Submission regarding the Independent Review of the ‘water trigger’ legislation

29 January 2016

EDOs of Australia (Australian Network of Environmental Defenders Offices Inc.) consists of eight independently constituted and managed community legal centres located across the States and Territories.

Each EDO is dedicated to protecting the environment in the public interest. EDOs:

- provide legal representation and advice,
- take an active role in environmental law reform and policy formulation, and
- offer a significant education program designed to facilitate public participation in environmental decision making.

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**Introduction**


EDOA is well placed to comment on the Issues Paper. Many of our clients live in regional and rural Australia and are directly impacted by unconventional gas and mining activities. As such, our offices have provided a significant number of advices and brought dozens of cases under State and Territory planning, resource management and biodiversity laws in respect of mining and petroleum exploration, production and expansion activities, including cases involving impacts on water resources.\(^1\) We have also published numerous reports, discussion papers, peer-reviewed articles and educational materials regarding mining, natural resource management and the law.\(^2\) Finally, we have extensive experience advising in respect of water law and policy at both a State and Federal level.\(^3\)

The comments in this submission are intended to build on those provided in our response to the EPBC Amendment Bill (Water Trigger Bill).\(^4\) As noted in that submission, we firmly support the trigger. However, we believe that it should be broadened to apply to all large mines\(^5\) that excavate beneath the water table and to all large unconventional gas projects, including water intensive shale gas. Furthermore, having analysed the operation of the ‘water trigger’ over the last two years, we are now in a position to propose further amendments which would improve the trigger’s capacity to protect water resources.

Our submission addresses the following matters: 6

1. Why it was necessary to introduce the ‘water trigger’
2. Does the ‘water trigger’ duplicate State laws?
3. Bilateral approval agreements and the ‘water trigger’
4. Why is the wording of the ‘water trigger’ different to other matters of national environmental significance (MNES)?
5. Constitutional considerations
6. How the EPBC Act could be further amended to improve the effectiveness of the ‘water trigger’

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\(^1\) Recent EDO cases involving mining activities include: SHCAG Pty Ltd v Minister for Planning and Infrastructure and Boral Cement Limited [2013] NSWLEC 1032; Fullerton Cove Residents Action Group Incorporated v Dart Energy Ltd [2012] NSWLEC 207; Hunter Community Environment Centre Inc v Minister for Planning [2012] NSWLEC 195; Illawarra Residents for Responsible Mining Inc v Gujarat NRE Coking Coal Limited [2012] NSWLEC 259; Buzzacott v Minister for Sustainability, Environment, Water, Population and Communities (No 2) [2012] FCA 403; Queensland Conservation Council Inc v Xstrata Coal Queensland Pty Ltd & Ors [2007] QCA 338. Note that many of these cases involved impacts on water resources.


\(^3\) EDOA has prepared submissions in respect of the Proposed Basin Plan; the Murray-Darling Basin Ministerial Council s.43A Notice; the Water Amendment (Long Term Sustainable Diversion Limit Adjustment) Bill 2012; and the Water Amendment (Water for the Environment Special Account) Bill 2012, amongst others. Available at: http://www.edo.org.au/edonsw/site/policy_submissions.php#3

\(^4\) This submission is available online at: https://d3n8a8pro7vhmx.cloudfront.net/edonsw/pages/2559/attachments/original/1453417706/130404_EPB_C_Amendment_Bill_-_Water_Trigger_ANEDO_submission_FINAL_18_April.pdf?1453417706

\(^5\) Where a ‘large mine’ is defined as it presently is under the EPBC Act (in relation to a coal seam gas development or a large coal mining development): as a mine that is likely to have a significant impact on water resources.

