



Desert Channels Queensland Inc. Project Review

“Sustainable Management and Conservation of Grazing Lands in Queensland’s Rangelands”

September 30, 2008



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a. Glossary of Terms

AACO	Australian Agricultural Company
DCQ	Desert Channels Queensland
DEH	Department of Environment and Heritage
DNRW	Department of Natural Resources and Water
DPIF	Queensland Department of Primary Industry and Fisheries
DU	Desert Uplands Bioregion
DUC	Desert Uplands Build-up and Development Strategy Committee
EPA	Environmental Protection Authority
GFP	Grazing For Profit
GLM	Grazing Land Management
MLA	Meat and Livestock Australia
NGRMG	Northern Gulf Resource Management Group
NHT	Natural Heritage Trust
NRM	Natural Resource Management
RB	Regional Body
\$AVANNA PLAN	One on one GLM workshops delivered on the property
SGC	Southern Gulf Catchments
SWNRM	South Western Natural Resource Management Group
WPC	Williams and Partners Consulting

1. Executive Summary

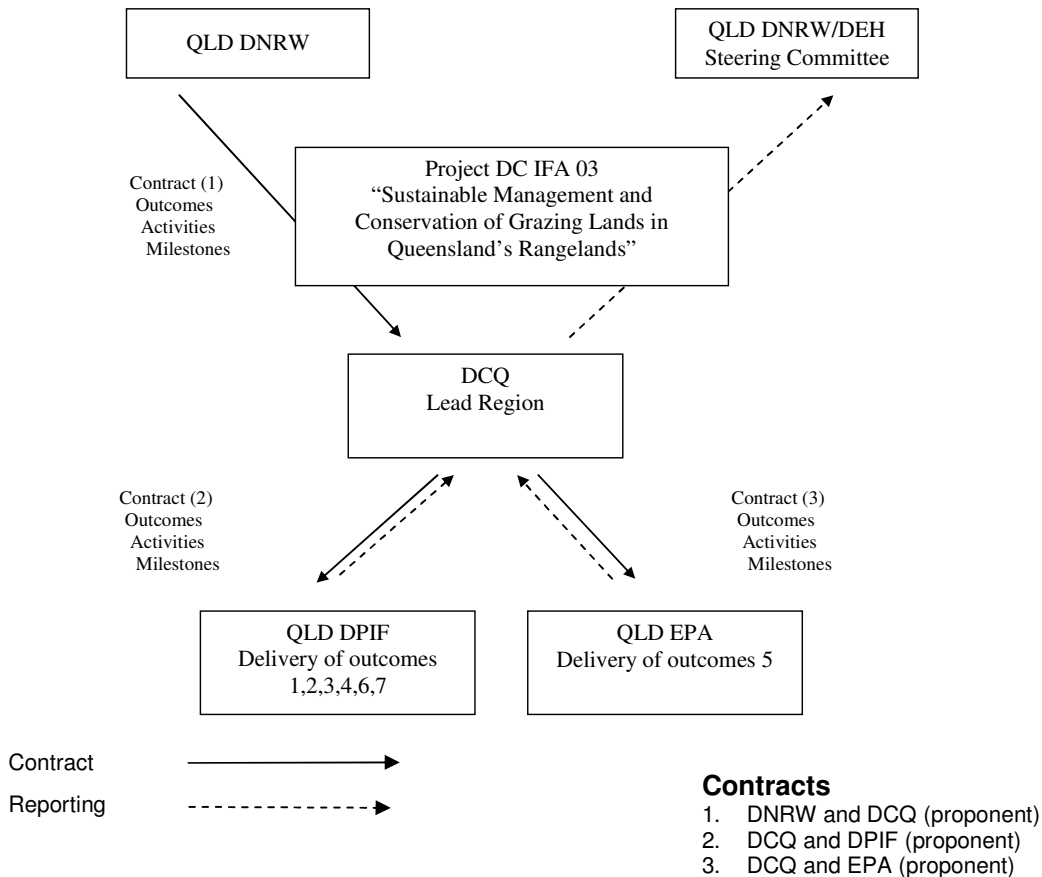
Desert Channels Queensland Inc (DCQ) engaged Williams and Partners Consulting to conduct a review of “Sustainable Management and Conservation of Grazing Lands in Queensland’s Rangelands” (the project) in co-operation with the following regional bodies;

- Northern Gulf Resource Management Group (NGRMG);
- Southern Gulf Catchments Inc (SGC);
- South West Natural Resource Management Group Inc (SWNRM)

In addition to these regional bodies, GLM was rolled out in the eastern part of the Desert Uplands bio-geographic region.

The project involved funding from NHT through QLD DNRW of \$3,521,000 over 3 years from 2004 to 2007. The structure of the project and relationship between the key stakeholders is shown in the following figure.

Figure 1.0 Project Structure



The project has been extended 3 times from June 2007, to December 2007, to June 2008 and now to December 2008 to complete the delivery of the programs. A summary of the measurable outcomes is shown below.

1. New GLM modules have been developed for the Mulga Lands, Southern Gulf, Desert Uplands and Channel Country. .
2. Participation in the GLM and \$avanna Plan training programs is summarised below.
 - 560 people have attended programs in the regions.
 - 422 of these attendees have been primary producers.
 - 322 properties representing 216 different aggregations have participated in the training programs.
 - GLM, \$avanna Plan and Stocktake participating properties represent 19% of the combined regional body and DU bioregion areas.
 - This represents 12.3% of the State of Queensland.
 - 15% of regional body and DU bioregion areas was covered with the more intensive GLM and \$avanna Plan (excluding Stocktake), (approximately 10% of State of Queensland).
3. A biodiversity training program has been developed and delivered in the region.
4. From the 2008 Williams and Partners Consulting survey of participants in GLM and \$avanna Plan training programs there is evidence of practice change in grazing land management as well as awareness in natural resource management.
 - The most significant benefit from attending the training programs stated by GLM and \$avanna Plan participants was in relation to Natural Resource Management on their own properties
 - Of the GLM and \$avanna Plan area, 74% of properties have a 'Plan' and 72% are using the 'Plan'
 - 67% are using ABCD Land Condition framework
 - 64% have stated that they have changed management practices
 - 44% of survey participants have applied for funding
 - 100% of participants recommend the training program be continued

However, there is evidence of;

5. Weakness in Project management, co-ordination and communication (both DPIF and DCQ)
6. Weakness in follow-up of GLM programs by DPIF
7. Weakness in DPIF evaluation of program participants and reporting
8. Weakness in Case Study development and promotion (DPIF and EPA)
9. There is no evidence yet of the benefit of the State-wide monitoring program

There is a desire to continue with further programs, however there is a;

10. Need for the development of a modular learning framework that GLM sits within;
and
11. Employment of a GLM officer within the regional bodies would address communication issues, co-ordination with other programs regional bodies are running and perhaps facilitate greater development of this modular framework.

This review recommends that there is sufficient evidence of benefits being delivered at the property, sub-catchment and regional scale to continue a 'like program'. If a similar program were successful in being funded the following recommendations would assist in improving delivery.

Recommendations arising from the 2008 project review

- R1. Continue support of GLM programs to deliver Natural Resource Management benefits at the property scale, sub-catchment scale and regional scale.**
- R2. The follow-up process or post GLM learning and engagement tools needs to be re-designed to address the stated desire for ongoing learning and to reinforce the adoption of technical skills.**
- R3. Develop a hierarchical learning framework that GLM sits within so that producers can access tools for ongoing learning and enter the process at the right level.**
- R4. Continue the group learning framework as the most cost effective method of delivering GLM training.**
- R5. Promote the availability of accreditation from Queensland TAFE with the possibility of a Diploma of Agriculture arising from GLM Training.**
- R6. Develop case studies highlighting positive outcomes from GLM training to support promotion of program by DPIF and Regional Bodies as well as supporting referral from past participants.**
- R7. Provide for funding for a GLM project officer within the Regional Bodies to co-ordinate workshops, promote GLM, develop case studies and provide linkages to funding and other programs that may form part of a hierarchical learning framework.**
- R8. Establish a Stakeholder Steering committee to manage the delivery of the program. Ensure that the Steering committee has resources to undertake it’s tasks. The Steering committee should be responsible for directing reporting, stakeholder communication, interregional planning.**
- R9. Remove State-wide monitoring from future projects, this is DPIF or DNRW task.**
- R10. Build into the project data collection and monitoring and evaluation of impacts on a rolling basis (annually).**

2. Introduction

Desert Channels Queensland Inc (DCQ) engaged Williams and Partners Consulting to conduct a review of “Sustainable Management and Conservation of Grazing Lands in Queensland’s Rangelands” (the project) in co-operation with the following;

Regional Bodies

- Northern Gulf Resource Management Group (NGRMG);
- Southern Gulf Catchments Inc (SGC);
- South West Natural Resource Management Group Inc (SWNRM).

In addition to these regional bodies, GLM was rolled out in the eastern part of the Desert Uplands biogeographic region.

Other stakeholders involved in the review process include;

- Department of Primary Industries and Fisheries (DPIF);
- Department of Natural Resources and Water; (DNRW)
- Environmental Protection Agency (EPA); and
- Meat and Livestock Australia (MLA).

The project represents a significant investment in land management in the region and as such warranted an independent assessment of outcomes compared to expectations and milestones set at the commencement of the project.

The stakeholders expect that there may be opportunities to continue ‘like investments’ in the future, therefore an independent review of the outcomes of this investment is critical to making appropriate decisions for the future both in terms of the type of investment as well as the management of the investment.

3. Background

In 2004 DCQ entered into an agreement with the Department of Natural Resources Mines and Energy (DNRME) for a project titled “Sustainable Management and Conservation of Grazing Lands in Queensland’s Rangelands”. DCQ was contracted as the Lead Region in association with co-operating regions including NGRMG, SGC, SWNRM and in association with the DUC.

Subsequent to the agreement between DNRME and DCQ, an agreement was established between DCQ and DPIF to deliver the program using the Grazing Land Management (GLM) tools developed by MLA and the DPIF Stocktake program. In January 2006 the EPA was contracted to develop and deliver a Biodiversity program in association with the GLM and Stocktake programs.

The project was a 3 year project with an overall budget in the order of \$3.5 million.

4. Scope

The agreed scope for the project review included the following elements.

Participant review

- Interview a random sample of participants in GLM, \$avanna Plan and Stocktake programs across NGRMG, SGC, DCQ, SWNRM regional body regions and the Desert Uplands bioregion.
- Target 42 participants representing an estimated 13% of all participants in GLM, \$avanna Plan and Stocktake programs.
- The questionnaire will focus on the following topics;
 - Awareness
 - Program delivery
 - Outcomes for your enterprise
 - Outcomes for the region
 - Future programs

Stakeholder review

- Stakeholders that have been identified include;
 - Regional bodies (DCQ, NGRMG, SGC, SWNRM)
 - DPIF
 - EPA
 - MLA

Contract review

- Prepare an independent review of the documented desired outcomes of the project and agreed milestones with the actual results achieved utilizing the following sources;
 - Participant interviews
 - Stakeholder interviews
 - Contract documents
 - Research within Regional Bodies data as well as DPIF

Report

- Prepare a report summarizing the outcomes from the review as well as recommendations arising from the review that relate to the implementation of similar programs in the future.

5. Project structure

Contractual Obligations

1. Natural Heritage Trust Extension Priority Action Activity Agreement
 - a. Project
 - i. “Sustainable Management and Conservation of Grazing Lands in Queensland’s Rangelands”
 - b. Parties
 - i. Department of Natural Resources, Mines and Energy
 - ii. Desert Channels Queensland Inc
 1. Co-operating regions
 - a. Northern Gulf Resource Management Group
 - b. Southern Gulf Catchments Inc
 - c. Desert Uplands Build-up and Development Strategy Committee
 - d. South West Natural Resource Management Group Inc
 - c. Date of commencement - 1st April 2004
 - d. Funding
 - i. Initial Funding \$841,000 (Exc GST)
 - ii. Indicative future funding \$3,080,500 (Exc GST)
 - e. Term
 - i. April 2004 to 31st March 2007 (3 years)
 - f. Project Aim
 - i. “This 3 year project aims to facilitate the adoption of sustainable practices in the extensive grazing areas of Queensland by Landholders, community groups and other natural resource managers by providing the networks, understanding, skills and technical support required, thereby contributing to natural resource management and biodiversity conservation outcomes.”

g. Project Outcomes

- i. Grazing Land Management (GLM) and Stocktake monitoring packages customised to the landscapes in each of the 5 regions (accounting for all the bioregions).
- ii. GLM and Stocktake training delivered to at least 60 properties in each of the 5 regions.
- iii. Subcatchment case studies (at least 2 per region) of a continuous improvement process for extensive grazing lands including impact on natural resources, biodiversity and sustainable production, linked to sub-catchment and regional goals.
- ii. An agreed and effective network for Statewide monitoring of the condition and trend of extensive grazing lands, linked to the national rangelands audit (‘ACRIS’) and Regional Plans.
- iii. Case Studies in each region that demonstrate effective conservation measures on grazing lands consistent with regional biodiversity targets (including the impact of improved land condition on biodiversity and management needs of wetlands and endangered regional ecosystems).
- iv. Industry driven changes in awareness and attitudes to natural resource management.
- v. A clearly defined and functional, network for Statewide coordination of grazing land initiatives within and across regions.

2. Activity Agreement

a. Project

- i. “Sustainable Management and Conservation of Grazing Lands in Queensland’s Rangelands”

b. Parties

- i. Desert Channels Queensland Inc
- ii. Department of Primary Industries and Fisheries

c. Date of commencement 1st January 2005

- d. Funding
 - i. Initial Funding \$640,000 (Exc GST)
 - e. Term
 - i. Initial Term 1st April 2005 to 1st March 2006
 - f. Outcomes
 - i. Completed materials for GLM Training Programs for Mulga region, Southern Gulf, Desert Uplands and Non-mitchell grass areas of Desert Channels.
 - ii. Sub-catchment case study areas selected in each region
 - iii. Documented terms of reference for coordination of cross-regional activities related to grazing land management
 - iv. 2 GLM and 2 Stocktake workshops in Mulga region.
 - v. 2 GLM and 2 Stocktake workshops in Northern Gulf.
3. Deed of Variation
- a. Project
 - i. “Sustainable Management and Conservation of Grazing Lands in Queensland’s Rangelands”
 - b. Parties
 - i. Department of Natural Resources Mines and Water
 - ii. Desert Channels Queensland Inc.
 - c. Date of variation – 8th August 2006
 - d. Changes
 - i. Project completion is extended to 30th June 2007
 - ii. Additional funding is approved of \$2,680,000
 - iii. Total Project Funding now \$3,521,000.
4. Deed of Variation (2)
- a. Project
 - i. “Sustainable Management and Conservation of Grazing Lands in Queensland’s Rangelands”

- b. Parties
 - i. Department of Natural Resources Mines and Water
 - ii. Desert Channels Queensland Inc.
- c. Date of variation – 2007
- d. Changes
 - i. Changes to the description of the milestones and outputs
 - ii. No change to the budget

Agreement on an extension of the project from 30th June 2007 to 30th June 2008

5. Environmental Protection Agency

- a. Project
 - i. Sustainable Management and Biodiversity Conservation of Grazing Lands in Queensland Rangelands
- b. Parties
 - i. Desert Channels Queensland Inc.
 - ii. Environmental Protection Agency
- c. Date of commencement
 - i. 11th November 2005
- d. Funding
 - i. Project funding of 295,455 (Exc GST)
- e. Term
 - 11th November 2005 to 30th June 2008
- f. Outcomes
 - i. Develop a broad based and region specific biodiversity training package integrated with GLM for Desert Channels, Southern Gulf, Northern Gulf, South West and Desert Uplands. Select 5 sub-catchment case study properties in each of the five regions.

