EUMERALLA DRAINAGE SCHEME

Submission to ENRC Inquiry into Rural Drainage

Presented by Adrian Morrissey
13 February 2013

EUMERALLA DRAINAGE SCHEME

OVERVIEW OF THE AREA

EUMERALLA DRAINAGE AREA
Total Area: 2751 ha
Apportioned Area: 2523 ha
Main Drain Length: 11km
Overflow Drain Length: 8km

Declared: Victorian Government Gazette: 17 January 1906

NORTHERN EUMERALLA DRAINAGE AREA
Total Area: 695 ha
Apportioned Area: 539 ha
Main Drain Length: 10.3 km

Declared: Victorian Government Gazette: 24 May 1938
LAKE GORRIE DRAINAGE AREA
Total Area: 546 ha
Apportioned Area: 305 ha
Declared: Victorian Government Gazette: 7 August 1957
<table>
<thead>
<tr>
<th>YEAR</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1879</td>
<td>18 of the pioneering ‘selectors’ agreed to form a syndicate the first work was undertaken</td>
</tr>
<tr>
<td>1882</td>
<td>A formal indenture was drawn up with the landholders and the Shire of Minhamite</td>
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<tr>
<td>1899</td>
<td>Formal mapping on the area was undertaken by the licensed surveyor J.W. Crawley</td>
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<tr>
<td>1902</td>
<td>Further works were carried out after the ‘Jasper Flood’ in the area</td>
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<tr>
<td>1906</td>
<td>Eumeralla Drainage Scheme Declared</td>
</tr>
<tr>
<td>1906 – 1910</td>
<td>Works continued</td>
</tr>
<tr>
<td>1924</td>
<td>Closer settlement board distributed reclaimed land from the last of Squattleseamere</td>
</tr>
<tr>
<td>1932</td>
<td>Grant to cut the main drain through the Gorrie.</td>
</tr>
<tr>
<td>1938</td>
<td>Northern Eumeralla Scheme Declared</td>
</tr>
<tr>
<td>1946</td>
<td>Worst floods in district history, 4 deaths recorded</td>
</tr>
<tr>
<td>1951</td>
<td>Eumeralla Excavation Company founded with purchase of a dragline excavator</td>
</tr>
<tr>
<td>1952</td>
<td>Soldier Settler Blocks were made available in Glengleeson West, 2956 acres part of the northern river reaches</td>
</tr>
<tr>
<td>1957</td>
<td>Lake Gorrie Drainage Area Declared</td>
</tr>
<tr>
<td>1991</td>
<td>Minhamite Shire Ceases and Moyne Shire with new boundaries is created</td>
</tr>
<tr>
<td>1992</td>
<td>Drainage Areas Act repealed</td>
</tr>
<tr>
<td>2000</td>
<td>Drainage management re-formed after Drainage Areas Act repealed</td>
</tr>
<tr>
<td>2004 to 2006</td>
<td>3 Stage maintenance works carried out. Landholders levied for the work</td>
</tr>
<tr>
<td>2011</td>
<td>Maintenance work denied on environmental grounds</td>
</tr>
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**HISTORY OF DRAINAGE AREA**

The Eumeralla drainage scheme is steeped in history. Prior to European settlement, Aboriginal tribes lived in the area, hunting and gathering from the wide swamp that connected the upper and lower reaches of the Eumeralla river (and we acknowledge the traditional owners).

Land ownership became formal and titles were issued and subdivided during the late 19th century.

In an extract from an obituary notice from the Port Fairy Gazette, dated 13-04-1913:

*Michael Morrissey was a native of County Limerick Ireland, he arrived via boat in 1853 as a one year old. When he grew to manhood, he took up land at Broadwater and was one of the pioneering syndicate who undertook the drainage works of the Squattleseamere Swamp. On accounts of water troubles, he carried on farming under great difficulties, until drainage was completed. He lived in this locality for 30 years.*
FIRST DRAINAGE WORKS
The first drainage scheme in the former Minhamite Shire began in 1879, when 18 pioneering selectors in the Bessiebelle area, agreed to pay 10 shillings per acre, towards the cost of drainage.

