



Delivery of training in the management of grazing lands in Queensland

A Gap Analysis March 2008

An initiative of AgForward

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This project was funded under the Systematic Approach to Sustainable Agriculture project (SASA). A strategic reserve project, managed by the Regional Groups Collective to explore the alignment of industry led Farm Management System (FMS) programs with the plans and delivery programs of the Natural Resource Management Groups (NRM Groups) across Queensland.

Executive Summary

A gap analysis of grazing management training was conducted on behalf of AgForward through a process of consultation with a wide range of stakeholders including producers, training coordinators and training deliverers.

The consultation process distilled a number of common goals:

- 1) Maintain or improve the condition of the natural resource asset
- 2) Maintain or improve animal production
- 3) Maintain or improve disposable income
- 4) Maintain or improve the quality of personal and family life.

This report lists available training courses and provides details on content, delivery mechanisms, regional availability and cost.

Training barriers as perceived by some producers include:

- Common belief that carrying large numbers of livestock is the key to profitability
- General conservative and traditional approach with reluctance to change
- Resistance to change unless there is a tangible positive effect on profits
- Making the time commitment to do training is difficult
- No clear process or pathway of training from the beginning
- Lack of support or follow-up after the course
- Feeling of insecurity with a relatively low level of competency in some areas
- Feel threatened by government trying to take away their livelihood
- The older generation say they know it all
- Belief that what is being taught is not relevant to my property or region
- Training will tell me I have to spend money on infrastructure, which I do not have.

Training barriers as perceived by some training providers and funders include:

- Engagement of landholders is not easy
- Cost of engagement and adoption is high
- One size (course) must fit all approach
- Lack of continuity of experienced, multidisciplinary staff
- Paucity in regional knowledge
- Inability to take a whole of business approach to practice changes
- Lots of environmental science experience but minimal experience in applied science of grazing.

The recommendations from this report can be categorised under three areas of influence:

1. Engagement and communication with stakeholders,
2. Training pathways, and
3. Training content.

Using these three areas of influence, the reports' recommendations can be condensed and categorised as shown in the following **Table 1**.

TABLE 1 Summary of recommendations from this report

Engagement & Communication	Training Pathways	Training Content
Consolidate formal communication, networks and partnerships. (R1)	Encourage diversity in training. (R5)	Ensure training is always regionally relevant. (R13)
Lobby lenders, DNW and others for training incentives. (R2)	Examine use of web-based training delivery. (R6)	Ensure the following elements are included: - Soil health and science, - Water quality, - Wetlands, - Biodiversity, - Fire management, - Greenhouse gas and energy management, - Managing climate variability, and - Carbon accounting. (R17)
Investigate developing an independent web site promoting all training. (R3)	Develop a whole of business approach to training. (R12)	Ensure training is coupled to basic economic options analysis. (R20)
Link training with State Leasehold Land Use Strategy. (R4)	Work with groups after training to enhance implementation. (R14)	
Greater regional promotion of funding assistance for training and on-property implementation. (R7, R8)	Conduct training at appropriate geographical level. (R19)	
Continue to recruit producer advocates. (R9)	Link the direction of training to individual profit drivers, skills and interest. (R19)	
Improve role of Regional Beef Research Committees in promotion of training. (R10)	Work with the Leasehold Land Use Strategy to minimise duplication in training and extension. (R21)	
Investigate appointment of State-wide training coordinator. (R11)		
Maintain a triple bottom line approach to measuring engagement and adoption. (R15)		
Strive for continuous improvement through review and change (R16)		

(R#) refers to the recommendation number within Section 5 of this report.

Of these recommendations, the five key recommendations that deserve highest priority are:

1. Consolidate formal communication, networks and partnerships.
2. Investigate appointment of a State-wide training coordinator.
3. Maintain a triple bottom line approach to measuring engagement and adoption.
4. Link the direction of training to individual profit drivers, skills and interest.
5. Ensure training is coupled to basic economic options analysis.

If any or all of these recommendations are to be adopted, the following factors will act to positively influence training outcomes:

- One-on-one training where feasible
- Training conducted on-property if practical
- Minimise the cost of training to the participant
- Flexibility in course duration and content
- Free maps and provide mapping skills
- Whole of business approach
- Optional training pathways
- Strong links to profitability
- Support with practical implementation of new information and technology
- Better promotion of financial incentives to producers who want to undertake on-property improvements for both the public and private good
- Mechanisms to facilitate continual improvement in the delivery of training.

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List of Abbreviations

AWI	Australian Wool Innovation
DNW	Department of Natural Resources and Water
FMS	Farm Management Systems
GLM	Grazing Land Management (EDGEnetwork course)
GPS	Global Positioning System
MLA	Meat and Livestock Australia
NRM	Natural Resource Management
PDS	Producer Demonstration Site
QDPI&F	Queensland Department of Primary Industries and Fisheries
SASA	Systematic Approach to Sustainable Agriculture project

1. Introduction

AgForward requested the services of a consultancy to identify, report and recommend solutions to address any strategic/operational gaps in the regional delivery of training in the management of grazing lands in Queensland.

This project is funded under the Systematic Approach to Sustainable Agriculture project (SASA). The SASA is a National Heritage Trust Strategic Reserve project, managed by the Fitzroy Basin Association and led by the Regional Groups Collective to explore the alignment of industry designed and endorsed Farm Management System (FMS) programs with the plans and delivery programs of the Natural Resource Management Groups (NRM Groups) across Queensland.

The aim of the consultancy was to provide AgForward and other stakeholders in the regional NRM process with information and recommended solutions to improve the coordination and service delivery of sustainable land management grazing programs.

The consultant was to deliver a report detailing:

- An overview of the delivery of grazing programs by NRM groups throughout Queensland.
- An overview of the delivery of sustainable grazing programs outside of regional NRM groups.
- Operational/strategic gaps in the delivery of sustainable grazing training.
- Recommendations, which address identified operational/strategic gaps in training, which will also include some recommendations regarding future roles and responsibilities.

2. Methodology

The project required an analysis of grazing land management programs delivered by the following stakeholders:

- NRM groups.
- QDPI&F
- Industry e.g. MLA, AgForward and AgForce.
- Agribusiness consultants: RCS and others.
- Sub-catchment groups: e.g. CHRRUP and catchment and Landcare groups.
- Others: e.g. Rangelands Australia.

The above stakeholders have one or more of the following roles:

- Coordination and facilitation of training,
- Funding of training, and
- Delivery of training.

For the purpose of this project, grazing land management programs represent specifically designed and delivered structured course work as opposed to general extension such as workshops, group and individual meetings.

This project required significant consultation with a range of stakeholders including AgForce and AgForce Cattle, service providers and regional beef groups. These stakeholders were discussed during an initial meeting with the project manager.

The analysis of the above mentioned service providers and the services they deliver was addressed and collated on a regional basis addressing the following issues:

- Current activities by region including investment and current costs to producers undertaking training.

- Current level of demand for sustainable grazing programs.
- Service provider constraints.
- Impacts associated with program delivery.
- The ongoing engagement of producers who participate in sustainable grazing programs.
- Future possibilities for improved adoption of sustainable grazing practices.
- Linkages to other training providers.

The consultant has identified the key operational/strategic gaps in the delivery of training on a regional basis and made recommendations to address these gaps.

As a basis for the consultation phase, a list of questions was prepared and endorsed by AgForward as a survey form. A survey was drawn up for producers and a separate survey for providers of training, coordination and funding. The producer survey was more attuned to seeking individual feedback on the quality of delivery of training. Each survey was divided into four sections, being:

- A. Background on the respondent,
- B. Course details and cost,
- C. Benefits and demand,
- D. Conclusions.

See **Appendix 1** for a copy of the producer and provider survey form.

Contact was made with some 80 people representing NRM bodies, Landcare organisations, the QDPI&F, private consultants and producers. Responses were received from a total of 48 persons with a roughly equal mix of response via email and telephone. See **Appendix 2** for a list of those people who were contacted and contributed to the survey. The overall response rate was in the order of 60 percent.

Where respondents contributed to this project by returning the survey by email, in most cases, it was necessary to recontact the respondent either by email or phone to clarify points. The completed survey forms do not form part of this report, however these were provided to AgForward. A survey form was not completed for all respondents if the response was not directly linked to the survey questions and/or was very brief.

Face to face consultation took place with AgForce staff in late November and also several MLA and QDPI&F staff at an extension and adoption meeting held in Brisbane on 6 December 2007. The consultation phase began on 29 November and was mostly completed by 21 December, i.e. a total of 17 weekdays. The majority of people contacted seemed generally interested in contributing, however it often took a number of telephone or email reminders to eventually receive the contributions that make up this report.

An effort was made to consult with stakeholders in each of the fourteen NRM regions, except for the Torres Strait NRM, as depicted in the map of Queensland shown in **Appendix 3**.

3. Results

3.1. Responses to the survey

The results of the survey provide information on the various courses related to grazing management and these are listed along with the deliverers and funding bodies in **Table 2**. That part of the survey titled *Section C Benefits and Demand* provided information on why a course was different to other courses, its strengths, its weaknesses, opportunities and barriers and it was this material that assisted the most in completing this gap analysis.

3.2. Common goals

Although not explicitly asked as part of the survey process, the following four goals of training in grazing management would appear to be common to training providers, training coordinators/funders and producers.

- 1) Maintain or improve the condition of the natural resource asset
- 2) Maintain or improve animal production
- 3) Maintain or improve disposable income
- 4) Maintain or improve the quality of personal and family life.

It became increasingly obvious as survey responses were received that most stakeholders and in particular producers wanted training in grazing management to be closely linked to all four of the above goals. Many respondents had a focus on one or two of these goals, e.g. NRM groups were most interested in improving the condition of the natural resources. Delivering the science and practice of grazing management without integrating all four goals was thought not to be an ideal outcome if significant on-property changes in practices were to eventuate.

3.3. Available training

This section is a summary of the various grazing management related courses available to producers in Queensland. Due to various levels of cooperation from some deliverers, not a lot of detail was forthcoming on several courses and this is evident in the following summary.

TABLE 2 Role of contacted NRM bodies and training course providers (Course deliverers are shaded green)

N.B. Training is defined as specifically designed and delivered course work and not general extension such as workshops and group/individual meetings.

Organisation Name	Core Roles	Training Delivered	Regions Serviced	Client Base
AgForward	Training	<ul style="list-style-type: none"> • Computer mapping • GPS Essentials • Vegetation Management 	All regions	Beef, sheep and grain producers
Burdekin Dry Tropics NRM	Coordination, funding and extension	Nil	Burdekin catchment	All landholders
QDPI&F	Research, extension and training	<ul style="list-style-type: none"> • EDGENetwork Grazing Land Management <ul style="list-style-type: none"> • Stocktake • SavannaPlan 	All regions	Beef and sheep producers
Burnett Mary Regional Group	Coordination and funding	Nil	Burnett and Mary River catchments	All landholders
Cape York Peninsula Development Association	Coordination and funding	Nil	Cape York Peninsula	All landholders
Central Highlands Regional Resource Use	Coordination and funding	Nil	Central Highland catchments	All landholders
Condamine Alliance	Coordination, funding and training	<ul style="list-style-type: none"> • Grazing Management 	Condamine Catchment	All landholders
Desert Uplands Build Up & Development Committee	Coordination and funding	Nil	Desert Uplands	All landholders
Fitzroy Basin Association	Coordination and funding	Nil	Fitzroy River catchment	All landholders
Fitzroy River & Coastal Catchments Inc	Coordination and funding	Nil	Fitzroy River catchment	All landholders
Grazing BestPrac	Training and consultation	<ul style="list-style-type: none"> • Grazing Management workshop 	Mainly Central Queensland	Beef and sheep producers

Inside Outside Management	Coordination and training	<ul style="list-style-type: none"> • Holistic management, • Holistic grazing planning, • Grass growers workshop. 	National, though mostly southern and central Queensland	All landholders
Mackay Whitsunday NRM	Coordination and training	Nil	North Queensland wet tropics	All landholders
Meat and Livestock Australia	Coordination and research and development of training	<ul style="list-style-type: none"> • EdgeNetwork products through QDPI&F 	National	Beef and sheep producers
Mitchell River Watershed Management	Coordination and funding	Nil	Mitchell River catchment	All landholders
Northern Gulf NRM	Coordination and funding	Nil	Northern Gulf catchments	All landholders
Queensland Murray Basin Committee	Coordination and funding	Nil	Queensland Murray Basin	All landholders
Rangelands Australia	Training	<ul style="list-style-type: none"> • Variety of short and post graduate courses 	National	All landholders
Regional Groups Collective	Coordination and funding	Nil	All regions	All landholders
Resource Consulting Service	Training and extension	<ul style="list-style-type: none"> • Cattle and Catchments <ul style="list-style-type: none"> • Applied Grazing • Grazing for Profit • Graduate Link 	National	Beef and sheep producers
SEQ Catchments	Coordination and funding	Nil	South east Queensland catchments	All landholders
Southern Gulf Catchments	Coordination and funding	Nil	Southern Gulf catchments	All landholders
South West NRM	Coordination and funding	Nil	South West catchments	All landholders
Terrain NRM	Coordination, funding and training	<ul style="list-style-type: none"> • SavannaPlan 	Herbert and Upper Burdekin Catchments	All graziers
Whitsunday Catchment Landcare Group	Coordination and funding	Nil	Whitsunday catchment	All landholders

3.3.1 Computer Mapping (AgForward)

This is a six and a half hour course to start developing a property map using satellite imagery and computer software. The cost is \$100 per person. AgForward estimates the average cost to conduct this course is \$2,600 for a group of seven producers or around \$ 370 per producer.

3.3.2 GPS Essentials (AgForward)

This course teaches producers in the practical application of GPS technology. The cost is \$50 per enterprise. AgForward estimates the average cost to conduct this course is \$2,400 for a group of seven producers or around \$ 340 per producer.

3.3.3 Vegetation Management (AgForward)

How regional ecosystems mapping and vegetation management laws impact the producer's property is the basis of this course over six and a half hours. The course also introduces producers to GPS and computer mapping. The course cost is \$100 per enterprise. AgForward estimates the average cost to conduct this course is \$2,600 for a group of seven producers or around \$ 370 per producer.

AgForward in cooperation with AgForests Queensland also delivers a Forest Management course, which is free and takes seven hours. The training covers timber harvesting and thinning in both remnant and non-remnant country in association with grazing activities.

3.3.4 EDGENetwork Grazing Land Management (QDPI&F)

This three-day course is well known and often mistakenly directly compared with other grazing management courses such as *Grazing for Profit* and *Holistic Management*. *EDGENetwork GLM* focuses on the grazing ecology, land condition and improving productivity while these other courses incorporate a lot more detail on the rest of the grazing business over a longer course duration. The course has been extensively regionalised and is based on science. See **Appendix 4.1**.

This training is respected by most stakeholders as a key grazing management course in Queensland. It has the potential to improve its appeal to a wider range of producers and other stakeholders through better integration with other training and the addition of new modules. Although it has a production focus, most NRM bodies appear to see it as a balanced course for its grazing landholder clients.

EDGENetwork GLM is part of MLA's EDGENetwork extension program and can be delivered by anyone who is accredited to do so. Currently, only the QDPI&F are delivering the course and estimates the average cost to conduct this course is \$22,500 for a group of 10 producers or a cost of around \$2,250 per producer.

3.3.5 Stocktake (QDPI&F)

This is a one-day course aimed at training producers and people such as valuers, and staff from the Environmental Protection Authority and Department of Natural Resources and Water to assess on a regular basis the condition of land and its carrying capacity. It also instructs producers on how to calculate forage budgets. See **Appendix 4.2**. The QDPI&F estimates the average cost to conduct the course at around \$1,500 per group. With the average number per group being 8 people, the cost is around \$ 190 per person.

3.3.6 SavannaPlan (QDPI&F)

This course has been derived from the *EDGENetwork Grazing Land Management* training and is delivered by QDPI&F staff and Terrain NRM staff. The major difference in delivery is that it is conducted on property one-on-one and is very flexible in content. The course focuses on identifying paddock land condition and

managing paddocks to maintain and enhance land condition. As it is one-on-one training it is costly to deliver, however it is currently funded for producers by at least three of the NRM groups. Refer to **Appendix 4.3**.

