Drummond Natural Diversity Recovery Catchment

Proceedings of the DNDRC Steering Committee Meeting

February 20th 2003
(Meeting 1)

Members of the DNDRC Steering Committee at Drummond NR (Feb. 2003).

Prepared by Bob Huston and Kel Baldock

GOVERNMENT OF WESTERN AUSTRALIA

DEPARTMENT OF Conservation AND LAND MANAGEMENT
Conserving the nature of WA

DNDRC Proceedings of Steering Committee Meeting

Meeting 1: 20-2-03

- Meeting opened: 9:45hrs

- Present: Mike Meinema (Chairman DCLM),
  Bob Huston (Exec. Officer, Recovery Catchment Officer DCLM),
  Greg Keighery (DCLM – Science Division),
  David Cale (DCLM – proxy for Greg Keighery),
  David Mitchell (DCLM Observer),
  Geoff Erickson (Shire of Victoria Plains),
  Matt Edmonds (Solomon Yulgan Catchment Group),
  Stephanie Clarke (Solomon Yulgan Catchment Group),
  Owen Donovan (FPC- WA Share Farms),
  Mark Graves (FPC – WA Share Farms – Proxy for Owen Donovan),
  Brendan Oversby (DEWCP – proxy for Martin Revell),
  Veronica North (Community Landcare Coordinator – Observer),
  Kel Baldock (Facilitator).

- Apologies: Don Telfer.

1.0 Chairman's Introduction

Mike Meinema (MM): Welcomed everyone to the first Steering Committee (SC) meeting. Introduced recovery catchment and highlighted the importance of the input from the community, as a key manager group, in the Recovery Catchment (RC). The SC is an invitation to the community to have a sense of ownership and commitment to conservation in the RC. The combined input from the community, AGWA, DEWCP and from the DCLM will ultimately see the development of a Strategic Management Plan for the RC.

- MM outlined the Departments responsibilities in the SC to include:
- Accountability of expenditure.
- Accountability of outcomes.
- Final responsibility for decision-making rests with the Department.
- To drive the RC process through the appointment of the Recovery Catchment Officer (RCO).
- Chair the DNDRC Steering Committee.

2.0 Introduction to Natural Diversity Recovery Catchments

Greg Keighery outlined the Recovery Catchment concept within the context of the Salinity Strategy.

In 1996 the Western Australian Government launched the Salinity Action Plan, a thirty-year plan to combat rising saline groundwater in the Agricultural Region of Western Australia (Government of Western Australia 1996). Delivery of the plan was based on the individual, the catchment scale and the State scale.

Restoring hydrological balance was a major aim of many of the programs under the plan. Activities designed to promote this restoration were allocated between these scales, for example developing new crops was a State level activity based in the Department of Agriculture, field trials of these crops was at the catchment to individual scale.

The plan was reviewed and re-issued as the State Salinity Strategy in 2000 (Government of Western Australia, 2000).

In the both of these strategies individuals and groups were to receive salinity management support within several categories of priority catchments:

- Focus Catchments (mainly to protect agricultural lands)

And three types of recovery catchments:

Figure 1 Claypan - Drummond N.R.

- Water Resource Catchments (DEWCP) These were all allocated in 1996, being the Mundaring Weir (Helena River), Wellington Dam (Collie River), Warren Denmark and Kent Rivers.
- Natural Diversity Recovery Catchments (DCLM) Three nominated in 1996, six more by 2005, based on biological survey results.

- Rural infrastructure (Town Recovery) Catchments (Local Government and Department of Transport, Planning and Infrastructure). At least 30 towns in this system by 2005.

  It is recognised the recovery catchments aim primarily to protect public assets. Therefore those departments who have primary responsibility in the nominated major function of that catchment would assist co-coordination and actions. This method is perhaps best considered as sharing the load and maximising the expertise and resources available.

  This doesn't mean that Water Resource Catchments ignore biodiversity protection or that Natural Diversity Catchments ignore private lands or assisting with new crops. The priority catchments are focused towards a goal and require holistic landscape solutions. They will however have long-term support towards implementing those solutions.

Figure 2 Drummond N.R.

3.0 Introduction to Drummond NDRC

In this session Recovery Catchment Officer Bob Huston introduced the committee to DNDRC. In summary:

- Located 10-kilometre s west of Bolgart.
- Total area of approximately 39 500 hectares.
- Encompasses three catchments:
  Yulgan Brook Catchment
  Solomon Creek Catchment
  Mt Anvil Gully Catchment
- Part of the Toodyay Brook /Avon River Catchment.