\(^6\) These matters address terms of reference 1-4 and 6 set out in the Issues Paper.
7. Incorporating the results of bioregional assessment into decision-making involving the ‘water trigger’
8. Future reviews

1. Why it was necessary to introduce the ‘water trigger’

Community concern

The ‘water trigger’ was introduced in response to widespread and ongoing community concern regarding the impacts of coal seam gas (CSG) and mining development on water resources. It followed on from several unsuccessful private members' bills which similarly sought to improve national regulation of mining and unconventional gas activities likely to have a significant impact on water resources. Passage of the Water Trigger Bill was therefore seen as an important – albeit overdue – step toward restoring community confidence in national environmental laws.

However, it was and still is considered a relatively modest intervention. For example, it does not prohibit hydraulic fracturing (as is the case in several foreign jurisdictions); it does not require the Minister to refuse a development likely to have a significant impact on water resources; and it does not require the Minister to act consistently with the advice of the Independent Expert Scientific Committee (IESC). To that extent, further amendments are required if the public’s (and experts’) concerns are to be properly addressed. This issue is dealt with in greater detail in section 6 of this submission.

Inadequate regulation by State and Territory governments

Community concern emerged in response to inadequate regulation of these impacts (including cumulative impacts) under State and Territory legislation, as well as a failure by State and Territory governments to administer and enforce their own laws.

These concerns were outlined by the Commonwealth Senate Standing Committee on Environment and Communications in their report responding to the inquiry into the Water Trigger Bill. The report noted that:

_The committee received much evidence which demonstrated that there is a high level of concern in the community, especially in rural areas, about the possible adverse effects of CSG and coal mining on the availability and quality of water resources. There is also a strong feeling that the assessment and approval processes for these developments are inadequate._

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7 For a full analysis of these bills, please see: Carmody, Emma and Ruddock, K, Coal seam gas and water resources: a case for Commonwealth oversight ?, Australian Environment Review, April/May 2013, pp. 501 – 504. Available online at: http://d3n8a8pro7vhmx.cloudfront.net/edonsw/pages/613/attachments/original/1381895827/RuddockCarmodyAER283.pdf?1381895827
8 For example, moratoria on fracking are in place in France and Germany.
9 For a further information, see the Australian Network of Environmental Defender's Offices submission responding to this Bill: http://www.edo.org.au/edonsw/site/pdf/subs/130404EPBCAmendmentBillWaterTriggerANEDOsubmission.pdf
As NSW is often cited as having the strongest environmental assessment and approval laws in Australia, we have provided a brief analysis of the deficiencies of this regulatory regime (as it relates to CSG, mining and water) and two case studies in Annex 1.

**Reliance on other MNES to protect water resources**

Prior to the introduction of the ‘water trigger’, the Commonwealth Minister for the Environment had to rely on one of the existing MNES to regulate the impacts of CSG development and large coal mining development on water resources. Where one of these matters was not likely to be significantly impacted by a development, the Minister had no legislative basis to intervene under the EPBC Act. In practice, this meant that many CSG developments and large coal mining developments that were likely to have a significant impact on water resources could not be declared ‘controlled actions’ under the EPBC Act.

Furthermore, even where one of the eight MNES was ‘triggered’ under the EPBC Act and the Minister for the Environment issued a conditional approval, the Minister’s conditions had to relate to the matter of NES.11 Where the Minister chose to impose conditions to protect water resources despite a relatively weak link to the relevant MNES,12 they invariably exposed themselves to legal challenges. This was an undesirable and unsustainable strategy. The ‘water trigger’ therefore clarified the Minister’s power under the EPBC Act to assess and conditionally approve (or alternatively reject) CSG development or large coal mining development likely to have a significant impact on water resources.

### 2. Does the ‘water trigger’ duplicate State and Territory laws?

It is frequently claimed by industry and governments alike that the ‘water trigger’ and more generally the EPBC Act duplicate State and Territory laws. EDOA strongly disagrees with this assertion for the following reasons.