The formal indenture was drawn up in 1882. By 1890 almost 10,000 pounds had been spent on the lower Eumeralla Drainage Area. Most of this sum was raised via loan, and over 3000 acres of swamp had been reclaimed.

Further drainage was carried out following the 1902 "Jaspers flood". Two loans were raised in 1906 and 1910. These works were completed by contractor Crawly, whose son Rolf Crawley went on to become Minhamite Shire secretary and engineer.

CLOSER SETTLEMENT
The Governments renewed interest in closer settlement dated from the depression of the 1890’s when it was proposed that the unemployed from the cities be removed and settled on small holdings. The Lands Purchase and Management Board which in 1915 became the Closer Settlement Board had the power to compulsorily purchase estates from 1904.
The government backed Closer Settlement Board, oversaw the WW1 soldier settlement of the 8,216 acre Squattleseamere estate in 1924. A lot of these farming blocks were made available via the drainage works.

GOVERNMENT GRANTS
In 1932 the first government grant was recorded to cut the main drain to Lake Gorrie, through the Gorrie Swamp. In 1935 another grant was recorded to enlarge and deepen the "Overflow Drain". In 1938 the Northern Eumeralla Drainage area declared and in 1941 a grant was received to enlarge the channel in the Northern Eumeralla Drainage area.
1946 FLOODS
The saddest tragedy in the history of Bessiebelle occurred on March 17th 1946. In 36 hours thirteen inches of rain fell, causing a freak flood. All tributaries of the Eumeralla River rose to overflowing. The huge embankment at Deep Creek on the Port Fairy/ Hamilton road collapsed during the night creating an avalanche of water to sweep across the floodplain, drowning thousands of head of livestock.
Tragically four members of the Sparrow family perished, fleeing the floodplain, in their search for higher ground.

Following 1946 floods, for the next two decades saw a great deal of work carried out on several drainage schemes in the Minhamite Shire. The work carried out on the Lower Eumeralla drain was undertaken by the Eumeralla Excavation Co with a dragline excavator purchased for 4450 pounds.

For many years this excavator maintained the drainage infrastructure.

SOLDIER SETTLEMENT
The government backed Soldier Settlement Board in 1952-54 oversaw the 2965 acre Glengleeson West settlement. A vast amount of this ground was made up of the alluvial river flats in the Northern Eumeralla Drainage Area which was made available through the drainage works that occurred prior to the soldier settlement.

Soldier settlement was a major turning point in the western district demographic. The need for more post war land resulted in many seasonally and permanently inundated areas being drained. These drainage systems are scattered throughout the district and provided some 300,000 ha of land for dryland farming. The drains were designed by engineers and constructed by locals or works crews from around the district and beyond.

DRAINAGE AREAS ACT REPEALED 1992
Prior to the repealing of the Drainage Areas Act 1958, an advisory committee of six persons was elected triennially. The committee met at least annually or as required. Councillors and executive officers attended by invitation.

Maintenance works generally consisted of weed and vegetation spraying and re-excavation of the weed and silt build up to the original drain profile.

Council generally executed and administered the works and levied the landholders - no service fee was charged.

Following the amalgamation of the Minhamite and the Moyne Shires, the rating schedules used to strike the levies was lost.

Following the loss of formal legislation and management arrangements, the condition of the drain could only be described as shocking. The last drainage meeting was held in 1989 and the elected members' terms expired in 1992. The whole management system was in disarray.

RECENT MANAGEMENT OF THE DRAINAGE AREA

A public meeting was held in early 2000, the ball was set rolling to create future management plans. With enormous effort from Greg Anders Moyne Shire and Brad Henderson GHCMA, a rating and levy system was re-created and within the next six years the entire main drain had been excavated.

Prior to this work being carried out, Environmental engineer Mr Peter Cameron made the following report dated 16th March 2000.
While the original design, shape and gradient of the channel has not yet been obtained, we have made some assumptions in this regard in order to assess the impact of the weeds on the hydraulic capacity of the river. The following data has been used for the assessment.