- Containing 58 farming properties – sheep/cropping.
- Solomon Yulgan Catchment Group (1998).
- The biodiversity icon: Drummond Nature Reserve.
- Remnant Vegetation: 15 percent remaining (10% Bindoon Training Area, 3% Nature Reserves, 2% within farmland).

Conservation Values

▪ Located 10km west of Bolgart.	▪ Area – 439ha.
▪ Flora – 429 species. ▪ Two species of DRF. ▪ Five species of priority flora.	▪ Only known populations of aquatic herb: *Hydatella leptogyne*.
▪ Contains ten vegetation communities. Two of which are uncommon in the wheatbelt	▪ Wandoo Woodland over sedges and ▪ Freshwater claypan community.
▪ Claypans: Last two remaining freshwater claypans in uncleared land.	▪ Claypans contain two species of DRF and two species of priority flora.
▪ Threats: ▪ Rising water tables. ▪ Excess surface water runoff. ▪ Salinity.	▪ Dieback. ▪ Weed encroachment. ▪ Isolation – corridor linkages.

It was highlighted the 429species found in Drummond NR represents 30%of all known species of all vascular plants in the whole of the United Kingdom.

Figure 3 Gnamma - Drummond N.R.

Hazards and Issues to conservation values:

- Freshwater claypans in Drummond NR are threatened by increased water levels, salinity and other disturbances to the degree that the conservation values could be lost within 10 years if no remedial action is undertaken.
- The system represents agricultural lands on the eastern edge of the Darling Range containing natural vegetation communities on the limits of their northern and eastern range.
- The area is threatened by surface and sub surface water run off, which have reached a stage approaching critical levels in some areas.
- The area is naturally moderately saline and at risk mainly from secondary salinity.
- The focus freshwater claypan environments located in Drummond Nature Reserve are in near pristine condition and are located high in the catchment.
- Scattered bushland remnants that are isolated and in many cases in need of protection.
- Degradation along creek lines through loss of vegetation, erosion and declining water quality.
- Lack of information concerning the presence and abundance of fauna and flora in the Catchment.

Figure 4 Salt scald wedge - Drummond N.R.

Potential for success

- The freshwater claypans of Drummond Nature Reserve appears to be threatened by very local hydrological changes. As such it is felt that local action should be able to reverse the declining trends.
- The CLC of Shire of Victoria Plains has developed a strong presence in the catchment area facilitating the formation of the Solomon Yulgan Catchment

Group in 1998 which has over time has incorporated landholders from the Anvil Gully Catchment.

- NHT grant for 2001 to begin tackling key issues concerning land degradation and the loss of biodiversity.
- The catchment community has interests in the production side of Landcare and conservation consequently supporting a range of options within the recovery catchment will be well received.
- Excellent opportunity to demonstrate the value of nature conservation in integrated farm and catchment management.
- Drummond Nature Reserve is close to the Perth metropolitan area and could be used as a "living example" of the potential biodiversity effects of salinity and the remedial actions undertaken against that threat.

Figure 5 Howlett revegetation project.

4.0 Drummond Nature Reserve Excursion

The committee were taken on an excursion to Drummond NR where they viewed project areas completed in 2001 on adjacent farmland and visited key sites on the nature reserve of interest:

- Claypan on the southwest corner.
- Area of saline degradation on the northwest corner.
- Piezometer sites.
- Dieback effected area.
- Gnamma hole site.
- Areas where paterson's curse infestations are being managed.

5.0 WA Share Farms Presentation.

Owen Donavan made a presentation to the Committee on the role of the Forest Products Commission and WA Share Farms. The following notes are compiled from that presentation.

Western Australia Has a population of around 2 million people with half living in Perth. France has a population of 60 million and is a quarter the size of W.A.

In comparison to the rest of the world W.A. has an extremely low population density.

Which gives us more room for tree crops compared to most countries in the world.

The area cleared for agriculture in the southwest corner is 18 million hectares. It is estimated that around 2 million hectares will be lost to water logging or salinity if no action is taken to fix the problem.

The Landcare problem is at a massive scale, unlike anywhere else in the world.

