000
the banks of the Yass River and to re-stabilise the river bank with native	Group	
tree species Note: To be funded under Habitat Action Program.		
Motion: The Committee supports funding for the program. Moved: Brian		
Hale. <b>Seconded</b> : Debbie Lennon. <u>Carried.</u>		
Habitat Improvement in the Indi River program – restoration of 250m	Murray	\$9,960
stretch of the Indi River by willow removal, stocking management and	Catchment	
revegetation program. restoration of a section of the Indi River by	Management	
removal of willows, stock management and revegetation with native plants.	Authority	
Note: To be funded under Habitat Action Program.		
Motion: The Committee supports funding for the program. Moved:		
Richard Ping Kee. <b>Seconded</b> : Ian Ward <u>Carried.</u>		

Platform: Research on fish and recreational fishing

Program	Proponent	2008/09	2009/10
Enhancing Australian bass populations in the Clarence	NSW DPI	\$10,000	\$10,000
River through increased knowledge of their biology.			
<b>Motion:</b> The Committee supports funding for the program.			
Moved: Richard Ping Kee. Seconded: Karl Schaerf. Carried.			
Continuation of established transect monitoring for the	Newcastle	\$9,500	
study of trout impacts on endangered frog demographics	University		
(Year 3).	•		
Note: To be funded under Small Grants Program.			
Motion: The Committee supports funding for the program.			
Moved: Karl Schaerf: Seconded: Debbie Lennon. Carried.			

### 7. Project Meeting Reports

Trust Fund meeting reports for DPI and external programs currently underway were reviewed by the Committee. Final reports for three Trust funded programs: Fish Cleaning Station, Balranald Township Reserve - Balranald Ex-Services Anglers Club, Community Accessible Fishing Deck Gosling Creek Reservoir - Orange City Council, Establishing sites for the study of trout impacts on population demographics Year 2 - Newcastle University had been submitted to the Committee.

Action item: That NSW DPI write a letter or appreciation to Mr Laurence Tockuss, Calrossy Primary School for submitting a comprehensive high quality meeting report for the Native Fish Awareness Program.

Action item: That NSW DPI investigate the potential of linking the Calrossy Primary School with the DPI "Get hooked it's fun to fish" schools education program in inland NSW.

#### 9. General business

Mr Kevin McKinnon and Mr Richard Ping Kee were selected as the potential RFFTEC representatives for the 2008 World Recreational Fishing Conference.

Mr Karl Schaerf was selected to represent RFFTEC at the ASFB Workshop and Conference 2008. Note: unfortunately due to a communication error between ASFB and Mr Schaerf, Mr Schaerf was unable to attend. However Mr Malcolm Poole of RFSTEC was available to attend the conference in Mr Schaerf's place.

It was proposed that RFSTEC and RFFTEC have a joint session at the next budget meeting in 2009. The Committee also requested that both Committees have an informal session before the meetings to discuss any expenditure related issues.

Action item: That a joint session be held the next budget meeting in 2009. DPI to present a meeting format at the next meeting.

## Compliance Officer vacancy

Mr Karl Schaerf noted that there is a Trust funded Fisheries Officer vacancy and requested DPI to fill this vacany as quickly as possible to ensure a full contingent of Trust funded officers on the inland.

Action item: That NSW DPI report to the expenditure committee at the next meeting on the current level of Trust funded Compliance vacancies.

## 10. Next meeting

26 November 2008.