

## Industry adaptability

Improving industry adaptability means assisting primary producers to make decisions that minimise risk from changed market conditions, climate change and adverse seasonal conditions.

### Industry adaptability scorecard 2007–08

Industry	All	Cereal grain, cotton, beef, vegetable, sheep and aquaculture	Aquaculture
<b>What we planned to do in 2007–08</b>	Finalise freight subsidy payments and 95% of Drought Relief Assistance Scheme (DRAS) applications within four weeks	Develop a coordinated response to unforeseen events impacting on particular locations or sectors within one month	Develop integrated farming systems including two polyculture trials (fish, crab, prawn, worm, seaweed tropical abalone) by 2010
<b>What we achieved</b>	Assisted primary producers through DRAS and freight assistance subsidies	Provided farm financial counsellors to help primary producers manage the impacts of flood	Developed new ecologically efficient models for aquaculture farms where complementary species are grown together
<b>Progress against MPS targets*</b>	Target: 300 Actual: 527 Measure: Producers assisted to access government financial assistance	Target: 900 Actual: 783 Measure: Farm enterprises assistend through business analysis/financial counselling services	Target 74 Actual 66 Measure: Systems, standards and tools for improved production efficiency
<b>What we plan to do in 2008–09</b>	Finalise freight subsidy payments and 95% of DRAS applications within four weeks	Develop a coordinated response to unforeseen events impacting on particular locations or sectors within one month	Develop production systems for enhanced prawn farming by June 2010

\* For more information on MPS targets, refer to overall performance scorecard on pages 16–21.

073



### DPI&F assists flood recovery

Rain is a major issue for Queensland's primary producers, and while a certain amount is good, flooding can cause damaged infrastructure, lost stock and crops, and pest problems.

February 2008 brought heavy rainfall to North and Central Queensland, causing flooding in many creeks and rivers and impacting significantly on local communities and businesses. Emerald and Charleville were the most severely affected, with Mackay and the Bowen-Burkekin regions also experiencing flooding.

Total losses in the gross value of agricultural production due to floods in 2007-08 is estimated at:

- \$39 million in Emerald and Charleville, particularly cereal grain, cotton, beef, vegetable and sheep (plus infrastructure damage for up to 40% of farms)
- \$7.3 million in Bowen-Burkekin, particularly sugar and beef (plus infrastructure damage over \$13 million)
- \$0.5 million in Mackay, particularly aquaculture (plus infrastructure damage over \$6.2 million).

To help primary producers manage the impacts of the flood, DPI&F worked closely with organisations such as AgForce to:

- ensure DPI&F farm financial counsellors were on-hand to help primary producers access recovery programs, such as financial assistance
- establish a database to record stock losses
- coordinate fodder drops
- provide pest and disease advice.

While flooding did cause devastation, the rain was not all bad news. Rainfalls over the spring/summer period benefited many shires, resulting in the revocation of their drought status. It also helped to accelerate pasture growth, provided good conditions for late summer crops, and replenished many dams, greatly benefiting irrigated cropping in the affected region, particularly cotton, maize and horticulture production.

## More efficient water use helps beat the drought

Rain or the lack of it is a major concern, with droughts and strong non-agricultural demands on water forcing primary producers to seek more efficient ways to use increasingly scarce irrigation resources. While rainfalls over the spring–summer period benefited many shires and resulted in the revocation of their drought status, 54.3% of Queensland was still officially drought declared as at 30 June 2008. DPI&F assisted primary producers experiencing drought through the Drought Relief Assistance Scheme (DRAS) and freight assistance subsidies.

Figure 17: Drought Relief Assistance Scheme (DRAS) claims and freight assistance subsidies, 2007–08

	Region					Total	
	Central	North	South	South-East	West	2007–08	2006–07
DRAS claims	453	63	2,531	1,453	553	5,053	6,854
Freight assistance subsidies	\$1.4 million	\$258,000	\$5 million	\$2.4 million	\$1.5 million	\$10.6 million	\$12.5 million

To help increase rural water use efficiency in the short and long-term, DPI&F staff are involved in:

- a \$1 million initiative to improve efficient use of irrigation water to enhance regional productivity looking at drip irrigation technologies, how to optimise use of water allocations, alternative water sources and developing plant-based indicators of vegetable crop stress (2007–10)
- a \$2 million multi-state project with Horticulture Australia to drive better vegetable irrigation through profitable practice change (2008–10)
- developing a web-based irrigation management tool for improving water use efficiency of Queensland broadacre and horticultural crops.

