

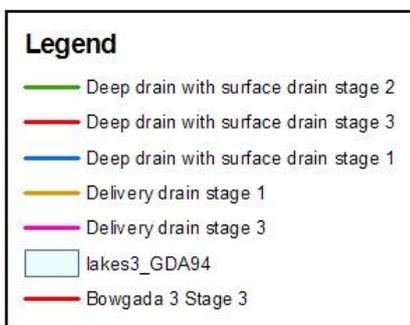
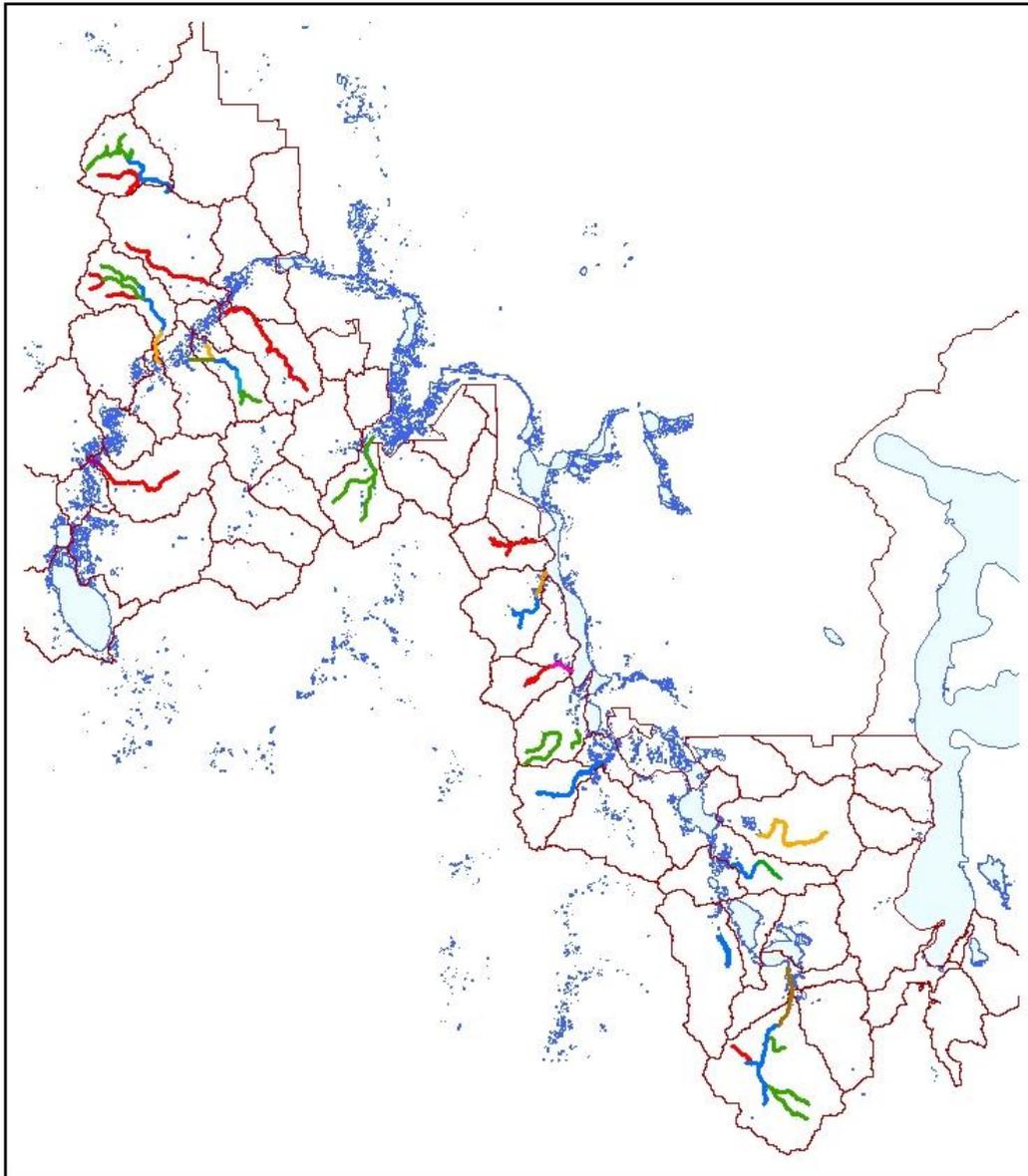
**YARRA YARRA CATCHMENT MANAGEMENT
GROUP**



