# OUR COUNTRY OUR FUTURE

ANNUAL REPORT 2010-11



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## OUR PARTNERS

#### SUB-REGIONAL GROUPS

FBA makes on-ground change happen by devolving funds to five sub-regional groups: Three Rivers Sub Region; Central Highlands Regional Resources Use Planning Cooperative (CHRRUP); Boyne Calliope Sub Region; Fitzroy River and Coastal Catchments (FRCC); Dawson Catchment Coordinating Association (DCCA).

#### AUSTRAI TAN GOVERNMENT

Through the Caring for our Country funding program, including the Reef Rescue component, and various one-off grants.

#### **QUFFNSI AND GOVERNMENT**

Through Q2 Coasts and Country funding and one-off grants.

## LOCAL GOVERNMENT

To provide feedback on planning, deliver projects, and raise community awareness.

## **FARMERS AND GRAZIERS**

To develop, manage and monitor projects on agricultural land - land managers contribute at least 50% of the value of the project and in many cases provide much more in both cash and in-kind.

### **INDUSTRY**

To share information that supports sustainable development and community awareness, including our efforts to partner with mines to develop an integrated water quality monitoring partnership.

## TRADITIONAL OWNERS

By supporting Fitzroy Basin Elders Committee to facilitate gatherings between Traditional Owners and encourage involvement in NRM activities.

#### **COMMUNITY GROUPS**

To complete grassroots natural resource management projects with wide public benefits and build capacity of dedicated volunteers.

## **SOURCE FITZROY**

Our commercial arm, which provides NRM services to individuals and businesses, and is currently exploring the potential to broker carbon offsets between industry and land managers.

## 2010-11 BY THE NUMBERS

## \$6.6 MILLION

Funds delivered by FBA on-ground to improve water quality and NRM outcomes



## \$8.1 MILLION

Support for projects by land managers - represents cash and the value of labour and project management



96.8%

Percentage of community that think it's 'absolutely critical' or 'very important' that local waterways are healthy (Online survey by FBA, 178 responses) 142

Number of land managers that received training in computer mapping, GPS and pasture budgeting skills 107,280 HECTARES

Area of land encompassed by FBA projects

That's about 45% of the total area of the A.C.T

498

Instances of media coverage received by FBA and its sub-regional groups to raise awareness of NRM activities and outcomes

420KM

Length of fencing funded to improve ground cover or protect waterways

233KM

Length of streams and creeks protected

**201KM** 

Length of pipeline funded for watering systems that protect waterways

## HOW WE OPERATE

## **OUR VISION**

Our Country, Our Future

## **OUR MISSION**

To achieve resilient, healthy catchments through strong, independent leadership of an engaged regional community.

#### **OUR REGION**

We work across an area more than 156,000 km² in size extending from Nebo in the north to Injune in the south, and west to the Drummond Range. As well as the catchments of the Fitzroy River, we cover adjacent coastal waterways and the Boyne and Calliope Rivers.

## WF HAVF A PLAN

FBA coordinates work to achieve natural resource management targets set out in the regional plan, the Central Queensland Strategy for Sustainability (CQSS), which was developed in consultation with the wider community.

#### NATURAL RESOURCE MANAGEMENT

Natural resource management (NRM) is about finding the balance between protecting the environment and land use needs of the community, agriculture and industry. Primarily FBA strives to: protect natural assets like habitats and ecosystems, wetlands, plants and animals; improve land condition and land management practices; and ensure healthy waterways flowing to the reef.