075

**DPI&F assisted primary producers experiencing drought through the Drought Relief Assistance Scheme (DRAS) and freight assistance subsidies.**



### Research and economic tools help growers recover from sugarcane smut

First detected in Queensland in June 2006, sugarcane smut—a widespread fungal disease that devastates sugar crops—is the focus of a \$6 million investment by DPI&F over three years to help sugar farmers recover economically from the impacts of the disease. Sugar crops struck by smut can be completely destroyed, or suffer severe stunting that reduces production by up to 30%. Most of the commercial sugarcane varieties grown in Queensland are susceptible to the disease.

From 2007 to 2010, \$3 million will be spent on industry research and plant breeding activities, while the remaining \$3 million will be used to provide on-farm agronomic and economic advice to help growers manage sugarcane smut in a sustainable way. After this time, it is expected that industry will have turned the corner with its management of sugarcane smut and will be able to focus on its normal commercial operations.

To date, research and development outcomes include the screening of more than 2,000 clones for smut resistance and the release of three smut-resistant varieties in 2007–08, with more new varieties to be released in the future. The investment in economic decision-making tools and on-farm agronomic practices is helping growers plan strategies for variety changeover and maximise profitability while dealing with sugarcane smut.

A specially designed farm economic analysis tool (FEAT) allows farmers to determine the best way to progressively replace smut-susceptible cane varieties while improving soil health. The sugar industry recognises the FEAT software as providing a solid basis for industry development services including banks, accountants and agricultural services to work with farmers to improve profitability.

### New soybean mill at Childers

A new processing facility at Childers is a major leap forward for soybean production in the Wide Bay region and will help boost declining profitability for sugarcane farmers. Growing soybeans will help increase cane yields, break soil pest and disease cycles and return nitrogen to the soil. The new soybean handling, drying and storage facility opened in November 2007 and is the culmination of ongoing cooperation between the Isis Central Mill, Canegrowers Isis, commercial partners, DPI&F, local communities and other agencies.

DPI&F and the Isis Central Sugar Mill conducted an economic and marketing feasibility study into the need for additional infrastructure to help growers maximise the returns from high quality, high volume soybean crops. A Sugar Industry Innovation Fund grant of \$224,000 helped establish the new soybean facility to take advantage of rotational cropping and to develop an automated receivables station based on grain industry technology and near infra-red technology for grading.

### Water saving technology helps future-proof nurseries

Australia's production nursery owners have turned adversity into innovation by using a mix of irrigation and water recycling methods to combat drought conditions, severe water restrictions and reduced demand for nursery products. To encourage water conservation in commercial nurseries, DPI&F was involved with a project jointly funded by the Nursery and Garden Industry Association Queensland (NGIQ) and the Department of Agriculture, Fisheries and Forestry National Landcare Program.

Completed in December 2007, the project involved retrofitting several nurseries to ensure they had a properly designed and managed irrigation system appropriate to their individual conditions and requirements. As a result of the retrofits, the participating production nurseries achieved water savings of between 25% to 45%, which could represent an annual saving of around \$20,000 for a nursery reliant on town water (calculation based on water costs of \$1.60 per kilolitre). Using less water, but watering more often, yielded additional benefits and cost savings including:

- less water and fertiliser used due to reduced leaching from plant containers
- more consistent plant quality and fewer plant throw-outs
- fewer water-borne diseases due to minimisation of wet areas around the nursery.

One participating nursery observed a visual difference in the quality of its crop and a noticeable decrease in pests and diseases, meaning the use of chemical sprays, such as herbicide and fungicide, could be reduced.

The project found that water usage and operating costs can be decreased on a grand scale by retrofitting an entire nursery, or on a smaller scale by evaluating production areas and upgrading the irrigation system to suit the crop and conditions of that area.

