

AMENDMENT C87gpla – INVERLEIGH STRUCTURE PLAN

SUBMISSION FORM – Unsewered blocks

I am opposed to the Amendment C87 to the Golden Plains Planning Scheme due to the potential leeching of septic run-off to the Leigh River (and through to the Barwon River). On Common Road, the natural slope towards the Leigh River and unsewered blocks on that slope has the risk of contamination of our local natural waterways. Recommended buffer zones from septic systems to water bodies can be as large as 300 metres¹. While the Leigh River does not fit into the highest category there is real uncertainty about the combined impact of a significant portion of the 525 unsewered properties on a slope toward the river. An investigation on the cumulative output from the septic systems and their likely impact on the river should be done as part of the assessment and viability for this development to proceed.

In the Inverleigh Structure Plan 2018 Page 36 under Section 5.4.4. Loss of Biodiversity it states “The Leigh and Barwon Rivers provide valuable environmental corridors that need to be protected from development and pollution associated with stormwater and septic seepage. The extensive floodway and floodplain assist in the protection of these river environs, as does the Environment Significance Overlay 2 – Watercourse Protection”. For this reason, we request more detail on measures that will be taken to prevent septic seepage from adding to the nutrient load of the Leigh River, a river which is already carrying the nutrient loads from the Ballarat Waste Treatment Plant.

http://www.vic.waterwatch.org.au/cb_pages/monitoring.php

In the Inverleigh Structure Plan Review (2005)² and in the 2015 Domestic Wastewater Management Plan Volume 1 Golden Plains³, particular focus was given to disposal options, most of which remains relevant and is applicable to all unsewered towns.

- The structure plan review noted that existing smaller lots within the township zone already present a problem with effluent run-off from septic systems and development of the township-zoned area will remain severely constrained without the provision of suitable sewerage management facilities. Golden Plains Shire should obtain health and environmental information for Inverleigh such as odour issues within the township and the bacterial quality of flows in street drains and that bacterial sampling and tests should be carried out in accordance with procedures specified by a NATA accredited laboratory and should analyse for total and faecal coliforms.
- Representative locations in the township should be selected, and samples taken at each location on at least three occasions. The date/time of sampling and weather conditions should be recorded for each sample, as well as any other relevant information (e.g. recent rainfall). The situation at Inverleigh has changed very little since 2005, except that there is now perhaps more pressure for close-development

¹ <https://www.epa.vic.gov.au/~media/Publications/891%204.pdf>

²

https://www.goldenplains.vic.gov.au/sites/default/files/Ref%20141_Inverleigh_Final_Report_030305_incl_appendices.pdf

³

<https://www.goldenplains.vic.gov.au/sites/default/files/Golden%20Plains%20DWMP%20Volume%201%20Final%20V5r.pdf>, page 15

and less appetite from water authorities and state government to fund reticulated sewerage.

- Site CO_LEI017 is an active water watch location, however, pH and conductivity data have only been monitored between 2007 and 2015. Over this period, minimal changes in pH were observed, but salinity peaked in Spring 2008 at 2440 $\mu\text{S}/\text{cm}$, after which it rapidly dropped to 500 $\mu\text{S}/\text{cm}$ in January 2010, and increased to ca 1500 $\mu\text{S}/\text{cm}$ early in 2015. "In general, levels below 1,500 $\mu\text{S}/\text{cm}$ are considered to have minimal short-term effect on aquatic biota. Toxicity studies suggest a step-wise impact on biota, with more and more taxa being removed from the aquatic community as salinity rises. ("[http://www.vic.waterwatch.org.au/resources/Pages from WW DI MANUAL PART B p 19 35 .pdf](http://www.vic.waterwatch.org.au/resources/Pages%20from%20WW%20DI%20MANUAL%20PART%20B%20p%2019%2035%20.pdf)). The proximity of the most recent measurements of the Leigh river to the upper limit of 'normal salinity' at 1500 $\mu\text{S}/\text{cm}$, the Leigh can be considered vulnerable to additional nutrient load.

Data collection from this location should be resumed ASAP to ensure data-driven insight in environmental changes.

- The feasibility of sewerage for Inverleigh should be revisited, with a focus on alternative non-traditional means of collecting, natural treatment and disposal or reuse. However, there is a need to first build sufficient evidence to demonstrate that this is the best option for the town.
- The revised monitoring and audit program for existing systems (refer to Section 2.3) will lead to increased understanding of the quality of wastewater management in the town.
- We therefore request tests be conducted according to this document prior to the development on these rezoned areas within the township.
- It is also recommended that stormwater quality monitoring is undertaken and an engagement/education program is established for residents to promote best practice onsite wastewater management. Much of Inverleigh is subject to inundation from the Barwon and Leigh Rivers. Overlays showing the extent of floodway and land subject to inundation are shown in the planning scheme. Extra care is required when planning, installing and operating onsite systems on flood prone land.

These actions have not been undertaken to date, and the need for them to be undertaken remains.

[http://www.ccma.vic.gov.au/admin/file/content2/c7/Upper Barwon Yarrowee Leigh FLOWS study update.pdf](http://www.ccma.vic.gov.au/admin/file/content2/c7/Upper_Barwon_Yarrowee_Leigh_FLOWS_study_update.pdf)