3.3.7 Grazing Management (Condamine Alliance)

This is course developed principally by George Lambert of Condamine Alliance. See **Appendix 4.4**. It was developed specifically for relatively small landholders in the Condamine catchment where the content attempts to cover the most critical elements of grazing management at such a level so that the course can be completed in one day. The course is funded by Condamine Alliance, which makes it free for producers to undertake. More emphasis on planning for extended dry periods and feed budgeting are planned for the future.

3.3.8 Grazing Best Practice Workshop (Grazing BestPrac)

The principals of Grazing BestPrac who deliver a number of grazing and property management training courses were not prepared to contribute to the survey. In general terms, Grazing BestPrac aims to deliver the expertise that fills the gap between other grazing management training and implementation on property. In addition, Grazing BestPrac aims to link grazing management with rest of the business. Grazing BestPrac believe more training attention should be given to soil health and less focus on fire as a management tool.

3.3.9 Holistic management (Inside Outside Management)

This is one of three training courses conducted under the banner of Holistic Management International Australia. This is an intensive nine-day course covering financial planning, grazing planning, land planning and biological monitoring. See **Appendix 4.5**.

3.3.10 Holistic grazing management (Inside Outside Management)

This course is conducted under the banner of Holistic Management International Australia and focuses on managing and monitoring pastures and is conducted over a three-day period. This product has been largely superseded by another Holistic product, namely Grass Grower Workshop. See **Appendix 4.6**.

3.3.11 Grass grower workshop (Inside Outside Management)

This is a one and a half day course also under the banner of Holistic Management with a focus on the theory and practice of grazing management and monitoring. The course works with rest, grazing and animal impact to effectively manage the biology of pasture management. See **Appendix 4.7**.

3.3.12 Being heard as a stakeholder in the rangelands (Rangelands Australia short course)

This course is presented over two full consecutive days and is designed to assist people to become better at communicating and contributing in rangelands involving multiple stakeholders. The course aims to equip people to understand different attitudes and perceptions in the management of rangelands.

3.3.13 Introduction to monitoring for management (Rangelands Australia short course)

This is a one-day applied course designed to reduce the confusion surrounding on-property landscape monitoring by examining different monitoring systems and techniques. The course will equip people with the basics to get started with monitoring. See **Appendix 4.8**.

3.3.14 Being in the rangelands for the long run: Balancing for economic, environmental and social outcomes (Rangelands Australia short course)

This applied course looks to help people balance the 'triple bottom line' (financials, environment and family/staff capacity) within the rangelands. Completing this course will assist landholders in developing triple bottom line property and regional plan. This course is run over two days, which are spaced between 4 to 6 weeks apart. See **Appendix 4.9**.

3.3.15 Success in Diversification: Thinking through Opportunities, Options and Implications (Rangelands Australia short course)

This two-day course is designed to help landholders explore the practicalities of diversification and review processes and tools that will help to evaluate the pros and cons of a new business idea.

3.3.16 No surprises in the Rangelands: Understanding global and national trends influencing your business and community (Rangelands Australia short course)

This course is designed to assist in raising awareness of what's happening beyond the property boundary to develop the skills for tracking global and national trends, events and emerging issues that may influence rangeland activities and its future. This course is run over one to one and a half days depending on needs.

3.3.17 Getting into Further Study: Insights, practices and tips for success in distance education (Rangelands Australia short course)

This course is to assist people working and living in rural and remote Australia, to develop the necessary skills for successful completion of postgraduate-level coursework programs by distance education. The course consists of a three-day, face-to-face workshop program and an optional research-based assignment to be completed following the workshop.

3.3.18 Graduate Certificate in Rangeland Management (Rangelands Australia post graduate course)

This post graduate course consists of completing eight units within three years with two main themes – sustainable rangeland production systems and building effective stakeholder engagements. A selection of elective subjects are also incorporated into the graduate certificate. The course can be completed externally or involve intensive on-campus blocks. See **Appendix 4.10**.

3.3.19 Graduate Diploma in Rangeland Management (Rangelands Australia post graduate course)

This post graduate course consists of completing 16 units within five years with three main themes – sustainable rangeland production systems, building effective stakeholder engagements and global and national trends. A selection of elective subjects are also incorporated into the graduate diploma. The course can be completed externally or involve intensive on-campus blocks. See **Appendix 4.11**.

3.3.20 Masters of Rangeland Management (Rangelands Australia post graduate course)

This post graduate course consists of completing 24 units within seven years with four main themes – sustainable rangeland production systems, building effective stakeholder engagements, global and national trends and research, development and extension methodologies. A graduate research project must also be completed. A selection of elective subjects are also incorporated into the masters. The course can be completed externally or involve intensive on-campus blocks. See **Appendix 4.12**.

3.3.21 Cattle and Catchments (Resource Consulting Services)

This two and a half day course has a focus on different grazing systems with an emphasis on pasture management and monitoring. It is popular with the NRM bodies and is a good starter course for the more intensive *Grazing for Profit* course. See **Appendix 4.13**

3.3.22 Applied Grazing Course (Resource Consulting Services)

This is a four-day course with a focus on cell grazing the infrastructure required to implement cell grazing. The course requires previous knowledge of grazing systems, so it is not an introductory course. See **Appendix 4.14**.

3.3.23 Grazing for Profit (Resource Consulting Services)

This is the most well-known and oldest course offered by Resource Consulting Services and extends over eight days. It is whole of business training including natural resource and grazing management. See **Appendix 4.15**.

3.3.24 Graduate Link (Resource Consulting Services)

This is a course where previous training or suitable experience is a prerequisite. It is split into three modules over six months and involves face to face and web based sessions. A major component is the completion of ten assignments by each business. See **Appendix 4.16**.

3.3.25 Meat and Livestock Australia

It is important to comment on the role of Meat and Livestock Australia (MLA) in grazing management training in Queensland. MLA is a major contributor to the development of training and extension, though not delivery of training. *EDGEnetwork GLM* is part of the *EDGEnetwork* training program developed by MLA and currently delivered by the QDPI&F in Queensland. *EDGEnetwork GLM* was and continues to be developed with the support of MLA. The GLM package was developed following an extensive survey of industry. [MLA monitors change in key management practices through annual producer surveys in order to continually improve its EDGEnetwork program](#). Other *EDGEnetwork* training that has links to GLM are training in nutrition and breeding.

In northern Australia, MLA also provides grazing knowledge and information to producers through regional *Beef Up* forums which normally involve presentations by the QDPI&F, private consultants and producers. These one-day forums focus on local issues and to date have been well attended and are recognised by a number of training providers as an excellent way to engage landholders in training. MLA also produces a technical magazine aimed at northern producers titled *Frontier*. This magazine is a quarterly production which reports on the results of research and how research is being applied on properties.

3.4. Regional availability of training

As can be seen in **Table 3**, the majority of the grazing management training is available in all regions of Queensland. There are two exceptions, the first being *SavannaPlan* which is conducted by the QDPI&F and Terrain NRM in only the Cape York, Herbert, Upper Burdekin and Northern Gulf regions. The second is the *Grazing Management* course offered by Condamine Alliance in only the Condamine region.

The approximate cost of each course to a producer after available subsidies is also shown in **Table 3**. The map following **Table 3**, labelled **Regional Training Availability** illustrates where training is available.

TABLE 3 Training courses, their duration, cost and regional availability



Available Training Deliverers	Course Name	Course Duration	Approx. Cost after subsidies*	Regions serviced by this course
AgForward	Computer Mapping	1 day	\$100 per person	All regions
	GPS Essentials	1 day	\$50 per enterprise	
	Vegetation Management	1 day	\$100 per enterprise	
Inside Outside Management	Holistic Management	9 days	\$1,386	All regions
	Holistic Grazing Management	3 days	\$462	
	Grass Grower Workshop	1.5 days	\$231	
QDPI&F	EDGEnetwork GLM	3 days	\$550	All regions
	SavannaPlan	3 days	No cost	Cape York, Herbert, Upper Burdekin, Northern Gulf
	Stocktake	1 day	\$90	All regions
Rangelands Australia	Introduction to Monitoring	1 day	\$175	All regions
	Being in the rangelands for the long run	2 days	\$330	
	Graduate Certificate in Rangeland Management	Within 3 years	\$3,080	
	Graduate Diploma in Rangeland Management	Within 5 years	\$6,160	
	Masters of Rangeland Management	Within 7 years	\$7,700	

Available Training Deliverers	Course Name	Course Duration	Approx. Cost after subsidies*	Regions serviced by this course
Resource Consulting Services	Cattle and Catchments	2.5 days	\$840	All regions
	Applied Grazing	4 days	\$1,750	
	Grazing for Profit	8 days	\$2,110	
	Graduate Link (3 modules)	Over 6 months	\$1,210	
Condamine Alliance	Grazing Management	1 day	No cost	Condamine catchment
Grazing BestPrac	Grazing Best Practice	2 days	\$680	All regions

* Approximate course cost only to producer including GST where applicable.

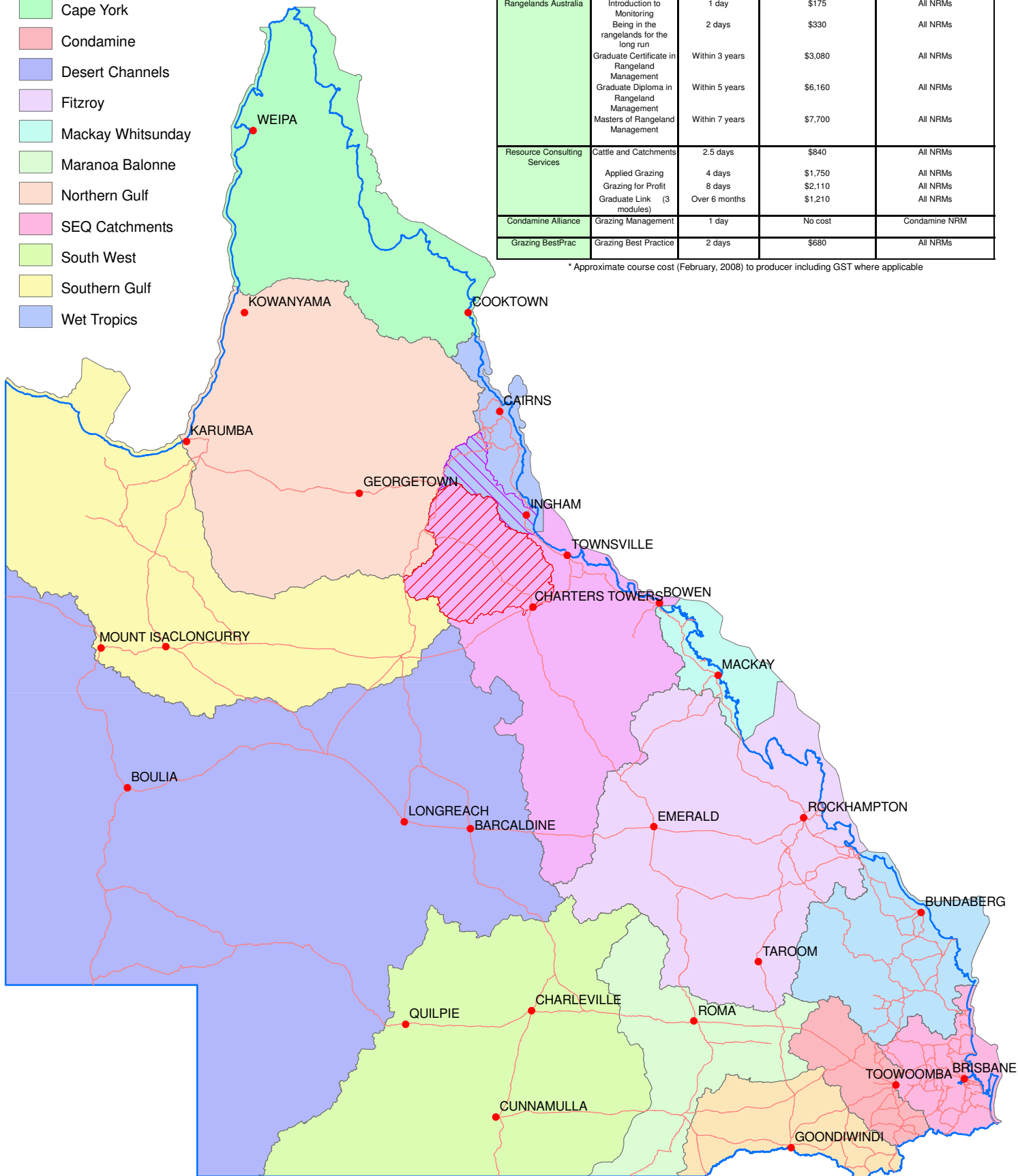
Regional Training Availability

Catchments

-  Upper Burdekin
-  Herbert River

NRM Regions

-  Border Rivers
-  Burdekin
-  Burnett Mary
-  Cape York
-  Condamine
-  Desert Channels
-  Fitzroy
-  Mackay Whitsunday
-  Maranoa Balonne
-  Northern Gulf
-  SEQ Catchments
-  South West
-  Southern Gulf
-  Wet Tropics



Available Training Deliverers	Course	Course Duration	Approx. Cost after subsidies*	Regions serviced by this course
AgForward	Computer Mapping	1 day	\$100 per person	All NRM's
	GPS Essentials	1 day	\$50 per enterprise	All NRM's
	Vegetation Management	1 day	\$100 per enterprise	All NRM's
Inside/Outside Management	Holistic Management	9 days	\$1,386	All NRM's
	Holistic Grazing Management	3 days	\$462	All NRM's
ODPI&F	Grass Grower Workshop	1.5 days	\$231	All NRM's
	Grazing Land Management SavannaPlan	3 days	\$550	All NRM's
	Stocktake	1 day	\$90	Cape York NRM, Herbert, Northern Gulf NRM, All NRM's
Rangelands Australia	Introduction to Monitoring	1 day	\$175	All NRM's
	Being in the rangelands for the long run	2 days	\$330	All NRM's
	Graduate Certificate in Rangeland Management	Within 3 years	\$3,080	All NRM's
	Graduate Diploma in Rangeland Management	Within 5 years	\$6,160	All NRM's
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Resource Consulting Services	Cattle and Catchments	2.5 days	\$840	All NRM's
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	Grazing for Profit	8 days	\$2,110	All NRM's
Condamine Alliance	Graduate Link (3 modules)	Over 6 months	\$1,210	All NRM's
	Grazing Management	1 day	No cost	Condamine NRM
Grazing BestPrac	Grazing Best Practice	2 days	\$680	All NRM's

* Approximate course cost (February, 2008) to producer including GST where applicable

3.5. General training barriers

During the consultations, a number of general barriers and gaps in training arose and these are listed here.

Firstly the perceived or real barriers facing some producers include:

- Common belief that carrying large numbers of livestock is the key to profitability
- General conservative and traditional approach with reluctance to change
- Resistance to change unless there is a tangible positive effect on profits
- Making the time commitment to do training is difficult
- No clear process or pathway of training from the beginning
- Lack of support or follow-up after the course
- Feeling of insecurity with a relatively low level of competency in some areas
- Feel threatened by government trying to take away their livelihood
- The older generation say they know it all
- Belief that what is being taught is not relevant to my property or region
- Impression that there is no point in doing training as it will tell me I have to spend money on infrastructure and I do not have the money.

Secondly the perceived or real barriers facing training some providers and funders include:

- Engagement of landholders
- Cost of engagement and adoption
- One size (course) must fit all approach
- Lack of continuity of experienced, multidisciplinary staff
- Paucity in regional knowledge
- Inability to take a whole of business approach to practice changes
- Lots of environmental science experience but minimal experience in applied science of grazing.

3.6. General catalysts for training

It also became apparent there were a number of general factors that could be categorised as positive influences or catalysts for training and these are listed below:

- One-on-one training
- Training conducted on-property
- Minimal cost to participant
- Flexibility in course duration and content
- Free maps and providing mapping skills
- Whole of business approach
- Optional training pathways
- Strong links to profitability
- Support with practical implementation of new information and technology
- Better promotion of financial incentives to producers who want to undertake on-property improvements for both the public and private good
- Mechanisms to facilitate continual improvement in the delivery of training.

4. Discussion

In discussing the findings from the consultation process, this section will be divided into barriers and opportunities to enhance the delivery of grazing management training in Queensland.

4.1. Producers - barriers and opportunities

4.1.1 Barrier - Carrying large numbers of livestock is the key to profitability

Although the science and grazing demonstration sites provide the evidence that medium stocking levels are more profitable and sustainable than higher stocking rates over the long-term, anecdotally there remains a significant sector of industry of the opinion that relatively high stocking rates are best practice and are more profitable.