First, based on our analysis environmental regulation at a State and Territory level does not adequately address the specific requirements of the EPBC Act. This being the case, it is difficult to argue that assessment and approval of CSG development and large coal mining development under the EPBC Act is duplicative. We canvass this issue in considerable detail in our submission concerning the Draft Framework for Standards for Accreditation of Environmental Approvals under the EPBC Act 1999. Rather than repeating our comments, we refer you to our submission which is available online.13

Second, drawing on our extensive experience as environmental lawyers, we developed 10 best practice standards for planning and environmental regulation in response to COAG’s proposal to streamline environmental assessment. We then evaluated the relevant laws in each State and Territory against these standards. Based on our analysis, no State or Territory currently has a regulatory regime that reflects EDOA’s ‘best practice metric’. In short, this means that States and Territories do not adequately regulate the impacts of mining on water resources. Again, this negates any suggestion that assessment and approval under the EPBC Act is duplicative and therefore redundant. Conversely, it highlights the need for greater scrutiny of high-impact activities.

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11 EPBC Act, s.134.
12 See for example the conditional consent issued by Minister Burke for the Gloucester Gas Project on 11 February 2013. The conditions regarding water resources were justified on the basis of impacts on the Green and Golden Bell Frog, the Giant Barred Frog and the Small-flower Grevillea.
13 Dated November 2012 and available at: http://d3n8a8pro7vhmx.cloudfront.net/edonsw/pages/293/attachments/original/1380674202/121123COAGCt haccreditationstandardsANEDOsubmission.pdf?1380674202
by the Commonwealth Government. A copy of the 10 best practice standards is available online.  

Third, cumulative impacts may be considered under the ‘water trigger.’ As previously indicated, State and Territory laws generally do not consider adequately consider cumulative impacts when assessing and approving developments.

### 3. Bilateral approval agreements and the ‘water trigger’

The EPBC Act expressly prohibits the exclusion of the ‘water trigger’ from the bilateral approval process. Briefly, EDOA strongly supports the maintenance of this provision for the following reasons:

- devolving approval back to State and Territory governments would negate the purpose of the ‘water trigger’, thereby further undermining community confidence in national environmental laws;
- State and Territory laws do not adequately protect water resources (see section 1);
- State and Territory laws do not meet the requirements of the EPBC Act (see section 2); and
- State and Territory laws do not reflect EDOA’s ‘best practice metric’ (see section 2).

### 4. Why is the wording of the ‘water trigger’ different to other MNES?

While the ‘water trigger’ is different in form to the other MNES regulated under the EPBC Act, it is still based on the same test. That is, it only applies where a CSG development or large coal mining development is likely to have or will have a ‘significant impact’ on a water resource. In that sense, it does not deviate from the overall level of regulation and protection offered to all MNES.

Furthermore, once it is agreed that a matter is of national significance and therefore warrants regulation under the EPBC Act, it is necessary to ensure that the relevant sections under the Act are fit-for purpose. The wording of the ‘water trigger’ reflects the type of development it seeks to regulate and the nature of the impacts associated with that development.

We therefore support the current wording of the trigger, subject to the amendments suggested below.

### 5. Constitutional considerations

EDOA understands that concerns have been raised by opponents of the ‘water trigger’ regarding its constitutional validity. These concerns are apparently based on the fact that other MNES derive their constitutional validity from the external affairs power, while the ‘water trigger’ is based on the corporations power and trade and commerce power.

EDOA considers this argument to be entirely devoid of legal merit. Specifically, the High Court confirmed in the ‘Work Choices Case’ that the corporations power conferred broad power on the Commonwealth to legislate in respect of most areas directly or indirectly

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14 See attachment A of EDOA’s Draft Framework for Standards for Accreditation of Environmental Approvals under the EPBC Act 1999 submission.
relevant to the operation of corporations covered by s. 51 (xx) of the Constitution. Corporations covered by s. 51 (xx) are ‘foreign corporations, and trading or financial corporations formed within the limits of the Commonwealth’.

