

Truth, Honesty & Integrity or the Slippery Dance of the State Authorities.

- Time for a bureaucratic revolution

BOOK 17

Malcolm Gardiner



This book is dedicated to and in acknowledgement of the inspiration gained from...

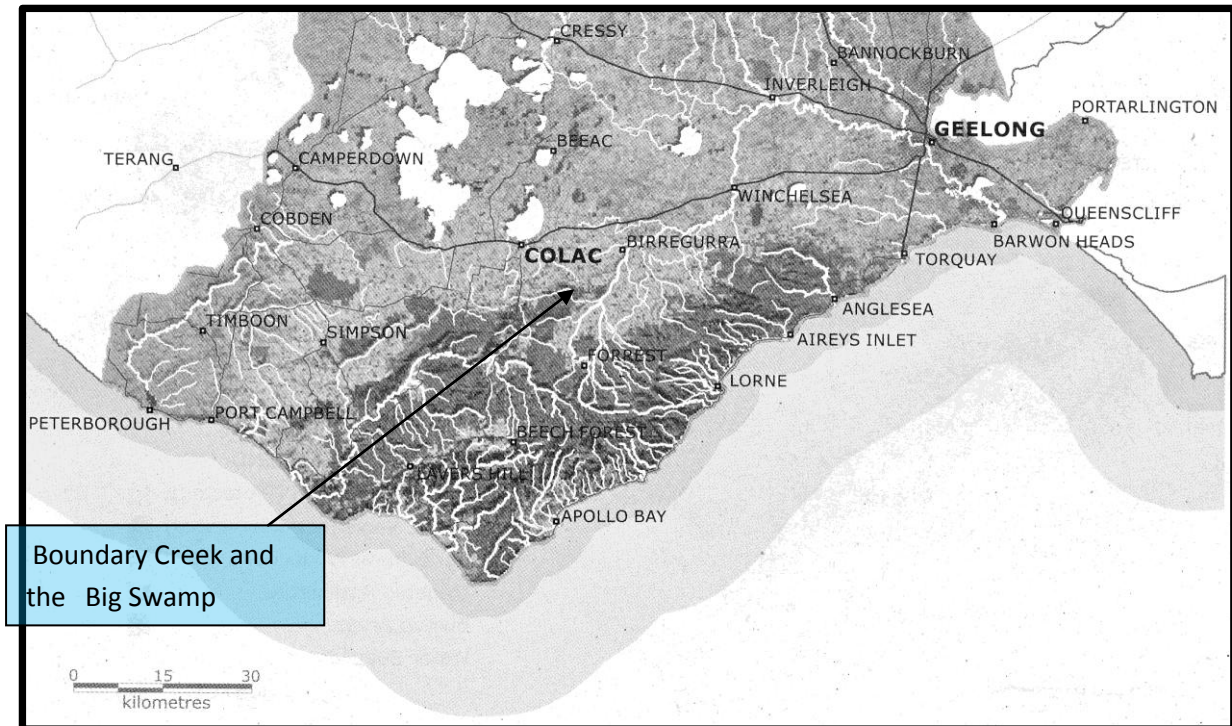
a small group of thoughtful, enthusiastic and committed citizens, my wife Kay, for the 40 residents of the Kwarren and Gellibrand valleys who attended the first meeting at the Gellibrand Hall in 2006; the 230 people who attended the Kwarren groundwater extraction meeting in Gellibrand in October 2007; the printers of books and other material; the placard makers; the emailers; the letter writers; the proof readers; the solicitors; the T- Shirt makers; the web site co-ordinators; the regular attendees of the Wednesday night gatherings over the last 5 years; the car sticker designers; the big photos maker; the young and the elderly alike; the Pointers; the attendees of meetings as far away as Warrnambool, Geelong and Melbourne; the librarians; cartographer; the people in contact with the multitude of organisations; the media AND especially those people in the background facilitating and making it possible for the “workers” to do their “work” of scrutinising and ensuring that the various State Government statutory authority officials do the work they are paid to perform.

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It never ceases to amaze me how many people are capable of providing that spark of enthusiasm, drive and willingness to contribute and persevere against seemingly stacked odds. Without this support it would be very easy to be disheartened, dispirited and discouraged by bureaucratic obfuscation.

We are indeed also very fortunate to be living in a country where the freedom still exists enabling its citizens to openly voice their objections to an issue and be permitted to pursue this issue with vigour.

April 2012



Location Map: source Corangamite Catchment Management Authority regional Catchment Strategy⁽⁹⁹⁹⁾

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April 2012

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The following summarised introductions from the Otway Water Books found at the website www.otwaywater.com.au give a broad brush outline of the social, economic and environmental impacts and issues experienced along Boundary Creek in the Otway Ranges.

BOOK EIGHT (October 2008)

“One Giant Environmental Footprint.”

The Barwon Regional Water Authority has been extracting large volumes of groundwater from the Gerangamete Groundwater Management Area on and off since the drought of 1982–83. The water is extracted between 500 to 600 metres below ground level, at the Barwon Downs borefield. It is treated and then conveyed and used in the Greater Region of Geelong. The environmental and social impacts of this pumping regime have been profound. Since Barwon Water had indicated that it was going to begin test pumping from a borefield at Kwarren with the aim of extracting 16 000 ML/year, Barwon Water’s Sustainable Management Practices came under scrutiny from the Kwarren and Gellibrand community residents and landholders.

This scrutiny indicated that there had to be a monumental shift in Barwon Water’s so called sustainable groundwater management practice before extraction of any kind could be allowed to proceed at the Kwarren or any other borefield.

Earlier books provide documentation and referenced material that clearly shows groundwater extraction from the borefield at Barwon Downs has had a profound detrimental affect on the area surrounding this borefield. There are a number of indicators presented in this book that suggest the detrimental sphere of influence maybe more severe and covering a wider area than first thought. Regardless, it was blatantly obvious that a full and comprehensive review of groundwater extraction in the Barwon Downs area is long overdue and this review should be conducted before any work at the Kwarren Borefield commenced.

BOOK NINE (September 2009)

“Barwon Downs Borefield Flora Studies 1986-2009.”

In the late 1980s the Government of the day repeatedly stated that the extraction of groundwater, unlike surface water impoundments (dams), did not create environmental problems. Consequently the Geelong and District Water Board (now Barwon Water) was encouraged to develop the Barwon Downs borefield.

“Because the use of groundwater usually has few adverse environmental effects, it is often favoured over surface sources which can have marked effects.”

(Report No 18 Department of Water resources, June 1988.)

Unfortunately it has been found that there can be serious impacts when groundwater is extracted faster than it can be replenished. Streams, springs and wetlands begin to dry up; potential acid

sulfate soils can become a major concern and there is substantial argument to support the notion that salinity problems can result. These problems impact on both the well being of humans and the environment.

This book highlights detrimental impacts that have resulted from groundwater extraction along Boundary Creek at Yeodene and presents an entirely different result to the published results of a study conducted by Sinclair Knight Merz on behalf of Barwon Water.

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Barwon Water released a media statement regarding the Sinclair Knight Merz report (April 23, 2009. REF: 063/09) that was headed **“Flora study inconclusive.”** It will be demonstrated that conducted differently, this flora study would have had another and more plausible result. If the *“conducted field surveys, reviewed groundwater levels and assessed new and previous data,”* had been completed as suggested in this flora study, the results would have been totally different.

This Barwon Water Media release contains half truths, misleading information and incorrect statements that masks some incredibly poor research.

However, the most damning indictment being that the flora study recommendations made in 1986, 1993 and 2002 were never implemented. As a consequence decades of crucial, comparative baseline data has been lost.

A compelling case is presented that the groundwater extraction licence at the Barwon Downs borefield must be reviewed immediately. This review cannot be left until 2019 when Licence Number 893889 expires. Social and environmental impacts cannot be allowed to continue for another 10 years.

BOOK TEN (November 2009)

“Waves of Obfuscation.”

(Obfuscation – stupefy, bewilder, muddle, confuse, obscure,)

Considering that the planned borefield investigations at Kwarren were to be conducted in a similar fashion to the 1987 Barwon Downs borefield investigations, eight groups of local residents appealed against Southern Rural Water’s October 2008 issuing of a licence to Barwon Water to conduct a test pump of groundwater at Kwarren.

Otway Water Book 10 is a continuation of this story and is a compilation of studies, irresponsible actions, cover-ups and failures to act.

(P.S. In 2009 Barwon Water withdrew its application to pump at Kwarren 24 hours before the VCAT hearing was to commence, bringing about the postponement of a \$200 million development.)

“Boundary Creek and the Big Swamp.”

This book examines and discusses the available data on the connectedness between the surface and groundwater flows of Boundary Creek and the Big Swamp. The Otway Water books preceding this one have dealt with...

- Extensive groundwater extraction – followed by Boundary Creek drying for the first time on record.
- Pre-pumping environmental studies not done.
- Studies post pumping inadequate, inaccurate and based on dubious information.
- Decades of flora recommendations largely ignored.
- Permissible Annual Volume recommendation for groundwater extraction being exceeded by a factor of 5.
- Southern Rural Water granting a 15 year groundwater extraction licence.
- Licence conditions being broken.
- Licence not scrutinised, reviewed or adequately policed by Southern Rural Water.
- Local knowledge largely being ignored.
- Platypus colonies being wiped out.
- Blackfish and other instream life forms decimated by acidic waters and no flows.
- Springs and wetlands drying out.
- Intensity and incident of fire dramatically increasing.
- Environmental flows not being allocated.
- Supplementary flows released into Boundary Creek and then disappearing into the depleted aquifer.
- No consideration being given to stygofauna (groundwater life forms), and
- the evidence pointing to a serious Actual Inland Acid Sulfate Soil problem.

If planned studies determine conclusively that there are Actual Inland Acid Sulfate Soils (AIASS) present in the Big Swamp the next step will be ascertaining the cause. Considering the extended drawn out periods taken by statutory Government authorities to commence and conduct such investigations this could take a considerable amount of time. Even with extensive circumstantial evidence that there is an Actual Inland Acid Sulfate Soil (AIASS) problem in the Big Swamp area the site has only been visited by representatives of the Colac Otway Shire (as at February 2010). Over 12 months earlier the first written formal complaint was sent to the Environment Protection Authority (Geelong). Formal complaints were also sent to the Department of Sustainability and Environment, Barwon Water, the Colac Otway Shire and Southern Rural Water. The Corangamite Catchment Management Authority was also consulted. The only authority to be proactive has been the Colac Otway Shire. Other authorities didn't bother to reply; said there wasn't an identified problem; stated it was someone else's responsibility or indicated investigations will be carried out in the future.

If authorities are so tardy investigating formal complaints of toxic acidified, heavy metal laden waters along Boundary Creek, it is anticipated that investigating the cause would take considerably longer. Pre-empting that Actual Inland Acid Sulfate Soils will be proven to exist along Boundary Creek this Book looks at the historical data available in an effort to determine the reasons for the creation of these soils. Also some of the commonly accepted ideas put forward by these very same statutory authorities are challenged.

“The Threat to Permanent Freshwater Peat Swamps & Wetlands of the Gellibrand River and Barongarook Creek Catchments – Otway Ranges.”

Inland Acid Sulfate Soils (IASS) is a newly recognised problem for soils on the Australian continent. Coastal Acid Sulfate Soil problems have been part of Australian history for many years. However, because of the severe and extended drought over the last decade previously saturated, innate Inland Acid Sulfate Soils have dried out and been exposed to oxidation causing serious ecological, social and engineering structural problems. Leaders in the area of Inland Acid Sulfate Soils began their serious studies in the 1990s.



Big Swamp IASS 2009

When a possible site of Inland Acid Sulfate Soil was recognised in 2008 in a freshwater peat swamp and wetland in the Otway Ranges, a site that appeared to be producing large amounts of sulphuric acid, toxic gases and heavy metals, Victorian State Government authorities were asked to investigate this occurrence.



Concrete cancer from acid waters.

Every indication pointed to groundwater extraction as the culprit. After 15 months of inaction by responsible authorities, a dedicated group of concerned Otway residents decided to seek the necessary expertise to conduct a comprehensive evaluation of the site. The site being situated along Boundary Creek in the vicinity of the Big Swamp freshwater peat wetlands of the Barwon River Catchment, Otway Ranges, Yeodene, Victoria, Australia.



Boundary Creek after March 2010 peat fire in the Big Swamp-supplementary water released from the Colac Otway Pipeline disappears into the depleted wetland.

In an attempt to ascertain the potential risk to permanent freshwater wetlands in the Gellibrand River Catchment of the Otway Ranges, sites outside the direct drawdown effect from the Barwon

Downs groundwater extraction, were also included in the Inland Acid Sulfate Soils study. These additional sites are located in the Loves Creek and Barongarook Catchments.

A concerted effort failed to source studies specifically dedicated to freshwater peat swamps and wetlands. Studies that were found on Inland Acid Sulfate Soils were not peat swamps and seemed to concentrate on the causal factor being the extended drought of the late 1990s and early 2000s. However, the major causal factor along Boundary Creek pointed to the extensive extraction/mining of the deep water aquifer at Barwon Downs. It would also appear that the Big Swamp was unique in that it was a freshwater site and as a consequence could reasonably be named as a Freshwater Inland Acid Sulfate Soils site.

Chapter three of this book summarises the scientific research undertaken by the Environment Analysis Laboratory of Southern Cross University (March 2010) in the Big Swamp freshwater peat wetlands. This research also identifies several nearby permanent freshwater peat swamps and wetlands in the Barongarook Creek and Gellibrand River Catchments of the Otway Ranges that would be under threat if other groundwater extractions were to be conducted and managed in the same fashion as at the Barwon Downs Borefield.

The first chapter of this book explores the work of Professor Lance Endersbee and its applicability to the Freshwater Inland Acid Sulfate Soils of the Gerangamete and Gellibrand Groundwater Management Areas. Endersbee presents a radically different explanation for the origins of the water held in deep water aquifers. His convincing arguments challenges the 150 year old theories on which much of today's hydrological work is based.



Three wetlands under threat – in Barongarook Creek Catchment, within a few kilometres of Colac.

the

Audre Lorde has this to say...*“I realise that if I wait until I am no longer afraid to act, write, speak, be, I’ll be sending messages on a ouija board, cryptic complaints from the other side.”*

Yvon Chouinard – Patagonia Clothing. *“If you have the ability, the resources and the opportunity to do good and you do nothing that can be evil.”*

Einstein’s idea that *“the significant problems we face today, cannot be solved at the same level of thinking that created the problems,”* is worthy of consideration. Perhaps it could be said that the significant problems we face along Boundary Creek cannot be solved by the same consultants, managers and State Government authorities that created the problems.

INTRODUCTION

Even though this book reveals and exposes alarming shortcomings of governance within an isolated area of the State of Victoria, it is none the less of serious consequence and concern to the social, environmental and the economic wellbeing to a significant area of Victoria in the Otway Ranges. Whether this is indicative of a wider problem will be for others to judge.

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Pre the 1990's most government authority staff included expert personnel within their ranks capable of carrying out and maintaining their areas of responsibility without fear or favour. However, by the end of the 1990's this was no longer the case. Increasingly government authority staff have been cut back. Unfortunately, it has been the experienced expert staff and the workers at the "grass roots" level that have been sacrificed.

This has been acknowledged by the Liberal coalition party when in September 2010 it had the following to say, "*Put simply the Government does not have the skills to manage groundwater in the state effectively.*"⁽⁴³⁾

Throughout this turmoil of staff changes and cutbacks the "desk sitters" and "kingdom builders" have been able to maintain their jobs and status. Consequently whenever there has been a need for studies, research and projects to be conducted the authorities have had to contract the work out to private enterprise or semi government bodies. On the surface this competition would appear to be in the best financial interests of the public purse, but this is too often at the expense of honesty, integrity and thoroughness. It takes a game and financially suicidal company to return with findings that do not reflect the wishes of the contracting authority. In some cases the contracting brief is so tightly defined that the restricting scope of work prevents a true and honest assessment of the situation.

Community involvement in such projects has come to be seen by the authorities as meddling and community participation can now be best renamed "community tokenism." When and if reports are made available any lay person scrutiny or criticism of findings is not tolerated, never encouraged, is often ignored and belittled.

Whenever an authority is persistently pursued with what would appear to be a reasonable criticism, a barrage of evasive strategies is then employed. These avoidance strategies are well versed and in most cases cause the pursuer to give up in despair wondering what is the use of trying. Lack of funds, not our responsibility, extended delay to requests, we will get back to you and never do, are some of these tactics employed.

With this all said and done there would appear to be sufficient law, acts of government, guidelines and policy to adequately deal with the devastating issue of water extraction in the Otway Ranges, to ensure that the groundwater resource is managed responsibly and in a sustainable fashion. However, the implementation of these documents by the authorities goes nowhere near delivering their intended outcomes.

Some may ask, "Can you summarise the contents of this book?" When the State Ombudsman officer asked to have thirty pages of a formal complaint over queries and breaches of the Barwon Downs Borefield licence summarised, he was told that the thirty pages was a summary. In a similar vein this book is only a fraction of the complete story.

CHAPTER ONE

- the Bureaucratic Structure.

When attempting to examine the structure of the various authorities of the State Government and how they relate to one another, a term that comes readily to mind is, "Just like a Dog's Dinner." Something that is so mixed up that the individual components cannot be easily defined, the meaning and intent lost, the original objective(s) of each component no longer discernible and the direction being followed blurred and indistinct.

However, with the Boundary Creek issues it is known which member of parliament is responsible for each of the various state authorities. (Source: Hon., Terry Mulder's Colac Office, 27 October 2011.)

Hon Ryan Smith CCMA, DSE, Parks VIC, EPA
Minister for Environment & Climate Change
Level 17, 8 Nicholson Street
MELBOURNE VIC 3003

Hon Peter Walsh Barwon Water, Southern Rural Water, Department of Primary
Industries - Ag & Food Security
Minister for Water
Level 20, 1 Spring Street
MELBOURNE VIC 3000

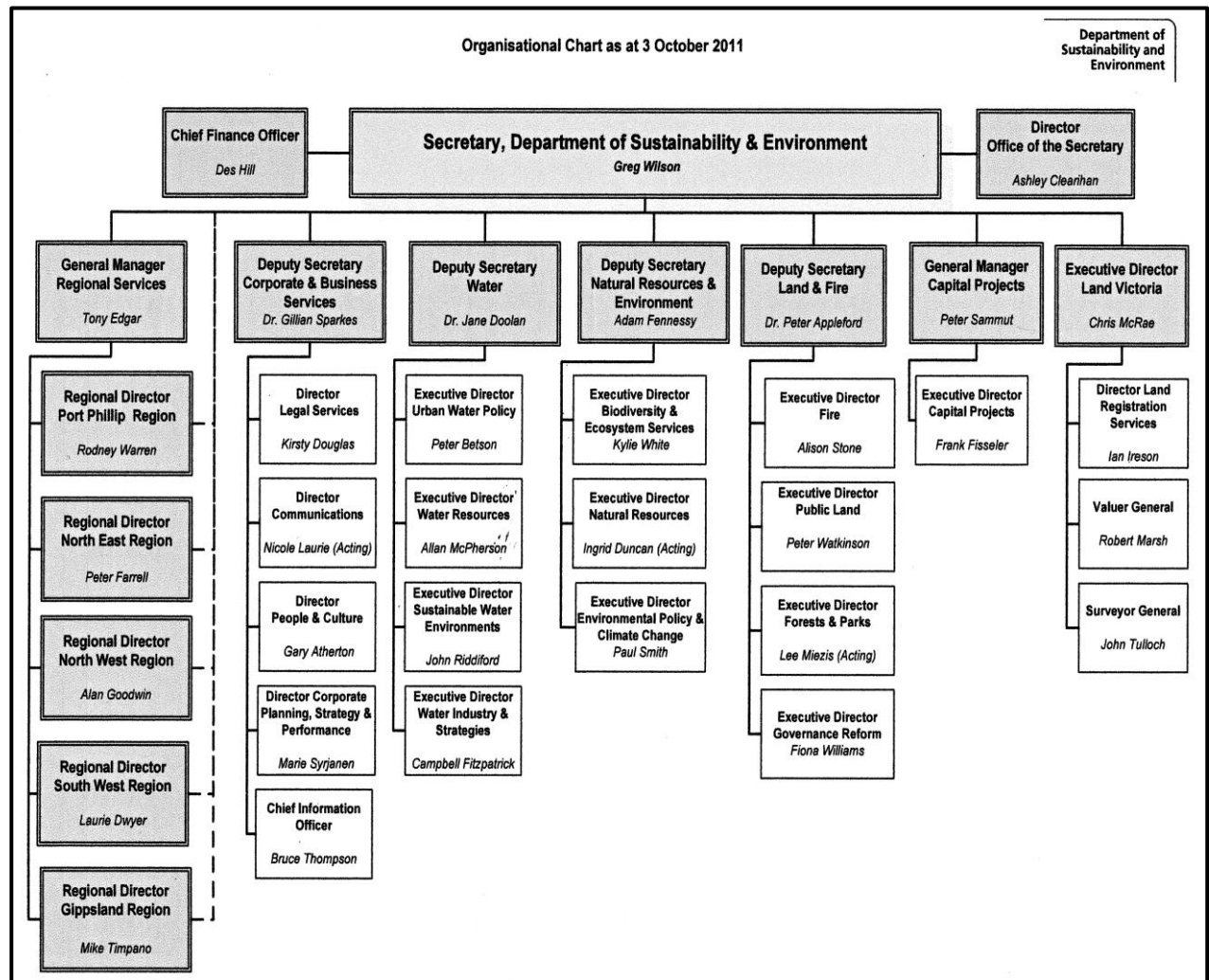
Hon Michael O'Brien Department of Primary Industries - Energy & Resources
Minister for Energy & Resources
Level 22, 1 Spring Street
MELBOURNE VIC 3000

Hon Jeanette Powell Colac Otway Shire
Minister for Local Government
Level 17, 8 Nicholson Street
EAST MELBOURNE VIC 3002

Attempting to obtain a detailed structure of these State Government Authorities has not been an easy task. In fact the process was becoming so laborious and time consuming that the decision was made that perhaps finding out about these structures would probably achieve little and the time being spent could be better used elsewhere. Suffice to say that to the outsider the structure of these bodies appears to be like a tangled, jumbled web. The results of a concerted effort to examine five of these authorities are included below, DSE, DPI, Parks Victoria, Barwon Water and the EPA.

The upper echelon of the **Department of Sustainability and Environment's** (DSE) structure was the easiest to obtain (see page 14). However, there is no mention of the multitude of employees charged with carrying out the directives of these desk bound officers.

The DSE web site as at 20 November 2011 list 51 Acts that this department administers, twelve of which refer directly to water.



(Courtesy of the Hon. Terry Mulder's office, Colac)

The Department of Primary Industries (DPI) administer and respond to queries regarding 38 major acts. There are seven core services that the DPI lists on its web site, one of them being the "[legislation and regulation ensuring our natural resources are well managed and protected](#)." The DPI web site did not appear to have a structure formatted.

Parks Victoria on its web site include the following documents most relevant to the management of Victoria's parks and reserves:

- 13 International treaties, conventions and initiatives,
- 10 Commonwealth legislation,
- 11 National policies and initiatives,
- 43 Victorian legislation,
- 18 Victorian policies and strategies,
- 6 Parks Victoria strategies, and
- 5 Codes of practice.

Barwon Water complies with the following state and federal legislation:

- 11 Acts,
- 6 International Management Systems, and
- 3 By-laws.

The Environment Protection Authority website states that: *“EPA helps protect Victoria’s water environments through mechanisms including environmental laws, policies and regulatory controls, and by working in partnership with Victorian communities, including businesses, government, individuals and groups.”*

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To ascertain what the laws, policies and regulatory controls are, became a “mission impossible” type exercise, other than to note there are the Environment Protection Act, Special Environment Protection Policies and that

- the EPA is involved in 10 water related acts, and
- has compiled numerous publications numbering well over a thousand.

The futility of attempting to converse with the EPA to obtain more detailed knowledge or the operation procedures of the EPA will become apparent as the chapters unfold.

It would be interesting but not necessary, to delve into the structure of the Colac Otway Shire, the Country Fire Authority, the Corangamite Catchment Authority and Southern Rural Water to understand and appreciate the complexity of these authorities. However, it is quite obvious that State Government Authorities weave an enormous tangled web, difficult to negotiate through and almost impossible to gain an outcome when the authorities withdraw into this maze.

Despite a proliferation of Acts of Government, policies, regulations and guidelines the nine State Government authorities dealt with are incapable of finding one piece of documentation that gives them enough confidence to tackle and investigate the demise of a significant groundwater dependent ecosystem that has impacted on the social, economic and healthy wellbeing of Victorian citizens.



CHAPTER TWO - the Slippery Dance.

The decision makers in the State Government bureaucracies carry the saying, *"It is not our responsibility,"* too far, making it an excuse for not intervening with wrong doings being committed around them, leaving it to others to do what they should be doing. In the end not one authority does anything of consequence. However, the administrators of these authorities will claim they have areas of responsibility that they diligently carry out. This is a misnomer and what readily comes to mind is the late 20th century, early 21st century barn dance called the "The Slippery Dance of the State Authorities." Unfortunately this dance appears to be still practised by many State Government Authorities to this very day.

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The dance steps are as follows:

One step forward and make a lot of noise.

Two steps backwards.

One step sideways after passing your partner on.

Then slide away quietly and unnoticed.

The pretence by State Government authorities that efforts are being made to resolve matters are readily portrayed in the jargon used and the processes employed to convey busyness. As a result the processes of governance become extremely obscure and confusing.

When meaningful efforts to correspond, interact face to face and or converse over the telephone, these efforts are thwarted with rhetoric and spin. While being flung around the dance floor it is so easy to think of the game called "Bullshit Bingo." The rules of this game are very simple. Each time a rhetoric term or spin is uttered, that particular phrase is covered on a game board (see page 17). Once a line has been covered diagonally, vertically or horizontally the holder of this card jumps up shouting out "Bingo." Unfortunately the winner is none the wiser, more confused, gets nothing as a prize and sits down disillusioned with the whole process.

Yvon Chouinard of Patagonia Clothing and a champion of the pursuit of truth, honesty and integrity had this to say, *"If you have the ability, the resources and the opportunity to do good and you do nothing, that can be evil."*

The Game Sheet.

You may not be aware that... <i>When one is fully aware and probably understands the situation better than the speaker</i>	Although this is outside our area of responsibility... <i>When in fact it isn't</i>	You misunderstood... <i>When there has been absolutely no misunderstanding</i>	Maps have been provided to you. This satisfies the licence conditions... <i>But doesn't answer the query</i>	I will follow that up for you... <i>When in the past nothing has ever been followed up</i>	If you have any further queries please don't hesitate... <i>BUT best to converse as there is no record</i>
I will call you... <i>Just like you have promised so many times before but have lost track of time</i>	We believe... <i>Knowing full well that what is to come is only a half truth, not the full story</i>	I am advised that... <i>Knowing full well that the advice is of doubtful credibility, needing further research</i>	As you well know... <i>A presumption made that the answer being asked for is already known.</i>	Considered in its entirety... <i>That overlooks the finer details and gaping black holes</i>	We advocate strongly that... <i>What we say is correct no matter what you have to say</i>
Give me a week or so... <i>Which can be anything from a week to years</i>	The evidence doesn't show... <i>When in fact it does, when placed under close scrutiny</i>	It is extremely difficult to pinpoint... <i>Often used as an excuse for doing nothing</i>	We will develop a program to clarify... <i>But never do it</i>	What that actually means... <i>Is nothing like what it actually says</i>	We recognise the community's concern... <i>But do nothing about it</i>
Further investigations will help... <i>If they are ever implemented, let alone finished& are often seen as someone else's responsibility</i>	I would firstly like to assure you that... <i>Being said many times before instils no confidence that things will be any different</i>	We are keen to ensure that the project meets its objectives... <i>but for some reason the project objectives become lost in the politics</i>	We will ensure that interested parties and the wider community have an opportunity to...	That was just an administrative oversight... <i>A common excuse for incompetence and or lack of accountability</i>	As we have explained... <i>Even tho' this explanation is fully understood the question has nothing to do with this explanation</i>
These matters are being investigated... <i>As they have been for many years and we can assure you nothing will change</i>	I apologise that this has taken longer than anticipated... <i>193 days to process an FOI request OR three yrs to deal with a formal complaint???</i>	Don't hesitate to contact me... <i>so we can discuss matters that are not written down and future reference to these discussions can be interpreted in many ways</i>	We will initiate further studies... <i>when funds arrive but never do OR at our convenience which never arises</i>	Although it is outside our area of responsibility... <i>In other words we will make noises and dance the dance but will actually do nothing</i>	We are presently developing policy to... <i>Meaning we won't be doing a thing and you can expect absolutely no help from anyone else.</i>
We will see if a clearer picture can be drawn... <i>Knowing full well that nothing will be done other than a few cosmetic brush strokes</i>	The complex interaction of many factors make it... <i>It would be better said, "You won't see the wood for the trees and our smoke screens."</i>	It has been addressed to our satisfaction... <i>Which is an extremely low standard and it has been accepted as satisfactory</i>	All licence conditions have been followed... <i>and this is acceptable even tho' there is massive environmental destruction</i>	Please find attached... <i>Distracters and material you didn't ask for but is sure to keep you out of the way for some time working it out</i>	We will advise interested parties once... <i>i.e. sometime in the future but don't hold your hopes of receiving it before Christmas</i>

CHAPTER THREE – Circle Work

One of the training drills used in Aussie Rules Football is to have the players rotating around the oval kicking, marking and handballing. Every authority asked to investigate the causes of the demise of the Big Swamp would be selected in the first 18 if handball was the criteria for selection.

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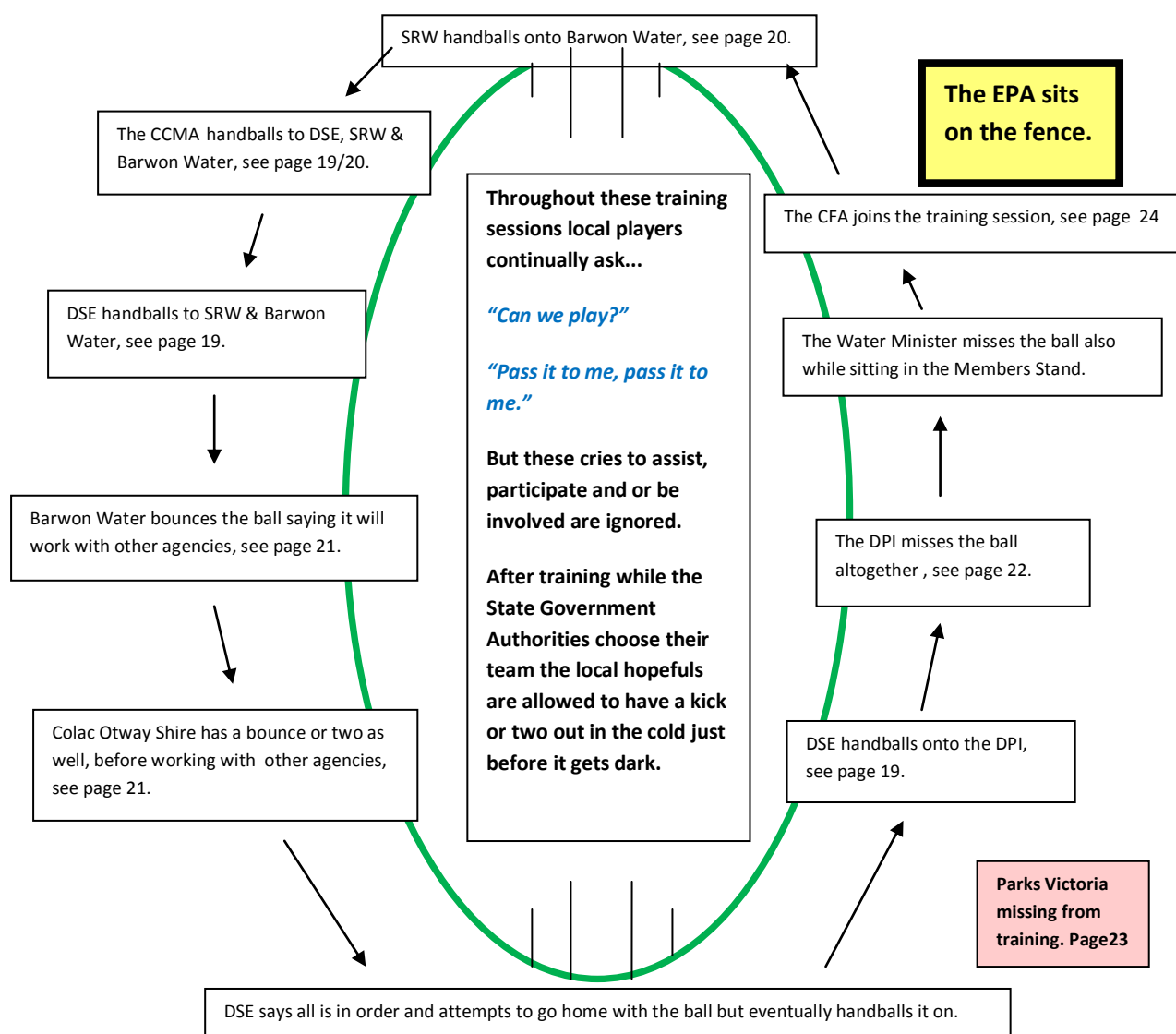
As in any enterprise there are always those who sit on the fence.
The EPA was formally asked in October and November 2008 to participate in the game but refused to “play ball,” eventually packing up its bags and leaving the scene.

“The authority (EPA) only handles management of waste acid sulphate soils being moved and deposited elsewhere.” (State Ombudsman File No:C/11/14770.)

On the 6 September 2011 in the same correspondence, a State Ombudsman investigation officer also said,

“In light of the information provided by the authority (EAP), I do not consider there is a role for this office at this time.” (6 September 2011. State Ombudsman File No:C/11/14770.)

Three years after formally being asked to be involved the EPA glibly walks away with the State Ombudsman’s office saying that it considers this to be the end of the story (EPA file Number : C/11/14770).



When the Acid Sulfate Soil (ASS) site was first discovered in the Big Swamp in August 2008 the Colac branch of the Department of Sustainability and Environment (DSE) was approached asking who would be the best contact to speak to about ASS. The answer was that the Corangamite Catchment Management Authority (CCMA) was currently funded, or was seeking funding to carry out ASS research in the district. CCMA said that this was not correct but the Department of Primary Industries (DPI) in Geelong was doing this work so ask them what has been done. This was duly done and the reply was that DSE in Colac was doing investigations into ASS. The DSE knew nothing of this and reiterated that it was definitely the CCMA's area of work and investigation.

This "circle work" had involved phone calls, personal visits and discussions that were obviously going no where. As a consequence the local Landcare Group, Land and Water Resources Otways Catchments (LAWROC), decided that as none of the state authorities were prepared to be involved, it would take the initiative and conduct some preliminary testing. Deakin University, Warrnambool Campus, did the testing of water samples and came up with alarming and disturbing results.⁽³⁰⁾ After another round of "circle work" brandishing these results, there was still no interest shown by any of the State Government authorities.

It was time to call in the "umpires" and a formal complaint in October 2008⁽³¹⁾ was sent to the Environment Protection Authority (EPA), Geelong branch, but the "circle work" continued. The issue was handballed back. The reply⁽³¹⁾ stated that the various authorities were playing within the rules:

- the DPI has been doing work in the Corangamite area,
- this can be found on the DPI web site,
- the Government coastal ASS Strategy was suggested as good reading,
- Victorian Government management authorities have applied for funding, and
- other suggestions were made that may eventually take place.

However, nothing else was to be done. No site visit, nothing. The initiative to take a course of action was handballed back to the local community. The scathing reply⁽³¹⁾ to this and the second formal complaint sent in November 2008 set in motion another round of "circle work" that is still taking place in 2012. Late in 2011 the umpiring board of management, the State Ombudsman, was asked to adjudicate. As far as the Ombudsman was concerned, this office was happy with the EPA's reply that the degradation of the Big Swamp was not an EPA responsibility.

Throughout this period of three years the "circle work" involving the following authorities continued; the Department of Sustainability and Environment, Southern Rural Water, Barwon Water, the Colac Otway Shire, Parks Victoria, the Department of Primary Industries, the Corangamite Catchment Management Authority and the Country Fire Authority. Surely these authorities would be match fit by now and confident enough to tackle a relatively easy challenge.

The Department of Sustainability and Environment.

The DSE is of the opinion that the drought is the most likely cause of the Big Swamp dilemma and that any groundwater extraction in the area is being conducted in a sustainable manner. DSE asserted that expert advice backed this stance; that Barwon Water complies with the licence conditions; an independent panel developed these conditions and no evidence of ASS was ever found when Barwon Water conducted its flora surveys. The last report was tabled in 2009.

DSE states that it keeps track of all studies relevant to the region and none of these have indicated a problem in the Big Swamp area. (DSE Ref: SEC 005678, File CS/07/3073 and DSE Ref: SEC005476, File CS/03/0455-3 and Minister for Water, Ref: DSE063402, File CS/07/3073)

"Assessing the impacts of ASS in the region falls under the responsibilities of the Department of Primary Industries (DPI)." (DSE Ref: SEC005678, File CS/07/3073.)

The final words came from Water Minister Holding stating that SRW was satisfied that the licensed extractions of groundwater at the Barwon Downs Borefield were being adhered to.

“BW recently completed a flora study as part of the monitoring requirements of the groundwater extraction licence it has for Barwon Downs. Whilst acid sulphate soil(ASS) monitoring was outside the scope of the study, no evidence of acidification was found. Nonetheless, BW is now proposing to work with agencies to specifically investigate ASS impacts at local and regional sites.” (DSE Ref: DSE063402, File: CS/07/3073.)

The secretary of the DSE also had this to say... *“Southern Rural Water (SRW) is the licensing authority responsible for administering Barwon Water’s (BW) licence to extract at Barwon Downs. SRW is satisfied that BW is adhering to its licence conditions...”* (DSE Ref:C005678, File: CS/07/3073.)

Southern Rural Water.(First notified of AIASS November 2008. Formal complaint date 4 March 2009)

Before the commencement of the 2009 flora study that Water Minister Holding refers to above, the following assurance from SRW was made.

“In accordance with condition 7 of the licence, SRW has required Barwon Water to undertake a detailed Flora Survey. Barwon Water has sought tenders from suitably qualified expert consultants and the successful tender has not yet been appointed. Barwon Water must consult with the Department of Sustainability and Environment regarding suitable consultants. The investigation into Acid Sulphate soils will be incorporated into the consultant’s analysis and the completed report is expected by mid-2009.” (No reference number was attached to this letter date 17 December 2008 from Chris Hughes, Manager Field Operations and Compliance SRW.)

Unfortunately the Water Minister and the Barwon Water players must have been looking the other way when this handball was passed to them, or perhaps they weren’t even at training, because it is beyond dispute that the Acid Sulfate Soil site on Boundary Creek was not reported in the flora survey study as promised.

However, there is another possibility. The research team doing the study was informed that the Big Swamp was to be included in the *“scope of the study.”* They did visit the site and drove a galvanised picket into the peat similar to the pickets left at other sites that they visited but in this scenario for some reason the coach must have decided that the Acid Sulfate Soil site investigation did not sit well with the team’s overall strategy of play. To incorporate the ASS site at the Big Swamp into the *“consultant’s analysis”* was dropped from the game plan.

As with the DSE, SRW⁽³¹⁾ maintains that the licence conditions are being adhered to and that the groundwater extraction is being conducted in a sustainable manner. Until recently the licence conditions were being broken on a regular basis and are well documented.⁽³⁰⁾⁽³²⁾ As for the groundwater being extracted in a sustainable manner the Victorian Auditor General’s report quoted below seriously disputes this claim. The nonsense surrounding these assertions by Barwon Water, Southern Rural Water and the Department of Sustainability and Environment that the groundwater extraction is sustainable can be likened to the training session where the player would swear on a bible that the ball was marked before it hit the ground or that it was not a throw. These assertions make it appear that the game is being played by the rules, when it isn’t. The SRW and State Ombudsman umpires blithely agree with these assertions.

Regarding the sustainability of groundwater extraction it is interesting to note a Victorian Auditor – General’s report tabled in Parliament in 2010.⁽²⁾

The report can best be summed up in one sentence taken from page (vii) of the summary.

“The Department of Sustainability and Environment (DSE) and water corporations do not know whether groundwater use is sustainable.”

As far as SRW is concerned Barwon Water is abiding by the licence conditions, therefore the Big Swamp problem has to be handballed on to someone else to make a decision as to who has the responsibility for the investigation and or cause(s) of its degradation.

“SRW is the delegated authority with the responsibility of regulating the take and use of groundwater in Southern Victoria in accordance with the Water Act 1989 and licence conditions.”