6. Project Participant analysis

The following tables set out an analysis of the number of participants, participating properties and property aggregations in the different training programs covered by “the project”. Data for this analysis has been made possible by access to the DPIF ‘GLM and Stocktake Participants data.xls’ file. Data in this file is current up to 23rd September 2008.

Table 1.0 Summary of Participating Properties by region

Sum of Property numbers Region	Workshop type			Grand Total
	GLM	\$avanna Plan	Stocktake	
NGRMG	8	38		46
SGC	30	1	4	35
DU*	22		1	23
DCQ	108		31	139
SWNRM	47		32	79
Grand Total	215	39	68	322

*DU properties outside DCQ.

Due to the overlap in area between Desert Channels Queensland and the Desert Uplands bio-region, all properties within both these regions have been attributed to DCQ for the purpose of this analysis.

DPIF data shows 322 properties participating in GLM, \$avanna Plan and Stocktake workshops.

Of these properties 98 represented multiple properties of an aggregation and 8 were Shire Council land holdings. Below is a table of the participating ‘aggregations’ in the training programs. Note, we have used the title aggregation rather than enterprise as a large corporate ‘enterprise’ such as AACO could have multiple separate aggregations.

Data recorded in the data file shows records where a couple, or a single participant has attended a training program and they have recorded managing or owning more than one property. In this instance this has been recorded as multiple properties as shown above. The adjustment for aggregation, reduces this instance to (1) aggregation as shown below.

Table 2.0 Summary of Participating Primary Producer Aggregations by region

Sum of Aggregations Region	Workshop type			Grand Total
	GLM	\$avanna Plan	Stocktake	
NGRMG	8	31		39
SG	18	1	0	19
DU*	18		1	19
DCQ	65		19	84
SWNRM	37		18	55
Grand Total	146	32	38	216

*DU area outside DCQ.

Participants consisted of primary producers, regional body staff, State Government staff, Local Government and University staff as shown below.

Table 3.0 Participants by Type

Sum of Attendee numbers Region	Participant type	Workshop type			Grand Total
		GLM	\$avanna Plan	Stocktake	
NGRMG	Primary producer	18	93		111
	Regional body	3			3
NGRMG Total		21	93		114
SGC	Local government			9	9
	Primary producer	21	10		31
	Regional body	7		3	10
	State government (DPI&F)	6		3	9
SGC Total		34	10	15	59
DU*	Local government			2	2
	Primary producer	31		1	32
	Regional body	5		4	9
	State government (DPI&F)			1	1
	State government (NRW)			1	1
DU Total		36		9	45
DCQ	Local government	2		11	13
	Pastoral College			1	1
	Primary producer	85		38	123
	Regional body	4		3	7
	State government (DPI&F)	11		7	18
	State government (EPA)	2		6	8
	State government (NRW)			2	2
DCQ Total		104		68	172
SWNRM	Local government			16	16
	Primary producer	68		57	125
	Regional body	11		5	16
	State government (DPI&F)	4		2	6
	State government (EPA)	2			2
	State government (NRW)			4	4
	University	1			1
SWNRM Total		86		84	170
Grand Total		281	103	176	560

*DU area outside DCQ.

Of this total number of attendees, 422 were primary producers as shown in the following table.

Table 4.0 Number of Primary Producer attendees by Region

Sum of Attendee numbers Region	Workshop type			Grand Total
	GLM	\$avanna Plan	Stocktake	
NGRMG	18	93		111
SGC	21	10		31
DU*	31		1	32
DCQ	85		38	123
SWNRM	68		57	125
Grand Total	223	103	96	422

*DU area outside DCQ.

It is worth noting that despite the Northern Gulf conducting all workshops on a ‘one on one’ basis. NGRMG also has the highest primary producer attendance ratio of all the regions, with only minimal attendance from governing body representatives.

The DPIF data shows workshops occurring over the period January to June 2004 to January to June 2008.

Table 5.0 Number of Workshops and Participants over time

Workshop	JJ04	JD04	JJ05	JD05	JJ06	JD06	JJ07	JD07	JJ08 (blank)	Total	
GLM											
Workshops	-	-	1	3	8	5	6	8	2	-	33
Participants	-	-	5	22	98	47	38	55	16	-	281
Average/wshop			5	7	12	9	6	7	8		9
\$avanna Plan											
Workshops	2	1	6	1	6	5	5	11	-	-	37
Participants	4	10	19	3	17	16	12	22	-	-	103
Average/wshop	2	10	3	3	3	3	2	2			3
Stocktake											
Workshops	-	1	2	4	2	5	1	1	2	1	19
Participants	-	5	14	42	19	48	9	10	20	9	176
Average/wshop		5	7	11	10	10	9	10	10	9	9
Total											560

Note that ‘blank’ refers to a Stocktake workshop conducted at Bollon in the SW where the date details were not provided.

The data shows that the Northern Gulf commenced delivering \$avanna Plan workshops before the other regions which may account for the higher relative number of participants. This is most likely due to the fact that DPIF staff were in place and already delivering GLM in the region and the version for Northern Gulf had already been developed.

The average number of GLM and Stocktake Participants per workshop is 9. The average number of participants at the \$avanna Plan workshops was 3.

The following table summarises the number of group workshops delivered across the regions (excluding \$avanna Plan which was delivered ‘one on one’).

Table 6.0 Number of GLM Workshops delivered

Count of Workshop Count Region	Reporting period								Total
	JD04	JJ05	JD05	JJ06	JD06	JJ07	JD07	JJ08	
NGRMG - GLM			1	1	1				3
NGRMG - \$avanna Plan	1	6	1	6	5	5	11	2	37
SGC				1			2		3
DU*			1			2	1		4
DCQ				4	2	3	5	1	15
SWNRM		1	1	2	2	1		1	8
Grand Total	1	1	3	8	5	6	8	2	70

*DU area outside DCQ.

The project included the development of new versions of GLM for Mulga region, Southern Gulf, Desert Uplands and Non-mitchell grass areas of Desert Channels. A summary of the number of workshops delivered for each version is shown below.

Table 7.0 Number of Workshops by version

Region	NG, SG, DU, DCQ, SW
Workshop type	GLM and GLM+
Count of Workshop Count	
Version	Total
Burdekin	4
Channel Country	5
Desert Uplands	6
Maranoa - Balonne	2
Mitchell grass	9
Mulga	9
Northern gulf	37
Southern Gulf	4
Grand Total	76

Note that the Northern Gulf workshops refer to ‘One on One’ delivery of GLM on the property of the participant.

The total estimated area of the GLM, \$avanna Plan and Stocktake participants properties is shown below.

Table 8.0 GLM, \$avanna Plan and Stocktake participant property areas

Region	Total Area (ha) (1)	Number of Participating Aggregations	Area of Participants Properties (ha) (2)	% of Total Area	Average Size of Aggregation (ha)
NGRMG	19,400,000	39	2,085,649	11%	53,478
SGC	19,500,000	19	2,989,855	15%	157,361
DU*	2,654,000	19	873,340	33%	45,965
DCQ	50,993,300	84	10,271,039	20%	122,274
SWNRM	18,700,000	55	5,049,991	27%	91,818
Total	111,247,300	219	21,269,875	19%	97,123

*DU area outside DCQ.

Notes:

1. The area of the Regions has been extracted from data posted on the websites for each Regional Body and the Desert Uplands Bioregion.
2. The area of the participants properties has been provided in the DPIF database by cross-referencing the property details with the DPIF Agricultural Property System database (APS).
3. There are some gaps in this information due to difficulties in cross referencing data.
4. There is an overlap between the Desert Uplands bio-region and DCQ of 4,846,000 ha. This has been removed from the DU bio-region and included in the DCQ figures. There is also a small overlap with DU and SGC which has not been accounted for in the above table.

The average aggregation sizes would indicate that the participants in training programs represent the larger landholders in the respective regions.

Based on the data shown above, the sum of the area of GLM, \$avanna Plan and Stocktake participants properties represents 19% of the total area of the combined regions. To place this in the perspective of the State of Queensland, the area of participants in these training programs represents approximately 12.3% of the State (based on the area of QLD being 173,417,490 ha). This indicates that the programs have had a significant coverage of the area of the regions.

The more intensive programs of GLM and \$avanna Plan have had a coverage of 17,143,874 ha or 15% of the regional body area or 10% of the State of Queensland.

7. GLM Participant Survey Outcomes

The 2008 GLM and \$avanna Plan participant survey is part of the project review. The participant survey sample of 39 survey participants represented 22% of the total number of GLM and \$avanna Plan program participating aggregations.

Attached as an Addendum to this report is a full report on the GLM Participant survey, “GLM Participant Survey 2008”.

Table 9.0 WPC 2008 Survey Participants sample size

Region	DPI GLM and \$avanna Plan Aggregations	WP Survey Participants	Survey Sample Proportion
NGRMG	39	7	18%
SGC	19	10	53%
DU*	18	4	22%
DCQ	65	11	17%
SWNRM	37	7	19%
Total	178	39	22%

*DU area outside DCQ.

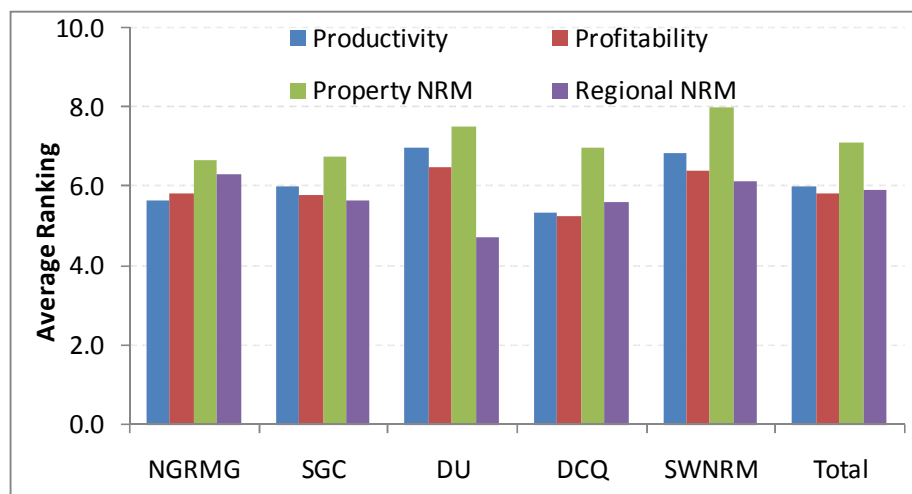
Note that the overlap between DU bioregion and DCQ regional boundaries has been attributed solely to DCQ.

Key outcomes from the GLM and \$avanna Plan survey are summarised below.

Natural Resource Management Benefits

1. Across all regions the greatest perceived benefit by participants of the GLM course was related to natural resource management on the participants properties.

Figure 2.0: GLM Outcomes



2. 85% of respondents referred to current or potential benefits at the regional level if a greater uptake could be achieved. 3 respondents cited limited benefit at the regional level.
3. Of the total survey respondents, 44% had applied for funding to support aspects of their plan.
4. Given the timeframe of the GLM courses being run over the period 2006 to the present, the take-up of project funding by participants is relatively good with approximately half of all GLM participants surveyed having applied for funding to support aspects of their plan or project. This rate is likely to increase as people implement their plans.

Based on the responses of the survey participants we conclude that the GLM and Savanna Plan programs have already and will continue to deliver significant Natural Resource Management benefits at the property scale, sub-catchment scale and regional scale.

Practice change

1. 74% of participants have a 'Plan' post the GLM training
2. 64% of respondents state that they have changed grazing practices as a result of attending the GLM course.
3. 67% of survey respondents are using the ABCD land condition framework.
4. 36% of survey respondent's use pasture yield assessment.
5. 46% of survey respondents had participated in a follow up process.

Take up of the concepts and broad tools ('Plan' and ABCD framework), is strong, however take-up of the more technical tools (pasture yield assessment) is weaker. This highlights the need for ongoing engagement to reinforce the learning process and the skills required to use the appropriate tools.

In terms of program design, the follow-up process is the weak point.

Ongoing learning

1. There was an acknowledgement by 74% of survey participants that changes in grazing and land management will be an ongoing process. This highlights an opportunity and a need to provide ongoing support in the form of follow-up or add-on programs to help facilitate this process.
2. 69% of producers surveyed would be interested in formalized accreditation for land management activities.
3. Despite the desire for formal accreditation, GLM participants lacked awareness of the availability of the Diploma of Agriculture accreditation through Queensland TAFE.

4. The Dip. Agriculture was mapped to the GLM course in 2007 and is available to GLM participants on the successful completion of the GLM course.
5. The most common benefit stated in relation to formalized accreditation was in relation to aiding lease renewal.

The survey respondents indicate a strong desire for ongoing learning in relation to grazing and land management. This highlights the opportunity for continued engagement with producers, providing the right learning tools can be developed.

Future GLM programs

1. 100% of respondents commented that GLM should continue to be offered.
2. 100% of participants who attended the GLM course in a group believe that group learning is the best method of delivery.
3. 100% of participants who had DPIF delivery \$avanna Plan (NGRMG) in a 'one on one' format believe that is the best method of delivery.

One on one delivery works in the NGRMG region due to the relationship between DPIF, NGRMG and producers in the region. Subject to funding constraints, this could continue to work.

In other regions it would appear there is strong support for the continuation of a group learning format.

Promotion and extension of GLM

1. The most common source of awareness of the program amongst participants was DPIF (44%), followed by the Regional Body network and word of mouth/referrals.

This highlights the need for case studies to support DPIF and Regional Body promotion of the programs as well as supporting the referral network.

