

Dandaragan Groundwater Protection Submission 2018

19th March, 2017

Dandaragan Groundwater Protection (DGP) is a community group formed as a result of a public meeting held in Dandaragan, August 2015, with concerns about the impact of unconventional fracking to our community and region.

Our core values are: transparency, truth, respect, honesty.

Our primary roles are:

- The protection of our groundwater.
- To work towards sustainable solutions for our agricultural based region.
- To build HOPE for our future generations wanting to make the Dandaragan region their home and workplace.

We have an affiliation with Lock the Gate Association and work closely with likeminded neighbouring community groups to prevent unconventional gas development, not just in our region but the whole of Western Australia.

DGP is concerned about the exploration licenses held over our Shire. Our members can see no middle ground in allowing this invasive industry into our landscape and oppose it unanimously.

We are very worried about the impact an industrial landscape will have on our farming practises, health and life style.

The following are a list of our main concerns for this Hydraulic Fracture Stimulation in Western Australia 2017-18.

1. Contamination of our surface and groundwater
2. Terms of reference for this inquiry
3. Aboriginal Heritage
4. Health, Physical and Mental
5. Impact to our Agricultural Activities
6. Community Fabric
7. Social License
8. Conclusion

1. Contamination of our Surface and Groundwater

a) In Public Question Time – 15th December 2016, Council responded in writing to DGP's question:

“We know that fracking has contaminated ground water in similar geology and depth as in Dandaragan, will Council therefore enact policy through its' means to town planning, health and environmental planning or in any way to protect the precious water in our communities?”

Council's reply. *"The Manager of Planning advised that the Local Planning Scheme and Strategy guide Council in making land use decisions. The Strategy identifies proclaimed drinking water protection zones as set by the Department of Water under their own legislation. These zones are small in area and currently cover approximately 300m to 500m buffers around drinking water or wells. A copy of the Department of Water guidelines for proclaimed drinking water zones and land uses was provided to Mr Cook. There are no controls within the Scheme or Strategy (existing or proposed draft Strategies) that give Council authority to regulate mining such as gas extraction."*

We refer to:

Report 42, Standing Committee on Environment and Public Affairs, Implications for Western Australia of Hydraulic Fracturing for Unconventional Gas, dated November 2015.

4.99 The Water Corporation submitted a key concept amongst a 'number of agencies' is the idea of a 1.5 kilometre buffer distance beyond PDWSA boundaries:

The Department of Water (DoW) considers land uses or activities associated with unconventional gas exploration and production to represent an unacceptable risk within PDWSA. Therefore DoW states that unconventional gas activities should not occur within PDWSA surface boundaries. As there is the possibility of underground intrusion, DoW proposes an additional buffer distance of 1.5 km beyond the PDWSA boundary.

"These new administrative arrangements will ensure the continued protection of PDWSA in Western Australia to the highest level that DoW is in the best position to 'avoid, minimise or manage' any risks to the State's water supplies"

Finding 13: The Committee finds that there are sufficient safeguards and water source protection policies in place to protect Public Drinking Water Source Areas in Western Australia without the introduction of a 1.5 kilometre buffer zone between water source areas and unconventional gas activity.

On reading the transcript on this whole section DGP feel uncomfortable with the language and content written.

At a public meeting in Dandaragan, in 2015, the CEO, of Transerv Energy (now White Bark Energy) was asked by Dandaragan farmer, Mick Fox, if he knew the location of the Water Corporation's bore that supplied the town of Moora. He did not know of the location and was surprised to be informed that it was located in the Dandaragan Deep exploration gas licence area.

This has left the general public wondering what goes on when gas exploration licenses are issued.

DGP have great concern that the Water Corporation's recommendations on a buffer zone of 1.5 kilometres was not adopted in Report 42.

b) Our Council further advised DGP: *"The Department of Water is responsible for the management of safeguarding public drinking water sources, while the Department of Health*

provides assessments of water quality in water supplies to safeguard human health. The Environmental Protection Authority is responsible for the environmental impact assessments for any proposals likely to have significant environmental impacts.”

With regards to the Department of Health,

Continuing on with report 42:

4.117 states: “Several potentially toxic chemicals have been identified within hydraulic fracturing fluids and flowback fluids and produced waters. However it is important to acknowledge that human toxicity is dependent on the concentration taken into the body, or dose. If the potentially toxic chemicals are present in hydraulic fracture fluids or in drinking water supplies and a concentration below an identified threshold of toxicological concern (TTC) it is unlikely that this exposure will lead to any aesthetic or health impacts.”