(No reference number was attached to this letter date 17 December 2008 from Chris Hughes, Manager Field Operations and Compliance SRW.) By all accounts Southern Rural Water seems to be doing a very poor job of doing this. ⁽³²⁾

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SRW has a very good record of supporting the team’s players to the exclusion of “outsiders” such as farmers who have wanted to be part of the team. The Shalley family have farmed land along Boundary Creek going back as far as 1912 and felt that they should have some say in how the team trained and played. They wanted a say in how the groundwater extraction was managed and needed SRW to be concerned and helpful. The Shalleys were concerned that Boundary Creek was drying up in summers after one of the wettest decades in recorded history;⁽²⁵⁾ By the late 1990s this family was becoming alarmed at the regular occurrence of Boundary Creek drying up in summer and wanted a say in the management of a creek that had never dried before 1984, the year after a substantial amount of water had been extracted for urban use in Geelong.⁽⁵⁰⁾

“As you may be aware, Barwon Water has had historical usage for the groundwater from the Barwon well field. This usage dates back at least until the early 1970’s in our current file. Until recently, there have been no problems associated with the usage...” (Extract from a letter to the Shalleys, SRW 23 July 1999)

The Shalley family has had a historical usage of waters from Boundary Creek going back to 1912. The summer flows into Boundary Creek come from this very same aquifer. Barwon Water has the capacity to, and does regularly, suck down the aquifer below the overflow into Boundary Creek causing it to dry up in most summers.⁽⁵⁾⁽²⁴⁾⁽¹⁹⁾

This is a classic case of a putdown, exclusion from the game and extracting the water before it reaches the surface, a convenient way to deny the Shalleys their historical usage claim. Nothing has improved and the circle work training session continues with the Shalleys sitting on the boundary fence watching it all happen.

Barwon Water. (First notified October 2008. Formal complaint dated 4 March 2009)

Barwon Water is like the player dressed in the best gear, wins all the awards for looking good, never has a hair out of place, turns up to training early, is the last to leave and never does a thing wrong. Regarding the ASS site issue on Boundary Creek in the Big Swamp Barwon Water had this to say...

“In accordance with our environmental management responsibilities to manage the groundwater resource sustainably, Barwon Water proposes to work with agencies to scope out an appropriate investigation of ASS taking into account local, regional and broader scales.” (Barwon Water Ref:55/100/0001C.)

Colac Otway Shire.(First notified of AIASS September 2008)

The Colac Otway Shire had this to say...

“Council is also pursuing discussions about the matter with various government agencies to scope out an appropriate investigation of ASS, taking into account local, regional and broader scales.”

(Colac Otway Shire letter from the CEO dated the 23 September 2009.) And so the ball is handballed on.

15 May 2009 in an email from the Mayor it stated Council was pressing hard to have DSE do a Hydrological study at Barwon Downs.

In an article in the Colac Herald 7 July 2010 the Colac Otway Shire Environmental Manager is quoted as saying:

“One of the challenges is that no single agency is responsible for managing this complex issue.”

The following quote from the same article could be taken to suggest that the “local players” in the “game” may be given the coach’s job of handling the whole team.

“By working together, these agencies will be able to help the community better manage this complex environmental problem.”

In a letter dated 14 December 2010 from the Shire CEO, this was written:

“Colac Otway Shire has actively advocated the issue of acid sulfate soils. It is not obligated or funded to act further on this matter than pure advocacy.” (Colac Otway Shire Ref:GEN00460)

And so the “circle work” continues.

The Department of Primary Industries. (First notified of AIASS August 2008.

Formal complaint date 4 March 2009)

The scoping out of an appropriate investigation involved the setting up of a Corangamite Inland Acid Sulfate Soils Multi Agency Steering Committee (CIASSMASC – the team) to look at and look for any Acid Sulfate Soil sites in the region. The brief of this committee did not include investigation of the cause(s) of any Actual Inland Acid Sulfate Soil (AIASS) sites found. Even though the Big Swamp had already been proven to be an AIASS site⁽¹²⁾ this committee felt that this needed to be confirmed and that the causes were a low priority. Surely an analysis result conducted by the Environmental Analysis Laboratory at Southern Cross University that found a S_{CR} result of 16% would be enough incentive to instigate an immediate investigation. Considering the Victorian trigger level is set at 0.03% and nothing has been done to look into the causes of the Big Swamp demise, is quite alarming and baffling.

The issue with the Big Swamp site and the reasons for the formal and informal complaints has been that not one authority has been prepared to instigate an investigation into the cause(s) of this occurrence in the Big Swamp.

The stated aim of the Corangamite Acid Sulfate Soils Multi Agency Steering Committee is:

“To improve the understanding of current and potential future sites at risk of acidification from inland acid sulfate soil (ASS) within the Corangamite Catchment Management Authority (CCMA) region and use this information to develop a risk based management response.” (Media Release 30 June 2010 from CIASSMASC)

A risk based management plan cannot be achieved unless cause(s) are investigated and determined.

Once this Corangamite Inland Acid Sulfate Soils Multi Agency Steering Committee had been formed it took over six months to have an official meeting as members failed to show or were otherwise occupied. Alarming the Department of Primary Industries was not part of the team. I asked to be able to speak to this committee and was told at the 12 August 2010 CIASSMASC meeting that the DPI had been invited to train but had refused to send down a player. In light of this I sent a formal complaint to DPI⁽³³⁾ asking that a DPI representative be appointed to the CIASSMASC. The reply to this formal complaint contained the following comments⁽³³⁾ ...

- ***“Because ASS mostly impacts public assets it is seen as the responsibility of DSE, not DPI. This is strongly suggested by legislation...”***
- ***“EPA is responsible for the management of pollutants, so if acid sulfate soils was to cause an impact, EPA should step in.”***
- ***“I have spoken to a number of DPI staff working in soils and no one knows of an invitation from Corangamite Inland ASS requesting a DPI representative.”***

At least 12 months after the CIASSMASC was formed a DPI representative attended a meeting. This was some considerable time after the brief of investigations by the CIASSMASC had been drafted

and finalised. Arguably one of the most important players had not even been invited to attend the training sessions.

The Corangamite Catchment Management Authority. (First notified of AIASS January 2009. Formal complaint query date 8 February 2009)

In reply to the question of the CCMA, ***“Do we require a formal complaint regarding the Acid Sulfate Soils and if so who to address it to?”***

“If you should resolve to lodge a formal complaint then this should be addressed to the responsible authorities. In this case those being DSE, Southern Rural Water and Barwon Water.” (CCMA

Ref:ADM/05-0013 Pt 2) More circle work with the prospect of not playing a real game for some time.

Parks Victoria.

In 2007 when Barwon Water was investigating the extraction of 16000 ML/year from the Kewarren Borefield, Parks Victoria was approached in regard to the possible impacts on the Porcupine National Park area and the Reference Area within this park. The reply on 31 January 2007 made it clear that DSE was the managing authority in regard to any groundwater extraction work being done in the area. The Porcupine National Park and reference Area are in close proximity to the Kewarren Borefield (see page 101) and are well inside the borefield area of impact.

“The matters raised by your letter are managed by DSE. I understand that they have addressed many of the issues you have raised...”

One of these issues included the drawdown and the cone of depression from the Barwon Downs Borefield extending a significant distance into the Porcupine Creek Catchment section of the National Park and Reference Area.

To date Parks Victoria has shown no concern regarding this occurrence. To suggest that Parks Victoria would be any more interested or act responsibly in the demise of a groundwater dependent ecosystem along Boundary Creek than a 16000 million litres a year extraction at Kewarren, seemed not worth pursuing.

Parks Victoria would appear to be quite happy to handball onto and have another authority deal with an issue that is impacting on and compromising an area that has significant recreational and environmental values.⁽¹⁸⁾ This is quite strange and at odds with the 2008 joint initiative between Parks Victoria and Deakin University.⁽³⁷⁾ Three hundred and forty three references dealing with the human health benefits of contact with nature clearly indicated that the Parks Victoria catch cry of “Healthy Parks, Healthy People” is warranted and would suggest that Parks Victoria should be vitally interested in this issue.

“That the natural environment is a key determinate of health is unquestioned.”

“Parks and other natural environments are a fundamental health resource, particularly in terms of disease prevention.”

“Contact with nature is defined as viewing natural scenes, being in natural environments, or observing, encountering or otherwise interacting with plants and animals.”





There can be no doubt that the Big Swamp has undergone massive degradation ruining its status as a “wilderness” area. Any beneficial uses as a recreational and contact with nature location have been compromised for an extremely long period. Even in one’s wildest dreams the Big Swamp can no longer be regarded as a “Healthy Park” or natural environment. Its beneficial uses promoting “Healthy People” no longer exists.

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Parks Victoria hasn’t even turned up to training.

The Country Fire Authority.

The CFA was invited along to training when the smouldering peat in the Big Swamp reignited after 12 years. The peat fire and the possibility of the peat continuing to smoulder for many more years became a nuisance and could not be ignored. By inviting the CFA onto the team this inconvenience clearly became the CFA’s problem, fire management. However, fire management did not appear to fit into the team’s ethos and as a result the CFA was shifted sideways from the team and given a managerial role.

The Victorian Water Ombudsman and State Ombudsman Departments.

The only good thing about these departments is that at least you obtain an answer. In 2007-08 when researching the issues involved with groundwater extraction from the Otways numerous non compliance and glaring discrepancies became apparent with Licence Number 893889. This licence deals with the groundwater extraction at the Barwon Downs Borefield. Not being able to have the issues with this licence resolved in what might be called the “normal” fashion as outlined in Chapter 5, the Water and Energy Ombudsman’s office was asked to assist. The officer contacted replied saying that as the issue involved poor scrutiny, non compliance and discrepancies in the licence it was not within their scope of responsibility. It was suggested that the State Ombudsman’s Department was the best way of dealing with this issue.⁽³⁰⁾ It was a neat piece of handballing and the State Ombudsman officer started off saying it most definitely was not his office’s responsibility either. After conferring with a superior over some quite forceful discussion the officer said his department would look at a written formal complaint. This was sent and was dated 3 October 2008. Otway Water Book 8⁽³⁰⁾ contains 52 pages that covers in detail some of the ensuing nonsense.

Book 10⁽³²⁾ devotes another 19 pages to the continuation of this farcical situation and because these 19 pages highlight so many examples of delaying tactics, mismanagement, incompetence, failure to carry out the most basic of licence condition surveillance and the dismissing of serious non compliance as inconsequential, it was decided to include the majority of these 19 pages in this book.

Formal Complaint to Southern Rural Water Re: Licence Number 893889

This licence was issued to Barwon Water by Southern Rural Water allowing the extraction of considerable amounts of groundwater from the Barwon Downs borefield. The licence was issued for 15 years and is due for renewal in 2019. As part of the licence conditions Barwon Water has to present a report to Southern Rural Water after each financial year. In 2007 after reading previously submitted copies of these reports it became blatantly obvious that Southern Rural Water was not adequately scrutinising nor policing the conditions as set out in the licence. The following pages describe the futility almost impossible task to gain a satisfactory conclusion to this issue.

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- The 2004-05, the 2005-06 and the 2006-07 Reports submitted to Southern Rural Water (SRW) demonstrated numerous examples of non compliance with the licence conditions. The reports were not accurate, factual and in many respects nor were they complete.
- During this period there were also numerous reported examples of conflicting data of significant proportions.
- Considerable doubt was raised in regard to Barwon Water's ability to be self regulating and Southern Rural Water's ability to perform the duties of overseer.
- 11 October 2007 during a phone conversation with the Chairperson of the Southern Rural Water board indicated she would refer a complaint regarding SRW's regulating of the Barwon Downs licence conditions to Dr. Martin Kent the Managing Director of Southern Rural Water.
- By 10 November 2007 there had been no contact from Dr. Kent. An email was sent...

Sat, 10 November, 2007 12:29:49 AM

From: Mal Gardiner
<otwaywater@yahoo.com.au>
View Contact

To: martin.kent@srw.vic.gov.au

Dear Martin,

I am following up a phone conversation I had with Jan Greig on the 11-10-2007. Jan assured me that she would approach you and ask you to contact me regarding some serious concerns that I have in relation to the way Southern Rural Water are scrutinising and ensuring the correct compliance to the licence No 893889 Barwon Water has.

I would appreciate some contact in the near future.

Regards,

- Having heard nothing by 9 December this email was sent again on the 9th and 10th.
- To be sure that this request arrived a Registered Post was also sent to Dr. Kent (RD27101260.)
- After three months of "run-around" Dr Martin Kent of Southern Rural Water made contact.
- A reply to the emails arrived 28 December 2007...

Fri, 28 December, 2007 12:29:36 PM

From: Martin Kent

<MartinK@SRW.com.au>

Add to Contacts

To: otwaywater@yahoo.com.au

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Dear Mr Gardiner

Thank you for your email of 10 December 2007 seeking:

1. An answer to your email dated the 10-11-2007.
2. a copy of the conditions, reasons and permit allowing Barwon Water to do a preliminary pump at Kwarren Yaughar 51 bore in July 2007.

The first point relates to your concerns regarding our enforcement of Barwon Water's compliance with their Groundwater Licence No 893889 - which provides for the taking of groundwater from the Barwon Downs borefield.

I understood that one of our staff had discussed this matter with you following your conversation with our Chairperson, Ms Jan Greig. However, if this is not the case, please let me know (email is fine) your preferred phone number and best time of day to catch you and I will call.

With regard to the second point, I am advised that Barwon Water's consultants undertook a pump test between around 2pm on 18 July 2007 and midday on 20 July 2007, and that some 6 ML of groundwater was pumped during the test.

The purposes of the test were to:

- 'develop the bore in preparation for the inspection with down-hole tools, and in readiness for the longer term test;
- assess bore integrity (based on pumping performance and recovery performance);
- assist in determining the rate at which to pump in the longer term test; and
- obtain bore chemistry samples to design any required treatment works in the long term test.'

I am advised that SRW did not issue an approval for the pump test. However, given the small volume of groundwater extracted, our attention is focussed on the proposed, and far more significant, three month pump test.

At this point, we are in discussions with the Department of Sustainability & Environment regarding the approval process for the three month pump test but have yet to finalise the approach to be used. We will advise interested parties once this is settled. Needless to say, SRW is keen to ensure that the process meets the objectives outlined in the Sustainable Water Strategy for Victoria's Central Region (the feasibility study for Geelong's longer term water needs), assesses the impacts in accordance with the Water Act, and ensures that interested parties and the wider community have the opportunity to have their say.

Regards

(Dr) Martin Kent

Managing Director

- Up to this stage spoken contact with all of the statutory authorities approached in regard to water issues, including officers of Southern Rural Water, resulted in broken promises, non action and denial. It became crystal clear that verbal discussions were all but useless as a reliable reference. Written word was the most verifiable evidence of statements made and appeared to be the only method of account. Southern Rural Water was not prepared to confirm in writing that the licence reports were scrutinised and found to be correct and that the licence conditions had been adequately adhered to.
- In February 2008 Barwon Water distributed an excellent visually presented 2006-07 Sustainability Report stating that there had been **100% compliance** with the groundwater extraction licence conditions.

- In April 2008 Southern Rural Water, a Warrnambool branch officer was given a detailed written copy of numerous examples of non compliance up to the end of the 2006-07 reporting period.
- As rational and normal dialogue attempts to resolve these concerns were thwarted over several months of mail and discussion a verbal complaint was made to the Water Energy Ombudsman. The 6 February phone discussions with the Water and Energy Ombudsman representative pointed out that “they” did not police non compliance issues and had no authority to insist that the correct procedures be followed. Referral was made to the State Ombudsman.
- Speaking to the State Ombudsman representative on 6 Feb. 2008 resolved that the State Ombudsman office could do nothing until a formal complaint was made.
- Due to other pressing issues with the Kewarren borefield issue a formal complaint to Southern Rural Water was not sent until 15 May 2008.
- This letter (sender to keep CV9201838) contained...
- Please report back in writing.
- That there were numerous breaches of the Licence No. 893889 conditions
- The reports 2002-05, 2005-06 and 2006-07 also contained numerous examples of conflicting and confusing data.
- If these documents were scrutinised and reviewed how could this situation continue over 3 years of reporting.
- As a result of non compliance why hadn’t the Licence been reviewed, and
- A trust that this matter be investigated with some urgency.
- This complaint was acknowledged by Dr. Marin Kent on 27 May 2008 as being received.
- 16 September 2008 in a Freedom of Information (FOI) request for the 2007-08 Report the following information was also requested:
Correspondence between SRW and Barwon Water regarding my formal complaint of non compliance to Licence No. 893889 conditions.”
 Having heard nothing in regard to the non compliance formal complaint for over three months this seemed a reasonable request
- A letter dated the 19 September 2008 acknowledge receipt of the FOI request. (SRW Ref: 646841)
- Another letter dated the same day, 19 September 2008 (SRW Ref: DWS 606147), stated:
- “The evidence doesn’t show an unexpected decline in groundwater levels or impact on the surface water resources. We believe that the current licence conditions are adequate for the responsible management of resources and there isn’t a need to review the licence or its conditions at this point.”
- The answer came across loud and clear that Southern Rural Water was suffering from the “ostrich syndrome” of burying one’s head in the sand.
- This letter also apologised for the delay in replying to the formal complaint sent way back in May. The reason for the delay being Southern Rural Water was waiting for the 2007-08 report from Barwon Water to arrive. It may have arrived at Southern Rural Water by the 19 September but by the end of October 2008 the 2007-08 report still hadn’t been sent to me under the FOI request. Considering the licence conditions state that the Barwon Water report must reach SRW by the start of September each year one wonders why the delay before this report is passed on.
- It is difficult to follow the logic that the 2007-08 report had to be received before a reply could be sent. The non compliance and other numerous issues were squarely directed at the earlier reporting periods of over a three year duration.
- The formal complaint had been sent to Southern rural Water (SRW) as directed by the State Ombudsman Victoria. The reply from SRW was regarded as unsatisfactory.

- 3 October 2008 the State Ombudsman Victoria was sent a written 11 page complaint. A copy of Chapter 23 from "Otway Water – the Summaries, Book 3, pages 205-238 were included. These pages dealt with specific concerns.
- 14 October Chris Wade of the State Ombudsman Victoria acknowledge this complaint and asked for a phone contact number.
- On 16 October during a phone conversation Chris asked for a summary of the 30 pages of discrepancies and complaints. Chris was told that this data was a summary. Chris stated that Southern Rural Water had to be given another opportunity to answer the concerns raised. The formal complaint had to include specific itemised questions.
- Chris confirmed this conversation in writing on 17 October 2008. (Ombudsman Victoria File No: C/08/13370)
- 23 October 2008 another formal 37 page complaint was sent to Southern Rural Water. This time the complaint was comprehensive and detailed. Over 70 specific questions were asked of Southern Rural Water.
- In the meantime Councillor Peter Mercer of the Colac Otway Shire queried Michael Malouf, Managing Director of Barwon Water, regarding the discrepancies and non compliance of Licence No. 893889.
- A copy of Michael's reply did nothing but confirm earlier concerns that serious breaches of the licence conditions were being treated as inconsequential.
- "Previous Annual Reports have included a number of reporting errors. These are essentially administrative issues and have not impacted on the appropriate extraction of groundwater under the licence." (Barwon water ref: 15/090/0011A)
- These are a few examples of the "*administrative issues*" ... and... "*reporting errors,*" referred to by the Managing Director;
- Reports submitted long after the 60 days for preparation due date.
- Numerous licence condition data reports omitted.
- The 2004-05 report miraculously contained identical data from the 2005-06 report, data that had been collected months after the 2004-05 report had been submitted.
- Miraculously a second copy obtained under FOI of the 2004-05 report contained pages and data not provided in the first copy.
- Also in these reports that should have been identical, there were significant differences in the data provided.
- Observation bore water levels being recorded and reported when the same report states they are dry.
- An observation bore had discrepancies of 30 metres.
- Data indicating the amount of water released into Boundary Creek from the Colac Otway Pipeline varies enormously on numerous occasions when compared with the data provided from SRW. For example on the same day Southern Rural Water states a no flow release when a Barwon Water report contradicts this stating there is a 2 ML/day flow. Both sets of data obtained from Southern Rural Water and Barwon Water under Freedom of Information requests.

(It is very interesting to note that on 22 July 2009 Chris Hughes, Manager Field Operations and Compliance, Southern Rural Water, has this to say... "*We take licence compliance seriously, however I don't intend to go over matters from previous years that amount to administrative errors or oversights.*"

- Despite this lengthy process and the amount of detail provided, Southern Rural Water and Barwon Water maintain that in essence the licence conditions of Licence No. 893889 are being met. No explanation has ever been given explaining how a layperson is able to compile a comprehensively detailed 30 page document indicating a high degree of non compliance and serious discrepancies when "expert" officers of Southern Rural Water who scrutinise,

review and police the same documents and licence conditions maintain the stance that everything is as it should be.

- 18 November 2008 Chris Hughes acknowledged the detailed 23 October complaint and stated, *"There are several specific matters outlined in your correspondence that require detailed consideration and investigation from Southern Rural Water in order to adequately respond to your concerns. A detailed response will be completed by 31 November 2008."*
- Chris rang on 27 November 2008. It was made clear that...
- Spoken promises were not acceptable due to past experiences.
- The non compliance, irregularities and discrepancies were thoroughly documented.
- Everyone spoken to about this issue had made assurances that scrutiny, review and policing of the licence has been scrupulously carried out.
- Stating that "all" of the complaints can be dismissed by claiming administrative errors and oversights without answering one specific question is not acceptable.
- If Southern Rural Water officers were in fact scrutinising, reviewing and policing as it is claimed they have been, they would have noticed these problems themselves back in 2005. No explanation has been given for this and it needs to be spelt out in writing.
- In a letter from SRW dated 28 November 2008 (SRW Ref: DWS 659983), Chris wrote this... *"As discussed, there are several specific matters outlined in your correspondence that require detailed consideration and investigation from Southern Rural Water. In order to adequately respond to your concerns, a written response will be forwarded by 12 December 2008, as agreed."*
- A three page reply dated 17 December 2008 arrived from Chris Hughes. The following green text is a copy of the contents of the letter from Chris Hughes, Manager Field Operations & Compliance, Southern Rural Water. The contents of Chris's letter have been typed out so that comments can be written in throughout the text. These comments are typed in black and have the benefit of hindsight as at November 2009.

COMPLAINT – BARWON WATER GROUNDWATER LICENCE NO 893889

Thank you for your letter of 23 October 2008 outlining your concerns with Barwon region Water Corporation's (Barwon Water) operation of the Groundwater Licence No 893889 (the licence) and compliance with the specific conditions.

The initial complaint in September 2007 was that concerns were held that Southern Rural Water were not scrutinising, reviewing or policing the Licence No 893889 adequately. All of the specifics presented were examples to justify this claim. If Southern Rural Water was doing its job these administrative errors or oversights or whatever one wishes to call them, should have been recognised years ago, not repeated year after year.

As you are aware, Barwon Water is required to provide Southern Rural Water (SRW) with annual reports detailing the operations of the bore field and addressing the specific reporting requirements detailed in the licence. The annual reports are reviewed by SRW Hydrogeologists to monitor the annual groundwater extraction and groundwater levels, particularly in the four key monitoring bores. The annual reports are also reviewed by field operations to monitor compliance directly related to licence conditions.

If these things are done as stated how is it that so many breaches of the licence go unnoticed. It would also seem impossible that Southern Rural Water can provide diametrically opposed data collected by its field operators(provided under FOI), to that provided by Barwon Water also under FOI, for exactly the same time period?

SRW takes compliance of all licence holders seriously. Our response to non-compliance is informed by the impact the non-compliance caused to the resource, how blatant the action was and whether it has been rectified, among many other things. In the case of Barwon Water, there have been instances of non-compliance in relation to some reporting requirements in the licence. These instances of non-compliance are administrative oversights and are not critical to the overall sustainability of the borefield, or the impacts on the nearby

area, to be of such a serious nature to warrant legal action. We have formed the view that this is the correct approach and is the same approach that would be given to any licence holder, notwithstanding that this licence is not like most licences.

At least there is recognition that there has been non-compliance. The instances of non-compliance may not be critical to the overall sustainability of the borefield using Barwon Water's definition of sustainability. Also the extended drought may conveniently allow any impacts on the surrounding area to be blamed on drought as the major factor for degradation. However, the Otway Water books present a detailed and convincing argument that the groundwater extraction at Barwon Downs is the major factor causing the degradation of the area.

Sustainability used in the modelling scenarios works on the principle that if there is more water that can be extracted after pumping then the aquifer is sustainable. Little concern is given to any other factor.

On the 20 000 ML/year extraction rate it is stated that as long as no more than 400 000 ML of groundwater is extracted over 100 years then the environmental impact will be acceptable. Sinclair Knight Merz when conducting pumping scenarios for the Barwon Downs borefield stated that all scenarios investigated would accompany a decline in Boundary Creek baseflows and especially at times of low flow. SKM postulated that at times Boundary Creek may dry up. However, over a 100 year period any impact would be "*barely discernable*." However, to date Boundary Creek has been dry over 1000 days into this 100 year period. This is considerably more than barely discernable.

In April 2007 Barwon Water distributed a community information bulletin on the Anglesea Borefield Project that stated, "*To make sure groundwater is extracted sustainably, recharge rates are measured (the rate at which the aquifer replenishes itself). This is used to calculate the Permissible Annual Volume (PAV), the amount of water that can be extracted annually from the aquifer.*" If the significant drop in the aquifer level is any indication then the borefield at Barwon Downs has gone from sustainable extraction to mining.

The Evans report defines sustainable yield as, "*The groundwater extraction regime, measured over a specific planning timeframe that allows acceptable levels of stress and protects dependent economic, social and environmental values.*" This is now the Australian nationally agreed definition.

In light of the above, SRW has taken a pragmatic approach, which means working with the licence holder to resolve the matter. SRW is continually working with Barwon Water to improve reporting under the licence, and appreciates the feedback provided in your correspondence. The licence conditions are unique to this situation and it takes some time to fully implement the various reporting needs within the licence. SRW will meet at least annually with Barwon Water to discuss their groundwater extraction, the licence and review a draft of the annual report prior to the completion of the final report. This will be in addition to the usual communications and will ensure that the concerns highlighted in your correspondence are given appropriate consideration.

My concerns should be Southern Rural Water's concerns. If both Southern Rural Water and Barwon Water are serious it should not take five years to improve the reporting under the licence to such a degree that the reports are all but perfect.

The point still appears to be missed by Southern Rural Water that this whole issue is not only dealing with the reporting but also the manner in which Southern Rural Water allows the operation of the Barwon Downs borefield to be conducted.

Southern Rural Water should not have to meet with Barwon Water to lead and direct how to provide a report that satisfies the licence conditions. This is not a difficult task. The only conclusion that can be arrived at is that both Southern Rural Water and Barwon Water have incompetent officers preparing the reports. The complaint directed to Southern Rural Water

is that these officers have not been doing the scrutiny, review and policing of the Barwon Downs groundwater extraction licence.

The matters that you have raised in your correspondence are of a specific and detailed nature, with many relating to administrative oversights from the annual reports. SRW doesn't consider it practical or relevant to respond in significant detail to concerns relating to administrative oversights, as these are matters of past and cannot be changed. I would say however that Barwon Water Corporation has been co-operative in recognising areas of reporting that need improvement and have responded positively to our requests. Whilst reporting is vital, our main focus is ensuring that Barwon Water comply with the conditions relating to how much water they can take and groundwater level triggers.

With the above in mind, I have endeavoured to respond in appropriate detail to concerns that you have outlined which relate to sustainable water management. The matters of particular concern appear to relate to the monitoring bore Yeo 40, the metering of Boundary Creek discharge point, Acid Sulphate Soils and groundwater levels. Several of the matters that you have raised may be better addressed through a face-to-face discussion rather than in writing.

Face-to-face dialogue may be a sound idea but as discussed over the phone (see point 29 above) there seems little point until there is some proof that the last 16 months of dialogue shows a tangible result.

YEO 40

YEO 40 is one of the four critical monitoring bores specified in the licence that has been assigned a trigger level used to protect the groundwater resource. Barwon Water must act in a specified manner set out in the licence when groundwater levels in the bores decline below the respective levels listed in the licence.

True Yeo 40 has a trigger level of 142.6 metres AHD. If Chris is referring to this one it is set to trigger off "alarm bells" in regard to subsidence and is called the Subsidence Trigger Level. This trigger level has not been passed and maybe that can be construed as protecting the groundwater resource. However, there is another critical trigger level at 158.5 metres AHD for the Yeo 40 observation bore. This is used to protect the environment and the farmers water supplies and is called the Maintenance of Flow in Boundary Creek Trigger Level. This level has been exceeded for the last few years and is presently around the 150 metre AHD level. It is puzzling why Chris is not aware of the two trigger levels and the significance of the 158.5 metre trigger level being exceeded for such long periods of time.

It was a condition of the licence that YEO 40 be replaced with a new monitoring bore by 31 December 2004 in the vicinity of the original bore. The replacement of YEO 40 was finalised in May 2005. The replacement occurred 6 months after the date required under licence conditions, however the process required the input of expert consulting Hydrogeologists and the availability of a suitably qualified drilling contractor.

This still does not explain how the graph in the 2006-07 report shows that the "[Replacement for Yeo 40 bore completed 31/7/06. Monitoring re-commenced.](#)"

The replacement bore for the designated monitoring bore "YEO 40" has been operational since the date of construction. It is located within approximately 300 metres of the original bore at a location off McCall's Road, Yeodene near Boundary Creek. The confusion surrounding the location of YEO 40 may have arisen as a result of an incorrect reference in the 2004/05 Annual Report, which stated the location as being "in Boundary Road". This relates to the designated bore Y-40 and the drilling of YEO 40's replacement is clearly shown in a photo in the 04/05 report.

The confusion between Y40 and Yeo 40 observation bores was obvious from the beginning. Southern Rural Water was made aware of this example to highlight the lack of scrutiny and review given to Barwon Water's reports by Southern Rural Water. Missing such an obvious "administrative oversight/error" should not be regarded as acceptable and should have made it abundantly clear why other more critical oversights were being missed.

Boundary Creek

Barwon Water is required to provide a flow of 2 ML/d to the headwaters of Boundary Creek from anytime that groundwater extraction commences under the licence until:

- The groundwater level in bore Yeo 40 recovers above a level of 158.5m AHD following the cessation of pumping; or
- At any time between 1 June and 30 November the natural flow at the Yeodene stream gauge exceeds 1 ML/d.

It gets to a stage when doubts arise that makes one wonder whether one is "knot picking" or not, but this statement about Boundary Creek and the provision of supplementary flows to the headwaters of Boundary Creek is wrong. Pre 1987 the ADH level in Yeo 40 was around the 160 metre level. Pre-pumping Boundary Creek was never known to dry up as far back as 1912. Since pumping Boundary Creek has been dry for extended periods totalling over 1000 days.

The licence states that supplementary flows have to be provided once groundwater extraction lowers the aquifer below 158.5 metres AHD. If the pumping commences and the AHD level stays above the 158.5 metres and Boundary Creek continues to flow, supplementary flows do not have to be provided.

A meter has been installed at the point of discharge into Boundary Creek, however prior to the installation of a meter alternate means of monitoring the stream flows were agreed between SRW and Barwon Water in order to comply with conditions detailed in section 6 of the licence. The alternate means included monitoring of the Forest Road gauging station and measuring the reduction in flow between the supply reservoir and Colac Basin No. 4. SRW is satisfied that these actions were a sufficient interim action to achieve the outcomes intended by the licence conditions.

Under Freedom Of Information all modifications to the licence were asked for prior to this letter. There was no mention of this change.

Barwon Water complies with the discharge conditions the majority of time; however they occasionally experience operational difficulties due to variations in stream flow after rain events and external influences beyond their control. These instances are short lived and rectified as soon as practicable.

The above paragraph makes sense and is easily understood and accepted. However, the specific questions asked in relation to conflicting data, poor field officer scrutiny and other bad management practices do not refer to such instances and have not been answered.

Water Usage & Groundwater Levels

Barwon Water's licence was developed with input from technical experts, community representatives and government departments to ensure the best management of the resources were appropriately considered balanced against the needs of an urban water supply. The stakeholders identified the following issues that would assist in the evaluation of the sustainability of the borefield, all of which were incorporated into conditions of the licence:

- Limits on daily, annual, 10 year and 100 year maximum volumes.
- Groundwater levels.

- Groundwater Salinity.
- Subsidence.
- Flow in Boundary Creek.
- Protection of riparian vegetation.
- Protection of stock and domestic use.
- Protection of flow in Barwon River and tributaries.

Unfortunately the development of the licence has not achieved these goals.

After reviewing the annual reports it is apparent that Barwon Water has operated within the annual use limits of the licence, with the maximum annual extraction being 12,604 ML in 2007/08. The annual reports also show that groundwater levels in the four critical monitoring bores have remained above the trigger levels listed in the licence.

If it is accepted that the 158.5 metre AHD level in the critical bore Yeo 40, is there to protect farmers' water supply and the environment then the nonsense of the above paragraph is obvious.

Acid Sulphate Soils.

In accordance with condition 7 of the licence, SRW has required Barwon Water to undertake a detailed Flora survey. Barwon Water has sought tenders from suitably qualified expert consultants and the successful tender has not yet been appointed. Barwon Water must consult with the Department of Sustainability and Environment regarding suitable consultants. The investigation into Acid Sulphate Soils will be incorporated into the consultant's analysis and the completed report is expected by mid 2009.

The Flora Study has been completed but the Acid Sulfate Soils **WAS NOT incorporated** into the consultant's analysis. Book 9 of Otway Water deals solely with the decades of inept flora studies.

In closing, I can confirm that SRW is committed to working closely with all stakeholders to continually improve the management of the resource, which will also include improved annual reporting. It is worth noting that SRW has reviewed the 2007/08 annual report in detail and as a result sought clarification on some areas of the report. Barwon Water subsequently made the necessary adjustments and re-submitted the annual report to the satisfaction of SRW.

The 2007-08 report is interesting and much better than earlier ones. However, it is most puzzling why the residual drawdown map is half missing. (See page 42 of this book, "The Slippery Dance")

As with all licences, Barwon Water's licence will be reviewed on expiry (2019) as part of the renewal process, which requires SRW to again consider matters outlined in S.53 & 40 of the Water Act 1989. Barwon Water does not self regulate their water extraction in relation to their groundwater licence. SRW is the delegated authority with the responsibility of regulating the take and use of groundwater in Southern Victoria in accordance with the Water Act 1989 and licence conditions.

Your correspondence is of significant detail and content; therefore in order to clarify all your points, I would be pleased to have a face-to-face discussion. If you have any questions or would like to schedule a meeting, please contact me on 0418582763.

If you are not satisfied with SRW's level of service, the Energy & Water Ombudsman (Victoria) can be contacted on 1800500509.

Yours sincerely,

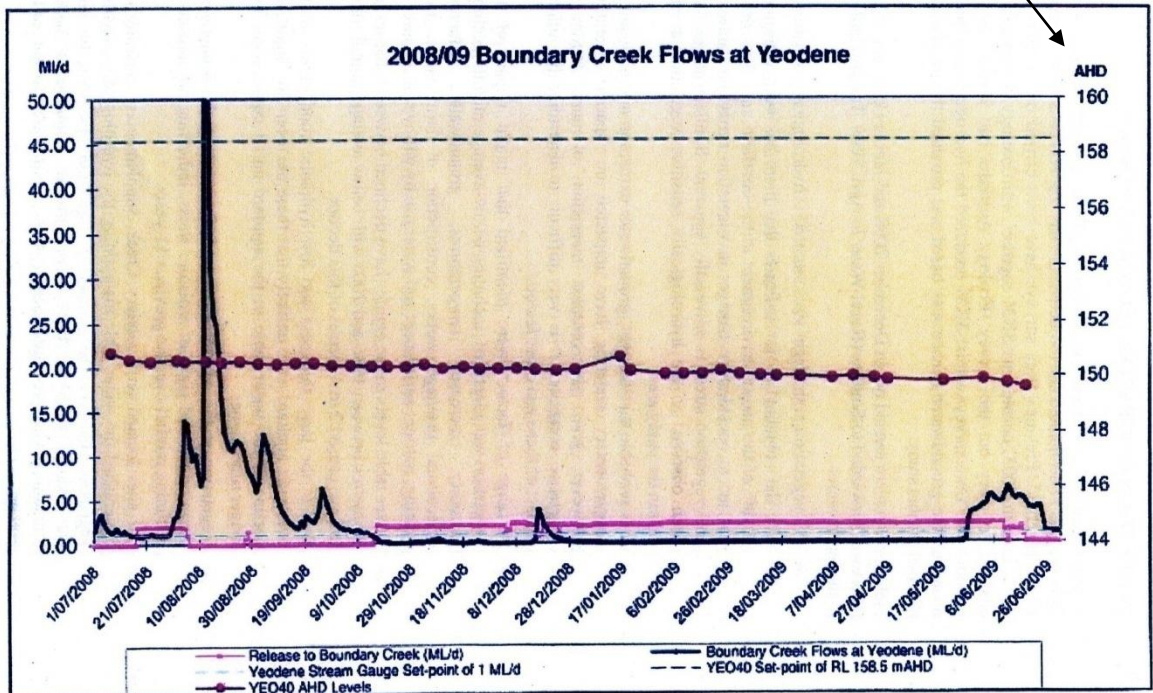
Chris Hughes

Manager Field Operations & Compliance.

This graph is taken from the 2008-09 report from Barwon Water to Southern Rural water and shows the water level in Yeo 40 at approximately the 150 metres mark. The trigger level of 158.5 metres is also clearly marked.

Yeo 40 water level height pre-pumping.

Figure 3. Flows in and Releases to Boundary Creek at Yeodene



- On 05 January 2009 the following letter was sent to Chris Hughes of Southern Rural Water...

Sender No. CV9106089

Re: Formal Complaint - Non compliance and discrepancies with the operation and management of Barwon Water Groundwater Extraction Licence No 893889.

Thank you for your letter of 17 December 2008 in reply to my 23 October 2008 formal complaint. In my opinion your reply is deplorable.

- You say that "... annual reports are also reviewed by field operations to monitor compliance directly related to licence conditions." You have been asked how the most basic of non compliance has been missed by SRW in three years of reports. You have not answered this. Nor have you given any assurance that this will improve.
- You say "SWR takes compliance of all licence holders seriously," yet you provide no evidence that this is the case. You brush aside the multitude of non compliance in this situation with the utmost ease and casualness.
- You also talk about things being rectified and that it is then OK. Part of this formal complaint is that there has been little to no evidence of an improvement in the reports I have specifically referred to.
- You say "These instances of non compliance are administrative oversights and are not critical to the overall sustainability of the borefield, or the impacts on the nearby area..."
- What rubbish, Chris. Firstly why have rules if they don't have to be followed?
- Secondly it is my opinion that any competent person could prepare a licence report that complies with every aspect of the licence conditions with ease, in the first instance.

- Allow me the access to the data and I will prepare the 2007-08 report again for free. Not only will I comply with all licence conditions I would ensure that the report is accurate, can stand up to scrutiny and is readable.
- Why does it take so many years to detect and correct administrative oversights?
- When attempting to summarise what my formal complaint is all about you failed to recognise that the major concerns I have are that the borefield is NOT sustainable and that there are serious impacts on the nearby area. Because of the way the reporting is conducted these concerns go undetected, hidden by inaccurate, incomplete and misleading reporting.
- You say “...Several of the matters that you have raised may be better addressed through face- to- face discussion rather than in writing.” As related to you on the phone on 27 November 2008, I have experienced a number of face-to-face discussions with SRW officers that have resulted in broken promises, non action and dismissive reaction. I have come to the conclusion, as I told you on the 27th, that the only action, promises and commitments that I believe are worthy are those put on paper and then acted upon. Rhetoric and spin are not credible responses in this instance.
- As I have stated earlier in this letter I believe you have made a mistake trying to summarise my concerns. In fact, I didn’t ask for this. I asked for answers to my specific questions. To presume and then summarise why I want accurate and complete compliance, tends to negate the lack of adequate sustainable management of the Barwon Downs borefield groundwater resource. I would like nothing more than to support the assertion that the groundwater extraction is not “mining” but is sustainable. But how can SRW or anyone else do this when there is not complete compliance, data missing, data incomplete and data not always accurate?
- Chris, you are right when you say “Yeo 40 is one of the four critical monitoring bores specified in the licence...” but to go on and say “...that has been assigned a trigger level used to protect the groundwater resource.” fails to recognise that Yeo 40 has two critical trigger levels that should be used to protect the groundwater resource.
- In the 2007-08 report one of these trigger levels is barely referred to, so much so that it is not readily apparent that this trigger level has been reached and passed consistently for years. This is another example of the poor reporting of the data.
- In fact you state this “The annual reports also show that groundwater levels in the four critical monitoring bores have remained above the trigger levels listed in the licence.” This is absolute nonsense. As indicated the critical trigger level of 158.5 AHD in Yeo 40 has been breached consistently for years.
- This critical trigger level of 158.5 AHD is mentioned in the Licence conditions and came about due to the following documentation...
- “Barnett, B. Of Sinclair Knight Merz, 23 May 2003 : Recommendations for Groundwater Licence Conditions. Letter and Discussion documents to Paul Northey of Barwon Water.”
- You did answer some of my specific questions in regard to Yeo 40, thank you for this. You say that the new Yeo 40 observation bore was completed and in operation within 300 metres of the old Yeo 40 by May 2005. However, you did not explain why the records for this bore don’t start until over a year later in July 2006. This is also reported in the 2007-08 report. As with so many of my specific questions you don’t explain why such poor data presentation has been consistently missed by SRW.
- Chris, you appear to blindly accept that all is well, the licence is being operated according to the licence conditions and even in the event of new and alarming evidence refuse to call for a complete review.
- Chris, I wonder who at SRW is prepared to put their name to the reviewing of the 2007-08 report. You say when referring to this 2007-08 report it was reviewed “... and re-submitted the annual report to the satisfaction of SRW.”