NGIQ officers throughout Australia will use the results from this project to promote water efficiency to production nurseries, and show owners they can survive and profit even in drought conditions.



**DPI&F was involved with a project to encourage water conservation in commercial nurseries.**

077



### The more in the pond, the merrier

New ecologically efficient models for aquaculture farms, where complementary species are grown together, are currently being developed by DPI&F scientists in an effort to minimise environmental impacts and maximise long-term industry profits for fisheries.

The integrated polyculture models involve capturing and recycling the waste nutrients of one species and using it as feed for complementary species, improving both profitability and water quality. Fish and prawns excrete around 75% of feed nutrients and this waste material can be a valuable resource in the right environment. For example, farmers who grow sand whiting can capture waste feed nutrients using enhanced bacterial processes and re-use them as feed for a banana prawn crop. This allows them to maximise the value of the feed and reduce their environmental footprint by lowering the amount of nutrient discharge.

Use of this model by DPI&F scientists recently resulted in the production of commercial quantities of sand whiting (over 12 tonnes per hectare) with zero wastewater discharge throughout the crop cycle. Research has also shown that marine worms can be produced in sand filtration beds that remove large amounts of organic matter from prawn farm waste streams, while creating ideal conditions for seaweed culture. This adds value to the pond aquaculture as worms can be sold for fishing bait or used as high grade feeds, and the seaweeds also offer many on-farm and off-farm uses.

While the use of integrated polyculture models with Australian species is still in its infancy, producing complementary native species through nutrient recycling provides new options for marine aquaculture farmers seeking diversification and better water management strategies.

Over the next two years, co-funding from the Australian Government will see sand worm filters applied at a semi-commercial scale at three prawn farms. Information generated by this trial and other ecosystem-based research will provide farmers with tools they need to apply more nutrient-efficient and profitable practices in the future.

### Future directions

#### Horticulture: the right climate for change

Climate change due to natural and human causes is a current and future challenge high on the agenda of the primary industries sector around the world. DPI&F horticulturists realised years ago that if Queensland's horticulture industry was to continue operating profitably in the future, climate forecasts would need to be incorporated into management systems and planning.

DPI&F has secured funding to lead a climate change research project to consider the specific challenges facing the horticulture industry from the Queensland Government, Horticulture Australia Limited, Land and Water Australia, CSIRO and the horticulture industry. This research will fill critical information gaps about the impacts of climate change on horticultural regions and their production systems, including an assessment of how vulnerable major regions are to the effects of climate change, right down to the farm level. The total cost of the project is \$184,000, with \$80,000 coming from Horticulture Australia Limited and Land and Water Australia. A final report will be available in early 2009.

## Sustainable resource use

Delivering on our key outcome of sustainable resource use for primary industries means:

- minimising or eliminating adverse environmental impacts of production and processing systems
- minimising or eliminating adverse impacts of invasive species on the economy, environment and social wellbeing
- ensuring the natural resource base supports production systems in the long-term
- facilitating a regulatory and non-regulatory environment that protects sustainability while minimising costs for business.

### Sustainable resource use scorecard 2007–08

Industry	All	Fishing	Cereal grains and cotton
<b>What we planned to do in 2007–08</b>	Provide strategic direction for weed and pest animal management in 2007–08 through Queensland Biosecurity Strategy	Issue 37,500 stocked impoundment permits	Conduct training on integrated pest management by June 2008
<b>What we achieved</b>	DPI&F's Pest Offensive aimed to control weeds, identify and prevent new weed threats, improve pest management in Aboriginal and Torres Strait Islander communities and better manage wild dogs and feral pigs	SIPS funding has resulted in the release of more than 9.5 million native fish into 30 Queensland dams and has raised over \$4 million to improve the quality of freshwater recreational fishing	Conducted a range of integrated pest management training for growers, consultants and agronomists
<b>Progress against MPS targets*</b>	Target: 22 Actual: 22 Measure: Number of declared, new and regional priority pest species subject to research to improve control measures	Target: 37,500 Actual: 39,500 Measure: Stocked impoundment permits issued	Target: 227 Actual: 275 Measure: Activities designed to achieve adoption of technologies delivered by DPI&F
<b>What we plan to do in 2008–09</b>	Provide strategic direction for weed and pest animal management in 2008–09 through Queensland Biosecurity Strategy	Issue 37,500 stocked impoundment permits	Deliver 10 training workshops to more than 500 farmers and agronomists by June 2009

\* For more information on MPS targets, refer to overall performance scorecard on pages 16–21.