**YARRA YARRA THREE STAGE DRAINAGE
PROGRAM**

SEPT 2007

Yarra Yarra three stage Drainage Program



Yarra Yarra Catchment Group
Management area
showing works program

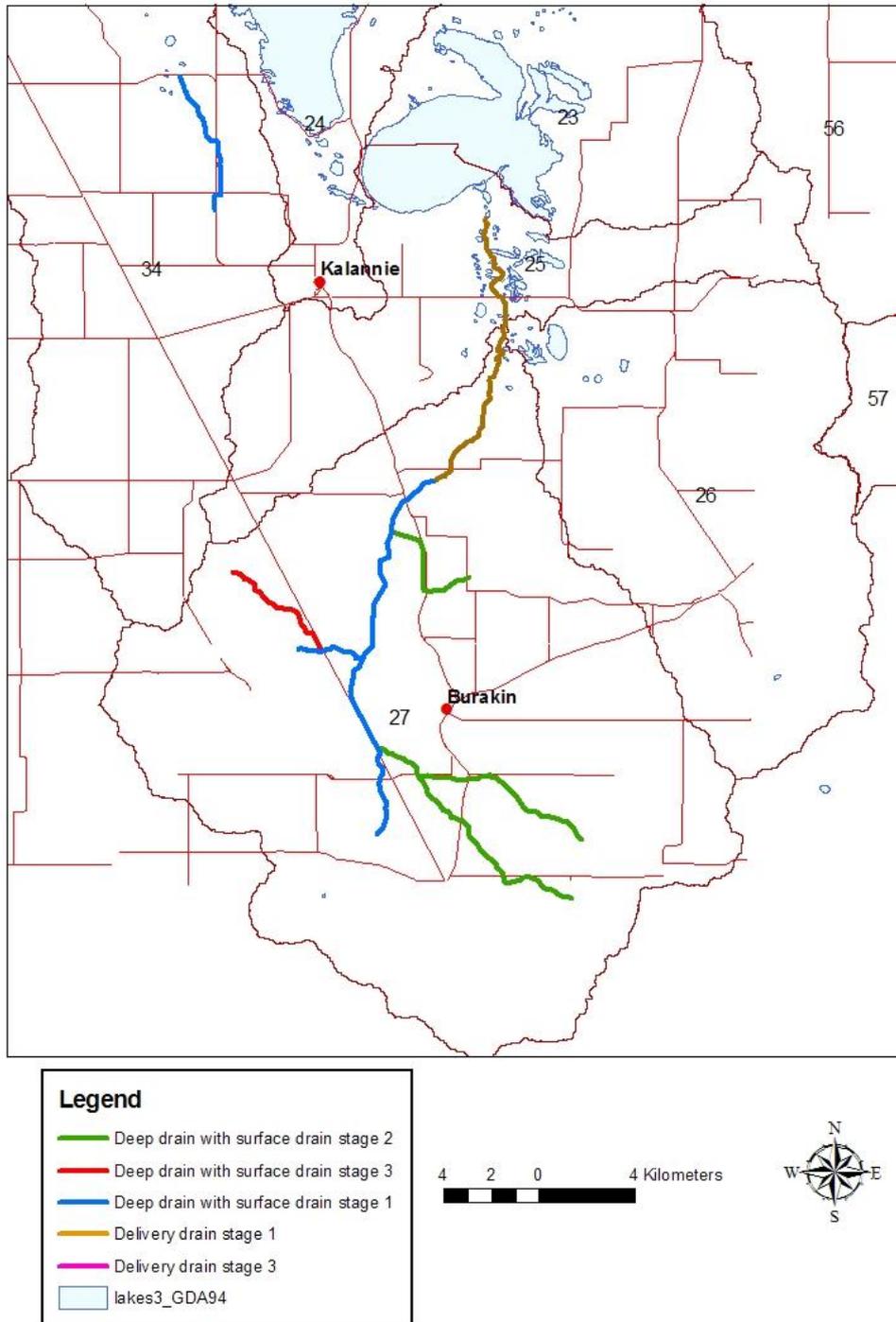


9 4.5 0 9 Kilometers



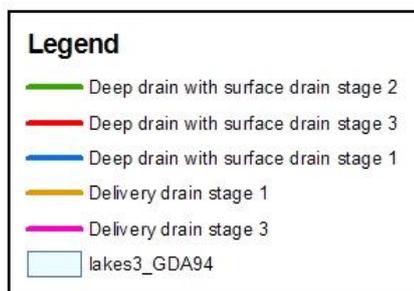
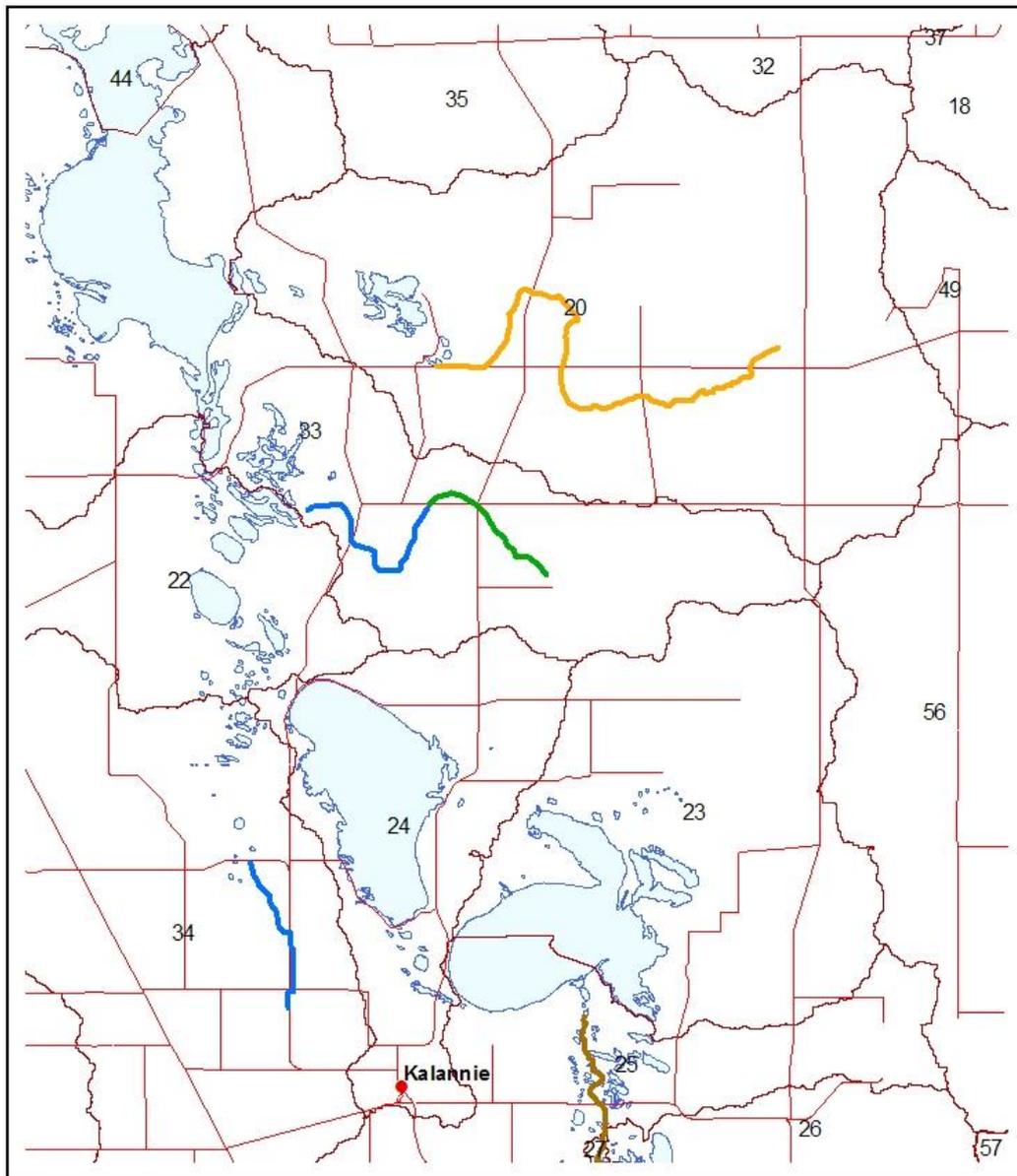
Apart from the fact that there is not sufficient funds available to construct all the drains in one Stage the project needs to be split into three years as we feel that around 100 km per year is a realistic target to aim for considering monitoring and construction time.

Burakin and Kalannie drainage schedules



As the legend shows Blue indicates stage one and will establish the main arterial drain in catchment 27. Stage 2 is depicted as green will be established in the second year to address salinity higher in the landscape and cannot be accessed until stage 1 is completed. By developing the network in two stages allows the main flush of stage one to abate before starting stage two thus relieving the pressure on the drain at the delivery point.. The delivery drain depicted in brown is already established. Stage 3 depicted in red is of lesser consequence