- Under the Second Schedule 1.3.c of this licence, a map of residual drawdown for the year must be provided. The full extent of the residual drawdown has never been provided in any of the last four annual reports.
- Barwon Water has also written to me saying that under the licence conditions the full extent of the drawdown does not have to be provided. Is that so?
- Further it is most baffling why other huge sections of the residual drawdown that has been provided in earlier reports is missing from the 2007-08 report. Why is this so? I am amazed that anyone reviewing the 2007-08 report did not pick this up and ask for it to be rectified.
- Because of groundwater extraction and considering the implications to groundwater pollution from the Acid Sulfate Soil concerns, I find it astounding that you have indicated leaving any investigation into the ASS until the end of 2009.
- After 12 months of complaint I doubt that it will make any difference to your stance of not carrying out a comprehensive review of the Licence No 893889 but the majority of the control sites in the licence for the 2009 flora survey, are in fact not that at all. From the limited data provided it is apparent that the area of residual drawdown has extended into these supposedly unaffected control areas. As a control should be outside the area of influence one is attempting to gauge these designated sites should not qualify as control sites. Therefore the flora survey results will be based on flawed data.
- However, I would like it noted in your files that you have been notified of the possibility that the majority, if not all, of the control sites mentioned in Licence 893889 have been compromised by the influence of the drawdown due to groundwater extraction at the Barwon Downs borefield.

Finally I would like to point out to you Chris, that of the 70 specific questions I asked of you in relation to non-compliance, discrepancies and other matters in regard to Licence No 893889, you failed to provide specific answers to 64 of these. The majority of these questions were directed at the lack of scrutiny, review and policing of the Licence No 893889 by Southern Rural Water. I would appreciate specific answers to these serious concerns and complaints.

- An email was sent to Chris Hughes 17 March 2009 asking for a reply to the 5 January Letter.
- 24 March 2009 Chris replied and stated, *"There are several matters outlined in your correspondence that require further consideration from Southern Rural Water in order to adequately respond to your concerns. A detailed response will be completed by 10 April 2009."* (SRW Ref: DWS 682827)
The 10 April came and went.
- 24 April 2009 this letter arrived...



Received 24/04/2009 [Signature]

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20 April 2009

Mr Malcolm Gardiner
1805 Colac Beach Road
KAWARREN VIC 3249

Dear Mr Gardiner

COMPLAINT - BARWON WATER GROUNDWATER LICENCE NO 893889

Thank you for your letter of 5 January 2009 further outlining your concerns with Barwon Region Water Corporation's (Barwon Water) operation of the Groundwater Licence No. 893889 (the licence) and compliance with the specific conditions.

As previously advised, Barwon Water is required to provide Southern Rural Water (SRW) with an annual report detailing the operations of the bore field and addressing the specific reporting requirements detailed in the licence. The annual reports are reviewed by SRW hydrogeologists to monitor the annual groundwater extraction and groundwater levels. The annual reports are also reviewed by field operations to monitor compliance directly relating to licence conditions.

It was acknowledged in the correspondence dated 17 December 2008 that there have been instances of non-compliance in relation to some reporting requirements in the licence. These instances of non-compliance are considered administrative oversights and whilst important, are not considered critical to the overall sustainability of the borefield, or the impacts on the nearby area, to be of such serious nature to warrant legal action.

The matters have not been ignored by SRW, but have rather been discussed with Barwon Water to ensure continuous improvements in the process so that such reporting non-compliances are avoided in the future.

SRW has recently met with Barwon Water to discuss their groundwater extraction and will meet again to review a draft of the 2008/09 annual report prior completion of the final report. This is in addition to the usual communications and will ensure that the concerns highlighted in your correspondence are given appropriate consideration. Barwon Water also provides SRW with a monthly report for the borefield, which shows water usage figures and some groundwater level data.

PO Box 153 MAFFRA VIC 3860
Telephone: (03) 5139 3100
Facsimile: (03) 5139 3150

ABN: 70 801 473 421
Email: srw@srw.com.au
Website: <http://www.srw.com.au>

The 2007/08 report was reviewed and after some points were clarified by Barwon Water, SRW was satisfied with the content. The report showed that all groundwater level monitoring results were within the licence trigger levels and that the groundwater extraction was within the maximum annual use limits. The 2007/08 report did include a map showing the relative residual drawdown for the year.

It was not my intention to dismiss the matters raised in your previous correspondence, however as previously stated there were a number of matters of specific and detailed nature, therefore it would be best to meet face-to-face to discuss your concerns in an effort to clarify the points of uncertainty.

I would be pleased to schedule a meeting at a convenient time and location, which would also include a hydrogeologist from SRW.

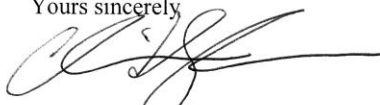
Again, I will say that SRW doesn't consider it practical to respond in detail to the concerns relating to administrative oversights from past reports, as these are matters that cannot be changed. Continuous improvements in communications and the reporting process will ensure that Barwon Water's groundwater extraction under the licence will receive the necessary scrutiny from SRW.

Barwon Water's licence will be reviewed on expiry as a part of the renewal process, which requires SRW to again consider matters outlined in Section 40 & 53 of the Water Act 1989. The licence was developed with input from technical experts, community representatives and government departments to ensure the best management of the resources were appropriately considered, balanced against the needs of urban water supply. Accordingly, SRW believes that the current licence conditions are adequate for the responsible management of the resource and there isn't a need to review the licence or licence conditions at this point in time.

The concerns that you have highlighted with Acid Sulphate Soil in your correspondence and a further formal complaint (4 March 2009) will be addressed separately in the near future.

If you have any questions or would like to schedule a meeting please contact me on 0418 582 763 or via email to chrish@srw.com.au.

Yours sincerely,



CHRIS HUGHES
MANAGER FIELD OPERATIONS & COMPLIANCE

- Under the circumstances it would appear that waiting to review Barwon Water's licence in 2019 is an extraordinary long period before this takes place.

- The ensuring of “...*the best management of resources were appropriately considered...*” may have been reached in 2004 however; there is considerable evidence to suggest that the best management recommended in 2004 is not being followed and is also outdated.
-
- There was considerable discussion in the lead up to issuing the 2004 licence in regard to the duration of the licence. Community members argued unsuccessfully for a period of only 5 years before the review. This would have been due this year.
- The fears by the community have been shown to be well grounded. Putting off a review for another 10 years is unbelievable.
- It is now the end of November 2009 and the formal complaint (4 March 2009) regarding the Acid Sulfate Soil has not been ‘...*addressed separately in the near future.*’ Apparently meetings have been planned, discussions commenced and a likely study suggested but other than this one can only guess.
- On 28 April 2009 another letter was sent off to Chris Hughes...

Sender No. MV0170766

Re: Formal Complaint - Non compliance and discrepancies with the operation and management of Barwon Water Groundwater Extraction Licence No 893889.

Thank you for your letters dated 24 March 2009 and 20 April 2009 in reply to my 23 October 2008 formal complaint and my reiteration of this in a letter 5 January.

*When you sent the 24 March letter I felt that when you said... “***There are several matters outlined in your correspondence that required further consideration from Southern Rural Water in order to adequately respond to your concerns. A detailed response will be compiled by 10 April 2009,***” and it also took an extra 14 days after the 10th for your response to arrive, I felt that a detailed response was on the way. You still haven’t answered my specific questions.*

*I also strongly disagree with you when you say many of them are simply “***administrative oversights***” and do not impact on the overall sustainability of the borefield operation. How can you make such a judgement saying the operation is adequate when the data to be scrutinised is incomplete, and inaccurate?*

I haven’t asked for you to take legal action, all I have done is asked you to answer my questions. I strongly disagree with you when you say that impacts to nearby areas are not critical.

You then write about the 2007/08 report and I am absolutely astounded with your comments, so astounded that I wonder whether whoever is advising you has actually scrutinised and reviewed this 2007/08 report. As a consequence I have a few extra questions that I would like to be added to the formal complaint that is already before you.

1. *You say the 2007/08 report was reviewed. You also stated... “***The report showed that all groundwater level monitoring results were within the licence trigger levels...***” This is not the case. On page 12 of this report the Yeo 40 key monitoring bore graph failed to include the critical trigger level for water releases from the Colac Otway Pipeline into Boundary Creek. Why wasn’t this included and why didn’t the review note this and have it rectified? This trigger level has been breached on numerous occasions adding up to years in duration. On what grounds did you make the above statement? The yeo 40, 158.5 AHD critical trigger*

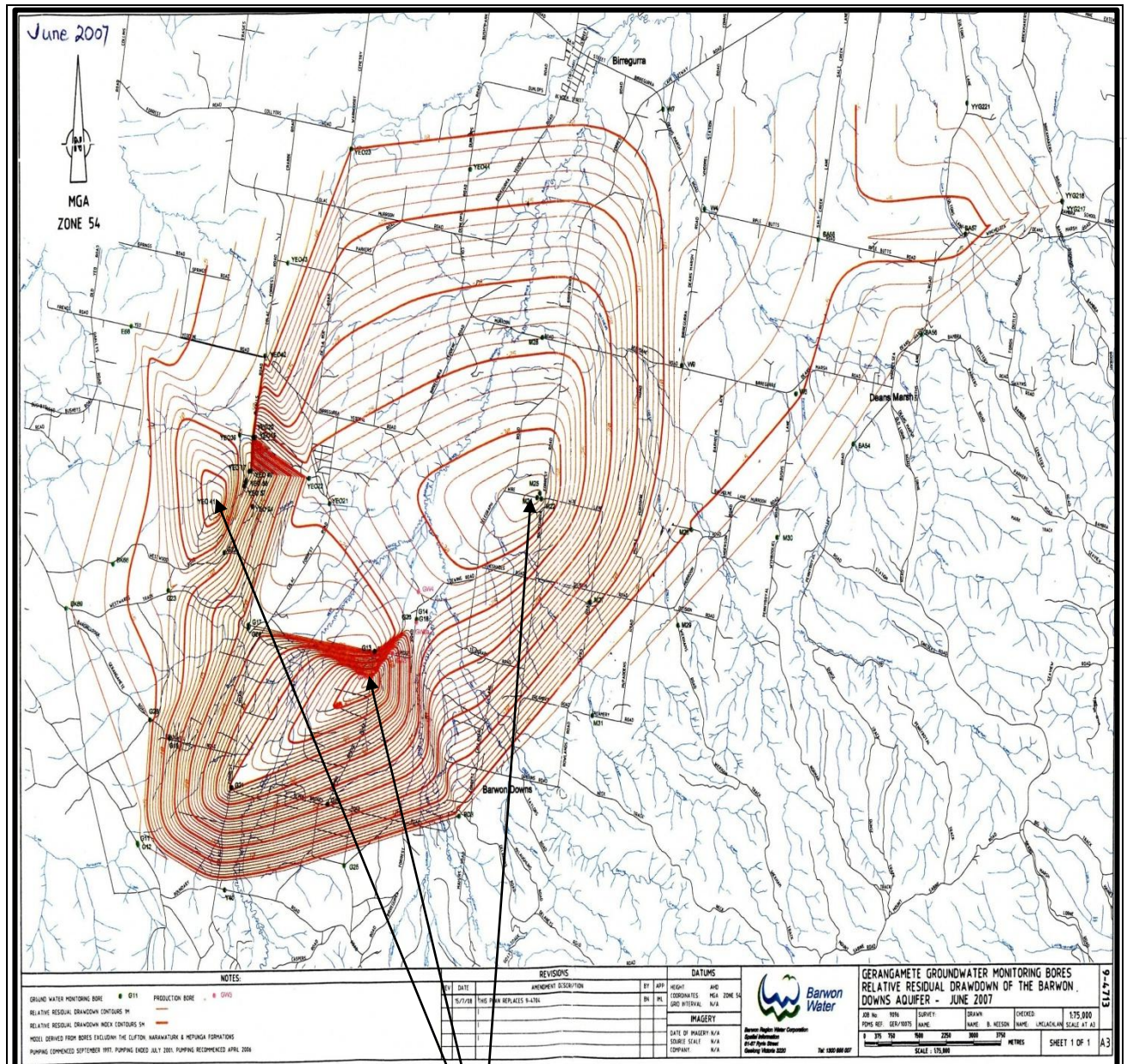
- level has NOT stayed above the licence trigger level set back in 2004. Has the critical trigger level been changed? Was the report not complete? Who reviewed this 2007/08 report?
2. You state **"The 2007/08 report did include a map showing the relative residual drawdown for the year."** Chris, have you seen this map? I have included a copy sent to me under FOI of this relative residual drawdown. For comparison I have included a copy of the 2006/07 map also obtained under FOI. In my opinion both are incomplete. I have also included a copy of the letter denying me access to data of the residual drawdown out to the point of ZERO drawdown. When you say the 2007/08 report includes a map of the residual drawdown this is only partially true. Where is the rest of the map? Why have huge sections of it been omitted?
 3. You also write of the 2002-04 review process of this licence. I would just like to flag with you that I have considerable data that clearly shows that this process was flawed. With hindsight the flaws have become glaringly apparent. Why haven't your officers noted these?

At this stage I see no point in meeting face-to-face with your hydrologist until you reply to the **"...number of matters of specific and detailed nature,"** (20 April letter) that you refer to, specific questions I have asked you to supply answers to. Below I have included an extract from my last correspondence to you.

- (You say "...Several of the matters that you have raised may be better addressed through face- to- face discussion rather than in writing." As related to you on the phone on 27 November 2008, I have experienced a number of face-to-face discussions with SRW officers that have resulted in broken promises, non action and dismissive reaction. I have come to the conclusion, as I told you on the 27th, that the only action, promises and commitments that I believe are worthy are those put on paper and then acted upon. Rhetoric and spin are not credible responses in this instance.)

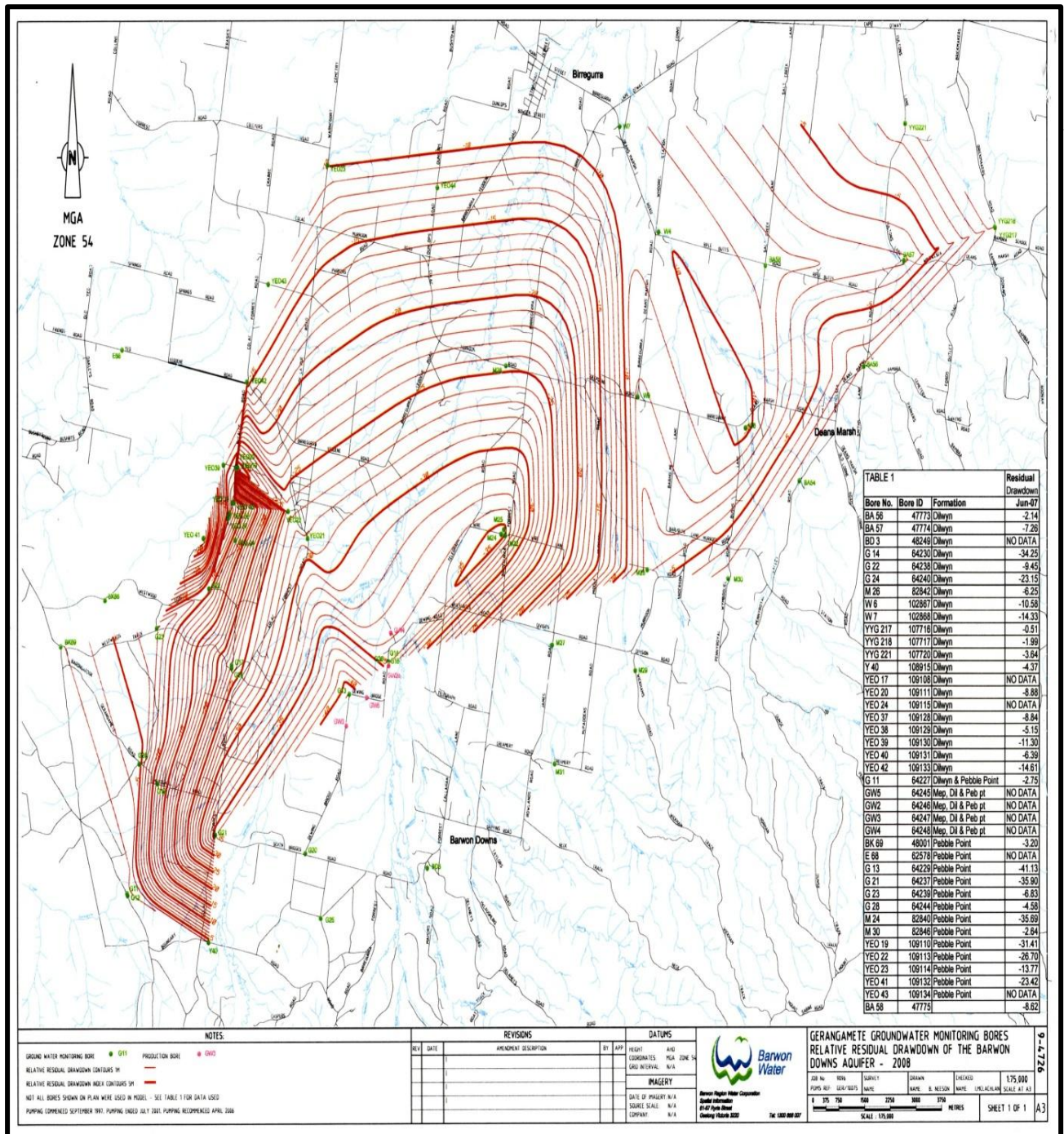
Hoping that you can clear these matters up for me.

2006/07 Map provided under FOI.



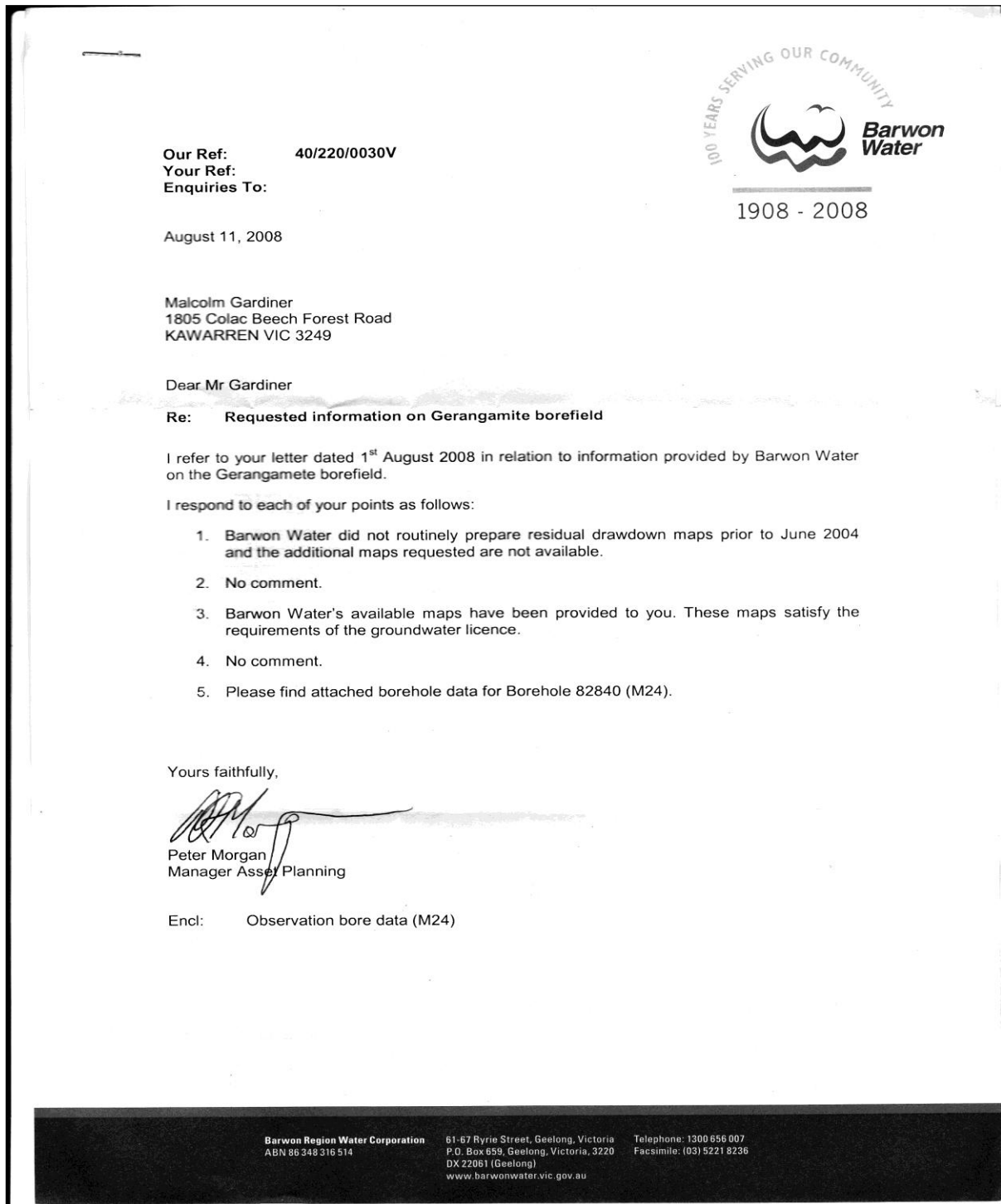
(The 2006-07 map sent to SRW was the same as this map but also had lines of cross section that I had drawn on it.)

Cones of depression



(Why this map has huge sections of it missing has never been explained.)

The above maps are the ones referred to in point 3 in the letter below. Barwon Water was asked for maps showing the drawdown out to ZERO but would not provide this data.



- The following day, 29 April 2009 an extra six pages (Sender No. BV6895253) were sent to Chris Hughes. These pages included drawdown maps going back to 1989 that both Peter Morgan, Point 1 above, and Michael Malouf don't have, don't wish to release or can't find. Michael Malouf states in a letter 22 August 2008 Barwon Water Ref: 40/220/0030V that "*Barwon Water has provided to you the information requested in your letter of 15th May 2008 where it exists.*"

- A gentle reminder email was sent on 15 June 2009 that nothing had been heard from Chris for some time.
- In a letter dated 16 June 2009 Chris acknowledges receipt of the 28 and 29 April letters and states, *"A response will be completed and forwarded to you by 30 June 2009."*
- On 30 June 2009 Chris wrote (SRW Ref: DWS 717192) a letter that stated, "Unfortunately a response has not been finalised, however you can expect a response by 10 July 2009."
- On 27 July 2009 a ten page reply from Southern rural Water arrived in response to the specific questions. This letter was dated 22 July 2009. The prospect of having the numerous specific questions answered seemed a reality at last.

It is sufficed to say that after all this time these are the outcomes:

- 81 specific questions were asked.
- 23 were answered.
- Of these 23, five of them were dismissed as administrative oversights.
- 4 of the 23 were admitted as examples of non-compliance.
- In an attempt to explain away the identical salinity sections in the 2004-05 and the 2005-06 reports, another non compliance was admitted to.
- This leaves 58 of the specific and detailed questions still un-answered. Perhaps they fall under the administrative oversights or errors.
- 30 November 2009. Perhaps it is time to have a face-to-face with officers of Southern Rural Water. If this is not done it is almost certain that the State Ombudsman Victoria will comment that not all avenues for settling this dispute have been exhausted and on these grounds will state that the Ombudsman's Department/Office has done all that it can.

As Chris states in his last letter, *"...the purpose of presenting data is to show compliance and allow analysis."*

- How can SRW or anyone else carry out an analysis when there is not complete compliance, data missing, data incomplete and data not always accurate?

Barwon Water Sustainability Report 2006-07, February 2008.

"Barwon Water will continue to contribute to water catchment protection and restoration programs that benefit the environment and the local communities that live in the area."

It seems doubtful that this will ever happen in the Barwon Downs valley until Southern Rural Water does its job as licence regulator.

***** (This is the end of the 19 pages extracted from Otway Water Book 10)**

It must be said that the 2010-2011 Barwon Downs Borefield report to Southern Rural Water looks to be complying with all the licence conditions. However, a query over the number of seemingly impossible cones of depression on the residual drawdown maps has not been addressed. This issue, called the *"Cones of Depression"* is covered in Chapter 5 in some detail and with all things considered, taking over 12 months and having nothing resolved for such a simple query is not unusual.

The circle work of handballing the investigation into the cause(s) of the demise of the Big Swamp continues. Even though the issues is handballed around and around and remains part of the training drills it is never considered to be serious enough to include in the match day game plan.

CHAPTER FOUR – Seeking Reliable Information

The Soft Approach.

In a co-operative, open and transparent world the usual method of gaining information is to phone or personally approach the person(s) who have the information. With the groundwater extraction issues each authority has been approached using this technique. Invariably this congenial method of gaining information has been in vain prompting the following types of response from the authorities:

- broken promises of assistance,
- documents/data lost or can't be found,
- availability, access and supply of documents denied,
- denials that documents and or data exists, and
- delays of extraordinary periods.

The Only Way to Do It.

After a reasonable period of persevering with each authority with this type of knockback and obstruction the following method of contact has been adopted:

- leave a paper trail,
- never accept the spoken word as good enough
- scrutinise supplied information critically,
- always double check the reliability of information obtained, and
- make use of the Freedom Of Information(FOI) process.

The FOI Process Often Requires Patience, Time & Perseverance.

Difficulties Obtaining the 2004 Barwon Downs Borefield Licence No. 893889

In the middle 2006 a copy of the groundwater extraction licence for the Barwon Downs Borefield was verbally requested of Southern Rural Water (SRW), Colac office. After some phone calls to the "powers that be" it was stated that the request had to be made to Barwon Water. Once this lengthy process successfully acquired a copy of the licence from Barwon Water another period of time elapsed before the 2004-05 and 2005-06 annual groundwater licence reports were obtained.

Noticing that several licence conditions had not been met a request was sent to Southern Rural Water asking why these items had been left out of the reports. A confused Terry Flynn, SRW officer, rang in an attempt to understand what was required. As it turned out the licence that Barwon Water had sent was entirely different to the one that was in Southern Rural Water's files. A copy of the Southern Rural Water copy of the licence was finally acquired 25 January 2007 (SRW ref: 409667), six months after the licence was first asked for. By this stage the outflow of cheques covering freedom of information requests had been well established and was to set the trend for years to come. Unfortunately a similar trend of misinformation, incorrect or corrupted data and delays was also to follow.

Amendments to the Barwon Downs Borefield Licence No. 893889.

When attempting to understand why there were so many breaches of the groundwater extraction licence concerning the Barwon Downs Borefield I was told that there had been numerous amendments to the licence hinting that this was one of the reasons why there appeared to be breaches. An email replying, to the request for these amendments (21 September 2007 8:32:46 AM from Belinda Green SRW), stated that a Freedom Of Information application was required to gain this information. The FOI application also asked for a copy of the 2006 - 2007 groundwater report that

was long overdue, another breach of the licence. A reason why this report was so long overdue was also asked for.

As it turned out there were only a few amendments that involved the increase in pumping volumes and none of these explained the reasons for the multitude of licence breaches and data discrepancies. Beside the initial application fee, photocopying fees etc. incurred additions expenses to obtain this material.

The FOI process was seen as one way of getting around the bureaucracy's obstacles to disclosure. It enables one to gain access to information and records and to delve into the government's maze and tangled web like structure. Unfortunately, on many occasions this has been shown to take a considerable time, to almost siege like proportions. The best examples of this have involved the CFA.

Thermal Images.

- It took ten months to obtain Country Fire Authority (CFA) thermal images that were taken after the 2010 fire in the Big Swamp. The last 50 days of this ten month period was taken up going through FOI. Initial discussions and requests for these images included denials that such images existed. After the images were used at a CFA/community briefing the acquiring of these images was then refused on the grounds that they were CFA intellectual property. Under FOI they were eventually released (CFA Ref: G251011 10/2422).

Appendixes to Fire report.

- In early June 2011 a copy of a fire report⁽¹⁷⁾ on the Big Swamp fire was in general circulation but the report did not contain copies of the five appendixes. After being denied copies of these from the Colac Office of the CFA an FOI request was sent off. This was received in Melbourne on the 20 May 2011 (CFA Ref: G61 1011 11/1028). Seventy nine dollars later and after 193 days the five appendixes arrived including a few photographs, an engineer's report and very little else of importance (CFA Ref: G619 1011 11/1028 and G60 1011 11/1028). Why the initial request was denied on the grounds that the appendixes were internal documents and not for public release is most confounding.

However, it is not only the CFA that tests one's patience; Southern Rural Water can be masters of this as well.

Cones of Depression.

1. Further to the complaints to Southern Rural Water 's lack of scrutiny of Barwon Water's groundwater reports on the Barwon Downs Borefield as described on pages 24 to 44, it is truly amazing that after 12 months a query regarding the number of cones of depression on the residual drawdown map in these reports, still hasn't been answered.
2. It would appear that for seven years Southern Rural Water has failed to scrutinise and notice any discrepancies with the residual drawdown maps. To have several cones of depression within the Barwon Downs Borefield area of influence needs to be explained. How the deepest cone of depression in the 2009-10 report does not even occur under the actual borefield requires extra and serious scrutiny. Why Southern Rural Water hasn't queried these multiple cones of depression in seven years is most baffling.
3. In theory, above each cone of depression there should be a borefield drawing down the aquifer water level. However, the only substantial borefield in the area of influence that is capable of creating such deep cones of depression is the Barwon Downs Borefield.
4. When the anomaly of these cones of depression was raised late in 2010 a series of contacts were made to establish whether this anomaly had ever been considered.
5. **1 December 2010.** At the meeting in Colac COPAC centre to launch the Warrion Groundwater Management Plan, a SRW water officer and SRW hydrogeologist were asked about these many cones of depression. The reply was that this was being looked into.

6. **14 December 2010.** An email was sent to Barwon Water whether there had been any updates to the 2009-10 report (see below, page 47).
7. **18 January 2011.** A similar email was sent with no reply.
8. **8 February 2011.** Having received no reply a Freedom Of Information request was sent to Barwon Water (see below, page 49).
9. **10 February 2011.** An email arrived explaining that the report was still in draft form and Barwon Water was waiting for SRW to make comment (see page 50). The report had been available to the general public since 1 September 2010 and contained no indication that it was in draft form.
(Each report covers a financial year and Barwon Water have 60 days to prepare the report for submission to Southern Rural Water by the following 1 September.)
10. **9 March 2011.** The FOI reply duly arrived and was dated 9 March 2011. It stated that there had been no modifications made to the original report as released on 1 September 2010 (see page 51). The drawdown map with multiple cones had not been changed.
11. **16 May - 26 August 2011.** During this period 7 emails were sent to SRW asking for any modifications to the 2009-10 report. These emails elicited two replies. The last one dated the 26 August 2011 is as follows...

From: Angus Ramsay <AngusR@SRW.com.au>
To: Mal Gardiner <otwaywater@yahoo.com.au>
Sent: Friday, 26 August 2011 3:52 PM
Subject: RE: Barwon Water Report 2009-10

Malcolm,

I know of no additional annual reports or any amendments made that SRW has received from BW on the operation of the borefield on the 2009-10 season.

The document that I referred to was a response doc from SRW to BW on the 2009-10 annual report, its data and the changes or clarifications to be made in the next annual report.

This strictly will require an FOI request as it is not within the realms of a "public doc" and this is the advice that I have received from Info Services.

You are also correct in that the next annual report is being prepared as we speak and we have already had one of our regular briefings with BW last week.

I also apologise as I said that I would be available but I have been stuck in a management meeting all day.

Regards

Angus Ramsay

Field Supervisor West | Southern Rural Water

Managing Water. Serving Communities.

12. An FOI request for the "advice" as mentioned above was not made. However, if the changes or clarification were referring to the residual drawdown maps it would appear that they have been overlooked because there are still several cones of depression present in the 2010-2011 residual drawdown map. Perhaps these cones are easily explained but on 1 December 2010 at the meeting in Colac the SRW officers stated that it was impossible to have so many cones of depression and seemed to be genuinely concerned that this should be looked into.
13. The Gerangamete Groundwater Borefield 2010 – 2011 report was first asked for in September 2011 and after numerous requests for it, it finally arrived in November. This is two months after the report had to be completed and delivered to SRW. No explanation was given why this took so long to mail out the 2010-11 report.
14. The residual drawdown map in this 2010-2011 report **still had four cones of depression** (see pages 41). It would also appear that nothing had been done in the last twelve months

regarding this apparent anomaly despite all of the fuss made to Southern Rural Water regarding the number of cones of depression.

From: Mal Gardiner <otwaywater@yahoo.com.au>

To: info@barwonwater.vic.gov.au

Sent: Tuesday, 14 December 2010 12:09 PM

Subject: Re: Attention Michael Watson

Dear Michael,

If there have been any updates on the Gerangamete Groundwater Management Area: Groundwater Licence No. 893889 - 2009/10 report, could I please have a copy of these, please?

Regards,

Malcolm.

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15. No reply.

From: Mal Gardiner <otwaywater@yahoo.com.au>

To: info@barwonwater.vic.gov.au

Sent: Tuesday, 18 January 2011 8:46 PM

Subject: Re: Attention Michael Watson

Dear Michael,

Has there been any changes to the Gerangamete Borefield 2009-10 report that was sent to Southern Rural Water, since you sent me a copy of this report. In other words once the report was scrutinised by SRW did any changes have to be made?

Also has there been any progress with the SKM Kewarren Borefield report as yet?

Regards,

Malcolm.

16. No reply and as a consequence the following FOI was sent 8 February 2011.



**Barwon
Water**

Freedom of Information



BARWON REGION WATER CORPORATION
61-67 Ryrie Street
PO Box 659
GEELONG VIC 3220
www.barwonwater.vic.gov.au
ABN 86 348 316 514

Telephone Local (03) 5226 2543
Telephone Overseas +61 3 5226-2543
Fax No. Local (03) 5222 6983

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Freedom of Information Act 1982

Access request form

NAME: MALCOLM GARDINER

POSTAL ADDRESS: 1805 COLAC LAVERS HILL ROAD
KAWARRIN VIC 3249

TELEPHONE CONTACT: BH AH 03 52 358 325

DETAILS OF DOCUMENTS REQUESTED:

- ① In regard to the Barwon Water document
"Gerangamete Groundwater Management Area
Groundwater Licence No. 893889 2009-2010
Report," that was sent to Southern Rural Water,
I request all documents that relate to any
modifications made to this original document/rep
after it had been submitted to Southern Rural Water.

FORM OF ACCESS REQUIRED: (Tick one)

- (i) A copy of the document(s) ☒
- (ii) Inspection of the document(s) ☐
- (iii) Access in another form (specify) ☐

I understand that an application fee of ^{23.90}~~\$22.70~~ must accompany this request and that further reasonable charges for photocopying and other processing costs may be applicable. FOI fees and charges are not subject to GST.

Signature [Signature] Date 8/02/2011

Send request and cheque/money order (payable to Barwon Water) for \$22.70 to:
FREEDOM OF INFORMATION MANAGER
BARWON WATER
PO BOX 659
GEELONG VIC 3220

17. It is not known whether this email was prompted by the FOI or the two emails dated the 14 December 2010 and 18 January 2011.

From: Michael Watson <Michael.Watson@barwonwater.vic.gov.au>

To: 'Mal Gardiner' <otwaywater@yahoo.com.au>

Sent: Thursday, 10 February 2011 2:31 PM

Subject: RE: Attention Michael Watson

Dear Malcolm,

Please note that I have been advised by the relevant Managers that to date there has been no progress on the SKM Kawarren borefield report and we are still awaiting Southern Rural Water comments and feedback on the Barwon Downs Licence Report and as such it is still in draft for amendment.

Regards,

Michael

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18. This email contains an amazing statement when saying that the 2009 – 2010 report is still in draft form. When this statement was made on 10 February 2010, this report would have been available to the general public for over five months and contained no indication that it was in draft form.
19. However, the SKM Kawarren Borefield report mentioned in the email above is still in draft form and not available (see *Kawarren Groundwater Last Report*, page 52).
20. The reply to the FOI (see page 51) clearly states that there have been no modifications to the 2009-2010 groundwater report. This FOI reply is dated six months after the completed report had to be lodged with Southern Rural Water. The only conclusions to be drawn are that there is something terribly wrong with this aspect of the management of the water resources at the Barwon Downs Borefield.



Our Ref: F070311/33925
Your Ref: Form dated 08/02/11
Enquiries To: Michael Watson
(03) 5226 2543

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9 March 2011

Mr Malcolm Gardiner
1805 Colac Lavers Hill Road
KAWARREN VIC 3249

Dear Sir,

Re: Freedom of Information request

In response to your Freedom of Information request, I have been advised that there have been no documents created or modified in regard to the original "Gerangamete Groundwater Management Area Groundwater Licence No. 893889 2009-2010 Report" sent to Southern Rural Water.

Please contact me on 5226 2543 if you wish to discuss the contents of this letter further in respect to the availability of information.

Yours faithfully,

A handwritten signature in black ink, appearing to read "Michael Watson".

Michael Watson
FOI Manager

Barwon Region Water Corporation
ABN 86 348 316 514

61-67 Ryrie Street, Geelong Victoria 3220
PO Box 659 Geelong Victoria 3220 TEL 1300 656 007 FAX +61 3 5221 8236

www.barwonwater.vic.gov.au

21. The query of the apparent anomalies with the residual drawdown maps and the cones of depression are still to be answered.

Kawarren Groundwater Last Report.

An attempt was made to conduct a groundwater test pump at the Kawarren Borefield under the pretence that this borefield was within the Newlingrook Groundwater Investigation area. Reports written by SKM between 2006 and 2009 on the Kawarren groundwater investigation contained inaccurate information^(Bk3) and had to be challenged so that an accurate and reliable record existed for future reference. When it became known that a report had been written summing up the Kawarren investigation it was deemed necessary to scrutinise this report for similar inaccuracies. If they existed, they should be challenged and not be allowed to be used in the future as a true and accurate account.

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1. Attempting to obtain a copy of this Sinclair Knight Merz's (SKM) final report on the \$200 million Kawarren groundwater investigation that was abandoned in 2009, is another example of an authority testing patience and perseverance.
2. Initial requests for this report fell on deaf ears and in October 2009 an FOI request asked for a final report on the "Newlingrook Groundwater Investigation."
3. The reply to this request (Barwon Water Ref: 15/260/0007C(2)), dated 17 November 2009 had this to say:
"SKM's final report on the "Newlingrook Groundwater Investigations."
There is no such report. The investigation was stopped before completion.
4. However, after the Kawarren investigations were abandoned SKM most definitely prepared a draft report and sent it off to Barwon Water late June/early August 2010, a year after the test was abandoned.
5. A request for this draft report was made 17 August 2010 via phone call to Barwon Water.
6. The letter on page 53 from Barwon Water, arrived as a follow up to this phone call.
7. However, the letter dated 27 August, did not arrive until after this email dated the 31 August, had been sent.

From: Mal Gardiner (otwaywater@yahoo.com.au)
To: info@barwonwater.vic.gov.au;
Date: Tue, 31 August, 2010 11:26:05 AM
Cc:
Subject: Attention Michael Watson

Dear Michael,

Following our conversation on the 17 August I would just like to remind you that you promised to look into providing me with a final report of the Newlingrook Groundwater Investigations.

I would also like you to look into providing me with a coloured copy of the 2009-2010 Barwon Downs Groundwater Licence No. 893889 Gerangamete Area report that is sent to Southern Rural Water.

Thanks,
Malcolm.

Our Ref:
Your Ref:
Enquiries To: Phone query
Mr M Watson
03 5226 2543

27 August 2010

Mr M Gardiner
1805 Colac-Laver Hill Road
KAWARREN VIC 3249

*ph book
17/8/10
Michael promised to sort out the
delay. There is a final report but in
draft form.*

53

Dear Mr Gardiner,


RE REQUEST FOR ACCESS TO REPORT

Further to our phone conversation 17 August 2010 in respect to obtaining a final copy of the SKM Newlingrook Groundwater Investigation report, I wish to advise:

- no final report on Newlingrook Groundwater Investigation has been completed
- following the Minister's agreement in June 2009 not to proceed any further with the Newlingrook investigation, Barwon Water requested its consultant (SKM) to document work completed to that date
- draft documentation of the work completed has been received – this has not been reviewed or finalised
- the review and finalisation of the draft documentation is currently not a high priority.

Please contact me on 5226 2543 if you wish to discuss the contents of this letter further in respect to the availability of the report requested.

Yours sincerely,



Michael Watson
FOI MANAGER

CC: Joe Adamski, General Manager Strategy & Technology
Peter Morgan, Manager Asset Planning

8. As a follow up, in September contact was made with Barwon Water inquiring into progress on the Newlingrook Groundwater Report and the 2009-10 Licence Number 893889 report.
9. 30 September 2010, the 2009-10 report arrived with the following letter explaining that the Kawarren report had not been completed as yet.