## Better pest management protects crops and the environment

Insects are now less of a pest for Queensland farmers who have attended DPI&F training on integrated pest management (IPM) practices. IPM's responsible crop protection principles increase yield, maintain product quality and lower production costs. IPM also benefits the environment by significantly reducing the use of insecticide and associated drift, contamination and chemical odour issues.

During 2007–08, DPI&F staff conducted a range of IPM training for growers, consultants and agronomists, including:

- courses on managing chickpea, mungbean and soybean crops, with the Mackay course attended by over 50 people in anticipation of major expansion in soybean production as a pulse break crop along the coastal sugarcane belt
- field days covering IPM in pulses, sorghum, cotton, sunflower and winter cereals and offering workshops on in-field sampling, insecticide management guidelines, minimisation of pest damage and financial loss
- an Insecticide Resistance Roadshow during May 2008 at Emerald, St George, Dalby and Goondiwindi that presented the latest resistance monitoring results for conventional insecticides for cotton bollworm, silverleaf whitefly, cotton aphid and Bt toxins.

To facilitate industry's ability to manage pests in an environmentally sustainable way, DPI&F has supported these activities with media releases and The Beat Sheet blog site (<http://thebeatsheet-ipmnews.blogspot.com>) which provides timely advice to growers and consultants during high insect pest activity. Blog postings cover a range of pest and crop combinations, from armyworms and aphids in winter cereals to corn earworm in sorghum and silverleaf whitefly in cotton.

Indications are that industry information and training is achieving its goals. Despite high numbers of corn earworm on grain sorghum crops during late last spring and early summer, these infestations were well managed by applications of environmentally friendly biopesticide. Advances in integrated pest management contribute to ensuring profitable and sustainable production practices and minimising losses due to insecticide resistance.

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## Battle against yellow crazy ants continues

DPI&F continues its yellow crazy ant eradication program in a bid to rid Queensland of the environmental pest regarded as one of the world's 100 worst invasive species. Yellow crazy ant infestations are usually treated by spraying or baiting, and infestations continue to be monitored throughout the state.

During 2007–08, Biosecurity Queensland conducted many rounds of treatment and surveillance at a 77 hectare site infected by yellow crazy ants in the Hervey Bay area, which has hugely reduced numbers of the pest. A unique difficulty of this site was a huge shell midden that was heavily infested and impossible to treat as it was. DPI&F worked with the Hervey Bay City Council and industry to dig out shells and crush them to use as a roadbase. An intensive monitoring program throughout local bushland areas will continue.

DPI&F also recently commenced a yellow crazy ant eradication campaign in Townsville, after a local discovered suspicious looking ants by the side of road in May 2008. Biosecurity Queensland was able to confirm the yellow crazy ant infestation, which covers about 25 hectares of the Ingham Road and Mount Saint John area. The area will be treated with regular chemical baiting, and ongoing monitoring and risk assessment will take place to determine if there are any other infected sites nearby.

## Red ants under fire

Australia is the first country to be close to eradicating fire ants, with Biosecurity Queensland working hard to fight the battle using innovative techniques such as fire ant genetic analysis. Since imported red fire ants were first detected in South-East Queensland in 2001, there has been tremendous community support for DPI&F's eradication program, with more than 40,000 ant samples being provided by the public and over 630 of these being positively identified as imported red fire ants.

Offering a \$500 reward to people who found a new fire ant nest clearly paid off for Biosecurity Queensland and the National Fire Ant Eradication Program. The one-off reward scheme, which ran in May and June 2008, was an innovative way of fast-tracking the pest equivalent of finding a needle in a haystack. The scheme saw 29 vigilant South-East Queensland residents pocketing the \$500 reward and nearly a ten-fold increase in the number of calls received about fire ants. This allowed the 29 previously unknown infested parcels in the greater Brisbane area to be treated and monitored by fire ant experts. Ultimate eradication will only be achieved through the cooperation and involvement of the community.

