

October 2014

Submission on Water Reform and Other Legislation Amendment Bill 2014

Report by SEQ Catchments Chief Executive Officer, Simon Warner
Level 2 183 North Quay Brisbane



Introduction

SEQ Catchments broadly supports the direction of reforms embodied in the Water Reform and Other Legislation Amendment Bill and welcomes the opportunity to comment on the Bill currently to the Agriculture, Resources and Environment Committee. Our specific comments relate to the following key issues:

- 1- Amendments to the River Improvement Trust Act
- 2- Waterway Identification Mapping process under the Water Act
- 3- Riverine Protection Permits Granted under the Water Act
- 4- Quarry Material Allocation under the Water Act
- 5- Water Planning Processes
- 6- Riparian Vegetation Management

About SEQ Catchments

SEQ Catchments is a natural resource management organisation that works with the community, the corporate sector and all levels of Government to ensure the long-term sustainability of the natural assets of South East Queensland. In over a decade of operation SEQ Catchments has delivered more than a thousand projects aimed at protecting and restoring the functionality of regional ecosystems. Many of these projects have involved maintaining and improving water quality and required significant engagement with landholders to deliver onground works in the rivers and creeks of the region. As such SEQ Catchments is well placed to make an informed commentary in regard to the Bill particularly in relation to the protection of the region's natural water values.

SEQ Catchments is jointly owned by the SEQ Council of Mayors and the SEQC Members Association which comprises industry and producer groups, land and coast care groups, universities and individuals with an interest in natural resource management in the South East Queensland region. This provides us with a unique understanding of the challenges in the region in relation to the operation of the Water Act. Key amongst these is the need to supply cost effective catchment sourced water to a population of more than three million people, supporting some of the States major horticultural areas and protecting the environmental values of the internationally listed Moreton Bay. Continued population growth will increase the pressure on the region waterways to provide a range of important services. SEQ Catchments supports the Government's endeavours to craft reforms that provide Statewide consistency, while providing the flexibility to respond to regional needs.

Amendments to the River Improvement Trust Act

Changes to the River Improvement Trust Act (1940) are strongly supported by SEQ Catchments with some minor modifications. The modernisation of the Act will provide a powerful instrument for tackling the serious issues of river degradation in South East Queensland which impacts heavily on the region's economic and environmental health. Examples of the negative impacts of the region's degrading river include loss of agricultural productivity, cost and reduced reliability of the potable water supply, siltation of shipping channels and reduced tourism and recreation opportunities. The expansion in the object of the Act to include river catchment areas is an important change to allow for the implementation of modern catchment management techniques.

Establishment of a river improvement area with the powers identified in the Act across the majority or all of a catchment within South East Queensland will be an important step forward in tackling the persistent and unresolved issues of catchment management in high risk areas such as the Logan and Brisbane River Catchment.

Under Part 2 - Establishment of river improvement trust areas - local government boundaries are used as the basis of the trust boundaries. In some instances this may exclude key areas of a river catchment from being included in the scheme and be against established understandings of integrated catchment management and the changes to the object of the Act. Therefore SEQ Catchments suggest that under clause 23 part 2 section 3 (2) the wording should be changed to include 'A river improvement trust must be made up of all or part of a river catchment'.

Over the past decade the Australian and Queensland Governments have made a major investment in natural resource bodies such as SEQ Catchments. SEQ Catchments is a membership-based organisation representing various sectors such as Landcare, Agriculture, Traditional Owners, Environment, Local Government and Industry. SEQ Catchments has developed significant expertise in planning and implementing river restoration and catchment management and it would be of advantage to the Trusts set up under the Act to include them as either members or in another formal capacity. As such consideration should be given in the Bill to recognising accredited natural resource management bodies under Amendment of S 5 (Membership of a Trust) to maximise this expertise and outcomes from previous investment.

