



Submission on

Proposed Amendments to the Queensland Regional Planning Interests Act 2014 in relation to the Queensland portion of the Lake Eyre Basin

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1. Expertise and qualifications

I am the Director of the Centre for Ecosystem Science (CES), UNSW Sydney, established in 2009. I have worked for 38 years working as a river scientist in government and university sectors. Much of my work, with my colleagues, has focused on rivers and wetlands of the Murray-Darling Basin and Lake Eyre Basin. My research has been supported by the Australian Research Council, all governments of Australia, including the Australian Government (various environment agencies, Murray-Darling Basin Authority), and non-government organisations (e.g. Birdlife Australia).

All of my research has supported instruments of government in implementation of policies and management of Australian Rivers. I also have an established track record in the research and management of river ecosystems and their biodiversity. My publications predominantly focus on the ecology, management and policy of rivers and wetlands. These include co-authorship of 141 peer reviewed publications, 26 book chapters, five books and 95 technical publications and reports. I have a long history of completing research and research and technical projects for governments in relation to river and wetland management, particularly focused in the Lake Eyre Basin. I advise State and Australian Governments on matters related to the policy and management of rivers. In 2017, I edited a book on the management of the rivers of the Lake Eyre Basin in which the current Premier Palaszczuk, in the forward, reiterated the importance of the rivers and the community and their protection (Kingsford 2017a).

I have assisted state and Commonwealth governments through the following advisory bodies in the Lake Eyre Basin: Cooper Creek Catchment Committee, Lake Eyre Basin Community Advisory Committee, Lake Eyre Basin Scientific Advisory Panel and the Queensland Government Advisory Panel on the management of Wild Rivers.

There is a need for a state, national and international focus on the rivers of the Lake Eyre Basin and their future protection. The Lake Eyre Basin rivers were recognized with the National River Prize in 2014 and the International River Prize in 2015. Much of the flows that make these rivers internationally important comes from the upper catchments in Queensland. The wetland of international significance in South Australia, Malkumba-Coongie Lakes, are dependent on river flows that come down from Queensland.

2. Background

There is widespread evidence that the ecological health of the Lake Eyre Basin rivers is in good condition, reflected in the recent assessment of basin condition (Lake Eyre Basin Ministerial Forum 2017) and other assessments (Pisanu et al. 2015). In addition, long-

term surveys of more than 50 waterbird species over three decades indicate that the waterbird community is highly variable but with few trends (Kingsford et al. 2017a), apart from migratory shorebirds (Lake Eyre Basin Ministerial Forum 2017). Fish communities are also in good condition (Arthington and Balcombe 2017, Kerezy 2017, Lake Eyre Basin Ministerial Forum 2017). This contrasts other river systems in Australia. In addition, there are relatively few major development pressures (Crothers 2017, Kingsford 2017b) although increasing particularly in relation to mining (Mudd 2017). To this extent, the Lake Eyre Basin Agreement has been highly successful. This was also reflected in the winning of the National River Prize in 2014 and the international river prize in 2015, the first time that these prizes have been awarded to river protection, rather than river rehabilitation.

There has been a long period of development of protections for the flows of the Lake Eyre Basin Rivers, including the Lake Eyre Basin Agreement to which the Queensland Government is a signatory. It is critical that this well established ecological and cultural health and condition of the Lake Eyre Basin rivers in Queensland and elsewhere are maintained. This is a key component of the Lake Eyre Basin Agreement to which the Queensland Government is a signatory.

3. Review of the Regional Planning Interests Act 2014 as it relates to the Queensland portion of the Lake Eyre Basin

Current status and proposed amendments

The Queensland Government is reviewing the Regional Planning Interests Act 2014 to “*work with traditional owners, stakeholders and communities to ensure the State’s pristine rivers are protected. This will include a review of the extent to which the Regional Planning Interests Act 2014 provides adequate protection for these rivers*”.

