

Response to the *Proposed Regulated Watercourse Land Regulations (April 2021)*

This submission comes from the Waterway Ecosystem Research Group (WERG, <http://thewerg.org>) based at the University of Melbourne. WERG works with Melbourne Water in a formal partnership known as the Melbourne Waterway Research Practice Partnership (MWRPP, <http://mwrpp.org>). The MWRPP undertakes industry-engaged applied research aimed at protecting and improving waterway ecosystem function and health throughout the greater Melbourne region.

We appreciate the opportunity to provide comment on the Proposed Regulated Watercourse Land Regulations (DELWP 2021; hereafter *proposed regulations*). In making this submission, we have reviewed the *proposed regulations* including Appendices A and B. In the sections that follow, we respond to the consultation questions associated with each of the six key issues.

Managing access and designating ('setting aside') areas for particular purposes

1. Are there other reasons why areas might need to be designated to manage access or activity in a particular area?

Waterbodies are areas of high significance for cultural heritage and biodiversity and we believe that **regulation 16** should be extended and minimum distances set within Crown land where camping, campfires and other activities are not allowed to occur. We suggest that

- If threatened species are found within the Crown land or up to 1km away, recreational activities should be prohibited in these Crown land areas.
- That recreational activities be prohibited in or near (extending up to 30 to 40m away from) areas that are naturally regenerating, have been revegetated in the last 20 years, or which contain native vegetation in densities similar to the EVC benchmarks for a given EVC community (Hansen et al., 2010).

We note that the *proposed regulations* are intended to complement other laws which govern other matters including Aboriginal cultural heritage (p.4, DELWP 2021). We strongly support DELWP's stated commitment to meaningful engagement with Traditional Owners and Aboriginal communities to ensure appropriate designating ("setting aside") for the management of Aboriginal cultural heritage and culturally sensitive areas.

As waterbodies are likely to be under similar stressors across the State, we suggest that there should be a minimum distance set under **regulations 32, 33 and 35**. We feel that these should not be allowed to be varied if they reduce the distance a certain activity is allowed to occur near a waterway or water holding area. As stated in the regulations, we suggest that this distance should not be less than

- 30 to 40m for camping (**regulation 35**), as based on the minimum requirements suggested in a Victorian Departmental report (Hansen et al., 2010).

The disposal of human faeces, soap or detergent (**regulations 32 & 33**) should be prohibited until further research is undertaken to determine the effects of this on waterways and the surrounding environment (Stevenson et al., 2020).

Protecting the environment

2. Are these regulations appropriate? What changes (if any) would you like to see?

Wood, both as standing dead or alive timber, or as fallen whole trees/shrubs, logs and branches provide valuable habitat for both in-stream and terrestrial native fauna. We believe that while **regulation 18** does provide some protection for vegetation:

- Firewood collection should be prohibited.

We fear that, under **regulation 23**, firewood collection would have a detrimental impact on the natural values of the states waterways and wetlands, as scientific authors have suggested that up to 80% of fallen timber has already been removed from waterways in the Murray Darling Basin (Mac Nally et al., 2001). This has had a significant negative effect on native mammals, birds and reptiles, and further depletion of these natural habitats through firewood collection would exacerbate the loss of native animal species (Mac Nally et al., 2001). This is because standing timber provides hollows for native birds and mammals, while fallen timber provides valuable habitat for ground dwelling mammals, reptiles, frogs and invertebrates. These habitats take a long time to develop and provide habitat and food resources for native species, especially if they have been revegetated or have naturally regenerated (20 years at the very least), so natural and restored areas should be protected from damage (Manning et al., 2020, Vesk and Mac Nally, 2006).

Fallen timber also provides a valuable habitat in-stream for native fish and invertebrate species (Tonkin et al., 2020), and this woody debris is likely brought into the waterway through floods or from trees and shrubs dropping timber directly into the waterway. The collection of firewood would likely greatly reduce this timber in waterways, having an adverse effect on the native fish species (and subsequently on the recreational fishing industry), as well as other native fauna.

As outlined by a Victorian departmental report, waterways should have minimum width requirements to stop the impacts of detrimental activities, such as livestock access and camping/recreational activities (Hansen et al., 2010). According to the report, minimum width requirements for waterways should not be less than 30 to 40m (Hansen et al., 2010).

We suggest that changes be made to **regulation 23**

- The collection of firewood should be prohibited in all Crown land areas in order to protect and provide habitat for native flora and fauna.

More generally, we suggest that

- Unlimited camping will have a detrimental impact on the delicate riverine ecology through pollution and potentially impact nocturnal fauna and disrupt the natural wildlife corridors that riparian areas provide. Studies have shown that trampling and removal of shoreline vegetation, erosion and poor water quality, increased nutrients and algal blooms, infrastructure development and fishing and hunting have the greatest detrimental impact on waterway areas (Hadwen et al., 2012).
- All areas containing existing vegetation communities (described as Ecological Vegetation Classes – EVCs) be prohibited from camping and any wood collection activities, and a buffer of 30 to 40m be set-up around these areas to prohibit disturbance from recreational activities.
- 20% of all areas of Crown land be designated and reserved as natural regeneration areas or areas for revegetation in order to increase the amount of both alive and dead native timber alongside waterways. Recreational activities should be prohibited within up to 30 to 40m away from these areas (Hansen et al., 2010).

- We encourage a stocktake of achievements and review of any lessons learnt from the Victorian Government's Regional Riparian Action Plan (RRAP) 2015-2020 (DELWP, 2015), and encourage a strong continued investment in continuing the work in the next phase of rivers and riparian land management.