The establishment of tree crops is a vital tool in the fight against water logging and salinity. Tree crops can also provide other benefits such as the stabilization of erosion prone sites and groundwater table control.

The State Government released an "Action Plan for Tree Farming" in October 2002. In the plan the main tree farming cells are identified with the core commercial species suited to each cell.

Competition for land due to horticulture, viticulture and more intensive agriculture has increased land prices to a point were we have to look at lower rainfall areas now to replace existing or create new timber resources in Western Australia.

Many other species of tree can be grown in the 400 to 600 mm rainfall zone. At present only Pine has existing markets and can be used for almost any product made from wood such as paper through to LVL and structural timber.

Other species can be successfully grown in the area but represent a higher risk to the grower until more stable markets can be developed.

Pinus pinaster (maritime pine) is one of the most common forest types in southern Europe. It has also been used for afforestation since the 1700's in France and Portugal on sandy soils.

Maritime pine is the best performing commercial timber species for the 400 to 600 mm rainfall zone on sandy sites.

The FPC with Farmers has been share farming tree crops since the 1980's in the southwest. We have developed a contract which shares harvest revenue and pays an up front payment with the landowner.

This contract arrangement ensures integrated plantings with landowners, as tree crop areas are not planted from fence to fence.

Midwest Share Farms was started in 1995 to eventually replace the Gnangara plantation (as this is to be removed and planted back to native vegetation over the next 20 years). To achieve this we will need to establish close to 30,000 hectares of tree crops with landowners in the Midwest Cell.

This year the FPC has increased the incentive payments to landowners, to target plantings in the Priority zone and recovery catchments.

FPC staff carries out site assessment with establishment works being undertaken by contractors and landowners. This has other benefits by providing off-season work through June and July.

In the Midwest cell the Pine tree crop areas account for the majority of plantings although we are establishing commercial trials of sandalwood and eucalypts on selected sites.

Only plantings at a large scale, of a single species will attract industry in the future and have an impact on Landcare problems.

Any tree crop planting on a property must be at least 20 hectares to make it viable to harvest trees at a later date. Plantings of less than 20 hectares are also less likely to impact water tables or salinity.

6.0 DNDRC Progress Report

Bob Huston (RCO) gave a report of the past activities completed in 2002 and an outline of projects in progress for 2003.

Summary of DNDRC works completed for 2001-02

- **Planting 21,000 seedlings** over two sites incorporating a buffer zone along the northern and eastern boundary (Camerer Farm) of Drummond Nature Reserve.
- **Block planting of 8,000 seedlings** over a 4ha of farmland (Howlett Farm) to address incoming surface water drainage affecting the Nature Reserve.
- **Hydro-geological groundwater study across the Catchment:** establishment of 44 water monitoring bore sites. ($50,000 project).
- **Remnant Vegetation Quality Assessment Survey:** Completed across the whole of the DNDRC. ($16,500 project).
- **Remnant Vegetation Fencing Scheme:** Purchase of $28,000 of fencing material to develop a remnant vegetation fencing material assistance scheme across the DNDRC.
- **DNDRC Photo Mosaic:** Production of aerial photo-mosaic support material of the recovery catchment area. ($5,000 project).

- **Catchment Newsletter:** Launch of Catchment newsletter in partnership the Solomon Yulgan Catchment Group.
- **Recovery Catchment Officer appointed** to coordinate on-ground action, promote conservation, sustainable farming systems and community development concerning nature conservation.

Figure 6 Drummond NR buffer project.

Figure 7 Piezometer nest Drummond NR.

Summary of DNDRC works in planning for 2003

- **Planting 25,000 seedlings** to establish corridor linkages between bushland remnants on farmland.
- **Planting 8,000 seedlings** developing a wildlife corridor linking Drummond Nature Reserve to Julimar and Bindoon forest blocks.
- **Conduct Dieback survey of Drummond NR.**
- **Implementing the Remnant Vegetation Fencing Scheme** across the catchment guided by the findings in the Remnant Vegetation Quality Assessment Survey.
- **Remnant vegetation fencing/protection (13.5ha) and planting 5,000 seedlings** to re-establish native vegetation on cleared areas.

- **Planting 4,000 oil mallee seedlings.**

- **Developing Landcare education program** with Bolgart and Calingiri Primary Schools.

- **River Restoration Project** in partnership with WRC to develop a demonstration site on rehabilitating highly saline creek line and valley floor.