With time passing and the advancement of scientific research, this statement is now not correct.

With the study of epigenetics, it has been discovered that our DNA plays a much smaller role than previously thought and that the environment we live in (for both humans, animals and plants) has a greater impact as to our evolution as a species.

It has been discovered that very small amounts of the same toxin over a long period of time, can be more harmful, than a one off exposure to the same toxin at a higher dose. It has an accumulative effect on the body.

Reference to epigenetics: Call of the Reed Warbler by Charles Massy. (Page 317 – 327)

c) While on the subject of chemicals, DGP is not aware of any science studies being carried out to understand the result of mixing different types of chemicals together. This is not just an issue for fracking but also an issue in agricultural applications. So little is known about this field and the harm on humans and animals through cocktail mixes of chemicals.

d) A further concern is what types of chemicals are brought back to the surface after fracking; another unknown factor.

e) Well Integrity.

Report 42,

8.35 The same well failure data can therefore be interpreted in different ways to result in varying conclusions. The Committee is of the view that the definition of well failure and well integrity is important, but reiterate that “there is absolutely no universal definition for well-failure frequency.”

The Finding 38: The committee finds that a well failure does not necessarily result in a leak to the external environment, therefore it is incorrect to equate all well failures with environmental impacts.

That does not instil confidence in our members and now with more evidence coming to light in recent times to support the frequency of well failures and fugitive emissions it is of real concern to us.

At a recent interview by video link to UWA, 15th MARCH, 2018, Professor Anthony Ingraffea made the following statement;

“Background papers and issue papers for use by the fracking inquiry in WA are woefully inadequate and about 10 years out of date. The industry is bigger and more intense than anyone can imagen.”

Refer: <https://www.facebook.com/frackfreewa/videos/1068623269942084/>

With this statement DGP fear the number of wells that would spread over the landscape and reinforce the need for well integrity.

The following, although not land based and not in Australia, is an example of well integrity and the sheer scale at what can go wrong.

“The Louisiana Environmental Apocalypse Road Trip” by Justin Nobel, July 2017.

Louisiana serves as a terrifying example of what can become of a state that short changes science and environmental regulations to boost industry and infrastructure.

The article concludes – “We’re at the coast now, a perfect spot for a final drink in the sand. The sky dims, goes lavender, purple, black, and one by one lights twinkle on the horizon, oil rigs, dotting the Gulf, lighting the night, some of the roughly 4,000 production rigs and drilling platforms located off the coast of Louisiana. And beneath the waves are more than 27,000 abandoned oil and gas wells, many of which are leaking. This is Louisiana, America, 2017.”

f) The evaporative ponds have been listed by our members as a real concern for potential contamination. We have undulating country and particularly over summer months can experience summer storms with flash flooding. Farmers have experienced devastating damage from these types of storms, gullies created, fences and stock washed away, damage to roads and infrastructure such as sheds, stock yards. The area of Dandaragan Deep is a water shed area for the town water supply to Moora and Dandaragan.

2. Terms of Reference.

a) It has come to our attention that many of our community members have found the **Terms of Reference in the “Guide and Information for Preparing a Submission”**, intimidating and feel their education levels are not sufficient to follow on with a submission.

DGP wish this to be noted in the enquiry. We believe the approach taken with initial information at the start of the sheet, will have reduced the number of submissions that your committee will receive.

b) DGP is also disappointed at the narrow reference for this inquiry and believe there should have been a focus on renewable energy and working towards a sustainable future.

Many of our community members feel that the gas industry is simply in a race against time before renewal energy will take over and fossil fuels will become a minor player.

c) The timing of the inquiry has also been questioned by community. November is the start of harvest and an extremely busy time right through until end of December; add in Christmas, plus it is traditionally in January, that farming communities are able to take annual holiday, and rural communities virtually come to a standstill and have skeleton staff in place. The start of the school year creates a rush for the community to settle back into a rhythm of life, while children are settled into their various schools, and it is catch up time on the farms. It was felt that another 4 weeks to closing would have helped people to get a submission better prepared and submitted. Remember these are all community people, not paid to write their submissions and many not familiar with the academic process, plus add poor internet connections includes further frustrations to individuals trying to do their best.

DGP would like the timing of the inquiry noted as not suitable to the rhythm of country life.

As Dandaragan Groundwater Protection we present the following concerns that community members have raised with us to pass onto the inquiry.