- Channel bottom width 3m
- Batter slopes 1v to 2.5 h
- Channel gradient 1-15000
- Depth 1.5m

Using the Chezy equation with the coefficient for the channel roughness of 0.025, which represents a channel in good condition, the flow capacity of the channel is 3.1 cumecs. For a channel with weeds the coefficient of roughness increases to 0.035 and channel capacity reduces to 2.2 cumecs. This represents a 30% reduction in the flow capacity of the channel and can be expected to result in the increased flooding of the floodplains along the river. Similarly, the period of inundation would increase as the river will take longer to remove the floodwater, leading to loss of pastures on the flats.

Weed growth present in the Eumeralla River is both heavy and extensive, and higher values for the roughness co-efficient could be expected and we consider that a reduction in flow capacity of greater than 50% could well occur given normal winter flows.

CURRENT MANAGEMENT CHALLENGES
There is no formal management for dryland rural drainage in Victoria. Formally, this was provided for by the Drainage Areas Act 1956.

Presently, rural drainage is only partially managed by the landholders who receive benefit from the drainage system. There is no mechanism for raising funds or getting agreement on what needs to be done. Any works that are done are typically funded by an individual landholder in an attempt to allieviate their own flooding issue. Works are generally not co-ordinated to achieve the best results.

The current approvals that can be required to perform maintenance work on drainage systems include:
1. Environmental Protection and Biodiversity Conservation Act (EPBC Approval)
2. Water Act (Works on Waterways Permit)
3. Flora and Fauna Guarantee Act (FFG Approval)
4. Crown Land Approval
5. Planning and Environment Act (Planning Permit)
6. Wildlife Act (Approval)

Increasingly, obtaining the approvals is getting more difficult and costly. The approvals are ad hoc and often seen as draconian by the landholders for the obligations it puts on them - particularly in regard to flora and fauna. It is environmental issues that are increasingly precluding any works to occur on a infrastructure system that was designed to drain land. The environmental values are there and have adapted to the drainage infrastructure over time - landholders should not be disadvantage because of these additional environmental values.
The Eumeralla River Restoration Committee is increasingly frustrated with the red tape surrounding drainage management. Proposed drain maintenance works are being hampered by legislative requirements such as native vegetation retention and threatened species protection.

At this stage it is not clear whether such requirements mean that the continuation of the rural drainage schemes is untenable into the future.

An example of our frustration begins 20th October 2008. A motion was passed at our meeting on that date to clear around 9000m of the southern end of the main drain.

At the suggestion of the Glenelg Hopkins CMA we entered into a pre approval process which would help to identify what legislative requirements would be needed before submitting a works on waterways application.

Information regarding the proposed works and there location was forwarded to the Department of Sustainability and Environment (DSE) and the Department of the Environment, Water, Heritage and the Arts (DEWHA) regarding the requirements.

The DEWHA responded in a letter dated 27 November 2009, “We have examined the circumstances surrounding the proposed clearing and routine maintenance of drainage lines and are of the opinion that this action is a lawful continuation of use under the EPBC Act, as such, no approvals are required under the EPBC Act.”

The approval by local DSE seemed to be the most difficult to acquire. After 15 months of trying to negotiate with DSE through both the committee and the CMA no action was taken and a Works on Waterway permit application was then submitted on 15th January 2010.

In a meeting on the 21st October 2010 with CMA, DSE and myself, DSE stated that a works on waterway permit application would be objected to by DSE due to State and Federal Government threatened species legislation. It then took until the 14th November 2011 before we then received a formal objection letter regarding the works on waterway application.

No-one asked the biodiversity to move into the drains, but we are happy to have it. In fact they are there because of the way we have managed the drains for over a century. But it feels as if we are being punished for the habitat we have provided the biodiversity to adapt too.

As a matter of interest around $425,000 of taxpayers’ dollars has been spent trying to resolve this issue. This does not include the time and money the landholders of the Eumeralla Drainage Area have spent trying to resolve this, and getting nowhere.
CASE STUDY: THE COST OF FLOODING ON LANDHOLDERS
Dairy farmers Martin and Debbie farm at Glengleeson West Road Macarthur and have drainage frontage in the Northern Eumeralla Drainage Area. Martin has been kind enough to supply a breakdown of the expenses to his business when the drainage scheme is not properly managed.