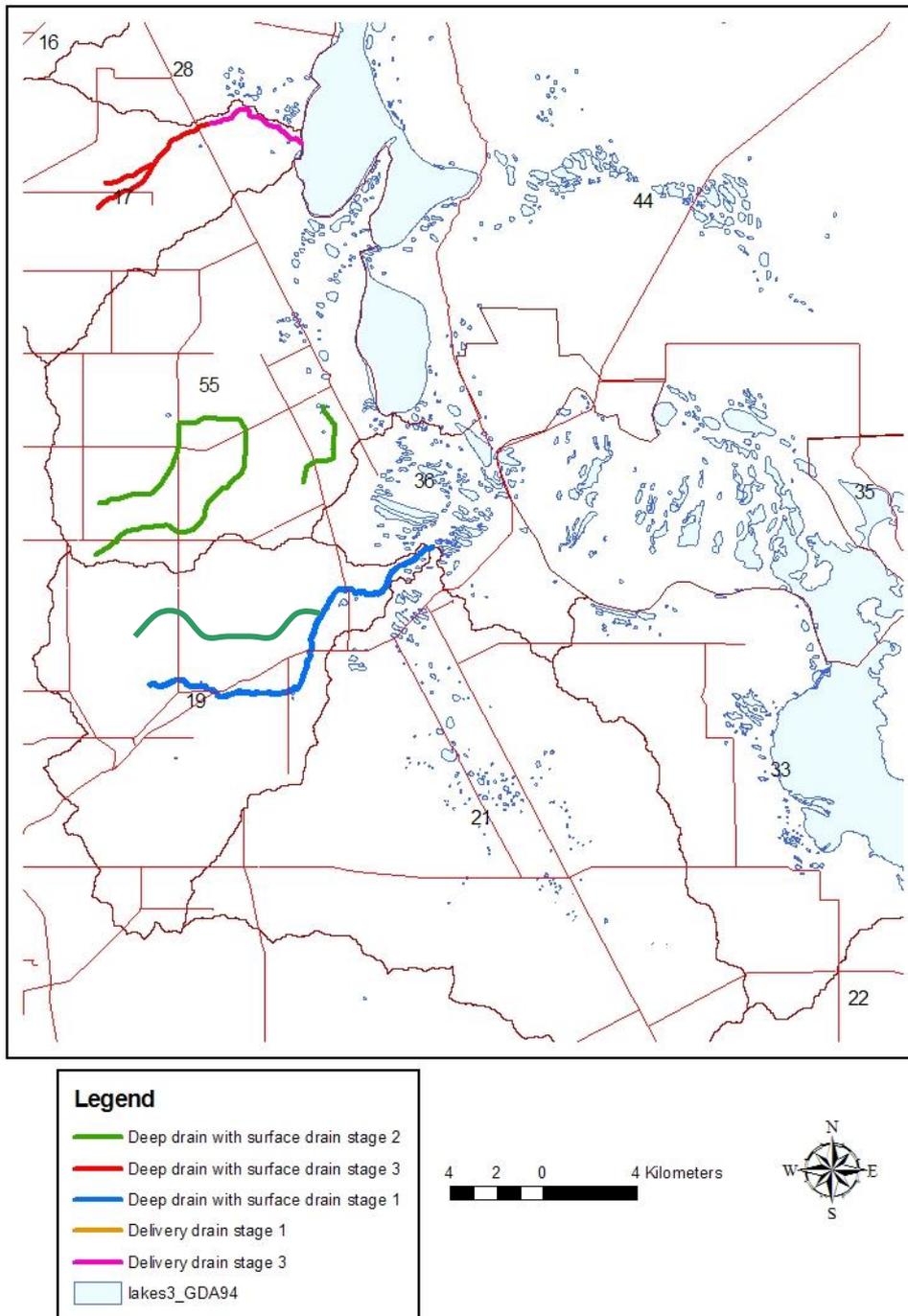
The drain in catchment 34 is a spur delivering into an existing drain and involves 3 farmers.



Stage one of catchment 33 may have to be relegated to stage two if there are not sufficient funds in the stage one allocation. The area of salinity and number of farmers involved doesn't match other higher priorities in Stage 1.

The surface drain (or delivery drain) in catchment 20 is of lower priority as these funds are required to enhance the existing surface drain which needs more definition. There will not be an easement required on this drain, so other cost sharing arrangements will need to be negotiated.