The majority of the High Court in the Work Choices Case adopted the position of Justice Gaudron in an earlier High Court case. In the earlier case, Justice Gaudron stated that:

I have no doubt that the power conferred by s. 51 (xx) of the Constitution extends to
- The regulation of the activities, functions, relationships and business of a corporation described in that sub-section,
- The creation of rights, and privileges belonging to such a corporation,
- The imposition of obligations on it and, in respect of those matters
- The regulation of the conduct of those through whom it acts, its employees and shareholders and, also
- The regulation of those whose conduct is or is capable of affecting its activities, functions, relationships or business.  

There can be no question that this covers the core business activities of unconventional gas and mining companies, namely the exploration and production of gas and minerals.

The trade and commerce power, which is provided for in s. 51 (i), enables the Commonwealth’s to regulate the transportation and exportation of gas and minerals.

Specifically, the High Court has held that the words ‘trade and commerce’ are to be interpreted in accordance with their ordinary meaning. This means that the Commonwealth may regulate ‘all the commercial arrangements of which transport is the direct and necessary result form part of trade and commerce.’ This includes written and verbal negotiations, as well as transport and delivery of goods.

The High Court has further held that the ‘trade and commerce power’ includes an ‘implied incidental power’ which enables the Commonwealth to regulate ‘all matters which may affect beneficially or adversely the export trade of Australia in any commodity produced or manufactured in Australia must be the legitimate concern of the Commonwealth…’.

Finally, the High Court has confirmed that the trade and commerce power can be used to prohibit (not just regulate) the exportation of minerals on environmental grounds.

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6. How the EPBC Act could be further amended to improve the effectiveness of the ‘water trigger’

As previously indicated, the ‘water trigger’ is an important first step in restoring community confidence in national environmental laws. However, it should be strengthened to more adequately address the breadth of concerns raised by the community and experts alike.

In the first instance, it is limited in its scope. That is, it only applies to CSG developments and large coal mining developments. Our submission responding to the Water Trigger

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16 Re Pacific Coal Pty Ltd; Ex Parte CRMEU (2000) 203 CLR 346 at 375.
17 W & A McCarthur Ltd v Queensland (1920) 28 CLR 530 at 546-7.
Bill outlines in some detail why the trigger should apply to all large mining developments that excavate beneath the water table and to all unconventional gas developments. We refer you to this submission, which is available online.20

Second, the Minister is not required to refuse a CSG or large coal mining development proposal because it is likely to have a significant impact on a water resource. Rather, the Minister may issue (and in all cases to date has issued) a conditional approval.

Third, the Minister is only required to take the advice of the IESC ‘into account’21. This is manifestly inadequate insofar as the Minister can ignore the Committee’s advice (despite the fact that it is based on best available science), as demonstrated by the following case study.

**CASE STUDY - Springvale Mine Extension Project, NSW (EPBC 2013/6881)**

**IESC advice**

Springvale longwall mine is located approximately 10 km northwest of Lithgow. The proposal involves the extraction of approximately 4.5 million tonnes/year of coal. The extension is to take place under the Newnes State Forest, with a large portion of the project occurring beneath the Temperate Highlight Peat Swamps on Sandstone (THPSS).

The THPSS are listed as endangered ecological communities under the EPBC Act. The IESC noted in its advice to the Minister regarding Springvale mine that the impacts of longwall mining on THPSS have been ‘severe, resulting in changes to the hydrological and hydrogeological regimes, vegetation composition and structure, and large reductions in THPSS extent.’ Furthermore, in a series of reports commissioned by the IESC, it was demonstrated that swamps are irretrievably damaged by longwall mining (that is, they cannot be rehabilitated).

In its advice to the Minister, the IESC raised a number of concerns about the impacts of Springvale mine on water resources and swamps. Specifically, it noted that:

- The EIS, including the groundwater model, does not provide a reasonable assessment of impacts on THPSS. It went on to note that ‘[c]onfidence in the groundwater model’s capacity to predict site specific impacts to individual THPSS is low’.

The IESC made a number of recommendations, including the following:

- The ‘only known strategy to reduce the risk of impact to the THPSS ecological communities within the project area would be to alter the mine layout such that swamps are not undermined by longwall panels and longwalls are sufficiently removed from THPSS such that tensile and compressive strains at THPSS sites are below 0.5 mm/m and 2 mm/m respectively.’