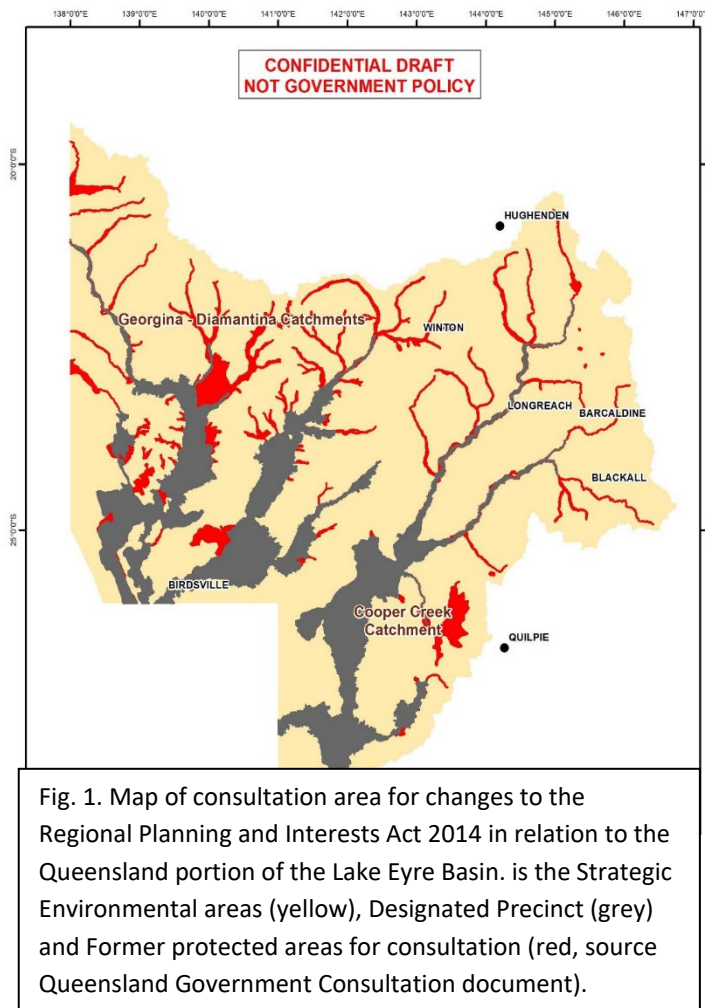
This review focuses on the management of Queensland streams and catchments of the Lake Eyre Basin (Fig. 1). There are some key policy elements of this review which are currently under consideration by the Queensland Government. These build on a long history of commitment to protection of the rivers of the Lake Eyre Basin which has also come under threat (Tan 2017).

Currently, all areas are open to exploration for all resources and all petroleum and gas activities. The following are currently unacceptable uses in the Designated Precinct (DP) areas: broadacre cropping (e.g. irrigation); water storage dams and open cut mining.

Amendments proposed for Designated Precinct areas include the following acceptable uses

- Exploration for all resources (but may not be able to proceed to production given the unacceptable uses listed below)
- Mining (except open cut in the DP which is an unacceptable use). An open cut mine may not be able to demonstrate compliance with the additional environmental

attributes.



Further unacceptable uses in Designated Precincts are to be expanded to include “high impact petroleum and gas activities”:

- infrastructure for processing or storing petroleum or by-products, including gas compression;
- low hazard dams and all regulated dams;
- borrow pits;
- permanent campsites / workforce accommodation;
- waste disposal and;
- other supporting infrastructure for the project (for example sewage treatment plants).

In addition, current environmental attributes

include beneficial flooding; natural hydrological processes and natural water quality. These are to be expanded to also include geomorphic processes; functioning riparian processes; functioning wildlife corridors and; Aboriginal cultural heritage.

There is also a commitment to streamlining approval processes but there is little detail on adequacy of assessing environmental and cultural heritage impacts.