081

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## Pest Offensive targets weeds and wild animals

Weeds are considered the greatest threat to remnant vegetation protected in Queensland, with most farmers ranking them as their worst land management problem. Pest animals also cause vast environmental damage across much of regional Queensland by ravaging crops and livestock. As part of Blueprint for the Bush, \$11 million has been allocated to improve the management of high priority weeds and pest animals until 2009–10.

As part of this initiative, called the Pest Offensive, more than \$4.5 million has already been provided to a range of partners, including regional natural resource management bodies and state and local government (including Aboriginal local governments). The main aims of the Pest Offensive are to control woody weeds, prevent weed seed from spreading, identify and prevent new weed threats, improve pest management in Aboriginal and Torres Strait Islander communities and better manage wild dogs and feral pigs. Key achievements during 2007–08 include:

- construction of clean-down facilities at Gin Gin and Emerald and mobile facilities for Far North Queensland to help reduce the spread of declared weeds
- mesquite weed management in strategic areas across western Queensland
- funding to ensure early intervention in the management of the invasive weed 'giant sensitive tree' in the Proserpine area (one of Australia's Weeds of National Significance)
- funding to enable early identification and management of coral and snake cactus which pose a significant threat to western Queensland graziers

- collaboration between five shires in the southern Gulf to improve and extend coordinated management programs for wild dogs and feral pigs, which cost the grazing industry millions each year and cause significant environmental damage
- reducing crop damage from feral pigs in the Whitsunday region to local sugarcane, guava and mango crops and native palms in the Conway State Forest, as a result of stronger partnerships between government and the community
- reducing the impact of rubbervine on conservation and pastoral lands in north western Queensland by expanding rubbervine-free areas (building on the success of ongoing rubbervine control work in Burke, Flinders, Cloncurry, Mount Isa and Richmond)
- expanding existing pond apple control areas in Far North Queensland to help protect Queensland's unique waterways, wetlands and areas significant to Aboriginal people by developing partnerships between government and community.

### Tilapia threaten native fish and habitats

Many Queensland waterways, particularly those in North Queensland, are at risk of becoming overrun with tilapia—a pest fish species known as either Mozambique mouthbrooder or black mangrove cichlid. Tilapia was first detected in Queensland in the mid-1980s after being introduced illegally as an ornamental species. These pest fish are now threatening native fish populations and destroying habitats by damaging water quality, breeding prolifically and introducing diseases and parasites. Pest fish can have a devastating effect on commercial and recreational fishing sectors and, under the *Fisheries Act 1994*, possessing or releasing a noxious fish into Queensland waters attracts penalties of up to \$150,000. Pest fish species can be introduced into waterways when people empty their aquarium fish into lakes and dams, use the fish as bait or when ornamental ponds and dams stocked with these species overflow into waterways during storms. Once pest fish enter a flowing river system, they are almost impossible to eradicate. Research into recent outbreaks strongly suggests that, from the size of the tilapia and the locations in which they have been found, the fish were illegally released into these areas.

DPI&F has stepped up surveillance, control and education activities to manage these species in our waterways. These activities include ‘fishing down’ the number of tilapia in newly affected catchments to reduce the population or using poison to kill the fish. An education campaign in North Queensland and the Gulf catchment over the past two years has aimed to raise awareness about pest fish infestations, offering advice on how to stop the spread and providing identification materials. As species like tilapia are popular in Asia, pest fish information brochures have also been translated into Vietnamese and Mandarin to alert non-English speaking people that it is an offence to rear these fish in Queensland.

During 2007–08, DPI&F has been involved in addressing several tilapia infestations:

- more than 6,000 tilapia were eradicated from two Cooktown dams followed by an intensive surveillance program in the Endeavour River in conjunction with the South Cape York Catchment Group to stop the species from spreading further.
- control and surveillance activities were undertaken at Eureka Creek in the Gulf of Carpentaria region after tilapia were detected.