4.1.1.1 Opportunities

This deficiency in understanding of fundamental grazing management is a serious issue, which should be continually challenged with actual evidence in as many locations and regions as possible. Training that incorporates actual property records where medium stocking rates are more profitable and sustainable would help to change this traditional view on stocking rates. Site visits to properties where stocking rate changes have happened would also assist. The use of dynamic modelling of the biological and financial parts of the grazing business will appeal to some producers but not all.

4.1.2 Barrier – Conservative approach with reluctance to change

Several training providers commented that the level of producer motivation to improve their business was often highly variable and not well understood. It would seem that in many cases, provided a producer has sufficient disposable income from either on-property or off-property income and is comfortable with the lifestyle, the level of motivation to attend training and change practices is greatly diminished. This does not necessarily mean these producers are successful grazing land managers.

4.1.2.1 Opportunities

The difficulties in convincing some producers without intimidation that further education will increase their level of disposable income while making them more environmentally sustainable is nothing new. The apparent, relative success of *SavannaPlan* in north Queensland in reaching some of these conservative producers is reassuring however the costs in delivering training on a one-on-one basis can be high compared to group training (this high cost per hectare of land is more so the case in the more intensively grazed regions). The real measurement of cost effectiveness is the net benefit on-farm and off-farm arising from actual on-ground changes to land management in both extensive and intensive grazing regions. The well-planned and more extensive utilisation of producer advocates in association with promotions for training may be an avenue worth exploring. More emphasis on humanising the benefits of training to average producers is an approach that should be considered.

4.1.3 Resistance to change unless there is a tangible positive effect on profits

This is a universal issue across all industries and in the sphere of sustainability, is the reason many environmentalists would like to see business take up natural resource accounting as well as financial accounting. If after a training course, producers are still asking what affect will this capital expenditure on infrastructure or change in management practice have on my bottom line over time, then the training is deficient.

4.1.3.1 Opportunities

Grazing management training must have content on the simple, economic evaluation of change. The training might incorporate the tools to do these analysis and worked examples, which producers can customise to suit their own needs. It may in some instances be preferable following a skills analysis (see Section 4.1.5.1) for producers to complete training in basic business management and enterprise economics prior to undertaking grazing management training.

4.1.4 Making the time commitment to do training is difficult

The duration of training courses varies with the material and provider and can range from half-day to nine-day courses. Producers need to be highly motivated to attend the longer courses due not only to time constraints but the associated costs. Travel to and from training venues can also extend the time commitment. One training provider believes this is a more serious issue in southern and southeast Queensland.

4.1.4.1 Opportunities

It would appear that existing training deliverers do largely travel to regional centres to minimise producer travel and time away from the property. There appears to be some reluctance by producers to spend more than one day at a time at training. There were suggestions that even three-day courses in regional areas could be broken up into one-day units spread over a period of weeks or months.

4.1.5 No clear process or pathway of training from the beginning

It was apparent that many training providers offered training in specific areas and had few resources to continue training in other areas if there was producer demand. This was a common observation from principally producers and QDPI&F staff. Often, producers are not aware of this lack of a training pathway until they complete their first stint of training and then start asking what they should do next to compliment what they have just learnt.

Several providers identified the need to initially identify the priority first actions for each producer. Often, producers will attend their first training course because it has been recommended by their peers and is available in their region. This first course is often about one aspect of the overall business (e.g. grazing management) or even one aspect of grazing management (e.g. GPS use) and can represent the first formal training for a producer.

4.1.5.1 Opportunities

This section discusses a model as proposed by QDPI&F and MLA to create a process of introducing producers to training so that they can plan what training is a priority and how they can do it.

By taking more whole of business approach, an alternative methodology is to use a process which initially identifies the key profit drivers for each producer followed by an audit of the skills and motivational issues for each producer. Depending on the results of these first two steps, the producer can be advised by those initiating the pathway process on the most suitable training pathway. This advice should try to encompass at the least the most important sustainable grazing business skills including people and livestock knowledge and skills. For example, it may mean that grazing management training is more or less important than say training in business management, options analysis or animal nutrition. Refer to **Figure 1** which is a diagrammatic representation of this process.

This process is likely to revolve around an introductory workshop to cover the profit drivers and skills audit before launching into specific training priorities. These are two keys to open the training doors and help segment the training market. It is thought important that the process be self-paced and not too rigid in content and delivery.

This approach is an attempt to recognise that some businesses should start training where the biggest and immediate gains are to be made and that producers have different aptitudes and interests for different aspects of property management.

If an approach similar to that described is applied, this should help to segment the producer clients into a range of skill levels and interests. A better understanding of what the producer training market is looking for and capable of should improve the efficiency of program and course delivery.

An associated option is for a stakeholder group or groups such as AgForward or MLA to organise regional training open days in association with providers and funders to explain the pathways to training and what training is available. One of the corporate producers contacted, thought a single, independent (not aligned to any single training provider) web site where all available training for the beef and sheep industries is located would be an advantage. This web site could incorporate the concept of pathways or tracks to training.

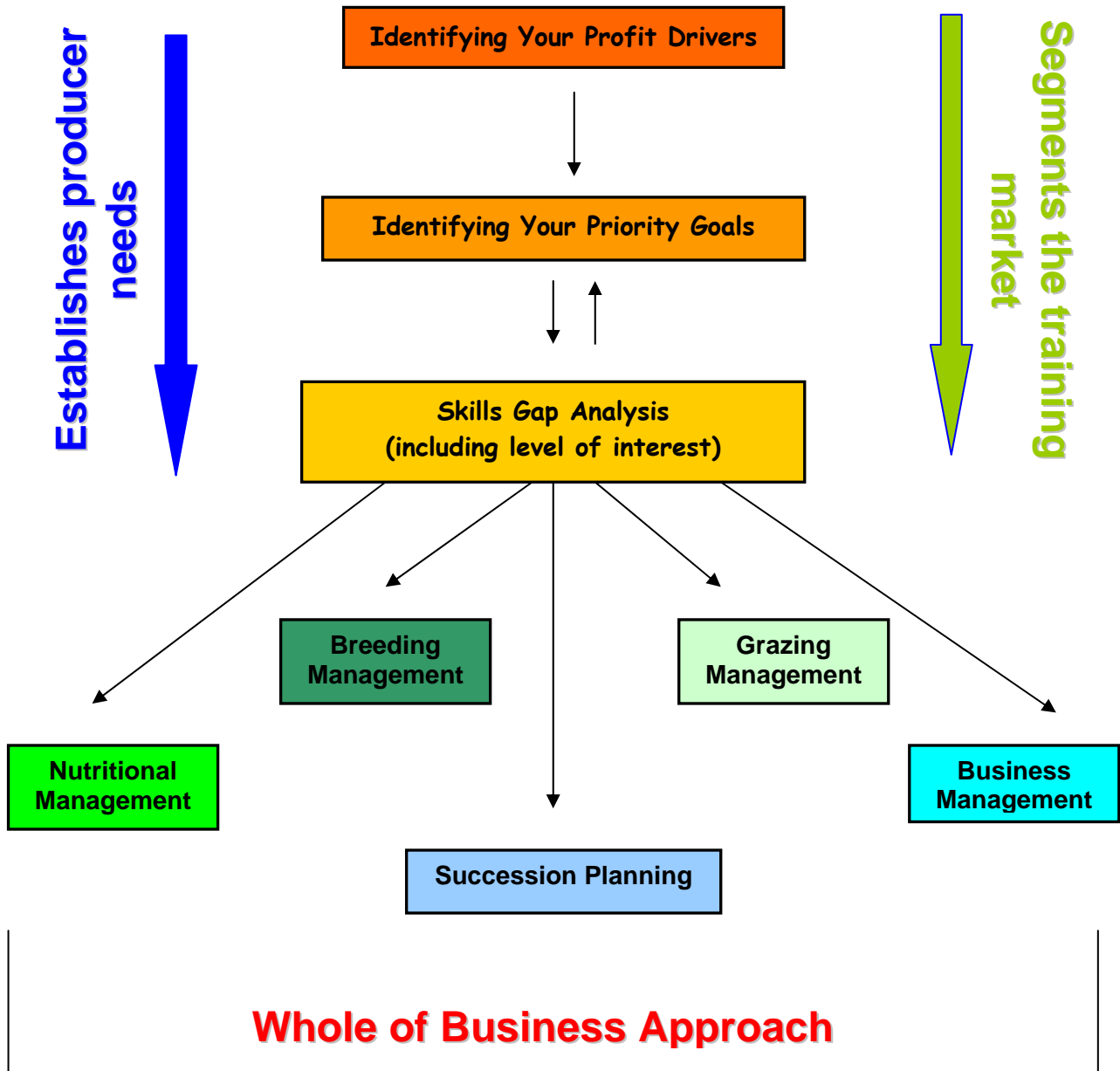
4.1.6 Lack of support or follow-up after the course

Most producers who attend training courses like the idea of receiving some support after the formal training is completed. This can take many forms, however the support should aim to consolidate the key messages and assist producers to implement on the ground what they have learnt. Support is already provided by a number of training organisations and may include follow-up training days, newsletters etc. Refer to **Appendix 4** Course Details.

4.1.6.1 Opportunities

The delivery of follow-up support post training should if possible be included as part of the overall training package. This can be logistically difficult and costly in some instances, however there exists a number of options ranging from telephone contact, email, web sites, newsletters, group meetings or one-on-one meetings on property.

FIGURE 1 Pathways of proposed producer training model
(Source : MLA/QDPI&F meeting 6 December 2007)



4.1.7 Feeling of insecurity with a relatively low level of competency in some areas

This is a common phenomenon in a traditional, male dominated industry where the average age of producers is creeping higher and higher. There is a general and very traditional expectation in the cattle industry that the man of the property should be capable in all areas, be innovative and independent. Many producers will not attend group training as they feel their position within the business could be diminished or at the very least their pride will be damaged.

4.1.7.1 Opportunities

One obvious solution is to provide one-on-one training. This is obviously a labour and resource intensive option, which unless funded by the likes of NRM organisations is not feasible in most closely, settled regions. One-on-one training may be cost effective where property holdings are relatively large as is the case in north and west Queensland. Learning and implementation through groups will often succeed provided groups are supported and given time for individuals to develop trust with each other. As earlier noted, the real measurement of cost effectiveness is the net benefit on-farm and off-farm arising from actual on-ground changes to land management in both extensive and intensive grazing regions.

4.1.8 Feel threatened by government trying to take away their livelihood

It was difficult to ascertain how extensive this sentiment from producers really is. Some producers believe that how they manage their natural resources is strictly their business and involving NRM organisations and even QDPI&F staff could threaten their livelihood. This may in part be due to the recent Queensland government vegetation legislation and surrounding planning process that resulted in less than desirable resource management outcomes in the eyes of most producers.

4.1.8.1 Opportunities

Community relationships and regional partnerships appear to be one of the most influential ways of changing this thinking in producers. Some regional NRM organisations and QDPI&F staff appear to excel in this regard and as a result have developed a valuable bank of local producer and community trust.

4.1.9 The older generation say they know it all

This is obviously not a unique issue for grazing management training, however it should be formally recognised as a continuing obstacle and is not restricted to the older generation. All but the most traditional producer will become involved in training if there is a significant and immediate financial reward from doing so.

4.1.9.1 Opportunities

Developing mutual respect with these producers is the key, albeit time consuming and difficult in some circumstances. Targeting producers who have the respect of their peers and are likely to act as role models for training and adoption is worth considering. The alternative is to begin working with the next generation so that when this generation is in charge of making management changes, they are well trained.

4.1.10 Belief that what is being taught is not relevant to my property or region

Unfortunately this belief can be well founded. Several NRM organisations were aware of course content that was not relevant to their region. An example was cited where Stocktake was delivered to a coastal producer group through a NRM organisation and the content was more suited to regions of western Queensland. This can be a major switch-off for producers, particularly those that are already apprehensive of the training.

A reported strength of some courses is the ability of training deliverers to quickly align themselves with producers and who are aware of regional differences wherever they are working. Training deliverers who do not regionalise their course content can sometimes quickly lose credibility in the eyes of producers.

4.1.10.1 Opportunities

Obviously it is in the interests of the deliverer and the body organising and perhaps funding the training to ensure the course content is regionally pertinent. An example of ensuring producers receive the training they want is through the Fitzroy Basin Catchment *Neighbourhood Catchment* program. This program coordinates a range of training courses including those related to grazing management. Part of the apparent success of this program may be that their measurement of performance and basis for continual improvement is based on on-ground outcomes and not attendance rates at training courses.

4.1.11 Impression that there is no point in doing training as it will tell me I have to spend money on infrastructure and I do not have the money.

This particular comment came from the far north QDPI&F and I suspect is more widespread than in the far north. Some producers know prior to any training that in order to implement changes, some level of expenditure on improvements be that waters or fencing will be required. It is this unwillingness or perceived inability to fund this sort of expenditure which stops some producers from attending training courses.

4.1.11.1 Opportunities

Many of the NRM organisations in Queensland are willing and able to assist producers through devolved grants in partially funding property improvements if there are sustainability outcomes. This may need to be more effectively communicated to producers at a regional level including the conditions behind such funding.

4.2. Providers - barriers and opportunities

4.2.1 Engagement of landholders

Although training providers and training organisers mostly say that they cannot keep up with the demand for training in grazing management, there was comment about how to get those producers who are influential and/or manage a relatively large area of land to attend training. These producers have the potential to act as successful training advocates and also produce relatively large-scale on-ground changes. The reasons these producers are not attending grazing management training are likely to be many and varied. Some producers would feel too proud, some will think they know enough, while others may have clashes with certain personalities.

4.2.1.1 Opportunities

The relationship with NRM bodies and local training coordinators such as FarmBis coordinators is important as their links with the local community appear to be strong. Similarly it is important to use local producer advocates, local meetings/forums (e.g. Beef Up forums) and local media as much as possible to increase the perception of local producer ownership in training. This process is no doubt working well in some regions and further lessons could be learnt where this approach is already successfully working.

4.2.2 Cost of engagement and adoption

The success of engaging landholders to participate in training appears to be usually measured by the number of participants attending courses relative to the full operational costs of delivery. This may not always be the best benchmark to use particularly when comparing participant numbers between relatively intensively and extensively grazed regions. Training in extensively grazed regions can involve relatively few managers, however the area managed by those few managers can be relatively large as is the case in the Northern Gulf region. Several training coordinators wanted to emphasise that it is not 'backsides on seats' or income from courses that is important to industry or the community, rather it is on-ground change. Accurately measuring on-property practice changes in a qualitative and particularly a quantitative way can be difficult, time consuming and expensive, however it should be a goal as an indicator of training success. Measuring actual changes to property productivity, resource security, income and costs is usually much more difficult to accurately measure due to time lags, lack of property records and sometimes other management and natural factors which can confound the cause of changes, however this should not be the excuse to not measure actual change.

4.2.2.1 Opportunities

Using standard benchmarks, which account for the full costs of delivery relative to landholder participation, area managed and the value of on-ground changes should be a critical factor in the planning, coordination and delivery of training. Determining how to best measure the cost effectiveness of training through assessing training costs and on-property changes is outside the scope of this project, however in general terms, a key benchmark of effectiveness should be the value of practice change against the full cost of training. Using a triple bottom line approach of measuring the level of engagement (number of participants), area of land (hectares) managed by participants and the value of actual on-property practice change (dollars) is likely to provide a realistic measurement of engagement and adoption.

4.2.3 One size (course) must fit all approach

A number of providers and producers are aware of their inability to reach some producers with a course that is inflexible and designed for the majority. Sometimes it is not only the content of the course that is a limiting factor but also the duration of the training is often inflexible.

4.2.3.1 Opportunities

There are obviously logistical and financial constraints to having a range of courses or even a high degree of course flexibility for different producer appetites. This problem is somewhat alleviated as there are already a diversity of courses available under the banner of grazing management. It is not always the case that producers are aware of this diversity and nor is it always possible to have training available in all regions and still be relevant to that region. Any approach to training where there is flexibility in content and delivery is advantageous and should appeal to a wider audience of producers.

4.2.4 Lack of continuity of experienced, multidisciplinary staff

This is a problem well recognised by producers, training providers and funding organisations. This has been a problem in regional Australia across most industry sectors. The problem is accentuated when a multidisciplinary team is needed to provide a whole of business approach to the grazing enterprise.