Recommendations arising from participant survey

- R1. Continue support of GLM programs to deliver Natural Resource Management benefits at the property scale, sub-catchment scale and regional scale.**

- R2. The follow-up process or post GLM learning and engagement tools needs to be re-designed to address the stated desire for ongoing learning and to reinforce the adoption of technical skills.**

- R3. Develop a learning framework that GLM sits within so that producers can access tools for ongoing learning and enter the process at the right level.**

- R4. Continue the group learning framework as the most cost effective method of delivering GLM training.**

- R5. Promote the availability of accreditation from Queensland TAFE with the possibility of a Diploma of Agriculture arising from GLM Training.**

- R6. Develop case studies highlighting positive outcomes from GLM training to support promotion of program by DPIF and Regional Bodies as well as supporting referral from past participants.**

7. Correlation with DPIF data

Through the review process, DPIF made available data from their database on GLM participants for the purposes of correlating datasets between the 2008 Williams and Partners GLM Participant Survey and the DPIF records.

A summary of the data sets is shown below comparing both the area surveyed and the number surveyed.

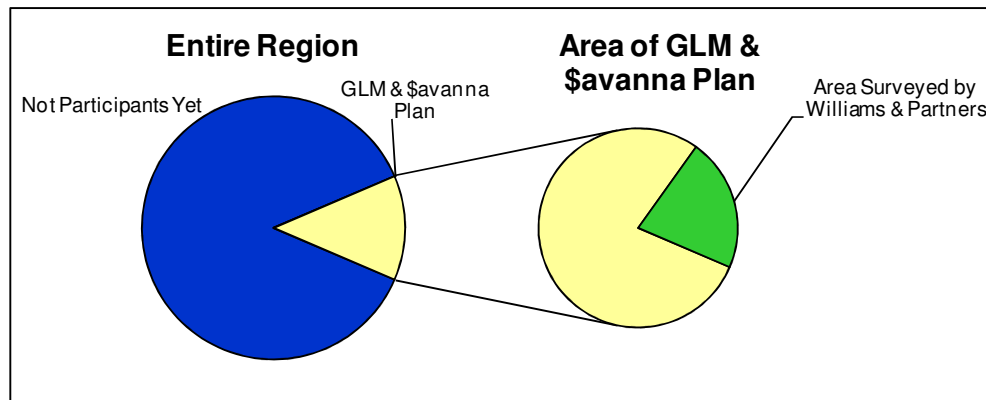
Table 10.0: Data collected by Williams and Partners Survey

Region	Number of GLM and \$avanna Plan Aggregations	Area of GLM and \$avanna Plan Participation	WPC 2008 Survey Numbers	WPC 2008 Area Covered By Survey (ha)	% of Total number of aggregations	% of Total Area
NGRMG	39	2,085,649	7	259,720	18%	12%
SGC	19	2,938,352	10	2,001,408	53%	68%
DU*	18	817,340	4	163,093	22%	20%
DCQ	65	8,918,189	11	1,133,463	17%	13%
SWNRM	37	2,375,343	7	448,732	19%	19%
Total	178	17,134,874	39	4,006,416	22%	23%

*DU area outside DCQ.

The following chart shows the area covered by GLM and \$avanna Plan participants relative to the entire region and the area covered by the WP survey relative to the DPIF.

Figure 3.0: WPC 2008 and DPIF Areas



The WPC 2008 GLM and Savanna Plan Survey contained 7 questions that were common to the DPIF dataset and the 2008 survey. These questions analysed were:

1. Do you have a GLM ‘Plan’ from the workshop?
2. Do you use your ‘Plan’?
3. Have you applied for funding to support aspects of your plan or projects?
4. Do you regularly monitor land condition?
5. Do you use the ABCD framework?
6. Do you use pasture yield assessment?
7. What follow-up did you receive after the workshop?

Below is a summary of the correlation data between the datasets.

Table 11.0: Correlation with DPIF data

DPIF			WPC		
Yes	No	Incomplete	Yes	No	Incomplete
<i>Q 1. Do you have a GLM ‘Plan’ from the workshop</i>					
34	1	4	29	10	0
<i>Q 2. Do you use your ‘Plan’</i>					
32	1	6	28	11	0
<i>Q 3. Have you applied for funding to support aspects of your plan or projects</i>					
8	3	28	17	22	0
<i>Q 4. Do you regularly monitor land condition</i>					
18	1	20	38	0	1
<i>Q 5. Do you use the ABCD framework</i>					
17	0	22	26	13	0
<i>Q 6. Do you use pasture yield assessment</i>					
14	0	25	14	25	0
<i>Q 7. What follow-up did you receive after the workshop</i>					
14	2	23	18	21	0

Our conclusion from this analysis is that there is insufficient correlation between the datasets to allow extrapolation of the WPC Survey data across the whole DPIF dataset. This is due largely to the fact that the DPIF data may not be current (responses could be up to 1-3 years old) or there is no response where follow up has not occurred.

From a statistical perspective the lack of correlation in these questions means that we are not able to immediately use the responses from these questions from the DPIF database. However the responses from the WPC 2008 Survey are still representative of the overall GLM participant population on the basis of the random sampling and the proportion of the overall population (22% by number).

Issues Arising

1. There needs to be a better defined follow-up process that works for DPIF and participants.
2. There is a missed opportunity in the data for evaluation and reporting of outcomes.

8. Stakeholder Review

Stakeholder reviews were conducted with the following groups.

- Regional bodies (DCQ, NGRMG, SGC, SWNRM)
- DU Committee (DUC)
- DPIF
- EPA
- MLA

8.1 Regional Body Stakeholder Review

Stakeholder interviews were conducted concurrently with the participant interviews in the different regions. Below are summarised outcomes from the stakeholder interviews.

Northern Gulf Resource Management Group (NGRMG)

Noelene Gross (General Manager) 18/06/2008

- a. Positive outcomes from the 2004/2008 GLM program
 - Opportunity to work with DPIF and landowners
 - Opportunity for NG to work with landowners one on one
 - Positive feed back from all landowners involved
 - Positive feed back from DPIF
 - NRM benefits resulting from increased knowledge and understanding of pasture growth and management –
 - i. reduced stocking rates in many cases having an immediate beneficial effect
 - ii. Awareness of problems associated with riparian grazing resulting in management changes
 - Increased awareness of the benefits of using mapping and GIS – now being complemented with GIS workshops in the region
- b. Negatives outcomes from the 2004/2008 GLM program
 - Insufficient funds to do more
 - Cost – it is an expensive way to deliver the programme

- Time – with available resources it will take some time to offer GLM to all landowners
- c. What are the options for alternative delivery modes
 - One on one delivery works best in this region – large family properties and it is the way the DPIF works here
- d. Are there plans to implement a similar program in the future
 - Yes, GLM has become an important part of the services offered by NGRMG and an important way of maintaining communication/contact with landowners
 - Plan to offer GLM to all landowners in the region
 - DPIF are very supportive of GLM continuing as are the landowners
- e. If a similar program were run, how would you recommend that it be changed (if at all).
 - Run the same programme with DPIF delivering one on one workshops and NGRMG supplying mapping and support

Southern Gulf Catchments (SGC)

Kate Masters (Project Manager), Jeremy Hayden (GIS Co-ordinator) 19/05/2008

- a. Positive outcomes from the 2004/2008 GLM program
 - Complements other projects and programmes being run by SG
 - Increased awareness of benefits and uses of mapping
 - The course was appropriate for the region
- b. Negative outcomes from the 2004/2008 GLM program
 - Lack of communication between DPIF and SG
 - Inadequate consultation with SG personnel about the running of GLM workshops
 - Unable to take advantage of possible synergies with existing programmes due to lack of consultation
- c. What are the options for alternative delivery modes
 - Develop a programme with SG involvement from the planning stage

- d. Are there plans to implement a similar program in the future
 - SGC would support a similar programme in the region if there was adequate consultation and opportunity to integrate GLM with existing SG programmes.
- e. If a similar program were run, how would you recommend that it be changed (if at all).
 - Consultation with SGC from the initial stages and SG involvement in planning and delivery.

Desert Channels Queensland (DCQ)

Peter Douglas (Chairperson), Mark Kleinschmidt, Alun Hoggett, Steve Wilson, Sue Gardiner, 27/06/2008

- a. Positive outcomes from the 2004/2008 GLM program
 - Developed GLM package for non-mitchell grass region of Desert Channels
 - Feedback from participants who attended GLM programs was generally positive
- b. Negatives outcomes from the 2004/2008 GLM program
 - Weak link between GLM and application for on-ground conservation works
 - No evidence of sub-catchment case studies
 - No evidence of state-wide monitoring
 - Reporting and communication between DPIF and DCQ needs to be improved
 - DPIF focus has changed from being interested in sustainability to being primarily profit driven in dealing with primary producers
 - Staff turnover within DPIF an issue in terms of delivering programs
- c. What are the options for alternative delivery modes
 - Need a pyramid or hierarchical learning process where people can build on prior learning. Introducing people to GLM was like introducing a learner driver to a Porsche.
 - Perhaps need to look at shorter courses as an introduction to GLM or as a referral to GLM.

- d. Are there plans to implement a similar program in the future
 - Yes, however with a DCQ Project Officer acting as a co-ordinator and project manager. This will assist in integrating GLM with other activities and programs being run through DCQ.
- e. How does GLM fit into the strategic direction of the RB
 - In 2004 DCQ lacked the internal knowledge, staff and capacity to engage landholders in relation to sustainable grazing management. GLM was seen as a tool to address this.
 - Longer term it could be that GLM is part of an overall suite of training offerings, some of which are delivered internally by DCQ and some of which are delivered by external providers such as DPIF, RCS, Agforward and others.

SWNRM

Geoff Edwards, Robyn Haig, Gary Butler, Ric Newsom. 26/06/2008

- a. Positive outcomes from the 2004/2008 GLM program
 - Development of the Mulga region module
 - Initial relationship with Col Paton and Jane Hamilton was very good and delivery was good
 - Feedback from producers was generally positive as to the benefits of the training
- b. Negatives outcomes from the 2004/2008 GLM program
 - Modest outreach compared to number of properties in the region
 - Tapering off in the last 12 months
 - DPIF personnel re-located to Roma without discussion
 - Higher numbers in 2006 due to activity from SWNRM and Planscapes
 - GLM was originally seen as playing a key role in developing the planning capacity for primary producers to undertake property and sub-catchment planning to support natural resource management activities.
 - GLM is now seen as an optional, more intensive grazing management training opportunity rather than being central to the development of NRM planning.

- Follow-up not happening.
 - GLM has to evolve, it is starting to lose relevance
 - Have not seen any sub-catchment case studies
- c. What are the options for alternative delivery modes
- SWNRM developing PLANSAPES. There will be no detailed grazing management module in PLANSAPES. If producers are interested in this type of training courses such as GLM or GFP may be recommended.
- d. Are there plans to implement a similar program in the future
- SWNRM will not support an extension under current terms
- e. How does GLM fit into the strategic direction of the RB
- SWNRM are committed to PLANSAPES and as such see GLM as an additional, external training opportunity for producers to access if they wish. It is not a core part of SWNRM activities.

Desert Uplands Build-up and Development Strategy Committee (DUC)

Robyn Adams (Chairperson), Rob Cameron (Co-ordinator) 26/06/2008

- a. Positive outcomes from the 2004/2008 GLM program
- Development of a customised GLM package for the Desert Uplands bioregion
 - Feedback from participants who have attended GLM workshops indicates that they have got a lot of value out of the program
- b. Negatives outcomes from the 2004/2008 GLM program
- DU specific GLM package is still not representative of the whole region
 - There was no consultation with DUC during the development of the DU specific GLM package. Committee members and or landholders could have added considerable knowledge to the development
 - Desert Uplands module was late being developed
 - Lack of communication between DUC and regional bodies re GLM program

- Lack of communication between DUC and DPIF re planning of GLM workshops
 - Lost opportunities to link GLM workshops with DU Property Management Planning process which would have been very useful
 - Biodiversity program was not promoted
 - Lack of reporting or communication on outcomes. DUC could have used information in their reporting if it had been available.
- c. What are the options for alternative delivery modes
- Splitting up the three days may be more attractive to some producers
 - Push Stocktake more as an introductory program
- d. Are there plans to implement a similar program in the future
- Yes, however it needs to be integrated with other DUC activities, particularly Property Management Planning
 - Need a modular, or hierarchical learning system so that people can advance their knowledge step by step, building on previous learning. At present it is a bit 'ad-hoc'.
 - Having a GLM project officer within DUC would be very beneficial to co-ordinate workshop and integrate the program with other activities.
- e. How does GLM fit into the strategic direction of the DUC
- The combination of GLM and DU Property Management Planning is seen as important for future lease renewals, therefore it needs to be continued.

Department of Primary Industries and Fisheries (DPIF)

Peter Long, David Phelps, John Target, Jenny Milson 03/06/2008

Peter Long, John Target, Jenny Milson 27/06/08

Col Paton, Jane Hamilton 01/07/08

- a. Positive outcomes from the 2004/2008 GLM program
 - Developed modules for Mulga region, Southern Gulf, Desert Uplands and Non-mitchell grass areas of Desert Channels
 - Delivered training programs to over 300 properties in the combined region
 - Over 600 people have attended GLM training programs during the period
 - Producer demonstration site set up at Bollon
- b. Negative outcomes from the 2004/2008 GLM program
 - Staff turnover within regional bodies
 - Communication between regional bodies has been limited
 - Co-ordination with multiple parties is an issue
 - In hindsight there should have been a steering committee with regular scheduled meetings
 - A recognised weakness state-wide is follow-up. Part of the issue is clarifying the actual process for follow-up (what is included and what is not, how long does it extend for)
- c. What are the options for alternative delivery modes
 - DPIF focus has changed to be more focused on economic outcomes, however it is believed that joint outcomes (economic and sustainability) can be achieved, such that DPIF and Regional Bodies and meet required outcomes.
 - In terms of program delivery, the group workshop over 3 days is the preferred method.
 - The employment of GLM co-ordinators within the Regional Bodies would be beneficial to overall project and landholder co-ordination.

- d. Are there plans to implement a similar program in the future
 - DPIF will be continuing to delivery GLM programs.
 - Demand for Stocktake is increasing.
 - Stocktake tools could be useful in terms of meeting lease renewal conditions.
 - If there is no supporting funding in the future, demand for Stocktake could remain strong and demand for GLM could drop off.