### **Proposed changes to traditional fishing laws**

Changes to laws governing traditional and customary fishing by Aboriginal and Torres Strait Islanders were proposed in February 2008 to ensure a fair and sustainable future for Queensland's fisheries. Under the proposed laws, Indigenous Queenslanders will be able to continue traditional and customary fishing for personal, domestic and non-commercial communal use as long as they use the same equipment as recreational fishers (such as nets, crab pots, fishing lines and spears) or approved traditional fishing apparatus. However, under the proposed laws, 14 specified areas would be closed to traditional and customary fishing (recreational or commercial) to prevent over-fishing in environmentally sensitive locations.

### **DPI&F protects swimmers**

To reduce the risk to swimmers from shark attacks, shark nets and drumlines are in place off 85 Queensland beaches. With around 9,500 whales migrating up the Queensland coastline each year, there is a chance that some may become entangled in shark control equipment. Since 2000, 22 whales have been caught in shark netting in Queensland. Of these entanglements, 19 whales have been successfully freed by DPI&F's trained marine animal rescue teams on the Gold Coast, Sunshine Coast and in Mackay. DPI&F aims to make sure whale entanglements are infrequent, and that animals caught in nets have the best possible chance of being freed quickly and unharmed. Acoustic markers have been fitted to shark nets to deter whales from coming too close to the equipment during the migration season. Suspected whale entanglements should be reported to DPI&F's Shark Hotline on 1800 806 891 as soon as possible.

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### Huge haul of fisheries information reeled in

DPI&F's commercial fisheries information system (CFISH) has now been operating for 20 years, with more than 10 million records outlining commercial fishing activity and catch in Queensland being entered since it began in 1988. There are now 1,600 commercial operators required to fill out logbooks covering 20 different fisheries throughout Queensland. The logbooks record daily fishing locations, catch (by species) and types of fishing gear used by each boat operating in the fishery. This information is used extensively by industry and government to assess the condition of Queensland's fisheries, develop fisheries management plans to ensure future sustainability and contribute to national statistics. CFISH is now one of the most comprehensive fisheries information systems in Australia, with about 500 requests each year seeking information from the database. More information about commercial fishing and logbooks is available at [www.dpi.qld.gov.au/fishweb](http://www.dpi.qld.gov.au/fishweb).

### Funding boost for tagging stocked fish

DPI&F's \$100,000 investment in tagging and monitoring of stocked fish in Queensland will help local groups better monitor their fish stocks and assist in future stocking decisions. Infofish Services has been contracted to manage this initiative and will be working closely with local stocking groups, and the Freshwater Fishing and Stocking Association of Queensland. The funds will be used to supply \$40,000 worth of tags and tagging equipment to stocking groups to be used to tag current stocked fish populations or larger fingerlings prior to release to allow future monitoring. Remaining funds will be used for data collection and final reports providing a review of fish kills during winter 2007, details of all tagging programs for stocked fish throughout Queensland and a detailed analysis of existing tagging programs. This will allow more cost-effective stocking and improved fisheries for local communities and travelling fishers.

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### Dear diary: anglers keep track of their catch

During 2007–08, around 700 recreational anglers kept a fishing diary to help DPI&F pull together a more comprehensive picture of recreational fishing in Queensland. Participants were provided with a diary, map book and fish identification guide, and encouraged to donate their fish frames for research. Information gathered through the diaries provides a better understanding of where people fish, what they catch and how much they spend on fishing. It also enables researchers to uncover fishing trends and better manage fish stocks. DPI&F staff also gather valuable information about recreational catch through surveys and fish measurements at boat ramps and other popular fishing spots. DPI&F is currently validating data collected during the year and aims to recruit up to 3,000 diarists across Queensland during 2008–09 to ensure catch and effort information is statistically representative.

### Keeping our regional dams full of fish

DPI&F introduced its successful Stocked Impoundment Permit Scheme (SIPS) in July 2000 to support freshwater recreational fisheries throughout regional Queensland. As most freshwater fish cannot reproduce in dams, the dams need to be regularly stocked with native fish. Through SIPS, DPI&F is able to give back money received from the sale of fishing permits to community-based fish stocking groups for the purchase of fingerlings and to fund other activities to enhance local fisheries. To date, SIPS funding has resulted in the release of more than 9.5 million native fish into the 30 participating dams throughout Queensland. Since its inception, SIPS has raised over \$4 million to improve the quality of freshwater recreational fishing. In 2007–08, \$670,000 of permits were sold with over \$510,000 distributed back to stocking groups in June 2008. The scheme not only supports local fisheries but also benefits regional communities through improved tourism infrastructure and economic benefits.