Water is the number one concern of most people in the area because of the following:

- a) How do you clean water contaminated by fracking?
- b) The geology of our area has many fault lines crisscrossing our country and we already know of one incident at Warro 4 well where the gas company hit a fault line resulting in a massive water flow.
- c) Our annual rainfall average is reducing and the prediction by scientists is that this trend will continue. Many farmers are totally depend on bores for the supply of water and this dependence will increase with surface water being challenged with reduced rainfall.
- d) The risk of water levels dropping and salt contamination because of fracking.
- e) Impact on Minyulo Brook, already effected by land clearing and increased water usage through agriculture and mineral sands operations. It no longer runs as permanent stream and the salt content in the water is rising and can no longer be use for garden purposes.
- f) That the government have a plan in place on how to supply water to the farms and communities should contamination occur. They then ask, who will foot the bill for that?
- g) Impact on local roads, and again who will pay for the maintenance?
- h) Safety on local roads, particularly school bus runs.
- i) Invasion of privacy
- j) Threat to biosecurity, particularly for the growing horticultural section

3. Aboriginal Heritage

Minyulo Brook is listed under the Aboriginal Heritage Act 1972 (AHA). It is a recorded birthing place for women

4. Health

Continuing on with Report 42

a) 4.106 – *“The Department of Health’s (DoH) involvement in regulating the onshore gas industry is ‘mainly reactive’ and ‘quite limited’. The Health Act 1911 provides the Executive Director, Public Health with the power to make inquiries and act in an ‘emergency or necessity.’*

4.107 *The Executive Director Public Health described the effect of the ‘reactive’ powers of DoH under the health Act 1911 as follows:*

This means that, at times, in dealing with contentious public issues, DOH input has not been sought until the end of the process, or when a crisis develops. As a result, DOH are often trying to interpret existing situations rather than proactively informing best practice to avoid or manage risks to Public Health .

DGP find comfort in the increased role of DoH and wish to see them play an even greater role.

b) *We support their request for the following:*

4.114 *“An ‘accurate and transparent public record’ of chemicals that are used in hydraulic fracturing is important, as is research into the aquifer systems throughout Western Australia to build a ‘cumulative dataset.’”*

We hope this dataset has commenced.

c) 4.116 listing all the known carcinogens is interesting and in particular the 96 substances listed from flowback; with 28 as known or suspected carcinogens.

DGP members ask if all 96 substances have been identified? This is of a particular concern to our members, as it is an unknown.

d) DGP refer to **“Unconventional gas Exploration and Production: Human Health Impacts and Environmental Legacy”** by Dr Mariann Lloyd-Smith, Nov 2015.

4.0 Implications for Human Health

“There has been no comprehensive assessment of the health implications of UG air pollutants to residents or workers in Australia. AS US based human health risk assessment of air emissions concluded residents closest to well pads i.e., living less than half a mile from wells, have higher risks for respiratory and neurological effects based on their exposure to air pollutants; and a higher excess lifetime risk for cancer.

Children living in close proximity to UG activities are at particular risk from air pollutants, due to their unique vulnerability to hazardous chemicals. Children’s exposure to chemicals at critical stages in their development may have severe long-term consequences for health. WHO has expressed a priority concern around children’s exposure to air pollutants?”

Her conclusion reads:

*Currently, Australian guidelines and standards currently do not take into account low-level, chronic exposure to environmental contaminants even those that demonstrate potential endocrine and epigenetic impacts. To fully assess the impacts of UG development, this would need to be addressed as a priority. Nevertheless, monitoring and regulatory safeguards for unconventional gas exploration and production cannot remove the threat of adverse impacts to water, air quality and to human health. Repeatedly, research and real world experience has pointed to evidence of the adverse impacts of this industry. **When so much is at risk, the most simple cost benefit analysis would suggest that this is an industry that represents far too great a risk to people, to agriculture and to the environment.***

(This report also supports the evidence listed in 1 b).)

e) In America there is a central data base where all diseases are to be reported and it helps to identify clusters of medical conditions occurring and investigations can then be carried out. The general consensus in our community is that we have a high rate of cancer, auto-immune and respiratory conditions diagnosed. It is often discussed as to why this is so.

DGP feel that there should be a data base set up for WA, and probably Australia, for all doctors to report diagnosed diseases and help Health Authorities to be more proactive in community health.

f) Mental Health. The feedback DGP are receiving from landholders is demonstrating that the threat of fracking is playing on their minds. Some speak about wanting hope for the future of their children and to be able to pass on a sustainable and viable farming operation to the next generation.