Environmental Protection Agency (EPA)

David Akers 04/06/2008

Teresa Eyre 24/06/2008

- a. Positive outcomes from the 2004/2008 Biodiversity program
 - Developed 4 customised versions of Biodiversity program for Mitchell Grass, Channel Country, Desert Uplands and the Mulga Region. Southern Gulf and Northern Gulf have been developed or customised by CSIRO.
 - Between January 2007 and June 2008, delivered 8 workshops with 87 attendees in Northern Gulf, DCQ, SWNRM regions.
 - 9 biodiversity property plans have been developed following the workshops.
 - Linkage with SWNRM PLANSCAPES framework is good.
 - Biodiversity program is a very good engagement tool for EPA.
- b. Negatives/weaknesses from the 2004/2008 Biodiversity program
 - Continuity of delivery (David Akers secondment to the program has ended).
 - CSIRO programs are not using the same material.
 - More time required to have a bigger impact.
- c. What are the options for alternative delivery modes
 - Potential to train Regional Body staff to delivery Biodiversity programs.

- d. Are there plans to implement a similar program in the future
 - Biodiversity program workshops will be offered where there is demand and where someone is able to delivery it.
- e. What is the lifecycle of the Biodiversity program
 - There is no further development funding at this stage.
- f. Will investment be continue to be made in product development
 - As above
- g. What are the barriers to successful delivery
 - Available and trained workshop presenters.
 - Demand for the program.

Meat and Livestock Australia (MLA)

Rodd Dyer 12/08/2008

- a. Positive outcomes from the 2004/2008 GLM program
 - Joint development with DPIF and Regional Bodies of new modules for Mulga region, Southern Gulf, Desert Uplands and Non-mitchell grass areas of Desert Channels
 - GLM delivered to areas of Queensland where it had not been delivered before.
 - GLM is the most successful Edge Product in terms of demand and adoption of practices.
- b. Negatives/weaknesses from the 2004/2008 GLM program
 - Evaluation data is not flowing through to MLA and regional bodies. Improved evaluation would greatly assist in continually developing and improving GLM.
 - Post GLM support or feedback has been variable and hasn't been clearly developed.
 - Version control of materials between regions is potentially a problem.
- c. What are the options for alternative delivery modes
 - DPIF, Agforward or others.
 - Need appropriately qualified presenters.

- d. Are there plans to implement a similar program in the future
 - GLM will continue to be offered.
- e. What is the lifecycle of the GLM program
 - GLM will be maintained and continually developed
 - Future developments of GLM will include a greater focus on climate variability and climate change.
- f. Will investment be continue to be made in product development
 - Yes - MLA have three core education products being GLM, Nutrition Edge, Breeding Edge, all are interrelated.
 - Future program/product development may include a Business Management program which will then strategically direct participants to the more technically orientate programs of GLM, Nutrition and Breeding.
- g. What are the barriers to successful delivery
 - Presenter fatigue is a real issue.
 - Presenter succession or future presenter development is important (capacity building).
 - Maintaining quality of information and continually updating the program to retain relevance.
 - There is currently no operational plan within MLA for incorporating current and future research work into the GLM material.
 - Further thought needs to be given to developing short ‘lead in’, or awareness building programs, such as the ‘Beef-up Forums’. Regional bodies could play a role in developing awareness through integration of GLM as a component of the broader activities of the Regional Body.

Key Issues arising from Stakeholder analysis.

Positive outcomes from the 2004/2008 GLM program

- New GLM packages developed
- GLM complements other programs
- GLM and the Biodiversity program are good engagement tools for agencies

Negative outcomes from the 2004/2008 GLM program

- Lack of communication between DPIF and RB's and between RB's
- Staff turnover
- Weak follow up
- Lack of outcome reporting by DPIF
- Lack of linkage with other RB programs
- Lack of case studies

What are the options for alternative delivery modes?

- Linkage with other RB programs
- Modular or hierarchical learning
- Push Stocktake more as an introductory program

Are there plans to implement a similar program in the future?

If a similar program were run, how would you recommend that it be changed (if at all)?

- GLM project officer employed within RB's
- Integration with other programs run by RB's
- Demand for Stocktake could increase in the event of no FARMBIS funding
- Importance of consultation between DPIF and RB's and between RB's

How does GLM fit into the strategic direction of the RB?

- GLM part of a suite of learning offerings
- Lease Renewals

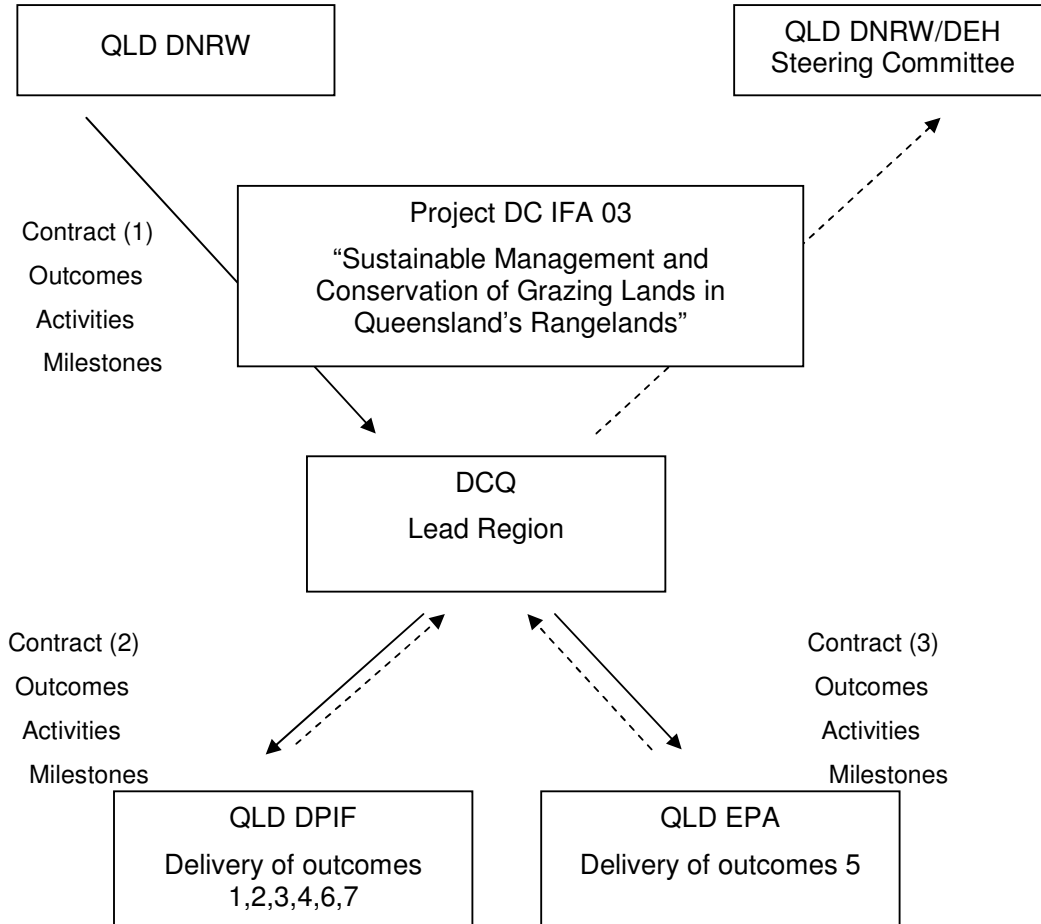
What are the barriers to successful delivery?

- Available and trained workshop presenters
- Presenter fatigue is a real issue
- Demand for the program without FARMBIS or RB subsidies
- Maintaining quality of information and continually updating the program to retain relevance
- Further thought needs to be given to developing short 'lead in', or awareness building programs, such as the 'Beef-up Forums'. Regional bodies could play a role in developing awareness through integration of GLM as a component of the broader activities of the Regional Body

9. Measurement of Project Outcomes

The project reporting structure is shown in the diagram below.

Figure 4.0 GLM and Stocktake Reporting Structure



Legend

Contract —————>

Reporting - - - - ->

Contracts

1. DNRW and DCQ (proponent)
2. DCQ and DPIF (proponent)
3. DCQ and EPA (proponent)

Project Outcomes as defined in the activity agreement with

1. Grazing Land Management (GLM) and Stocktake monitoring packages customised to the landscapes in each of the 4 regions (accounting for all the bioregions).
2. GLM and Stocktake training delivered to at least 60 properties in each of the 5 regions.
3. Subcatchment case studies (at least 2 per region) of a continuous improvement process for extensive grazing lands including impact on natural resources, biodiversity and sustainable production, linked to sub-catchment and regional goals.
4. An agreed and effective network for Statewide monitoring of the condition and trend of extensive grazing lands, linked to the national rangelands audit ('ACRIS') and Regional Plans.
5. Case Studies in each region that demonstrate effective conservation measures on grazing lands consistent with regional biodiversity targets (including the impact of improved land condition on biodiversity and management needs of wetlands and endangered regional ecosystems).
6. Industry driven changes in awareness and attitudes to natural resource management.
7. A clearly defined and functional, network for Statewide coordination of grazing land initiatives within and across regions.

The key issue from the project structure in relation to reporting outcomes is the complexity that has arisen through managing 'back to back' contracts with agencies responsible for delivering the majority of the outcomes set out in the agreement between DCQ and DNRW.

Due to difficulty in reporting on milestones and actions in a meaningful way between DCQ and DNRW and DEH, changes were made to the Schedule 3, Activities and Milestones. It was acknowledged by DCQ that the original activity agreements were not well developed from a project management perspective and were subsequently altered in a Deed of Variation.

The ripple effect of changes in the DCQ/DNRW schedule then had to be reflected in the agreements with DPIF and EPA.

“Sustainable Management and Conservation of Grazing Lands in Queensland’s
Rangelands”

There appears to be a failure in the reporting from DPIF and EPA to DCQ which could be related to the number of changes occurring to the reporting framework between DCQ and DNRW/DEH. DCQ and DPIF adopted a practice of jointly completing with DCQ the required reporting to DNRW/DEH, which has met DCQ obligations however does not necessarily provide good governance between DCQ and DPIF/EPA.

The status of the most recent reporting on outcomes from DCQ to DNRW and DEH is shown below.

Table 12.0: June 2008 reporting to DNRW and DEH

Outcome	Jan-June 08 Milestones and outputs	July 2008 Status
GLM and StockTake packages customised to landscapes of each region	completed	Completed GLM modules for Mulga region, Southern Gulf, Desert Uplands and Non-mitchell grass areas of Desert Channels.
GLM and StockTake training delivered to at least 300 properties across the 4 regions	1 GLM or StockTake workshop delivered and follow up support for planning and land condition assessment	Delivered GLM and Stocktake training to 322 properties and 216 aggregations.
Monitoring and evaluation; including workshop and case study area of a continuous improvement process for extensive grazing	Demonstrated effectiveness of GLM and StockTake workshops, follow-up and associated project activities contributing to sustainable and productive land management	Extension requested so that case studies can be completed by December 2008. Report on focus catchment and 8 case study areas due for completion in July 2008.
A framework for State-wide monitoring of the condition and trend of extensive grazing lands	Delivered a monitoring framework, consistent with tools in other areas of Queensland, for land managers and regional bodies to assess land condition and trend	Planned to distribute information booklet on remote sensing to monitor property grazing management practices in the July/Dec 08 period. Produce booklet on guidelines for the use of remote sensing. (July/Dec 08) Report on condition and trend in the Focus Catchment and Case Study Areas, due July/Dec 08.
Develop, trial and undertake a biodiversity component for GLM. Monitor sites to establish biodiversity outcomes from property management changes.	3 workshop sessions delivered. Final report written. Evaluation undertaken.	Final report being drafted to be completed by December 2008. 7 Biodiversity plans prepared, example to be provided with final reporting.
Industry-driven changes in awareness and attitudes to natural resource management	Promotion and support provided to land managers throughout the project area for GLM and related programs/funding opportunities.	WPC 2008 survey indicates significant changes in awareness and attitudes to natural resource management.
A network for Statewide coordination of grazing land initiatives	Project administration, reporting and coordinating tasks undertaken; Final report produced on future Statewide grazing land issues;	Project administration ongoing. Final report to be prepared July/Dec 2008.

Source: DCQ August 2008

In relation to meeting the overall project outcomes by the revised completion date of December 2008 the following issues are highlighted.

Milestone

1. The customised GLM versions were developed.
2. The overall number of participating properties could be below the target, depending on how the indicator is measured (property numbers or aggregations). However the area covered by GLM and Savanna Plan participants should provide sufficient evidence of impact.
3. Development of case studies should have occurred earlier than at the end of the project. Case studies could have been used throughout the project as promotion and support material. Monitoring and evaluation of outcomes could be improved.
4. The framework for state-wide monitoring is in progress and should be delivered by the scheduled end date. The project was due to finish by June 2007 originally, therefore there is a question as to why this element of the project has been delayed.
5. There was a later start on the biodiversity program which may explain the later delivery of the final reports and case studies.
6. This report has highlighted changes in awareness and attitudes to natural resource management arising from the project.
7. Final report is yet to be completed.

Overall the main weakness identified in relation to achieving the required outcomes are;

1. The development of sub-catchment case studies;
2. Monitoring and evaluation of GLM outcomes;
3. Timeliness of the delivery of the state-wide monitoring framework;
4. Evidence of the biodiversity case studies.

10. Summary of Issues arising

A summary of the issues arising from the analysis is shown below.

There have been significant outcomes achieved in terms of;

1. practice change and awareness in relation to natural resource management
 - 560 people have attended programs in the regions
 - 422 of these attendees have been primary producers
 - 322 properties representing 216 different aggregations have participated in the training programs
 - 19% of regional body area covered with GLM, \$avanna Plan and Stocktake
 - 12.3% of the State of Queensland
 - 15% of regional body area covered with the more intensive GLM and \$avanna Plan, (10% of State of Queensland)
 - The most significant benefit from attending the training programs stated by GLM and \$avanna Plan participants was in relation to Natural Resource Management on their own properties.
 - Of the GLM and \$avanna Plan area, 74% of properties have a ‘Plan’ and 72% are using the ‘Plan’
 - 67% are using ABCD Land Condition framework
 - 64% have stated that they have changed management practices
 - 44% of survey participants have applied for funding
 - 100% of participants recommend the training program be continued
2. New modules of GLM have been developed
3. A biodiversity program has been developed

However, there is evidence of;

4. Weakness in Project management, co-ordination and communication (both DPIF and DCQ)
5. Weakness in follow-up process of GLM programs. Follow-up process fails to build on opportunities created by training.
6. Weakness in DPIF evaluation of program participants and reporting
7. Weakness in Case Study development and promotion (DPIF and EPA)

8. There is no evidence yet of the benefit of the State-wide monitoring program
There is a desire to continue with further programs, however there is a;
9. Need for the development of a modular learning framework that GLM sits within;
and
10. Employment of a GLM officer within the regional bodies would address
communication issues, co-ordination with other programs regional bodies are
running and perhaps facilitate greater development of this modular framework.

