

LANDSCAPE SCIENCE CLUSTER WORKSHOP

MONDAY 24 NOVEMBER 2008 08:45 – 14:00

LIRRA LIRRA MEETING ROOM, WAITE CAMPUS
DRAFT NOTES

Present:

Alan Richards	SA MDB NRM
Brett Bryan	CSIRO
Megan Lewis	University of Adelaide
Bertram Ostendorf	University of Adelaide
Elsbeth Young	DEH
Andrew Fisher	DWLBC
Richard Davies	Flinders University of SA
Richard Glatz	PIRSA
Stephanie Williams	DEH
Kathryn Bellette	NRM RA
Jeff Foulkes	DEH
Guy Robinson	University of SA
Mark Stanley	EP NRM
Frances Mowling	PIRSA
Wayne Meyer	University of Adelaide
Chris Raymond	Enviroconnect (Facilitator)
Sue Saunders	University of Adelaide (note taker)

Apologies:

Stacey Brouwers
Randy Stringer
Sarah Morgan
Andy Lowe

CR invited attendees to introduce themselves and explained the objectives and agreements of the meeting.

WM and KB presented the background to the Integrated Landscape Cluster and the NRM RA.

Questions

KB: NRM STI has integrated landscape modelling as one of its priority areas – choosing areas where the Alliance can make a difference. There is a broad focus on IL economics. Trying to facilitate focus on complementary outcomes and habitat restoration and the bringing together of everything. Does not preclude research.

Landscape integration? General support for the core group with the responsibility for the naming?

Landscape integration or landscape modelling?

Agreed that re-naming should be considered by the core group – either suggestion could be appropriate

NRM RA Expert Panel (appointed for 12 months initially) is being brought together:

Wayne Meyer (landscape integration)

David Paton

Peter Dillon (+ freshwater ecologist?)
Howard Fallowfield
Barry Brook (climate change)
Kathy Ophel-Keller
David Chittleborough (soils)
Lea Bryant (Hawker Centre)
John Hatch (economics)

After LS workshop in March '08 and the meeting held with interstate experts and after NCRIS TERN process, how do you see the cluster fitting in with the landscape research?

WM: We're positioned well against the national capability. After NCRIS process we were seen to have strong interaction in terms of data management. Key players on national scene, David Pannell in WA and salinity and future farming CRC. Landscape logic is a CERF funded program. Fenner Group at ANU have reorganised themselves and have influence with the national agencies because of their location. UQ presented well nationally as they have a history of working together well and are well supported by Qld Govt. SA has a toe hold in there nationally but we need more people onboard to build our national reputation .

Linking current projects and emerging opportunities to Symposium themes (group exercise)

Looking for three or four themes for a People, Place and Purpose Symposium to be held concurrently with the Spatial Science Institute Conference in 2009.

CR: The Spatial Science Institute is running a Conference next year in Adelaide. They have invited symposia which will tie in with the Spatial Science Conference. They are one day events with multiple presenters. We think we'd have one international, a few national speakers and the rest from our group. Chris Pettit, DPI Victoria, suggests we hold a similar symposium every two years.

The audience will be mainly researchers, policy makers, spatial scientists, surveyors. P, P and P would be targeted towards environmental policy makers and scientists. We hope also to attract people who are not necessarily attending the Spatial Science Conf.

Our proposal needs to be submitted to the Spatial Science Organising Committee by early December.

We could look at having a two day symposium but the cost to us would be much higher. The advantage is that a lot of the organising work will be done by the SSC for the main Conference. Two day option to be left open until after abstracts are received.

Holding a specific session on SA strategic themes to be considered along with themes for a national and international audience.