While prices for meat and wool are at an all-time high and there is real financial confidence abounding in the community, it is definitely dampened by the threat of fracking in our region.

Refer to Call of the Reed Warbler by Charles Massy on mental health in rural areas – page 479.

g) **A Warning From Wyoming.** To further support our concerns, John Fenton, a farmer and rancher, of Pavillion, Wyoming, visited our community in April 2016, and told us first hand of the health and financial impacts to himself, his family and their community.

John's lasting statement to our community is: **"Fracking is not just about the environment or water, its human rights. When you take a rural or a remote area and you industrialise it for fracking, it impacts every portion of your life. People pay the ultimate price."**

h) *I further refer to an article by Josh Dzieza, Sep 14 2017.*

<https://www.theverge.com/2017/9/14/16290934/india-air-conditioner-cooler-design-climate-change-cept-symphony>

The Race Against Heat – How do you cool 7.5 billion people on a warming planet? He is writing about his country, India, and the impacts to its people.

“By the end of the century, almost half the people on Earth will face deadly heat and humidity for more than 20 days a year, accordingly to a study by Camilo Mora, a researcher at the University of Hawaii. And that’s the best-case scenario, with drastic reductions in carbon emissions. If emissions continue on their current trajectory, three-quarters of humanity will face deadly heat. Regions in the Persian Gulf, Bangladesh, and northeast India may become so hot and humid that, in the words of another recent study, they pass the “upper limit on human survivability”, deadly to anyone who ventures outside for more than a few hours.” End of quote.

This article supports the observations of our own local farmers and community members that our heat waves are becoming more intense. It is fact that the highest death rate from any natural disaster is a heat wave and that it effects the most vulnerable in our communities.

DGP believe that our Government needs to be looking at ‘the whole of the picture’ when dealing with this inquiry and that climate change needs to be a consideration in reducing the use of fossil fuels and helping to protect the most vulnerable countries at risk.

5. Impact on Agricultural Activities

a) The final question our Council was asked: **“As over 96% of Dandaragan residents voted against living in a gas field, will you actively discourage development of gas fields within Exploration Permit 321 (which includes Dandaragan Deep) as clearly there is no social license to do so?**

Council’s reply. **“The Shire of Dandaragan does not have legal jurisdiction in relation to exploration permit approvals or applications, as these functions are the responsibility of State and Federal Government agencies/organisations.”**

As land holders and community members we need to have protection and to feel secure to go about our work and lifestyle.

DGP feel that the gas industry use to their advantage, the maze of pathways through the various levels of government, and have an unfair advantage over community members. They are paid to do their work and community members are defending their rights to clean air, water and land in voluntary time and personal money.

We are hearing time and again of government having to pick up the bill, of costs incurred, when there is environmental damage caused. In many cases the company concerned has disappeared or become insolvent.

DGP want the Government to bring in legislation to protect our wellbeing and environment by:

“A company wishing to develop gas extraction is required to pay up front, the determined financial amount for restitution, to the State, should contamination occur. This is to be held in trust until the project is completed.”

DGP believe that if a gas company truly believes they have ‘best work place practises’ and the best technology available to safely remove unconventional gas, that a company would be comfortable to agree to these terms.

This would help to bring trust to the industry between landholders’ and industry.

b) DGP is also concerned about how insurance companies are now viewing farming businesses who have fracking activities happening on their properties, along with the financial institutions not being prepared to lend money.

c) Our landholders are not comfortable with the current legislation in place with regard to **Access to Land and Land Use** and believe it does not protect the landholder enough.

We have an example of bullying by a gas company in their attempt to gain entry for a flora survey. After a number of phone calls to the farmer, he was informed that if he did not agree to their request they would take him to court. It was at that point the farmer, Zac Roberts, discussed this with the other members of his family and it was decided they needed to join DGP and resist this with a whole of community approach.

We have further been told of stories where the farmer has agreed to the flora survey, thinking that was the extent of the permission. Then to discover at a public meeting, that by signing the form it gives the company entry to the property unless notified otherwise. The farmers this has happened to, are now too concerned to bring attention to their property, by writing a letter to revoke entry, in case they are taken to court. They remain quite, hoping that fracking will not go ahead.