## FROM THE CHAIR

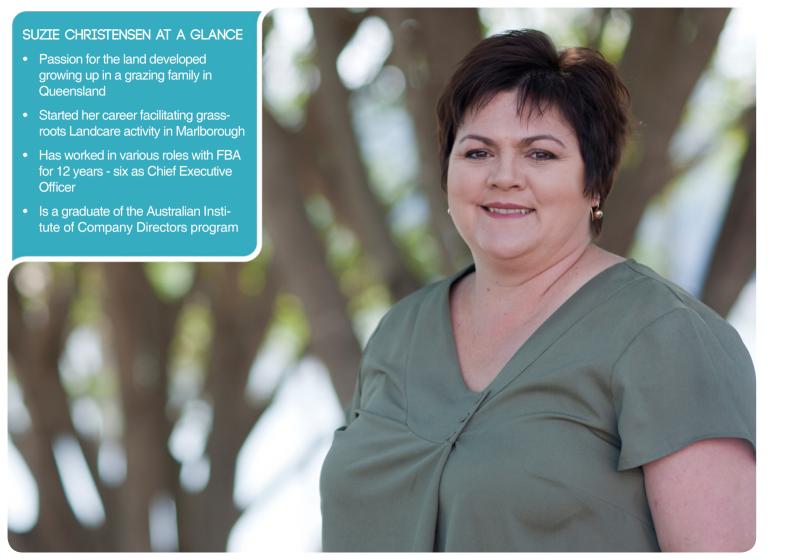
This year the Board developed a new strategic plan that identifies the challenges and opportunities facing FBA as we promote the sustainable management of our rich and diverse catchment. The plan has crystallized the scope of our efforts from now through to 2016.

We have clarified our intention to tackle issues like helping the region take advantage of a carbon economy, and incorporating climate change adaptation into our project work. The plan also defines FBA's role as an advocate for important regional issues, and specifically our desire to protect strategic cropping land – an issue close to my heart. The plan will enable us to take the organisation into a new and exciting era.

The Board has had a big changeover since the last AGM, with four new members and new people elected to leadership roles, including my own ascension to Chair. It has been rewarding to lead a group with such a diverse skill set as we meet regularly to discuss FBA business. As a group, the Board is keen to be more inclusive of our stakeholders and will continue to seek ways to listen, and respond to, the community we represent.

Supporting our CEO to attend a global conference on sustainable beef in late 2010 has delivered some exciting opportunities for FBA in the area of Grazing Best Management Practice. This has shown us that the expertise and experience we've gained in the Fitzroy Basin can have broader impact on sustainable land management. The Board is keen to extend FBA's influence both within and beyond our catchment.

Charlie Wilson



## FROM THE CEO

Flooding rains in late 2010 and early 2011 had a devastating impact on many individuals, businesses and farming enterprises. Water quality also suffered. A record amount of 39 million megalitres of water discharged from the mouth of the Fitzroy River. Flood waters carried contaminants into creeks and streams and out to the Great Barrier Reef lagoon, putting pressure on this fragile ecosystem.

In response, FBA did what we do best. We partnered with land managers to help them replace critical infrastructure needed to manage landscapes, speeding up efforts to restore ground cover and reduce further erosion. Our strong network of five sub-regional groups enabled us to get funds to where they were needed quickly.

Understandably, the flood affected the delivery of our regular grants program. But FBA still partnered with more than 100 farmers and graziers to improve the quality of water leaving their properties by adopting better management techniques and smarter technology.

Our best management practice programs continue to expand, and we are also exploring ways to support good land management in a changing climate and a low carbon economy. The regional natural resource management plan is under review and we will be seeking community input in late 2011 / early 2012.

The Board has developed a new strategic plan with exciting directions for the future. In response, FBA recently restructured. As CEO Iwill concentrate more on emerging initiatives and securing new investment. A new position of Chief Operating Officer will take responsibility for the everyday management of staff and delivery of funded programs and incentive grants. I welcome Paul Birch into that role, confident that he can keep the ship running well.

Finally, I wish to acknowledge the work of Claire Rodgers, who resigned in 2011 after ten years with FBA. We have benefitted greatly from Claire's high level knowledge of natural resource management, negotiation skills and general nous.