**There was majority support to hold a symposium as part of the Spatial Science Conference.
Agreed the name for the Symposium should be People, Place and Purpose.**

Butcher Paper Notes

Table 2 – Andrew Fisher presented

1. River Murray Forest (DWLBC/DEH/SA MDB NRM)
Systems that have multiple benefits/ecosystem services

2. Endemic biodiversity for integrated pest management and biosecurity (SARDI/HAL/CRC NPB/AMLR NRM) (2003-)
 Linkages to CRC
 RG's work in many ways mirrors what AF is doing.
3. Climate change, community & environment (PSRF/DAFF/LSC)
4. Nature links – Integrated ecological planning synthesis (DEH/DWLBC/AMLR NRM/CFC/SAMDB NRM)
 Social – historical
 Ecological
 Spatial info
5. Habitat 141 (NGO driven)
 Conservation action planning

Related themes

Integrated analysis for informed decisions
 Sustainability in changing environments
 Biodiversity management in sustainable landscapes

Projects

Climate change, community and environment (WM/BB)
 Nature links integrated ecological planning synthesis (Den Project Officer)

RG: managing natural resources; sustainability; researchers involved and industry funds; impact on agricultural systems.

WM: figure out ways to get benefit. Identify positives to present to the farming community about biodiversity and increasing productivity. Systems with multiple benefits.

Table 3 – Jeff Foulkes presented

1. Landscape Scale Ecological Restoration (DEH)
 Phase 1 – end '09 (on-going)
 Physical, biophysical, historical LS analysis
 ID groups of species that would benefit understanding patterns across the landscape
2. Soil Seedbank/E. Plains Fire Trial (KI) (Flinders Uni/DEH (proposed)
 Ecological processes/fire/restoration-regeneration
3. Soil Seedbank/SE Drains Water (Flinders Uni/DEH/Drainage Board(proposed)
 Management/regulation
4. TERN – Rangelands Scientific Reference Sites (Uni Adel/DEH) (2009-2011)
5. Regional/Bioregional Vegetation Mapping (DEH) (on-going)
 1:50,000
 1:100-250,000 pastoral

6. River Murray Forest Biometric Targetted Planting for Biological Assets (DEH/DWLBC) (completion early 2009)
7. Communicating Science Outcomes for policy and management decisions
 - Communicating to who?
 - How our system relates to their system
 - Corporate sponsorship and mainstream funding agencies
 - Defining NRM

Related Themes

Modelling landscapes

Monitoring response to land use

Projects

Use of soil seedbanks(Rick Davies)

How to stratify variable landscapes (Jeff Foulkes)

RD: Surveying above ground level. Germinating soil seedbank stuff and relating to what is above the ground. Above ground stuff is only a fraction of what's there.

Table 4 – Guy Robinson presented

1. Wild Eyre (Andrew Freeman, EP NRM) (On-going Jan '09 -)
 - Landscape restoration
 - Remediation
 - Coastal grasslands
 - Land use remediation
2. Climate Change Vulnerability (Mark Stanley, Frances Mowling) (Jan '09 -)
 - Triple bottom line
 - Modelling climatic data
 - Climate change adaptation
3. Hydro-geomorphic drivers of wetlands (Frances Mowling) (completed)
 - Temporal/spatial relations of climate
 - Climate and environment
4. Eyre Peninsula landscape futures (Wayne Meyer, Brett Bryan et al.) (Jan '09 -)
 - Application to DAFF, Australian Farming Futures
 - Climate change theme
 - Climate change – landscape futures, mixing and matching farms with NRM conservation
5. Environmental farm planning (Guy Robinson) (completed)
 - Farmer decision making
 - Plan implementation
 - Farmer attitudes
 - Agricultural
 - Land use/environment land use
6. Grain and graze (MLA/GRDC national) (Jan '09 -)
 - Involved in other NRM regions

Innovative farm practices – more resilient practice (connection with regional environment??)
Integrated biodiversity
Agricultural land use and environment adaptation

Related Themes

Environmental decision making
Modelling landscapes
Land use change and scenario modelling

Projects

Environmental decision making
People, place and purpose
Wild Eyre
Landscape futures analysis

GR: In Canada, community leaders were important and farmers had an impact on people around them as to what should and shouldn't be done.