Our Ref:
Your Ref: Phone query
Enquiries To: Mr M Watson
03 5226 2543

54

30 September 2010

Mr M Gardiner
1805 Colac-Laver Hill Road
KAWARREN VIC 3249

Dear Mr Gardiner,

RE REQUEST FOR ACCESS TO REPORTS – 23 SEPTEMBER 2010

Further to your phone message, please find attached Gerangamete Groundwater Management Area: Groundwater Licence 893889 – 2009/10 report.

In respect to the Newlingrook Groundwater Investigation report, I wish to advise:

- no final report on Newlingrook Groundwater Investigation has been completed
- following the Minister's agreement in June 2009 not to proceed any further with the Newlingrook investigation, Barwon Water requested its consultant (SKM) to document work completed to that date
- draft documentation of the work completed has been received – this has not been reviewed or finalised
- the review and finalisation of the draft documentation is currently not a high priority.

In discussion with the relevant manager, he is unable to give me a timeframe for completion of the report.

Yours sincerely,



Michael Watson
Foi Manager

Attach.

CC: Joe Adamski, General Manager Strategy & Technology
Peter Morgan, Manager Asset Planning

10. After weeks of hearing nothing in regard to the Kawarren report, the following email was sent.

From: Mal Gardiner (otwaywater@yahoo.com.au)
To: info@barwonwater.vic.gov.au;
Date: Sat, 13 November, 2010 3:11:09 PM
Cc:
Subject: Re: Attention Michael Watson

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Dear Michael,
I was wondering how the final report of the Newlingrook Groundwater Investigations is coming along. Have your "guys" had a chance to review the draft report yet?

Cheers,
Malcolm.

11. 1 December 2010 a reply arrived.

From: Michael Watson (Michael.Watson@barwonwater.vic.gov.au)
To: otwaywater@yahoo.com.au;
Date: Wed, 1 December, 2010 9:20:22 AM
Cc: Jill.Szalnowski@barwonwater.vic.gov.au;
Subject: Request for Update.

Dear Mr Gardiner

*Thank-you for your recent email seeking advice as to the reports requested.
In response I can advise the following :-*

As previously advised in Barwon Water letters dated 17th November 2009 and 27th August 2010, no final report has or will be produced for the Newlingrook groundwater investigation as the investigation was stopped before completion.

As previously advised in Barwon Water's letter dated 27th August 2010, draft documentation of partially completed work has been received. This has not been reviewed or finalised and the review and finalisation is currently not a high priority.

Regards,
Michael

Michael Watson
Company Secretary | General Manager Finance & Administration | Barwon Water
61-67 Ryrie Street (PO Box 659) Geelong VIC 3220
T (03) 5226 2543 | F (03) 5222 6875 | M 0417 544 108 | W www.barwonwater.vic.gov.au

12. 18 January 2011.

From: Mal Gardiner [<mailto:otwaywater@yahoo.com.au>]
Sent: Tuesday, 18 January 2011 8:46 PM
To: info
Subject: Re: Attention Michael Watson

Dear Michael,
Has there been any changes to the Gerangamete Borefield 2009-10 report that was sent to Southern Rural Water, since you sent me a copy of this report. In other words once the report was scrutinised by SRW did any changes have to be made?
Also has there been any progress with the SKM Kawarren Borefield report as yet?

Regards,
Malcolm.

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13. 10 February 2011.

[Print](#) - [Close Window](#)

Subject: RE: Attention Michael Watson
From: Michael Watson (Michael.Watson@barwonwater.vic.gov.au)
To: otwaywater@yahoo.com.au;
Date: Thu, 10 Feb 2011 14:31:18

Dear Malcolm,

Please note that I have been advised by the relevant Managers that to date there has been no progress on the SKM Kawarren borefield report and we are still awaiting Southern Rural Water comments and feedback on the Barwon Downs Licence Report and as such it is still in draft for amendment.

Regards,

Michael

14. 22 June 2011.

[Print](#) - [Close Window](#)

Subject: Re: Attention Michael Watson
From: Mal Gardiner (otwaywater@yahoo.com.au)
To: info@barwonwater.vic.gov.au;
Date: Wed, 22 Jun 2011 22:52:54

Malcolm Gardiner
1805 Colac Lavers Hill Road
Kawarren
Vic 3249
ph (03) 52 358 325
www.otwaywater.com.au

Dear Michael,
I was wondering how the final report of the Newlingbrook Groundwater Investigations is coming along. Have your "guys" had a chance to review the draft report yet?

Cheers,
Malcolm.

15. This letter arrived 14 July 2011.



Our Ref:
Your Ref: Email dated 22/06/11
Enquiries To: Michael Watson
(03) 5226 2543

57

14 July 2011

Mr Malcolm Gardiner
1805 Colac Lavers Hill Road
KAWARREN VIC 3249

Dear Sir,

Re: Final report – Newlingbrook Groundwater Investigations

Further to your email of 22 June 2011, I wish to advise the draft reports need a significant review prior to being finalised.

The Water Resource Planning Team (who should review these reports) is fully committed up to Christmas with preparation of the Barwon Water/Victorian Government Water Supply Demand Strategy. Ideally, we will wait until after Christmas to review the draft reports prior to finalisation by SKM. This would mean reports probably finalised by around April 2012.

Yours faithfully,

A handwritten signature in black ink that reads "Michael Watson".



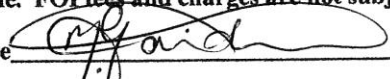
Michael Watson
General Manager
Finance & Administration

Barwon Region Water Corporation
ABN 86 348 316 514

61-67 Ryrie Street, Geelong Victoria 3220
PO Box 659 Geelong Victoria 3220 TEL 1300 656 007 FAX +61 3 5221 8236

www.barwonwater.vic.gov.au

16. April 2012 would be 34 months after the Kwarren project had been abandoned. With no assurances that the report would be finalised even then an FOI was sent asking for a copy of the draft report.

 Barwon Water	<h2 style="margin: 0;">Freedom of Information</h2>	
BARWON REGION WATER AUTHORITY 61-67 Ryrie Street PO Box 659 GEELONG VIC 3220 www.barwonwater.vic.gov.au ABN 86 348 316 514		Telephone Local (03) 5226 2595 Telephone Overseas +61 3 5226-2595 Fax No. Local (03) 5221 8236
<h3>Freedom of Information Act 1982</h3> <h4>Access request form</h4>		
NAME: <u>MALCOLM GARDINER</u>		
POSTAL ADDRESS: <u>1805 COLAC LAVERS HILL ROAD</u> <u>KAWARREN VIC 3249</u>		
TELEPHONE: BH <u> </u> AH <u>(03) 52 358 325</u>		
DETAILS OF DOCUMENTS REQUESTED:		
<u>① A copy of the draft documentation of</u> <u>partially completed work for the Newlingbrook</u> <u>groundwater investigations that you</u> <u>mentioned in an email dated Wed 1 December</u> <u>2010 9:20:22 pm - that was sent to me.</u>		
<u>② A copy of Barwon Water's EPA licence.</u>		
FORM OF ACCESS REQUIRED: (Tick one)		
(i) A copy of the document(s)	<input checked="" type="checkbox"/>	
(ii) Inspection of the document(s)	<input type="checkbox"/>	
(iii) Access in another form (specify)	<input type="checkbox"/>	
<p>I understand that an application fee of \$21.00 must accompany this request and that further reasonable charges for photocopying and other processing costs may be applicable. FOI fees and charges are not subject to GST.</p>		
Signature <u></u>		Date <u>22/11/2011</u>
Send request and cheque/money order (payable to Barwon Water) for \$21.00 to: FREEDOM OF INFORMATION MANAGER BARWON WATER PO BOX 659 GEELONG VIC 3220		

17. Thinking that the application fee was \$23.90 (see page 49) a cheque for this amount was included.
18. Even though the cheque was cashed in November it took nearly a month to process the application. This letter then arrived 9 January 2012.



Our Ref: F070311/B084690
Your Ref:
Enquiries To: Trevor Little
(03) 5226 2511

3 January 2012

Mr Malcolm Gardiner
1805 Colac Lavers Hill Road
KAWARREN VIC 3249

Dear Mr Gardiner,

Re: Freedom of Information request

I refer to your request of 22 November 2011 received by Barwon Water on 24 November 2011, in which you sought access to documents under the *Freedom of Information Act 1982* ("Act").

Please note that s 17 of the Act sets out the requirements for a request which complies with the Act and which requirements must be satisfied before Barwon Water can process the request. One of those requirements is that the request be accompanied by the relevant fee or be waived (in whole or in part), pursuant to s 17(2A) and s 17(2B) of the Act. The current fee payable on requests made pursuant to the Act since 1 July 2011 is \$24.40. Unfortunately, you have used an out of date request form to seek access and Barwon Water confirms receipt of your application fee of \$23.90.

In those circumstances and pursuant to s 172(B) of the Act, Barwon Water has determined to waive the shortfall of 50c in your application fee on 23 December 2011. Barwon Water will respond to your request as soon as practicable and in any case within the time period set out in s 21 of the Act. I note the due date for a decision to be notified to you will be 6 February 2012.

Yours sincerely,

A handwritten signature in dark ink, appearing to read "Michael Watson".

Michael Watson
FOI Manager

Barwon Region Water Corporation
ABN 86 348 316 514

61-67 Rylie Street, Geelong Victoria 3220
PO Box 659 Geelong Victoria 3220 TEL 1300 656 007 FAX +61 3 5221 8236

www.barwonwater.vic.gov.au

19. A reply to an FOI application must take no longer than 45 days. It took Barwon Water 30 days to decide whether to ask for or waive the 50c shortfall. Once Barwon Water agreed to

- the fee status on the 23 December, Barwon Water had another 45 days to make a decision. Having waited for over a 1000 days for this report, another 45 days seemed inconsequential.
20. The FOI reply arrived 7 February 2012 and stated that the draft report was exempt from disclosure under s 30(1) of the FOI Act. The explanation in full is as follows:

The rest of the documents are exempt from disclosure under s 30(1) the Act because disclosure of those document would divulge matter in the nature of opinion, advice or recommendation or consultation or deliberation engaged in between officers of Barwon Water in the course of, or for the purposes of the deliberative processes involved in the functions of Barwon Water. Those functions relate to, among other things, Barwon Water's processes in carrying out its statutory functions.

The documents are in draft form and have never been endorsed by Barwon Water. They were sought and provided to Barwon Water at the very early stages of Barwon Water's deliberative processes in relation to the Newlingbrook Groundwater Investigation and are still pending consideration. No final decision has been made by Barwon Water in relation to the preliminary views and opinions set out in the draft documents.

Disclosure of the documents would be contrary to the public interest because the documents remains in draft form and consideration of them remains incomplete. Due to the preliminary nature of the documents, they do not in any way represent the decision-making process actually being undertaken by Barwon Water. Now do they reflect any final view taken by Barwon Water in relation to the issues canvassed in the documents. It is contrary to the public interest for preliminary, unendorsed and isolated opinions and advice from officers of Barwon Water to be disclosed, as disclosure would lead to misunderstanding and confusion about Barwon Water's actual views or actions. This is particularly the case given the technical and speculative nature of the contents of the documents, which relate to theoretical future projections and modelling based on events which may or may not occur. Disclosure would also damage the integrity of Barwon Water's decision-making processes, which is contrary to the public interest.

Barwon Water FOI Ref: F070311/B084690, 3 February 2012.

The efforts to gain the report on the Kavarren Groundwater Test investigations could as aptly fit under the section of this book headed, *"Authorities Can Use the FOI Process to Frustrate,"* (see page 62) as under this section, *"The FOI Process Often Requires Patience, Time & Perseverance."*

Data Can Go Missing.

Considerably more concerning than data being difficult to access are the times when important documentation and data goes missing.

1. On 6 September 2006 Terry Flynn of Southern Rural Water was asked for the yearly groundwater volumes from the Barwon Downs Borefield since 1980.
2. On 20 September 2006 Terry replied that he unfortunately only had more recent data. This was data provided in the Barwon Water's groundwater reports 2004-2006.
3. Having no luck with the licence regulating body it was decided to enquire through Barwon Water.
4. When enquiring for these groundwater extraction volumes from Barwon Water for the period 1980-2005 the Freedom of Information reply from Barwon Water stated that, ***"Please note there are no records prior to 1988."*** (Barwon Water ref: 15/260/0003X (3), 9 November 2006) Besides some considerable discrepancies with the figures provided since 1988, the fact that there were no figures prior to 1988, seemed unbelievable. The Stage One 1995 licence that was granted to Barwon Water to extract huge volumes of water was founded on the findings

from a 1986-90 test pump. Between 1986 and 1990 Barwon Water extracted over 20 000 ML of groundwater at the Barwon Downs Borefield and on a regular basis a Progress Report was compiled. Back in 1989 I had obtained copies of Progress Report Number 7, 26 June 1989 and Report Number 8, August 1989. The 1989 Report Number 8 stated that, *“These progress reports will continue to be produced at approximately two month intervals for use by the interdivisional working group. The next report is expected to be produced in early December, or earlier if it is decided to continue pumping beyond the end of November.”*

The pumping did continue to the end of February of the new year and there should have been at least three more reports containing the extraction volumes.

In November 2006 I asked for another copy of Report Number 8 and the reports covering the period up to the end of the test pump in 1990.

The Freedom of Information reply asking for Report Number 8 and the final few reports stated,

“After a thorough and diligent search,” these reports could not be found. (Barwon Water Ref: 15/260/0003X(7)FOI)

It is quite amazing that critical data could not be found and that other data could be so inaccurate, especially when this data was used to determine the licence extraction rates for Stage One at the Barwon Downs Borefield in 1995. Barwon Water stated there were no records prior to 1988 and records after this period that could not be found. To make matters worse the final report on the 1986-90 test pump had disappeared as well. It was two years after first attempting to obtain a copy of this final report that by chance an incomplete report was uncovered in a colleague's personal library.

5. It took even longer to track down a copy of a HydroTechnology report written by Khouri and Duncan⁽³⁵⁾ that was a critical report that had a significant influence on the cessation of the Kwarren Groundwater Extraction Investigations in the 1990s. HydroTechnology had been taken over by SKM and all contact made with SKM staff including the SKM library staff could not find a copy. A copy was finally sourced from within a State Government Authority.

Data Varies Depending on the Source.

It is most alarming when what should be the same data can vary depending on the source.

1. One example of this happening occurred when attempting to establish whether Barwon Water was complying with the licence condition of Licence No. 893889, releasing supplementary water into Boundary Creek. For the period 1 November 2005 to 23 October 2006 Southern Rural Water provided the supplementary figures for the release of waters into Boundary Creek (SRW FOI Ref No: 449537). Through Freedom Of Information Barwon Water provided markedly different figures (Barwon Water FOI Ref: 15/260/0003X(3)). During the same period I took random samples from the discharge point and came up with a different set of figures. For example when the releases were reported as stopped I was able to calculate that approximately 30 000 L/Day were still being released.⁽³⁰⁾ 30 000 L/day is not an insignificant amount of water and considering the other discrepancies it would be difficult to argue that the management of this water resource was being handled correctly. Little wonder so many FOIs have had to be made. Even if on occasions the data provided is nowhere accurate glaring faults in the management of the State's water resources can be exposed.
2. Another example of data varying and being contradictory is found in “Acid soils and soil acidification in Victoria – a review,” by Crawford, Heemskerk and Dresel.⁽¹¹⁾ The following statement on page 55 of this report is in complete variance to even common sense. *“It is understood that in Boundary Creek, AASS has been created by an unsuccessful attempt to extinguish a peat fire by draining the peat.”* (AASS - Actual Acid Sulfate Soil) The reason the peat caught fire in the first place was that it was drained and dried out because of groundwater extraction. One does not put a peat fire out by continuing to drain

it thus making it drier. This would only exacerbate the problem allowing the peat to become a fuel source that would continue to smoulder underground or ignite on the surface and become a wildfire. See page 148 for similar comments from Barwon Water.

3. In Barwon Water's 2003 Water Resource Development Plan⁽⁴⁾ this statement was made.

"No long term flora or fauna impacts have been detected in Boundary Creek area resulting from the Barwon Downs wellfield."

Boundary Creek had a historical average daily summer flow of 3.2 ML going back to 1912. By the end of 2003 and after the Barwon Downs wellfield began operations, Boundary Creek had been dry on 494 days.⁽⁴⁹⁾ In this instance Barwon Water data varies markedly with data found on the State Government water data base.

4. In 2008 MLC member Greg Barber, asked the then Minister for Water Tim Holding, for all documents in relation to the decision to allow groundwater pumping in the Gellibrand Groundwater Management Area (DSE Ref F1/03/3047, 27 November 2008).

After "... *thorough, diligent and complete searches...*" nothing was dated any earlier than April 2008. The following advisors provided information for the Minister,

- Executive Director Water Entitlements & Strategies,
- General Manager, Office of Water,
- Acting Chief Legal Officer,
- Director Legal Services,
- Group Director, Allocations, Trading and Irrigation,
- Manager Groundwater Allocation, and
- Senior Project Officer Groundwater.

Were the "complete searches" by these people thorough and diligent? The date of April 2008 is significant because Service Contract No 10643 issued to Sinclair Knight Merz was approved 11 May 2007. Also added to this time line discrepancy is the period needed to draw up the lengthy licence document. Barwon Water insists that permission was given as far back as June 2007. Unfortunately this date does not even predate when the Service Contract was approved.⁽²²⁾

5. A continuous stream flow gauging station (No. 233228) on Boundary Creek records two sets of flow data, one for Barwon Water and one for DSE. Between 1 Jan. 2011 and 18 Mar. 2011 DSE reports⁽⁴⁹⁾ that 724.99 ML flowed past this point and Barwon Water states⁽⁵⁵⁾ that 746.113 ML flowed past this point in the same time period. Averaged out this would be an extra 274 323 litres a day. This was for a 77 day period (see graph page 149).

Authorities Can Use the FOI Process to Frustrate.

The Freedom of Information Act is supposed to inform, provide transparency, allow openness and be a form of review of important decisions. Unfortunately, this process can be used by the authorities to delay and frustrate. Too often the reply to the most basic of requests is that an application must be made through the FOI Act process.

1. The Barwon Water FOI officer had this to say in 2007,
"It has come to my attention that you have also requested documents and information from a number of officers across Barwon Water. I would request that any documents and information you seek from Barwon Water are sought from the Freedom of Information Officer and is accompanied with the required fee of \$22.70." (Barwon water Ref:15/260/0007A(6) See Appendix One page 109.)
2. In an FOI request to the Colac Otway Shire the reply came 14 days after the regulation 45 days. This was an oversight but considering that the request required no more than a five minute research effort it is baffling why the request wasn't dealt with immediately instead of taking 59 days.

Suppression of Information.

The FOI can be used to get at the truth of frequently suppressed and or distorted information. An example of this is best seen when attempting to engage the Colac Otway Shire in meaningful dialogue over the testing of the waters in Boundary Creek. In 2008 Deakin University, Warrnambool Campus had analysed water samples through a NATA accredited laboratory that indicated serious pollution from acid and heavy metals.⁽³⁰⁾ A second copy of these test results were given to the Colac Otway Shire by local Landcare Group, LAWROC, when a tour of the Boundary Creek area was undertaken in January 2009. The elevated lead levels caused some amazement with one of the Colac Otway Shire officers and should have prompted an immediate and thorough examination of waters flowing down Boundary Creek.

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Being frustrated at the lack of action from State Government Authorities⁽³³⁾ the local Landcare Group (LAWROC) commissioned a study that proved beyond any doubt that the Big Swamp was an Actual Inland Acid Sulfate Soil site.⁽¹²⁾ By 3 September 2010 the Colac Otway Shire had this confirmed through a separate study being done by the Corangamite Inland Acid Sulfate Soils Multi Agency Steering Committee (CIASSMASC). However, attempting to confirm that the water flowing intermittently down Boundary Creek was terribly polluted was another story. Rain flushes were to confuse and dictate the manner and methods used to gain an accurate picture of the degree of pollution but it would appear that these changing conditions have not been considered when the Colac Otway Shire has conducted its investigations.

From the LAWROC 2008 water test results it would appear that because the arsenic was at such elevated levels⁽³⁰⁾ this was a good place to start enquiries with the Shire. On 19 November 2009 the question was asked of the Shire had the waters flowing from and across the Big Swamp been tested for arsenic. As a consequence of this question and others, a series of letters began to flow back and forth for some considerable time (see Appendix Two page 110).

One of the criticisms of the LAWROC Landcare Group's commissioned water test results of 2008 was that the group did not have the "expertise" to collect and deliver water samples to a strict code. Bearing this in mind it seemed a reasonable request to ask of the Shire the names of the "reputable chemical analysts," the experts that provided the "expert advice" and in what manner the samples had been collected. To be told that I already knew who these people were was preposterous, as it was later to be shown (see Appendix Two page 110).

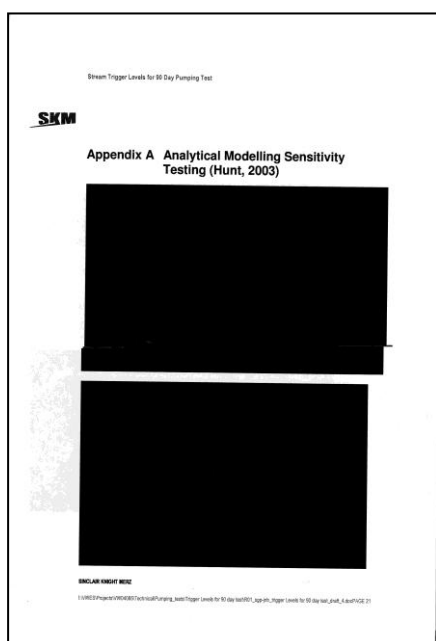
In Shire correspondence it appeared that Barwon Water, Southern Rural Water, Corangamite CMA, the Department of Sustainability & Environment and the Department of Primary Industries (see page 110) were involved in this testing and as a consequence a letter was sent to each of these departments asking had they done any arsenic testing of waters in Boundary Creek. Perhaps the question asked of these authorities should have been did they assist the Shire with advice on how to go about conducting water sampling and testing. None of the authorities mentioned by Shire had done any testing and stated that to their understanding these tests had been done by the Colac Otway Shire.

It appeared that the Shire was not prepared to freely provide information and as the matter of access to information had been spun out over a considerable period, an FOI was sent to the Shire 13 May 2011 asking for copies of the heavy metal testing as indicated in the various letters from the DPI, CCMA, etc. The reply arrived Friday 3 June 2011 with 19 pages of maps and data taken over a twenty six month period covering March 2009 to May 2011. The following week after the FOI arrived from the Shire, I was invited to attend a meeting with Stewart Anderson of the Colac Otway Shire at 8:30 am on Friday the 10 June 2011 in the Shire Offices.

The meeting lasted until 10:30 am and covered a wide range of issues dealing with the Big Swamp. However, the water testing was the main item of discussion. CEO Rob Small, officer Jack Green,

officer Stewart Anderson, Councillor Stuart Hart and myself were in attendance. From my small amount of experience collecting and presenting samples for analysis it appeared that the manner in which the Shire sampling had been conducted could only give a most basic indication of the state of the water passing across and through the Big Swamp. It was also unbeknown to me that the Shire and officers from another state government department were meeting later in the day with some of the property owners abounding Boundary Creek. Unfortunately not all landholders were invited to this important meeting.

It is most curious that both these meetings were within a few days after gaining the water test results through the FOI process. The meeting of landholders was called to advise them to be very wary of utilising the waters flowing down Boundary Creek. This warning should have been issued years earlier, following the 2008 LAWROC water test results and the initial 2009 Colac Otway Shire testing. These meetings were followed up with a media release (see page 127).

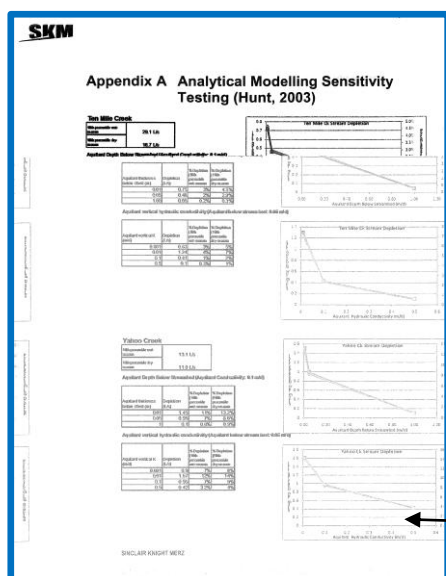


Another example highlighting how the suppression of information can be used to frustrate was evident when the Kwarren community was seeking information on Barwon's Water efforts to investigate the extraction of groundwater from the Kwarren Borefield. A report had been written in 2008⁽³⁸⁾ and placed on the Barwon Web site and included this blacked out data in Appendix A, draft 4. The second page of this appendix was also blacked out.

On 22 January 2009 Barwon Water was asked for a readable copy of the report, draft 4. The FOI officer of Barwon Water replied stating that it could be obtained only through FOI and any request had to be accompanied with \$22:70.(see page 62)

An FOI request was sent with a cheque. The copy sent in the reply contained the same blacked out pages. I now had two copies with data missing when it was specifically asked that data on these blacked out pages be included.

Months later in a lead up to a VCAT hearing, Southern Rural Water included the very same report with the unreadable section Appendix A, as evidence and supporting argument for the granting of the licence to Barwon Water to test pump at Kwarren.⁽³¹⁾ Perhaps the blacked out pages did not contain any data.



In September 2009, twenty four hours before the VCAT hearing was to start in earnest, Barwon Water withdrew its licence application.

On 5 October 2009 another FOI was sent to Barwon Water asking for the latest version of the 2008 report.

The reply in November 2009 stated that. ***“Reply attached. Draft 4 is latest version, no final report produced.”*** (Barwon Water Ref:15/260/0007C(2)).

Having withdrawn its application to continue with a test pump at Kwarren it was no surprise to flip through to Appendix A and find that the blacked out pages were now readable.⁽³²⁾

← This is what was hidden under the blacked out section and may or may not have been important to those groups

objecting to the granting of the Kawarren Groundwater extraction licence. What is important is that the data presented was not available before the hearing. This is a clear case of suppression of information.

Another occurrence whether tactical or by accident, is the providing of data in such a small or blurred form that it is unreadable. Reducing data from A3 size to A4 is another tactic and providing black and white copies of graphs involving several colour charted occurrences on the one page makes deciphering the data impossible.

Thorough Work Can Stand Up to Scrutiny.

Thorough and fair work can stand up to scrutiny whereas poor and prejudiced work must be exposed or it will continue.⁽⁶⁾

There are three excellent examples that highlight work that is far from thorough or fair.

1. In 2006 the CCMA commissioned a study⁽¹⁰⁾ to determine the environmental flows required for the streams and estuary of the Barwon River. The recommendation for the tributary of Boundary Creek was for two fortnightly periods of no flow. That is four weeks of no flow and was accompanied by this statement: *"If these reaches do not cease to flow, sustained flows may promote the growth of perennial emergent species such as Typha and Phragmites, which will replace other vegetation assemblages and may degrade habitat for Platypus, larger fish species, such as River Blackfish, and macroinvertebrates."* The poor and prejudiced work done for the Boundary Creek reach of this study has been covered in detail in Otway Water Book Nine.⁽³¹⁾ (Appendix Three of this book, pages 132-137, covers some of the correspondence regarding this example. Also see page 81)
It is made blatantly clear that pre groundwater extraction by Barwon Water Boundary Creek had an average daily summer flow of 3.2 ML. Platypus and River Blackfish could survive in this environment but would have extreme difficulty with four weeks of no flow. (This terrible piece of research is dealt with in detail in Otway Water Book 9, pages 34- 36).
2. Another example of sloppy and incompetent work can be found in the 2009 Barwon Downs Borefield flora survey report commissioned by Barwon Water.⁽³⁹⁾
Otway Water Book 9 devotes 20 pages exposing this calamity.
It is worthy of note that a hard copy of this report was requested through FOI, and accompanied by \$22:7 as dictated by Michael Watson (see page 61), and took 55 days to process. At the time of the FOI submission this report was not on the Barwon Water web site. When the FOI reply arrived it **did not** contain a hard copy as requested but directions on how to access the report that was by this stage on Barwon Water's web site.
3. The third example. The following words coloured in green are extracts from Otway Water Book 13.⁽¹⁹⁾ Residual drawdown maps have to be included in Barwon Water's annual report on the Barwon Downs Borefield. This extract clearly shows that work that has been supplied is neither thorough nor fair and cannot stand up to scrutiny.

Residual Drawdown maps provided by Barwon Water in regard to Groundwater Licence No. 893889 Gerangamete Area.

These annual reports must reach Southern Rural Water 60 days after the end of the financial year. That is by 1 September. The 2004-05 report should have been in Southern Rural Water's archives by September 2005. This was the first report of the new Licence granted in 2004.

The 2004-05 report was requested in 2006 and arrived 25 January 2007, 16 months after the report should have been reviewed, scrutinised and archived by Southern Rural Water.

During the course of 2007 considerable discrepancies and concerns regarding this report were noted. Another identical report was asked for.
Why ask for another copy of the report?

There was so much wrong with this report that it was felt that every effort be taken so that there could be absolutely no chance that any criticism be levelled that this report had been tampered with after receipt.

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The Gellibrand Post Office was asked to hold any mail from Southern Rural Water. When the report duly arrived 5 February 2008 it was opened in the presence of a witness and each page duly signed.

Photocopies of both reports were taken and archived.

The concerns and discrepancies apparent in the first copy were still present in the second. Under further scrutiny other serious concerns became apparent and considerable additional data appeared in the second copy that was not in the first. Most of this research is covered in Otway Water Book 8 "One Giant Environmental Footprint." (free download at www.otwaywater.com.au)

Maps 1 and 2 (see pages 20 & 21) were the only residual drawdown maps in the first report.

However, in the second copy of the 2004-05 report amongst the additional data there were 2 extract maps provided, Maps 4 & 5 (see pages 22, 23).

All of the maps in this second report for 2004-05 were half the size of Maps 1 & 2 that were found in the first report for 2004-05. The two 2004-05 reports were significantly different.

One of the most significant concerns with the financial year 2004-05 report was that it contained data from December 2005. The salinity section of the reports in both the 2004-05 and 2005-06 were identical. The 2004-05 report had to be written at the same time as the 2005-06 report. In other words the 2004-05 report was written some 12 months after it should have been completed and archived at Southern Rural Water.

Vital /Critical Data Said to be Collected – BUT NOT DONE

At a Natural Resources & Environment Committee (NREC) hearing in Colac in the late 1980s officers of the Geelong and District Water Board (now Barwon Water) stated that the recommendations made by Quentin Farmar-Bowers⁽¹⁸⁾ in 1986, had been implemented. Farmar-Bowers had been commissioned to determine what environmental studies should be done pre the 1986-90 stress test pumping at the Barwon Downs Borefield, so that high quality and reliable comparative information could be gathered. When asked for copies of the work done so far, Barwon Water said the Rural Water Commission (now Southern Rural Water) was doing them. The Rural Water Commission said the Department of Rural Affairs (DARA) in Colac was doing them. The Department of Rural Affairs both in Colac and Geelong had no idea who was doing the work. In an attempt to discover who had actually commenced the studies recommended by Farmar-Bowers, the Department of Water Resources, Victoria was approached. The following letter arrived. This information stated that almost none of the recommendations had been implemented. This letter was dated three years

after the critical stress test pump had commenced. What a calamity and what an impossible task to adequately evaluate the effects on the social and environmental impacts without this comparative data and the involvement of local input. When the stage one licence was issued in 1995 it had to be based on many assumptions in regard to the social and environmental impacts that had and may occur as pumping progressed.


It is quite amazing that critical data can go missing (see page 60) and that comparative pre pumping studies stated as being done were not done and that this formed part of the decision that determined the extraction rates for Stage One(1995) at the Barwon Downs Borefield. The licence for Stage One allowed 12 000 ML/year extraction. The 1995 report⁽⁴⁸⁾ stated that 4000 ML/year extraction would in all probability affect flows in Boundary Creek.

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<p>Your ref: Our ref: Ext. no: 003980 Contact: 651 3940 R Bugeja</p>	<p>57</p>	<p>Department of Water Resources Victoria 2nd Floor, 35 Spring Street Melbourne, 3000 Telephone: (03) 651 2977 Facsimile: (03) 651 2989</p>
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8 February 1989

Mr Malcolm Gardiner
RMB 5180
KAWARREN 3249


Water Victoria

Dear Mr Gardiner,

DRAFT WATER MANAGEMENT STRATEGY - SOUTH-WESTERN REGION

Thank you for your letter of 31 January 1989 in which you ask a series of questions about recommendations made in 1986 for environmentally oriented studies to form part of the monitoring program to accompany groundwater pumping at Barwon Downs. You also sent me a copy of your notes, apparently prepared at about the same time, in which you identify what you thought were discrepancies between recorded and forecast water consumption figures in the Geelong water supply system.

I understand that you have also sent these latter notes to the Geelong and District Water Board and that a meeting has been arranged with the Board for this week at which the basis of the water demand forecasts will be discussed. Under the circumstances I think I should leave it to the Board's officers to answer the points raised in your notes. However I would still be prepared to talk to you if you wish, after your meeting with the Board.

In relation to the studies recommended by Quentin Farmer-Bowers in his October 1986 report, I can provide you with the following information:

1. Vegetation studies
 - (a) Pasture
DARA Geelong have examined the intermediate elevation recharge areas and have indicated that any effects of reduced groundwater levels on agricultural species would not be significant. This is because of the

Warren's ?? comments...

14/2/89 Warren asked Frank Barkla of DARA Geelong. Reply "I have no idea where the statement in 1(a) came from."

marginal agricultural nature of the area and the substantial absence of improved pasture species.

(b) Native Vegetation

Not done

Involves detailed mapping of existing vegetation, identifying areas subject to possible changes due to changed groundwater levels, establishing monitoring plots, doing base-line monitoring followed by progressive monitoring.

2. Fauna

(a) Fish

Inadequate

DCFL (B Tunbridge) included Boundary Creek in the environmental flow and fish study of the Barwon catchment. This study was funded jointly by state government agencies and local water authorities, including the Geelong and District Water Board.

(b) Mammals, Reptiles and Frogs

Not done

Involves documentation of the abundance and species composition. Work to be co-ordinated with the vegetation work.

→ No mention of birds

3. Water Quality Studies.

→

RWC simulation studies of the Barwon River system included an assessment of reduced flow in Boundary Creek. Direct monitoring of Boundary Creek forms part of the artificial recharge study.

4. Landscape Assessment

Not Done

A visual management assessment by DCFL appears to be the appropriate approach.

5. Archaeology

NOT DONE

Involves work by the Victorian Archaeology Survey.

During 1987 I wrote to DCFL, Colac in relation to items 1(b), 2(b) and 4 asking for advice on the priority which should be placed on the recommended work. I was concerned to know whether the work should be commenced immediately at that stage of the groundwater testing or if it could reasonably be deferred until after a review of the testing indicated whether or not there was some prospect that the Barwon Downs wellfield could be developed to the next stage. I also wanted to know whether DCFL thought that the work would contribute to its Regional priorities and whether it would be prepared to undertake the work.

CRITICAL →
NOT DONE.

Although item 5 did not fall within the area of DCFL responsibility, the same reasoning applied in relation to the

timing of the work.

At the time, other priorities and commitments relating to the NREC hearings resulted in the advice from DCFL being deferred. However with the strong strategic direction in favour of intensified groundwater investigations emerging in the Regional Strategy, I have recently asked DCFL to re-examine the matter. Their advice will enable the South-Western Region Task Force Working Group on groundwater to take the appropriate further action on these outstanding recommendations by Quentin Farmar-Bowers.

What about
K & Calli →
as specifically
asked
for ??

In answer to your postscript, survey bench marks have been established and are being monitored to detect any regional subsidence which may be attributed to the groundwater extractions. However based on theoretical assessments made by Dr Evans of the Rural Water Commission, no significant subsidence is anticipated.

As discussed with you by telephone, I would welcome the opportunity to discuss these matters with you in person or to talk to a meeting of your Committee.

Yours sincerely



RM BUGEJA
Planning and Environment Branch

The only study commenced or done that vaguely resembles the recommendations made by Farmar-Bowers was Barry Tunbridge's⁽⁴⁴⁾ fish studies mentioned in 2 (a). This work was completed in 1988. To make matters worse Barry's work has been ignored ever since.

Critical data that should have been collected pre pumping had not been done. It was not until after the stress pump 1986-90 had finished that the first series of study and research commenced in 1991. To make matters worse the next series of study and research that were done in the early 2000s were based on the assumption that the 1990 studies had been done prior to any groundwater extraction.⁽³¹⁾ By this stage close to 30 000 ML had been extracted. Any consideration that there had been enormous amounts of groundwater extracted prior to 1991 or that this extraction had dried up Boundary Creek on numerous occasions was never taken into account.

How all of the Victorian state authorities that include the earlier versions of Barwon Water, Southern Rural Water, the Department of Primary Industries and the Department of Sustainability & Environment, could allow this to happen seems incredible. However, if considering and taking into account the present situation, this is understandable. Is it incompetence, lack of thoroughness, poor management, pressure to move onto more pressing matters or just a complete lack of concern prompted by the thoughts that no one ever bothers to check and follow up anyway? It is probably a combination of these things but whatever, none of them are acceptable excuses.

Vital/Critical Data recommended to be collected but not done.

Since Farmar-Bowers made his recommendations back in 1986, almost identical recommendations have been made as a result of survey work completed by Barwon Water in the early 1990s and early 2000s.⁽³¹⁾ These recommendations were made so that a comprehensive comparative database could be established on which to judge future impacts. In May 2009 an FOI was sent to Barwon Water asking for the documentation in regard to the implementation of the 2002 recommendations.

“We have not located any documents relating specifically to the above request.”

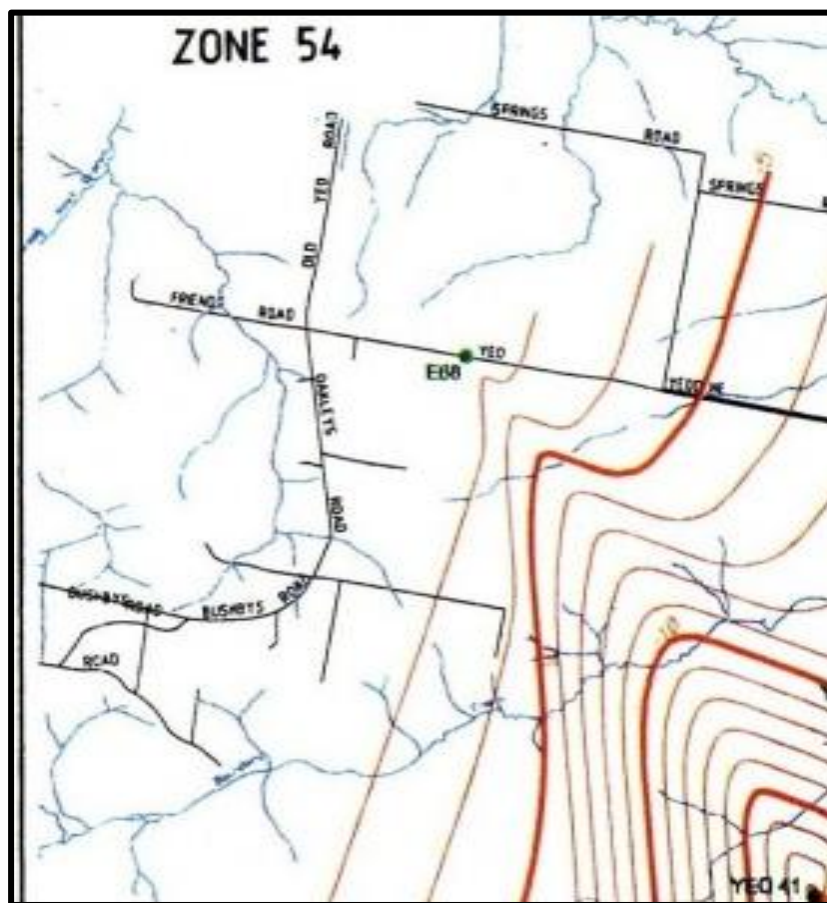
The request was specific and detailed and there could be no confusion as to what was being requested.⁽³¹⁾

To add insult to injury the 2009 flora report made almost the identical recommendations as made in 1986, 1900s and 2000s.⁽³¹⁾ It is therefore easily understood why the 2009 document had inconclusive results. The comparative data on which to base any findings had not been collected.

One of the recommendations in these reports has consistently been to investigate the vertical leakage downwards of water from the earth’s crust in the layers above where the groundwater is being extracted. This investigation should have included the area of influence from the pumping, out to the point of zero drawdown.⁽³¹⁾ This has never been done and asking for detailed drawdown maps from Barwon Water showing the area of influence from groundwater extraction out to the zero point has met with this type of reply.

“Barwon Water’s available maps have been provided to you. These maps satisfy the requirements of the groundwater licence.”⁽³⁰⁾

The maps “provided” that cover the period 2000 to 2011 do not show the drawdown anywhere near the zero point of influence. Examples of these maps can be seen on pages 41 & 42.



This is a cropped section of the map from page 42 showing the drawdown contours in red.

The two bold red lines are marked as 5 metre and 10 metre drawdown. This map goes out as far as the 3 metre mark and no further.

The map also highlights another difficulty with data and material acquired. It is often very difficult to decipher.