11. Recommendations for future programs

This report concludes that there is evidence of significant outcomes being achieved practice change and awareness in relation to natural resource management and that if possible further support for an integrated project such as this project should be sought if possible.

Below is a series of recommendations that highlights areas that could be improved if the project were to move forward.

Recommendations arising from the 2008 project review

- R1. Continue support of GLM programs to deliver Natural Resource Management benefits at the property scale, sub-catchment scale and regional scale**
- R2. The follow-up process or post GLM learning and engagement tools needs to be re-designed to address the stated desire for ongoing learning and to reinforce the adoption of technical skills.**
- R3. Develop a hierarchical learning framework that GLM sits within so that producers can access tools for ongoing learning and enter the process at the right level.**
- R4. Continue group learning framework as the most cost effective method of delivering GLM training.**
- R5. Promote the availability of accreditation from Queensland TAFE with the possibility of a Diploma of Agriculture arising from GLM Training.**
- R6. Develop case studies highlighting positive outcomes from GLM training to support promotion of program by DPIF and Regional Bodies as well as supporting referral from past participants.**
- R7. Provide for funding for a GLM project officer within the Regional Bodies to co-ordinate workshops, promote GLM, develop case studies and provide linkages to funding and other programs that may form part of a hierarchical learning framework.**
- R8. Establish a Stakeholder Steering committee to manage the delivery of the program. Ensure that the Steering committee has resources to undertake its tasks. The Steering committee should be responsible for directing reporting, stakeholder communication, interregional planning.**
- R9. Remove State-wide monitoring from future projects, this is DPIF or DNRW task.**
- R10. Build into the project data collection and monitoring and evaluation of impacts on a rolling basis (annually).**

**Annexure 1
GLM Participants Survey
2008**



Desert Channels
Queensland Inc.

GLM Participant Survey 2008

September 30, 2008



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Appendix 1. Williams and Partners Consulting 2008 Evaluation Survey Questionnaire	

a. Glossary of Terms

AACO	Australian Agricultural Company
DCQ	Desert Channels Queensland
DEH	Department of Environment and Heritage
DNRW	Department of Natural Resources and Water
DPIF	Queensland Department of Primary Industry and Fisheries
DU	Desert Uplands Bioregion
DUC	Desert Uplands Build-up and Development Strategy Committee
EPA	Environmental Protection Authority
GFP	Grazing For Profit
GLM	Grazing Land Management
MLA	Meat and Livestock Australia
NGRMG	Northern Gulf Resource Management Group
NHT	Natural Heritage Trust
NRM	Natural Resource Management
RB	Regional Body
\$AVANNA PLAN	One on one GLM workshops delivered on the property
SGC	Southern Gulf Catchments
SWNRM	South Western Natural Resource Management Group
WPC	Williams and Partners Consulting

1. Executive Summary

Desert Channels Queensland Inc. contracted Williams and Partners Consulting to conduct a review of the “Sustainable Management and Conservation of Grazing Lands in Queensland’s Rangelands” (the project) in co-operation with the following Regional Bodies;

- Northern Gulf Resource Management Group (NGRMG);
- Southern Gulf Catchments Inc (SGC);
- South West Natural Resource Management Group Inc (SWNRM).

In addition to these regional bodies, GLM was rolled out in the eastern part of the Desert Uplands biogeographic region.

The 2008 GLM and \$avanna Plan participant survey is part of the project review. The participant survey sample of 39 survey participants represented 22% of the total number of GLM and \$avanna Plan program participants.

Region	DPI GLM and \$avanna Plan Aggregations	WP Survey Participants	Survey Sample Proportion
NGRMG	39	7	18%
SGC	19	10	53%
DU*	18	4	22%
DCQ	65	11	17%
SWNRM	37	7	19%
Total	178	39	22%

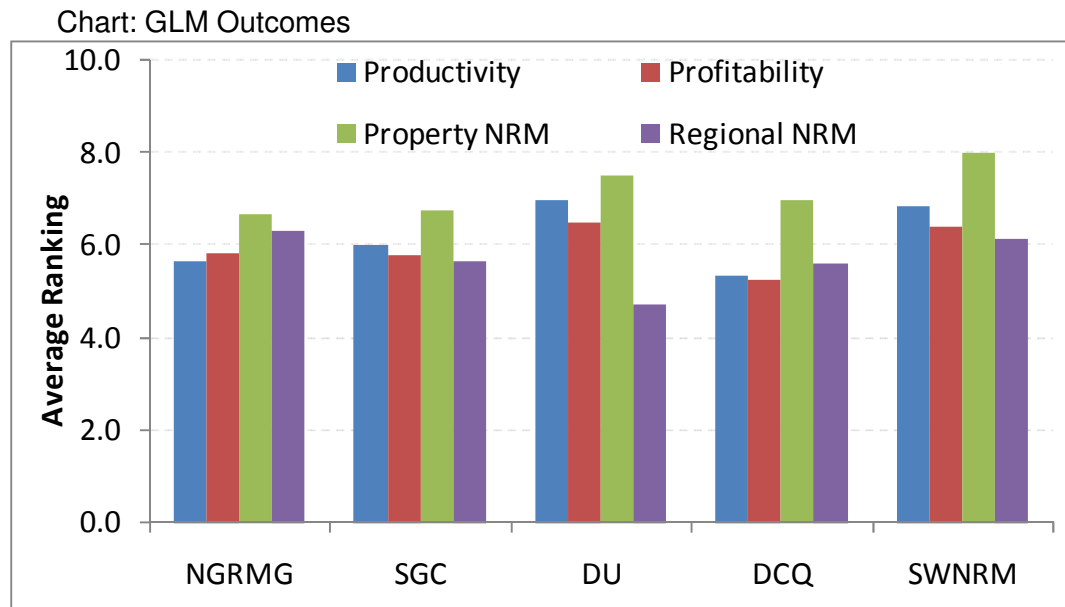
*DU properties outside DCQ.

Key outcomes from the GLM and \$avanna Plan survey are summarised below.

Natural Resource Management Benefits

1. Across all regions the greatest perceived benefit by participants of the GLM course was related to natural resource management on individual properties.

Based on the responses of the survey participants we conclude that the GLM and \$avanna Plan programs have already and will continue to deliver significant Natural Resource Management benefits at the property scale, sub-catchment scale and regional scale.



2. 85% of respondents referred to current or potential benefits at the regional level if a greater uptake could be achieved. 3 respondents cited limited benefit at the regional level.
3. Of the total survey respondents, 44% had applied for funding to support aspects of their plan.
4. Given the timeframe of the GLM courses being run over the period 2006 to the present, the take-up of project funding by participants is relatively good with approximately half of all GLM participants surveyed having applied for funding to support aspects of their plan or project. This rate is likely to increase as people implement their plans.

Practice change

1. 74% of participants have a 'Plan' post the GLM training
2. 64% of respondents state that they have changed grazing practices as a result of attending the GLM course.
3. 67% of survey respondents are using the ABCD land condition framework.
4. 36% of survey respondent's use pasture yield assessment.
5. 46% of survey respondents had participated in a follow up process.

Take-up of the concepts and broad tools ('Plan' and ABCD framework), is strong, however take-up of the more technical tools (pasture yield assessment) is weaker. This highlights the need for ongoing engagement to reinforce the learning process and the skills required to use the appropriate tools.

In terms of program design, the follow-up process is the weak point.

Ongoing learning

1. There was an acknowledgement by 74% of survey participants that changes in grazing and land management will be an ongoing process. This highlights an opportunity and a need to provide ongoing support in the form of follow-up or add-on programs to help facilitate this process.
2. 69% of producers surveyed would be interested in formalized accreditation for land management activities.
3. Despite the desire for formal accreditation, GLM participants lacked awareness of the availability of the Diploma of Agriculture accreditation through Queensland TAFE.
4. The Diploma of Agriculture was mapped to the GLM course in 2007 and is available to GLM participants on the successful completion of the GLM course.
5. The most common benefit stated in relation to formalized accreditation was in relation to aiding lease renewal.

The survey respondents indicate a strong desire for ongoing learning in relation to grazing and land management. This highlights the opportunity for continued engagement with producers, providing the right learning tools can be developed.

Future GLM programs

1. 100% of respondents commented that GLM should continue to be offered.
2. 100% of participants who attended the GLM course in a group believe that group learning is the best method of delivery.
3. 100% of participants who had DPIF delivery \$avanna Plan (NGRMG) in a 'one on one' format believe that is the best method of delivery.

One on one delivery works in the NGRMG region due to the relationship between DPIF, NGRMG and producers in the region. Subject to funding constraints, this could continue to work.

In other regions it would appear there is strong support for the continuation of a group learning format.

Promotion and extension of GLM

1. The most common source of awareness of the program amongst participants was DPIF (44%), followed by the Regional Body network and word of mouth/referrals.

This highlights the need for case studies to support DPIF and Regional Body promotion of the programs as well as supporting the referral network.

Recommendations arising from participant survey

- R1. Continue support of GLM programs to deliver Natural Resource Management benefits at the property scale, sub-catchment scale and regional scale.**

- R2. The follow-up process or post GLM learning and engagement tools needs to be re-designed to address the stated desire for ongoing learning and to reinforce the adoption of technical skills.**

- R3. Develop a learning framework that GLM sits within so that producers can access tools for ongoing learning and enter the process at the right level.**

- R4. Continue the group learning framework as the most cost effective method of delivering GLM training.**

- R5. Promote the availability of accreditation from Queensland TAFE with the possibility of a Diploma of Agriculture arising from GLM Training.**

- R6. Develop case studies highlighting positive outcomes from GLM training to support promotion of program by DPIF and Regional Bodies as well as supporting referral from past participants.**

2. Introduction

Desert Channels Queensland Inc (DCQ) engaged Williams and Partners Consulting to conduct a review of “Sustainable Management and Conservation of Grazing Lands in Queensland’s Rangelands” (the project) in co-operation with the following Regional Bodies;

- Northern Gulf Resource Management Group (NGRMG);
- Southern Gulf Catchments Inc (SGC);
- South West Natural Resource Management Group Inc (SWNRM). and

In addition to these regional bodies, GLM was rolled out in the eastern part of the Desert Uplands biogeographic region.

The agreed scope for the project review included a survey of a random sample of participants in GLM and \$avanna Plan programs across NGRMG, SGC, DCQ, SWNRM regional body regions and the Desert Uplands bioregion.

A random sample of 48 participants was selected from the DPIF participant database. Of this group 39 survey questionnaires were completed. Survey questionnaires unable to be completed resulted from people moving, or unable to be contacted after repeated efforts. All participants successfully contacted agreed to participate.

The survey questionnaire focused on the following topics;

- Awareness
- Program delivery
- Outcomes for your enterprise
- Outcomes for the region
- Future programs

A copy of the survey questionnaire is attached at Appendix 1.

The sample of 39 survey participants represented 22% of the total number of GLM and \$avanna Plan participating property aggregations (Note an aggregation refers to an enterprise that may own more than 1 property). Note that there is an overlap between DU bioregion and DCQ regional boundaries. For the purpose of this analysis all survey respondents that fall within both DU and DCQ are only counted once as DCQ.

Region	DPI GLM and \$avanna Plan Aggregations	WP Survey Participants	Survey Sample Proportion
NGRMG	39	7	18%
SGC	19	10	53%
DU*	18	4	22%
DCQ	65	11	17%
SWNRM	37	7	19%
Total	178	39	22%

*DU properties outside DCQ.

1. Awareness

Question 1

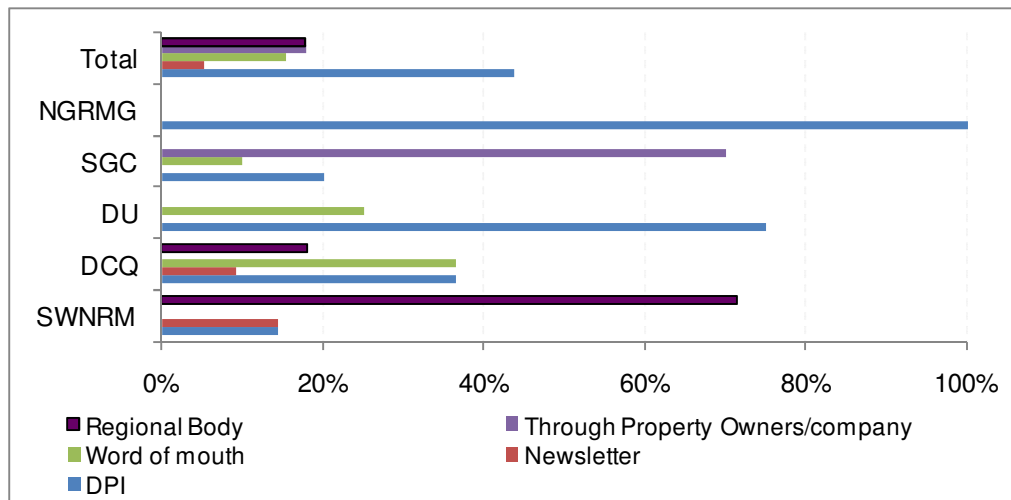
Which Training did you undertake?

	GLM	\$avanna Plan
Northern Gulf Resource Management Group		7
Southern Gulf	10	
Desert Uplands (non DCQ)	4	
Desert Channels Queensland	11	
South Western Natural Resoure Management	7	
Total	32	7

\$avanna Plan was only delivered in the Northern Gulf region. This program used the GLM training materials, however was delivered on a 'one on one' basis on the participants property with significant mapping assistance from NGRMG.

Question 2

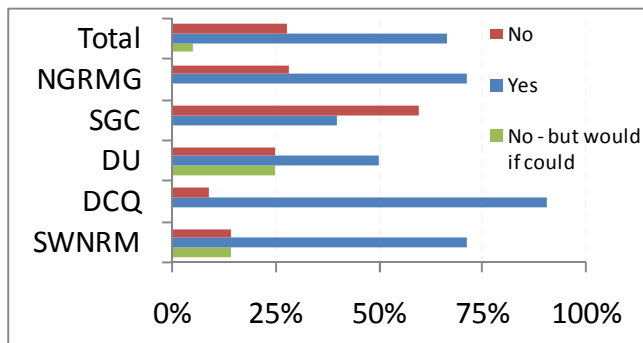
How did you Become Aware of the training?



- DPIIF was responsible for raising awareness of the training in 44% of survey respondents.
- In NGRMG all respondents noted DPIIF as the source of awareness.
- In SGC the majority of survey respondents were employed managers for larger family concerns or pastoral companies and the source was through the company or owner.
- In DCQ and SWNRM the regional body was a significant source of awareness, particularly in SWNRM.