4. Implications of the proposed changes for the goal “to ensure the State’s pristine rivers are protected”

There are welcome positive initiatives in the proposed changes to legislation and resulting policy which will help protect the pristine rivers of the Lake Eyre Basin in Queensland and achieve the stated goal. However, there are also serious negative implications of the proposed changes which will threaten this goal and challenge Queensland’s responsibilities in terms of good environmental management and commitment to the rivers of the Lake Eyre Basin.

i. Positive implications

- b. There is a clear recognition and legislative pathway showing the Queensland Government's commitment to the protection of the pristine rivers in the Lake Eyre Basin, through explicit policies and proposed changes to legislation.
- c. There is a clear commitment to protecting some floodplain areas of the pristine rivers through the delineation of flooded areas in the channel country where there are some restrictions on developments (but see below).
- d. There are an increased number of areas included in the Strategic Environmental Areas, extending across to the Georgina and Diamantina River catchments (Fig. 1).

ii. Negative implications

a. Removal of areas from the Designated Precinct

Substantial areas on the Georgina-Diamantina floodplain, western part of Cooper Creek floodplain and Kyabra Creek catchment have been removed from the original Designated Precinct Areas (red areas, Fig. 1). Kyabra Creek floodplain, one of the areas removed, can provide significant flooding which flows down into South Australia as well as affect flooding on Cooper Creek and alter distribution of flooding. Similarly, Farrars Creek channels can make substantial differences to flooding and natural hydrology. Removal of these systems from the Designated Precinct Areas exposes them to a range of potential impacts from exploration and development which can affect natural flooding regimes (see below). Further, many tributary systems are also removed. Any major impacts on these tributaries (e.g. Thomson River) as a result of resource developments could have significant impacts on downstream flows, affecting the condition and health of these rivers and flow and flooding regimes downstream, including to the Ramsar-listed Malkumba-Coongie Lakes Ramsar site. This is a significant concern because these areas may be affected by development which affect the natural flow variability of the floodplain, which are currently considered unacceptable in Designated Precinct Areas. There is no transparency or rationale provided for why these areas were removed from this designation.

Recommendation – Areas removed from the Designated Precinct areas should be reinstated, unless there is an adequate hydrological, ecological and cultural reasons why they should not be protected. There should be protection of the internationally significant rivers and their floodplains for future generations.

b. Inadequate control of structures which may affect natural flooding regimes

There is inadequate consideration or inclusion of a range of structures which may be part of resource exploration or development, including levees banks, roads, raised gas pads which can affect flooding patterns. There is clear evidence that a range of minor changes on the floodplain (e.g. levees and roads) can affect the flooding of natural areas and may even alienate parts of the floodplain. This is documented for areas in South Australia (Costelloe 2017) but has also occurred in other parts of the floodplain. For example a road near Longreach affected flooding in the Thomson River. Such developments could be included but only after there is a hydrological and environmental assessment of their impacts and mitigating strategies if they impact on flooding. Further, there is no commitment to monitoring their effects (see Monitoring and Compliance).

Recommendation – All structures should be controlled which potentially affect flooding regimes, including drilling pads and roads.

c. Inadequate control, assessment or monitoring of gas infrastructure (exploration and development)

The proposals do not adequately protect the floodplain and rivers from the potential impacts of gas exploration and development, including infrastructure (e.g. roads, drilling pads). and the (outlined above in relation to their negative consequences) do not adequately represent the responsibilities of the Queensland Government under the Lake Eyre Basin Agreement. The Lake Eyre Basin Agreement has helped protect the river flows of the Lake Eyre Basin Rivers making it one of the great desert river systems in the world that remains largely unregulated (Kingsford et al. 2014). Successful mitigation of threats by communities and governments continue to provide important policy and community support for the protection of river flows (Tan 2017). These current changes to adequately protect the natural variability of flows of the Lake Eyre Basin Rivers.