6. Community Fabric

a) The concern of our community fabric is heightened with the article in **Unconventional Oil & Gas, issue 6//SPRING 2016**. Article, **“Journey to the West”**, page 34 – 39. It starts, **“Western Australia is home to a number of highly attractive unconventional oil and gas development prospects.”** In this glossy magazine the story rolls on telling the opportunities and associations with government departments.

“Currently, the Perth Core Library is undergoing a \$7.3 million expansion to ensure it can continue to assist exploration for mineral and petroleum resources. In November 2015, the final report of the two-year parliamentary inquiry into fracking suggested that Western Australia’s regulators were well prepared to manage the developing shale and tight gas industry and associated hydraulic fracturing processes. The newly established National Energy Resources Australia (NERA), a resources industry growth centre to which the Australian Government has committed funding of \$15.4m over four years, is located in Perth. This oil, gas and energy resources growth centre is intended to promote sector competitiveness and productivity via collaboration, innovation and reduced regulatory burden. Currently, Western Australia also sees the largest share of petroleum exploration expenditure (onshore and offshore) in Australia.”

What is really going to happen to our agricultural areas under this threat? It also raises another question outside of this enquiry, what is happening off shore with our oceans? There is no comfort in reading that article.

To further add to our frustration in our immediate region, the current Government, has announced the closure of the Moora Hostel because of needing to cut costs in education.

As country citizens we have a right to confidently go about our way of life knowing that we have a sustainable future for our children in all areas pertaining to a quality of life. Clean air, water, soil and the essential services to maintain a sound standard of living and that includes education.

DGP would like to know, how much government money is used in supporting the gas and oil industry?

The next question is, how much of the money remains here in Australia and how much tax do these gas companies pay to our Government?

e) In an article published Nov 2016, called **“Feeding the Beast” by Richard Denniss**, I quote the following:

“The harshest, most inconvenient, truth is that given a choice our elected representatives would prefer to avoid a fight with the fossil-fuel industry than lead a fight to rapidly reduce our greenhouse gas emissions.” He further states, ***“The gas industry has lobbyists everywhere. The gas industry has former staff everywhere. And when the main determinant of the gas industry’s future profits is the decisions of today’s politicians, you can bet that no matter what the problem, someone will argue that the answer is gas. It is not climate change that needs to be tackled in Australia; it is the entrenched political power of the fossil-fuel industry. And unfortunately for those paying attention to the climate science, that battle has barely begun.”***

With that statement in mind the DGP would like to see legislation put in place at both State and Federal level of Government:

“Retiring politicians are not to take industry positions for financial gain for a period of five years.”

In Canada this is the position to prevent collusion and back handers between politicians and industry. Here in Australia there is no law in place and we understand it is referred to as ‘the revolving door’.

Still focusing on community fabric, with regards to climate change an article by **David Wallace-Wells, 9th July 2017.**

“When Will The Planet Be Too Hot For Humans? Much, Much Sooner Than You Imagine. The Uninhabitable Earth”

His opening chapter, ‘Doomsday’ contains a sentence, I quote:

“Over the past few decades, the term “Anthropocene” has climbed out of academic discourse and into the popular imagination – a name given to the geologic era we live in now, and a way to signal that it is a new era, defined on the wall chart of deep history by human intervention.”

Heat Death, The End of Food, Climate Plagues, Unbreathable Air, Perpetual War, Permanent Economic Collapse, Poisoned Oceans, The Great Filter are the headings for the chapters in this article.

“But more than half of the carbon humanity has exhaled into the atmosphere in its entire history has been emitted in just the past three decades; since the end of World War II, the figure is 85 percent. Which means that, in the length of a single generation, global warming has bought us to the brink of planetary catastrophe, and that the story of the industrial worlds’ kamikaze mission is also the story of a single lifetime.”

End of quote.

This article appears in the July 10 2017, issue of New York Magazine.

There is a general consensus that the fossil-fuel industry is in a race against time with the emerging renewal energy industry.

Tim Hollo, Executive Director of the Green Institute wrote an article ***“Elon Musk’s big battery brings reality crashing into post-truth world – Tesla to build world’s biggest lithium ion battery in SA”***.

In the article, the following is stated,

“There’s been a lot written in recent years on the idea that we are living in a ‘post-truth’ world. Climate writer David Roberts brought it to my attention around 2010, when I was grappling with the idea that dinosaur politicians and rent-seeking corporates not only weren’t telling the truth about climate change and energy: they were actively dismissive and destructive of the very idea of truth.” End of quote.