Question 3

Have you recommended this training to anyone else?



- Across the whole group 67% had recommended GLM to other producers.
- Southern Gulf was an exception compared to the other regions with a low level of referral.
- The Desert Channels Queensland Group had the highest GLM recommendation percentage, 91%.

Findings

Referrals are a key source of future program demand. This suggests there is potential for some build up in momentum if GLM is continued to be offered.

2. Program Delivery

Question 2

Group v One on One Presentation. Benefits/weaknesses and outcomes.

- 100% of the GLM and GLM + participants approved of the delivery technique they undertook (group vs 'one on one').
- Group workshop participants nominated the group format as the most appropriate way of presenting the GLM course.
- Savanna Plan participant's nominated the 'one on one' presentation format as the most appropriate way of presenting the GLM course.

Question 3

Group Summary

- 78% of GLM attendees who participated in a group program still have contact with the group that they worked with. In many cases this is because they are neighbours, or work for the same company. The minority of cases where the participants are no longer in contact occurred where the group consisted of participants from different geographic regions.
- A key factor that emerged in the comments about the group presentation was the need for a good facilitator. The comments were generally very favourable as to the quality of the facilitators presenting the workshops.
- Benefits of the group process included;
 - Workshop presentations allow greater information sharing among producers.
 - Workshop participants found great value in the ability to "bounce ideas of others" and share in their combined knowledge.
 - This secondary information sharing re-enforced GLM principles and created greater interest in the subject.
 - Information sharing within the group situation was referenced as the main reason for their recommendation that future GLM be presented in a group format.

- Weaknesses of the group process included;

Potential for participants to get left behind in the group format

Mapping went too quickly not enough time for more personal attention

Participants covered vastly different types of country

Might be quicker if there weren't so many there

Participants might not be as forthcoming with information as they would be one on one

Group was good, however would prefer 1 on 1 to talk about funding

Can have one dominant group member - but good facilitation will handle this. Facilitators did a good job

- Would you have preferred to receive training in another format?

- 100% said No, some comments included;

No - the small group worked well. 1 on1 would be a waste of resources

No - one on one would be expensive and group interaction is an important part of the process

No - needs to be in group with 1 on 1 follow-up

No - important to have other peoples opinions and Knowledge

Question 4

'One on One' Delivery

- Benefits of the 'one on one' process included;

People dominate conversations in group, country is all different and scale of operations are different
1on1 on property is efficient

In the field on my property I could relate to it practically

Sometimes in a group of people unsure about asking questions
Talking about own property

Takes the pressure off people. Often in group people are reluctant to talk or ask questions

3 DPI and 3 student's therefore great ratio of trainers to students

Can ask questions relating to your property can be more open with the business side of things
don't have to travel

One on one participant's gained property specific detail that was possibly unavailable in the workshop format.

Clarity of information delivered was higher in one on one format.

- Weaknesses of the 'one on one' process included;

Expensive to government but cost efficient in terms of results

More Expensive

Would have liked it to be longer, more hands on with more time in the paddock

Doesn't open the participants to other ways of thinking

On their side (DPIF) are not going to cover many people in 12 months

- Would you have preferred to receive training in another format?

- 100% said No, some comments included;

No - good to do GLM with a whole lot of other stuff as well - decision making and financial management

I am a big supporter of 1 on 1 extension

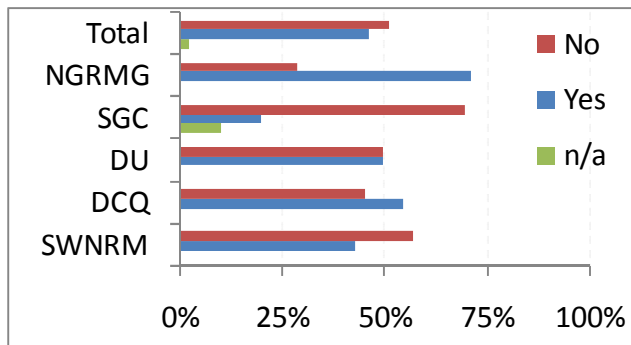
Findings

GLM participants who attended in a group workshop format gained an advantage from sharing experiences and knowledge with other producers. The ability to '*bounce ideas*' of group member's often re-enforced GLM principles while also creating a peer group for individual producers to access post GLM for reference or follow-up outside the formal framework of the course.

Those who attended Savanna Plan courses in a one on one format cited greater property specific information and greater individual focus as the reason for their endorsement. Post GLM follow up in the one on one format is reliant on DPIF continued service. This represents a high cost of delivery and a high cost of follow up.

Question 5 & 6

Did you receive a follow-up?



- 46% of the survey participants had participated in a follow-up process.
- Follow-up was strongest in NGRMG and DCQ
- Follow-up was weakest in SGC and SWNRM
- Of the 20 who had not participated in a follow up process, 11 had been contacted however had not proceeded with follow due to;
 - 5 were too busy;
 - 3 could not see the value in committing the time;
 - 2 had regular informal contact with DPIF;
 - 1 had future follow up planned.
- The remaining 9 of the 20 who had not participated in follow-up simply stated there had been no follow-up.

Findings

The follow up process needs to be re-examined in the overall course design to ensure that it is seen as valuable. Further definition of the follow up process would be beneficial with specific outcomes targeted so that past participants can evaluate the 'cost benefit' of committing more time to re-enforcing the GLM learning process.

3. Outcomes

Question 7

Question 7 addressed the perceived outcomes of GLM.

Please rate your perception of the benefit derived from the GLM program that you attended. (1-10) (1 least benefit, 10 most benefit)

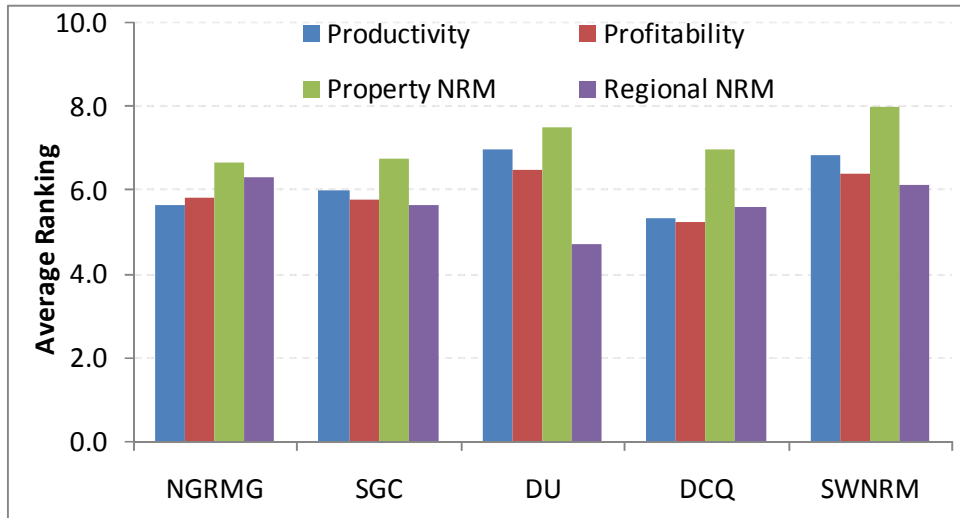
Increased productivity on your property

Increased profitability within your enterprise

Improved Natural Resource Management on your property

Improved Natural Resource Management for the whole region

The graph below represents the average ranks by group (1 low – 10 high) split by region.



- The consistent response across all regions showed the greatest benefit attributed to improved natural resource management on the participants property.
- The second highest rating outcome was productivity.
- GLM's impact on natural resource management for the whole region was lower. There was a common perception in several regions that GLM was not reaching a large proportion of the community and consequently having little effect on the region as a whole.
- Many survey participants felt GLM was “preaching to the converted” and something had to be done to increase the attendance at GLM courses.

Findings

Across all regions the greatest perceived benefit by participants of the GLM course was related to natural resource management on the participant's properties.

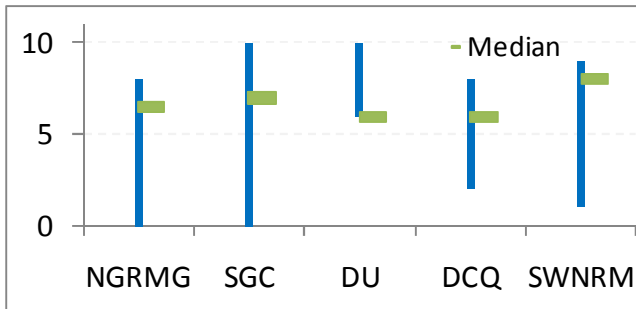
The following data shows in more detail the range and the mean for each question from Question 7.

Question 7a

Please rate your perception of the benefit derived from the GLM program that you attended.

Increased Productivity on your Property?

Respondents were asked to rank their opinion on the outcome of GLM with respect to its affect on productivity on their property. Ranks were given (1 low – 10 high). The table below shows the range of responses and the median response, segmented by region.



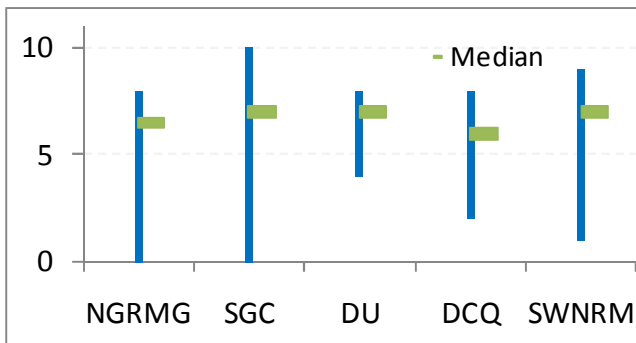
- Responses range from 0 to 10 in SGC and 0 to 8 in NGRMG.

Question 7b

Please rate your perception of the benefit derived from the GLM program that you attended.

Increased Profitability within your enterprise?

Respondents were asked to rank their opinion on the outcome of GLM with respect to its affect on profitability on their enterprise. Ranks were given (1 low – 10 high). The table below shows the range of responses and the median response, segmented by region.



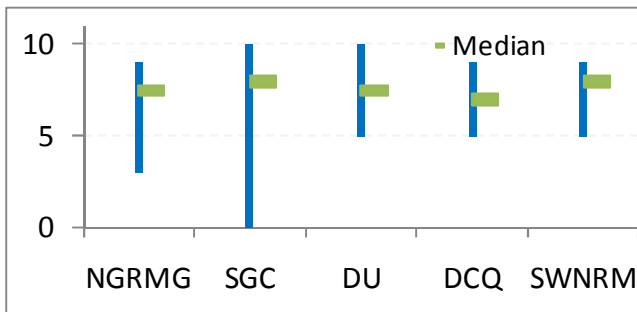
- Responses range from 0 to 10 in SGC and zero to 8 in NGRMG.

Question 7c

Please rate your perception of the benefit derived from the GLM program that you attended.

Improved Natural Resource Management on your property

Respondents were asked to rank their opinion on the outcome of GLM with respect to its affect on natural resource management on their property. Ranks were given (1 low – 10 high). The table below shows the range of responses and the median response, segmented by region.



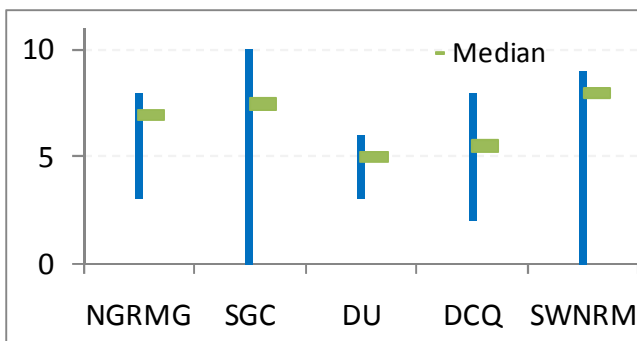
- Responses range from 0 to 10 in SGC.
- In DU, DCQ and SWNRM all responses were 5 or above which suggests that in those regions 100% of attendees saw a positive outcome in relation to NRM issues on their property.

Question 7d

Please rate your perception of the benefit derived from the GLM program that you attended.

Improved Natural Resource Management for the whole region

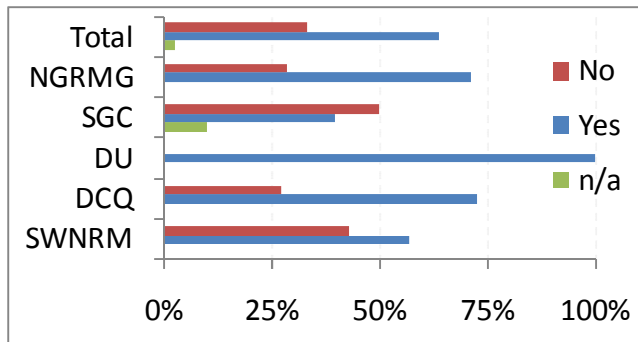
Respondents were asked to rank their opinion on the outcome of GLM with respect to its affect on natural resource management for the whole region. Ranks were given (1 low - 10 high). The table below shows the range of responses and the median response, segmented by region.



- Greater variability in response to this question.

Question 8

Have your grazing or land management practices changed as a result of GLM?



- 64% of respondents state that they have changed grazing practices as a result of attending the GLM course.
- There was a generally positive response to changes to management practices as a result of attending the GLM or \$avanna Plan workshop.
- Comments from participants related to changes they have made are shown below.

Yes - Wet season spelling

Yes - More awareness of land condition and improved knowledge

Yes - Watching for patch grazing and increased awareness of grass coverage.

Yes - more aware that there is an objective way to measure these things that we have always been doing

Yes - use ABCD

Yes - more aware of stocking rates and available pasture

Yes - taking more notice of vegetation grasses etc

Yes - more aware of land condition, stocking rates and spelling

Yes - Starts rotational grazing and wet season spelling.

Yes - Implemented rotational grazing

Yes - rotational grazing

Yes - Implemented fencing to land type and reduced paddock size

Yes - reduced stocking rates and Spelling of paddocks

Yes - have reduced stocking rates but more influenced by season - sold earlier

Yes - planning, Fencing and watering points

Yes - have reduced grazing pressure in some paddocks

Yes - planning how to budget etc for changes in management

Yes - have implemented a funded subdivision program - invested \$120k in fencing and waters

Yes - new watering points

Yes - had already begun change from GFP course

Yes - increased spelling of country

Yes - getting to know country better - changed water and fencing

Yes - need to decrease stock numbers

Yes - destocking earlier more monitoring of pasture performance rather than animal performance

Yes - more rotational grazing

Yes - continually evolving with training - fencing and water improvements

Yes - more concentrated effort on pasture management and water management

Yes - Changed perception from looking after cattle to looking after the grass

Yes - more awareness of where cattle graze and ground cover

Yes - better utilisation of grass through rotational grazing

Yes - more awareness of land monitoring

- Comments from participants related to why they have not altered their land practices are shown below.