4.2.4.1 Opportunities

Probably one of the best ways of minimising this problem is to have close working regional relationships where a pool of staff originating from both the private and public sectors can work together to develop sufficient staff capacity so that when staff expertise is not available within one organisation, the gaps in knowledge and experience can be drawn from elsewhere. This can be difficult to achieve in practice due to commercial sensitivities, a lack of agreed roles and responsibilities and the fact that these working relationships can take many years to develop. The provision of staff succession planning within private and public organisations is obviously another solution provided there is cross organisational agreement in sharing resources and assumes the total necessary budget exists.

4.2.5 Inability to take a whole of business approach to practice changes

The feedback during the consultation process is that taking a whole of business approach to the business which incorporates grazing management is highly desirable, however not always possible to achieve. For producers to make informed decisions about grazing management practices, it is important that they not only have the skills and tools to manage grazing but also to know how changes to grazing practices will impact on the whole of their business.

4.2.5.1 Opportunities

Taking a whole of business approach to the grazing business, which incorporates grazing management, is the approach taken by several private consultants, such as Grazing BestPrac, Resource Consulting Service and Inside Outside Management. This requires the coordination of skilled and experienced staff who may have specialist skills but as a team can offer a 'one stop shop'. This should be achievable for any group providing training, however requires extensive planning and agreements within and between training funders, providers and coordinators. Having a multidisciplinary team may in some instances require outsourcing of expertise with relevant knowledge and experience.

4.2.6 Lots of environmental science experience but minimal experience in applied science of grazing

The NRM bodies appear to have the majority of their staff equipped with environmental science qualifications and generally outsource to obtain expertise in applied grazing management science. This appears to work well in most cases. The NRM bodies have a sustainability focus as opposed to a production focus and outsourcing grazing expertise probably maintains their strategic balance between sustainability and production at the right level. Where there are close links between an NRM body and grazing expertise, there are mutual capacity building benefits. An example is in the Burnett Mary Regional Group where there has been obvious sharing of knowledge on such things as pasture management and water quality with regional QDPI&F staff. On another level, suitably qualified and experienced staff will not be available unless environmental and agricultural science graduates are forthcoming.

4.2.6.1 Opportunities

A strong working relationship between the NRM bodies and the private and public providers of grazing management training is the key to balancing environmental science with grazing science. Unfortunately, building such relationships requires considerable people skills and is time consuming, hence the variability across the State in this balance.

4.3. Specific gaps in content of training

The following specific gaps do not apply to all training courses, however it is important to recognise these gaps do exist and to endeavour to ensure consistency across all training. The extent and exact nature of these gaps should be confirmed through formal survey and feedback from an adequate number of training course participants.

4.3.1 Basic science

A suggestion was made that training in grazing management should if it does not already, cover some basic science on soils, water and vegetation, akin to what is found in a first year agricultural science degree. This suggestion was made for the benefits of many of the older producers who have not been fortunate enough to receive this basic science as part of their formal education. This suggestion is somewhat reinforced by others suggesting that more time should be spent on the basics of soil health and its relationship to production and a sustainable environment.

4.3.2 Fire management

A northern service provider commented that training in fire management throughout the extensive areas of southern and central Queensland is lacking. The same provider says the evidence of this is in the growing woody weed-thickening problem in these regions. Skills are required in remote sensing, the use of fire, self-monitoring of fire management outcomes and the relationship between fire and grazing economics. The same remote sensing could be used to help detect changes in greenness, which would not only assist fire management but grazing management as well. This suggestion was made in the context of stating that the use of fire in Queensland has dropped by one-third over last 25 years. This call for more training in fire management should be considered in perspective as some other providers who work more closely with soil biology believe that fire is overused.

4.3.3 Biodiversity

A number of respondents thought some training did not contain enough material on biodiversity issues or it was not well integrated into the rest of the grazing management training. This should be looked at on a course-by-course basis. Some training deliverers mentioned that their course work was likely to increase its biodiversity content in the near future.

4.3.4 Greenhouse gas management

Several training providers mentioned they would be investigating the inclusion of material that specifically helps producers in managing energy consumption and greenhouse gases. No details of course content were provided.

4.3.5 Managing climate change and variability

Surprisingly many respondents did not bring up this issue. Some training providers made mention of the need for training in this area, however it may be that managing climate variability is already well covered in training as a part of Australia's normal climate variability.

4.3.6 Economic analysis

The requirement here is for an understanding of the basic tools in comparing management options. Careful planning will be necessary to ensure this element fits comfortably with the balance of grazing management training and does not overcomplicate the delivery or switch people off the subject.

4.3.7 Soil health

This element is to cover the basics of applied soil science and includes the use of a soil health scorecard. Such a scorecard has been developed by the QDPI&F and the Burnett Mary Regional Group.

4.3.8 Water quality

Similarly this topic is to cover the basics of applied water quality science and includes the use of a water quality scorecard. Such a scorecard has been developed by the QDPI&F and the Burnett Mary Regional Group.

4.3.9 Wetlands management

Both the QDPI&F and NRM organisations respondents were interested in seeing the inclusion of wetlands management within grazing management training. As water becomes more and more a scarce commodity, the importance of this aspect will increase.

4.3.10 Carbon accounting

Currently many producers in Queensland want to know more about how they can benefit by storing carbon in their soils and vegetation. How this area of science will apply to grazing properties is currently confusing and producers have a desire to understand how management can affect carbon storage and any possible carbon derived income on their property.

4.4. Specific gaps in coordination and delivery of training

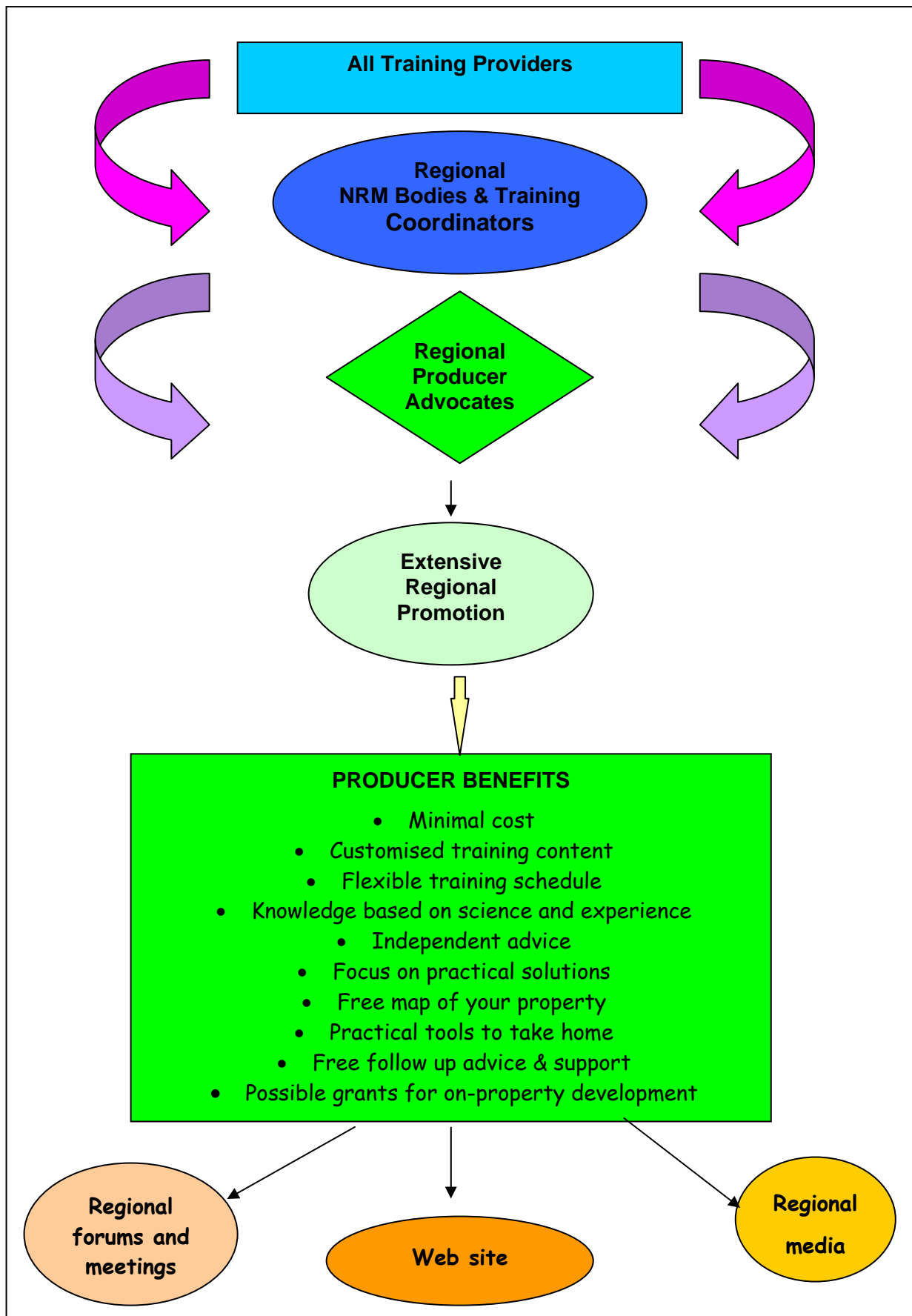
As opposed to specific gaps in content, there appears to be several gaps in actual delivery of the courses.

4.4.1 Engagement of producers

During consultations, there were two main schools of thought to attract more producers to training. The first suggestion is to actually pay these producers any gap in financial cost after existing training subsidisation is accounted (e.g. FarmBis) to attend training. So instead of normally paying for the privilege of attending a training course, the producer is 'encouraged' to attend by being offered a sum of money to plug any financial gap. This approach would seem to be inequitable to all other producers who attend training at their own cost and on their own initiative. Importantly it ignores the fact that the producer's attitude to training and learning is more important than cost or other elements of further education. A common observation is that those people sent to training by their superior at the cost of their employer sometimes get very little out of a course.

The second suggestion is make greater use of producer advocates. This involves the wider cooperation of influential producers who are able to spread the 'word' on the benefits of grazing management training. This may involve some remuneration for producers who take the time to do this. **Figure 2** is a diagrammatic representation of this option. The key steps involve training providers, regional NRM bodies/training coordinators and local producer advocates working closely at the start of the engagement process. The benefits of training should be clearly and loudly enunciated through local forums/meetings, a designated training web site and the local media.

FIGURE 2 Engaging producers to undertake grazing management training



4.4.2 Cost of engaging producers

Section 4.2.2 discusses the importance of measuring the full costs of engaging producers in training and the need to measure on-property change as part of benchmarking training effectiveness. The factors affecting the cost of engagement include the relative extensive or intensive nature of grazing in a region, which can affect how far producers will travel from home to attend training. Even the history of producers with prior training can affect the attitude of producers to group and one-on-one training. Such differences are highlighted by the relative success of *SavannaPlan* (one-on one) over *EDGEnetwork GLM* (group workshop) in the Northern Gulf region, whereas *EDGEnetwork GLM* is well attended in regions like the Burnett Mary.

The difference in regional land capability or carrying capacity determines property size and herd size. In comparing the cost of engaging producers through group and one-on-one training, an important ratio is the average number of hectares managed per producer. Simplistically, the average training group in the Burnett Mary region would need to engage around 6 producers per group to equate in land area to a single, average one-on-one engagement in Far North Queensland. Alternatively, if an average of six producers are engaged in a single group in Far North Queensland, this is equivalent in land area to three groups of 11 producers per group in the Burnett Mary region.

4.4.3 Continuous improvement

Although the survey questions used as part of this analysis were not explicit about how continuous improvement occurs, there appeared to be scope for some training coordinators and deliverers to look at how others are doing business and to make comparisons with their own business. This was most apparent with the NRM organisations who appear to act independently of each other without really knowing what works and does not work in other regions. There would seem to be an opportunity for the NRM bodies to regularly compare modus operandi and results for the benefit of landholders. A similar opportunity exists for NRM bodies to compare notes with training providers

There was evidence that some NRM groups and other organisations like MLA did spend time seeking feedback from landholders with the aim of continuously improving what they do.

4.4.4 Pathway of training

This has already been mentioned and the opportunities discussed under Section 4.1.5. This is an essential element of successful training.

4.4.5 Lack of support post training course

Similarly this factor has been discussed under Section 4.1.6. The provision and promotion of some form of support following the formal training days presents a key opportunity to improve the delivery of training packages. To exploit this opportunity requires support to become an integral part of the training package and not an after thought. This of course requires planning, human and financial resources.

4.4.6 One size must fit all

Section 4.2.3 talks about this as a barrier to some existing training and is often the reason producers complain that a course was not satisfactory as it was not relevant to my property or my region. Local knowledge and flexibility in delivery style and content is an advantage. An example of this was cited by the Mackay Whitsunday NRM group which organised a Stocktake session with local landholders. The deliverers had experience in western Queensland and did not customise the course

to sit the coastal environment. The result was dissatisfied landholders and a dissatisfied NRM group. Although promoted as a state-wide course, the deliverers on this occasion did not have the capacity to conduct this course outside of their region of expertise.

4.4.7 Whole of business approach

The importance of this issue as discussed under Section 4.2.5 cannot be overstated. Producers are looking for training that can assist them to be confident decision makers in all parts of the business and how one part of the business can affect others parts and their total bottom line.

5. Conclusions and recommendations

This section will highlight the most important findings and offer recommendations to help fill training gaps and remove barriers to training.

5.1. Engagement and communication with stakeholders

It became apparent during consultations that perhaps not all grazing industry stakeholders are involved in training and education as much as they could or want to be. Improved direct links between NRM bodies, MLA, AgForward and other training providers with lenders, insurance brokers, stock and station agencies, rural valuation firms and rural real estate agents may lead to a better understanding by these stakeholders of the natural resource constraints on grazing businesses. Often unrealistically high financial and production expectations by some of these stakeholders makes it difficult for producers to maintain sustainable grazing practices.

There may also be scope for improved servicing of grazing clients by these stakeholders if they better understand the nature of their clients business from a natural resource perspective. For example, good grazing management should decrease overall business risk and therefore present less risk to lenders and insurance brokers who may be able to offer more attractive terms and conditions around lending and insurance. In the longer term, improved linkages and signals between the natural asset worth and the financial balance sheet including property values should be to the benefit of sustainable production.

Generally it would appear that the regional NRM bodies have good community relationships, which includes landholders, Landcare organisations, private consultants and the QDPI&F. There appears to be distinct organisational and funding advantages in working closely with NRM groups in delivering training at a regional level. The working relationship between the far north Queensland QDPI&F grazing extension staff and Terrain NRM and Northern Gulf NRM appears to be a good example of a synergistic relationship that was cultivated over time.

A possible way of improving stakeholder relationships across Queensland is to facilitate regular formal contact between the NRM organisations, between training providers and between other stakeholders. Such formal communication could work on the training pathways concept as discussed under Section 4.1.5.1 and would be a good opportunity to further continuous improvement in training content and delivery.

Recommendation 1

Consolidate and strengthen formal communication, networks and partnerships by initially holding the following three forums involving:

- All regional NRM organisations and associated Landcare groups**
- All training providers including the QDPI&F, MLA, AgForward, Rangelands Australia and private grazing consultants.**
- All other interested stakeholders including financial lenders, DNW, insurance brokers, rural valuation firms, rural property agents and stock and station agencies.**

Provided these forums are successful, it would be desirable for representatives from all three broad groups to meet and plan for the future.

Creating this regular contact and formal network may be difficult to do in the short-term due to commercial and proprietary interests, however an efficient network of this sort is likely to help build capacity in producers and result in changes to management practices for the benefit of sustainable production.

Recommendation 2

Following on from recommendation 1, as an incentive to producers, lobby lenders, insurance brokers, DNW and others to provide favourable terms of business to producers who satisfactorily complete approved grazing management training and on-ground changes.

The NRM groups appear to be generally well resourced and staffed, though sometimes inexperienced staff and high staff turnover can be an obstacle for some of these organisations. The NRM and Landcare groups appear to be particularly successful in developing community awareness and support and as previously mentioned, this success hinges mostly on the people skills of personnel working on behalf of these organisations. For this reason, the coordination of training through the regional NRM groups continues to offer a significant opportunity. It is however critical that this role is filled by the most suitable person(s) for the job, i.e. someone with the correct social and organisational skills.