Local Government members of SEQ Catchments have expressed concern regarding provisions related to membership of the Trust. In particular under clause 24 there is a concern that under section 5 1A there is not an obvious opportunity for local government to be represented. As such it is suggested that a new sub clause be added: (1A) (c) a person or persons nominated by the relevant Local Governments covered in the river improvement area that the Minister is satisfied are suitable.

Local Government members have also expressed concern regarding Clause 41 Section 14 (1C) regarding the liability of local government to contribute to a river improvement trust. As currently drafted there is ambiguity. SEQ Catchments suggest that the Ministers ability to decide the amount to be contributed be limited to at least that which had been agreed and contributed previously or the previous year where a contribution has been made. This would limit the amount that the Minister could decide but still leave room for the Minister to direct a contribution should a council not agree a reasonable amount. Adding the words "no greater than the previous annual contribution by the local government" may help allay the concerns of members. Additionally the inclusion of a formal dispute resolution process could be considered.

Waterway Identification Mapping

While SEQ Catchments understand the desire to implement a planning system based on clarity regarding the differentiation between various waterway features through a watercourse identification map it has several concerns regarding the application of the process. Under the current Water Act *drainage feature* means a natural landscape feature, including a gully, drain, drainage depression or other erosion feature that—

- (a) is formed by the concentration of, or operates to confine or concentrate, overland flow water during and immediately after rainfall events; and
- (b) flows for only a short duration after a rainfall event, regardless of the frequency of flow events; and
- (c) commonly, does not have enough continuing flow to create a riverine environment.

Within the South East Queensland region changes to the drainage features of the upper catchment can have potentially large impacts on downstream water quality in tributaries and water catchments with subsequent significant economic impacts. As the explanatory notes to the Bill indicate it is often difficult to identify where the boundary between a drainage feature and a watercourse lies. As such the mapping process and identified differentiation between a drainage feature and watercourse feature will be critical to water quality outcomes¹.

A large proportion of the total stream and river network in South East Queensland that makes up the water ecological infrastructure is small gullies. For much of the time, these are dry and not easily identifiable as important parts of the waterways, however after rain, they become the drainage lines channelling runoff. A vast branching network is formed that eventually coalesces to form larger streams and rivers. In southeast Queensland these gullies or 'first order streams' make up a very large proportion (approximately 7,500 km) of the total waterway length (almost 16,000 km). Many of these smaller gully networks have been poorly managed in the past and have lost most of their native vegetation. Vegetation plays an important role in holding the soil in place and preventing gully erosion, particularly during heavy rainfall.

The definition and mapping exercise is important as only works within an identified watercourse (not drainage feature) trigger the processes under Part 4 Division 1 of the Bill granting permits for excavating or placing fill in a watercourse, lake or spring. A key consideration in deciding the granting of a riverine protection permit is the effects of the proposed activity on water quality. The cumulative impacts of unregulated changes to drainage features particularly in the more densely populated South East corner of Queensland where peri urban landownership is greater and development pressure is growing could have potentially significant impacts on water quality, the availability of water for other users, groundwater recharge and downstream flooding.

Under Part 7 Amendment of Vegetation Management Act in the Bill the importance waterway identification mapping is again highlighted as the basis on which vegetation clearing in a watercourse or lake is regulated. Given the importance of the mapping in relation to water quality outcomes particularly in South East Queensland SEQ Catchments requests further clarification on the process to be established by the Department for the drafting and consultation regarding the mapping exercise. SEQ Catchments has extensive resources and expertise in waterway mapping that may be of assistance in this task.