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## Sustainability a priority for commercial fisheries exports

Keeping Queensland's fisheries healthy and sustainable supports the increased profitability of our commercial fishing industry, with state-managed wild-caught commercial fisheries generating around \$200 million in exports each year. To ensure the long-term sustainability of Queensland's natural fisheries resources, DPI&F:

- reports annually on the status and health of Queensland's fisheries by providing catch statistics for each fishery and results of research and monitoring programs
- works with industry to develop innovative bycatch reduction techniques and implement codes of conduct and environmental management systems
- helps Queensland's major fisheries meet strict sustainability guidelines to ensure they are approved for export under Commonwealth legislation. In 2007, ecological assessments of 12 fisheries under the *Environment Protection and Biodiversity Conservation Act 1999* took place, with a further six fisheries being re-assessed in 2008.

## Study to investigate seafood: from ocean to plate

Prompted by a decline in the commercial fishing sector, a new seafood study will investigate the future profitability of Queensland's fisheries—from ocean to plate. Jointly funded by DPI&F, Queensland Seafood Industry Association and the Queensland Seafood Marketing Association, the study will examine the domestic supply chain for prawn, coral reef finfish, and inshore finfish species caught in Queensland. Many factors are currently impacting the industry's ability to remain viable, including record high fuel costs, labor shortages, the wharf price received by fishers, competition with other domestic sea foods and cheaper imported product. In the industry's favour is world-class, sustainable seafood such as prawns, scallops and bugs. In the future, DPI&F will continue to work with industry to improve profitability in the commercial fishing sector and help market Queensland seafood to ensure better prices are accessed by the entire supply chain.



087



## New fish habitats under protection

Two new fish habitat areas—Cleveland Bay near Townsville and the Fitzroy River near Rockhampton—were declared in May 2008 in recognition of their fish habitat value and economic importance to Queensland. While declared fish habitat areas are still open to legal fishing, boating and swimming, they are protected from changes and degradation associated with coastal development. With the addition of these two declarations, Queensland now boasts 73 declared fish habitat areas, providing protection for more than 880,000 hectares of high-quality coastal and estuarine fish habitat for future generations.

## Future directions

### Smarter fishing for the future

Ensuring fishing resources are sustainable, profitable and fairly accessed is no walk in the park. In Queensland, DPI&F is faced with the challenge and responsibility of managing fishery resources accessed by 1,700 commercial fishing vessels, 500 aquaculture operations, and approximately 800,000 recreational fishers.

With an investment of \$46.7 million into the sector and around 350 staff operating from 30 locations, DPI&F is currently developing a new fisheries strategy to optimise the value of Queensland's fishery resources for all stakeholders. The strategy, being developed in consultation with the fishing community, recognises and supports the co-existence and interdependence of recreational fishing, commercial fishing, Indigenous fishing and aquaculture, as well as the government's role in facilitating management arrangements to ensure long-term success.

The strategy focuses on three major investment areas—habitat, harvest and value—and defines actions needed to meet the strategic objectives of sustainable resources, responsible fishing and profitable industries. The strategy will steer the transformation of fisheries over the next five years into an organisation that is driven by knowledge and informed by relationships, delivering programs through partnerships and founded on responsibility and sustained by investment.

Features of the new strategy will include:

- a participatory approach to management with all sectors of the fishing community
- the development of new tools and programs to support ecosystem-based fisheries management
- a strategic approach to fisheries habitat management
- more emphasis on the socioeconomic outcomes of fisheries management
- partnering with the seafood sector within an industry development framework to support regional communities
- addressing key supply chain issues to enhance profitability
- improved service delivery, in line with DPI&F's 'fresh approach' to providing contemporary industry development services to its clients
- a major focus on optimising the net value of the state's fishery resources, and fishing and aquaculture ventures to the economy and community of Queensland.

Implementation of the strategy is expected to begin in late 2008.