Jibberding 19 Mongers 55 and Mongers 17

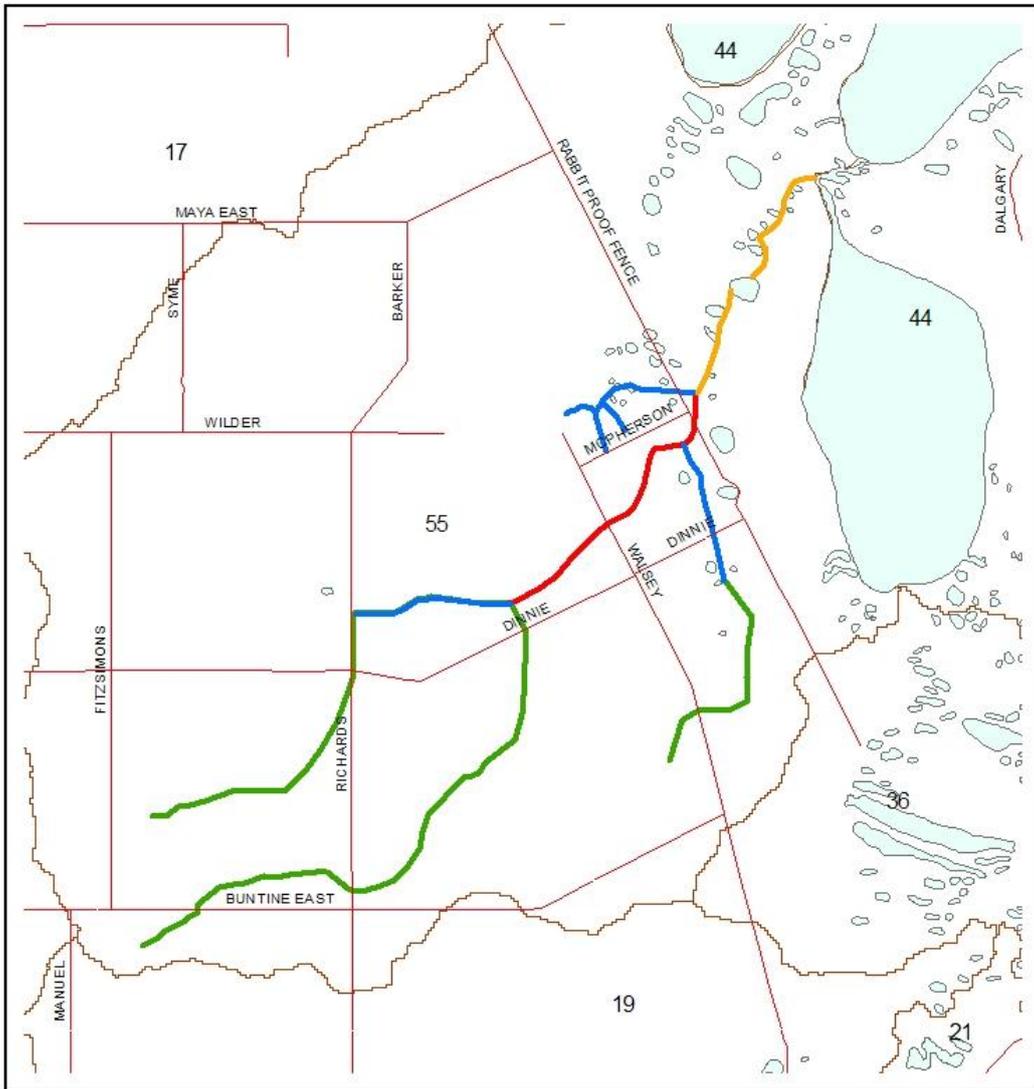


Catchment 19 is of high priority because of the potential to rehabilitate a large area of salt affected land and also 2 homesteads are at severe risk. Stage 2 involves 3 farmers and has extensive salt damage.

Stage 2 of Mongers 55 is to address salt affected land higher in the catchment and will be an extension of Mongers stage 1. The main drain of stage 2 will need to traverse some productive land to access the saline areas. This makes stage two of less priority than other stage two contenders in some other catchments.

Mongers 17 is a smaller catchment and does not contain as much salt land as some other catchments and does address as many farmers so has been relegated to stage 3

Mongers 55 showing the various stages of this pilot project

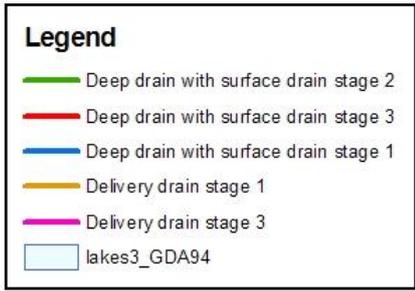
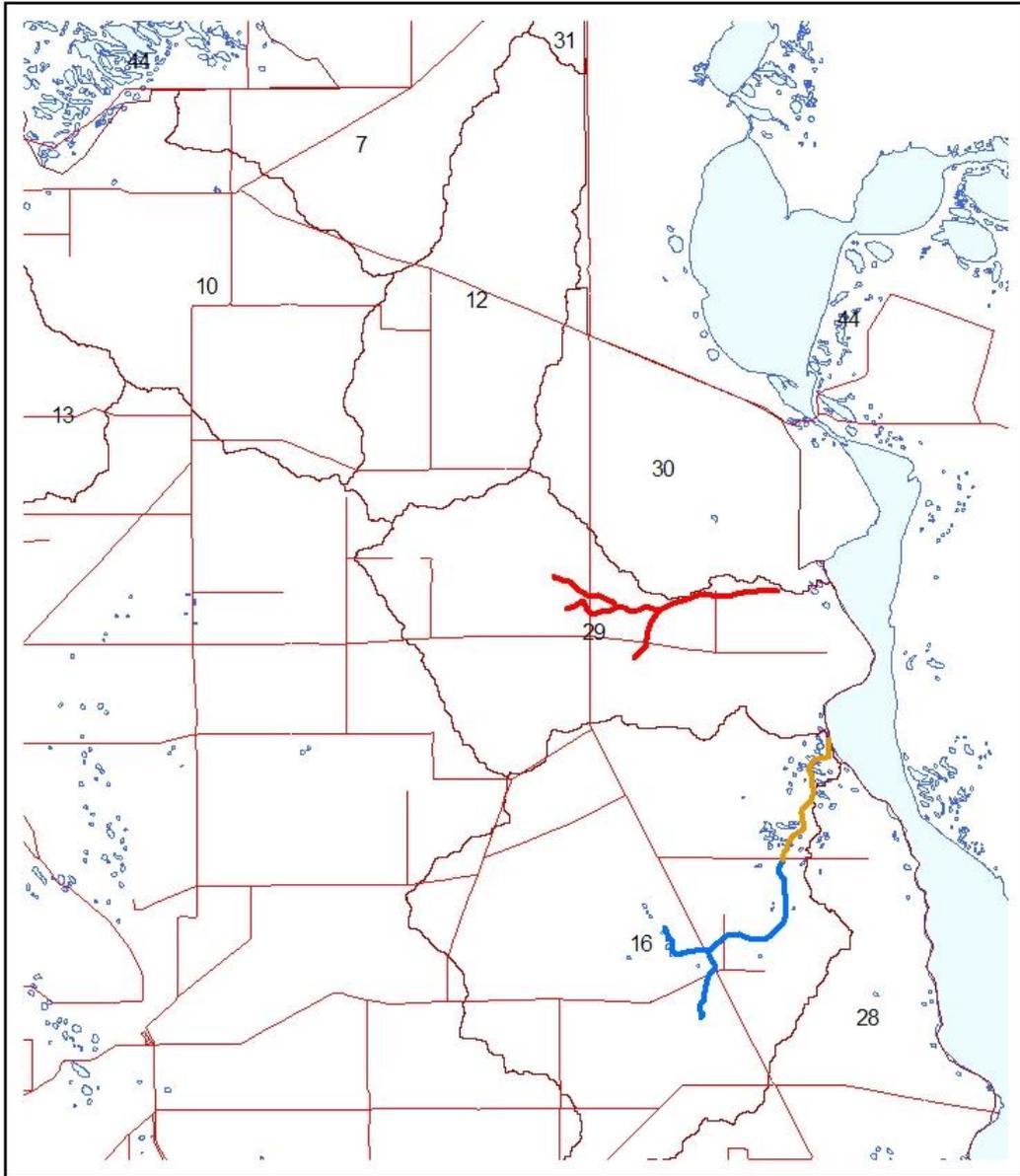