According to the Fitzroy Basin Association (FBA) they see few linkages with MLA except through EDGENetwork workshops. This is despite the fact that central Queensland supports a high percentage of the national beef herd. The FBA claims that MLA have not shown serious interest in utilising NRM bodies as an extension provider for the beef industry despite the NRM bodies investing more in extension than any other provider.

As mentioned earlier, one corporate producer believes a single web site would be useful in determining what training is current and how it can be organised. This should be done so that the web site information is 'independent', meaning the site encompasses all available training information in a transparent and equitable way.

Recommendation 3

Investigate the development and maintenance of an 'independent' web site that lists all training courses available to graziers in Queensland and promote that site as widely as possible.

With the Queensland government initiating State Leasehold Land Use Agreements in 2008, closer ties between the Department of Natural Resources and Water (DNW) and training providers may see mutually beneficial outcomes for lessees, the DNW, NRM bodies and training providers.

Recommendation 4

Investigate how the State Leasehold Land Use Strategy can work synergistically with training in grazing management.

As earlier discussed a diversity of training packages is a good state of affairs as this creates a level of flexibility determined by a range of factors such as property size, skills level, remoteness, climate etc.

Recommendation 5

Maintain and encourage a diversity of training packages in recognition that there is a diversity of production systems and training needs.

The use of web-based delivery combined with teleconferencing may allow training to be extended to more producers at a realistic cost. Results from a QDPI&F/AWI initiative labelled *Leading Sheep* are encouraging and may be worth piloting more widely with Queensland beef and sheep producers. The e-technology experience in the sheep industry has aided in individualising the training. The same technology could be applied to the likes of MLA's Beef-Up Forums or any organisation offering a presentation from a central point of distribution. The technology allows producers to be interactive yet not having to travel off the property.

Recommendation 6

Examine the feasibility of adapting the use of web-based training delivery as developed by the QDPI&F and AWI to the beef and sheep grazing industry in Queensland.

Most producers appear aware of FarmBis funding assistance for training, however there may be a need to better inform producers of grants available through NRM bodies to assist with on-property implementation of improved grazing practices. There were no recorded complaints by producers on the complexity or otherwise of completing funding applications. Perhaps there is a core of producers experienced in seeking funding and NRM bodies and training providers are willing to assist in the application process.

Recommendation 7

More effectively promote funding assistance and associated conditions available for training and on-property implementation as available through NRM bodies and FarmBis. This could be a role for producer advocates, web sites, regional NRM publications, private newsletters and MLA's Beef Up forums and Frontier magazine.

Several survey respondents were frustrated with the relatively slow, even 'glacial' rate of change in grazing management practices as evidenced by the extensive and recurring nature of overgrazing in some regions of Queensland. Many stakeholders reason that only legislation will see some producers change their management, however to date regulation for environmental sustainability has not been well enforced. Other stakeholders reason that loss of pasture productivity and loss of income will drive poor grazing management practices out of the industry. While this may be true, some producers are irreversibly damaging their country, which is happening over decades before productivity and profitability declines to a point where property ownership or practice change is inevitable. This can be the case for both broadacre and the peri-urban producers.

Agriculture and in particular the livestock industries are regarded as a traditional industries with a large and diverse range of operators. Reaching the slow adopters remains an ongoing problem. Producers are motivated by different things and often this is not production or profitability related. Numerous respondents talked up the benefits of combining soft, flexible training with other business and social occasions such as AgForce meetings and other community events and meetings. Being close to the ground in regions is obviously an advantage in such planning.

Recommendation 8

Look to combine formal training awareness sessions with existing regional meetings so that producers are more aware of training and funding for training and on property implementation.

Like most promotions and advertising in the world today, having a human and personal tag to training should help to attract producers to training. Attaching an average face and an average producer to the benefits of training is important.

Recommendation 9

Continue to promote training and engage more producers by putting greater emphasis on recruiting and retaining producer advocates.

Comment was received about the ineffectiveness of some of the Regional Beef Research Committees. Some of these committees are apparently not seen as representative of industry and therefore lack credibility.

Recommendation 10

Follow up with regional coordinators and training deliverers on the perception that some Regional Beef Research Committees could better represent the industry and play a more significant role in the promotion of training.

It is pertinent to report that a number of producers and training coordinators were conscious of the fact that the current array of available training may be confusing to many producers. Engaging producers to undertake training can be hampered if there are seen to be a plethora of training opportunities. Having one person in Queensland to ensure producers are engaged and receive the training they are seeking may be advantageous for not only producers but also training coordinators and deliverers. There are potential commercial issues in taking this approach, which hopefully are not insurmountable.

Appointing a single person for such a role would necessitate not only the appropriate mix of skills and experience but a person that is accountable to all stakeholders in an objective and transparent way.

Recommendation 11

Investigate the feasibility and benefits of appointing a State-wide grazing training coordinator.

5.2. Training pathways

As earlier discussed, one of the most prevalent concerns by stakeholders is the lack of a whole of business approach to training where there are clear, logical pathways to training. Integrating the many parts of the grazing business with training pathways based on priority profit drivers and skills auditing should improve the efficiency of training in general.

In most cases, producers do not think about aspects of their grazing business in isolation and therefore want to be able to integrate the parts of the business (production, profitability, sustainability and social) into any decision-making which affects grazing management.

Recommendation 12

Where absent, develop a whole of business training model based on profit drivers and an audit of producer skills that prioritizes the needs of producers and more accurately identifies the segments of the training market.

As earlier discussed, it is critical that training is kept as regionally relevant as possible.

Recommendation 13

Ensure that training if conducted in different regions and catchments is as far as possible made locally relevant for these different regions and catchments.

An issue raised during the consultations was the lack of knowledge and expertise by many deliverers to be able to assist producers with practical advice regarding the on-property implementation of information and technology passed on at training courses. Many producers want to know more about the 'how-to' part of implementation often at a very practical level. For example, if a paddock needs subdivisional fencing so as to strategically rest country, what is the best way to do this on my country and what will be the implications on herd management, cash flow etc. Some deliverers both in the private and public sector appear to be able to perform well in this regard and this is naturally welcomed by producers.

The use of relevant scenario setting that incorporates both the theory and practice can be a valuable training tool. This appears to help in giving producers the confidence to make changes to infrastructure and practices. The use of simple systems modelling that incorporates biological and financial aspects of the business appear to also be useful.

The implementation of learning may be improved by one-on-one or small group follow up in the early stages post training and this does happen at both the private and public delivery level. Motivated producers with common goals who work together can be very successful as evidenced by such programs already operating in Queensland, e.g. Executive Link as offered by Resource Consulting Services. One-on-one follow up is generally preferred by producers, however this is rarely financially viable except perhaps in more extensive grazing regions. The use of Producer Demonstration Sites (PDS) as offered by Meat and Livestock Australia may be another avenue of demonstrating implementation as are well planned and targeted field days.

The steps toward implementation are generally most successful when the process is made as relevant as possible to the individuals' circumstances, hence the relative success of one-on-one and small regional groups of like-minded producers.

Recommendation 14

Where not currently the practice, look to form groups of like-minded producers during and following training so that implementation and adoption is enhanced as well as minimising the relatively high cost of one-on-one extension in intensively grazed regions.

In speaking with a number of extension staff and consultants, it became apparent that the actual delivery of grazing management training was only the beginning of the process of seeing producers adopt change. To maximise attendance and adoption of learnings, a significant amount of resources is required following the formal delivery of training.

The *Grazing for Profit* module that has been successful for Resource Consulting Services and the *SavannaPlan* model managed by the QDPI&F are examples of how the training messages are not only transferred from the day of delivery but also over time at the individual property level some time after the course work.

Although there was not a lot of comment about the effectiveness of training, the point was made by a number of regional NRM bodies and QDPI&F staff that monitoring and evaluation of training is critically important and it is the measure of on-property practice changes not the number of participants at courses that is important.

Recommendation 15

If not already in place for all training courses, formulate and maintain a triple bottom line approach to measuring engagement and adoption by measuring producer participation in training (number of producers engaged), area of land managed by participants (hectares) and the value of actual on-property changes in practice (dollars) as a proportion of the full developmental and operational costs of training.

In terms of coordination and delivery of training, continuous improvement is an obvious necessity. There does appear to be scope for some NRM bodies and other organisations to improve their coordination and delivery performance by actively comparing methods and results.

Recommendation 16

Where not formally in place, training coordinators and deliverers should be routinely surveying their customer base for feedback, comparing training approaches and on-property practice change, thereby leading to internal reviews and actions for continuous improvement at both the strategic and operational levels.

5.3. Gaps in training content

As discussed earlier, there are a number of recurring and specific gaps in training that have to come the forefront during consultations.

The addition of new elements or an expansion of existing elements of training courses should be based on direct producer feedback. Before taking on any of the following recommendations, producers who have completed training should be specifically asked what if any of the following improvements should be made. In some cases, existing courses are already very comprehensive and extend over many days. Any changes to existing courses should take this into consideration.

Recommendation 17

Where required, further improve elements of existing training to include:

- **Soil health and science,**
- **Water quality,**
- **Wetlands,**
- **Biodiversity,**
- **Fire management,**
- **Greenhouse gas and energy management,**
- **Managing climate variability, and**
- **Carbon accounting.**

A remarkably repetitive comment from a wide range of stakeholders was the importance of linking grazing management practices to the economics of the whole grazing business. This should not be unnecessarily overcomplicated considering a large proportion of producers currently have poor production records and poor skills in this area.

Recommendation 18

Where absent, ensure that grazing management training is coupled to the basics of economic options analysis within the grazing business.

Generally speaking, respondents believe the more 'local' you can afford to go with training, the more successful will be learning and implementation.

Recommendation 19

Where ever possible and depending on the size of holdings, conduct training at the sub-catchment, catchment or regional level so as to retain local relevance, producer awareness and sharing of on-property implementation strategies.

NRM respondents in particular were supportive of diversity in training. As earlier discussed, one size does not fit all.

Recommendation 20

Maintain and enhance the diversity of available grazing management training, however improve the training pathway so that it is related to profit drivers and producer skills and interest.

Many of the people interviewed were hopeful that existing grazing management training would align well with the expectations of the Queensland government on maintaining leasehold condition. There remains uncertainty as to whether this will be the case. Lessees will need to demonstrate to the government that their lease conditions are being met including maintaining and enhancing the land condition if leases are to be renewed. If the Leasehold Land Use Strategy is to be successful, there should be a degree of consistency between lease conditions and land condition.

Recommendation 21

Perceive the Leasehold Land Use Strategy as a catalyst for grazing management training and continue to monitor and work with the Queensland government on training that encapsulates both land condition and lease conditions, so as to minimise duplication in training for producers.

6. Appendices

Appendix 1 Training provider and producer survey questions



Regional Delivery of Broadacre Sustainable Grazing Management Programs in Queensland

Survey of Providers

An initiative of AgForward

Project Consultant: Steve Banney

Phone: 0427 161 072, Email: sdb@austarnet.com.au

A. Provider Background

- *Provider Name*

- *Location(s)*

- *Main Activities*

- *Regions Serviced*

- *Grazing Client Base (number and enterprise types)*

- *Grazing Client Land Base (total hectares)*

- *Grazing Client Livestock Base (total head)*

B. Course Details and Costs

Please complete Sections B and C for each training course provided.

- *Name of Course*

Overall Description and Duration

Level of Producer Skills: (No prior skills, prior intermediate skills, prior high skills)

- *Course Deliverables*

- *Course Trainers – Describe level of competency and experience*

Trainer #1

Trainer #2

Trainer #3

- *Number of Producers who have completed this course (last three years)*

2005

2006

2007

- *Form of Course Promotion*

- *Post Course Support Services on Offer*

- *Qualification to Producer on Completion of Course*

- *Type and Level of FarmBis Support*

- *Type and Level of Other Financial Support*

- *Net Course Cost to Producer*

- *Existing Course Development Cost to Provider*

- *Future Course Developments and Estimated Cost to Provider*

C. Benefits and Demand

Please complete Sections B and C for each training course provided.

- *Key Benefits of Course for Producers*

- *Key Limitations of Course for Producers*

- *Key Differentiating Aspects of Course for Producers*

- *Existing Strengths of this Course*

- *Future Opportunities for this Course*

- *Demand Outlook of Course for Producers*

- *Name of any Similar Competing Courses*

- *Any Planned Future Changes to Course*

- *Methods of Communication with Producers Post Course Completion*

- *Existing Barriers to Uptake of this Course by Producers*

- *Possible Incentives to Improve Uptake of Course by Producers*

- *Existing and Possible Links to Other Courses (internal and external)*

- *Existing and Possible Links to Other Training Providers*

- *Existing and Possible Links to Meat and Livestock Australia's Role in Extension*

- *Role of QDPI&F as a Training Provider*

- *Scope for Better Coordination of Linkages between Courses and Providers*

- *Describe any links between courses and regional monitoring and evaluation*

D. In Conclusion

- *Other Comments*

- *Person Completing this Survey*
Name

Position

- *Date Completed*



Regional Delivery of Broadacre Sustainable Grazing Management Programs in Queensland

Survey of Producers

An initiative of AgForward

Project Consultant: Steve Banney
Phone: 0427 161 072, Email: sdb@austarnet.com.au

A. Producer Background

- *Producer Trading Name and Main Property Name*

- *Main Property Location(s)*

- *Main Enterprises*

- *Grazing Land Base (principal type of country and total hectares)*

- *Grazing Livestock Base (principal breed and total head)*

B. Course Details and Costs

Please complete Sections B and C for each training course completed.

- *Name of Course*

General Course Description and Duration

Level of Producer Skills: (No prior skills, prior intermediate skills, prior high skills)

- *Course Deliverables*

- *Course Trainers – Describe level of competency and experience*

Trainer #1

Trainer #2

Trainer #3

- *Number of family members who have completed this course (last three years)*

2005

2006

2007

- *How did you find out about the course?*

- *Describe any Post Course Support Services on Offer by the Provider*

- *Was any Qualification gained on Completion of Course?*

- *Type and Level of FarmBis Support*

- *Type and Level of Other Financial Support*

- *Net Course Cost to Producer*

C. Benefits and Demand

Please complete Sections B and C for each training course completed.

• *Key Benefits of this Course for Producers*

• *Key Limitations of this Course for Producers*

• *Key Differentiating Aspects of this Course for Producers*

• *Existing Strengths of this Course*

• *Future Opportunities for this Course*

• *Demand Outlook of Course for Producers*

• *Name of any Similar and Competing Courses*

• *Suggestions for any Changes to improve this Course in the Future*

• *Methods of Communication with Providers Post Course Completion*

- *Existing Barriers to Uptake of this Course by Producers*

- *Possible Incentives to Improve Uptake of Course by Producers*

- *Existing and Possible Links to Other Courses*

- *Existing and Possible Links to Other Training Providers*

- *Existing and Possible Links to Meat and Livestock Australia's Role in Extension*

- *Role of QDPI&F as a Training Provider*

- *Scope for Better Coordination of Linkages between Courses and Providers*

- *Describe any links between courses and your ability to monitor your property landscape*

D. In Conclusion

- *Other Comments*

A large yellow rectangular box intended for providing other comments.

- *Person Completing this Survey*

Name

Position

A yellow rectangular box intended for providing the name and position of the person completing the survey.

- *Date Completed*

A yellow rectangular box intended for providing the date the survey was completed.