Suzie Christensen



## RESCUING THE GREAT BARRIER REEF

#### **GRAZING**

Graziers are valued partners in FBA's work to improve the sustainability of our region, as grazing is by far the dominant land use in central Queensland. Collectively the grazing businesses we've worked with in the past year manage more than 400,000ha of grazing land across the region.

Almost 100 grazing businesses developed projects in 2010-11 to improve ground cover and improve water quality. Maintaining high levels of ground cover reduces run-off from pastoral land, which means healthier creeks and rivers, and fewer contaminants reaching Queensland's world heritage listed Great Barrier Reef.

In some cases achieving improved land management is straightforward, such as new fencing and troughs to help graziers control stock access to riverbanks, which reduces erosion from the damage caused by cattle drinking at the river's edge or overgrazing creek flats. Changes in farm layouts and practices often go hand-in-hand with improved productivity, giving graziers added reasons to get involved.

In other cases, restoring ground cover on grazing land requires a long-term approach. Degraded paddocks can take significant time and money to return to good condition. That's why more than 20% of our paddock rehabilitation projects were in the form of a five year Voluntary Land Management Agreement (VLMA).



## NRM IN ACTION

## RESTING PADDOCKS TO RESCUE THE REEF

Andrew and Meagan Lawrie have invested heavily in infrastructure to systematically rest paddocks from cattle grazing to maintain good ground cover and reduce erosion, helping reduce contaminants entering waterways and reaching the reef.

The Lawries have gradually transformed their 3474ha Moora Plains property west of Rockhampton by splitting it up into 40 paddocks for an intensive rotational grazing system – with the purpose of improving overall land condition and ultimately improve the property's productivity.

Their recent FBA-funded project enabled them to get help with fencing and watering points on 2106ha of Moora Plains to enable them to manage 14.5km of creeks and riverbank – a sensitive area prone to erosion from cattle.

The new fencing will also enable more sustainable management of 519ha of vegetation along the waterways. High density grazing for a short period followed by extensive resting of the river and creek bank areas facilitates the growth of vegetation which stabilises creek banks, improves water quality and promotes biodiversity. The Lawries allow cattle to graze riparian areas for short periods during the dry season (April to August) within the rotational grazing system.

The family used the incentive grant to help them achieve their goals, and are also keen regenerative grazing advocates - they hosted a field day on their property in 2011 to help share their experience.



## RESCUING THE GREAT BARRIER REEF

#### **GRAINS**

Our approach to working with grain growers is innovative – it allows farmers to fully scrutinise thier cropping enterprise, compare it to the highest industry standards, and develop an individual plan of attack to improve in priority areas. It also incorporates training and access to grants to help implement improvements.

This integrated and industry-driven approach is known as Grains Best Management Practice (BMP). This year we recruited forty-five new growers into the Grains BMP program. Most of these growers went on to develop on-farm projects funded by FBA to improve thier land management, such as machinery modifications to enable controlled traffic farming. One-on-one pesticide application training was also provided to 37 Grains BMP participants.

In total 39 growers re-entered the program to reassess their practices across all five modules as part of the BMP cycle of continuous improvement. Analysis of data from growers re-assessing their practices show improvement in a number of areas. A decline in self-assesment ratings for some practices are attributed to improved awareness. Repeat growers know more about what constitutes best practice and give themselves a more realistic rating – this shows the process helps growers gain real insight into how they can run a more sustainable business.



## NRM IN ACTION

#### MAKING THE BIG CHANGE

Making the switch to zero till cropping sooner rather than later has already proven a good decision for mixed enterprise farmers Mark and Helena Collins. The Collins' own Unumgar, a 3245 hectare property 30km west of Moura with 200ha dedicated to grain production and the remainder supporting 380 breeders.

Through FBA's Grains BMP program the Collins' gained the motivation and support needed to improve their systems to move to controlled traffic farming - including purchasing a new planter that allows them to retain winter wheat stubble during the summer months.