Case study: Martin and Debbie
Dairy Farmers
Northern Eumeralla Drainage Area

Total Farm Area 188 Ha
Farm Area Subject to Inundation 28 Ha

In 2010/2011 the area of the farm subject to inundation was inundated due to poor drainage in the Eumeralla Drainage Area. Therefore only 160 Ha of the total farm area was productive in that year.

The farm grossed $700 000 off the 160 Ha. By averaging this out across the Ha in production you could assume that the production that year was $4375 per Ha.

Due to the loss of the 28 Ha to inundation from the drainage system, the farm could assume a loss of gross income in the order of $122 500. This equates to a 14.9 % loss of income in 2010/2011. These figures do not include the cost that would be incurred for extra cows and fertilizer that would need to be purchased if the land was productive.

Additionally to the loss of income, additional costs are incurred due to the land being inundated for a long period of time. The below table indicates the pasture renovations that need to take place on the 28 Ha in order to rehabilitate the land post inundation.

**SEED COSTS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
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<tbody>
<tr>
<td>Annual summer crop $100/$120 per Ha</td>
<td>$3000</td>
</tr>
<tr>
<td>Autumn perennial grass seed $250 per Ha</td>
<td>$7000</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>$10 000</strong></td>
</tr>
</tbody>
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**GROUND WORKING COSTS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disc cultivation $50 per Ha</td>
<td>$1500</td>
</tr>
<tr>
<td>Power harrowing $100 per Ha</td>
<td>$3000</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>$4500</strong></td>
</tr>
</tbody>
</table>

**SOWING COSTS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seed drilling summer crop $60 per ha</td>
<td>$1500</td>
</tr>
<tr>
<td>Seed drilling perennial grass $60 per Ha</td>
<td>$1500</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>$3000</strong></td>
</tr>
</tbody>
</table>

**FERTILISER AND SPRAYING COSTS**
<table>
<thead>
<tr>
<th>Service</th>
<th>Cost 1000 Ha</th>
<th>Sub Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roundup Spraying $20 per Ha</td>
<td>$600</td>
<td></td>
</tr>
<tr>
<td>Contract Spraying $15/ $20 Per Ha</td>
<td>$450</td>
<td></td>
</tr>
<tr>
<td>Fertilizer DAP @ 100 Kg per Ha $70 per Ha</td>
<td>$1050</td>
<td>$2100</td>
</tr>
</tbody>
</table>

**TOTAL PASTURE RENOVATION** $19 600

Given the Eumeralla Drainage Area services 3120 Ha if we assume the same loss of productivity has occurred the potential loss of income across the entire scheme equates to $13 650 000. At current day land prices the value of the land inundated is in the order of $32 000 000.

**FUTURE MANAGEMENT OF THE DRAINAGE AREA**

The following issues would need to be addressed in order for a drainage scheme to be managed adequately:

- Clear legislation/policy around drainage
  - Including policing and penalties for people who do not manage the scheme to a certain standard
  - A formal way to set up and manage a scheme

- Government facilitation
  - Help to define the standard to which the scheme is to be maintained.
  - Aid in the development and updating of management plans for the drainage areas to be kept to that standard
  - Collect levies from landholders within the drainage area for works
  - Be present at the management committee meetings
  - Provide assistance to the committee to get the approvals and permits required to carry out the management plans.

- Succession of the drainage area:
  - A formal way to ensure that when a beneficiary of the scheme changes hands the buyers are fully aware of their obligations to the scheme.

The government has supported the maintenance and development of these drainage areas in the past and it seems that due to the legislation it is being returned to a wetland. If this is the case the landholders should be paid compensation for the loss of productive land.

From our point of view there are three options going forward:

1. The environmental value must be purchased from landholders. This would require all the land drained being purchased by the Victorian Government.

2. Compensation is sought from Government by landholders through the legal system

3. Government provides the policy/legislative tools to enable an appropriate Authority (such as the CMA) to establish and oversee the management of the drainage schemes without interference from other authorities (ie DSE)
INQUIRY INTO RURAL DRAINAGE

It’s been 21 years since the Drainage Areas Act 1958 was repealed

It’s been 19 years since The Shire of Minhamite was abolished, resulting in our valuable records being destroyed.

It’s been 9 years since we were notified that we are no longer permitted to control in-stream vegetation using herbicides.

It’s been 2 years 4 months since we were denied a maintenance permit on environment grounds.