Appendix 2 Table of people and organisations contacted as part of this project

NRM ORGANISATIONS, QDPI&F, LANDCARE						
	Organisation	FirstName	LastName	Position		Contribution Received*
1	Burdekin Dry Tropics	Bob	Frazer	CEO		No
2	Burdekin Dry Tropics	Scott	Crawford	Program Manager		No
3	Burdekin Dry Tropics	Gale	Duell	Regional Landcare Coordinator		No
4	DPI - GLM Burdekin	Brigid	Nelson	Extension		Yes
5	DPI - GLM Burdekin	Bob	Shepherd	Extension		No
6	DPI - GLM Burdekin	Marnie	McCullough	Extension		Yes
7	DPI - GLM Burdekin	Bob	Karfs	Program Leader		No
8	Burnett Mary Regional Group	Fiona	McCartney	Sustainable Use Coordinator		Yes
9	Burnett Mary Regional Group	John	Muir	Regional Landcare Coordinator		Yes
10	Burnett Catchment Care Association	Dean	Power	Catchment Coordinator		No
11	DPI - GLM Burnett	Bill	Schulke	Extension		Yes
12	DPI - GLM Burnett	Graeme	Elphinstone	Extension		Yes
13	Condamine Alliance	Penny	Hamilton	Program Manager		Yes
14	Condamine Alliance	George	Lambert	Grazing extension		Yes
15	Condamine Alliance	Andrew	McCartney	Regional Landcare Coordinator		Yes
16	Cape York Peninusal Development Assoc	Peter	Thompson	CEO		Yes
17	Cape York Landcare	Sandy	Lloyd	Landcare Coordinator		Yes
18	Desert Channels Queensland	Steve	Wilson	Regional Coordinator		No
19	Desert Channels Queensland	Cameron	O'Neil	Landcare Coordinator		Yes
20	Desert Uplands Build Up & Development Committee	Robert	Cameron	Catchment Coordinator		Yes
21	DPI - GLM Fitzroy	Paul	Jones	Extension		No
22	Fitzroy Basin Association	Claire	Rodgers	Program Manager		Yes
23	Fitzroy Basin Association	Gavin	Peck	Technical Manager		Yes
24	Fitzroy River & Coastal Catchments Inc	Murray	Bullock	Catchment Field Officer		Yes
25	Central Highlands Regional Resources Use Planning Cooperative	Anna	Cohrane	Executive Officer		Yes
26	DPI	Kevin	McCosker	Biloela Beef Group		No

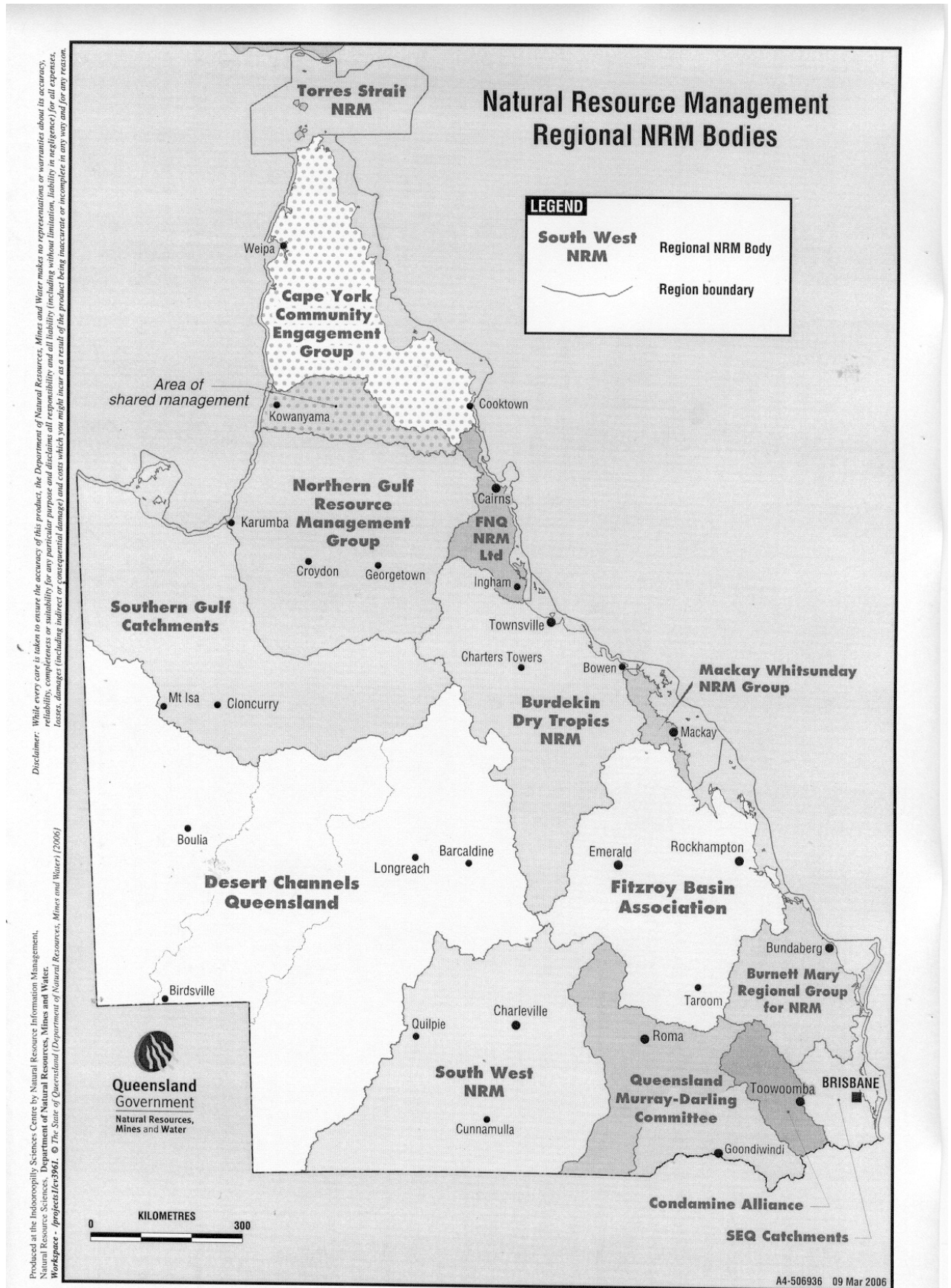
27	DPI - GLM Mackay Whitsunday	Caroline	Sandra	Extension (GLM)	Yes
28	Mackay Whitsunday NRM	Robert	Cocco	Operations manager	No
29	Whitsunday Catchment Landcare Group	Christine	Peterson	Catchment Coordinator	Yes
30	Mackay Whitsunday NRM	Jon	Graftdyk	Sustainable Landscapes Grazing	No
31	MRCC	Brad	Wedlock		No
32	NRM Facilitator, Aust Govt	Stephen	Tapsall	Sustainable Resource Use	Yes
33	Mitchell River Watershed Management	Deborah	Eastop	Catchment Coordinator	No
34	Northern Gulf NRM	Noeline	Gross	CEO	Yes
35	Northern Gulf NRM	Kristy-Leigh	Wellington	Grazing Lands Officer	Yes
36	DPI - GLM Maranoa Border Rivers	Col	Paton	Extension	Yes
37	DPI - GLM Maranoa Border Rivers	Jillian	Alexander	Extension	No
38	Qld Murray Darling C'tee	Geoff	Penton	Program Manager	Yes
39	SEQCatchments	Bruce	Lord	Community Partnerships Mgr	No
40	SEQCatchments	Col	Freeman	Regional Coordinator	No
41	SEQCatchments	Alison	Chapman	Landcare coordinator	No
42	Southern Gulf Catchments	Kate	Masters	Program Manager	Yes
43	Southern Gulf Catchments	Charles	Curry	Projects Coordinator	No
44	Regional Groups Collective	Sarah	Hood	Project Coordinator	Yes
45	DPI - GLM Mulga	Jane	Hamilton	Extension	Yes
46	South West NRM	Keith	Walker	Aust. Govt. Regional Facilitator	No
47	DPI - GLM North Queensland	Joe	Rolfe	Senior Extension	Yes
48	DPI - GLM North Queensland	Jim	Kernot	Senior Extension	Yes
49	DPI - GLM North Queensland	Kev	Shaw	Senior Extension	Yes
50	DPI - GLM North Queensland	Bernie	English	Extension	Yes
51	Terrain NRM	Ian	Little	Grazing Extension (\$avannahPlan)	Yes
AGFORCE CATTLE BOARD REPS					
52	Chairman	Greg	Brown		Yes
53	AgForce North	Alex	Stubbs		No
54	AgForce North	Peter	Hall		No
55	AgForce CQ	Ian	McCamley		No

56	AgForce SE	David	Rathie		Yes
57	AgForce SE	Ian	Harsant		No
58	AgForce SIQ	Teresa	Allen		No
59	AgForce SIQ	Grant	Maudsley		Yes
60	AgForce SW	Steve	Taylor		Yes
61	AACO.	David	Connolly	(Kim MacKenzie, Training Officer)	Yes
NORTH AUSTRALIA BEEF RESEARCH INDUSTRY COMMITTEE					
62	Chairman, NABRC	John	Cox		Yes
63	Chairman, West Qld	Elizabeth	McKenzie		No
64	Rep, Sth Qld	Rawdon	Briggs		Yes
65	Chairman, SE Qld	Max	Boothby		Yes
66	Chairman, Central Qld	Ron	Carige		No
67	Chairman NW Qld	Zanda	McDonald		No
OTHER					
68	Meat and Livestock Australia	Rodd	Dyer	Manager, Northern Beef	Yes
69	Meat and Livestock Australia	Wayne	Hall	Manager, Northern R&D	Yes
70	Meat and Livestock Australia	Mick	Quirk	Environment Coordinator	Yes
71	Resource Consulting Services	Margaret	Bridgeford	CEO	Yes
72	Inside, Outside Management	Helen	Lewis	Director	Yes
73	Grazing BestPrac	Mick	Alexander	Principal	No
74	Rangelands Australia	John	Taylor	Director	Yes
AGFORCE & AGFORWARD					
75	AgForward	Genevieve	Nash	Longreach	No
76	AgForward	Lyndal	Rolfe	Emerald	No
77	AgForward	Janet	Snars	Charleville	Yes
78	AgForce	Wendy	Allan	Toowoomba	No
79	AgForce	Oscar	Pearce	Brisbane	Yes
80	AgForce	Andrew	Freeman	Brisbane	No
81	AgForce	Kate	Scott	Toowoomba	No

* Contribution was either a fully cooperative written or verbal sharing of information

Appendix 3 Map of Queensland showing NRM regions.

(Source: http://www.regionalnrm.qld.gov.au/my_region/regional_nrm_groups.pdf)



Appendix 4 Course details

4.1. EDGENetwork Grazing Land Management

(details from QDPI&F, regional NRM groups, MLA and producers)

Provider	QDPI&F
Regions	Northern Gulf Southern Gulf Mackay Whitsundays Burdekin Desert Uplands Fitzroy Burnett and South East QLD Border Rivers (coming soon) Maranoa Balonne & Western Downs Mulga Channel country Mitchell grass Tropical Wet Coast under development
Course Duration	Three days plus a follow-up day around six months after the course
Deliverables	An understanding of the ecosystem, so as to improve land condition, improve evenness of pasture use and improve diet quality through the management of the following aspects: <ul style="list-style-type: none"> ▪ Grazing ▪ Fire ▪ Tree-grass balance ▪ Sown pastures ▪ Weeds.
Completed courses	47 GLM workshops delivered across QLD since 2002 encompassing 690 participants from primarily grazing and mixed enterprises.
Post Course Services	Trainers can be contacted for assistance. Level of assistance is variable.
Qualifications	Certificate of attainment with potential to gain recognition of prior learning for a diploma of agricultural business with TAFE.
FarmBis Support	Has ranged from 50-75%, currently at 65%
Other Support	Partnership projects funded through some regional NRM groups in various models (subsidy, consultancy, partnership projects etc.)
Key Benefits	Comprehensive knowledge transfer and enhancement based on adult learning principles – interactive in that producers learn from each other. Evaluated development options. Peer review. Business and personal development based on continuous improvement cycle. All courses developed to address learning outcomes identified by producers Assimilate a lot of info for producers into an understandable format Quality control on presenters – they have to be able to answer the tricky questions
Key Limitations	QDPI time and funding to deliver the course Group activity versus one-on-one training Not sufficient follow-up after the course Length of the workshop (though this may be overcome through delivery arrangements with trainers) Travel & over night stays sometimes required for participants to attend Limited financial analysis covered in the workshop
Key Strengths	Technical knowledge based on science, delivery based on adult learning, linked to a planning process and implementation strategy. Peer review as a group, Course materials and structure was developed from outcomes of extensive consumer surveys. Delivered by experienced trainers (technical and extension experience) Delivers principles in a range of formats that suit various learning styles Principles delivered allow producers to make informed management decisions for their own places and their own circumstances. Development of a grazing land management plan Information is “customised” to provide specific regional examples & tools. Developed for MLA by experts in the areas to address learning outcomes prioritised by producers Independent – MLA is not making money from the courses
Future Opportunities	Better linked to planning and implementation, better process of follow-up post training, possibly split into half-day or 1-day separate units. Integration with other courses, including NRM group planning/activities, Computer mapping with AgForward, economics and benchmarking. Has the flexibility to adapt to individual group needs pre, during and post workshop. Customisation of materials & tools for peri-urban graziers Integrations with above mentioned groups /courses Partial delivery of materials via internet based technologies Develop a “profit driver” course that looks at the business holistically and allows

Grazing management training – a gap analysis

	producers to identify where best to invest their training time/dollars in terms of technical aspects
Demand Outlook	Good, ongoing enquiry, though perhaps less in future if Farmbis subsidy is dropped
Current Barriers to Uptake	Time, money and producer motivation. Length of courses in southern and south-east Qld Lack of awareness of the courses Lack of good deliverers actively pushing courses
Possible Incentives to Uptake	Address climate change impacts and carbon accounting, transparent demonstrated links between productivity and sustainability, more economic evaluation, climate change risk management, carbon trading explained. Other cost subsidies. Incentive based payments or incentives for best practice grazing management. Links to regional NRM support for on-farm activities
Future Course Improvements	Property mapping, vegetation management, climate risk management, other productivity based training packages (e.g. Breeding and marketing), economic assessment, biodiversity management, cross industry training (cropping, native forest management, dairy), weed management.
Links to Other Courses	Closely linked in development and operational phases
Links to MLA	DPI&F focus is currently on productivity growth
Role of QDPI	Continued and better links to NRM bodies, Attempting to improve coordination with communication & planning with other organisations such as AgForward, NRM bodies other agencies
Other	Time, money and producer motivation.

4.2. Stocktake

(details from QDPI&F, regional NRM groups and producers)

Provider	QDPI&F
Regions (regionalised)	All regions of northern Australia
Course Duration	One day
Deliverables	Paddock-scale land condition monitoring and management package. It has been developed to provide grazing land managers with a practical, systematic way to: <ul style="list-style-type: none"> - Assess land condition and long-term carrying capacity - Calculate short-term forage budgets - Record and store monitoring data - Monitoring in terms of ecosystem health and long-term paddock productivity. - Interpreting data in a way that is useful for business planning.
Completed courses	Approximately 65 courses to end of 2007 involving at least 520 people.
Post Course Services	Phone support
Qualifications	Certificate of attainment with potential to gain recognition of prior learning for a diploma of agricultural business with TAFE.
FarmBis Support	Accredited Farmbis trainers/course, thus eligible businesses can attain 65% Farmbis subsidy.
Other Support	In some regions is subsidised to varying levels by the NRM bodies.
Key Benefits	Answer questions like... How healthy is your country? Is poor land condition reducing your income? Why is it that no matter how wet or dry it is, some people always seem to grow more grass than others? Do you have enough feed to last over the dry season? We've had a really good year and have more feed than what we need for our own stock, How many extra agistment cattle could I put in the back paddock? If I feed a supplement, how will that affect the carrying capacity of the paddock?
Key Limitations	Group not one-on-one.
Key Strengths	Information is "customised" to provide specific regional examples & tools. Has flexibility to adapt to individual group needs pre, during and post workshop.
Future Opportunities	May require better regionalisation, e.g. inland versus coast
Demand Outlook	Continuing though perhaps less then current particularly if Farmbis subsidy is dropped. Still strong funding support from regional NRM bodies.
Current Barriers to Uptake	Group activity vs one-on-one training. Not enough deliverers to meet demand.
Possible Incentives to Uptake	Other cost subsidies. Incentive based payments or incentives for best practice grazing management
Future Course Improvements	Less reliance on using computer to store records,
Links to Other Courses	TAFE & AgForward, NRM bodies
Links to MLA	GLM was developed by MLA
Role of QDPI	Deliverers
Other	As a monitoring tool, there is too much focus on productivity and not enough on biodiversity, riparian management, weeds and erosion. State leasehold (DNRW) plan to base their monitoring process for lease renewal on Stocktake (&GLM) principles and encourage their land managers to do the same.