During the recent extraordinary wet season experienced in central Queensland, Mark said the retained stubble had done a "magic job" of holding the topsoil together, despite receiving more than 400mm of rainfall in just one month. Less soil disturbance and the ability to retain stubble means more topsoil remains in the paddock, reducing run-off of nutrients and chemicals from the farm, as well as increasing fallow efficiency.

Mark is expecting his cropping frequency to increase and he will also save money through increased efficiency - the new system will cut the Collins' cultivation time from two weeks to just three days. He said the Grains BMP program and incentive funding from FBA helped him commit to, and adopt, controlled traffic farming much quicker with minimal capital costs.



## RESCUING THE GREAT BARRIER REEF

#### DRYLAND IRRIGATION

FBA works in collaboration with Cotton Australia to support irrigators within the basin. During the year, five irrigators developed contracts with FBA to complete on-ground works to improve the sustainability of their operation. Eight farmers completed training delivered by an experienced facilitator contracted by FBA to improve their skills in nutrient, chemical and sediment management activities through the cotton industry's best management practices program, myBMP.

## **HORTICULTURE**

FBA partners industry body Growcom to target horticulturalists in our region. This year 38 horticulturalists undertook training under Growcom's Farm Management System's water quality module which help them assess their business to achieve productivity and environmental gains. Five of these farmers progressed to develop on-ground projects that will directly reduce water run-off (hence a reduction in nutrients, pesticides and sediment) and improve water quality through the adoption of nutrient and pesticide delivery mechanisms that target plant areas only.



## NRM IN ACTION

### MARVELLOUS MULCH IMPROVES MANGO FARM

Thanks to a grant to purchase a new seven foot side delivery slasher, lan and Gloria Pershouse are now able to easily apply slashed mulch to mango trees across 18 hectares of their Sunnyvale property at Bernaraby near Gladstone.

The farming system used on Sunnyvale was exposing soil under the canopy of the mango trees and leading to a build-up of nutrients and organic matter in-between the rows. There was even more grass than usual growing in the inter-row area this year due to a wetter than normal summer.

The exposed soil at the base of the mango trees was prone to erosion when it rained, and meant there was little competition for weeds which led to herbicide applications about six times a year.

With their new machinery the Pershouses can distribute organic matter harvested from the inter-row underneath the tree canopy. Less topsoil washing away from rain splashing on the bare earth will limit sediment run-off into nearby Boyne River.

The mulch will also suppress weed growth resulting in up to 50% fewer herbicide applications per year, which means less chemical run-off to waterways. In the longer-term, the additional organic matter breaking down will result in less need for fertilisers.



## HELPING LAND MANAGERS BOUNCE BACK QUICKER

"Our DCCA field officer was fantastic, very helpful, understanding and made the grant application straight forward and easy to follow. Our whole experience with the Fitzroy Basin Association has been very positive and we appreciate the help as the flood damage has made life very tough."

Maree Hebbes
Usher Pastoral Company



## RESTORING FLOOD RAVAGED LAND

More than 10,000 square kilometres of the Fitzroy Basin was submerged by flooding rains in late 2010 and early 2011. With thousands of homes and businesses inundated, and areas of agricultural land swamped by water, the damage bill was high. For some the losses are still being felt.

Flood waters flowing across farming lands brought about new risks to water quality entering the reef lagoon as topsoil, nutrients, chemicals and debris from farms was washed into local waterways. Receding waters exposed new and large areas of bare ground.

FBA delivered \$400,000 in Australian Governement Flood Recovery grants to assist land managers to restore local landscapes. Many fences, trough and pipes that were washed away by flood waters were providing an environmental benefit by allowing management of stock access to sensitive riverbanks or wetland areas. We helped land managers replace this essential infrastructure.

In a number of cases, flood damage provided landholders with an opportunity to reassess and improve their property planning. Our knowledgeable field staff were able to provide advice to both limit the impact of production on the environment and shift critical infrastructure from flood zones.