During the renewal process for the Barwon Downs Borefield in the early 2000s there was much discussion regarding flora control sites and fish and fauna surveys that should have been

included in the new licence conditions. Invertebrate studies recommended in 1986 and socialcultural

work continued to remain outside any form of consideration and unfortunately the fish and fauna survey work never appeared in the licence conditions of 2004. It is easy to understand that the fish surveys would have been superfluous as Boundary Creek was dry for months on end, but why the fauna surveys were omitted is a mystery.

A group reviewing the licence and conducting analysis of ecological survey reports recommended on 13 August 2002 that in future, sites 46, 25, 78 and 79 were critical sites and should be focused upon in future work. In the 2008-09 survey, site 25 couldn't be found and sites 78 and 79 were not included. More baffling was that the control sites for this 2008-09 survey all fell a long way inside the residual drawdown area of influence and consequently proved useless as control sites.⁽³¹⁾

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It is most baffling that the SKM hydrogeologist on this flora/fauna and fish study analysis group was instrumental in choosing the control sites and also was influential in the dismissal of swamp sites 78 and 79 as not being influenced by the Barwon Downs Borefield drawdown. Sites 78 and 79 site are located directly over residual drawdown influences of many metres. This same analysis group were informed that swamp sites 78 and 79 would recover faster than the Regional System. This has not happened and the decimation of the rare flora within this swamp area has not recovered.

Once again recommendations have been ignored and monitoring of these sites has not been conducted. Neither have hand augured monitoring bores been constructed as recommended. These recommendations were made in an effort to gain an accurate picture of influences at work. As with the fauna and fish surveys, data that should have been collected has never been done and no documentation has ever been produced to demonstrate that sites 78 and 79 are not directly or indirectly connected to the aquifer from which Barwon Water is extracting groundwater at the Barwon Downs Borefield.

Assurances that have not stood the test of time.

1. At the same NREC Victorian bi-partisan Government committee hearing in March 1989 (see page 66) Barwon Water officers stated,
"As indicated previously in evidence to the Committee, the Board wishes to ensure that environmental needs are adequately recognised and safeguarded in any water resource development that it may seek to undertake."
Not only had the previously evidence given stating the Farmar-Bowers recommendations had been implemented when in fact none of them had, the Barwon Water representatives gave these unsubstantiated assurances. Otway Water Book 13 contains more than seventy dot points clearly demonstrating that the environmental needs have not been adequately safeguarded in relation to the Big Swamp and Boundary Creek.
2. Farmar-Bowers recommendations had been implemented (see page 66).
3. Barwon Water would make a concerted new and every effort to improve community consultation and foster a new belief in Barwon Water's ability to consult (see pages 83-91).
4. Southern Rural Water gives assurances that the Big Swamp will be included in the 2008-09 Flora study (see page 20).
5. The consultative process regarding the groundwater extraction at Kwarren was to involve
 - Community meetings (see page 72)
 - Genuine appeal process (see pages 77, 78)
6. The Water Minister and Secretary of the Department of Sustainability and Environment secure in the belief that nothing is out of the ordinary with the manner in which the groundwater extraction is proceeding at the Barwon Downs Borefield (see page 20).
7. Barwon Water's asserted that permission had been given to conduct a test pump at Kwarren before Service Contract 10643 was drawn up (see page 62).

CHAPTER FIVE

–Community Consultation & Involvement

Communities should have things explained to them in a fair and reasonable manner if they are expected to make informed comment and feel that they are involved in processes taking place. Unfortunately in regard to the groundwater extraction at Barwon Downs and the proposal for the Kawarren extraction, the exact opposite has been the experience.

A diversity of methods should be included in research design generating a more reliable and balanced ecological and sociocultural management regime for a project.⁽⁴²⁾ Concentrating on a purely economic and hydrological stand point can cause extreme disharmony with a community that has little to no affective say in a development that has the potential to dramatically alter the lifestyle and environment in which this community has functioned since European settlement.

Values precious to communities that have come under threat are...

- stock and domestic water provisions,
- environmental degradation,
- recreational pursuits,
- aesthetic aspects,
- increased intensity and threat from fire, and
- risks to human health.

Eamus et al.⁽¹⁴⁾ states that estimations of water regimes required by an ecosystem are developed through strategic scientific research and through the application of local knowledge based on many years of observation. MacKay⁽³⁶⁾ writes about cutting edge science needing to recognise that the lay person can identify simple but precise indicators of the status of groundwater-dependent ecosystems. In both the Kawarren and Boundary Creek experiences local community consultation and involvement has been largely ignored.

The Kawarren Experience.

In May 2007 service contract Number 10643⁽³⁾ was let out to SKM to investigate the extraction of 16 000 million litres/year from the Kawarren borefield. This contract was issued in spite of the fact that in the 1990s it was determined that 3 000 million litres/year extraction at either the Kawarren or Gellibrand Borefields could dry up the middle reaches of the Gellibrand River. Contract No. 10643 involved looking at land acquisition, easement requirements, access roads, power lines access and availability, an additional borefield site, treatment plant, piping and transfer pumping stations over and into the Barwon Downs system. The State Government's first preference for supplying Geelong with additional water was to extract 16 gegalitres/year from the Kawarren Borefield.⁽⁴⁰⁾ When compiling this 39 page contract there had been no consultation with the Kawarren community. Considering the implications and possible impacts any extraction could have on the area this was quite alarming and astounding.

The first thing that anyone in the Kawarren valley heard of such a proposal was in June of the same year when an officer from Barwon Water spoke to Kawarren farmer, Robert Maxwell. Robert has landholdings on three sides of the pumping site. Mr Maxwell was told that there was no need to talk to anyone about the pumping as it would be unobtrusive and cause no concern. He asked for this to be placed in writing.

The following letter duly arrived.

Our Ref: 40/220/0030V
Your Ref:
Enquiries To: Scott Dennis



**Barwon
Water**

BARWON REGION
WATER AUTHORITY
61-67 Ryrie Street,
Geelong, Victoria.
P.O. Box 659,
Geelong, Victoria, 3220.
D X 22061 (Geelong)
Phone: 1300 656 007
Fax: (03) 5221 8236
ABN 86 348 316 514
www.barwonwater.vic.gov.au

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June 15, 2007

Robert Maxwell
RMB 35 Kwarren East Road
Kwarren VIC 3249

Dear Mr Maxwell,

Re: Kwarren - Groundwater pumping test

Thank you for taking the time to meet with Scott Dennis on the morning of the 12 June 2007 to discuss the investigations into the Gellibrand and Newlingrook Groundwater Management Area's (GMA) for potential long-term water supply for Geelong and surrounding areas.

The study about to be commissioned by Barwon Water will seek to identify the potential sustainable yield from the aquifers and likely impacts on watercourses and other users. Cost estimates will also be prepared on the establishment a groundwater pumping scheme including transferring the water to Wurdee Boluc Reservoir.

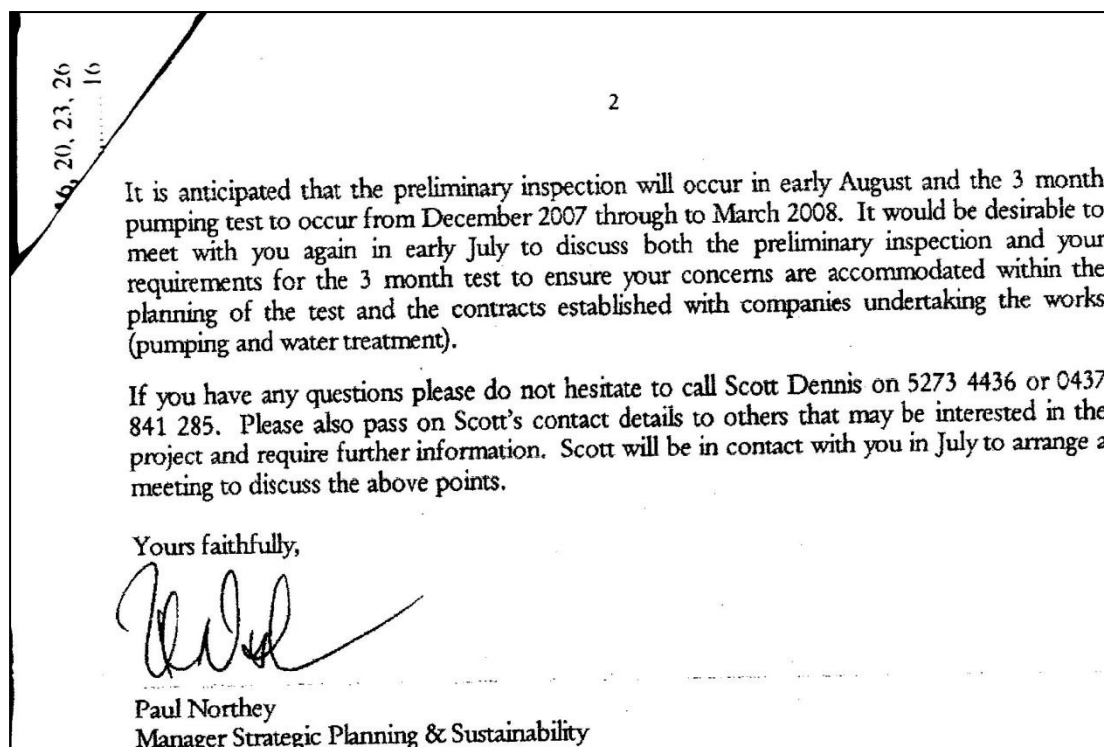
As discussed, the investigations propose to utilise the bore installed in the early 1980's located just off McDonalds Rd, Kwarren and located on land currently farmed by you. In summary the investigations will include the following activities:

- Preliminary bore inspection to determine condition and suitability to undertake 3 month pumping test. This will involve a short 2 day pump test to ensure integrity of the bore.
- For the 3 month pump test - Within close proximity to the bore, establishment of pump, generator, flow monitoring, water quality monitoring and water treatment equipment and pipeline to adjacent water course.
- Following the 3 month pump test - ongoing monitoring of water levels and quality within the bore for the subsequent 3 months.

Management of water disposal, noise and impact on your farming activities will be of high priority. We are keen to work with you to ensure minimal disruption during the establishment, operation, post test monitoring and subsequent removal of equipment for the 3 month pump test.

We will be required to meet regulatory requirements for our works at this site which are likely to include Environmental Protection Authority, Southern Rural Water, Corangamite CMA and Colac Otway Shire. Community consultation is planned to commence in July following identification of affected parties.





In this letter it states that there would be *“Community consultation in July following the identification of affected parties.”*

Being an **“affected party”** I wrote asking a series of questions in July 2007.⁽²³⁾ The reply stated this *“The concerns you raise have been noted and these matters will be addressed appropriately in correspondence to all affected parties. If you have any further questions please do not hesitate to call...”* To this day five of the six questions asked have still not been answered. The sixth question was answered in a letter that was sent to my deceased mother. I have not received one of the letters that were sent to **“affected parties.”** Being a landholder since 1962, and in residence at Kwarren since 1972, this is quite amazing.

An extract from Barwon Water’s web page 1 February 2008 stated that in June/July Barwon water wrote to landholders who would be affected by initial investigations.

“In June/July 2007, Barwon Water wrote to landholders who would be affected by initial investigations, either because there was an existing observation bore on their property or a new observation bore would be constructed, or because their land was near the proposed pump test bore.”

This gives the appearance that landholders were being kept up to date with developments but this was not the case. The investigation into groundwater extraction at Kwarren did not following anything like an open and transparent process.

In June/July 2007 Barwon Water wrote to approximately 35% of **“affected parties”** within 2.5 km of the Kwarren bore and failed to identify the other 65% within this radius.

In the local papers distributed in the Kwarren/Gellibrand/Colac area there was at no stage any article instigated by Barwon Water explaining or referring to the Kwarren investigations. Due to the agitated state that residents of Kwarren were displaying, Johanna Wade of the Colac Herald wrote an article dated Friday 21 September 2007. This article stated that Barwon Water will answer Colac and district residents’ questions about water investigations from 11 am on Monday at its Colac office. This article in the Friday paper was the only indication given to local residents that a meeting

was planned for the following Monday. Luckily this notice was seen by a local community member and was able to notify others.

Ninety seven people turned up at 11 a.m. and indicated they would not leave until Barwon Water set a date for a public meeting in Gellibrand. The meeting was set for the end of October 2007. There was no further contact until the 17 October 2007 when *some* residents started to receive notification dated 11 October, that the public meeting was to be held 25 October. Nothing was reported in the local press, few people had been notified and 8 days notice for such an important meeting appeared that Barwon Water did not want or expect a large attendance.

Through the efforts of locals over 230 vitally interested people attended. The first half hour was spent talking about the Newlingbrook Groundwater Management Area until the speaker was asked to deal with the Kwarren proposal in the Gellibrand Groundwater Management Area not Newlingbrook that was at least 8 kilometres away in the next parish. All that the meeting achieved was to further incise the local communities from the Kwarren/Gellibrand area and those communities all of the way down the Gellibrand River to Bass Strait.

This summary of Part 4 of the Statement of Obligation for Barwon Water as legislated in June 2007⁽²⁷⁾ outlines how Barwon Water should conduct community engagement and consultation,

Part 4 Governance and Risk Management.

Pt 10 Customer and Community Engagement. 10.1 The Authority must develop and implement open and transparent processes to engage its customers and the community in its planning processes to ensure, among other matters, that the services it provides reflect the needs and expectations of customers. 10.2 The Authority must: a) make available to the public, information about the water supply... and ...

13 Managing Assets. 13.1 The Authority must develop and implement plans, systems and processes to manage its assets in ways which: d) minimise detrimental social, economic and environmental effects of managing its assets.

Even though Barwon Water's Community Consultation and Engagement Strategy describes an excellent model⁽²⁷⁾ that outlines how community consultation and engagement should be conducted, Barwon Water failed miserably to take heed of its own documentation when dealing with the Kwarren and Gellibrand residents.

The 23 July letter sent to some affected landholders stated that SKM was still designing the "big" test pump and once it was finalised locals ***would be informed how it was to proceed***. This was after an unauthorised preliminary 48 hour test pump had been conducted at the Kwarren borefield site. This pumping was done without Southern Rural Water permission, no licence had been granted for this exercise.

"I am advised that SRW did not issue an approval for the pump test. However, given the small volume of groundwater extracted our attention is focused on the proposed, and far more significant, three month test." (Email from Dr. Martin Kent SRW Friday 28 December 2008, 12:29:36 PM)

6 million litres may be a small amount of water but if this amount of unlicensed groundwater was extracted by any one of the local ***"affected parties,"*** or concerned community members, this amount would have been a prosecutable offence.

A copy of this preliminary test dated 28 August 2007, was sent to the EPA Geelong recommending that the proposed three month test pump at Kwarren proceed. Through local appraisal and scrutiny this report was shown to be of poor quality and another report was subsequently prepared and submitted by Barwon Water 17 December 2007. Unlike the 28th report, access to this latest

submission was denied by Barwon Water. (Several months later and after another FOI this report was acquired)

By the second week in November 2007 there was a section of Barwon Water's web site dedicated to the Newlingbrook and Gellibrand investigations, five months after the Kwarren farmer, Robert Maxwell, was notified of investigations that were to take place next to his property.

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On 28 January 2008 a drilling rig and a great deal of other equipment arrived at the Kwarren township bore site. The men working at this site were extremely reluctant to make any comment as directed by their supervisors. The Kwarren community had not been kept informed of any development since the October public meeting in 2007. Still no meaningful dialogue, communication or community involvement sought.

It would appear that because of community unrest SKM started to visit and ask for local input. However, reports containing the documentation of these discussions contained serious inaccuracies. Such as stating Porcupine Creek stops flowing in summer periods, when it doesn't. Other information was questioned as to its reliability. This further upset the community and especially so when these shortcomings were notified to Barwon Water and the inaccuracies are still contained in the report without any retraction or alteration.

To further incise the local residents it became known that Barwon Water had convened a **Regulatory Reference Group** of stakeholders in the Kwarren Borefield investigations and that this group had been established sometime in August 2007. Barwon Water denied access to the minutes of these meetings, attendance at meetings or representation from local "**affected parties.**" To make matters worse this Regulatory Reference Group comprising representatives from 10 authorities, authorities with regulatory and jurisdictional powers, were not exercising their responsibilities when queried over basic jurisdictional matters.⁽²⁷⁾ After requesting minutes of the Regulatory Reference Group minutes through a Freedom Of Information application, a reply (Barwon Water Ref:15/260/0007A(6)) arrived in late February 2009. Strangely the reply stated the minutes were granted in full but were not included. The envelope only contained two reports that were not even requested. Some days later after a phone call query, the minutes arrived. These minutes were for the first meeting and were dated 10 August 2007. There had apparently been no other meetings up to February 2009 and after reading the minutes it could not be understood why such a fuss had been made denying access to them.

Barwon Water's *Community Consultation and Engagement Strategy*⁽²⁷⁾ and Statutory Obligations, were not applied to the Kwarren investigation.

Some of the headings found in Barwon water's *Community Consultation and Engagement Strategy* are as follows;

- Barwon Water will make information readily available,
- Barwon Water will listen and respond to participants,
- Barwon Water will consult with community wherever possible,
- Barwon Water will encourage participation,
- Barwon Water will minimise barriers, and
- Barwon Water will state clear focus and purpose.

The explanation of intent and meaning of these headings is a far cry from the community consultation and engagement experienced with Barwon Water's handling of both the Kwarren and Barwon Downs developments.

Being open and transparent is an integral part of being accountable for program development, action, implementation and final outcomes. It would appear most obvious that the investigations

planned to take place in the Gellibrand Groundwater Management Area were neither open nor transparent and any community involvement could best be termed tokenism.

It may be accepted and possible to justify non compliance with a self regulated Community Consultation and Engagement Strategy but the same cannot be said for a legislated document. The objectives as clearly outlined in the legislated Statement of Obligations for Barwon Water have not been followed.

Two extremely important comments relevant to this discussion were made by a hydrologist from SKM at the 25 October 2007 public meeting in Gellibrand to discuss the Newlingbrook Groundwater proposal.

- When asked had any provisions or studies been made for stygofauna he had no idea that this term was referring to groundwater life forms. Once explained the meaning of stygofauna the answer was that no provisions or studies had been envisaged.
- This same person made the comment that there would be sufficient water left to support invertebrates such as platypus. (invertebrates being animals without backbones)

These two instances alone highlight the fact that local knowledge and involvement would have been beneficial to the appropriate management of the Kwarren groundwater investigation.

Unfortunately the agendas appeared to be set and the manner in which the investigation and development of the Kwarren Borefield did not include local input.

Southern Rural Water's Involvement with the Kwarren Experience.

Southern Rural Water placed one advertisement in the Colac Herald 1 February 2008 calling for submissions regarding Barwon Water's "Expression of Interest regarding Pump testing of a Groundwater Bore." Submissions had to be in by 18 February 2008. The address to send any submissions to was incorrect on the advertisement. Over 30 submissions opposing the expression of interest were sent to SRW. Southern Rural Water decided to put aside a day and night session for these objectors to verbally present their cases. This was held on 10 April 2008 in the Colac COPAC building. Approximately 23 objectors took up this opportunity.

The community involvement and engagement appeared at long last to be happening. However, 14 days after these verbal submissions, Minister Tim Holding made it abundantly clear that there was to be no community involvement, engagement or discussion of any consequence (see page 78). The Southern Rural Water consultative process was simply tokenism, farcical and an elaborate window dressing kidding local communities into thinking that a democratic process was being followed.



Minister for Water

Ref: DSE048544
File: CS/030527

121 Exhibition Street
Melbourne, Victoria 3000
GPO Box 4509
Melbourne, Victoria 3001
Telephone: (03) 8684 8000
Facsimile: (03) 8684 8014

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Mr Charles Kohout
125 Carlisle Gellibrand Road
GELLIBRAND VIC 3239

24 APR 2008

Dear Mr Kohout

TEST PUMPING OF GROUNDWATER

I refer to your letter received on 27 November 2007, to the Premier, the Hon. John Brumby MP, regarding the test pumping of groundwater at Love Creek by Barwon Water. As the issue falls within my responsibility as the Minister for Water, your correspondence has been forwarded to me for response.

In October 2006, the Victorian Government published *The Central Region Sustainable Water Strategy*, which outlines actions to secure water supplies for homes, farms, businesses, industry and the environment for the next 50 years. These actions will help improve the health of rivers and secure supplies for Melbourne, Geelong, Ballarat and the State's inner west.

The Strategy identified two options for Geelong's future water supplies: a pipeline connection to Melbourne or utilisation of groundwater resources from the Newlingbrook aquifer system. In May 2007 the Government announced that connection to Melbourne was the preferred option. However, the Newlingbrook resource appraisal program will continue, to improve our knowledge of the extent, quality and properties of groundwater in the area.

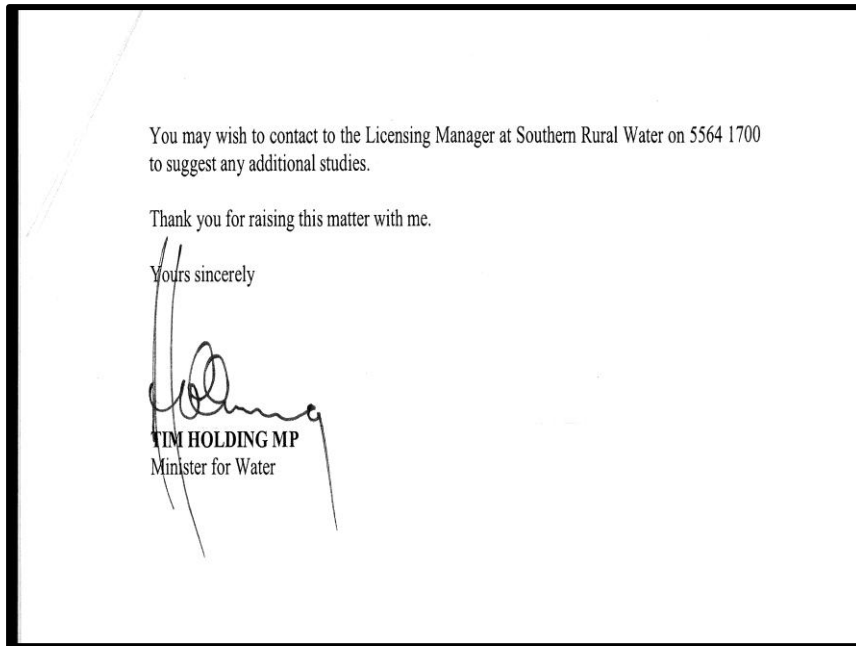
The study into the Newlingbrook aquifer system is occurring at several sites, including an existing bore in Kewar. As is normally the case, extensive field surveys and investigations are being undertaken, and test pumping will assist in determining the aquifer's basic characteristics, including flow rates, draw down rates and recovery rates.

As you may be aware, Southern Rural Water held a meeting on 10 April 2008 with those people who lodged submissions following the advertising of Barwon Water's Section 51 licence application. This licence will be issued for 13 months and will allow Barwon Water to pump groundwater from an existing bore in Karaween. The water will be treated and discharged into Love Creek. Subsequent to the testing period, any long-term licence application from Barwon Water will be subject to public consultation.

Privacy Statement

Any personal information about you or a third party in your correspondence will be protected under the provisions of the *Information Privacy Act 2000*. It will only be used or disclosed to appropriate Ministerial, Statutory Authority, or departmental staff in regard to the purpose for which it was provided, unless required or authorised by law. Enquiries about access to information about you held by the Department should be directed to the Manager Privacy, Department of Sustainability & Environment, PO Box 500, East Melbourne, 3002.





Considering that the licence mentioned in this letter says, “*This licence will be issued...*” and The public consultation process that Southern Rural Water had put in place in February did not conclude for another six months, in October 2008, is farcical. As was expected Southern Rural Water’s decision in October was exactly as Minister Holding said it would be. So much for community consultation and input.

How ludicrous for the Minister to write, “... *any long term licence application from Barwon Water will be subject to public consultation,*” and doesn’t this set a terrible example for all authorities to follow, treating the public with such contempt.

It would have been as appropriate to include this Kawarren experience in the “*circle work*” as outlined on page 18, at which the...

local players continually ask...

“Can we play?”

“Pass it to me, pass it to me.”

But these cries to assist, participate and or be involved are ignored.

After training while the State Government Authorities choose their team the local hopefuls are allowed to have a kick or two out in the cold before it gets dark.

Colac Otway Shire’s Involvement with the Kawarren Experience.

After months of trying to work co-operatively with the Colac Otway Shire over the Kawarren/Gellibrand ground and surface water issues the best the Council could do was to move and pass this motion,

“That the Council advocates strongly to ensure farmers, residents, businesses and environmental flows are not put at risk by water harvesting schemes, particularly the Kawarren/Gellibrand area. That the Chief Executive Officer seek to arrange for Councillors to meet with Barwon Water board members to discuss areas of mutual concern such as , but not limited to: Kawarren Underground Water, Apollo Bay Water, Water for Intensive Agriculture, Colac Water, recycled Water.”

There is no doubt that this was a productive meeting, however, the Kawarren/Gellibrand community residents voicing concerns were not included in, or advised of any discussion or outcomes reached.

The Boundary Creek Experience and Groundwater Extraction.

The pretence by State Government Authorities to include community consultation, engagement and involvement has been common practice with the communities in the upper reaches of the Barwon River Catchment for a considerable longer time than in the Kwararren experience. Knowledge and experiences from owners of long term custodianship of property adjoining Boundary Creek has largely been overlooked and or ignored.

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The Shalley family have owned land adjoining both Boundary Creek and the west branch of the Barwon River since 1912. Nellie Shalley is the present custodian and has a boundless amount of local knowledge that has regularly been overlooked as trivial, inaccurate and of little consequence to the development of research and projects involving her property and surrounding district.

The Shalleys and neighbours have had serious concerns regarding the summer flows in Boundary Creek since the groundwater extraction during the 1982-83 drought. In the summer of 1984 Boundary Creek suffered four days of no flow, never experienced in the 70 years the Shalleys had lived in the area.

There had been no consultation with the community before the 1982-83 extraction and there was most definitely only cursory contact but many promises made that there would be no serious impact with the stage one extractions. Stage one licence allowed water extraction to be three times over the Permissible Annual Volume (PAV). When assessing the 1986-90 stress test pump results⁽⁴⁸⁾ it was calculated that the PAV should be somewhere between 1500 ML/year up to the very maximum of 4000 ML/year. A licence was issued in 1995 for 12000 ML/year.

Because of the real and imagined concerns of the local population, token community consultation was incorporated into the review of the stage one licence as a lead up to the issuing of the stage two licence. This process took 4 years to complete and at the end of it a licence for 20 000 ML/year was granted much to the local community's opposition.

During this review process an important event took place that highlights how local input was being treated. If it did not suit the desired outcome of the authorities then it was seen as trivial and of little concern. The Shalley family from an agricultural perspective, had relied on the summer flows in Boundary Creek since 1912. Nellie Shalley and her immediate family had many an experience bathing in, fishing for trout, blackfish and redfin and enjoyed the ramblings of many a platypus family up until the 1980s. By the time the stage two licence was being discussed Boundary Creek had been dry over the mid 1980s and 1990s for hundreds of days.

At consultative meetings Nellie was often ridiculed that this life ever existed in Boundary Creek. The 1990s and 2000s fish studies⁽²⁵⁾ were continually referred to as the bench mark of life in the creek. Of course by this stage larger species of life had not been able to survive in a dry creek bed and were never recorded in the 1900s and 2000s surveys. By the time the first Barwon Water groundwater related fish study was conducted these species were no longer present, either having died out or moved to a reliable year round water environment. Pre pumping comparative data had never been collected. Nellie's account were ignored.

In 2007 Nellie was still steadfastly holding her beliefs that these larger species did once flourish in Boundary Creek. However, the authorities responsible for the issuing of the stage two licence were as definite that this was not the case. Nellie was portrayed as a person not to be believed, a person with vested interests and imaginations that involved all sorts of impacts that were unfounded. After months of trying to ascertain which stance was the reality, and finding no person or evidence that Nellie's was the truth of the matter, I was beginning to come to the conclusion that local input in this case was unreliable. However, as a last resort it was suggested that the Arthur Rylah Institute may

have done some fish study work in the area. As it turned Barry Tunbridge had completed a study on the Barwon River and tributaries including Boundary Creek and confirmed beyond any doubt that Nellie was correct in her assertions.

It was during a document research task looking for another aspect of groundwater extraction, that a letter from Reg Bugeja (see page 68, point 2(a)) was unearthed that ironically showed Barwon Water had part funded Tunbridge's research. Perhaps the lesson to be learnt here is that as Eamus et al.,⁽¹⁴⁾ MacKay,⁽³⁶⁾ and Storey & Taylor⁽⁴²⁾ state, local input and involvement is an important source of information enabling a more reliable and accurate research document.

The Boundary Creek Experience and Environmental Flows.

Another experience that highlights the folly of researchers overlooking community consultation and involvement once again involves Nellie Shalley. In 2006 the Corangamite Catchment Management Authority (CCMA) funded a project to determine the environmental flows required for the Barwon River, tributaries and estuary. A reach of Boundary Creek in the Shalley property was used to determine its required environmental flow. Nellie gave permission for the researchers to enter her land and she was named in the report as a participant. However, there is little doubt that Nellie's views or historical knowledge was never asked for. Recommending two fortnightly periods of no flow for Boundary Creek designed to foster the best conditions for platypus and fish such as blackfish (see page 65) would most definitely go against every experience Nellie had pre groundwater pumping and extraction.

The Big Swamp Experience and Acid Sulfate Soils.

The local community Landcare Group, LAWROC, was the first to discover that the Big Swamp had been turned into an Inland Actual Acid Sulfate Soil contaminated site. After the responsible authorities refused to do any testing LAWROC, at great expense to its members, commissioned the testing. Using the test results as evidence and with persistent lobbying of the nine authorities an elite group called the Corangamite Inland Acid Sulfate Soils Multi Agency Steering Committee (CIASSMASC) was convened. Local input into this select group was not sought.

In the "Community Engagement" section of Barwon Water's 2010 groundwater report⁽⁵⁾ to Southern Rural Water it states,

"Barwon Water is engaged in studies with a number of stakeholders who have an interest in inland sulphate acid soils and managing fire risks in the Gerangamete area."

These stakeholders are the members of the CIASSMASC authority representatives. It is interesting to note that the stakeholders with the most to lose through the impacts created by the contaminated site in the Big Swamp are members of the local communities and are not represented.

LAWROC and its many members have most definitely shown an interest in the Acid Sulfate Soils issue many will be in the direct line of any fire that escapes from the Big Swamp while others are impacted by the contaminated water that flows out of this area. This surely entitles these people to be regarded as "stakeholders." Up to this time LAWROC participation and community engagement in any Inland Acid Sulfate Soils discussion by state authorities has been pointedly denied. At no stage has Barwon Water made an effort to include any LAWROC member in the Community Engagement process.

The Big Swamp Experience & the Colac Otway Shire.

In the Geelong Advertiser 28 August 2008, it was reported that Cr. Peter Mercer had spoken at a Colac Otway Shire Council meeting regarding the water management issues that were arising in the Shire. This was at the same meeting that I had presented a detailed account of the concerns with the Kewarren and Barwon Downs groundwater extractions. Cr. Mercer expressed the view that water

management issues had to become as much the Shire's responsibility, as water harvesting was threatening the viability of the Shire.

"Are we to watch our dairy farms, organic orchards, blueberry farms and other food producers have their viability threatened." (Geelong Advertiser 28 August 2008)

There was also an article in the Colac Herald 29 August 2008 headed, **"Big cities threaten production of food."** As a civic leader Cr. Mercer echoed his opinion that *"...over pumping of the aquifers (at Barwon Downs) risked the environment, agriculture, people's health and economy."*

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The following week a deputation wine and dined representatives of the Colac Otway Shire and conducted a tour of the area. Once again the major stakeholders, the local residents, were not included in any of the discussions and had to be content with what took place by reading accounts in the local newspaper.

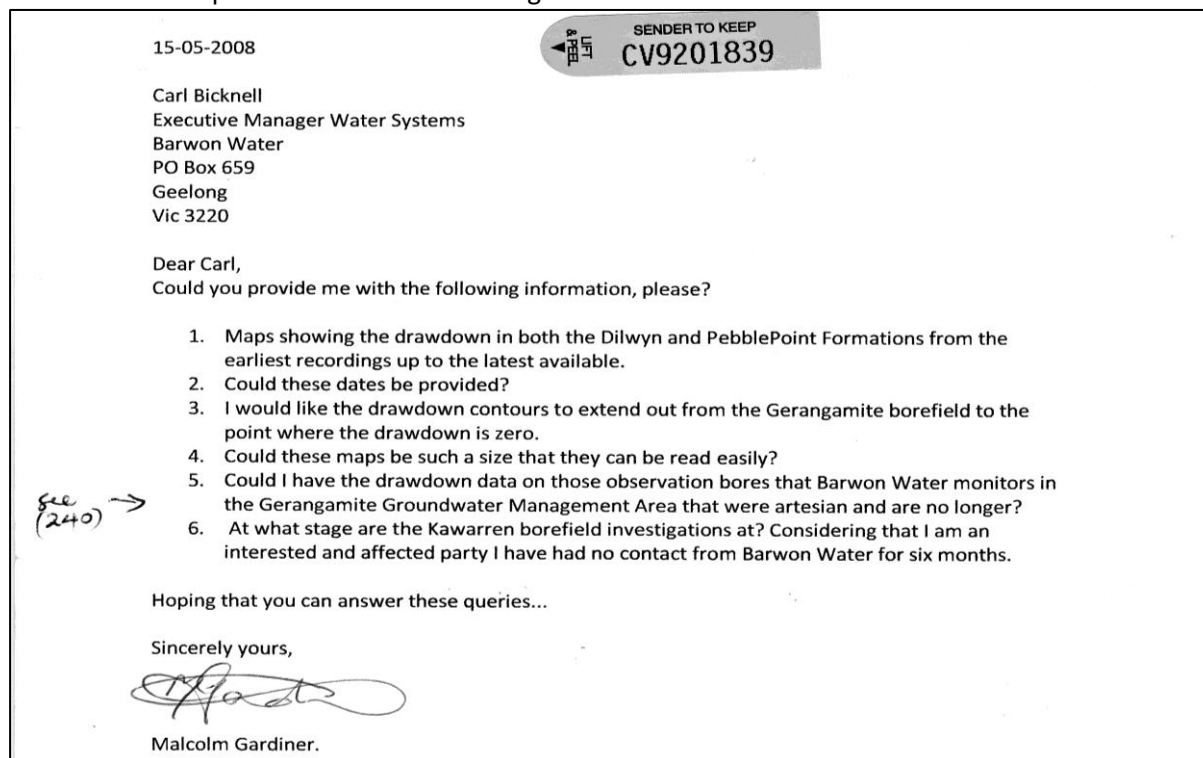
Sociocultural Studies.

Throughout the 30 years that extensive groundwater extraction for urban water use has taken place, there has not been one sociocultural study done involving those communities within the direct influence of groundwater drawdown.

At the very best the inclusion of community participation in activities, research and studies on groundwater extraction in the Kwarren(2006-2012)and Barwon Downs(1980-2012) valleys would be described as abysmal.

Nothing Has Changed.

The remainder of this chapter attempts to highlight the frustrations experienced dealing with Barwon Water since the beginning of the 2006 Kwarren Groundwater Investigations. Up to 15 May 2008 there had been limited and even that was poorly done, consultation with interested and affected parties. By this stage it was apparent that the management of the Barwon Downs Borefield was extremely relevant to the way in which the Kwarren Borefield would be developed. As a consequence it was felt that close scrutiny of the Barwon Downs Borefield and its management was required so that any mistakes or problems experienced in that venture were not repeated at Kwarren. In the pursuit of this the following letter was sent.



Nearly a month later this reply arrived.



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Considering the amount of angst that Barwon Water was receiving from the Kewarren/Gellibrand district over the Kewarren investigations it is amazing that Barwon Water had not notified the local community that Scott had vacated his role and that Tony was in charge.

Having heard nothing from anyone for close to another month I decided to call into the Barwon Water offices in Geelong on 7 July 2008 and ask what the delay was all about. Both Peter Morgan and Tony Belcher spoke to me in the foyer for approximately 45 minutes. From my notes written after this discussion I noted the following things.

- At least two more weeks was required to compile the data.
- To complete this task was not a high priority.
- The “track record” for Barwon Water consultation was dismal, BUT
- Both Peter and Tony were adamant that every effort would be made to remedy this. Tony being the man to turn things around.
- That Peter and Tony asked for a chance to do this.
- That these two people knew very little of the Kewarren/Gellibrand area or the issues of concern.
- Many examples were highlighted including the fact that Service Contract 1064 involving the Kewarren Borefield development included using Environmental Water Reserves that were to

be kept and utilise from the lake on the Ten Mile Creek. There is no lake or dam or other impoundment on the Ten Mile Creek.
The commitment had been given that consultation and community involvement would improve markedly. However, on returning to Kwarren I was to learn that nothing had changed.

Malcolm Gardiner
1805 Colac Beech Forest Road
Kwarren
Vic 3249
08-08-2008

Peter Morgan
Manager Asset Planning
Barwon Water
PO Box 659
Geelong 3220

SENDER TO KEEP
CV7569364

Peter,
Following our lengthy discussion at your offices in Geelong yesterday I am aggrieved on several points that I would like to draw your attention to.

1. Taking over 50 days to date, to provide information that is to be made available under Licence 893889 is a little annoying considering the information asked for should be at your "finger tips."
2. For you to say it is not a high priority to provide this is also infuriating.
3. To need another few weeks is also disturbing.

However the thing that most upsets me is the spin and rhetoric that both you and Tony Belcher were prepared to feed me especially when you specifically stated that a fresh start is needed and Barwon Water will now be making an attempt to get the process right.

We spoke about the 48 hour test pump last July 2007. This discussion covered the fact that the crit written by members of this community on the SKM 28 August submission to the EPA accurately discredited much of the contents of this document. We spoke about the fact that you have denied access to the 17 December resubmission to the EPA on this test.

We also spoke about those people most involved in the Kwarren groundwater investigations process and who the various stakeholders are. It was my impression that you agreed that the residents of Kwarren and Gellibrand were indeed significant stakeholders. We spoke about the one meeting the Regulatory Reference Group has had back in August 2008.

Yet you allowed this discussion to proceed and not once did you...

4. State that there is a Regulatory Reference Group of stakeholders meeting in Colac on Monday the 14 July 2008. (No one to my knowledge from this area has been given an invitation to this)
5. Recently you have sent another report to the EPA titled "Newlingrook and Gellibrand Groundwater Investigation – Pumping Test Water Quality and Ecological Monitoring," and you made no reference to this when you know our community wants access to this type of material.

The rhetoric and spin you fed me yesterday reinforces the contemptible way in which you treat people who fall under your umbrella as outlined in the Statement of Obligations set down by the Government and your customer policy set out on your web site.

As I said to you both yesterday this valley has a extreme range of people with various backgrounds and they do not appreciate being treated in this way.

And as I stated clearly yesterday, Barwon Water has to prove to this community that it is open, transparent and willing to engage people it affects with meaningful dialogue. Yesterday was a perfect time to start but unfortunately this latest episode reinforces the facts, beliefs and perception that Barwon Water is a law unto itself.

Malcolm Gardiner.

Cc: EPA Western...Chairperson Barwon Water.

↑
emailed

This letter prompted no response.

It is now 2012 and Tony Belcher has not been seen to visit the Kwarren valley on any occasion.

However, a reply to the 15 May letter finally arrived 2 months later.

Our Ref: 40/220/0030V
Your Ref:
Enquiries To:

July 24, 2008

Malcolm Gardiner
1805 Colac Beech Forest Road
KAWARREN VIC 3249

Dear Mr Gardiner

Re: Requested information on Gerangamite borefield

I refer to your letter dated 15th May 2008 requesting maps showing the relative residual drawdown in the Dilwyn and Pebble Point formations and observation bore data for the Gerangamite borefield.

The requested information is attached.

Yours faithfully,



Peter Morgan
Manager Asset Planning

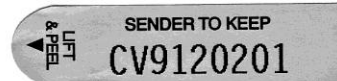
Encl: Relative Residual Drawdown Plans; June 2004, June 2005, June 2006, June 2007
Observation bore data (G13, G14, G18, M26, M27, M28, YEO21, YYG221, W6, W7, W9)



After this reply and looking at the enclosed material it was once again reinforced that little had changed. The following letter may seem a little terse but by this stage two years of similar nonsense indicated that attempting to be considerate and informal was a wasted effort.

Malcolm Gardiner
1805 Colac Beech Forest Road
KAWARREN
Vic 3249
01-08-2008

Peter Morgan
Manager Asset Planning
Barwon Water
PO BOX 659
GEELONG
Vic 3220



Peter,

Re: The information you sent on the Gerangamete borefield, your Ref. 40/220/0030V, 24 July 2008.

I am extremely disappointed that the information sent did not provide the data asked for in points 1-5 of the 15 May 2008 letter (see below).