It’s been 2 years 3 months and 9 days since I informed Dr Denis Napthine via letter, the problems of rural drainage.

It’s been 364 days since the Inquiry Into Flood Mitigation was held.

10 months since Mr Ryan Smith Minister for Environment and Climate Change reassured Dr Denis Napthine that the DSE are looking into the matter.

Today the 13th February 2013 we have a Inquiry into rural drainage.

This is a clear case of where local government, local knowledge with local people got the arse and was replaced with a grand idea; The Water Act.
We have had no co-ordination, management or leadership from the Victorian Government at all
There no consistency or equality between the different drainage areas. Any landholders within the Strathdownie or Yatchaw drainage areas can count their lucky stars that they don’t have to put up with the tripe that we are subjected to!
There has been occasions where the DSE refuse to reply to letters from the GHCMA and the environment minister expects us to have faith in the DSE

LEGAL OPINION

In January 2012, I had conversations with a lawyer, in regard to the legal situation with future maintenance of the Eumeralla Drainage Area.
The Lawyer was Mr Tobin SC, He is also a landholder within the drainage area and his father Pat was a past president of the group for many many years.

To paraphrase the conversation, Tim Tobin SC said that it could be argued that we can claim ‘ownership via contribution’ of the drainage channel.
The pioneering selectors paid countless men with hand tools, to dig, or excavate the channel. He went on to say that this equity can be ongoing, and can be claimed by the present owners as their property. From the pioneering times, to the present day, the landholders always paid special levies for the routine maintenance. Although they don’t
have physical ownership, it has always been ‘common property’ that essentially services their own farms.

Under Section 51 (xxx) of the Constitution of Australia, to acquire property, there needs to be ‘just terms compensation’ and fairness. By the DSE denying the landholders any future maintenance, due to the presence of threatened biodiversity, they are in-fact taking vital and valuable property from the landholders’ remembering their ‘ownership via contribution’. Also by allowing prolonged inundation they are also taking our productivity. There is no fairness!

Do the Commonwealth Government want to steal from the landholders? No. Under the Environment Protection Biodiversity and Conservation Act, section 43A and/or section 43B they have a clause ‘lawful continuation of use’. The department is sympathetic to the needs of the farming community. The EPBC act is not about preventing people from making a living off their land. There is ‘fairness’ in their legislation.

The Eumeralla Drainage group were denied a permit for drainage maintenance because of the following:

1-Removal of native vegetation protected under the planning and environment act 1987
My comment; vegetation in waterways was an enormous problem highlighted in the Flood Mitigation Inquiry and needs to be addressed.

2-Changes to the hydrology of the river which flows into the Nationally significant Wetland.
My comment; the changes to the hydrology occurred when the pioneering selectors began the drainage works in 1879. You can't un-scamble an egg, and if anyone wants to try, they can pay!

3-Risk to the populations of species protected under the Flora and Fauna guarantee Act 1987, including Growling Grass Frog, Swamp Skink, Dwarf Galaxias, and Yarra Pygmy Perch.
My comment; Under the Flora and Fauna Guarantee Act 1987 section 26 the DSE can place an ‘Interim Conservation Order’. If this stretch of drain is so important to the above species. why hasn’t the DSE placed an ‘Interim Conservation Order’ on the Eumeralla Drain?

CONCLUSION

Scottish moral philosopher Mr Adam Smith (1723-1790) and pioneer of political economy.
Accordingly he wrote, the expectation of profit from ‘improving ones capital’ rests on private property rights. It is an assumption central to capitalism that property rights encourage their holders to develop the property, generate wealth, and efficiently allocate resources based on the operation of markets.

From this has evolved the modern conception of property as a right, evolved by positive law, in the expectation that this will produce more wealth and better standards of living. He
also stated that one of the sacred laws of justice was to guard a person’s property and possessions.

Just like many country landholders belong to their local CFA to protect their properties from fire and tempest, the local landholders in the Eumeralla Drainage Areas have been active members of past and present Eumeralla Drainage Committees, to minimise the damage from flooding and prolonged inundation! Common sense and local knowledge was plentiful prior to the Drainage Areas Act being repealed. Now common sense has dissipated in to a DSE pantomime!