4.3. SavannaPlan

(details from QDPI&F and regional NRM groups)

Provider	QDPI&F and Terrain NRM
Regions (regionalised)	Herbert, Upper Burdekin Catchments, Northern Gulf and Cape York.
Course Duration	Three days over a 12-month period with one on one.
Deliverables	Is a revised 3 day GLM workshop concentrating on land management Enhanced mapping capability if already using GIS mapping or increased awareness if intend participating in an AgForward course. Ability to use the ABCD land condition assessment tool. Completed assessment of land condition over the entire property. Plans for grazing management using stocking level adjustment, wet season spelling and rotation. Plans for on-ground works for improvements in infrastructure for GLM.
Completed courses	About businesses from 2005 to 2007
Post Course Services	Continuing DPI&F extension services
Qualifications	Nil (equivalent to GLM competency)
FarmBis Support	Nil
Other Support	Burdekin Dry Tropics jointly funds Terrain GLM Coordinator with Terrain NRM. Northern Gulf and Terrain NRM funds DPI&F beef teams.
Key Benefits	Starting point is assigning land condition Start to have a holistic view of your property – managing all parts of the business Starts record keeping Puts producers in touch with specialists Free mapping to identify land types and infrastructure Assigning grazing values and carrying capacity to different land types Improved production of native pasture by: <ul style="list-style-type: none"> • maintaining or increasing perennial grass component • maintaining or improving soil health – ground cover • preventing or reversing timber thickening • prevention or reduction of weed infestation.
Key Limitations	Producer time commitment to course and managing change in practices. Time and cost from DPI – high cost per property GPS training not always followed up Delivery team overcommitted Not enough decision-support tools Not attracting older managers Deliverers are too soft on over-stockers
Key Strengths	On-property delivery enables tailored training and practical application of land condition assessment and GLM practices. One on one on your property at convenient time Science support Lease hold renewal GPS and mapping Good tools Outside opinion on land condition Helpful for new industry entrants
Future Opportunities	Demonstrating to government looking after country Email discussion groups in the future in new proposal Working towards supply chain concept and feedback systems
Demand Outlook	Continued delivery in the Herbert, Burdekin, Northern Gulf, Cape York and beyond. Possibly another 100 producers over next three years.
Current Barriers to Uptake	No major barriers from producers. Reluctance to make changes, particularly with stock reduction and introduction of wet season spelling rotation. People not sure what comes next so will try and formalise the ongoing process but still want to retain flexibility
Possible Incentives to Uptake	Incentive grants offered for on-ground works (current program is offering grants). Requirements for land management agreements (LMAs) for pastoral lease renewal are likely to be met by SavannaPlan property planning process. Improved chances of making successful application for Commonwealth EnviroFund and Water Grants applications. Limit DPI&F extension services to graziers who participate in SavannaPlan, particularly in provision of information on supplementary feeding.
Future Course Improvements	Under constant review and improvement. A formal part of the project should be to establish monitoring points in the future – was a part of evaluation feedback from producers.
Links to Other Courses	SavannaPlan promotes other DPI&F courses in encouraging a holistic approach to managing a cattle station business. AgForward courses, particularly GIS mapping are promoted and linked.
Links to MLA	Possible integration of parts of EDGE Nutrition.
Role of QDPI	DPI&F Far Northern Beef Team is the training provider; their experience is essential.
Other	People who don't come to courses get by as the country is generally forgiving country or going backwards very slowly. Many people are not dependent on grazing as primary source of income. Can be difficult to get preferred trainers to the north. Must link change to profit outcomes. Also links with NRM is very important but time consuming

4.4. Grazing Management

Provider	Condamine Alliance
Regions (regionalised)	Condamine Catchment
Course Duration	6-7 hours
Deliverables	Pasture condition – what are you looking at & how valuable is it to the animal. Why is this important? How to improve condition How much does this cost? Grazing management. Grazing methods Pasture Yield – how to use photo standards Stocking rate calculation Pasture species for various soils and districts Pasture establishment – more advanced sessions Grass check changes over time.
Completed courses	Approx. 600 from 2005 to 2007
Post Course Services	Personal contact with course deliverer and through catchment LandCare officers
Qualifications	Nil
FarmBis Support	Nil
Other Support	Condamine Alliance provides funds for landholders to rehabilitate land at environmental risk.
Key Benefits	Extension of pasture technology How to manage pastures How to calculate stocking rates How to plan for low forage levels at particular times of the year – yearly forage budgeting
Key Limitations	Personal attention (farm visits) not able to be given to all producers
Key Strengths	Fairly short, no frills, targeted to specific areas and audiences, meaningful and no punches pulled. More detailed workshops have been delivered to those wanting them.
Future Opportunities	Depends on LandCare coordinators and what funds Condamine Alliance wants to put into grazing land management.
Demand Outlook	No comment
Current Barriers to Uptake	Time and Seasons
Possible Incentives to Uptake	Dependent on LandCare facilitators
Future Course Improvements	More emphasis on matching land capability to land use and to expectations. More emphasis on planning for extended dry periods – when to start destocking – feed year planning etc
Links to Other Courses	No comment
Links to MLA	Currently have a PDS project on “Leucaena on the downs”. This is a 3-year project.
Role of QDPI	No comment
Other	No comment

4.5. Holistic management

Provider	Inside Outside Management Pty Ltd
Regions	Currently in Queensland, NSW and NT but available nationwide.
Course Duration	Three modules of three days each is a total of nine days.
Deliverables	<ol style="list-style-type: none"> 1. Financial planning, 2. Grazing planning, 3. Land planning, and 4. Biological monitoring.
Completed courses	40 producers in last three years.
Post Course Services	Formation of support groups, phone, email, review weekends, international email conference, international newsletter.
Qualifications	Holistic Management International Australia is pursuing accreditation with TAFE nationwide.
FarmBis Support	65% so producer pays \$1,386 incl GST
Other Support	Fully funded by QMDC grazing project
Key Benefits	<p>The opportunity to create a picture of what they want their life to be like, what they need to produce to create that life and a decision making process that leads them towards creating what they want, decision by decision. Improved time management, creativity, improved family relationships and how to manage their environment profitably and sustainably.</p> <p>The Grazing planning component enables producers to improve; pasture productivity, animal health and land management with minimal input costs. Land planning assist to create a practical picture of how the producer wants their property to be like well into the future. This is created in conjunction with the financial plan which includes a planned profit, expenditure of money where the business needs it most and monthly monitoring to keep on track.</p> <p>The biological monitoring of the land which gives the earliest indication of change and verifies regenerative land management with the use of animals.</p>
Key Limitations	Cost for producers to have trainers assist them with their implementation
Key Strengths	<p>Businesses become more creative, addresses root causes of environmental problems instead of symptoms, improved time management and animals are used as an effective tool to improve the land.</p> <p>People get energised and gain a renewed direction of their businesses.</p> <p>Trainees develop a fresh look at how they can work with the environment.</p> <p>Trainees can immediately begin to create positive change for people and the land with minimal input costs.</p>
Future Opportunities	Carbon sequestration in the soil from correctly timed grazing of pastures create carbon trading opportunities as well as productivity improvements.
Demand Outlook	Demand is growing through regional NRM catchment groups
Current Barriers to Uptake	<ul style="list-style-type: none"> • Time • Present paradigm excluding the time factor from grazing management • Lack of appreciation of animals as tools to make positive change to the environment • Perceived cost perceived need for the training.
Possible Incentives to Uptake	Carbon credits or government incentives to improve soil through increasing soil carbon.
Future Course Improvements	Continual enhancement of learning experience
Links to Other Courses	Supporting courses assisting landholders improve their resource, product or marketing. KLR marketing is working well and Proagative with succession planning is also useful support.
Links to MLA	Enhance the Edge Network, promote the role of animals as good for the environment, and a tool to put carbon back into the soil. Demonstrate landholders can be part of the solution and not as the problem. Use MLA connections to educate the people everywhere that are not land based that animals can be used in a positive way to solve many of the perceived environmental problems around the world.
Role of QDPI	The QDPI & F have offered various training packages however the course material is outdated and repackaged. Although backed up by science the results on the land are where the rubber hits the road. These organisations are deeply steeped in the old paradigms that have lead to the problems we now face and have difficulty seeing new information.
Other	<p>Better linking of people wanting training and being directed to the suite of options available for them, would be beneficial for both.</p> <p>The biological monitoring comes into its own when producers require facts about how they are improving their land. People managing holistically can bring out every year of data that includes % of ground cover, % of perennials, the increase or decrease of plant spacings, condition & diversity of grasses, the plants form, whether overgrazed, normal or dying, and the species composition. Holistic Biological monitoring records the effectiveness of the water cycle, mineral cycle, biodiversity state and the conversion of sunlight into root energy. Holistic Biological monitoring gives the earliest possible practical indication of change to the environment.</p>

4.6. Holistic Grazing Planning: Increasing Pasture & Animal Productivity

Provider	Inside Outside Management Pty Ltd
Regions	Currently in Queensland, NSW and NT but available nationwide.
Course Duration	Three days
Deliverables	<ul style="list-style-type: none"> • How nature functions holistically, so you can rebuild pasture diversity, ensure positive animal nutrition and solve environmental problems, all with minimal input costs. • Use of the grazing chart to create a grazing plan for your property that ensures adequate recovery period for plants and maximise fodder production. Techniques to quickly and accurately measure feed volumes to enable stocking rates to match feed reserves. Effectively plan for droughts. • Effective monitoring techniques to enable you to keep improving your country and your cash flow.
Completed courses	40 producers in last three years.
Post Course Services	Phone and grazing planning review days.
Qualifications	Holistic Management International Australia is pursuing accreditation with TAFE nationwide.
FarmBis Support	65% so producer pays \$462 incl GST
Other Support	Fully funded by QMDC grazing project
Key Benefits	Working with nature, cost effectively. Grazing plan done on their place for their property, to improve pasture productivity. Holistic Biological Monitoring allows the landholder to monitor annual change and provides the earliest indication of improvement, or a change.
Key Limitations	Cost for producers to have trainers assist them with their implementation as intensely as some would like, and cost of support.
Key Strengths	Businesses become more creative, addresses root causes of environmental problems instead of symptoms, improved time management and animals are used as an effective tool to improve the land. People get energised and gain a renewed direction of their businesses. Trainees develop a fresh look at how they can work with the environment. Trainees can immediately begin to create positive change for people and the land with minimal input costs.
Future Opportunities	Regular improvements to case studies and presentation, continual incorporation of new data and knowledge as it becomes available.
Demand Outlook	Demand has reduced due to producer's reluctance to attend 3 day training. This product has been largely superseded by the Grass Growers training which provides for half a day on each property which trainees appreciate. However this level of support can only be achieved if trainees are geographically close.
Current Barriers to Uptake	<ul style="list-style-type: none"> • Time • Present paradigm excluding the time factor from grazing management • Lack of appreciation of animals as tools to make positive change to the environment • Perceived cost perceived need for the training.
Possible Incentives to Uptake	Carbon credits or government incentives to improve soil through increasing soil carbon.
Future Course Improvements	Continual enhancement of learning experience
Links to Other Courses	Work with specific land improvement companies such as - natural / organic fertilisers, manure spreaders, animal nutrition companies, livestock marketing training (e.g. KLR)
Links to MLA	Enhance the Edge Network, promote the role of animals as good for the environment, and a tool to put carbon back into the soil. Demonstrate landholders can be part of the solution and not as the problem. Use MLA connections to educate the people everywhere that are not land based that animals can be used in a positive way to solve many of the perceived environmental problems around the world.
Role of QDPI	The QDPI & F have offered various training packages however the course material is outdated and repackaged. Although backed up by science the results on the land are where the rubber hits the road. These organisations are deeply steeped in the old paradigms that have lead to the problems we now face and have difficulty seeing new information.
Other	Better linking of people wanting training and being directed to the suite of options available for them, would be beneficial for both. The biological monitoring comes into its own when producers require facts about how they are improving their land. People managing holistically can bring out every year of data that includes % of ground cover, % of perennials, the increase or decrease of plant spacings, condition & diversity of grasses, the plants form, whether overgrazed, normal or dying, and the species composition. Holistic Biological monitoring records the effectiveness of the water cycle, mineral cycle, biodiversity state and the conversion of sunlight into root energy. Holistic Biological monitoring gives the earliest possible practical indication of change to the environment.

4.7. Grass Growers Workshop: getting the most from the pasture

Provider	Inside Outside Management Pty Ltd
Regions	Currently in Queensland, NSW and NT but available nationwide.
Course Duration	One and half days including half day on property
Deliverables	<ul style="list-style-type: none"> • Both the basic theory and a ½ day on your farm doing your grazing plan using the grazing chart, and setting up a biological monitoring site. • Innovative techniques to simultaneously maximise stocking rate and improve land health and productivity • How to coordinate three primary land management tools (rest, grazing, animal impact) to grow more pasture • How to maximise the harvest of sunlight by managing stocking rate, time, stock density and herd effect.
Completed courses	10 producers since mid 2007
Post Course Services	Phone and grazing planning review days.
Qualifications	Holistic Management International Australia is pursuing accreditation with TAFE nationwide.
FarmBis Support	65% so producer pays \$231 incl GST
Other Support	No other support at this stage.
Key Benefits	Working with nature, cost effectively. Grazing plan done on their place for their property, to improve pasture productivity. Holistic Biological Monitoring allows the landholder to monitor annual change and provides the earliest indication of improvement, or a change.
Key Limitations	Cost for producers to have trainers assist them with their implementation as intensely as some would like, and cost of support.
Key Strengths	Businesses become more creative, addresses root causes of environmental problems instead of symptoms, improved time management and animals are used as an effective tool to improve the land. People get energised and gain a renewed direction of their businesses. Trainees develop a fresh look at how they can work with the environment. Trainees can immediately begin to create positive change for people and the land with minimal input costs.
Future Opportunities	Regular improvements to case studies and presentation, continual incorporation of new data and knowledge as it becomes available.
Demand Outlook	Demand increasing, good for smaller landholders, or landholders who are time poor.
Current Barriers to Uptake	<ul style="list-style-type: none"> • Time • Present paradigm excluding the time factor from grazing management • Lack of appreciation of animals as tools to make positive change to the environment • Perceived cost perceived need for the training.
Possible Incentives to Uptake	Carbon credits or government incentives to improve soil through increasing soil carbon.
Future Course Improvements	Continual enhancement of learning experience
Links to Other Courses	Work with specific land improvement companies such as - natural / organic fertilisers, manure spreaders, animal nutrition companies, livestock marketing training (e.g. KLR)
Links to MLA	Enhance the Edge Network, promote the role of animals as good for the environment, and a tool to put carbon back into the soil. Demonstrate landholders can be part of the solution and not as the problem. Use MLA connections to educate the people everywhere that are not land based that animals can be used in a positive way to solve many of the perceived environmental problems around the world.
Role of QDPI	The QDPI & F have offered various training packages however the course material is outdated and repackaged. Although backed up by science the results on the land are where the rubber hits the road. These organisations are deeply steeped in the old paradigms that have lead to the problems we now face and have difficulty seeing new information.
Other	Better linking of people wanting training and being directed to the suite of options available for them, would be beneficial for both. The biological monitoring comes into its own when producers require facts about how they are improving their land. People managing holistically can bring out every year of data that includes % of ground cover, % of perennials, the increase or decrease of plant spacings, condition & diversity of grasses, the plants form, whether overgrazed, normal or dying, and the species composition. Holistic Biological monitoring records the effectiveness of the water cycle, mineral cycle, biodiversity state and the conversion of sunlight into root energy. Holistic Biological monitoring gives the earliest possible practical indication of change to the environment.