1. Point one asked for the earliest recordings and the latest drawdown figures. The first map that you provided is dated June 2004. This and the other drawdown maps are identical to the ones in the reports Barwon Water has sent to Southern Rural Water. I have these although they are extremely reduced and difficult to read. I also have a Feb 1990 map and a 2000 one provided by your staff in 2000. I was hoping to fill in the gaps but it would appear that you can't do this.
2. *
3. The maps provided fell well short of showing the drawdown contours extending to zero. Is it possible that you have no idea of the sphere of drawdown affect the groundwater extraction at Barwon Downs is having?
4. In some parts of the maps I still have to use a magnifying glass to read the data but they are by far much better than the maps provided in your annual reports sent to Southern Rural Water.
5. In regard to the data sent on bores that were and are no longer artesian I am surprised that one of the bores I was particularly interested in has not even been recognised. This may well not be your fault because in the Licence No. 893889 bore ID 82840 is marked as non artesian. However, prep pumping of the Barwon Downs borefield this bore was approximately -8.7 metres DBNS indicating that it was very artesian. Irrespective of what the Licence states I would assume that since the borefield has been in operation since the early 1980s, you would have this data.

In effect, Peter, what took you over two months to compile does not even go close to providing the information asked for and considering that this material you provided is readily available I am surprised it took so long to compile.

If you can provide the information asked for it would be most appreciated. If you can't I would appreciate a reason why this is not possible.

Regards,


Malcolm Gardiner.

A reply arrived in due course and the additional artesian bore figures (M24) were provided. It is an interesting aside but this bore just happened to adjoin a property of a farmer whose stock and domestic bore was apparently no longer able to provide the usual supply of water. The artesian bore had been lowered over 40 metres, 32 of these below ground level.

Our Ref: 40/220/0030V
Your Ref:
Enquiries To:

August 11, 2008

Malcolm Gardiner
1805 Colac Beech Forest Road
KAWARREN VIC 3249

Dear Mr Gardiner

Re: Requested information on Gerangamite borefield

I refer to your letter dated 1st August 2008 in relation to information provided by Barwon Water on the Gerangamete borefield.

I respond to each of your points as follows:

1. Barwon Water did not routinely prepare residual drawdown maps prior to June 2004 and the additional maps requested are not available.
2. No comment.
3. Barwon Water's available maps have been provided to you. These maps satisfy the requirements of the groundwater licence.
4. No comment.
5. Please find attached borehole data for Borehole 82840 (M24).

Yours faithfully,


Peter Morgan
Manager Asset Planning

Encl: Observation bore data (M24)

100 YEARS SERVING OUR COMMUNITY



**Barwon
Water**

1908 - 2008

Not being happy with the way things were developing it was decided to approach the Barwon Water Board to see if things could be improved.

Malcolm Gardiner
 1805 Colac Beech Forest Road
 Kwarren
 Vic 3249
 09-07-2008

Chairperson Roger Lowrey
 Barwon Water Board
 Geelong
 Vic 3220.



Dear Roger,

Re: Kwarren Groundwater Investigations.

Please find enclosed copies of three letters and a CD of Five books dealing with Otway water. As you may be aware the Barwon Downs/Kwarren/Gellibrand/Carlisle River/Princetown communities have some concerns regarding surface and groundwater extraction from the Otways.

The enclosed three letters highlight one of these concerns. Peter Morgan and Tony Belcher spoke with me on Monday last and they spoke about getting things right and in the final stages of development before involving these communities. It was pointed out that the test pump in July 2007 and the following developments highlight the stupidity of ignoring and excluding the locals.

From this week's discussion and revelations that have come about I do not expect Barwon Water to change its operating procedures, its community consultation, its openness or community engagement. And consequently Barwon Water cannot expect to receive nothing but mistrust, suspicion and opposition from the communities in this area.

I write to you in the slim hope that maybe the Board does not appreciate nor is informed regarding the situation in our part of the Otways.

Yours sincerely,

Malcolm Gardiner.

Having heard nothing for close to a month the following letter was sent to the Board.

1805 Colac Beech Forest Road
KAWARREN
Vic 3249
01-08-2008

Barwon Region Water Board
Barwon Water
PO BOX 659
GEELONG
VIC 3220

Dear Board Members,

I am a little distressed at Barwon Water's apparent lack of openness and transparency in regard to a number of things to do with the borefield operation of the Barwon Downs borefield. In this instance I am finding it extremely difficult to obtain data that should be accurate and readily available. Included is some of the correspondence that highlights this.

Further I find it most baffling that Barwon Water does not have accurate water flow recorders along the Wurdee Boluc Inlet Channel that can give a clear picture of the inflows, outflows and losses. I believe Darren Cheeseman has stated that there is Federal funding available to do this if funding is an issue.

I would appreciate a reply to this letter and comment on these two issues.

Yours sincerely,

Malcolm Gardiner.

Our Ref: 40/220/0030V
Your Ref:
Enquiries To:

21st August, 2008

Mr Malcolm Gardiner
1805 Colac Beech Forest Road
KAWARREN VIC 3249

Dear Mr Gardiner

Re: Barwon Downs borefield

I refer to your letter sent to Barwon Water's Board dated 1st August, 2008 and advise that the letter was distributed to Directors.

I have requested our Managing Director to respond and address the two issues you have raised therein.

Yours faithfully,


Roger Lowrey
Chairman



226 file (2004)
2013

Our Ref: 40/220/0030V
Your Ref:
Enquiries To:



1908 - 2008

Page | 90

22nd August, 2008

Mr Malcolm Gardiner
1805 Colac Beech Forest Road
KAWARREN VIC 3249

Dear Mr Gardiner

Re: Barwon Downs borefield

I refer to your letter to Barwon Water's Board dated 1st August 2008 and advise of the Board's response to these matters.

Information on Gerangamete borefield

Barwon Water has provided to you the information requested in your letter of 15th May 2008 where it exists. This was provided in correspondence dated 12th June, 24th July and 11th August 2007.

Barwon Water acknowledges your concern with the delay in responding to a number of items requested in your letter. Due to the technical nature of your information request, a review of the information was first undertaken by Barwon Water's hydrogeology advisers and as soon as the technical review of the information was completed, it was forwarded to you on 24th July 2007.

Wurdee Boluc Inlet Channel

As detailed in previous correspondence to you dated 14th April 2008, Barwon Water does maintain flow monitoring devices along the Wurdee Boluc Inlet Channel (WBIC), including ultrasonic flow meters at some of the channel syphons and traditional gauging stations at harvest points. The traditional gauging stations are accepted practice flow measuring devices for open channels.

Barwon Water does not normally operate the WBIC during summer to minimise evaporation losses and to enable routine maintenance work to be undertaken. During normal climatic years, the WBIC is only operated during the cooler and wetter months of the year when losses from the channel are at a minimum. Conversely, some runoff is expected into the channel at this time. This is a very different operating scenario to channels in northern Victoria which are located in a much hotter and drier region and are operated during the summer months when net evaporation losses are very high.

Barwon Region Water Corporation
ABN 86 348 316 514

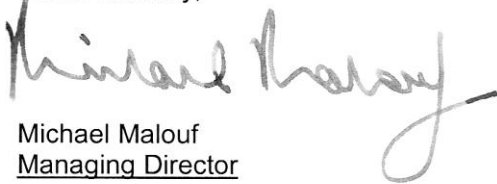
61-67 Ryrie Street, Geelong, Victoria
P.O. Box 659, Geelong, Victoria, 3220
DX 22061 (Geelong)
www.barwonwater.vic.gov.au

Telephone: 1300 656 007
Facsimile: (03) 5221 8236

Due to the WBIC operation regime, the net loss of water from the WBIC is quite low, in the order of five percent, which includes seepage and evaporation. Based on information from flow monitoring devices and this operating regime, seepage is the most significant component of water loss in the WBIC with evaporation estimated at less than 1%. The estimated cost of replacing the Wurdee Boluc Inlet Channel with a pipe would be more than \$150 million and this would only deliver a water saving of up to 1,600 ML/yr.

Barwon Water intends to continue its program of regular channel maintenance and improvement, with \$3.5 million committed to maintain and improve the channel over the next 5 years to further reduce seepage losses from the channel.

Yours faithfully,



Michael Malouf
Managing Director

The Wurdee Boluc Inlet Channel losses has been an area of contention since the 1980s and is another story.⁽²¹⁾⁽³³⁾ Suffice is to say that the Wannon Water system that supplies Warrnambool, Camperdown, Terang, Timboon, Simpson and many other Western District towns, loses between 8 and 13% and it is a fully piped system. How the Wurdee Boluc Inlet Channel that is an open antiquated earthen channel of 53 kilometres length can only lose 5% is very difficult to understand.

As for the reply in Michael's letter dated 24 July 2007 (it should have been dated 2008 not 2007), it is difficult to understand as there was nothing of a "*technical nature*" that required a "*technical review*." The data asked for should have been readily retrievable from any half efficient filing system.

CHAPTER SIX

– State Government Authorities’ Responsibilities

After spending hours researching the various State Government Authorities web sites and literature it has not been established where the following national policy agendas fit into the Victorian State system.

- National Strategy for Ecologically Sustainability Development (1992),
- Intergovernmental Agreement on the Environmental (1992),
- National Water Quality Management Strategy (1992),
- National Principles for the Provision of Water for Ecosystems (1996),
- National Strategy for the Conservation of Australia’s Biological Diversity (1996), and
- The National Water Initiative (2004).

However, other responsibilities of the State Authorities that relate to the Big Swamp issues are numerous and fairly well defined. If there were officers within the state authorities with any sense of accountability, moral consciousness and commitment to pursue the intention of the policies and guidelines and indeed the “*rules of the game*,” then the Big Swamp issue would be quickly and decisively dealt with.

Victorian Auditor General - Groundwater Sustainability 2010

The Victoria Auditor-General published two reports that are relevant to the Boundary Creek and Big Swamp groundwater dependent ecosystems and the social and economic welfare of a significant part of the Otway Ranges. The first of these tabled in Parliament in October 2010⁽²⁰⁾ made it quite clear that the Department of Sustainability & Environment and the water corporations do not know whether groundwater use is sustainable. This is quite an astounding finding and gives a clear indication that groundwater extraction in the State requires a significant overhaul. In the light of this, to allow the groundwater extraction at the Barwon Downs Borefield to continue without any form of review until the licence runs out in 2019, is unbelievable. This is especially so as the licence allows for extractions of 20 000 ML/year which is at least 5 times the sustainable level calculated in 1990s.⁽¹³⁾ The sustainable level being called a Permissible Annual Volume(PAV). The PAV report included in its final words the following statement,

“It was concluded in the study that flow in Boundary Creek (located on the Barongarook High) would be affected by extraction at a rate of 4,000 ML/year, and the springs in the area and domestic and stock users extracting from shallow bores may be affected.”

The level of extraction with no effects on Boundary Creek was calculated to be in the order of 1500 ML/year.⁽⁴⁸⁾

Victorian Auditor General - Contaminated Sites 2011

The second of these reports by the Victorian Auditor-General concentrates on the management of contaminated sites and is dated December 2011.⁽¹⁾ To understand the relevance to the Big Swamp it is important to qualify and define the term “*contaminated site*.” In this report the Auditor-General defines a contaminated site as follows,

“Contaminated sites are land, and in most cases groundwater, where chemical and metal concentrations exceed those specified in policies and regulations.”

The Big swamp most definitely qualifies as a contaminated site under this definition. Water tests and acid sulfate soil testing conducted by the Landcare Group, LAWROC, has proven this beyond any doubt.⁽¹²⁾⁽³⁰⁾

The Victorian Auditor-General's report says that contaminated sites are generally caused by inappropriate management practices. In the Big Swamp scenario there is considerable voice given by the various authorities that the contamination of Boundary Creek, the aquifer and the Big Swamp is a natural occurrence. This may well be the case but until a comprehensive study is undertaken the truth of the matter will not be known. Whether this will ever be done seems quite doubtful after reading the VAG report.

The VAG report includes the following from the cases studied...

1. Applying the regulatory framework for contaminated sites *"Councils and the Department of Planning and Community Development (DPCD) have not applied the regulatory framework as intended."*
2. And the regulatory instruments have been implemented in an ad hoc basis by the EPA and DPCD.
3. The regulatory framework has existed since the 1980s.
4. Also, *"Framework weaknesses have been known for at least 10 years, yet action to systematically address them began only within the last year."*
5. *"The Department of Planning and Community Development (DPCD), the Environment Protection Authority (EPA) and councils are not effectively managing contaminated sites, and consequently cannot demonstrate that they are reducing potentially significant risks to human health and the environment to acceptable levels."*
6. Largely because of the complex regulatory framework this has led to *"...a lack of accountability and responsibility, and subsequent inaction."*
7. *"In this audit we identified a range of cases that demonstrated the adverse consequences that flow from a lack of accountability and clarity, and gaps in the framework. Most notably we identify cases of inaction by responsible entities in dealing with contamination; this inaction being driven in part by an undue emphasis on avoiding legal and financial liability, rather than protecting human health and the environment."*

Cases studied demonstrated...

1. Inaction
2. Inconsistent interpretation and application of the framework by councils and the DPCD
3. Councils have shown a lack of vigour in applying their own internal systems and processes
4. Responsibility is neither clearly defined nor accepted by any entity.
5. There are around 100 entities involved in regulating and managing contaminated sites.
6. However, the responsible entities have been neither proactive nor systematic in categorising the nature and extent of contaminated sites.

Possible Human health risks

1. *"Human health risks range from minor health problems, such as allergic reactions and hypersensitivity, to serious health problems, such as cancer, respiratory illness, reproductive problems and birth defects."*

Possible Environmental risks

1. *"...degradation of soil, water and air quality and impact upon their uses."*
2. *"Contamination of groundwater can prevent it from being used for drinking, irrigation or stock supplies...can impact upon plant growth...odours making recreational areas unsuitable, or even affecting the way a place looks by degrading the aesthetic values of an area."*

Managing Contaminated Sites

1. *"Councils, the EPA and DPCD are the key public sector entities responsible for the management of contaminated sites."*
2. *"The EPA is responsible for regulating known contaminated sites..."*

3. One mechanism that the EPA uses to manage and reduce the risk to human health and the environment is “...*investigating contamination in all sites that come to its attention, to determine if further action is required.*”
4. “*However, there is no agency responsible for oversight of the system in relation to sites that are known to be contaminated and where the risks to human health and the environment may be long-term rather than imminent.*”

If one did not know any better it could be mistakenly taken that the Victorian Auditor-General's report on contaminated sites was describing and had used the Big Swamp site as its major contaminated case study.

The Environment and Protection Authority's Responsibilities.

If the Victorian Auditor-General's report is to be believed it seems quite clear cut that the very least the EPA should have done was to initiate an investigation of the Big Swamp site three years ago when the EPA was first notified that the Big Swamp was a possible contaminated site. But true to the VAGs report on contaminated sites, the EPA has shown a lack of accountability, inaction and responsibility to be proactive implementing policy to reduce the risks to human health and the environment.

From the investigations and audit that the VAG conducted it would appear that the EPA has a key responsibility to manage the Big Swamp contaminated site. It is also evident that the EPA could instigate an Environmental Audit (EA) of this site under the Environment and Protection Act.

An “*Environment Audit must follow relevant EPA environmental audit guidelines and standards, and undertake sampling and analysis of soil, and possibly groundwater, surface water and air.*”⁽¹⁾

In the case of the Big Swamp and as part of the Environmental Audit it would be wise to include a Hydrogeological Assessment (EPA document Number 668). A formal request to this effect was sent to the EPA 29 November 2011. Gaining no reply after several reminder copies of the initial email and reminders were sent Express Post (CV2689294). An email was received stating that a reply would arrive before 13 January 2012 (see Appendix Four, page 138-147, for a detailed sequence of events and correspondence of the example referred to in the following few pages.).

The following letter arrived 19 January 2012.

Our Ref: MA005457

Mr Malcolm Gardiner
Kawarren
1805 Colac Laver Hill Road
KAWARREN
VIC 3249

Dear Mr Gardiner

Big Swamp AIASS Site

Thank you for your email of 29 November 2011, and follow up emails on 28 December and 13 January, about EPA's management of acid sulfate soils.

The Ombudsman's office is correct in his conclusion that EPA deals with "the handling of waste acid sulfate soils being moved and deposited elsewhere". Our responsibilities are outlined in the Industrial Waste Management Policy (Waste Acid Sulfate Soils) (1999), made under the *Environment Protection Act 1970* (the Act).

Your correspondence queries the application of EPA Publication 668, *Environmental Auditing – Hydrological Assessment (Groundwater Quality) Guidelines* (the Guidelines). The Guidelines provide support for environmental auditors, engineers and consultants, outlining the recommended process for conducting a hydrological assessment. The Guidelines do not impose obligations on EPA to conduct assessments in particular circumstances.

You suggest that section 27A of the *Environment Protection Act 1970* places on EPA "a responsibility to act if a person causes or permits an environmental hazard". This interpretation is incorrect. Section 27A creates an indictable offence, including for "causing or permitting an environmental hazard". Where sufficient evidence exists that an individual has caused or permitted an environmental hazard, EPA may seek to prosecute under this provision. Typically, a prosecution of this nature is in relation to the dumping of industrial waste or a pollution event. Examples of such prosecutions can be found in media releases on EPA's website at www.epa.vic.gov.au/about_us/news.asp.

Finally, you request that EPA instigate an environmental audit, including hydrological assessment, of Big Swamp. The environmental audit system is designed to assess environmental risk, including where land and groundwater contamination has occurred, often in relation to industrial sites. EPA statutory tools, including pollution abatement notices, works approvals and licences, may require a land owner or proponent to conduct an environmental audit to demonstrate risks are being managed to an appropriate level. These circumstances are not applicable to Big Swamp and accordingly, EPA has no plans to require an audit or other assessment.



Lvl 3, 200 Victoria Street
Carlton
Victoria 3053
GPO Box 4395
Melbourne Victoria 3001
T: 1300 EPA VIC
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DX 210082
www.epa.vic.gov.au



However, Southern Rural Water, in partnership with La Trobe University and other Government agencies, are leading an investigation into acid sulfate soils in the Otway Ranges and Basalt Plains. The study is examining the cause of inland soil acidification, its associated risks and potential management actions. You may wish to contact Angus Ramsey at Southern Rural Water on 0419 509 087 to discuss this work further.

Yours sincerely



KATRINA MCKENZIE
ACTING CHIEF EXECUTIVE OFFICER

17/1/2012

To say that there is not an environmental risk and that land and groundwater pollution has not occurred in the Big Swamp is an absolute nonsense, especially so when extensive documentation has accompanied the formal complaints sent to the EPA.

Once again the EPA seemed to be throwing the problem back to the complainant rather than evaluating, investigating and being proactively looking at the issue as a possible EPA concern. The initiative of working out how the EPA should go about being involved in such a serious problem should not be the responsibility of a community group or resident.

An email was sent to Angus of Southern Rural Water, asking is it true that the La Trobe University study is looking at the causes of the Actual Inland Acid Sulfate Soils problem in the Big Swamp. The reply to this 20 January 2012 1:31 PM states,

“Is it true - Partly?

As you would be aware, the multi agency committee has engaged the La Trobe Uni to undertake a study to identify and research inland acid sulphate soils (IASS) in the Corangamite Region.

A part of the study will be looking into the possible underlying or root causes of why there is the existence of IASS at a site and determine whether it is a potential or actual site and its implications.

I must stress that it is a regional study being undertaken by an educational body and not an in depth investigation by an authority into any one particular identified IASS site.”

The brief⁽³³⁾ and aim (see page 22) of the multi agency committee (CIASSMASC) do not include looking at the cause(s) of any Actual Inland Acid Sulfate Soil site(s) found.

On the same day that the email was sent to Angus the following letter was written and sent in reply to Katrina’s EPA letter.

Malcolm Gardiner
 Vice President LAWROC Landcare
 1805 Colac Lavers Hill Road
 Kewarren
 Vic 3249
 ph (03) 52 358 325
www.otwaywater.com.au
otwaywater@yahoo.com.au
 Date 19-01-2012



Katrina McKenzie
 Acting Chief Executive Officer
 EPA Victoria
 GPO Box 4395 Melbourne
 Victoria 3001

Dear Katrina,
EPA Ref: MA005457 Regarding the Big Swamp AISS Site.

Thank you for your letter of 17-01-2012.

I have had a few discussions with members of the Corangamite Inland Acid Sulfate Soils Multi Agency Steering Committee and persons involved in the La Trobe University study and am under the impression that the causes of any AIASS problems in the Big Swamp are not part of the brief. Bearing this in mind and the fact that no one has determined the cause of the contamination of the land and groundwater I would have thought that this falls under the responsibility of the EPA.

Efforts over the last three years to get the EPA to do this may have been "sloppy" and referral to certain sections of the Environment and Protection Act may have been misguided but that has only come about because of the inaction of your Authority. Surely the EPA has to be proactive and do something constructive aiming at the very least to determine the causes of this problem. As you put it, *"The environmental audit system is designed to assess environmental risk, including where land and groundwater contamination has occurred."*

I would have thought that all of the material supplied to the EPA would have established that there was a potentially environmental and human health risk involved with the contamination of the Big Swamp site and as a consequence becomes the EPA's responsibility. Is this not so? Does the EPA investigate sites when there is a distinct possibility that it is contaminated and has the potential to be an environmental risk?

Further to the emails I first sent in November 2011 the EPA has not answered my query the name of a person within the EPA that deals with Acid Sulfate Soils. If this could be answered I would appreciate it.

Yours sincerely,

Malcolm Gardiner.

c.c. to the Hons. Greg Barber/Terry Mulder/Ryan Smith/Peter Walsh & the VAGO.

This lack of involvement in the contaminated site of the Big Swamp is even more disappointing and confusing if the following statements found on the EPA web site are to be believed (as at 22 November 2011).

“EPA administers the Environment Protection Act 1970, which provides the basis for protecting our water environments from pollution.”

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“How EPA protects the water environment

EPA helps to protect Victoria’s water environments through mechanisms including environmental laws, policies and regulatory controls, and by working in partnership with Victorian communities, including businesses, government, individuals and groups.”

“State Environment Protections Policy (Waters of Victorian)

The State Environment Protection Policy (Waters of Victoria) sets the framework for government agencies, businesses and community to work together, to protect and rehabilitate Victoria’s surface water environments.”

There are numerous EPA publications listed on the EPA website providing clear and specific direction how the water environments can be protected or rehabilitated.

In the EPA Annual Plan 2011-2012⁽¹⁶⁾ page 14, it discusses the EPA’s accountability to Government. This further emphasises how easy it is to write the words, words that have very little relationship to reality and on the ground actions.

“Statutory activities and environmental protection

The purpose of these activities is to protect, care for and improve beneficial uses of the environment...that ensures:

- *Beneficial uses of water are protected...*
- *Contamination of land and groundwater is prevented...”*

And the EPA 5 Year Plan 2011-2016⁽¹⁵⁾ contains more of the same. Lots of huff and puff and more of the same.

Colac Otway Shire’s Responsibilities.

The Colac Otway Shire has steadfastly maintained the stance that the Shire’s role in the Kewarren groundwater investigations and the contaminated Actual Inland Acid Sulfate Soil site in the Big Swamp is nothing more than to act as advocates for its constituents being impacted by this issue. 22 April 2008 the Shire adopted the following resolution regarding the community concerns over the Kewarren groundwater investigations...

“That Council, although it is outside our area of responsibility, recognises the community’s concern regarding the potential impacts of groundwater extraction from the Gellibrand aquifer.”

This was to be the best that the Shire could do.

In regard to the Big Swamp issues the Shire has been instrumental convening meetings between the various authorities and the setting up of the Corangamite Inland Acid Sulfate Soils Multi Agency Steering Committee. As discussed earlier this committee has been extremely slow to perform, is spending large sums of money to confirm facts already established and is failing to investigate the causes of the Big Swamp’s demise.

Under the **Public Health and Wellbeing Act 2008** the Shire has numerous responsibilities to the residents under its care that also relate to the responsibilities and issues involving the **Environment Protection Act 1970** as described above.

Within the Public Health and Wellbeing Act it states that the ***“Parliament recognises that the State has a significant role in promoting and protecting the public health and wellbeing of persons in Victoria,” “promoting conditions in which persons can be healthy,”*** and that regard should be given

to many guiding principles, including the Precautionary Principle, the Principle of Accountability and the Principle of Collaboration. A great deal of the responsibility of implementing this Act has been given to Councils such as the Colac Otway Shire Council. In this case the Colac Otway Shire has done little more than “advocate.” (see page 22)

“The function of a Council under this Act is to seek to protect, improve and promote public health and wellbeing within the municipality district by...” intervening if the health of people within the municipality district is affected, ensuring that the municipality district is maintained in a clean and sanitary condition and creating an environment which supports the health of members of the local community. In regard to the health and wellbeing of the residents within the influence of impacts from the Actual Inland Acid Sulfate Soil site on the Big Swamp the intent of these objectives and principles appear to have been forgotten.

The Shire quite clearly states some of its responsibilities under the **Planning and Environment Act**, in the Shire’s **Planning Scheme Overlays** that include...

- to protect and maintain quality and quantity of groundwater recharge in the Barwon Downs Wellfield Intake Area and to the geological aquifer intake beds within the municipality,
- to protect areas of significant vegetation,
- to maintain and enhance habitat including wetlands and streams (Boundary Creek being specifically named),
- to protect areas prone to land degradation processes,
- to protect water quality in accordance with the provisions of relevant State Environmental Protection Policies, and
- the protection and enhancement of the biodiversity of the area.

The Shire also has a specific and quotable responsibility under the Environment Protection Act 1970 in regard to pursuing a Hydrogeological Assessment as per Document No. 668 “**Environmental Auditing – Hydrogeological Assessment (Groundwater Quality) Guidelines**”

“Other organisations may also request an HA when implementing other legislation or regulations. Here are three examples:

Local government has obligations to consider environmental protection, including groundwater...or when considering the requirements of an environmental audit Overlay on potentially contaminated land.”

When speaking to an officer of the Victorian Auditor General’s Office I was informed that the EPA does not have to deal with the Big Swamp as it is not designated as a contaminated site. And, it would appear that this may never happen as the EPA is the major authority responsible for designating a site as contaminated. Following up this line of investigation an environment officer of the Colac Otway Shire was asked.

“In regard to the Big Swamp/Jurassic Park has the Shire recognised and designated it as a contaminated site? If it hasn’t is their (should be “there”) any likely hood or discussion of this happening in the future?”

The email reply was prompt, Wednesday, 1 February 2012 10:05 AM.

“The Shire recognises the swamp as an actual acid sulfate soil site but it is not designated as a contaminated site.

The EPA are responsible for deciding contaminated sites and have a list of such, but it usually applies to chemical contamination of a manmade type and which could have an impact on someone’s health.”

Finally, it may not be written in any policy document but it would appear that out of all the responsible authorities it could be expected that the Colac Otway Shire would exercise a moral obligation to its constituents, and go against the trend as described by the Victorian Auditor-General above and be proactive in a strong and forceful manner attempting to resolve the Big Swamp issue.

The Department of Sustainability & Environment's Responsibilities.

The Department of Sustainability and Environment (DSE) administer 51 major State Government Acts of which it would appear that 12 of them can be applied to the dilemma along Boundary Creek and the contaminated Actual Inland Acid Sulfate Soil in the Big Swamp.

These 12 Acts are:

1. Catchment and Land Protection Act
Provides a framework for the integrated management and protection of catchments
2. Environment Protection Act
Relates to protecting and improving air, land and water environments
3. The Flora and Fauna Guarantee Act
Provides the needs for the protection of the State's native species
4. Commissioner for Environmental Sustainability Act
Provides annual reporting on the Environment management Systems
5. National Environment Protection Council (Victoria) Act
Gives legal effect to Commonwealth, States and territories Intergovernmental Agreement on the environment
6. National Parks Act
Provides for the management of National and other parks
7. Parks Victoria Act
Creates Parks Victoria and makes provisions for its powers, duties and functions
8. Reference Areas Act
Management of areas of special ecological interest and significance
9. Sustainability Victoria Act
The DSE web site does not define what this Act covers and has been included because of the water industries continued use of the notion that groundwater is sustainable
10. Victorian Environmental Assessment Council Act
This Council is to conduct investigations and make recommendations relating to the protection and ecologically sustainable management of the environment and natural resources of public land
11. Water Act
Governs the statutory powers and functions of all water authorities outside the metropolitan area, and provides for the integrated management of the water resources and for environmental and consumer protection
12. Health Act 1958
The section 228 and Part XX relating to Precautions Against Fire is the DSE responsibility.

When attempting to find the Health Act containing this information it was found that the Health Act of 1958 has been replaced by the Public Health and Wellbeing Act 2008. Considering that the DSE information above, points 1-12, were taken from the DSE web site in January 2012 this has to be another example highlighting the difficulties accessing reliable and up to date information.

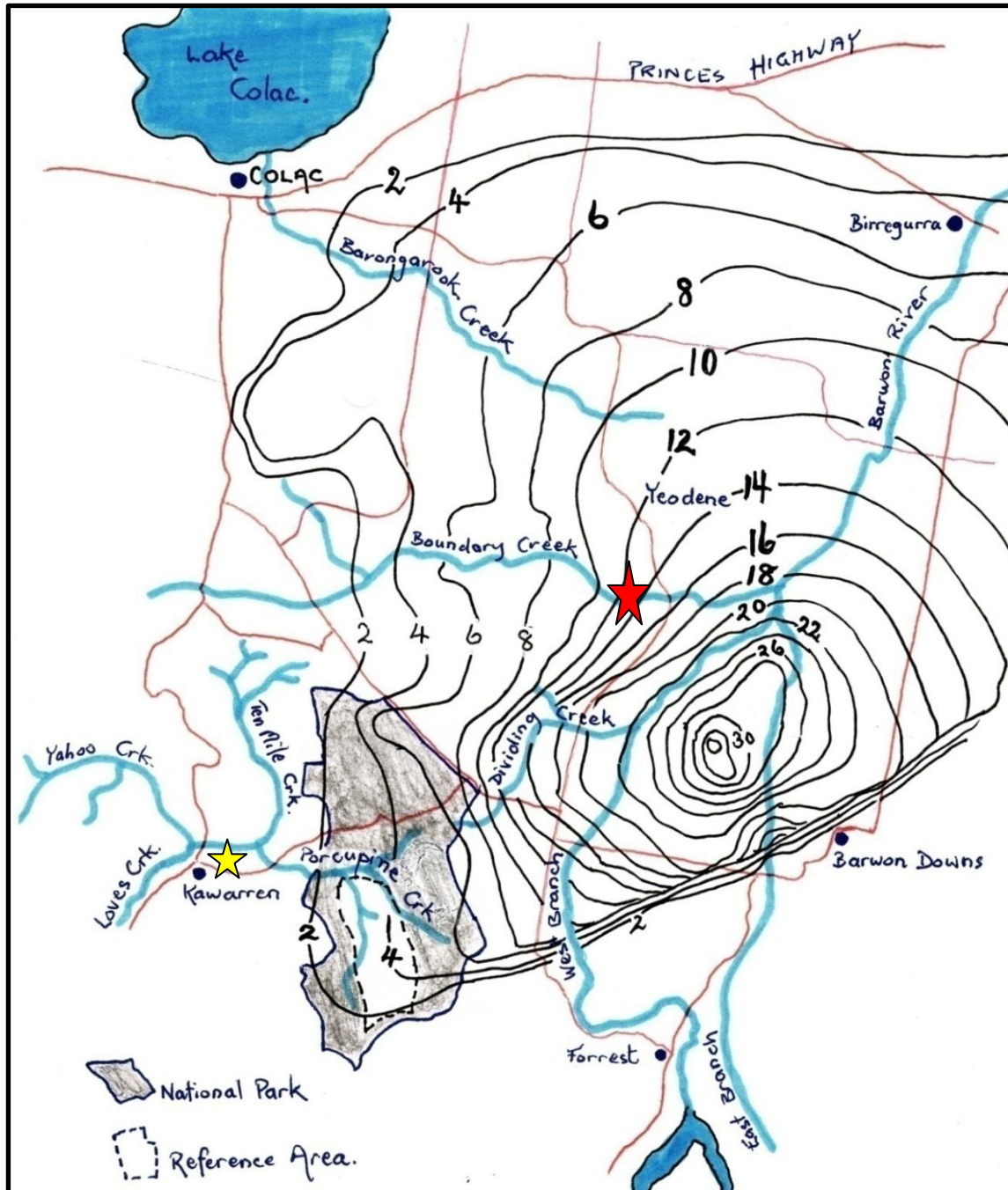
The relevance of most of these State Government Acts in relation to Boundary Creek and the Big Swamp is obvious. However, the ones relating to Parks and fire may not be. It is difficult to determine whether this is a DSE responsibility under the Health Act or one of the other Acts.

The map on page 101 clearly shows the influence of groundwater extraction spreading out under a National Park and Reference Area. One would think that any impacts from this influence would be a Parks Victoria responsibility.

The red star indicates the area of the Big Swamp that first caught fire in 1997 and smouldered for 12 years until it reignited in 2010 causing a wild fire.

On this map the National park is the shaded area and the Reference Area is shown to exist within the boundaries of this Park.

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The drawdown contour lines are numbered showing the amount of drawdown from the aquifer in metres as at 2002.

This map clearly demonstrates that a National Park and Reference Area are being impacted.

The yellow star indicates the proximity of the Kawarren Borefield.

Statement of Obligation and Barwon Water's Responsibilities.

The 2007 Statement of Obligations⁽⁵²⁾ for Barwon Water is very specific and clearly defines the manner in which water resources under its sphere of influence must be developed and managed. The Kawarren investigations had to be conducted within the law and in the manner as outlined in the 2007 Sustainable Management Principles of the Statement of Obligations. This was most definitely not being done and as with any discussion or issues concerning the Barwon Downs Borefield licence. Otway Water Book 3 covers this topic in detail. If Barwon water were to implement the actions set out in this Statement then the majority of community concerns would be resolved.

The Statement of Obligations declares:

- Manage water resources in a sustainable manner
- Effectively integrate economic, environmental and social objectives
- Minimise impacts of its activities on the environment
- Must develop and implement open and transparent processes to engage its customers and community

Under the Sustainable Management Principles section:

- The need to ensure that water resources are conserved and properly managed for sustainable use and for the benefit of present and future generations, and
- The need to encourage and facilitate community involvement in the making and implementation of arrangements relating to the use, conservation and management of water resources; and
- The need to integrate both long-term and short-term economic, environmental, social and equitable considerations; and
- The need for the conservation of biological diversity and ecological integrity to be a fundamental consideration; and
- If there are threats of serious or irreversible environmental damage, lack of full scientific certainty as to measures to address the threat should not be used as a reason for postponing such measures.

Under the Environmental Management section.

- The Authority must develop and implement an Environmental Management System which; a) must be in accordance with the following standards from the Standards Australia AS/NZS ISO 14000 Series of Environmental Management Systems Standards – 14001 and 14004.
- The Authority must manage the impacts of its activities on any waterway, aquifer or wetland to minimise environmental impacts on and risks to the aquatic ecosystem.
- The Authority must monitor the impact of its activities on waterways and wetlands, including the impact of dams on the thermal regime of waterways.
- The Authority must make available to the public: a) water quality and flow data compiled by the Authority relating to waterways; or b) if the data is available from a central data agency, relevant contact details for that agency.

When observing the manner in which the Kawarren groundwater investigations have been handled it is doubtful that anyone within Barwon Water was even aware of the 2007 Statement of Obligations.

It is most interesting to observe the following quote taken from an advertisement that Barwon Water placed in the Geelong Advertiser on 26 January 2008, page 27. This quote formed part of Barwon Water's argument and position on the fluoride debate...

"As a State Government entity, Barwon Water is required to follow policy."

The question then arises why doesn't Barwon Water follow Victorian State Government policy and Gazetted documents when managing the groundwater resource of the Otways?

Other Barwon Water Responsibilities.

When developing the 2004 groundwater licence for the Barwon Downs Borefield and the Kewarren groundwater investigation in 2006, Barwon Water, DSE and Southern Rural Water appear to have completely disregarded the ***State Environment Protection Policy (SEPP), Groundwaters of Victoria 1997***,⁽⁵³⁾ and the ***State Environment Protection Policy, Waters of Victoria 2003***.⁽⁵⁴⁾ These SEPP responsibilities under the Environment Protection Act, lie primarily with the EPA but every other authority approached over this Big Swamp issue have a joint responsibility in regard to the implementation of these two SEPPs. However, it has been far too easy to pass the issue onto another authority.

SEPP 1997, Special Gazette Number S 160.

The Victorian Government published a Special Gazette, Number S 160,⁽⁵³⁾ specifying certain management principles to be applied to groundwaters of Victoria.

- The protection of existing and potential beneficial uses, including:
 - Ecosystems,
 - Stock and domestic water,
 - Agriculture, and
 - Primary contact recreation.
- The intergenerational equity and precautionary principle.
 - An interpretative definition of the precautionary principle is, “There is a problem until it is proven otherwise, NOT that there is **no** problem until one is created.”
- Protection agencies (e.g. Southern Rural Water, the Environment and Protection Authority, the Department of Sustainability and Environment, the Corangamite Catchment Management Authority, the Department of Primary Industries, Parks Victoria and the Colac Otway Shire) must implement the policy.

Implementing such a policy and applying specifics to the management of groundwaters were based on sound management practice of the time and should have been strictly adhered to with any new groundwater project. When renewing the 2004 groundwater extraction licence it would appear that the intent of this Special Gazette was ignored.

Also in this Gazetted SEPP the Hydrogeological Assessment once again is mentioned.

“The Authority (EPA) may require a hydrogeological assessment to be undertaken to determine any

- ***existing groundwater contamination and resulting risk to beneficial uses of groundwater, and***
- ***potential risk to groundwater quality and beneficial uses of groundwater.”***

This seems to be very specific and straight forward and is most definitely applicable to the Big Swamp.

Further, this SEPP is as applicable to the portfolios of responsibility for all the statutory authorities.

SEPP 2003. Victorian Government Special Gazette Number S 107.

The year before Southern Rural Water granted the 2004 Stage Two licence to extract 20 000 ML/year from the Barwon Downs borefield, the Victorian Government published the Victorian Government Gazette Number S 107⁽⁵⁴⁾ and included these items to be addressed when dealing with waters of Victoria:

- ***The principle of integration of economic, social and environmental considerations.***
 - *Sound environmental practices and procedures should be adopted*
 - *Effective integration of economic, social and environmental considerations in decision-making processes with the need to improve community well-being and the benefit of future generations.*
- ***The precautionary principle.***

- *If there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.*
- *Decision making should be guided by a careful evaluation to avoid serious or irreversible damage to the environment wherever practicable.*
- ***The principle of intergenerational equity.***
 - *The present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations.*
- ***The principle of conservation of biological diversity and ecological integrity.***
 - *The conservation of biological diversity and ecological integrity should be a fundamental consideration in decision making.*
- ***The principle of shared responsibility.***
 - *Protection of the environment is a responsibility shared by all levels of government and industry, business, communities and the people of Victoria.*
- ***The principle of enforcement.***
 - *Environmental requirements should be enforced.*
- ***Principle of accountability.***
 - *Access to reliable and relevant information in appropriate forms to facilitate a good understanding of environmental issues.*
 - *The opportunities to participate in policy and program development.*
- ***There should be no increased water allocation approved unless it is subject to a process which is designed to provide environmental flows.***
- *Groundwater managers need to ensure that their activities do not pose an environmental risk to surface water beneficial uses, particularly through the excessive extraction of water and the subsequent prevention of surface water environmental flows, and through reducing the quality of adjoining surface waters.*
- *Water managers must ensure that groundwater quality does not impact on the beneficial uses of surface waters and vice versa.*
- *Persons who generate pollution and waste should bear the cost of containment, avoidance and abatement.*

Implementing these principles and intentions outlined in Government Gazette S 107, would have ensured sustainable groundwater extraction management practices in the true sense of sustainability. Unfortunately, it would appear that the decisions makers involved in granting the 2004 groundwater extraction licence were ignorant of this Gazette and its rulings. Also, determining and allocating environmental flows to streams should have been done as a matter of course even if there was not a Government ruling saying this should be done.

Once again a glaring omission apparent during the development and implementation of the Kavarren and Barwon Downs Borefields is highlighted by the complete lack of any consideration of the social implications. Considering the social outcomes of a project have been repeatedly stated in Government documents for decades not to mention that Beneficial Uses includes the very same notion.

On the Barwon Water web site as at 20 November 2011, the following extracts were found.

“We comply with the following state and federal legislation

- ***Water Act 198***
- ***Catchment and Land Protection Act 1994***
- ***Environment Protection Act 1970...*** Barwon Water lists a total of 11 Acts.

The SEPPs fall under the Environment Protection Act.

“We comply with the following international and Australian standards:” Six are listed and include the,

“ASNZS ISO 14001:2004 Environmental Management System.”

Barwon Water has an obligation to diligently perform the responsibilities set out in state and federal legislation but in regard to its groundwater extraction management at the Barwon Downs Borefield this does not appear to be the case.

The Department of Primary Industries’ Responsibilities.

The DPI website provides a great deal of insight into the overall responsibilities it administers but is very light on detail.

“We administer and respond to queries regarding 38 major Acts.”

These Acts are not listed but no doubt cover water resources.

“Our work includes forward scanning and insight about emerging issues, engaging activity with stakeholders, and implementing legislative change and cabinet processes.”