We also funded three community groups to restore local wetland habitat and waterways. More than half of the funding applications received were from people and organisations that FBA had not worked with previously.



## SUPPORT FOR THREATENED SPECIES

#### **DOLPHINS**

We continued to fund research on the Australian Snubfin and Pacific Humpback dolphins, which has identified the critical importance of local habitat. Each species is at risk from loss of habitat through industrial development.

## KROOMBIT TINKER FROG

We monitored the presence of the endangered Kroombit Tinker frog by using four automated sound recorders to record the frogs' calling patterns, which is the only means to monitor these secretive animals. Numbers recorded show a downward trend in the population.

## CASCADE TREE FROG

Surveys were conducted and tissue samples collected of this endangered frog to determine their genetic diversity and study their movement. Data will assist Queensland Parks and Wildlife Service to guide their management plans.

#### BELYANDO COBBLER'S PEG

This rare plant species is found in important tracts of natural grasslands in the Central Highlands region. We raised awareness of grasslands in the community and among landholders to improve their management.

#### BLACK BREASTED BUTTON QUAIL

We are looking to identify possible new habitats of this quail to guide conservation efforts. Desktop surveys were conducted; but heavy rains meant physical surveys were not possible in 2010-11.

### FITZROY RIVER TURTLE

We funded Greening Australia to continue to survey and protect Fitzroy River Turtle nests during the 2010/11 wet season.

## BRIDLED NAIL-TAIL WALLABY

We again supported local group Australian Animal Care and Education to continue their captive breeding and relocation work to boost wallaby numbers.



## GRASSROOTS COASTAL PROTECTION

Grassroots community groups in coastal areas of our region have been successfully engaged by FBA to address issues that affect coastal wetlands, dunal areas, and beach scrub habitat.

Not only did FBA fund a number of groups to physically carry out on ground work, we collaborated with many more groups to raise awareness of the value of coastal ecosystems among the general public, local community, and schools. This was achieved through the media, publications, community events, practical workshops, and interpretive signage. FBA also supported groups to apply for grants to expand their activities.

Together with our partners Greening Australia and the Queensland Government, FBA worked with four local volunteer-driven organisations to undertake weed control in our region's internationally significant wetland areas. Groups got involved in wetland management and helped reduce weed infestations across an area of 600ha in the Shoalwater and Corio Bay wetlands. Barriers to fish migration were also reduced by installing two fish ways.

The rehabilitation of patches of endangered coastal semi-evergreen vine thicket vegetation, known as beach scrub, continued to progress on the Capricorn Coast thanks to dedicated volunteers that controlled weeds, removed rubbish, revegetated, and constructed beach access.



## USING SCIENCE TO IMPROVE NRM

FBA needs assurance that projects we fund that are designed to improve land condition will make an impact at the catchment-scale, not just in the targeted paddock.

We do this through a clever combination of satellite imagery, historical data and current research. The starting point is Vegmachine software – a tool developed by FBA and the Queensland Government that combines satellite imagery mapping and historical data to determine changes in ground cover over time. Vegmachine enables us to examine changes at the paddock-scale and compare this to the rest of the property, as well as average cover levels for similar land types within the local catchment.

This information is used in conjunction with the results of a study commissioned by FBA that identified land types that would deliver cost-effective sediment reductions. In this way, FBA can target projects in areas of the basin where the greatest and most cost-effective changes can occur.

In 2010-11 we continued to update the data within Vegmachine and also improved staff skills in using the software. In addition we developed, and trained staff in the use of, an improved sediment calculator called PEPER. PEPER will model and accurately estimate sediment reductions over the life of on-farm projects and the long-term outcomes achieved.

Our commitment to science means FBA has one of the most technically sound methods of identifying where project activity should occur, in order to be effective.