Recommendation – There should be no gas infrastructure (exploration and development) allowed on Designated Precinct Areas (including those removed) unless there is clear demonstration that hydrological (flow and flooding patterns) and water quality are not affected.

d. Lake Eyre Basin Agreement

The proposals (outlined above in relation to their negative consequences) do not adequately represent the responsibilities of the Queensland Government under the Lake Eyre Basin Agreement. The Lake Eyre Basin Agreement has

helped protect the river flows of the Lake Eyre Basin Rivers making it one of the great desert river systems in the world that remains largely unregulated (Kingsford et al. 2014). Successful mitigation of threats by communities and governments continue to provide important policy and community support for the protection of river flows (Tan 2017). These current changes to adequately protect the natural variability of flows of the Lake Eyre Basin Rivers.

Recommendation – The Queensland Government needs to demonstrate that the inadequacies identified in this submission do not affect its commitment to the Lake Eyre Basin Agreement.

e. Downstream impacts of changes on Malkumba-Coongie Lakes Ramsar site

There are inevitable impacts of changes to flow and flooding regimes which affect downstream systems in a connected river catchment. For example, redistribution of floodwaters as a result of a levee bank may mean there is a reduction of flows re-entering the main channel of a river and reducing flows downstream. It is not clear what changes the proposals, particularly those that do not adequately consider deleterious effects will have on the Malkumba-Coongie Lakes Ramsar site. This is also a matter of international and national significance under the EPBC Act.

Recommendation – There should be an assessment of the potential impacts of changes in the management of the Lake Eyre Basin Rivers in Queensland on downstream flows, particularly to the internationally important and Ramsar-listed Malkumba-Coongie Lakes system.

f. Streamlining of approvals

There is little information on how this will be achieved and whether it will be adequate. Currently, there is relatively poor assessment of small developments (e.g. roads, levees) which can significantly affect flood distribution and natural flow regimes. Cumulatively these can have a significant impact. It is also not clear how infrastructure for gas exploration and development will be assessed (see comment above).

Recommendation – There should be explicit processes identified for assessment of proposals (large and small) which affect the natural flow and flooding patterns of the Lake Eyre Basin Rivers. This should include impacts on threatened species, communities and cultural heritage.

g. Monitoring and compliance

There is no clear identification or transparency in reporting by the Queensland Government of current or future potentially deleterious threats and their

subsequent impacts on the rivers of the Lake Eyre Basin. For example, there are few publications which adequately identify the potential and actual development of water resources in Queensland (Crothers 2017). It is also important to identify the potential exploration and development impacts of the oil and gas industry on the floodplains and rivers of the Lake Eyre Basin (Kingsford 2017b, Mudd 2017). The spillage of the Lady Annie Mine represents another challenge with insufficient reporting of the extent of the spillage or the long-term impact and likely rehabilitation costs (Taylor and Little 2013, Mudd 2017). There is a poor track record of adequate monitoring of potential threats or spatially explicit public information on the distribution of infrastructure in the Lake Eyre Basin that could affect river flows.

Recommendation – There needs to be spatially explicit data made available to communities, including the location and size of all infrastructure (dams, weirs, levees, roads, pads, resource developments). And there should be monitoring of the effects of these structures on downstream flooding patterns, including impacts on floodplain areas and downstream to South Australia.

h. Consultation

There was inadequate consultation both in terms of the implications of the changes or the engagement of the regional Lake Eyre Basin community, the scientific community or Traditional Owners. There is a strong network established across the basin, particularly strengthened increased Aboriginal involvement. This community has been integral to protecting the river and ensuring that major deleterious developments are identified and adequately discussed and resisted if necessary (Kingsford et al. 2017b). This community was not adequately consulted. The community broadly was not provided with the key evidence necessary for protecting the pristine rivers of the Lake Eyre Basin, including products from government coordinated workshops.

Recommendation – More information needs to be provided on the rationale for decision-making to improve public confidence.

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