Apparently the decimation of water dependent ecosystems and the impact on landholders primary industry does not qualify under this statement.

An emerging issue would have to be the detrimental effects of massive groundwater extraction on Beneficial Uses.

“We protect the sustainability of Victoria’s primary and energy industries by regulating natural resources use in the public interest.”

Doing nothing about pollution of ground and surface waters must not be disregarded. This pollution must be seen as contrary to the public interest.

“We also encourage best practice behaviours through a proactive approach to self-regulation. We do this while educating, inspecting and enforcing industry and community compliance with legislation and regulations.”

Self-regulation if it has been applied in this case, does not work. Also, there seems to be very little compliance with legislation and regulations, but perhaps, as all the authorities assert no one is responsible to enforce legislation and regulations covering the depletion and pollution of natural resources in the Otway Ranges.

However, *“DPI is responsible for regulating the development and production of our earth resources to ensure they are sustainable. To do this we rely on community consultation.”* What a joke.

As the Victorian Auditor-General’s Office has indicated not enough is being done to ensure that the groundwater resources of the State are being managed sustainably. As for assistance from the DPI and helping the community deal with the Big Swamp problems, there has been no assistance and there most definitely has not been any community consultation.

“People using Victorian waters or land must abide by the rules and regulations laid down by Victorian and statutory authorities.”

This is very commendable but a useless statement unless statutory authorities like the DPI are prepared to enforce the rules and regulations without fear or favour. It would appear that these rules apply only to the community and the landholders and residents of these communities. The people must abide by the rules and regulations BUT it would appear that the same rules do not apply to the statutory authorities themselves. “Do as we say not as we do.”

Of the 7 core services that the DPI provide this is the most telling.

“Our core services include: legislation and regulation ensuring our natural resources are well managed and protected.”

To implement this core service is all that the communities being impacted by the Big Swamp and the Boundary Creek demise ask for.

Parks Victoria’s Responsibilities.

Parks Victoria’s web site includes a summary of legislation, policy and guidelines that include:

1. 13 international treaties, conventions and initiatives;
That includes,

- i. Convention Concerning the Protection of Natural Resources and the Environment of the South Pacific Region 1986,
 - ii. Convention on Biological Diversity,
 - iii. Convention on the Conservation of Nature in the South Pacific 1976.
2. 10 Commonwealth legislation:

That includes,

 - i. Environment Protection and Biodiversity Conservation Act 1999,
 - ii. Environment Protection (Impacts of Proposals) Act 1974.
3. 11 National policies and initiatives:

That includes,

 - i. Caring for Our Country,
 - ii. Intergovernmental Agreement on the Environment 1992,
 - iii. National Strategy for Ecological Sustainable Development,
 - iv. Wetlands Policy of the Commonwealth Government of Australia 1997.
4. 43 Victorian legislation:

That includes,

 - i. Catchment and Land Protection Act 2006,
 - ii. Conservation, Forests and Lands Act 1987,
 - iii. Environment Effects Act 1978,
 - iv. Environment Protection Act 1970, including State Environment Protection Policies (Waters of Victoria) and its schedules,
 - v. National Parks Act 1975 (Vic),
 - vi. Water Act 1989,
 - vii. Wildlife Act 1975.
5. 18 Victorian policies and strategies:

That includes,

 - i. Living with Fire, Victoria's Bushfire Strategy 2008,
 - ii. Policy for Sustainable Recreation and Tourism on Victoria's Public Land 2002.
6. 6 Parks Victoria strategies:

That includes,

 - i. Conservation reserves Management Strategy 2003,
 - ii. Linking People and Spaces 2002.

There are five codes of practice that do not appear to have any relevance to the Big Swamp issue. The Parks website states Parks Victoria does know how to conduct "business" following the principles of codes of conduct.

Corangamite Catchment Management Authority's Responsibilities.

The Corangamite Catchment Management Authority (CCMA) was established to ensure the protection and sustainable development of land, vegetation and water resources.

In its website literature the CCMA recognises the importance of:

- community involvement to help carry out much of the natural resource management which takes place across the catchment,
- the joint roles and overlapping of shared and significant responsibilities of catchment management with other authorities such as the Department of Sustainability and Environment, the Department of Primary Industries, Parks Victoria, local government, industry and water authorities,
- the rivers and their adjoining wetlands that are the lifeblood of our region, and
- wetlands that provide a range of important environmental services.

In the CCMA Corangamite Wetland Strategy⁽⁷⁾ peatlands, permanent rivers and streams, shrub swamps, freshwater marshes and freshwater springs are stated as important under the ***Directory of***

Important Wetlands of Australia Wetland Classification System. Boundary Creek and its wetlands, the Kawarren Borefield creeks and wetlands are within the catchments of the Barwon and Gellibrand Rivers that are specifically named on the CCMA website as lifeblood rivers within the CCMA's area of responsibility.

The Corangamite CMA has responsibilities to perform under both the Statements of Obligations for Catchment Management Authorities and the more specific Statements of Obligations for the Corangamite Catchment Management Authority.⁽⁴¹⁾ These Statements of Obligations make it abundantly clear that if the CCMA was doing its job effectively this authority would have taken the lead back in 2008 and would have been pro-active investigating the causes of such decimation of a the Big Swamp peat wetland. The CCMA, if carrying out its responsibilities would have then developed a management plan to halt further decimation and spread of this problem.

Also when the Kawarren/Gellibrand community was "battling" to have Barwon Water develop the Kawarren borefield in a sustainable way the CCMA should have provided support and expert advice.

The CCMA Regional Catchment Strategy⁽⁹⁾ intention being the ensuring the improvement and protection of natural resources within the CCMA's area of jurisdiction. The Corangamite Catchment Management Authority's Regional Catchment Strategy (RCS) states that the CCMA should assess threats to the environment, economic and social values; to guide the planning and action of local and State Government agencies with responsibilities for natural resource management, and to provide a pivotal role implementing relevant policies, initiatives and National and State legislation. In the Corangamites Catchment Management Authority's Corangamite Wetland Strategy⁽⁷⁾ there is a section that includes, "[A brief overview of the key wetland related legislation, agreements and policy that relates to wetland management and use within the Corangamite region.](#)"

This brief overview of legislation, agreements and policy includes,

- 6 international,
- 5 Australian,
- 20 Victorian, and
- 7 regional agreements and policies.

The Wetland Strategy also names the Department of Sustainability and Environment, the Department of Primary Industries, Parks Victoria, the Environment Protection Authority, the Colac Otway Shire and Barwon Water as key regional agencies with wetland management responsibilities.

The CCMA Regional Catchment Strategy⁽⁹⁾ makes it quite clear that, "[A key task of the RGS is to ensure institutional complexity does not lead to inappropriate, ineffective or inefficient natural resource management.](#)" Groundwater management is named as one of the areas that may involve such complexity.

The argument could be put that the CCMA has an impossible task of being able to co-ordinate let alone implement and juggle all of these variables. However, it is as arguable that the CCMA should not include these aspirations unless it is prepared to at least make an attempt to do these things. Especially with such obvious environmental and a well documented degradation episode that is transpiring along Boundary Creek within a few kilometres of the CCMA head office.

Are the Various Statutory Authorities doing their "JOB."

Put quite simply it would appear that they are not.

And put quite simply there would appear to be enough Acts, regulations, guidelines and policies relevant to the Big Swamp and Otway groundwater extraction issues to resolve these issues.

CHAPTER SEVEN - What Should Be Done?

One may ask if this state of bureaucratic mismatch actually exist, what can be done about it?

One part of the solution to the problem would be to declare all positions that involve full time desk sitters, policy makers and kingdom builders vacant.

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Reduce the number of vacancies created by 95% and implement the following:

All candidates applying for the remaining 5% of the vacancies created would have to undergo a two day selection process.

DAY ONE

1. Test the applicant's knowledge and understanding of the Act(s), policies, regulations, guidelines and directives relevant to the position being applied for.

2. Examine whether the applicant knows how these Act(s), policies, regulations, guidelines and directives can and are to be implemented.

DAY TWO

Examine the applicant's honesty, truthfulness, integrity and ability to be able to implement the Act(s), policies, guidelines and directives without fear or favour. Test that the applicant would have the strength of character to be able to resist the pressures and temptation to deviate from the core responsibility of implementing uncompromising the Act(s), policies, guidelines and directives they would be employed to carry out.

Another part of the solution would be to hold accountable any person within an authority who allows the decimation, degradation and unsustainable exploitation of the State's natural resources as depicted in this picture of the Big Swamp, if their actions or lack of action are shown to be contrary to State Government law, regulation, guideline or policy.



APPENDIX ONE



Our Ref: 15/260/0007A(6)
Your Ref:
Enquiries To: Mr M Watson
05 5226 2543

13 February 2009

Mr M Gardiner
1805 Colac-Beech Forest Road
KAWARREN VIC 3249

Dear Mr Gardiner,

RE FOI REQUEST AND INFORMATION REQUESTS

I acknowledge your Freedom of Information request for the following information:

1. Minutes of the Newlingbrook and Gellibrand investigations Regulatory Reference Group Meeting held on 10 August 2007
2. Natural service level of YEO 40 (109131) observation bore.

I am currently collating the information and will advise you of the outcome within the required timeframe.

It has come to my attention that you have also requested documents and information from a number of officers across Barwon Water.

I would request that any documents and information you seek from Barwon Water are sought from the Freedom of Information Officer and is accompanied with the required fee of \$22.70.

I have attached a standard Barwon Water Freedom of Information request form if you wish to submit a request with the appropriate details as to the documents to which you seek access.

Please contact me on ph.5226 2543 if I can be of further assistance in this matter.

Yours sincerely,

A handwritten signature in black ink that reads "Michael Watson".

Michael Watson
FOI MANAGER

Enc.

APPENDIX TWO

Malcolm Gardiner
1805 Colac Lavers Hill Road
Kawarren
Vic 3249
Ph 52 358 325
19 November 2010

Colac Otway Shire Councillors
C% Rob small
CEO
Colac Otway Shire.

Dear Councillors,

Would you please consider the following questions and answer them accordingly?

1. Why isn't the Colac Otway Shire (CoS) looking into the causes of the Inland Actual Acid Sulfate Soils problem at the Big Swamp along Boundary Creek at Yeodene?
2. Isn't it the case that a risk based management plan cannot be developed until the cause of a problem in the Big Swamp is ascertained?
3. Who has given the CoS the impression that the Inland Actual Acid Sulfate Soils problem at Yeodene is complex?
4. Why hasn't CoS asked that a Hydrogeological Assessment be conducted?
5. Who has advised CoS that it is not easy to conclusively determine whether groundwater extraction is the primary reason for the massive drawdown of the water table under the Big Swamp?
6. Could CoS provide documentation that demonstrates there are 2 aquifers under the Big Swamp at Yeodene? Could CoS include in its answer a cross section of the landform in the Big Swamp vicinity that clearly shows the profile including these two aquifers?
7. Who determined that if the Barwon Water stopped extracting groundwater that it would not help manage the issues experienced in the Big Swamp in the short to mid-term? Additional to this particular question has an assessment been made to the long term management of the Big Swamp if pumping ceased altogether?
8. Does CoS realise that the majority of the strategies in the Environment Management Plan as outlined in the DSE 2009 coastal acid sulfate soils document also are as applicable to the Big Swamp Inland Actual Acid Sulfate Soil problems?
9. Could I have a copy of the findings and decisions of the 8 September 2010 workshop conducted by CoS in relation to the Yeodene Peat Swamp?
10. **Has the CoS tested for arsenic levels in the waters flowing from and across the Big Swamp?**
11. In March 2009 it was reported in the Colac Herald that toxicologist Professor Christopher Grey was concerned that the dust from the bed of Lake Colac could cause long term health problems for Colac residents. This same article stated that the dust was going to be tested. Could I have a copy of the test results?
12. I wrote in some detail to Stewart Anderson months ago regarding warning signs on the approaches and access routes to the Big Swamp and as yet have heard nothing. Could you also look into this for me?

As councillors of the Colac Otway Shire could you please address these questions and reply in writing?

Yours sincerely,

Malcolm Gardiner.

Letter One November 2010 CoS.

Our Ref: GEN00460 RS/RD
Your Ref:
Contact:

-2-



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23 November 2010

Mr Malcolm Gardiner
1805 Colac - Lavers Hill Road
KAWARREN VIC 3249

Dear Malcolm,

Big Swamp Issues: Yeodene

I refer to your letter to Councillors concerning the Big Swamp.

I am providing you with an interim response while officers more familiar with our involvement with this site respond.

Although you have written to Councillors, this is an operational item and so is beyond their responsibility. It is more appropriate that staff respond. I will of course provide them with copies of our response.

You seem to be under the impression that Council has a responsibility for these actions; if not an obligation. This is not correct, although Council will continue to advocate for action on these issues on the community's behalf.

The responsibility for this situation rests more properly with EPA, Southern Rural Water, Barwon Water and other State agencies such as the Department of Primary Industries (DPI) and the Department of Sustainability and Environment.

It is not possible for Council to do this work on other agencies behalf, in part because we don't possess the expertise, and this only confuses the responsible agency's status, and partly because we don't have the funds.

For the above reasons questions 1, 2, 3, 4, 5, 6, 7 and 8 are not the responsibility of Colac Otway Shire to answer. I will follow up questions 9-12 with Mr Stewart Anderson but would have to restate my comments above about contacting the relevant responsible authorities in relation to questions 1-8.

I am happy to discuss these matters with you in person.

Yours sincerely,


Rob Small
Chief Executive Officer

Colac Otway Shire
PO Box 283
Colac Victoria 3250
www.colacotway.vic.gov.au
inq@colacotway.vic.gov.au

Colac Service Centre
2-6 Rae Street
Colac Victoria 3250
Ph: (03) 5232 9400
Fax: (03) 5232 1046

Apollo Bay Service Centre
69-71 Nelson Street
Apollo Bay Victoria 3233
Ph: (03) 5237 6504
Fax: (03) 5237 6734

Malcolm Gardiner
1805 Colac Lavers Hill Road
Kawarren
Vic 3249
5-12-2010

Mr. Rob Small
CEO
Colac Otway Shire
PO Box 283
Colac
Vic 3250

Dear Rob,

Re: letter I sent to the Colac Otway Shire Councillors.

I am extremely disappointed that you chose not to send this letter onto the Councillors. I do not believe that it was your place to decide whether the Councillors should see this letter or not. No doubt once the Councillors had seen my letter they would then ask for your advice and then make a decision based on that advice. They may have reached the same decision you have, but I believe they should have been given the opportunity to make these decisions, considering my letter was addressed to them.

If I read the Colac Otway Shire Environmental Significant Overlays, and if I read the Environment Protection Act and the Planning and Environment Act and the Hydrogeological Assessment document correctly, then I do believe that the Shire has responsibilities that it is not following. Consequently I would like to correct you and state that I do not have the wrong impression as to who has a specific responsibility for the actions I have queried.

I believe when you completely dismissed questions 2, 3, 5, 6 and 7 that you have failed to understand the questions and this is probably why the letter should have been passed onto the rightful recipients. No one else BUT the Colac Otway Shire can answer these questions so I find it quite baffling how any other agency could provide me with the answers.

Regarding question 1, I know the Colac Otway Shire is involved in a very limited Acid Sulfate Soil study that includes work in the Big Swamp, but the question asked is, why hasn't the CoS representative been advocating on the community's behalf, the investigation of the *cause* of this problem? This question, I believe, can also only be answered by the Colac Otway Shire. How would another agency answer this, unless of course, the Shire's course of action is dictated by one of these other agencies.

Under the Hydrogeological Assessment guidelines Shires such as the one you work for are specifically named as agencies that can request such an assessment. I therefore would suggest that question 4 also can only be answered by the Colac Otway Shire.

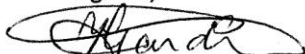
Asking Stewart Anderson to follow up on question 9- 12 I believe is unsatisfactory. Stewart was given the extremely high arsenic levels test results nearly two years ago. Perhaps the question should have been why hasn't this been followed up before now? At the time I thought the elevated lead levels might have prompted a speedy response not to mention the other toxic levels of heavy metals and non metals indicated in the same test results.

It would also appear that the Councillors are being poorly informed from your officers or they have misinterpreted information they have been fed. One specific instance is the notion of 2 aquifers as is queried in my question 2.

Which leads me to your indicated course of action regarding sending the Councillors copies of your response to my queries. I doubt that this would serve any purpose other than to confuse the issue. However, I look forward to the responses.

Perhaps when you speak to Stewart you could ask him the results of the engineers report that he said he would ask for regarding the suspected acid attack on the concrete pylons of the Colac to Forrest Road Bridge that crosses Boundary Creek.

Regards,



Malcolm Gardiner.

Our Ref: GEN00460 RS/RD
Contact: Stewart Anderson



6 December 2010

Mr Malcolm Gardiner
1805 Colac - Lavers Hill Road
KAWARREN VIC 3249

Dear Malcolm,

Big Swamp Issues: Yeodene

I refer to your letter to Councillors concerning the Big Swamp received on 22 November 2010. Council's Chief Executive Officer sent you an interim response on 23 November explaining that questions 1, 2, 3, 4, 5, 6, 7 and 8 are not the responsibility of Colac Otway Shire to answer. I am writing in response to questions 9-12.

Question 9 requests copies of the findings and decision of the 8 September 2010 workshop. The workshop you refer to was a Councillor workshop where a presentation was given to update Councillors on the discussions at recent meetings about the Yeodene peat fire and the inland acid sulphate soils study. There were no official findings or decisions provided at this workshop.

Question 10 asks whether Council has tested for arsenic levels in the water flowing from and across the swamp. Council has taken water samples downstream of the peat swamp and tested for arsenic. The levels of arsenic in the water were found to be well below the drinking water standards.

Question 11 relates to the testing of dust from Lake Colac. Council has contributed funds to a dry lake sediment study that is being carried out by the Ballarat University. Although samples have been taken from Lake Colac the results have not been delivered to Council at this time. The results are not expected to be provided until March 2011.

Question 12 relates to the letter you wrote relating to warning signs. CFA and DSE are responsible for the warning signs leading into the peat swamp. Council has highlighted the importance of appropriate signage being installed and maintained at meetings with DSE and CFA. I will follow up with these agencies about what they are doing to effectively warn people not to enter the area but it is not a Council responsibility to install or maintain the signage.

I am happy to discuss these matters with you in person or alternatively you can call me on 5232 9414.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Stewart Anderson'.

Stewart Anderson
Manager Environment and Community Safety

Colac Otway Shire
PO Box 283
Colac Victoria 3250
www.colacotway.vic.gov.au
inq@colacotway.vic.gov.au

Colac Service Centre
2-6 Rae Street
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Ph: (03) 5232 9400
Fax: (03) 5232 1046

Apollo Bay Service Centre
69-71 Nelson Street
Apollo Bay Victoria 3233
Ph: (03) 5237 6504
Fax: (03) 5237 6734

Our Ref: GEN00460
RS/RD
Your Ref:
Contact: Rob Small



14 December 2010

Malcolm Gardiner
1805 Colac Lavers Hill Road
KAWARREN VIC 3249

Dear Malcolm,

Letter to Colac Otway Shire Councillors

I refer to your letter of 5 December, received in this office on the 10 December with reference to the above subject.

In my letter to you dated 6 December, I indicated that your letter dated 19 November, along with my reply referred to above, were sent to Councillors. I have also subsequently received a copy of Stewart Anderson's reply to questions 9 to 12 in your letter dated 5 December 2010. I have therefore not chosen, as you suggest, to keep Councillors out of the loop.

That completes the response to the letter as I understand it.

You have subsequently asked in your letter of the 13 December that these questions and answers be read at a Council meeting. That would be an abuse of that facility since the questions have already been answered and the Councillors have been privy to our responses.

There would therefore be no point in reading the questions and answers at Council.

I repeat that this is an operational question and is being handled within the Shire's obligations.

In response to the balance of your letter dated 5 December, I provide the following responses:

1. Colac Otway Shire has actively advocated the issue of acid sulphate soils. It is not obligated or funded to act further on this matter than pure advocacy.
2. We are satisfied with our actions to date and believe that hydrological assessments may well be part of the research that is being carried out through the multi-party working group. We have indeed sought such a study.

You will now be aware of Stewart Anderson's reply. His response indicates our findings which appear to be at odds with your belief that they are at

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extremely high levels of arsenic in the water. Our testing did not reveal that to be so therefore we have no basis on which to follow this up.

3. As far as the number of aquifers and their connectivity are concerned, we are not qualified to comment. We have information passed to us which has been authorised by reputable scientific staff members of the responsible agencies. Your issue should be taken up with them.

I believe I have answered your questions as appropriately as I can.

Yours sincerely,

Rob Small
Chief Executive Officer

Our Ref: GEN00460
RS/RD
Your Ref:
Contact: Rob Small

31 January 2011

Malcolm Gardiner
1805 Colac Lavers Hill Road
KAWARREN VIC 3249

Dear Malcolm,

Ongoing discussions re Peat Fires and Boundary Creek

I refer to your letter dated 17 January received in this office on 20 January 2011.

I am not sure if we are misunderstanding each other. I hope that you agree that I have not been keeping Councillors out of the loop with respect to our recent correspondence.

I have routinely sent them copies of all the correspondence between us and have briefed the Mayor and Cr Stuart Hart orally on these issues.

You continue to assert that I have not kept Councillors informed and this misinformation does nothing for your credibility with me. I have asserted now three times in correspondence that Councillors have been kept informed and can prove that if it is necessary.

I note from the Council meeting of the 27 January that you had the impression that the letters would be read at question time at Council meetings. This had not been indicated in your initial correspondence. While you did request subsequently that your letters be read and answered at Council, the Mayor (on my advice) indicated that the answers had been given and that Councillors had already received copies of the replies. This being the case, to agree to the request would have been an improper use of question time. It is necessary to indicate in correspondence if your request is to be specifically taken as questions for question time. A copy of a pro-forma for Council meeting question time as requested by yourself at the January Council meeting has been enclosed.

see p. 9

Never asked 4
this to be →
done

I am not prepared to enter into an analysis of what I do or do not believe or waste valuable ratepayer time on defending positions of other agencies.

Having said all that, this Council does take the matter seriously and is bound to take the advice of bona fide agencies and experts in its reporting processes. So the answer to your question about sources of responsible authorities will not be answered in accordance with the above position.

The arsenic levels in water samples collected at Boundary Creek near the Colac-Forest Road are provided in the table below. The levels found do not exceed the relevant standards for human and livestock consumption. This data has been forwarded to you on the basis that it is expert advice.

Colac Otway Shire
PO Box 283
Colac Victoria 3250
www.colacotway.vic.gov.au
info@colacotway.vic.gov.au

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Please do not attempt to engage us in a discussion on the validity of the reports. They are prepared by reputable chemical analysts and we are not in a position to question their validity.

Boundary Creek Colac-Forest Road Water Testing Results

Date	Arsenic mg/l
4 March 2009	0.001
23 April 2009	0.001
29 September 2009	0.001
28 October 2009	0.001
9 December 2009	0.003
6 January 2010	0.002
21 April 2010	0.003
22 September 2010	0.001
20 October 2010	0.001

Council agrees with the facts that there is a serious issue with respect to the area that has become colloquially known as "Jurassic Park" and will continue to fulfil its obligation to advocate this issue to the appropriate authorities.

Yours sincerely,


Rob Small
Chief Executive Officer

CC: All Councillors
Stewart Anderson, Manager Environment & Community Services

Malcolm Gardiner
1805 Colac Lavers Hill Road
KAWARREN
Vic 3249
Wednesday 9 February 2011

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Mr. Rob Small
CEO
Colac Otway Shire Council
PO Box 283
COLAC
Vic 3250

Dear Rob,

Ongoing discussions re: Arsenic levels in the Acid Sulfate Soil site in the Big Swamp area of Boundary Creek.

Thanks for your letter 31 January 2011. Would it be possible to provide me with names of the *"reputable chemical analysts"* and organisation that provided the Council with the *"expert advice"* regarding the arsenic levels in the water samples collected at Boundary Creek?

Yours sincerely,

Malcolm Gardiner.

Our Ref: GEN00460 RS/RD
Your Ref:
Contact:

-16-



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14 February 2011

Mr Malcolm Gardiner
1805 Colac Lavers Hill Road
KAWARREN VIC 3249

Dear Malcolm

Thank you for your letter of 9 February 2011, received in this office on 11 February, with respect to our ongoing discussions.

I believe the question that you have asked has been answered. That response is that it is irrelevant who the 'experts' are. Council is not expert in these matters and relies on a range of relevant agencies for their advice.

The advice has been provided by officers of Barwon Water, Southern Rural Water, Corangamite CMA, Department of Sustainability & Environment and the Department of Primary Industries.

I am not prepared to attribute names to the experts. It is irrelevant to Council's role in this matter.

Please understand that I am not trying to be obstructive or difficult. I believe that you understand the people who are involved in these agencies.

Yours sincerely,


Rob Small
Chief Executive Officer

CC: All Councillors

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www.colacotway.vic.gov.au
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Malcolm Gardiner
1805 Colac Lavers Hill Road
KAWARREN
Vic 3249
16-02-2011

The CEO
Department of Primary Industries
Colac Office
Gellibrand Street
Vic 3250

Dear Sir/Madam/MS,

Re: Arsenic testing done on waters at the Colac to Forrest Road Bridge.

I have been advised by the CEO of the Colac Otway Shire, Rob Small, that your authority has conducted arsenic testing of waters in Boundary Creek that flow under the Colac to Forrest Road Bridge and that these results have been provided to the Colac Otway Shire. Testing was conducted between 4 March 2009 and 20 October 2010.

I am extremely interested to look at the result testing sheets. Could you provide me with a copy of these results and any other testing that was conducted? Could you also include the laboratory test result sheets, please?

Regards,

Malcolm Gardiner.

23rd February 2011

Malcolm Gardiner
1805 Colac-Lavers Hill Road
KAWARREN 3249

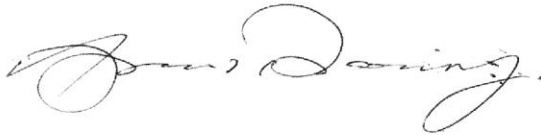
Dear Malcolm

Re - Arsenic testing done on waters at the Colac to Forrest Road bridge

Southern Rural Water has not conducted any testing of arsenic at the stated site you refer to. Southern Rural Water does not undertake arsenic testing on waterways and will defer any water quality matters to the responsible authority deemed appropriate.

If you have any further enquiries regarding this matter, please contact me on 55641713 or mobile 0419 509087 or email me at angusr@srw.com.au

Yours sincerely



ANGUS RAMSAY
Groundwater and Rivers Supervisor West

Our Ref: B050424
Enquiries To: Tony Overman

Page | 123

February 25, 2011

Mr. Malcolm Gardiner
1805 Colac Lavers Hill Road
Kawarren
Vic
3249

Dear Mr Gardiner

Re: Request for information

In reference to your letter dated 16th February 2011 requesting information on water quality testing at the Colac Forrest Road bridge, the following is provided.

Barwon Water has not undertaken any testing of arsenic in water taken from Boundary Creek. Barwon Water is aware that Colac Otway Shire has conducted some testing at the site as part of its environmental health monitoring.

Yours faithfully,

Tony Overman
Strategy and Sustainability Coordinator

Barwon Region Water Corporation
ABN 86 348 316 514

61 – 67 Ryrie Street, Geelong, Victoria, 3220
P.O. Box 659, Geelong, Victoria, 3220 TEL: 1300 656 007 FAX: +61 3 5221 8236

www.barwonwater.vic.gov.au

CCMA Ref: WLE/32-0002 11/0390
Document No: 1

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18 March 2011

Mr Malcolm Gardiner
1805 Colac Lavers Hill Road
Kawarren Vic 3249

Dear Mr Gardiner

Arsenic Testing – Boundary Creek

I refer to your letter to the Corangamite Catchment Management Authority (CMA) dated 16 February 2011 regarding arsenic testing in Boundary Creek between 4 March 2009 and 20 October 2010.

The Corangamite CMA has investigated the matter in consultation with the Colac Otway Shire's Environment Manager, Stewart Anderson, and advise that the testing was undertaken by the Shire.

We encourage you to direct any further queries on the testing directly with Shire.

Yours sincerely



Gareth Smith
Chief Executive Officer

Received 24/03/2011
3 days after I hand delivered
the 21/03/2011 letter to Colac
office.



Corangamite Catchment Management Authority ABN: 60 365 974 029
PO Box 159, 64 Dennis Street, Colac, Victoria, 3250
t: 03 5232 9100 f: 03 5232 2759
e: info@ccma.vic.gov.au w: www.ccma.vic.gov.au



Department of Primary Industries

1 Spring Street
GPO Box 4440 Melbourne
Victoria 3001 Australia
Telephone: (03) 9658 4000
Facsimile: (03) 9658 4400
ABN 42 579 412 233
DX 210404

Page | 125

Our Ref: SI006776

Our Ref:

Mr Malcolm Gardiner
1805 Colac Lavers Hill Road
KAWARREN VIC 3249

Dear Mr Gardiner,

ARSENIC TESTING DONE ON WATER AT THE COLAC TO FORREST ROAD BRIDGE

Thank you for your letter received 23 February 2011 regarding the arsenic testing of waters in Boundary Creek.

I can advise that neither the Department of Primary Industries nor the Department of Sustainability and Environment's Office of Water have any record of heavy metal testing performed at the site you refer to.

However, following discussions with relevant staff members I can advise that the Colac Otway Shire Council performed a series of heavy metal tests in Boundary Creek. The results from these tests could provide you with the information you are seeking. Should you have further queries regarding this matter please contact the environmental health section of the Colac Otway Shire Council on telephone (03) 5232 9400.

Yours sincerely,

Richard Bolt
Secretary

22/3 / 2011

Received 24/03/2011 3 days after
hand delivered to the Colac Office the
21/03/2011 letter.

Privacy Statement

Any personal information about you or a third party in your correspondence will be collected and protected under the provisions of the **Information Privacy Act 2000**. It will only be used or disclosed to appropriate ministerial or departmental staff in regard to the purpose for which it was provided, unless required or authorised by law. Enquiries about access to information about you held by the Department should be directed to the Manager Privacy, Department of Primary Industries, GPO Box 4440, Melbourne, 3001



For more information about DPI visit the website at www.dpi.vic.gov.au or call the Customer Service Centre on 136 186.

M



**Department of
Sustainability and Environment**

Ref: SEC007519

File: CS/07/3073-02



Mr Malcolm Gardiner
1805 Colac Lavers Hill Road
KAWARREN VIC 3249

58
8 Nicholson Street
PO Box 500
East Melbourne Victoria 8002
Australia
Telephone: (03) 9637 8000
Facsimile: (03) 9637 8100
ABN 90 719 052 204
DX 210098

Page | 126

Dear Mr Gardiner

ARSENIC TESTING ON WATERS AT COLAC TO FORREST ROAD BRIDGE

I refer to your letter dated 16 February 2011, addressed to the Chief Executive Officer, regarding arsenic testing in Boundary Creek. Your correspondence has been forwarded to me for a response.

I am advised that the arsenic testing in Boundary Creek in 2009-2010 was conducted by Colac Otway Shire. I understand that they will forward the results from the testing to you.

Thank you for writing to the Government on this important issue.

Yours sincerely

Allan McPherson
Executive Director, Water Resources Division
Office of Water

25/5/11

Privacy Statement

Any personal information about you or a third party in your correspondence will be protected under the provisions of the Information Privacy Act 2000. It will only be used or disclosed to appropriate Ministerial, Statutory Authority, or departmental staff in regard to the purpose for which it was provided, unless required or authorised by law. Enquiries about access to information about you held by the Department should be directed to the Manager Privacy, Department of Sustainability & Environment, PO Box 500, East Melbourne, 8002.



MEDIA RELEASE

Tests reveal acid sulphate issues in Boundary Creek, Yeodene swamp

Colac Otway Shire Council has advised property owners on Boundary Creek not to drink untreated water from the area, after testing revealed low pH and elevated levels of nickel and aluminium.

Authorities believe that acid sulphate soils in the Yeodene peat swamp have caused the changes to water quality in Boundary Creek, however the changes in water quality in Boundary Creek are not threatening public or stock health.

Council's Acting Chief Executive Officer Jack Green said that the Council's role in this issue was primarily concerned with public health, and ensuring the community understood what was happening in the area.

He said Corangamite Catchment Management Authority was the agency primarily responsible for river health, Southern Rural Water was responsible for the licensing and monitoring of groundwater extractions, while the Department of Sustainability and Environment was the state government agency responsible for groundwater supplies and management.

"The pH levels in the creek are about 3 to 4, which is not desirable but thankfully, pose no major health concerns," he said.

"Exposure may lead to skin and eye irritation or stomach upset in sensitive individuals, but it is worthwhile noting that some carbonated beverages have an even lower pH of 2.5.

"The nickel and aluminium levels in the creek at the moment are also elevated, but do not exceed the standards for livestock and irrigation use at this point.

"We recommend that people should not drink water from Boundary Creek, or any other creek, without effectively treating it first."

Colac Otway Shire Council began taking water samples from Boundary Creek in early 2009 in response to concerns raised by a member of the public.

The Yeodene peat swamp has traditionally been waterlogged, but in the past decade has dried out, exposing the organic-rich soils to the air, causing them to produce acid.

The affected section of Boundary Creek runs through six privately-owned properties, crosses underneath the Colac-Forrest Road and joins the Barwon River three kilometres downstream of the Yeodene peat swamp.

Council has advised all adjoining landholders of the issues Boundary Creek was experiencing.

Mr Green said Council was working with DSE, DPI, Corangamite CMA and a local water corporations and authorities to better understand where potential acid sulphate soils may occur and the risk that they may pose to waterways and water supplies.

June 14, 2011

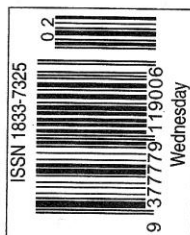
Inquiries -

Tamzin McLennan

Ph: (03) 52329493

Fax: (03) 52321046

Email: tamzin.mclennan@colacotway.vic.gov.au

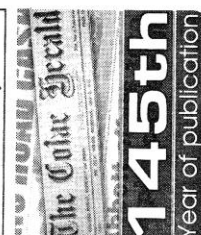


The Colac
HERALD

Phone 5231 5322

WEDNESDAY, JUNE 15, 2011

\$1.10 (inc. GST)



HIDDEN DANGER

Council admits water has high metal levels

Boundary Creek report vindicates campaigners' concerns

by Alison Martin

Authorities waited two years before issuing health warnings about water in Colac District's Boundary Creek.

Colac Otway Shire Council advised Yeodene property owners yesterday not to drink untreated water from the area, after testing revealed high acidity and elevated levels of nickel and aluminium.

The council began taking water samples from Boundary Creek in early 2009 in response to concerns raised by Kewarresident Malcolm Gardiner.

But Mr Gardiner said he believed council had only released the results of water testing after he issued a freedom of information demand last month.

The drinking water standard for aluminium is 0.2 mg/l but on March 2 the level was 3.7 mg/l, reaching 4.7 mg/l on September 22 last year.

Nickel levels were at 0.11 mg/l in March 2009, 0.2 mg/l in April, 2010 and 0.1 mg/l in March, 2011 but the drinking water standard is 0.02.

Mr Gardiner, who has been campaigning for action on water quality in Colac and the Otways for almost a decade, said the Boundary Creek issue was the tip of the iceberg.

He said independent water testing three years ago had prompted the council's testing

of Boundary Creek.

"We've been screaming since 2008 for council to let the people know the water's no good," he said. "But it's only since the Fol that they've decided to tell people."

"I'd been getting the run-around for months.

"But at least council has done the testing, which is more than the water authorities have done."

The council's acting chief executive officer Jack Green said the council's "role in the issue was primarily concerned with public health, and ensuring the community understood what was happening in the area."

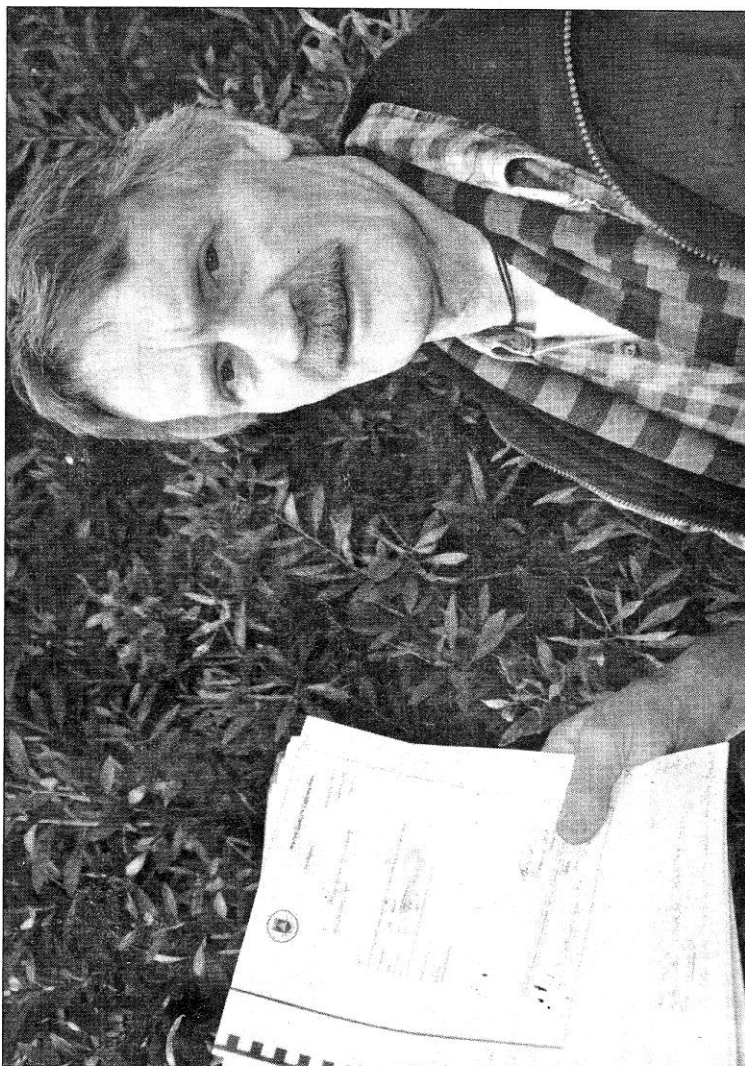
But the warning sends mixed messages to the community.

"The pH levels in the creek are about three to four, which is not desirable but thankfully, pose no major health concerns," Mr Green said.

"Exposure may lead to skin and eye irritation or stomach upset in sensitive individuals, but it is worthwhile noting that some carbonated beverages have an even lower pH of 2.5," he said.

"The nickel and aluminium levels in the creek at the moment are also elevated, but do not exceed the standards for livestock and irrigation use at this point.

"We recommend that people should not drink water from Boundary Creek, or any other creek, without effectively treating it first."



ABOUT TIME: Malcolm Gardiner shows the result of Boundary Creek water tests from 2008. 110614AM004

The council "believed" acid sulphate soils in the Yeodene peat swamp had caused the changes to water quality in Boundary Creek.

Mr Green said the council was working with the State Govern-

ment, CCMA, water corporations and authorities "to better understand where potential acid sulphate soils may occur and the risk that they may pose to waterways and water supplies".

"While council is not the responsible authority for river health, we do have a responsibility for general environmental health where that may have a human health implication," he said.

Warning on creek water

Page | 131

PROPERTY owners on Boundary Creek have been urged not to drink untreated water from the waterway.

Recent tests have revealed low pH and elevated levels of nickel and aluminium, which has been blamed on acid sulphate soils in the Yeodene peat swamp.

Authorities believe the changes in water quality will not threaten public or stock health.

"The pH levels in the creek are about 3 to 4, which is not desirable but thankfully, pose no

major health concerns," said Colac Otway Shire acting chief Jack Green.

"Exposure may lead to skin and eye irritation or stomach upset in sensitive individuals, but it is worthwhile noting that some carbonated beverages have an even lower pH of 2.5.

"The nickel and aluminium levels in the creek at the moment are also elevated, but do not exceed the standards for livestock and irrigation use at this point."

APPENDIX THREE

Malcolm Gardiner
1805 Colac Lavers Hill Road
KAWARREN
Vic 3249
4-04-2011

Mr. Gareth Smith
The CEO
Corangamite Catchment Management Authority
Colac
Vic 3250

Dear Gareth,

Re: Feb.2006 Environmental Flow Determination for the Barwon River: Final Report-Flow Recommendations.

I thought you may be interested to read these pages of comments dealing with a small section of the above mentioned report. I would assume that this report cost the CCMA a considerable sum and if other sections of it are as poorly done it would appear that the CCMA has some cause to be concerned.

I did pass this onto a member of the CCMA board some considerable time ago and was wondering had it been brought to your attention.

I would appreciate it if you could spend some time looking into this for me and respond in writing.

Yours sincerely,

Malcolm Gardiner.

3 pp (34-36) from Gway Water BK 9.

Hand delivered 4/4/11

Ref: CEA/17-0010

20 June 2011

Page | 133

Mr Malcolm Gardiner
1805 Colac Lavers Hill Road
Kawarren Vic 3249

Dear Mr Gardiner

**Feb 2006 Environmental Flow Determination for the Barwon River: Final Report
Flow Recommendations.**

Thankyou for your letter and comprehensive comments, regarding the 'Environmental Flow Determination for the Barwon River' report.