Legend

- Local roads
- Mongers delivery
- Mongers farmers spurs
- Mongers Main Drain
- Mongers stage 2
- lakes3_GDA94
- Subcatch_94

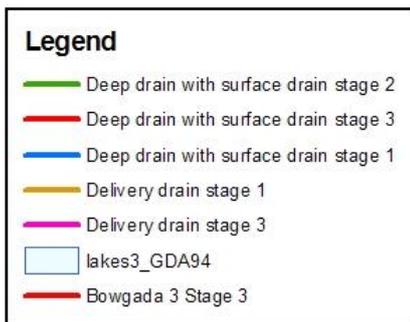
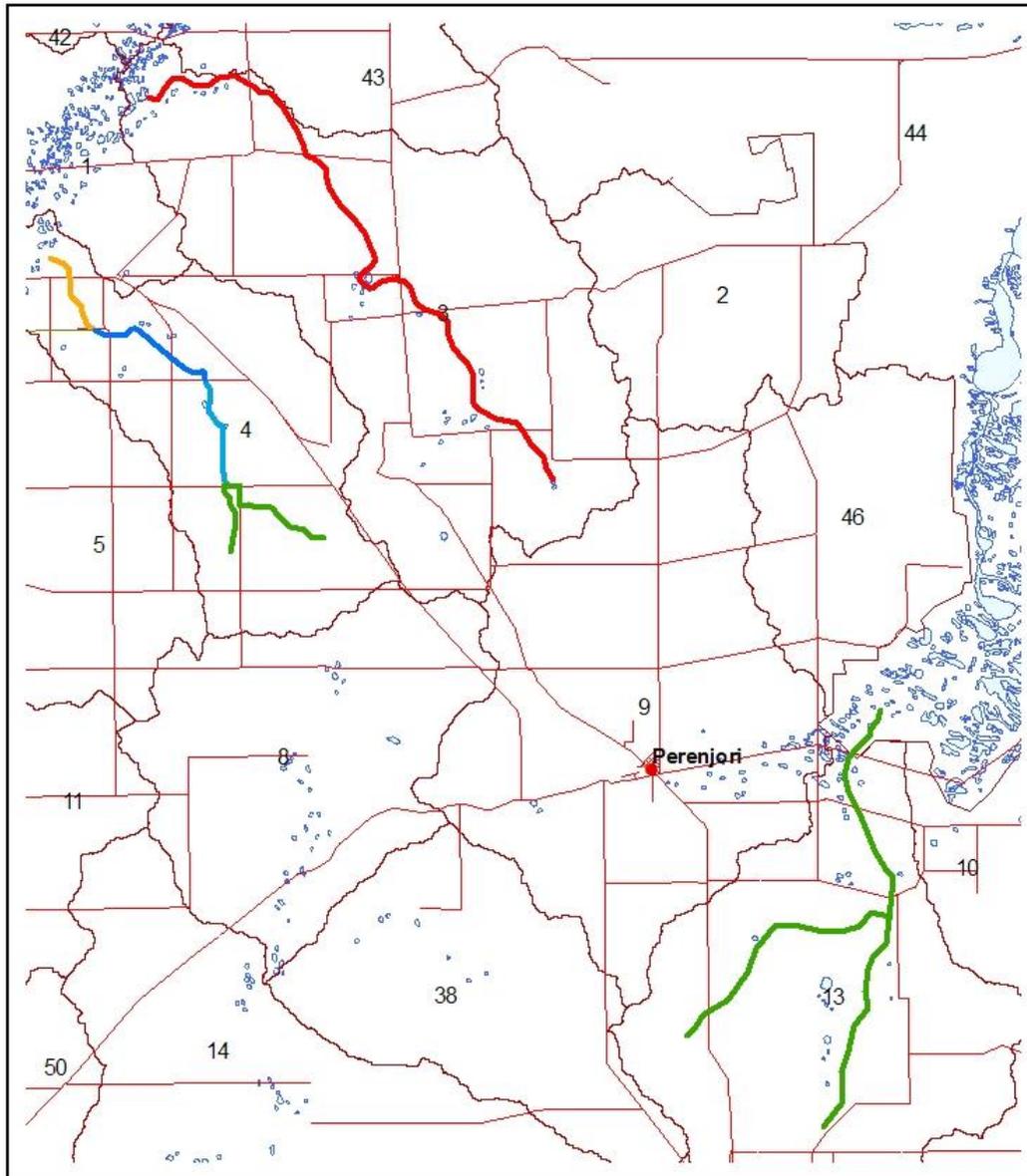
Mongers 55 showing Stage 1 completed and stage 2 pending