No - training has given confidence to continue current practices

No - due to season

No - have my own ways of assessing pasture and land condition

No - Haven't changed as yet. Already practicing rotational grazing

No - Reinforced decisions and changes that we were making after coming here and making mistakes

No - already using rotational grazing

No - have been using these practices for 60 years

No - Haven't been able to implement changes yet. Have developed plan but need to know if can find ground water

No - not a lot already doing pasture budgeting etc with rangeland officer

No - already doing it and have an environmental management degree

Findings

Based on the responses by participants, attending the GLM course has had a significant impact on grazing and/or land management practices. Of the participants surveyed, 64% stated that they had changed land management practices as a result of attending the GLM course.

Question 9

Do you have plans to change grazing or land management practices in the future?

- A total of 74% of survey participants stated that they had plans to change grazing or land management practices in the future. The majority of the comments referred to changes in management as an ongoing process.
- Some comments are shown below.

Yes - more calculation of pasture yield assessment more scientific calculation of stocking rates for each paddock

Yes - decrease labour requirements if not changing will get squeezed out

Yes - as seasons change and progress

Yes - continue to improve management and spell country

Yes - continuous process

Yes - more waters improve land and pasture utilisation

Plan to improve monitoring

Yes - rotation in the future with dry cattle

Yes - continual change

Yes - continue subdivisional fencing and implement rotational grazing

Yes - Continuous improvement

Yes - management is on ongoing changing process

Yes - more attention to pasture management

Yes - ongoing Change

Yes - more waters to put in

Yes - implement rotational grazing and continue fencing to land type.

Weeds - fence off rubber vine and burn

Findings

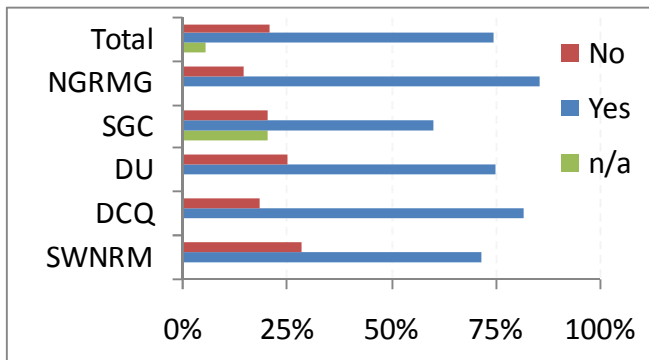
There was an acknowledgement by 74% of survey participants that changes in grazing and land management will be an ongoing process. This highlights an opportunity and a need to provide ongoing support in the form of follow-up or add-on programs to help facilitate this process.

Question 10

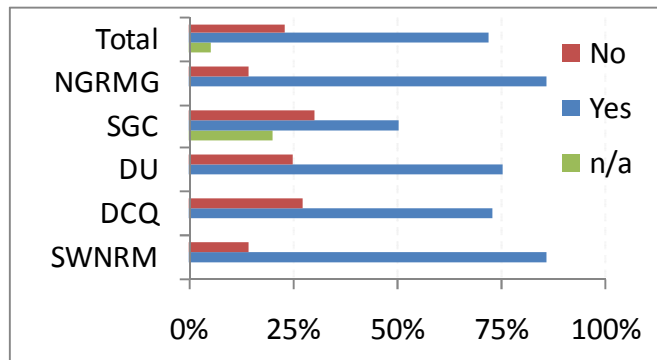
- a) Do you have a GLM Plan from the workshop?
- b) Do you Use your Plan?

Respondents were asked if they had a GLM plan and if they used their GLM plan. The majority of respondents across all regions had a GLM plan. The following charts show the responses split by region.

Do you have a GLM Plan from the Workshop?



Do you use your Plan?



- 74% of respondents stated they have a 'plan' from the workshop.
- 72% of respondents stated they used their 'plan'. (One respondent stated that they had not used their plan yet).

Findings

72% of survey participants have developed a 'Plan' following the workshop and they are using it. One respondent had a plan and had not used it yet. The GLM process has been effective in commencing a planning process.

Question 10c

c) How do you use your GLM plan?

Findings

- GLM Plans were used by 72% of survey participants.
- Comments are summarised below in relation to how plans are used.

Watering facilities and fencing redesign

Have expanded to increase productivity

Monitoring and evaluation

Fencing - added 70 - 80km of new fences

For positioning of new waters and fencing

More water and increase carrying capacity

Planning paddocks and water distribution
relocating Fences and waters.

Improve pasture utilisation by putting in more
waters and fencing

Basic improvements - fencing of dams etc

Reduce Labour component

Maintaining a plan for the development of
infrastructure aiming at decreasing the need for
labour input

The plan will be used as part of CAPEX budget
with the Company

Drought proof the property

Infrastructure development

Planning changes to fencing and water

Access grants for fencing and waters

Carrying capacities depending on season

Subdivide large paddocks and put in new waters

When funds are available invest in infrastructure

Use for bank reviews and land management

Fencing for flood prone areas and ease of
mustering

Rotational grazing and spelling country

Planning location of fencing and waters.

Pasture Assessment

Plan is continually changing with improvements

As a benchmark to refer to

Calculating ground cover and stocking rates

Ongoing Rejuvenation, Fencing fragile riparian
areas

Continuous review and improvement

Fencing according to land type

Stock according to pasture - don't overgraze

Reducing paddock size

Use to access funding

Implementing rotational grazing

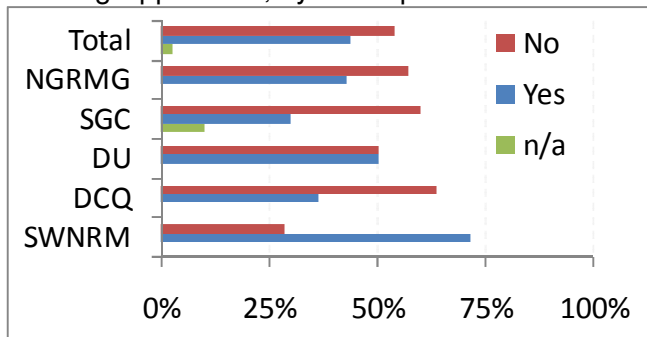
Follow up helped us up with the plan

Prepare project information to the company for
CAPEX Manage carrying capacity and pasture
utilisation

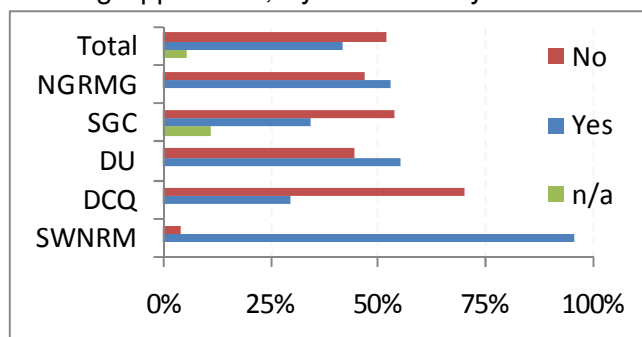
Question 10d

d) Have you applied for funding to support aspects of your plan or projects?

Funding Application, by Participant



Funding Application, By Area Surveyed



- Of the total survey respondents, 44% had applied for funding to support aspects of their plan. This equates to 42% of total property area surveyed (1,722,884 ha) had applied for funding to support their Plan.
- There are some aberrations in the correlation between Funding by Participant (%) and Funding by Area Surveyed (%) due to a large property in the DCQ not applying for funding and several larger properties in the SWNRM applying for funding.

Findings

Given the timeframe of the GLM courses being run over the period 2006 to the present, the take-up of project funding by participants is relatively good with approximately half of all GLM participants surveyed having applied for funding to support aspects of their plan or project. This rate is likely to increase as people implement their plans.

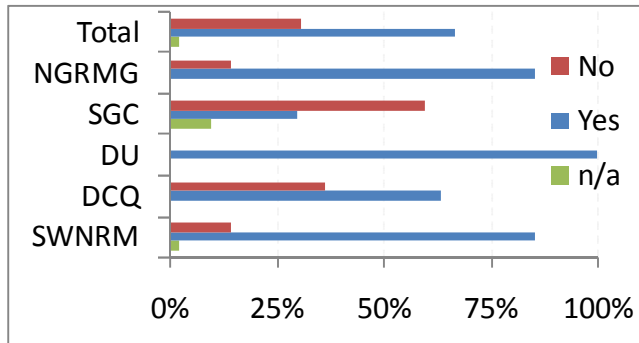
Question 10e

e) Do you regularly monitor land condition?

- 100% of respondents identified that they regularly monitor land condition.

Question 10f

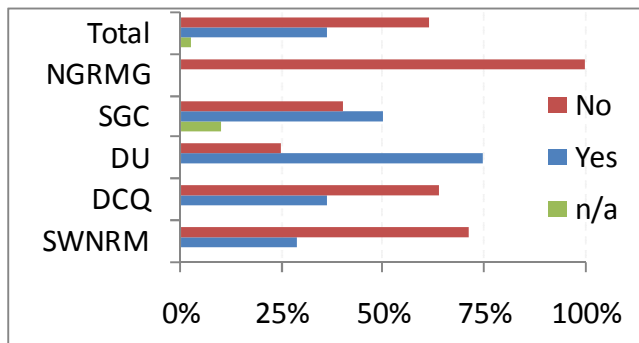
f) Do you use the ABCD Framework?



- 67% of survey respondents used the ABCD land condition framework.
- Southern Gulf survey respondents had limited use of the ABCD framework. A number of the SG respondents are AA Co employees and AA Co employs a Rangelands Officer who conducts a company designed monitoring programme on all the company properties in the region.
- Some producers were using a pasture check or grass check framework as a substitute.

Question 10g

g) Do you use pasture yield assessment?



- 36% of survey respondent's use pasture yield assessment.
- None of the 7 producers surveyed from NGRMG used pasture yield assessment.
- SGC and DU were the only regions to have 50% or above take up of pasture yield assessment.

Question 11

If you have plans to make changes to grazing or land management practices, what are the main constraints to making these changes?

- Across all regions financial constraints were the top response.
- The second top response was seasonal constraints followed by time constraints.
- Other constraints on change were cited as government legislation or red tape, attitudes, restrictions on water and lack of a workforce.
- Desert Channels Queensland (and the balance of the Desert Uplands bioregion) was the only region that cited labour as a constraint.

Question 12

Would you be interested in formalised accreditation for land management activities?

- 69% of producers surveyed would be interested in formalised accreditation for land management activities.
- The most common benefit stated in relation to formalised accreditation was in relation to aiding lease renewal.

Question 13

What other courses have you attended relating to grazing or land management

- 77% of participants had completed other education courses. These included Nutrition Edge , Grazing for Profit, Future Profit, Landcare Courses, ALMS courses, mapping, MLA days, University degrees, Agforward
- The most common course noted was Nutrition Edge followed by Grazing for Profit.

Question 14

How does this course compare to other courses that you have attended?

- GLM was generally seen as comparable with and often better than most courses.
- Northern Gulf Resource Management Group members cited GLM as the best course due to it being delivered in a one-on-one format.
- GLM was cited as a more general course, covering a wide range of areas when compared to others.
- Comments are summarised below.

Favourably as shorter courses are easier to actually attend given time constraints

Compared well because it was on property

Nutrition course was twice as good as GLM although they compliment each other

It is not just another course - got a lot out of it

GLM was the best facilitated course, local was a good point

1on 1 and on property - was well worth the time

Not as exciting because it covered some of the same ground. Equally as well presented

Preferred GLM because it was 1 on 1 and on property

GLM was most detailed Other courses have been done in a group where as this was 1 on 1

Very good - GLM is very comprehensive

Compared well - did one on one and was specific to our property

Well presented and equally as informative Nutrition course was best there was some overlap of information

Less intense, still useful -GLM has a broader focus

GLM was a good course - learnt quite a lot

GLM is the best course I have been to can't say enough positive things about it

GLM was not as good as GFP, GLM still a good course GLM was much more user friendly RCS course easier to get a handle on

Very favourably - emphasis on land condition

More intense - more outcomes for profit and long term strategy

GLM was the start, it introduced a new way of looking at things and had the Biggest impact

Was well structured and well presented, Col Patton was very good information backed up by examples

Savannah plan much more applicable and practical . My understanding is that GLM is more specific to my own environment than a GFP and most other courses

Question 15

Of the training that you attended, what do you feel has been of the most value?

- A common comment was that the different training programs were all interrelated or complimentary
- Within the GLM framework, NGRMG respondents identified mapping as the most valuable segment of the program.
- Comments are summarised below.

GFP because it is a more expansive course. GLM was very practical though

The mapping part of GLM

Nutrition Course - was very practical putting nutrition into practice. Complements GLM

Mapping - understanding of grass growth/ coverage etc.

GLM was concise and well done for a three day course.

Good to get out and go for a walk - explanation of different grasses

GLM was the best management planning wise

All linked in together mapping was useful to integrate into PMP

Nutrition course was best - got \$500 back in first 15 minutes

Getting the plan in place on paper for everyone to read

GLM is very good but others are very valuable also - can't split them

GLM - Not the content, perhaps the group interaction

Nutrition Course was best. Calculation of supplementary feeding etc.

How to control land and how to control woody weeds

NutritionEdge linked land and Stock where as GLM more land related

Interaction with other people - mostly private places have a lot to share and learn from each other

Stocking rates, pasture conditions, pasture yield assessment, discussion on different land types

Improvement you can get in pastures through grazing management.

EDGE Nutrition - were all good hard to split them, all go hand in hand

Interaction with other managers about grass and land management

GFP - more comprehensive

The planning side - using maps and budgeting etc

Other Courses will have bigger impacts on Profit, but GLM is the most important

Land condition assessment

An awareness of grazing land management, awareness of need to manage your grazing land

Awareness within the Co of the importance of NRM management - it has been useful for the managers and very useful for my work with them

The mapping has helped with property. The mapping is very useful

Hard to split them as they complement one another

Mapping.

GLM is best for land management

Had already implemented much of the GLM - said we were on the right track - they learnt from us

GLM - course has an excellent land care aspect

Calculation pasture assessment - stocking rates kg/ha

The pure basics about plant growth - wonderful information and very useful for me

4. Outcomes for the Region

Question 16

Are you aware of other services (funding, training, mapping) run through the Regional Bodies?

- 100% of producers across all regions were aware of other services offered through their regional body.