Riverine Protection Permits

Part 4 Riverine Protection Permits allows applications to the chief executive for a permit to excavate or place fill in a watercourse, lake or spring. Section 220 establishes the criteria for deciding the application and includes factors such as:

- Effects on water quality
- Quantity and type of material to be excavated or placed
- Seasonal factors
- Affected vegetation
- Physical integrity of the watercourse
- Cumulative effects of similar applications

The excavating or placing of fill in a watercourse can have serious implications on a range of waterway related values and it is suggested that the list of criteria should be expanded to include the following issues:

- Impacts on critical habitats of aquatic species
- Impacts on habitat connectivity
- Risks to downstream infrastructure such as dams and water treatment plants
- Land degradation impacts
- Flooding impacts

A requirement for ongoing monitoring and reporting should be considered. Applications considered high risk on the basis of the volume of material to be excavated or filled could be required to develop an environmental impact

management plan to avoid, reduce, mitigate and where necessary offset impacts from excavation and filling activities as part of the permit conditions.

Under Section 228 of the Bill the Chief Executive can amend or cancel a permit if the conditions are not being complied with or it becomes evident that the adverse effect of the permitted activity is greater than was anticipated when the permit was issued. While this provision is supported it should be noted that the Bill contains no make good provisions enabling the chief executive to instruct the applicant to remediate the greater than expected outcomes even if the activities have been non compliant with the permit.

Quarry Materials

Extraction of sand and gravel from waterways has the potential for serious impacts on the health of regional rivers. Increasing construction activity and pressure to upgrade road networks will create unprecedented demand for sand and gravel, especially in the South East Queensland region. Extracting sand and gravel from regional rivers is a recognised environmentally high-risk activity. Potential issues associated with sand and gravel extraction within waterways include:

- Acceleration of erosion and sedimentation
- Deepening the bed may trigger headward erosion or bank erosion
- Altered flow regime during and after the works
- Loss of habitat and breeding areas for in-stream biota
- Loss of vegetation on stream banks and in stream large woody debris
- Potential for the stream to change course
- Potential to alter floodplain flows
- Potential for contaminants from machinery to reduce water quality
- In-stream sediment mobilisation.

Sand and gravel extraction from waterways can have lasting long-term impacts. The cumulative effects of multiple mining operations along a river reach can be much greater than the effects at just one site due to up or downstream migration of channel changes. Extraction of sand and gravel from rivers is not considered good practice and is actively discouraged in Victoria and New South.

Under Section 229 of the Bill the chief executive when considering the granting of a quarry allocation must consider:

- The physical integrity of the watercourse or lake, including bed and bank stability
- The condition of the watercourse or lake, including its ability to function naturally
- The supply of sediments to estuaries and the sea from the watercourse or lake

 The quarry material available in the watercourse or lake and any existing quarry material allocations in relation to the watercourse or lake.

Given the high-risk nature of the activity SEQ Catchments recommends that similar to the granting of Riverine Protection Permits the following issues should also be considered:

- Cumulative impacts from other similar activities
- Impacts on critical habitats of aquatic species
- Impacts on habitat connectivity
- Potential impacts on downstream infrastructure such as dams and water treatment plants
- Potential impacts on other downstream users
- Flooding resilience and impacts
- Ability of the area to recover
- The environmental record of the proponent.

There also needs to be a consideration of the inclusion of performance measures and a monitoring program associated with the granting of an allocation. The requirement on a proponent to develop and implement an environmental impact management plan including methods to avoid, mitigate and offset impacts should also be included. The requirement for a rehabilitation component following the cessation of quarrying should also be part of the allocation process. While the chief executive has the ability to suspend the allocation if the conditions have not been met or there is unforeseen degradation of the watercourse or lake there are again no make good provisions identified.

Activities under both riverine protection and quarry allocation permits can potentially have significant impacts on waterways. SEQ Catchments suggests that within South East Queensland in particular all works on drainage features and waterways should be potentially code assessable. The recently developed legislation related to the construction and modification of levees provides an innovative model. Under the legislation any person planning to construct or modify a levee must give consideration to the potential effects of their levee on the movement of floodwater, and how this could affect other people and properties. The level of assessment of a levee will depend on the levee category. The three categories are:

- Category 1 levees do not have any off-property impacts and are subject to self-assessment.
- Category 2 levees do have off-property impacts and have an affected population of less than 3 people and are subject to code assessment.
- Category 3 levees do have off-property impacts and have an affected population of at least 3 people and are subject to impact assessment.