Firstly, it is important to clarify that a flow study does not account for the impact of groundwater extraction on groundwater dependant ecosystems. To account for this impact and the subsequent decline in water quality; a completely different investigation would be required.

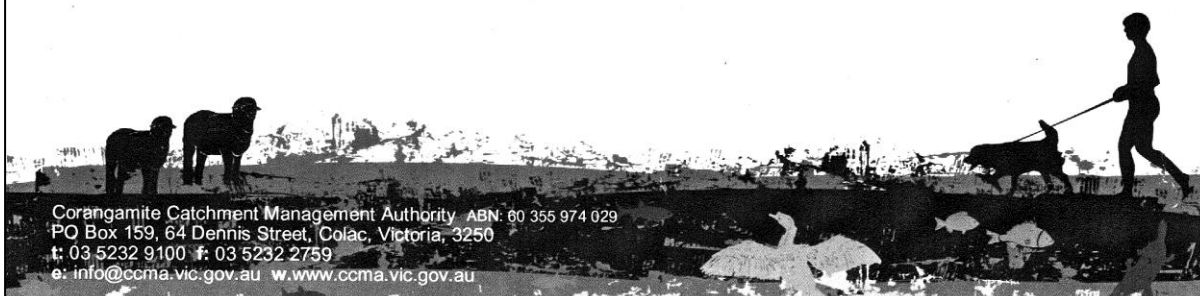
The purpose of a flow study is to assess the flow requirements of environmental assets associated with waterways. While historical flow, as well as social and economic values are considered, the flow requirements of life dependant on the waterway are the focus of the work.

This methodology is:

- undertaken by respected experts on hydrology and ecology
- widely accepted as the best available science
- currently being further validated through the Victorian Government's Victorian Environmental Flows Monitoring and Assessment Program.

While it is acknowledged that there is variability in findings/figures compared to other studies undertaken in this area, we are very confident that the flow recommendations provided for Boundary Creek are robust within the scope of the original project.

The observed acidification of Big Swamp and subsequent water quality impacts add a variable not examined in the original report. This would need to be considered if any change in flow regime could be achieved.



Corangamite Catchment Management Authority ABN: 60 355 974 029
PO Box 159, 64 Dennis Street, Colac, Victoria, 3250
t: 03 5232 9100 f: 03 5232 2759
e: info@ccma.vic.gov.au w: www.ccma.vic.gov.au

- 12 -

Please contact me or our River Health Executive Manager, Trent Wallis, (03) 5232 9100, if you require additional information.

Yours sincerely

A handwritten signature in black ink, appearing to be 'Gareth Smith', written over the typed name.

Gareth Smith
Chief Executive Officer

Malcolm Gardiner,
1805 Colac Lavers Hill Road,
Kawarren
Vic 3249
ph (03) 52 358 325
www.otwaywater.com.au
otwaywater@yahoo.com.au

Date 21-6-2011



Mr. Gareth Smith,
Chief Executive Officer,
Corangamite Catchment Management Authority,
Colac
Vic 3250.

Dear Mr. Smith,

Re: Feb 2006 Environmental Flow Determination for the Barwon River: Final Report Flow Recommendations.

Your Ref: CEA/17-0010

Thank you for your reply to enquiries regarding the findings of the above mentioned report and its recommendations in regard to the reach along Boundary Creek. Am I to understand that you are saying that the recommendation of 2 periods of a fortnight duration of no flows for Boundary Creek are appropriate?

You mention the flow recommendations provided for Boundary Creek being robust within the scope of the original project and that the flow requirements of life dependent on the waterway are the focus of the work. I would assume it is safe to believe that the scope of the report is covered by the section written and headed Objectives (Page 3) and in the Development of Flow Objectives. If this is the case then the concerns voiced that 2 fortnightly periods of no flow being recommended for Boundary Creek has to be viewed as totally inappropriate.

1. Nellie Shalley was not interviewed regarding social values. The reach studied on Boundary Creek flows through her property and she has arguably the best historical knowledge on that part of the creek. She is also the President for the Landcare group in the area.
2. To state that one of the natural characteristics of Boundary Creek is to have a period of cease of flow is wrong (Page 22, Objective 11). i.e. if one defines natural as "of or according to or provided by nature."
3. Gauging the current health of environmental values at the time of the report would have indicated serious problems being experienced along this reach of the creek.
4. The flows recommended will not achieve the objective of
 - a. Enhancing the environmental values, or

- b. Stopping the degrading of habitat for Platypus, larger fish species, such as River Blackfish, and macro-invertebrates (Page 22).
5. The water quality degradation and acidification of Boundary Creek goes back as far as 1993 if not further, and should have been examined in the original report, then there would have been no need to even consider a change to the flow regime recommendations.
6. Regarding your comment that the study did not take into account the impact of groundwater extraction is astounding. The amount of data available and the environmental creek impacts being experienced along Boundary Creek at the time of this study is further indication that the robustness of the points under the methodology that you talk about, are questionable.

I would appreciate a reply to my question in the first paragraph above.

Yours sincerely,

Malcolm Gardiner.

Ref: CEA/17-0010

Page | 137

29 June 2011

Mr Malcolm Gardiner
1805 Colac Lavers Hill Road
Kawarren Vic 3249

Dear Mr Gardiner

Feb 2006 Environmental Flow Determination for the Barwon River: Final Report Flow Recommendations.

Thank you for your further comments, regarding the 'Environmental Flow Determination for the Barwon River' report.

The Corangamite CMA is confident the flow recommendations provided are appropriate, including 2 periods (fortnight duration each) of no flows for Boundary Creek.

Flow ('FLOW') studies are widely recognised as 'best practice' for providing recommendations in this complex area of water management. The methodology is currently being further validated through the Department of Sustainability and Environment's Victorian Environmental Flows Monitoring and Assessment Program.

Additionally, FLOW studies have, and continue to enable improvements to environmental flows and environmental condition, extensively across the state.

As you rightly point out, historical flow as well as social and economic values are considered. However, the flow requirements of life dependant on the waterway remain the focus of the work, and form the basis of the cease to flow recommendation.

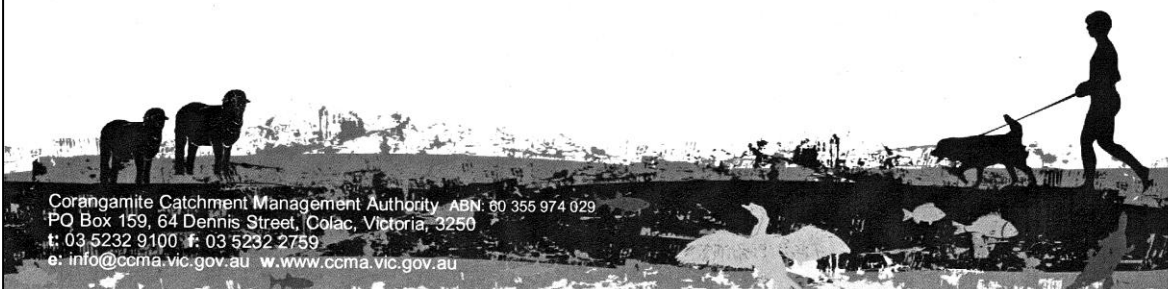
Again, it is important to note that a FLOW study does not account for the impact of groundwater extraction on groundwater dependant ecosystems.

We would be happy to meet if would like to further information on any of the points raised above.

Yours sincerely



Gareth Smith
Chief Executive Officer



Corangamite Catchment Management Authority ABN: 60 356 974 029
PO Box 159, 64 Dennis Street, Colac, Victoria, 3250
t: 03 5232 9100 f: 03 5232 2759
e: info@ccma.vic.gov.au w: www.ccma.vic.gov.au

APPENDIX FOUR

Subject: Re: Big Swamp AIASS site
From: Mal Gardiner (otwaywater@yahoo.com.au)
To: John.Merritt@epa.vic.gov.au;
Cc: ombudvic@ombudsman.vic.gov.au;
Bcc: suedmclean@yahoo.com.au;
Date: Tuesday, 29 November 2011 11:31 AM

Hi John,

It was good to have an opportunity to listen and speak with you and Cheryl down at Geelong a few weeks ago at your 5 year plan launch.

I would like to follow up on the problem we have at the Big Swamp on the Boundary Creek that is a tributary of the Barwon River.

The State Ombudsman investigation officer, Jamie Lynch, informs me that the reason the EPA has not answered my November 2008 formal complaint in regard to the Actual Inland Acid Sulfate Soil (AIASS) site in the Big Swamp is that...

"The authority (EPA) only handles management of waste acid sulphate soils being moved and deposited elsewhere."

I would appreciate a copy of the reports, studies and or advice that enables the EPA to come to this conclusion.

On what basis has this decision been made?

I would also like to point out that I think Cheryl and yourself were wrong when you said at the Geelong launch that the document Number 668 "Environmental Auditing - Hydrogeological Assessment (Groundwater Quality) Guidelines," is not part of the EPA's mandate. If the document 668 is not part of the EPA's job prescription and you plan not to implement its recommendations, it should be removed from the EPA web site.

However, if it is found to be part of the EPA's area of responsibility I would urge you to immediately instigate a full HA in regard to the issue in the Big Swamp.

I would also like to point out that section 27A of the EPA Act, part (1) (c) says that the EPA has a responsibility to act if a person causes or permits an environmental hazard. The Big Swamp situation may well come under this clause and if the EPA has not done any ground work to ascertain the cause then this should be started immediately.

I am also formally asking that an Environmental Audit be instigated by the EPA on the Big Swamp situation as per the EPA Act, Part IXD - Environmental Audits, section 53. I also formally request that a HA (Hydrogeological Assessment) be included as part of this Audit.

Hoping to hear from you soon,
Malcolm.

Malcolm Gardiner
1805 Colac Lavers Hill Road
Kawarren
Vic 3249
ph (03) 52 358 325

Subject: Re: Big Swamp AIASS site
From: Mal Gardiner (otwaywater@yahoo.com.au)
To: John.Merritt@epa.vic.gov.au;
Cc: ombudvic@ombudsman.vic.gov.au;
Date: Tuesday, 13 December 2011 11:03 AM

Hi John,
 If you have received this email could you let me know, please?
 Cheers,
 Malcolm.

Malcolm Gardiner
 1805 Colac Lavers Hill Road
 Kewarren
 Vic 3249
 ph (03) 52 358 325
www.otwaywater.com.au

From: Mal Gardiner <otwaywater@yahoo.com.au>
To: John Merritt <John.Merritt@epa.vic.gov.au>
Cc: "ombudvic@ombudsman.vic.gov.au" <ombudvic@ombudsman.vic.gov.au>
Sent: Friday, 9 December 2011 2:16 PM
Subject: Re: Big Swamp AIASS site

Hi John,
 Did you recieve this email?
 Cheers,
 Malcolm.

Malcolm Gardiner
 1805 Colac Lavers Hill Road
 Kewarren
 Vic 3249
 ph (03) 52 358 325
www.otwaywater.com.au

From: Mal Gardiner <otwaywater@yahoo.com.au>
To: John Merritt <John.Merritt@epa.vic.gov.au>
Cc: "ombudvic@ombudsman.vic.gov.au" <ombudvic@ombudsman.vic.gov.au>
Sent: Tuesday, 29 November 2011 11:31 AM
Subject: Re: Big Swamp AIASS site

Hi John,
 It was good to have an opportunity to listen and speak with you and Cheryl down at Geelong a few weeks ago at your 5 year plan launch.
 I would like to follow up on the problem we have at the Big Swamp on the Boundary Creek that is a tributary of the Barwon River.
 The State Ombudsman investigation officer, Jamie Lynch, informs me that the reason the EPA has not answered my November 2008 formal complaint in regard to the Actual Inland Acid Sulfate Soil (AIASS) site in the Big Swamp is that...

Print

http://au.mg5.mail.yahoo.com/neo/launch?.rand=7rdak996ecv?

letter (269) file (208)

Subject: Fw: Acid Sulafte Soil section of EPA
From: Mal Gardiner (otwaywater@yahoo.com.au)
To: otwaywater@yahoo.com.au;
Date: Wednesday, 28 December 2011 7:57 PM

SENDER TO KEEP
CV2689294

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Hi John,
Thought that you may not be getting these emails so I decided to send it by Express Post.
Cheers,
Malcolm.

Mailed 31/12/2011
Wont go until 03/01/2012

Malcolm Gardiner
1805 Colac Lavers Hill Road
Kawarren
Vic 3249
ph (03) 52 358 325

www.otwaywater.com.au

----- Forwarded Message -----

From: Mal Gardiner <otwaywater@yahoo.com.au>
To: John Merritt <John.Merritt@epa.vic.gov.au>
Sent: Tuesday, 13 December 2011 11:04 AM
Subject: Re: Acid Sulafte Soil section of EPA

EPA address Melb.

~~200~~
GPO Box 4395
Melb
Vic. 3001

Hi John,
If you have you received this email could you please acknowledge it?
Cheers,
Malcolm.

Malcolm Gardiner
1805 Colac Lavers Hill Road
Kawarren
Vic 3249
ph (03) 52 358 325
www.otwaywater.com.au

From: Mal Gardiner <otwaywater@yahoo.com.au>
To: John Merritt <John.Merritt@epa.vic.gov.au>
Sent: Friday, 9 December 2011 2:15 PM
Subject: Re: Acid Sulafte Soil section of EPA

email,
PP 1-2

Hi John,
Have you had any luck tracking down a contact re: ASS in the EPA?
Cheers,
Malcolm.

PP A-B

so sending via
Express Post

Malcolm Gardiner
1805 Colac Lavers Hill Road
Kawarren
Vic 3249
ph (03) 52 358 325
www.otwaywater.com.au

1 of 2

→ PTO

28/12/2011 7:57 PM

From: Mal Gardiner <otwaywater@yahoo.com.au>
To: John Merritt <John.Merritt@epa.vic.gov.au>
Sent: Tuesday, 22 November 2011 12:45 PM
Subject: Acid Sulafte Soil section of EPA

Hi John,
Could you give me the email address for the section or persons who deal with Acid Sulfate Soils in the EPA?
Ciao,
Malcolm.

Malcolm Gardiner
1805 Colac Layers Hill Road
Kawarren
Vic 3249
ph (03) 52 358 325
www.otwaywater.com.au

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2

Subject: Acid sulfate soil sand EP Act

From: Dan.Keely@epa.vic.gov.au (Dan.Keely@epa.vic.gov.au)

To: otwaywater@yahoo.com.au;

Date: Thursday, 5 January 2012 12:13 PM

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Dear Mr Gardiner

Thank you for your recent emails to EPA CEO John Merritt regarding acid sulfate soils and the Bid Swamp site.

I am writing to confirm we have received these emails and you can expect a response within the next week.

Best regards,

Dan Keely
Manager | Office of the Chairman and CEO
EPA Victoria
T: 03 9695 2606 | F: 03 9695 2895 | M: 0437 679 999
www.epa.vic.gov.au

week ending
13/01/2012

Our Ref: MA005457

Mr Malcolm Gardiner
Kawarren
1805 Colac Laver Hill Road
KAWARREN
VIC 3249

Dear Mr Gardiner

Big Swamp AIASS Site

Thank you for your email of 29 November 2011, and follow up emails on 28 December and 13 January, about EPA's management of acid sulfate soils.

The Ombudsman's office is correct in his conclusion that EPA deals with "the handling of waste acid sulfate soils being moved and deposited elsewhere". Our responsibilities are outlined in the Industrial Waste Management Policy (Waste Acid Sulfate Soils) (1999), made under the *Environment Protection Act 1970* (the Act).

Your correspondence queries the application of EPA Publication 668, *Environmental Auditing – Hydrological Assessment (Groundwater Quality) Guidelines* (the Guidelines). The Guidelines provide support for environmental auditors, engineers and consultants, outlining the recommended process for conducting a hydrological assessment. The Guidelines do not impose obligations on EPA to conduct assessments in particular circumstances.

You suggest that section 27A of the *Environment Protection Act 1970* places on EPA "a responsibility to act if a person causes or permits an environmental hazard". This interpretation is incorrect. Section 27A creates an indictable offence, including for "causing or permitting an environmental hazard". Where sufficient evidence exists that an individual has caused or permitted an environmental hazard, EPA may seek to prosecute under this provision. Typically, a prosecution of this nature is in relation to the dumping of industrial waste or a pollution event. Examples of such prosecutions can be found in media releases on EPA's website at www.epa.vic.gov.au/about_us/news.asp.

Finally, you request that EPA instigate an environmental audit, including hydrological assessment, of Big Swamp. The environmental audit system is designed to assess environmental risk, including where land and groundwater contamination has occurred, often in relation to industrial sites. EPA statutory tools, including pollution abatement notices, works approvals and licences, may require a land owner or proponent to conduct an environmental audit to demonstrate risks are being managed to an appropriate level. These circumstances are not applicable to Big Swamp and accordingly, EPA has no plans to require an audit or other assessment.

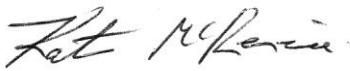


Lvl 3, 200 Victoria Street
Carlton
Victoria 3053
GPO Box 4395
Melbourne Victoria 3001
T: 1300 EPA VIC
F: 03 9695 2610
DX 210082
www.epa.vic.gov.au



However, Southern Rural Water, in partnership with La Trobe University and other Government agencies, are leading an investigation into acid sulfate soils in the Otway Ranges and Basalt Plains. The study is examining the cause of inland soil acidification, its associated risks and potential management actions. You may wish to contact Angus Ramsey at Southern Rural Water on 0419 509 087 to discuss this work further.

Yours sincerely



KATRINA MCKENZIE
ACTING CHIEF EXECUTIVE OFFICER

17/1/2012

Subject: The Big Swamp and cause of ASS
From: Mal Gardiner (otwaywater@yahoo.com.au)
To: AngusR@SRW.com.au;
Date: Thursday, 19 January 2012 8:00 PM

Hi Angus,
 Happy New Year to you and hope that it is a good one for you and yours.

Katrina McKenzie (EPA) suggested that I contact you regarding the Big Swamp. She states that the La Trobe University study is looking at the causes of the Actual Inland Acid Sulfate Soils problem in the Big Swamp. Is this true?

Cheers,
 Malcolm.

From: Angus Ramsay <AngusR@SRW.com.au>
To: Mal Gardiner <otwaywater@yahoo.com.au>
Sent: Friday, 20 January 2012 1:31 PM
Subject: RE: The Big Swamp and cause of ASS

Hi Malcolm,
 A Happy New Year to you and your family as well.

Is it true - Partly?

As you would be aware, the multi agency committee has engaged the La Trobe Uni to undertake a study to identify and research inland acid sulphate soils (IASS) in the Corangamite Region. A part of the study will be looking into the possible underlying or root causes of why there is the existence of IASS at a site and determine whether it is a potential or actual site and its implications. I must stress that it is a regional study being undertaken by an educational body and not an in depth investigation by an authority into any one particular identified IASS site.

The multi agency committee will be releasing a bulletin on the initial findings and reports of the La Trobe Uni study in the very near future.

Individual reports from the study will be released under direction of the La Trobe Uni study candidate and co-ordinator.

I hope that this clarifies things as well as answers your question.

Regards

Angus Ramsay

Field Supervisor West | Southern Rural Water
 Managing Water. Serving Communities.

p: (03) 5564 1713 m: 0419 509 087 e: angusr@srw.com.au w: www.srw.com.au

I personally spoke to John Wood of La Trobe University at the 3rd National Acid Sulfate Soil Conference in March 2012 and was told that the University study most definitely does not cover looking at the cause(s) of the Big Swamp's demise from a freshwater wetland to an Actual Inland Acid Sulfate Soil site.

This question was asked not wanting to duplicate, upset or infringe on any work the La Trobe University was conducting. The direct answer given was that another investigation separate to La Trobe's brief would not do this as the cause(s) of any ASS found was not being investigated.

(19 April 2012 and there has been no bulletin released.)

Malcolm Gardiner
 Vice President LAWROC Landcare
 1805 Colac Lavers Hill Road
 Kewarren
 Vic 3249
 ph (03) 52 358 325
www.otwaywater.com.au
otwaywater@yahoo.com.au
 Date 19-01-2012



Katrina McKenzie
 Acting Chief Executive Officer
 EPA Victoria
 GPO Box 4395 Melbourne
 Victoria 3001

Dear Katrina,
EPA Ref: MA005457 Regarding the Big Swamp AISS Site.

Thank you for your letter of 17-01-2012.

I have had a few discussions with members of the Corangamite Inland Acid Sulfate Soils Multi Agency Steering Committee and persons involved in the La Trobe University study and am under the impression that the causes of any AIASS problems in the Big Swamp are not part of the brief. Bearing this in mind and the fact that no one has determined the cause of the contamination of the land and groundwater I would have thought that this falls under the responsibility of the EPA.

Efforts over the last three years to get the EPA to do this may have been "sloppy" and referral to certain sections of the Environment and Protection Act may have been misguided but that has only come about because of the inaction of your Authority. Surely the EPA has to be proactive and do something constructive aiming at the very least to determine the causes of this problem. As you put it, *"The environmental audit system is designed to assess environmental risk, including where land and groundwater contamination has occurred."*

I would have thought that all of the material supplied to the EPA would have established that there was a potentially environmental and human health risk involved with the contamination of the Big Swamp site and as a consequence becomes the EPA's responsibility. Is this not so? Does the EPA investigate sites when there is a distinct possibility that it is contaminated and has the potential to be an environmental risk?

Further to the emails I first sent in November 2011 the EPA has not answered my query the name of a person within the EPA that deals with Acid Sulfate Soils. If this could be answered I would appreciate it.

Yours sincerely,

Malcolm Gardiner.

c.c. to the Hons. Greg Barber/Terry Mulder/Ryan Smith/Peter Walsh & the VAGO.

Our Ref: MA005529

Mr Malcolm Gardiner
Vice President
LAWROC Landcare
1805 Colac Lavers Hill Road
KAWARREN VIC 3249



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Dear Mr Gardiner

Big Swamp Site

Thank you for your further letter of 25 January regarding acid sulfate soils and the Big Swamp site.

As previous correspondence has indicated, EPA has a limited role in addressing issues such as the acidification of soil at Big Swamp. This is because the *Environment Protection Act 1970*, in creating the Authority, sets out its broad duty as the protection of the environment through the regulation of emissions, waste and industrial pollution. I understand that, although the reasons for the acidification of soils at Big Swamp are not fully understood, it is not suggested that the acidification is as a result of pollution or industrial waste contaminating the site.

EPA's role in acid sulfate soils, as Katrina McKenzie as acting EPA CEO explained, is limited to the implementation of the *Waste management policy (Acid Sulfate Soils)* and the appropriate movement of such soils to prevent off-site impacts.

Key agencies, including Southern Rural Water, Colac Otway Shire, Corangamite Catchment Management Authority, Barwon Water, the Department of Sustainability & Environment, the Department of Primary Industry and the Environment Protection Authority have committed to work together to improve the understanding of current and potential future sites at risk of acidification from inland acid sulfate soils within the Corangamite region.

I understand you have had some contact with this group to date and I encourage you to continue this engagement. Accordingly, rather than provide a separate EPA contact, I encourage you to direct future correspondence to this group at the following address:

Inland Acid Sulphate Soils Multi-Agency Steering Committee
c/o Stewart Anderson
Colac Service Centre
PO Box 283
Colac
VIC 3250

Yours sincerely

A handwritten signature in black ink, appearing to read 'John Merritt', with a small star-like mark at the end.

JOHN MERRITT
CHIEF EXECUTIVE OFFICER
25/3/2012

Lvl 3, 200 Victoria Street
Carlton
Victoria 3053
GPO Box 4395
Melbourne Victoria 3001
T: 1300 EPA VIC
F: 03 9695 2610
DX 210082
www.epa.vic.gov.au



APPENDIX FIVE

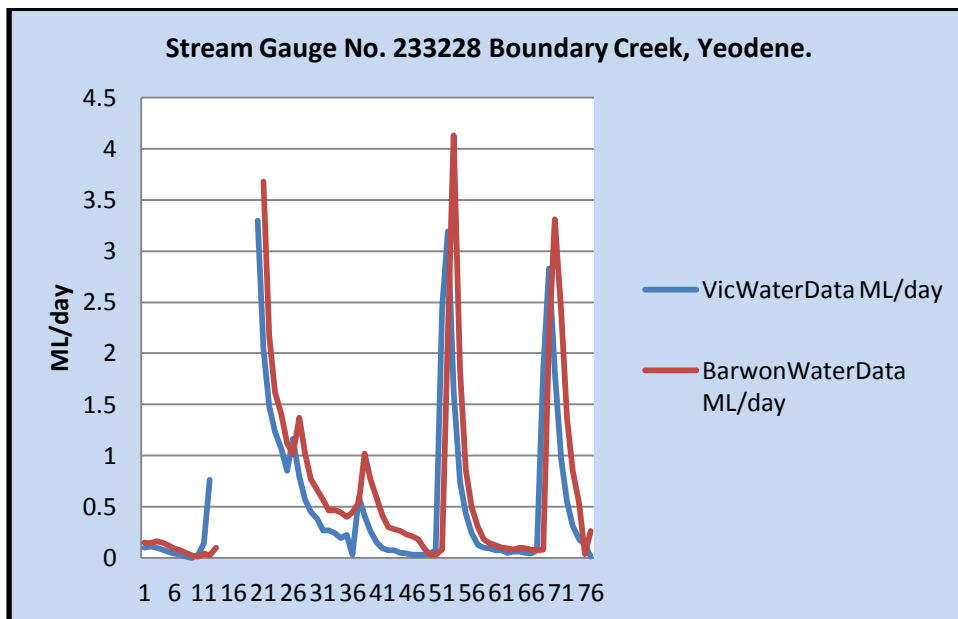
In February 2012 Barwon Water released its draft Water Supply Demand Strategy 2012- 2062 and contained the following statements.

“Q. What is the cause of acid sulphate soils at Big Swamp on Boundary Creek at Yeodene?”

- A. A range of factors are likely to have contributed to changes at this site, including*
- a. An outbreak of fire on the swamp in 1997 which started in the adjacent private property*
 - b. Extensive drainage works conducted for fire management purposes*
 - c. Extensive on-site fire management burning within the swamp to reduce fire risk.”*

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APPENDIX SIX



Source: Vic Water Data and Barwon Water Data.

This graph covers the 77 day period 1 January 2011 to 18 March 2011.
Any flows over 4 ML/day are not shown on this graph.

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CONCLUSION

It may have been noted that the Contents page at the start of this book did not include the page number of this conclusion. This was done in the hope when attempting to go straight to the conclusion that some pages of this book would be read first. In a way this conclusion is an anti climax, but suffice is to say that all of the authorities that have been approached to investigate the social, environmental and economic impacts as a result of the Big Swamp's utter devastation affecting both surface and groundwaters, have buried their heads in the sands and completely distanced themselves from any responsibility.

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The following pages contain extracts from a Victorian Government Gazette that clearly demonstrates that these authorities have failed miserably.



Victoria Government Gazette

No. S 107 Wednesday 4 June 2003
By Authority: Victorian Government Printer

SPECIAL

Environment Protection Act 1970 Act No. 8056/1970

VARIATION TO STATE ENVIRONMENT PROTECTION POLICY (WATERS OF VICTORIA)

Order in Council

The Lieutenant-Governor as the Governor's deputy, with the advice of the Executive Council, under section 16(2) of the **Environment Protection Act 1970** and on the recommendation of the Environment Protection Authority declares the variation to State environment protection policy (Waters of Victoria) contained in the Schedule to this Order.

Dated 3 June 2003
Responsible Minister
JOHN THWAITES MP
Minister for Environment

BRIAN TUKE
Acting Clerk of the Executive Council

BACKGROUND

Purpose of State Environment Protection Policies

State Environment Protection Policies (SEPPs) are declared by the Governor in Council under section 16(1) of the **Environment Protection Act 1970**. SEPPs provide a statutory framework for the protection of the uses and values of Victoria's environments. SEPPs include:

- the uses and values of the environment that the community and government want to protect – these are called **beneficial uses**;
- the **objectives and indicators** which describe the environmental quality required to protect beneficial uses;
- guidance for communities, industries, local government and government agencies on their responsibilities, under the **Environment Protection Act 1970**, to protect and rehabilitate the environment in order to protect beneficial uses – this is called the **attainment program**.

SEPPs set a framework for environmental decision-making and a clear set of publicly agreed environmental objectives that all sections of the community **must** work together to achieve. Environment protection programs in Victoria are developed within this broad framework.

This word "must" is significant as in most instances such a statement uses the words "will attempt" "endeavour" or the like.

PART VI: ATTAINMENT PROGRAM

12. Practicability

Over the lifetime of the Policy, environment management practices that effectively minimise environmental risks to beneficial uses need to be implemented for a range of activities. These may include the implementation of best practice if required to ensure effective environmental management.

This attainment program provides a series of environment management practices and actions that protection agencies, businesses and communities need to implement to improve environmental quality and help protect beneficial uses. Practices and actions included in the Policy need to be implemented on a priority basis to the extent practicable over its 10 year life, taking into account environmental, social and economic considerations.

KEY RESPONSIBILITIES FOR IMPLEMENTING THE POLICY

Communities, businesses and protection agencies, including catchment management authorities, regional coastal boards, water authorities, municipal councils and relevant State government agencies, have responsibilities to plan or manage Victoria's surface waters, and activities that impact on them, in an ecologically sustainable manner. To guide the protection of beneficial uses, clause 13 identifies general responsibilities for implementing the Policy and clauses 14 to 23 identify key responsibilities and goals that the Environment Protection Authority, key protection agencies, industries and communities should aim for over the 10 year lifetime of the Policy.

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Page 13 of the SEPP.

13. General responsibilities for implementing the Policy

While the Environment Protection Authority is responsible for ensuring the overall implementation of the Policy, its implementation on a daily basis is the shared responsibility of protection agencies, businesses and communities. Given this shared responsibility, EPA will work with protection agencies to, by January 2004, agree on State-wide priority programs to implement the Policy and improve environmental quality. The Policy's implementation on a regional basis will be primarily planned for through regional catchment strategies and, where relevant, coastal action plans.

To implement the Policy:

- (1) protection agencies need to ensure that statutory and strategic planning tools and decisions are consistent with the Policy;
- (2) protection agencies need to work with one another, and with businesses and communities to implement agreed environment improvement programs and actions;
- (3) relevant protection agencies and relevant businesses need to ensure the coordinated and quality controlled monitoring of ambient environmental quality and the impact of wastewater discharges on surface waters;
- (4) protection agencies and businesses need to include in their annual reporting processes actions taken to implement the Policy, so that the Environment Protection Authority can report to the Victorian community on policy implementation and its effectiveness in protecting beneficial uses;
- (5) protection agencies and businesses need to ensure that actions they take to implement the Policy are reviewed and periodically independently audited;
- (6) protection agencies and academic institutions need to ensure that research is undertaken to increase the understanding of environmental quality, and actions to protect beneficial uses. In particular, research needs to focus on:
 - (a) developing specific beneficial uses and environmental quality objectives for lakes, estuaries and wetlands, suspended sediments, environmental flows and aquatic habitats; and
 - (b) improved environment monitoring and assessment tools.
- (7) protection agencies need to provide information to Victorians on the impacts of human activities on surface waters and actions to minimise these impacts.

14. Environment Protection Authority

The Environment Protection Authority has a responsibility to enable the protection of the beneficial uses of Victoria's environment through employing a range of measures consistent with its responsibilities under the **Environment Protection Act 1970**. In carrying out these responsibilities, it is important that the Environment Protection Authority provides support to communities, businesses and protection agencies to ensure the implementation of the Policy.

During the lifetime of the Policy, a goal of the Environment Protection Authority will be to work with protection agencies, businesses and communities to:

- (1) assist catchment management authorities, regional coastal boards and regional communities to develop Government approved regional catchment strategies and plans, which identify the regional environmental, social and economic values of surface waters and, after careful consideration of environmental, social and economic needs, set appropriate goals, priorities and environmental targets for catchment and coastal environments;

- (2) use Victoria's statutory environmental audit system to enable independent audits of the progress towards implementing the Policy, attainment of the environmental quality objectives and regional targets, and the protection of beneficial uses. This needs to be undertaken within the context of monitoring and evaluating the use of Victoria's natural resources (see clauses 19, 41, 51 and 55).
- (3) report to the Victorian community on the progress towards implementing the Policy, attainment of the environmental quality objectives and regional targets, and the protection of beneficial uses;
- (4) ensure the development of the environmental quality objectives as listed in clause 11;
- (5) provide reliable information to Victorians on waste avoidance and reuse, pollution control, cleaner production and eco-efficiency;
- (6) provide tools for measuring and reducing environmental impacts; and
- (7) focus on providing guidance, and use partnership, audit, regulatory and enforcement tools, to minimise the impact of:
 - (a) wastewater discharges;
 - (b) urban stormwater runoff;
 - (c) intensive agriculture;
 - (d) aquaculture;
 - (e) water extractions;
 - (f) port, marina and vessel operations.

15. Catchment management authorities

Catchment management authorities have a responsibility to coordinate the ecologically sustainable development and use of catchments, floodplains and waterways, and where relevant estuaries and coasts, through many mechanisms, including the protection and rehabilitation of water quality, flow and aquatic habitats. In carrying out these responsibilities, it is important that catchment management authorities work with protection agencies, regional communities and businesses to develop Government approved regional catchment strategies and plans, which identify the regional environmental, social and economic values of surface waters and, after careful consideration of environmental, social and economic needs, set appropriate goals, priorities and environmental targets for catchment and coastal environments.

During the lifetime of the Policy, a goal of catchment management authorities will be to work with the Department of Sustainability and Environment, the Department of Primary Industries, regional resource managers, municipal councils and industry sectors to assist urban and rural landholders to use land sustainably and to reduce the impact of catchment activities on surface waters.

In the Port Phillip and Western Port catchments, the Port Phillip and Western Port Catchment Management Authority, in consultation with stakeholders, needs to set priority programs and regional targets for catchment management. In the same region, Melbourne Water and the Port Phillip and Western Port Catchment Management Authority need to work in partnership and in consultation with stakeholders, to set priority programs and targets for waterway management.

16. Regional coastal boards

Regional coastal boards have a responsibility to provide advice on, and undertake, strategic planning to enable the ecologically sustainable development of coastal environments. In carrying out these responsibilities, it is important that regional coastal boards work with catchment management authorities to include in regional catchment strategies and, where relevant, in coastal action plans priority programs and regional targets aimed at achieving the protection of beneficial uses. As regional coastal boards are advisory bodies, they should set priority actions in conjunction with relevant protection agencies.

During the lifetime of the Policy, a goal of regional coastal boards will be to work with catchment management authorities, the Department of Sustainability and Environment, Parks Victoria and municipal councils to ensure an integrated approach to protecting estuarine beneficial uses. This could be achieved through including in their coastal action plans, management actions, monitoring, reporting and research provisions to protect and rehabilitate estuaries.

17. **Municipal councils**

Municipal councils have a range of responsibilities which impact on surface waters, including the planning and approval of sustainable land use, domestic wastewater management, urban stormwater, and where relevant, floodplain management. In carrying out these responsibilities, it is important that municipal councils work with the Environment Protection Authority, catchment management authorities and other protection agencies to ensure their municipal planning schemes, statutory approvals and municipal programs are consistent with the Policy and regional catchment strategies, and help to protect beneficial uses.

During the lifetime of the Policy, a goal of municipal councils will be to ensure that land use planning decisions and approvals consider the capability of land to sustain the use, that stormwater and domestic wastewater management is improved and, where relevant, that sediment runoff from unsealed roads is reduced.

18. **Water authorities**

Water authorities have various responsibilities to provide water and wastewater services in an ecologically sustainable manner. In carrying out relevant responsibilities, it is important that water authorities work with catchment management authorities and other protection agencies to develop and implement relevant priority actions.

During the lifetime of the Policy, a goal of relevant water authorities will be to:

- (1) work with the Department of Sustainability and Environment, Department of Primary Industries, catchment management authorities and landholders to minimise the impact of irrigation drains and agricultural drains on beneficial uses;
- (2) provide environmental flows as required under the **Water Act 1989**;
- (3) work with the Environment Protection Authority and the Department of Sustainability and Environment to improve the management of trade wastes and to minimise the impact of wastewater on beneficial uses.

19. **Department of Sustainability and Environment**

The Department of Sustainability and Environment is responsible for overseeing sustainable catchment, coastal and water management. In carrying out its responsibilities in respect of catchment and water management, it is important that the Department of Sustainability and Environment continues to work with catchment management authorities, regional coastal boards, water authorities and other protection agencies, to assist in the development and implementation of regional priority programs and regional targets. By January 2004, the Department will work with the Environment Protection Authority, catchment management authorities and other protection agencies to develop a framework for monitoring and evaluating the implementation of regional catchment strategies including priority programs, regional targets, the attainment of environmental quality objectives and the protection of beneficial uses. This framework will outline the role of independent auditing within the context of monitoring and evaluation.

During the lifetime of the Policy, a goal of the Department of Sustainability and Environment will be to continue its work in developing State-wide strategies, supporting planning and guiding investment in sustainable natural resource management and developing management tools, including market mechanisms and incentives, to guide

sustainable use of our natural resources. The Department will also continue to provide information on protecting and rehabilitating rivers, wetlands, lakes, estuaries and marine environments and their beneficial uses.

20. Department of Primary Industries

The role of the Department of Primary Industries is to facilitate the sustainable development of Victoria's primary industries to achieve strong economic activity, a high quality natural resource base in the long term, and resilient industries and communities. During the lifetime of the Policy, a goal of the Department of Primary Industries will be to develop partnerships with industry, communities, and government departments and agencies to promote the sustainable use of natural resources.

21. Parks Victoria

Parks Victoria provides services to the Department of Sustainability and Environment to conserve, protect and enhance Victoria's national, state, marine, regional and metropolitan parks and conservation reserves, and related water environments. In carrying out these responsibilities, it is important that Parks Victoria ensures that its activities are consistent with the Policy and help to protect beneficial uses.

During the lifetime of the Policy, a goal of Parks Victoria will be to work with catchment management authorities, regional coastal boards, the Department of Sustainability and Environment, municipal councils and communities to ensure that a priority is placed on protecting the beneficial uses of the aquatic ecosystem, spiritual and cultural values and where relevant, recreation, in rivers, wetlands and estuaries of high conservation value.

22. Industry sectors

To protect beneficial uses, the potential impacts of existing and future human activities need to be minimised. Industry sectors, incorporating peak bodies, producers, manufacturers and service providers, can play a significant role in this by developing environment management systems aimed at increasing the eco-efficiency and reducing the environmental impacts and resource intensity of their industries. The Environment Protection Authority will provide guidance to industries to assist them to develop environment management systems.

Industry peak bodies and representatives need to negotiate implementation programs with their members and suppliers, and with protection agencies, that include incentives, effective environmental management practices, implementation targets, reporting, monitoring, evaluation and independent audit provisions and cleaner production measures.

During the lifetime of the Policy, a goal of industry bodies and representatives will be to work with their members and suppliers to account for all costs associated with producing goods and services, including those associated with natural resource use and environmental impacts.

23. Communities

Community members have responsibilities to protect the beneficial uses of Victoria's surface waters. These include a responsibility to manage their activities to minimise direct impacts on surface waters and to efficiently use natural resources to avoid the generation of waste and wastewater.

In carrying out these responsibilities, it is important that community members (including indigenous groups) support and feed into the regional planning processes of catchment management authorities, regional coastal boards and municipal councils, to identify beneficial uses they value and actions aimed at achieving their protection. This is important not only to ensure that communities help protect beneficial uses, but also to ensure indigenous and non-indigenous cultural and spiritual values are incorporated into regional catchment strategies and regional coastal plans.

Table 1: Beneficial uses to be protected.

BENEFICIAL USES	Aquatic Reserves	Wetlands and Lakes	RIVERS & STREAMS						MARINE & ESTUARINE					
			Highlands	Forests-A	Forests-B	Cleared Hills & Coastal Plains	Murray & Western Plains	Estuaries & Inlets	Open Coasts	Port Phillip Bay	Western Port	Gippsland Lakes		
Aquatic ecosystems that are:														
largely unmodified	✓		✓	✓	✓				✓			F6	F8	F3
slightly to moderately modified		✓					✓		✓					
highly modified								✓						
Water suitable for:														
primary contact recreation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
secondary contact recreation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
aesthetic enjoyment	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
indigenous cultural and spiritual values	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
non-indigenous cultural and spiritual values	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
agriculture and irrigation		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
aquaculture		✓		✓	✓	✓	✓	✓	✓	✓	✓			
industrial and commercial use				✓	✓	✓	✓	✓	✓	✓	✓			
human consumption after appropriate treatment		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
fish, crustacea & molluscs for human consumption		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			

F6 means refer to the beneficial uses set in the SEPP (Waters of Victoria) – Schedule F6. Waters of Port Phillip Bay.

F8 means refer to the beneficial uses in the SEPP (Waters of Victoria) – Schedule F8. Waters of Western Port and Catchment.

F3 means refer to the beneficial uses in the SEPP (Waters of Victoria) – Schedule F3. Gippsland Lakes and Catchment.

“My thorn will cut your twist.” – 8.5 years old granddaughter Gracie Gardiner.