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20 Available online at: https://d3n8a8pro7vhmx.cloudfront.net/edonsw/pages/2559/attachments/original/1453417706/130404_EPB_C_Amendment_Bill_-_Water_Trigger_ANEDO_submission_FINAL_18_April.pdf?1453417706
21 EPBC Act, s. 136 (2) (fa).
Commonwealth Minister’s consent

- The Minister’s consent does not require the proponent to change its mine layout. We also note that the NSW consent did not require that the mine layout be altered.
- The Minister’s consent did include conditions stating that mine must not have ‘more than negligible impacts’ on the THPSS. However, this is problematic for two reasons. First, as noted by the IESC, the only way to prevent impacts on swamps is to change mine layout. Second, if mine layout is not altered, impacts on the THPSS are inevitable. Specifically, it has been noted that ‘when the relationship between groundwater and longwall mining is considered, the question is not if impacts will occur, but when they will occur.’ Evidence also suggests that these impacts will be significant.
- The Minister’s consent requires greater than negligible impacts to be offset pursuant to the Commonwealth offsets policy. However, EDOA has received expert advice indicating that due to the nature and location of swamps, few if any will be available for offset credits.

While there are a limited number of examples where the Minister imposes conditions based on the IESC’s advice, there is nothing in the Act which compels the Minister to do so.

We therefore recommend that the EPBC Act be amended to increase its capacity to protect water resources from the impacts associated with unconventional gas and mining activities. Specifically, the Act should be amended so that:

- the ‘water trigger’ applies to all large mines that excavate beneath the water table and to large unconventional gas projects;
- the Minister ‘must not act inconsistently’ with the IESC’s advice when determining the project;
- conditions of consent are required to reflect the IESC’s advice;
- the Minister must not approve a project until the proponent has adequately addressed any concerns raised by the IESC in their report.

7. Incorporating the results of bioregional assessment into decision-making involving the ‘water trigger’

The IESC has been involved in developing the scientific framework for bioregional assessment across coal and CSG-intensive regions. It is crucial that the information acquired through this strategic assessment process inform decision-making made under the ‘water trigger’, particularly in relation to cumulative impacts on water resources. This

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24 See for example the conditional consent issued by Minister Burke for the Gloucester Gas Project on 11 February 2013.
25 Where a ‘large mine’ is defined as it presently is under the EPBC Act (in relation to a coal seam gas development or a large coal mining development): as a mine that is likely to have a significant impact on water resources.
will necessarily involve refusing certain CSG and large coal mining projects, something that rarely happens under the EPBC Act.\textsuperscript{27}

\section*{8. Future reviews}

EDOA does not believe that the ‘water trigger’ warrants further individual review. In making this recommendation, we note that the other MNES are not subject to individual scrutiny. Rather, the EPBC Act requires the operation of the Act to be independently reviewed every 10 years.\textsuperscript{28} The most recent review was undertaken in 2009 by an expert panel chaired by Dr Allan Hawke. This was an exhaustive and widely consultative report which resulted in 71 recommendations for reform to build on the Act and improve its efficiency and effectiveness.\textsuperscript{29} Rather than conducting ad-hoc reviews of individual MNES, there is a strong argument to be made in favour of revisiting and giving effect to Dr Hawke's recommendations.

\begin{footnotesize}
\begin{itemize}
\item[27] Only 10 of the 732 matters requiring Ministerial assessment and approval under the EPBC Act have been refused. See Australian Government, \textit{Department of the Environment Annual Report 2013-14}, p. 212.
\item[28] EPBC Act, s. 522A. The review must also examine the extent to which the Act's objects have been achieved.
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ANNEX A

Deficiencies in NSW assessment and approval laws

Environmental assessment and development consent for mining and petroleum exploration and production activities in NSW is governed by three central parts of the Environmental Planning and Assessment Act 1979 (EPA Act): Part 3A, Part 4 (State Significant Development or SSD), and Part 5.