Table 1 – Megan Lewis

1. SA MDB Environ values for regional investment priorities (Brett Bryan/SA MDB/CSIRO) (near completion)
Asking people what they value about the environment. Took it to managers and asked which was more important to manage. What is the most important aspect in which to invest. Financial decisions tool. Got different answers from farmers, community leaders, school teachers etc.

Theme

Linking people, policy and place

2. Woody perennials in future farming systems (Bertram Ostendorf/ UA/ DWLBC/NRM RA/ FFI CRC) (in development)
Part of FFS CRC. Looking at mitigation and adaptation to climate change. Above and below ground carbon storage. Benefits and costs. Looking at scale comparable with agriculture. Up to 25% of area could be available for change.

Theme

Modelling landscapes

3. Monitoring erosion risk across SA agricultural districts (Megan Lewis/UA/DWLBC/ARC) (in progress)
Developing new tools for assessing soil erosion using satellite imagery to track changes and identify areas most at risk and those responding to changes. Developing tools to deliver to land holders and regional groups.

Theme

Assessing resource condition – monitoring

Refining of research and application themes

Discussion ensued suggesting a new theme i.e. better engagement between the management agencies and science and communicating complex information.

State Government environmental agencies were present at People, Place and Purpose Conference in Bendigo. Invite not only scientists to present but also regional people.

Who to influence?

Need to engage a water group

Present from community perspective

“Engagement” theme. Community leader to present at the symposium i.e. Brian Foster (EP NRM); Ag Excellence Alliance (Jeanette Long); Corporate involvement (AGL leader).

ACTION

Communicate with the above and bring possibilities to the LS core group.

Monitoring Theme

1. Is money being spent in the right areas?
2. Use of monitoring data in adaptation management.
3. Regional board representative (regional presenter)
 - Design
 - Practicalities
 - Difference between national, state and regional policy frameworks.
4. New technologies
 - Sampling, spatial comprehensiveness, indices
 - Develop new technologies for sampling
 - What changes are significant
 - What measures should be used around different management practices
 - Monitoring in a rigorous manner – what, how, when, frequency.
5. Temporal variability
6. Trends in climate change
 - Emerging properties
 - Analysing monitoring data
 - How to identify signals of change, which are significant, what capacity
 - = left → resilience

Modelling Landscapes (overall theme?)

1. Map/model → \$ from land, water and biophysical resources.
2. Adoption etc

ACTION

Core Group to consider further themes and sub themes.

Refinement of Themes and Identification of Theme Leaders

Cluster Leader: Wayne Meyer

Theme 1

Megan Lewis - Monitoring response to land-use change and management
Bertram Ostendorf

Theme 2

Brett Bryan - Land use scenario modelling and environmental decision making
Wayne Meyer
Andrew Fisher
Frances Mowling

Theme 3

Engaging rural communities in integrated landscape planning
Guy Robinson
Mark Stanley -
Alan Richards
Kathryn Bellette

Theme 4

Approaches to biodiversity management
Duncan MacKay- Informing biodiversity management
Richard Glatz

Frances Mowling- Sustainability in a changing environment (merged with BB & AF themes)

Brett Bryan mentioned the need to explicitly consider the economics of landscape management

Possible Theme 5 - The economics of landscape planning and management (for core group discussion)

ACTION

People identified in the core group will work on people, place and policy symposium
WM to chair the LS Core Group
WM to liaise with the theme leaders and come up with the Core Group
WM to announce core group to LS Cluster members
Publication of lectures/presentations into book – structure to be discussed by Core Group.

Next Steps

Details of presenters, themes and budget are due with Spatial Conference organisers by early December.

WM to call a meeting.

BO to act as liaison between Spatial Science Conference organising committee and LS group.

PLEASE NOTE IN YOUR DIARIES:

A seminar at 0930 on 11 December in Prescott Bldg, Level 3 seminar room. More information to follow.

Meeting closed at 1.10 PM.