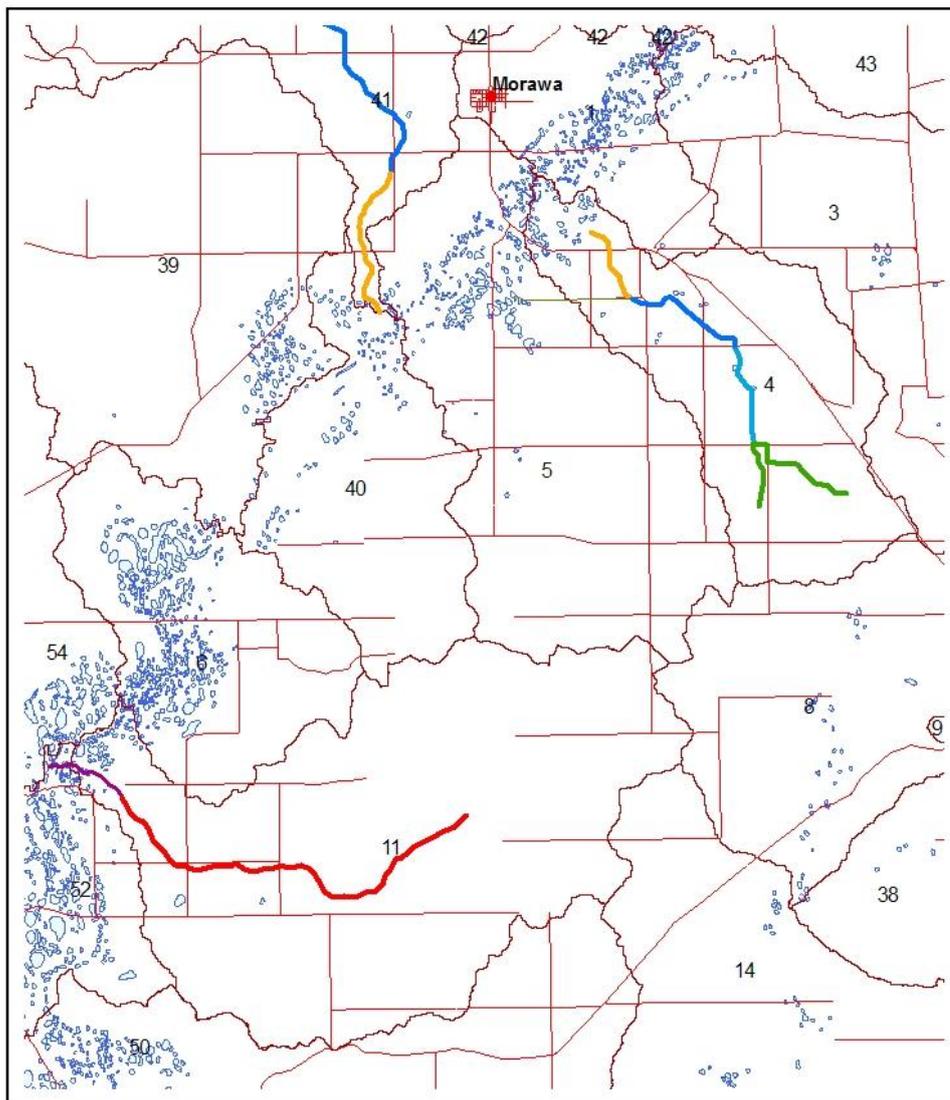
Mongers sixteen is a stage one project and services 5 farmers. This project has the potential to protect a number of large areas of remnant bush totalling 364 ha. The most significant site is 100 ha of predominately York Gum forest. This remnant is showing signs of great stress due to the rising water table. It is a classic site suitable for rehabilitation.

Mongers 29 has been relegated to stage 3 as there are only two farmer who will be beneficiaries of this project and does not address as much salt affected land as other Catchments higher up the priority list.