Prohibiting interference with livestock and structures and maintaining good order

3. *Are these regulations appropriate? What changes (if any) would you like to see?*

We are unclear, in **regulation 22**, what the definition of 'cultivated land' is, and if this applies to pasture land as well as cropping land. These definitions need to be made explicit.

As proposed above and mentioned in **regulation 20**, we support the work by the RRAP to continue to convert Grazing Licences to Riparian Management Licenses (DELWP, 2015). This is because livestock are known to contaminate waterways through faecal contamination, pugging and erosion (Dorrrough et al., 2004).

We strongly suggest that dogs (including those on leashes and 'Gun Dogs') and any other domestic animals be prohibited from Crown land frontages. This is because dogs are known to have a strong negative impact on native animals, especially in countries such as Australia (Doherty et al., 2017).

Managing hygiene and waste to protect water quality and amenity

4. *Are these regulations appropriate? What changes (if any) would you like to see?*

Regarding **regulation 32, 33 and 34**, it is unclear who would be responsible for monitoring and enforcing these regulations. Who is the lead agency? How will the lead agency coordinate with authorised officers from the other responsible agencies and what are the resourcing arrangements?

We note that there is also no limit on the number of people allowed to stay in a given area. Does this mean that potentially large groups of people with caravans and motor homes could camp within a relatively small area, potentially polluting the surrounding land and groundwater with human faeces and soap/detergent? There is not enough conclusive evidence on the effects of human faecal contamination on areas which do not have access to toilet facilities (Stevenson et al., 2020), so we suggest a high degree of caution when setting regulations on human faeces and soap/detergent.

We suggest that under **regulation 32, 33 and 34**, there is a need to

- Set a maximum number of people for a given area of Crown land waterway. We suggest, as per NSW regulations, the maximum number of tents, caravans and campervans permitted to use the ground at any one time is not to exceed an average of two per hectare (that average being calculated over the total area of the crown land) (Department of Planning, 2006). The maximum number of people in each tent/campervan/caravan should not exceed 5. Campers should have to register with the Department to get a camp site so that numbers are limited and length of stay strictly controlled.
- Require all people camping on Crown land to take all of their waste (including faeces) with them when they leave.
- Reducing the maximum number of nights that a given individual/group is able to stay on a waterway to 7 days rather than 28, to reduce the impact of any given occupant. Furthermore, a

given area of Crown land should only be allowed to be used for a maximum of 28 days in a year, to ensure that this area has time to recover.

- Undertake appropriate peer-reviewed research to determine the maximum carrying capacity of people next to waterways, including the impact of human waste and camping equipment (Stevenson et al., 2020).
- Provide appropriate funding so authorised officers are resourced to properly monitor and enforce regulations in regards to camping and managing hygiene and waste to protect native vegetation and water quality and amenity.

Managing camping

5. Are these regulations appropriate? What changes (if any) would you like to see?

As mentioned previously, we suggest that under **regulation 35** there is a need for the following:

- Campers should have to register with the Department to get a campsite so that numbers are limited and length of stay strictly controlled. Fees should be considered to ensure people value and look after the site.
- Reduce the maximum number of nights that individuals or groups are allowed to stay on Crown land to 7 consecutive nights in order to reduce the impact of human waste and camping equipment on a given piece of Crown land.
- Reduce the overall number of nights that Crown land can be used in a year to a maximum of 28 nights, to ensure that the natural assets of the area are maintained and natural regeneration is allowed to occur.
- Set a maximum number of people for a given area of Crown land waterway. For example, as per NSW regulations, the maximum number of tents, caravans and campervans permitted to use the ground at any one time is not to exceed an average of two per hectare (that average being calculated over the total area of the crown land) (Department of Planning, 2006).
- Provide appropriate funding so authorised officers are resourced to properly monitor and enforce regulations in regards to camping.

The definition of ‘riparian management works’ needs to be better defined. We agree that revegetated areas should be a part of this definition, but we suggest that naturally regenerating areas should also be included in this definition. As identified above, we suggest that:

- Camping and other activities (such as toilet facilities) should be at least 30 to 40m (Hansen et al., 2010) from these ‘riparian management works’ sites, or other native vegetation. These areas need to be marked on all publicly available maps to ensure these regulations are adhered too.
- Camping should not be allowed in areas that contain or are 1km from threatened species.

Furthermore, we suggest that camping and other recreational activities should only be allowed on Crown land where publically available roads adjoin the Crown land. This is to ensure private properties are not unduly effected by people camping on Crown land, and to reduce the potential impact on livestock and private infrastructure such as gates, buildings and water troughs.

Managing campfires

6. Are these regulations appropriate? What changes (if any) would you like to see?

There are inherent fire risk problems if campfires are permitted in Crown frontages that are vegetated and there are no designated safe fire pits.

As identified previously, we suggest that **regulation 39** should prohibit the use of campfires

- In areas that contain or are 1km from threatened species.
- In or 30 to 40m from 'riparian management works' sites, including areas that are naturally regenerating, have been revegetated or that are near other existing EVCs.

The Regional Riparian Action Plan 2015-2020 has been a significant (\$40 million) investment in riparian management works delivered in partnership with a broad range of engaged stakeholders (>1500 landholders and ~600 Traditional Owner, Landcare, angling, school and other community groups). It is vital that the *proposed regulations* do not detract from or undermine any of the future benefits expected from the important on ground work accomplished by the RRAP.

It is critical that the management of the *proposed regulations* by authorised officers of the various responsible agencies be properly resourced. To date, Victorian government funding for natural resource management staff such as National Parks rangers (VNPA, 2020) and waterways staff has been declining. Appropriate levels of funding must be made available if the *proposed regulations* are to be properly administered to achieve their stated aims (p.4, DELWP 2021).

Yours sincerely,

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