Question 17

Did you become aware of these services through the GLM course?

- 26% of respondents became aware of other services through the GLM course.
- The vast majority of all producers were already aware pre-GLM of the services available to them although GLM did give them greater detail of what was on offer.

Question 18

What benefits do you see arising from the GLM program at the regional level?

- 85% of respondents referred to current or potential benefits at the regional level if a greater uptake could be achieved. 3 respondents cited limited benefit at the regional level.
- A comment noted earlier is that the people who should be attending are not attending.

Great way to share knowledge and interact on a professional basis

Yes - a living document gives one a step to keep going

The more participants the more the region will benefit

Increased awareness of land management issues

Potential for very positive benefits for the region brought on by the group process

Communication in groups with older managers - transfer of ideas - benefit to the region if all learn how to better manage land and pasture

Better land management practices and regional improvement in land condition

Improved utilisation of country. Help people think outside the square and deal with the issues facing agriculture

The more country we can look after the greater the benefit to the region. Need to have a large area under sustainable management

Get people thinking outside the square would be good for the whole region

People that abuse their country would see the value in it and change their views from the short term to long term - but these are the people least likely to attend

Helps in general management of land - need not be able to change the mindset of land managers for the future

People more aware of grass production and stocking rates etc

Benefits in raising awareness of importance of natural resource management

Would be huge benefit if more people attend. growers who are doing well won't go because they don't see a need to change

If everyone learns as much as I did it would benefit the region enormously

Benefits for everybody in the region - if enough people take up these practices it will cause change through weight of numbers It would be good to have as many people as possible having the understanding of pasture production and land condition provided by this course

"Lifts peoples game".

Increases awareness of land degradation and caring for the land. Even the people that don't attend through word of mouth"

IF enough people participate then will have huge benefit for the region through improved land management and less people will be hit as hard by dry spells

Education and awareness is good for the community as a whole. Keeping up to date with the latest information and increasing awareness

More aware environment and closer monitoring of land condition

Have increased carrying capacity on my property + environmental benefits - less runoff, better weed control, less erosion, reduced impact from dry spells. Better cattle

Improved management practices and benefits for lease renewal

More understanding of grass and pasture conditions less impact of dry times, droughts won't cost as much, has to be better for the whole region

If everyone used GLM we would be much better off, less erosion and more stability of channels

More activity at the top of the water shed so effects whole region

Overall awareness of pasture condition. Limited benefit at regional level. Preaching to the converted, need to encourage others to attend

"environment will be better, improvement in catchments

grazing is main land use, each property covers 1000's of Ha, 1on1 delivery is targeted approach and will have greatest impact "

Regional benefit will arise from Groups that have done a group project, like Planscapes

Raised awareness of the need to pay attention to pasture and d land management

A change in attitudes across the region

Yes - improved land condition and quality of cattle if people want to take it on board. Increased understanding

Would help the region through decreased stocking rates etc. Potential to have a big benefit for the region lot of overstocking now

Limited benefit at regional level because they are preaching to the converted. The ones that should be there won't go. There would be huge benefit if could get more people to attend

Yes - standardises the language industry wide. Eg ABCD now everyone has a common view for aspects of land management

Marginal benefit at this level

Might teach people how to rotational graze and get a bit of ground cover

"Very Little from the program

Some benefit from getting a group of producers together to talk grass and cattle"

5. Future

Question 19

Do you think GLM should continue to be offered?

- 100% of respondents commented that GLM should continue to be offered.
- Some comments are summarised below.

Yes - no doubt. As more people take it up it will flow on to others, even the ones that don't attend the course

People who benefit the most are the gov't scientists. Need some reality checks

Definitely should fund again - is a priority for our region

Yes - other people could benefit from the group interaction

Yes - every one should do it

Yes as long as getting attendees. The more people we get to attend the better - getting outside the square

Yes - there are still a lot of people that would benefit

Yes - should be compulsory requirement to receive drought assistance

Question 20a

a) In the future what do you think is the best method of raising awareness of training like GLM?

- Survey respondents were split between 'word of mouth' promotion, direct marketing i.e. flyers or mail outs and through field days or regional bodies.
- Comments below highlight the need for case studies from successful program attendees

Brochures with plenty of information

Through regional bodies

Word of mouth from past participants

Articles in the country life about the benefits

Agforce, DPIF, Field days, Articles in Newspapers

Rural report on the Radio

Radio - every one listens to the Radio

Landcare groups at a local level

DPIF Newsletter

Articles in the local media featuring a local identity talking about the course - needs to be the right person, someone with credibility

Email, Flyers in the mail

Re visit people who have done the course and write stories about the positive outcomes from the course

Question 20b

b) In the future what do you think is the best method of encouraging people to attend?

- The general consensus in addressing promotion was through increased awareness and by demonstrating the financial benefits of GLM
- Using local producers to promote GLM through word of mouth was cited by members in both the SGC and SWNRM regions
- Accreditation potentially linked to lease renewal could be a good hook to get people to attend
- Make land management training a requirement for drought assistance
- Location is important
- Link training to funding
- Work with large corporate groups to promote training

Question 20c

- c) In the future what do you think is the best method of delivering training like GLM?
- 100% of Survey respondents that attended the one-on-one GLM course strongly recommended that this was the best method of delivering the GLM Training.
 - 100% of Survey respondents that attended the group workshop strongly recommended that this was the best method of delivering the GLM Training.
 - Some comments indicate benefits of breaking up the training into different sessions

Question 21

What other types of training do you think would be valuable to assist with sustainable management?

- Responses to question 21 varied from field trips, GLM refreshers and group follow-ups of GLM to Timber management, animal nutrition and top level management.
- A summary of the responses is shown below.

Field Trips

The first course should be the GLM Course to teach how to manage the grass and land, then Nutrition course to learn how to manage cattle

Follow up group meetings

Beef group benchmarking

Management of Timber

Environmental Management training

Stocktake, Pasture species Identification

GPS & GIS Training

1 day group refresher course perhaps 2 years later

Mapping

Funding application assistance

Marketing

GLM should be included in the curriculum at the ag college.

Basic land management courses - Graeme Sait Cert in sustainable agriculture

Holistic Management

Training on soil management and vegetation management

Cropping/farming techniques - spraying etc

Commercial Side - people need help to manage book work, good stockmen but not always good businessmen

Preg testing schools

Computers and Information Technology

Hands on livestock management

Property planning and budgeting. Need to set goals and have goals checked with follow-up.

Water management

Nutrition Improving river systems management

Weed management

More intensive animal management

Land management

Research site - need somewhere to see the results of improved management

Ways of Rejuvenating degraded land

6. Other Comments

Survey respondents were asked if they had any additional comments regarding the GLM course. A summary of these comments is listed below.

Preaching to the converted - often the participants that attend are those that already look after their land. Its those that won't attend this type of training that need it most

I would like to see them add more content on browse and herbage rather than concentrating on grass. Herbage and browse are very important part of grazing systems in this region

The course needs to be over a period of different seasons, starting with a good or bad season and monitoring the changes in land condition. The course should be compulsory - but you can't do that because that is communism.

Leasehold strategy planning side of GLM will be important to renewing leases.

Would have liked to have done the course 5 years ago.

The course was well facilitated and notes are well designed for the specific area, would like to see more regional specific information on land rehabilitation

Need to highlight the benefits of the course - people see the course as 3 days out of their life but don't see the long term benefits

Instructors of the course were tremendous and the continued success of the course hinges on good presenters. Timing should be in summer when work winds down and it is too hot to be working outside.

Need more awareness of total grazing pressure, controlling water is the only way to control total grazing pressure. Could be a separate session for mapping - was a bit rushed. Possibility to split the course into 2x2 day sessions so that there is more time but not in one big block.

Need to concentrate on follow up

Stock take was good course but Nutrition and GLM together are a good combination. GLM Was very comprehensive, group workshop is a good format.

With mapping now have an accurate base for data and a solid start to make calculations properties will very easily conform with lease renewal process value for money has been huge - better than grants etc -having more positive effect on NRM over a larger area

Every one should do this course, it should be made mandatory. People overstock and weeds are a problem

Too scientific and hard to apply to a large operation. GLM People should spend time with successful people and learn how they do it rather than how the scientists do it.

Three days is a bit long to leave the dogs tied up. Could have done it in 2 days longer hours in stead of knocking off at 4.30, summarise the content a bit. The food was fantastic.

I can't stress enough how important it is to have the right people to deliver the course. Our course had people who were willing to listen and adapt as the course went along. The main benefit of the GLM is that it is focused on your land type.

The course was helpful to me a lot of the science was new to me. If in your 50's or 60's might be too set in your ways - need to be open minded to take advantage.

There are a lot of people who would benefit from the course.

3 days well spent. Group worked well because it was made up of progressive people

We already do a lot of this stuff - feed budgeting etc in the company - this course presented some different ways and some different ideas

There is a generational problem with regard to land management. Older generations just used the land with out thinking about sustainability. There is a shift in the thinking of younger generations with more focus on long term sustainability

Maps - maps were wrong so participants didn't have confidence in maps when planning projects, need to have one on one session before hand to go through maps.

In corporate more on nutrients and supplements.

Overall a valuable course and will use the tools learnt.

Within the company process the plan was useful. I have used it to check a real life example and it looks like it will work"

The course was helpful to me a lot of the science was new to me.

Very useful course for management and the future of the cattle industry

7. Conclusion

Based on the participant surveys, the GLM training programs delivered have had a significant impact on management practices in all the regions surveyed. One area that is not being addressed completely is the follow-up. Further design is required in relation to the follow up to make it more effective and seen as integral to the overall GLM process.

Recommendations arising from participant survey

- R1. Continue support of GLM programs to deliver Natural Resource Management benefits at the property scale, sub-catchment scale and regional scale.**

- R2. The follow-up process or post GLM learning and engagement tools needs to be re-designed to address the stated desire for ongoing learning and to reinforce the adoption of technical skills.**

- R3. Develop a learning framework that GLM sits within so that producers can access tools for ongoing learning and enter the process at the right level.**

- R4. Continue group learning framework as the most cost effective method of delivering GLM training.**

- R5. Promote the availability of accreditation from Queensland TAFE with the possibility of a Diploma of Agriculture arising from GLM Training.**

- R6. Develop case studies highlighting positive outcomes from GLM training to support promotion of program by DPIF and Regional Bodies as well as supporting referral from past participants.**

Appendix 1
Williams and Partners Consulting 2008
Evaluation Survey Questionnaire

Desert Channels Queensland

2008 Evaluation Survey

All survey responses will be treated as confidential and used only for the purposes explained in the covering letter. Please complete each question by inserting a number or a tick in the relevant box.

Introduction

Williams and Partners Consulting have been contracted to provide an independent review of the success of the Grazing Land Management (GLM) training delivered within the Desert Channels Queensland, Northern Gulf Resource Management Group, Southern Gulf Catchments, Desert Uplands Build-up and Development Committee and South West NRM regions. DPI&F were contracted by DCQ to deliver GLM and other training under a Natural Heritage Trust project commencing in 2004.

The purpose of the review is to provide feedback to the stakeholders on what worked well and not so well and also how it may be able to be improved if delivered again in the future.

This survey compliments the training workshop exit surveys that you will have already completed as part of your training session.

We appreciate your time in participating in this review. Data collected as part of this review will remain confidential.

Questions

Awareness

1. Which training did you undertake?
 - a. Stocktake
 - b. GLM
 - c. GLM+/\$SavannaPlan
 - d. Biodiversity management
 - e. Wetlands management
2. How did you become aware of this training?

3. Have you recommended this training to anyone else? (yes/no)

Program Delivery

1. How was the training delivered to you (workshop, one on one)?
2. Did you find this method appropriate? (yes/no) comments

3. If you attended the training in a group:
 - a. Did the group process work well for you?

.....

.....

- b. Do you keep in touch with the group?

.....

.....

- c. Do you get support and assistance from your peers?

.....

.....

- d. What were the benefits of this format?

.....

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.....

- e. What were the weaknesses of this format?

.....

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.....

- f. Would you have preferred to receive your training in another way? Eg. 1 to 1

.....

.....

.....

4. If you received the training in a one-on-one format:

- a. What were the benefits of this format?

.....

.....

Desert Channels Queensland

2008 Evaluation Survey

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b. What were the weaknesses of this format?

.....
.....
.....

c. Would you have preferred to receive your training in another way? Eg. with a group of graziers.

.....
.....
.....
.....

5. What follow-up did you receive after the workshop?

.....

6. How long after the workshop did the follow-up occur?

.....

4. Did the follow-up meet your needs?

.....

Outcomes

7. Please rate your perception of the benefit derived from the GLM program that you attended.

(1-10) (1 least benefit, 10 most benefit)

Increased productivity on your property

Increased profitability within your enterprise

Improved Natural Resource Management on your property

Improved Natural Resource Management for the whole region

Other

.....

8. Have your grazing or land management practices changed as a result of attending the training? Please explain how.

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.....

9. Do you have plans to change grazing or land management practices in the future?

.....

10. More specifically:

a. Do you have a GLM 'Plan' from the workshop.
(Yes/No)

b. Do you use your 'Plan'
(Yes/No)

c. How do you use your 'Plan'

.....
.....

d. Have you applied for funding to support aspects of your plan or projects

.....

e. Do you regularly monitor land condition
(yes/no)

f. Do you use the ABCD framework
(yes/no)

g. Do you use pasture yield assessment tools
(yes/no)

11. If you have plans to make changes to grazing or land management practices, what are the main constraints to making these changes?

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.....
.....

Desert Channels Queensland

2008 Evaluation Survey

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12. Would you be interested in formalizing accreditation for land management activities? (e.g.):
- a. TAFE
 - b. Postgraduate
 - c. ISO 14001
 - d. Other

.....

13. What other courses have you attended relating to grazing or land management?

.....

14. How does this course compare to other courses that you have attended?

.....

15. Of the training that you attended, what do you feel has been of the most value?

.....

Outcomes for the region

16. Are you aware of other services (funding, training, mapping) run through the Regional Bodies?

.....

17. Did you become aware of these services through the GLM course?

.....

18. What benefits do you see arising from the GLM program at the regional level.

.....

Future

19. Do you think GLM should continue to be offered?

.....

20. In the future what do you think is the best method of:

- a. raising awareness of training like GLM

.....

- b. encouraging people to attend

.....

- c. delivering training like GLM

.....

Desert Channels Queensland

2008 Evaluation Survey

*All survey responses will be treated as confidential and used only for the purposes explained in the covering letter.
Please complete each question by inserting a number or a tick in the relevant box.*

21. What other types of training do you think would be valuable to assist with sustainable management?

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22. Other comments

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Thank you