## NRM IN ACTION

## REVIVING LAND CONDITION OVER FIVE YEARS

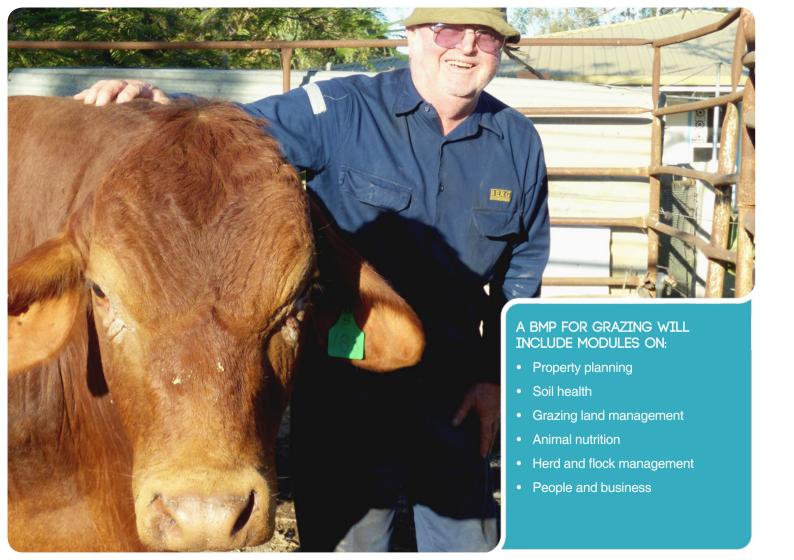
Ross Christiansen and his son Garth were some of the first landholders to partner with FBA in a Voluntary Land Management Agreement (VLMA) to restore the condition of grazing land. They could not be more pleased with the results - better ground cover, healthier pastures and improved carrying capacity. In fact, Garth believes "we couldn't have gotten a better response."

The Christiansens fatten weaners on Campo Santo, a 5108ha property located about 40km south-east of Taroom that has been in the family for 33 years. Two paddocks on Campo Santo, 19ha and 53ha respectively, were highlighted using VegMachine as requiring attention.

Both areas were treated by cutter barring to a depth of 20-30cm. Due to the existing buffel grass seed bank no grass seed was sown - instead a mix of Seca, Wynn Cassia and Burgundy bean was planted. An electric fence was installed to divide the paddocks to enable spelling of the treatment area. Ross and Garth also put in additional funds to expand the project to treat a further 364ha of the same paddock.

Ground cover is being boosted and targeted land condition ratings in the paddocks are being achieved, which will lead to significant water quality improvements through reduced erosion and run-off. Garth said "The paddock had been earmarked for treatment but by taking advantage of the VLMA incentive we were able to get it done a few years earlier."

The Christiansens project will continue until December 2014, with incentive payments each year dependent on the landholders meeting ground cover targets and maintaining monitoring records.



## SETTING THE STANDARD IN GRAZING

FBA is leading the charge to help the Australian grazing industry adopt a best management practice (BMP) program that will boost environmental performance across the country and provide an excellent tool to document and showcase the good land stewardship of graziers.

A BMP for the grazing industry will be a voluntary program accessed via the web, supported by workshops, that will allow graziers to assess their business against industryagreed best practice standards. By benchmarking against other operations, graziers can develop an action plan for improvement and potentially access grants and training to help implement changes. The model is based on our innovative and highly succesful Grains BMP program.

Collective data will be captured via the online database, but individual graziers will retain control over the privacy of their own

information. This will enable aggregated data to be used to demonstrate local, state and national trends and improvements in grazing land management.

FBA has been working with the Queensland Government and industry partners to establish self-assesment modules relevant to the grazing industry. In 2010-11, three modules were developed: Soil Health, Grazing Land Management, and Property Design and Planning. These modules will now be piloted by local graziers, with a more extensive rollout in the Fitzroy region and further afield planned for next year.

Additional modules will be added in the future to cover the full range of environmental, technical and business management topics. There is tremendous interest in the program at a regional and national scale.



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