

Water Trigger Review

GPO Box 787

Canberra ACT 2601 Australia

Independent Review of the 2013 EPBC Act amendment - Water Trigger by Mr Stephen Hunter.

Dear Mr Hunter,

Thank you for considering the comments that I make in this written submission and the ones I will make in the on-line survey.

I make these comments as a landscape natural resource practitioner; having Chaired the Namoi Catchment Management Authority for seven years; a farmer in the Liverpool Plains; being the part architect of a proposal for 'Assessing the cumulative impact of mining scenarios on bioregional assets in the Namoi Catchment' (which became a formative template for the Bioregional Assessment program), and; a former member of the IESC 2013-2014.

I will use the Terms of reference to target my remarks.

1. Examine the appropriateness of the regulation including whether it is necessary and well targeted.
- The regulation has proven to be necessary, and your previous review 2015 has supported this view. There are improvements to be made as to the regulation, particularly targeting the vexed question of predicting and managing cumulative impacts. The regulation has overcome an anxiety held within the broader community of the independence in the oversight of the science used by projects that have become very large, with corresponding potentially large impacts.
2. Examine the effectiveness of the regulation in protecting water resources from the impacts of coal seam gas and large coal mining projects, including the role and scope of work ascribed to the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development (IESC)
- The intent of regulation is well founded and as previously stated appropriate, however, I consider it too early to properly evaluate the effectiveness of the regulation. Monitoring projects against their modelled predictions, management plans, and conditions, will over time reveal the effectiveness of the regulation and its operation. The IESC provides advice based on knowledge, evidence and the proponents own assessment of its impacts. It can only provide this advice in terms of risk. Despite this, it is an improvement on previous processes without an independent assessment of proposals.
- To this end I can recall the IESC seeking to develop a clear line of sight from its recommendations to conditions, something that has no doubt occurred somewhat, but the true test will be if those conditions do mitigate impacts to water resources. This can only be tested over time. I do recognise the complexity and the uncertainty that the IESC operates in when trying to provide advice.

- Advices from the IESC have consistently found improvements to be made in proposals and directly demonstrates the effectiveness of the regulation in protecting water resources from the impacts of coal seam gas and large coal mining projects. These improvements have often followed assessment at the State level by the relevant agencies, nearly all of which are not 'independent' of the approval and assessment process. As the Issues Paper correctly notes, the IESC has on a number of occasions directly raised the interest of the Minister.

3. Identify any opportunities to improve the effectiveness of the regulation.

- To improve the regulation the linkage between the proponent and the company undertaking the EIS and modelling should be considered. Whilst the integrity of all interested organisations is not questioned, there is an imperative to get the project approved, creating a conflict of interest that should be made more transparent.
- The water trigger has been instrumental in incubating mechanisms and processes that assess and monitor cumulative impacts across many mines in the same locale, but there are serious legal impediments to the Minister considering cumulative impacts when assessing and conditioning an individual project, leading to the perverse potential of a 'death by a thousand cuts'. These impediments restrict the effectiveness of the regulation when cumulative impacts cannot be fully acted uponⁱ. Consideration as to effectively incorporating, conditioning and making compliant, cumulative impact management at the regional or affected landscape scale would seriously improve the potential for the regulation to effectively protect water resources.
- The regulation will benefit from a continual refining and understanding of the concept of significance. An impact of significance is very much scale related. The relocation of a stream or loss of a water source that is to be 'made up' to a farmer at their scale is obviously very much different to the felt impacts at a sub-catchment scale, and so on. It is however the reality that 'significance' of the many impacts at the micro scale aggregating up into larger scales has been missed when assessing and understanding impacts, as they do eventually and inevitably aggregate. Many projects in an area could well be judged to individually not be capable of having a 'significant' impact, yet their cumulative affects create the 'significance'.
- The Issues paper identifies a range of conditions that have been applied by the Minister that generally allow the project to continue - conditional on a 'management plan' being developed to 'ensure that any significant impacts on a water source are acceptable. There is an implicit assumption here that all impacts can be mitigated and it was a consistent message that I gleaned during my time on the IESC. These projects now operate on a number and scale unprecedented in the landscape and it is conceptually corrupt to work from the premise that each project should be treated individually; cumulatively they will have no impact; we know how natural systems behave and will react to these intrusions; and, there is always a management option.
- The condition, as identified in the Issues Paper, "identification of thresholds and limits relevant to the project's impacts on groundwater and surface water, including requirements to stop activity where limits have been reached" is indeed a bold, and innovative, condition. As far as I understand this condition is yet to be fully tested. It is also contended that when operating in natural systems where we do not yet fully understand thresholds and irreversibility, we,

collectively, do not have the knowledge to properly implement this condition and its obvious sensible intent.

- Other improvements include, infrastructure that has possible impacts on landscape functioning, particularly across floodplains. The project itself never sits in isolation in the landscape, it is vitally connected to the product transport facilities, generally rail, that is imposed on the normal water distribution services that an unimpeded floodplain provides. There are consequences when these facilities are placed across floodplains that flow on to other water services that have been provided by a functioning floodplain. These 'flow' on effects should be considered as part of the overall project impact.

4. Examine the efficiency of the regulation in protecting water resources from the impacts of coal seam gas and large coal mining projects.

- It seems totally incongruous that water was previously not considered a matter of national environmental significance. This is perhaps not surprising considering the legislative wrangling's that consistently plague the management and use of the 'flows of rivers' between the various jurisdictions. This focus on the 'flows of rivers' has only very recently, within past three decades, started to realise the great importance that groundwater has in the management and use of the arid Australian natural resources. Both industries that the water trigger targets, operate at depths below the ground surface and therefore have impacts on surface water but more substantially on groundwater.
- At the very least the 'water trigger' is an attempt to consolidate assessment and approval processes at the most appropriate scale, especially when that scale crosses arbitrary jurisdictional boundaries. Water does not respect these boundaries.
- I wish to reinforce the point about cumulative impacts. Historically the impacts from one project could be manageable. However, the impacts from an unknown number of projects cannot be reasonably assessed on case by case basis as to their collective abilities not to impact on water resources. This particularly relates to landscape processes that supply and move water around. I do consider that until there is an effective mechanism to assess the risks from cumulative projects the efficiency of the regulation in protecting Australian water resources is questionable.

5. Identify any opportunities to reduce or simplify the regulation whilst maintaining its effectiveness.

- There is the consistent call of duplication between the various jurisdictions. Whilst water management is the domain of the States, catchments, landscape processes and water do not recognise these boundaries. It would simplify the outcome sought by the regulation for a national assessment only.

6. Identify any recommended appropriate future review points of the regulation.

- It would be appropriate to review the regulation on a tri-annual basis.

General Comments

I note and support the findings of the “Independent Review of the National Partnership Agreement on Coal Seam Gas and Large Scale Coal Mining June 2015”, in particular Recommendation 3 dot point 5, and Recommendation 4. It must be considered that as these activities occur in local and regional landscapes ‘Stakeholder’ bodies many times offer little expertise and resources to keep affected communities informed. The most pertinent point from this Review is the role and use of the Completed (2016) Bioregional Assessments. There has been very little explanation offered to affected communities as to how they will be used in any planning process, given their significance and scientific credibility, and how they might benefit affected communities in relation to mitigating impacts.

Thank you for this opportunity,

Yours sincerely,

Jim McDonald

[Redacted Signature]

ⁱ Clayton Utz, 2015

http://www.claytonutz.com/publications/edition/23_july_2015/20150723/epbc_act_cumulative_impacts_under_the_microscope_latest_full_federal_court_decision.page