4.8. Introduction to monitoring for management

Provider	Rangelands Australia
Regions	Nationwide
Course Duration	One day
Deliverables	<ul style="list-style-type: none"> • Clearly think through why you need monitoring for your own circumstances. • Appreciate how monitoring can help meet the production, financial, social and environmental goals of your grazing-based business • Understand the drivers behind the increasing importance of monitoring. • Make the link between monitoring seasonal conditions and longer-term trends, and better management of the production, financial, social and environmental aspects of your enterprise • Identify best available indicators of trends in land condition (e.g. plants and other organisms, soils, biodiversity, catchment and enterprise health), and the drivers of those trends • Understand the fundamentals of monitoring design and sampling • Using sound principles, be able to evaluate and select monitoring systems and/or monitoring tools (based on their strengths and weaknesses) with respect to your particular monitoring needs • Learn practical monitoring skills through use of South West NRM's monitoring system - "Monitoring Made Easy".
Completed courses	No comment
Post Course Services	No comment
Qualifications	Statement of Participation or Statement of Attainment
FarmBis Support	65% off cost of \$450 plus GST per producer
Other Support	No comment
Key Benefits	No comment
Key Limitations	No comment
Key Strengths	No comment
Future Opportunities	No comment
Demand Outlook	No comment
Current Barriers to Uptake	No comment
Possible Incentives to Uptake	No comment
Future Course Improvements	No comment
Links to Other Courses	No comment
Links to MLA	MLA supports Rangelands Australia
Role of QDPI	No comment
Other	No comment

4.9. Being in the rangelands for the long run: Balancing for economic, environmental and social outcomes.

Provider	Rangelands Australia
Regions	Nationwide
Course Duration	Two days within the space of 4 – 6 weeks
Deliverables	<ul style="list-style-type: none"> • Appreciate the economic and environmental importance of the rangelands, and why sustainability is an issue • Clarify what is sustainability – in the rangelands, in this region and in your particular case • Understand why there's increasing community and government interest in the rangelands • Identify your own personal sustainability objectives, and appreciate the perceptions and aspirations of others • Through a self-assessment, identify areas for strengthening your own capacity to progress towards sustainability • Identify other areas for improvement, and the consequences of doing nothing or delaying action • Clarify the intended and unintended consequences of proposed options for improving sustainability, the resources required, and the likely benefits/costs of investing in these strategies or actions • Develop a sustainability action plan, together with a contingency plan to cope with the unexpected • Learn how to source information to keep up-to-speed with the evolving concept of sustainability, changing expectations, etc.
Completed courses	No comment
Post Course Services	No comment
Qualifications	Statement of Participation or Statement of Attainment
FarmBis Support	65% off cost of \$850 plus GST per producer
Other Support	No comment
Key Benefits	No comment
Key Limitations	No comment
Key Strengths	No comment
Future Opportunities	No comment
Demand Outlook	No comment
Current Barriers to Uptake	No comment
Possible Incentives to Uptake	No comment
Future Course Improvements	No comment
Links to Other Courses	No comment
Links to MLA	MLA supports Rangelands Australia
Role of QDPI	No comment
Other	No comment

4.10. Graduate Certificate in Rangeland Management.

Provider	Rangelands Australia
Regions	Nationwide
Course Duration	Eight units within three years
Deliverables	<p>Explain the evolving concept of sustainable development/ecologically sustainable development (ESD)</p> <ul style="list-style-type: none"> • Analyse global and national issues and problems driving sustainability initiatives and wider change in rangeland practice(s) • Analyse case studies of regional and enterprise-scale sustainability initiatives and the implications for policy • Identify and evaluate assessment frameworks, targets and widely accepted indicators of rangeland sustainability • Analyse 'best practice' guidelines for enterprise and regional sustainability and appreciate the knowledge deficiencies and R&D in progress to address the knowledge gaps • Analyse progress towards sustainability in the forestry, tourism and mining industries, and the lessons to be learnt from these sectors • Demonstrate skills in communication (i.e. verbal, report writing, etc), on-line learning, information acquisition and management, critical thinking, etc. • Develop and manage a multi-stakeholder process • Derive an understanding of the diverse culture, values and needs of individual stakeholders based on credible information • Examine own style in working with diversity within a group • Evaluate the appropriateness of participatory processes in relation to issues and ethical implications • Create a climate that encourages an openness to change • Engage ethically with others • Analyse complexity and integrate multiple viewpoints into the process. <ul style="list-style-type: none"> ▪ Plus elective subjects
Completed courses	No comment
Post Course Services	No comment
Qualifications	Graduate Certificate in Rangeland Management
FarmBis Support	Not available
Other Support	HECS offers up to 65% off cost of \$8,800 per producer
Key Benefits	No comment
Key Limitations	No comment
Key Strengths	No comment
Future Opportunities	No comment
Demand Outlook	No comment
Current Barriers to Uptake	No comment
Possible Incentives to Uptake	No comment
Future Course Improvements	No comment
Links to Other Courses	No comment
Links to MLA	MLA supports Rangelands Australia
Role of QDPI	No comment
Other	No comment

4.11. Graduate Diploma in Rangeland Management

Provider	Rangelands Australia
Regions	Nationwide
Course Duration	Sixteen units within five years
Deliverables	<p>Explain the evolving concept of sustainable development/ecologically sustainable development (ESD)</p> <ul style="list-style-type: none"> • Analyse global and national issues and problems driving sustainability initiatives and wider change in rangeland practice(s) • Analyse case studies of regional and enterprise-scale sustainability initiatives and the implications for policy • Identify and evaluate assessment frameworks, targets and widely accepted indicators of rangeland sustainability • Analyse 'best practice' guidelines for enterprise and regional sustainability and appreciate the knowledge deficiencies and R&D in progress to address the knowledge gaps • Analyse progress towards sustainability in the forestry, tourism and mining industries, and the lessons to be learnt from these sectors • Demonstrate skills in communication (i.e. verbal, report writing, etc), on-line learning, information acquisition and management, critical thinking, etc. • Develop and manage a multi-stakeholder process • Derive an understanding of the diverse culture, values and needs of individual stakeholders based on credible information • Examine own style in working with diversity within a group • Evaluate the appropriateness of participatory processes in relation to issues and ethical implications • Create a climate that encourages an openness to change • Engage ethically with others • Analyse complexity and integrate multiple viewpoints into the process. • Build scenarios and explore futures for the rangelands • Analyse and evaluate complex scenarios for the rangelands, their risks and probabilities and their likely impact • Identify potential threats and opportunities that individuals, their regions and/or industry might need to address • Identify, explore and develop action plans and strategies to minimize or counter threats and risk to business and sustainable futures in the rangelands. <p>Plus elective subjects.</p>
Completed courses	No comment
Post Course Services	No comment
Qualifications	Graduate Diploma in Rangeland Management
FarmBis Support	Not available
Other Support	HECS offers up to 65% off cost of \$17,600 per producer
Key Benefits	No comment
Key Limitations	No comment
Key Strengths	No comment
Future Opportunities	No comment
Demand Outlook	No comment
Current Barriers to Uptake	No comment
Possible Incentives to Uptake	No comment
Future Course Improvements	No comment
Links to Other Courses	No comment
Links to MLA	MLA supports Rangelands Australia
Role of QDPI	No comment
Other	No comment

4.12. Masters of Rangeland Management.

Provider	Rangelands Australia
Regions	Nationwide
Course Duration	Twenty-four units within seven years
Deliverables	<p>Explain the evolving concept of sustainable development/ecologically sustainable development (ESD)</p> <ul style="list-style-type: none"> • Analyse global and national issues and problems driving sustainability initiatives and wider change in rangeland practice(s) • Analyse case studies of regional and enterprise-scale sustainability initiatives and the implications for policy • Identify and evaluate assessment frameworks, targets and widely accepted indicators of rangeland sustainability • Analyse 'best practice' guidelines for enterprise and regional sustainability and appreciate the knowledge deficiencies and R&D in progress to address the knowledge gaps • Analyse progress towards sustainability in the forestry, tourism and mining industries, and the lessons to be learnt from these sectors • Demonstrate skills in communication (i.e. verbal, report writing, etc), on-line learning, information acquisition and management, critical thinking, etc. • Develop and manage a multi-stakeholder process • Derive an understanding of the diverse culture, values and needs of individual stakeholders based on credible information • Examine own style in working with diversity within a group • Evaluate the appropriateness of participatory processes in relation to issues and ethical implications • Create a climate that encourages an openness to change • Engage ethically with others • Analyse complexity and integrate multiple viewpoints into the process. • Build scenarios and explore futures for the rangelands • Analyse and evaluate complex scenarios for the rangelands, their risks and probabilities and their likely impact • Identify potential threats and opportunities that individuals, their regions and/or industry might need to address • Identify, explore and develop action plans and strategies to minimize or counter threats and risk to business and sustainable futures in the rangelands. <p>Understand research methodologies and biometrics Complete a relevant research project Plus elective subjects.</p>
Completed courses	No comment
Post Course Services	No comment
Qualifications	Masters in Rangeland Management
FarmBis Support	Not available
Other Support	HECS offers up to 65% off cost of between \$17,600 and \$26,400 per producer
Key Benefits	No comment
Key Limitations	No comment
Key Strengths	No comment
Future Opportunities	No comment
Demand Outlook	No comment
Current Barriers to Uptake	No comment
Possible Incentives to Uptake	No comment
Future Course Improvements	No comment
Links to Other Courses	No comment
Links to MLA	MLA supports Rangelands Australia
Role of QDPI	No comment
Other	No comment

4.13. Cattle and Catchments

(details from Resource Consulting Services)

Provider	Resource Consulting Services
Regions	Australia wide – principally Queensland and NSW
Course Duration	2.5 days includes half-day in the paddock
Deliverables	<ul style="list-style-type: none"> • How to measure carrying capacity • How to manage and maintain appropriate stocking rates; • How to monitor and maintain appropriate pasture growth and ground cover
Completed courses	120 producers from 2005 to 2007 (3 years)
Post Course Services	KIT days, on-property consulting, newsletter, phone
Qualifications	Nil
FarmBis Support	65%
Other Support	Nil
Key Benefits	Focuses on different grazing systems with emphasis on implementation of pasture monitoring and management
Key Limitations	The course is only short so cannot provide an holistic business approach, only an holistic resource management approach
Key Strengths	Principles based – does not matter where it is delivered the principles still apply; Holistic approach means that the clients is not dealing with issues in isolation Provides tools to take home and use straight away
Future Opportunities	No comment
Demand Outlook	This course seems to work best when promoted through the NRM groups; so it's future will depend on that support; may also depend on training subsidies
Current Barriers to Uptake	No comment
Possible Incentives to Uptake	Our experience says encouragement from neighbours, peers and colleagues are the best motivator for people to attend; although FarmBis subsidy provides the means, it is not the initial motivator.
Future Course Improvements	Updated details each year from Profit Probe financial benchmarking results; updated detail on client and RCS research; principles of course remain stable.
Links to Other Courses	This course is an excellent way for producers to be introduced to some of the principles which are covered thoroughly in the Grazing for Profit course
Links to MLA	No comment
Role of QDPI	No comment
Other	No comment

4.14. Applied Grazing Course
(details from Resource Consulting Services)

Provider	Resource Consulting Services
Regions	Australia wide – principally Queensland and NSW
Course Duration	4 days
Deliverables	<ul style="list-style-type: none"> • Participants develop necessary pasture and livestock strategic husbandry skills to competently manage an intensive grazing operation; they also build monitoring and evaluation systems to manage their natural resources. • Strategy, planning and implementation guidelines of integrated grazing systems and sustainable land resource management, including a focus on paddock design for cell grazing; covers water and mineral cycles, and pasture production
Completed courses	120 producers from 2005 to 2007 (3 years)
Post Course Services	Field day after course, KIT days, on-property consulting, newsletter, phone
Qualifications	Not formally qualified
FarmBis Support	65%
Other Support	Nil
Key Benefits	Focuses on different grazing systems with emphasis on implementation of cell grazing and suitable fencing/watering facilities
Key Limitations	Course requires a degree of previous knowledge about livestock and grazing systems to benefit so not suitable as introductory program
Key Strengths	Principles based – does not matter where it is delivered the principles still apply; Holistic approach means that the clients is not dealing with issues in isolation Provides tools to take home and use straight away
Future Opportunities	Will depend on future continued uptake of cell and rotational grazing to remain suitable to marketplace; may also depend on training subsidy
Demand Outlook	Will depend on future continued uptake of cell and rotational grazing to remain suitable to marketplace; may also depend on training subsidy
Current Barriers to Uptake	No comment
Possible Incentives to Uptake	Our experience says encouragement from neighbours, peers and colleagues are the best motivator for people to attend; although FarmBis subsidy provides the means, it is not the initial motivator.
Future Course Improvements	Updated details each year from Profit Probe financial benchmarking results; updated detail on client and RCS research; principles of course remain stable.
Links to Other Courses	No comment
Links to MLA	MLA could promote the course as a preferred option for producers
Role of QDPI	No comment
Other	No comment

4.15. Grazing for Profit

(details from Resource Consulting Services)

Provider	Resource Consulting Services
Regions	Australia wide – principally Queensland and NSW
Course Duration	8 days – covering land, livestock, finance and people
Deliverables	<ul style="list-style-type: none"> Comprehensive knowledge and tools to build skills in farm business analysis and planning, natural resource management, managing and motivating staff, animals and crop husbandry.
Completed courses	600 producers from 2005 to 2007 (3 years)
Post Course Services	Field day after course, KIT days, on-property consulting, newsletter, phone
Qualifications	Not formally qualified – available to receive RCC from Roma TAFE of Diploma of Farm Business Management
FarmBis Support	65%
Other Support	Nil
Key Benefits	Holistic approach to grazing business at all levels; provides tools for future decision making and a framework for planning for whole of business
Key Limitations	8 days takes a big commitment – often people don't attend because of time away; those who do attend say it was worth the effort
Key Strengths	Holistic; has economic, ecological and people elements intermingled; gives a whole of farm/whole of business approach including personal goals Provides tools to take home and use straight away
Future Opportunities	May depend on future subsidy to encourage farmers to attend; demand remains strong and course very suitable in current environment of climate uncertainty;
Demand Outlook	Ongoing positive outlook; need to work harder to get the more mid-range producers who are not necessarily inclined to look for new thought processes unless in adversity (as compared with earlier uptake which included many thought leaders).
Current Barriers to Uptake	Time away from home; lack of understanding of the value of the course prior to completion; attitudinal barriers
Possible Incentives to Uptake	Our experience says encouragement from neighbours, peers and colleagues are the best motivator for people to attend; although FarmBis subsidy provides the means, it is not the initial motivator.
Future Course Improvements	Updated details each year from Profit Probe financial benchmarking results; updated detail on client and RCS research; principles of course remain stable.
Links to Other Courses	Internally linked to the Rural Profit System to lead into Graduate Link and ExecutiveLink; Externally linked through RCC to Diploma of Rural Business Management
Links to MLA	MLA could promote the course as a preferred option for producers
Role of QDPI	No comment
Other	No comment

4.16. Graduate Link

(details from Resource Consulting Services)

Provider	Resource Consulting Services
Regions	Australia wide – principally Queensland and NSW
Course Duration	3 modules over six months
Deliverables	<p>Participants complete a strategic audit of their own business performance including human resources, training needs, NRM management, leading to a framework for a Farm Business Plan.</p> <ul style="list-style-type: none"> • 1 x 2.5 days face to face • 3 x internet based webinar sessions • 1x 2.5 days face to face <p>10 assignments/exercises to be completed relevant to own business</p> <ul style="list-style-type: none"> • Financial reporting & Economic analysis • Strategic, technical and operational thinking • Elements of profitability • Time management priority matrix • Biological planning principles to link stocking rate to carrying capacity • Soil and pasture monitoring • Use of grazing charts • Animal health and nutrition supplementation • Family/business vision and goal setting • Working with people
Completed courses	150 producers from 2005 to 2007 (3 years)
Post Course Services	Field day after course, KIT days, on-property consulting, newsletter, phone
Qualifications	<p>Two AQTF competencies:</p> <ul style="list-style-type: none"> • RTE 5906 Monitor and Review Business Performance • RTE 5106 Develop Production Plans for Livestock <p>Eligible for RCC with Roma TAFE for Diploma of Agriculture & Diploma of Rural Business Management</p>
FarmBis Support	65%
Other Support	Nil
Key Benefits	Provides a staged learning process with specific activities relating to different grazing and business management principles to be applied to the participants own business; delivered in a supported peer learning environment with qualified teachers/facilitators
Key Limitations	Course requires a degree of previous knowledge about livestock and grazing systems to benefit so not suitable as introductory program
Key Strengths	Principles based – does not matter where it is delivered the principles still apply; Holistic approach means that the clients is not dealing with issues in isolation Provides tools to take home and use straight away
Future Opportunities	Will depend on future continued uptake of introductory programs to develop base skill to go into GraduateLink program; currently Grazing for Profit and Farming for Profit
Demand Outlook	Will depend on future continued uptake of introductory programs to develop base skill to go into GraduateLink program
Current Barriers to Uptake	No comment
Possible Incentives to Uptake	Our experience says encouragement from neighbours, peers and colleagues are the best motivator for people to attend; although FarmBis subsidy provides the means, it is not the initial motivator.
Future Course Improvements	Updated details each year from Profit Probe financial benchmarking results; updated detail on client and RCS research; principles of course remain stable.
Links to Other Courses	Internally linked with RCS Rural Profit System of Grazing for Profit, Graduate Link and Executive Link. This course is eligible for RCC with Roma TAFE for Diploma of Agriculture and Diploma of Rural Business Management
Links to MLA	No comment
Role of QDPI	No comment
Other	Some aspects covered through Gatton courses and Agricultural Colleges of Qld; these are not delivered in an applied on farm environment