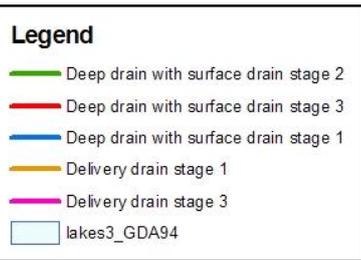
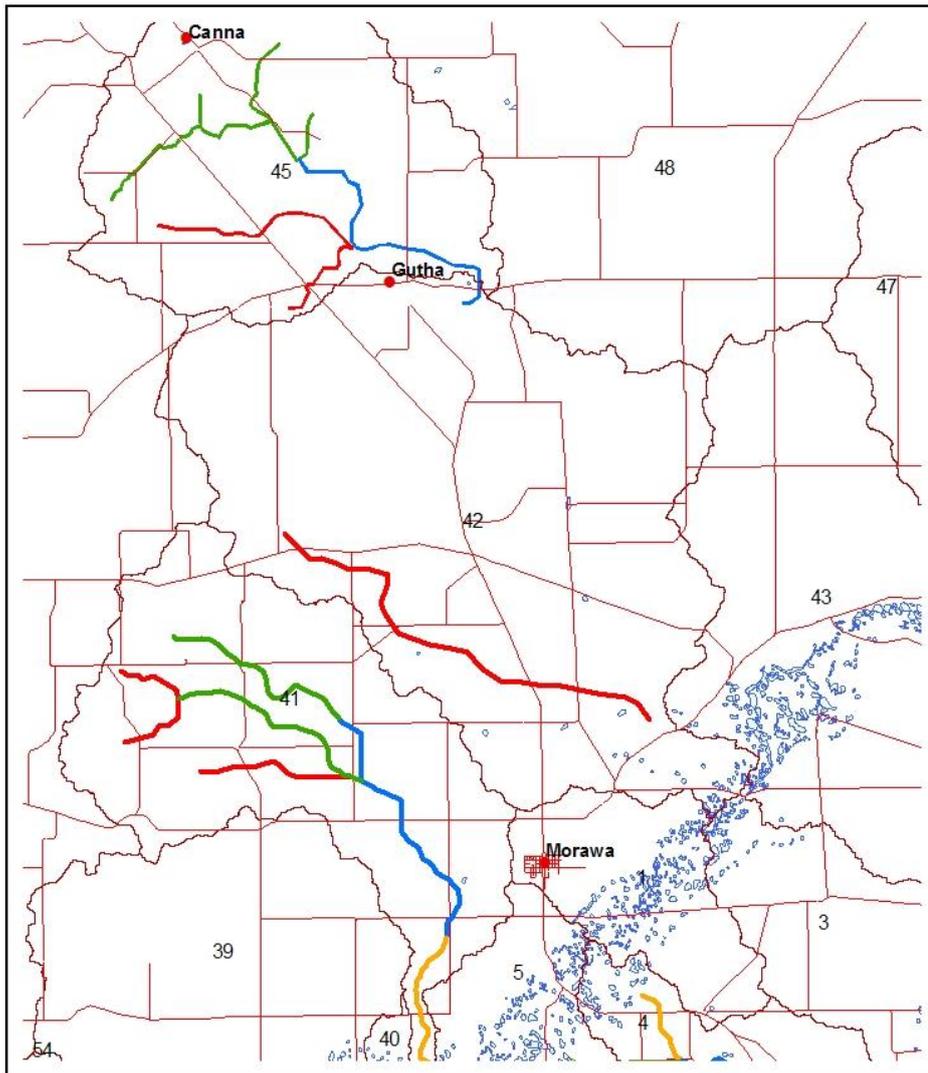
Catchment 13 in the Perenjori Zone is of high priority but we cannot proceed any further with this until a legal dispute regarding ownership of a property within the drainage line is resolved.

Stage one of Catchment four in the Bowgada Zone has been completed. With 2 km of this darin being relegated to stage 2 while a family dispute is being resolved 2. Stage two will address some extensive salinity problems in the higher landscape and involves six farmers. Catchment 3 in the Bowgada Zone is a worthy catchment but has a long lead distance to satisfactory discharge and has been down graded to stage 3.



There has been little interest shown in integrated drainage in the East Three Springs Zone except in Catchment 11. We have drilled along this drainage line and the results show that the water table would respond to deep drainage but not to the extent of other catchments of higher priority.

Canna/ Gutha 45,42 Merkanooka 41



The Merkanooka drainage network in Catchment 41 is extensive and totals around 45 km of drainage line. Stage 1 had to be terminated at the Mingenew/ Morawa road as funds allocated to Stage 1 in this catchment had run out. This drainage network was cut into stages 1,2 and 3 as logistically there wasn't enough funds available to do it all in the one year. Stage 2 is more significant as regards the amount of recoverable land for the distance of drain excavated.

More recently two farmers have shown interest in developing a drainage line in Catchment 42 (Pintharooka) in the Canna/Gutha drain, this needs more investigation.

Catchment 45 is extensive and similar to 41 and is likewise divided into three stages. The first stage of 45 has been finished and here again has been terminated 2 km short of the targeted distance because of funding constraints.

YARRA YARRA WORKS PROGRAM, TOTAL 405.98 km

	Stage 1		Stage 2		Stage 3	
	Main drain	Delivery drain	Main drain	Delivery drain	Main drain	Delivery drain
BURAKIN	15.00		38.00		5.55	
XANTIPPE	5.50					
GOODLANDS 20		21.35				
GOODLANDS 33			16.14			
JIBBERDING 19	16.54		10.00			
MONGERS 55			23.00			
MONGERS 17					8.47	4.86
MONGERS 16	11.30	5.70				
MONGERS 29					13.76	
PERENJORI 13					28.00	
EAST THREE SPRINGS 50					18.00	3.5
BOWGADA 3					23.65	
BOWGADA 4	7.41	4.78	9.90			
MERKANOOKA	3.5	6.70	26.93		13.18	
PINTHAROOKA					19.35	
CANNA / GUTHA	11.34		15.86		18.71	
Total	70.59	38.53	139.83		148.67	8.36

Mongers 55 1st stage (completed)

Main Drain	5.19
Farmers Spurs	6.29
Farmer delivery	2.61
Delivery 2	1.83
Delivery 1	2.29