A similar model for works in waterways (drainage features, watercourses and lakes) is suggested to the Committee as a way to efficiently manage the potential water quality impacts.

Water Planning

The Water Act is the most powerful Act impacting on the waterways of Queensland. Planning for the management of water is done through preparing and implementing water plans and preparing and implementing water use plans. Both sets of plans are based mainly on the allocation of water. Under the Act there is little provision for a statutory water plan based on protection of water quality. This would be especially beneficial in catchments such as those in South East Queensland and the Great Barrier Reef where declining water quality has the potential to have significant economic impacts. It is worth noting that under the Victorian Water Act an overarching Sustainable Water Strategy is prepared to address threats to the reliability and quality of water prior to allocation planning. The Victorian Water Act also has provision for water supply protection plans designed specifically to protect water quality in drinking water catchments.

SEQ Catchments requests that the Agricultural Resources and Environment Committee consider the inclusion of water quality within elements of the Queensland water-planning framework.

Management of Riparian Vegetation

As the Committee would be aware SEQ Catchments in its April 2013 submission on the Land, Water and Other Legislation Amendment Act raised serious concerns regarding the level of protection provided under various Acts for riparian vegetation in South East Queensland. Significant evidence surrounding the importance of riparian zones in protecting water quality exists. Works associated with Riverine Protection Permits and Quarry activities allowed under the Water Act are provided with vegetation clearing exemptions within a watercourse or lake provided the area to be cleared is less than 0.5 hectares. Similarly exemptions exist for as of right clearing under emergency provisions. Clearing of 0.5 hectares of riparian vegetation where the vegetation is in a thin strip along river could have serious consequences in terms of the length of potential riverbank degradation and destabilisation. For example the clearing of 0.5 hectares of a 10-meter wide riparian zone would equate to half a kilometre of clearing. Moreover given the population density in South East Queensland and number of small landholdings the cumulative impacts of unregulated riparian zone clearing could be significant. Therefore SEQ Catchments requests that the Committee consider ways that the riparian zones of South East Queensland can be protected and that the cumulative impacts are appropriately managed.

Recommendations

That the Agriculture, Resources and Environment Committee consider the following:

- Providing flexibility to allow River Improvement Trust boundaries to be defined based on catchment boundaries.
- Recognising accredited regional natural resource management organisations in the River Improvement Trust Act.
- Clarifying Local Government membership of a River Improvement Trust under clause 24.
- Clarifying ambiguity regarding the Ministers' powers to compel Local Governments to contribute to a River Improvement Trust and an appropriate dispute resolution process identified.
- Clarifying the process for establishing, communicating and consulting on a South East Queensland waterway map and providing the capacity to amend the map when deficiencies are identified.
- Expanding the range of considerations that the Chief Executive takes into account when considering riverine protection permits and quarry allocations to include:
 - o aquatic species habitat
 - habitat connectivity
 - o downstream impacts on infrastructure
 - o downstream impacts on other users
 - o flooding resilience of site
 - o ability of area to recover
 - o cumulative impacts of similar applications
 - o environmental record of the proponent
 - o monitoring requirements
- Including 'make good' provisions as a part of riverine protection permits and quarry allocations for when permit conditions are not met or environmental impacts are greater than expected.
- Requiring Environmental Impact Management Plans outlining avoidance, mitigation, offset and rehabilitation activities for certain categories of works in waterways.
- Providing the regulatory capacity to categorise works in waterways based on potential impacts and for this categorisation to determine the level of assessment required (similar to recent regulatory provisions introduced to regulate levees).
- Introducing provisions to protect water quality into the water planning framework
- Removing 'as of right' provisions for riparian clearing in South East Queensland.

SEQ Catchments would appreciate the opportunity to appear before the committee to further discuss the above and other matters associated with the Water Reform and Other Legislation Amendment Bill 2014.