Of principal concern is the fact that Part 3A, Part 4 (SSD) and Part 5 all confer broad discretion upon the relevant decision-maker to determine how environmental impacts will be assessed, and subsequently whether consent will be granted. There is therefore no guarantee of comprehensive EIA of these projects on groundwater in NSW legislation. The following two case studies illustrate our concerns.

CASE STUDY – Part 3A and impacts on water resources

Barrington-Gloucester-Stroud Preservation Alliance Incorporated v Planning Assessment Commission and AGL Upstream Infrastructure Investments Pty Limited (2012) (Gloucester Gas Project Case)

EDO NSW, on behalf of Barrington-Gloucester-Stroud Preservation Alliance Inc. commenced judicial review proceedings against two decisions of the Planning Assessment Commission (PAC) to approve parts of the Gloucester Gas Project.

The Gloucester Gas Project involves 110 coal seam gas wells within a 210km area between Barrington and Great Lakes, transporting the gas from the processing facility to the existing gas supply network via a 95-100 km pipeline traversing several local government areas, and a gas delivery station at Hexham. The Alliance is concerned about the risks of surface and groundwater contamination and the lack of data about groundwater impacts.

The key issue raised by the Alliance in the hearing before the Land and Environment Court was that the PAC failed to properly apply the precautionary principle in approving the development on the basis of only preliminary groundwater investigations, and that certain conditions imposed in relation to groundwater and wastewater left open the possibility of a significantly different development from that for which approval was sought and were therefore uncertain.

Justice Pepper dismissed the claim, stating that the conditions imposed in relation to the project were within the permissible limits of Part 3A, were not uncertain with respect to impacts, and that the precautionary principle was adequately considered by the PAC in granting the project approval.

In short, the Court affirmed that the PAC was able to approve the project under Part 3A on the basis of preliminary groundwater studies.
CASE STUDY – Part 5 and impacts on water resources

Fullerton Cove Residents Action Group Incorporated v Dart Energy Limited & NSW Department of Trade and Investment, Regional Infrastructure and Services (2013) (Fullerton Cove Case)

EDO NSW acted for Fullerton Cove Residents Action Group (FCRAG) in a challenge to Dart Energy’s proposal for the drilling of coal seam gas exploration wells at Fullerton Cove near Newcastle. The Pilot Appraisal Exploration Program (PAEP) is for two vertical wells drilled into two separate coal seams, with four lateral wells, two in each coal seam. The PAEP includes the continuous pumping of water out from the coal seams (16,000 Litres per day) for 12 months, allowing the gas to flow. It is to be located on a floodplain zone, in a high water table area, near an internationally-listed RAMSAR wetland.

FCRAG argued that the PAEP is high-impact development, and Dart should have prepared a full Environmental Impact Statement (EIS), and be subject to the formal public consultation processes under Part 5 of EPA Act. FCRAG also argued that the PAEP was not properly assessed under Part 5 of the Act, particularly in relation to potential impacts on groundwater, threatened species and ecological communities. In particular, the Department of Trade and Investment had not been provided with any groundwater assessment by Dart before approving the project.

On 5 September 2012, FCRAG was successful in obtaining an injunction restraining Dart Energy from drilling the wells until the main case had been decided. The injunction was necessary because Dart refused to agree to stop work while the case was on foot.

The main proceedings were heard in the Land and Environment Court on 15-19 October 2012 before Justice Pepper. On 28 March 2013, Justice Pepper dismissed FCRAG’s case.

The Court found that although there was no consideration of any groundwater assessment, the Department had complied with its requirements to consider environmental impacts “to the fullest extent possible” under s111 of the EPA Act. Her Honour took into account the fact that this was a pilot project, and the Department had general knowledge of the geology of the area, and information collected in reports for nearby exploration wells.

In summary, Her Honour considered that Part 5 of the EPA did require either an EIS for the project, or the proponent to provide detailed groundwater studies before it was approved.