- **Sustainable Grazing from Saline Land Project:** Develop a project in partnership Dept. Agriculture WA on productive use of saline effected farmland and seek funding support from SGLS.

- **Soil Mapping of DNDRC:** Produce comprehensive soil maps of DNDRC as part of the development of basic information data sets.

- **Establish the DNDRC Steering Committee** made up of key stakeholder from local government, farmers, Catchment Group and key government agencies.

- **DNDRC official launch in the district to the local community.**

7.0 Defining the Role of the Steering Committee

During this session the Committee considered its primary roles and defined them in two broad categories:

(Note – words in brackets are suggestions by the Facilitator, Kel Baldock to add clarity to the role)

MANAGEMENT [which included planning]

- Offer technical support;
- Oversee management (of the demonstration catchment programs) and be comfortable in its direction;
- Assist with (setting) financial priorities;
- To be aware of time constraints (of Govt. budgets [Nov.], labour, volunteers);
- To be aware that intended outcomes have time constraints and targets;
- Government Agencies have a role to help develop partnerships (with community and other stakeholders);
- To evaluate performance and to set performance targets and indicators;
- To identify projects, initiatives and trials;

COMMUNICATION [recognising that <u>demonstration</u> is a key objective]

- To be informed (by other Committee members) about directions of the program (for the catchment and area);
- To keep stakeholders informed about time constraints of the program;

- To keep Local Govt Authorities informed (and to seek their support in certain activities / initiatives);
- To develop and maintain communication links to the community in the area and the wider community;
- To raise awareness of the issue of Public Benefit versus Private Benefit (especially when considering issues of 'investment by Government' and 'investment by community' into initiative and projects within the program).

8.0 Defining DNDRC Vision Statement

In a session following identification of Committee's roles, the group initially suggested key words / phrases that should be included in the vision statement.

From discussion amongst members it was clarified that a vision statement should reflect:

- A futuristic 'rose coloured glasses' view of the Drummond Recovery Catchment in the future;
- Was not necessarily time bound;
- Should indicate how the key objectives would be achieved.

With great initiative from Stephanie Clarke, the key words and emphases were compiled into a draft statement. Two versions that capture the essence of this initial draft are presented below for the Committee's consideration.

1. ***To achieve enhanced biodiversity within the Drummond Recovery Catchment by developing partnerships that encompass sustainable farming systems in the area. This will result from a focus of wide stakeholder participation and be achieved by a community that leads by example.***

2. ***To achieve enhanced biodiversity values within the Drummond Recovery Catchment by developing partnerships that encompass sustainable farming systems in the area. This will result from a focus of wide community participation, be achieved by stakeholders who lead by example and seek to establish an area that demonstrates genuine integration of environmental, economic and social progress [or replace 'progress' with 'improvement'?].***

9.0 Next Meeting

- The group decided to meet in two months time. Bob will liase with all members to fix a suitable date.
- The committee expressed that they would envisage meeting 2-3 times a year.

Appendix 1: Meeting Agenda

Drummond NDRC Steering Committee Meeting Agenda

20th February 2003
Venue Bolgart Hotel Time: 9:30am – 3:30pm

	Topic	Who	Time	Discussion Information Decision
1.	Welcome	Chairman Mike Meinema	5 min (930-9:35)	
2.	Introduction of Committee Members	Facilitator Kel Baldock	10 min (9:35-9:45)	
3.	Introducing DCLM Recovery Catchment Program	Greg Keighery	20 min (9:45-10:05)	Information
4.	Introducing Drummond NDRC	Bob Huston	25 min (10:05-10:30)	Information
5.	Field Trip Drummond NR	Greg Keighery Bob Huston	2 hr (10:25-12:30)	Information
6.	Lunch		45 min (12:30-1:15)	
7.	Forest Products Commission Presentation	Owen Donovan	30 min (1:15-1:45)	Information Discussion
8.	DNDRC Progress Report	Bob Huston	15 min (1:45-2:00)	Information
9.	Defining the role of the Steering Committee	Facilitator Kel Baldock	30 min (2:00-2:30)	Discussion Decision
10.	Defining the Vision Statement for DNDRC	Facilitator Kel Baldock	45 min (2:30-3:15)	Discussion Decision
11.	Wind Up: Where to from Here? Actions. Next meeting date?	Facilitator Chairman	15 min (3:15-3:30)	Discussion Decision