While our group’s main aim is to protect water, air and soil; as time has evolved it has become evident that climate change is also part of this debate.

Call of the Reed Warbler by Charles Massy gives hope to farmers and the general population that through regenerative farming we have the chance to turn climate change around by sequestering carbon by farming with the laws of nature.

Our environment is at the tipping point and we cannot afford to allow anymore industrialization of our agricultural landscape by allowing unconventional gas activities.

We need to become the clever country and work together to improve our situation and work towards a sustainable future.

This view is supported by writer **Tim Winton** in an article, PERTHNOW.COM.AU Sunday, February 26, 2017. ***“Friction on fracking has Winton riled up.”***

“A government that welcomes frackers isn’t just reckless – it’s a government that’s completely lost touch with the people.”

He said the fracking issue was representative of a whole raft of environmental issues that had been ignored or neglected by the major political parties which have instead focused on winning votes by spruiking their policies for debt, jobs, the economy, transport and crime.

“I know WA is in a frightening amount of debt but that’s on paper,” the award winner said.

“The debt we’re racking up in terms of the true bottom line – the cost to our environment, what we’re taking out and not putting back – we’re in a worse debt position. Paying that debt down is not like putting money back into a box. Some debts you can’t come back from. And yet it’s barley mention this election.”

End of Quote

7. Social License

We were inspired by the effort of the Carnamah Shire’s residents who surveyed their community and declared themselves a “Gasfield Free Community” at a public event on April 12th 2015. (Refer: Eneabba News March 26th 2015)

We conducted a community survey in November 2016, under the guide lines of Lock the Gate asking, “Do you want your district gasfield free?” The result was 96.4% of our community want to live in a gasfield free region.

On the night of our community declaring our area ‘gasfield free’ we came together as a whole community; farmers had donated lambs to be roasted on spits and women organised salads and bread rolls. Indigenous locals attended and neighbouring community members came to add their support.

Knitting Nanna’s came up from the city to organise activities for the children and an arts activity to create a bunting, telling the story of the community’s achievement. A band travelled from Perth, at no cost, to entertain the crowd.

Metal road signs, declaring our area gas field free, were presented to a representative on each main road to be erected, declaring our intent.

The turnout was so large that the community club took a record taking over the bar. A good night was had by all and many old friendships were renewed and strengthened, along with new friendships being formed; all on the common ground of wanting to protect our environment and our way of life. Water is recognised as the life blood to our community.

DGP members attended the Shire of Dandaragan meeting held 15th December 2016 to present to Council the results of the survey and to demonstrate **that the gas industry do not have a social license to operate in our community.**

This supports the findings of the following communities in our shire - Jurien 90.5% and Cervantes 93% who have also presented their declarations to Council.

8. Conclusion

Dandaragan is regarded as highly productive farming land, with a reliable rainfall and a growing agricultural diversity with a range of horticultural activities emerging and a bottled water business.

Olives, stone fruit, citrus, potatoes, onions, cut flowers, blue berries, mangoes, melons, avocados, table grapes, sweet potatoes, passionfruit and zucchini are all grown commercially in our area.

We are strong producers of prime lambs, mutton, wool, beef, pork, stud breeders for wool and sheep meat and a camel farm producing milk.

Our area grows a range of crops for grain: wheat, barley, lupins, canola, oats, plus hay and the production of small grains such as subterranean clover and serradella.

Many farmers are introducing perennials into their farming systems to produce productivity for stock carrying capacity plus increasing the health of their soil.

The town site is now surrounded by hobby farmers, who have chosen to make Dandaragan their home, as it avails them to live a rural lifestyle to pursue rural activities in a clean and safe environment.

Dandaragan has grown from a school, post office, shire office, church in the mid 1960's to a thriving agricultural district and town, with businesses that service the agricultural industry, with excellent sporting facilities and amenities.

This growth came about with the release and development of virgin land by "New Land Farmers" who came from the Wheatbelt and carved out their properties to create a new and exciting future for the future generations to come.

Moora is our main town for business, secondary education and shopping and the coast is within easy driving distance, for a day trip for recreation activities.

Our community is united and determined to ensure that we remain sustainable and vibrant and resolved to protecting our way of life.

I make reference to the Royal Address on /Sustainability, The Hague, 5 September 2017 by William Ferwerda. www.commonland.com/en/file/download/258

Please hear our voice. "Water is the most precious commodity on this planet".

End of submission

Mick Fox

Dandaragan

