



# COMMENTS ON CALOUNDRA SOUTH DRAFT PUBLIC ENVIRONMENT REPORT

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Report by SEQ Catchments Chief Executive Officer, Simon Warner

183 North Quay Brisbane

[swarner@seqcatchments.com.au](mailto:swarner@seqcatchments.com.au)

07 3211 4404

SEQ Catchments is the identified Regional Natural Resource Management Body for South East Queensland. We are a community-based, not-for-profit organisation helping to build a sustainable community that cares for and values the natural resources and biodiversity of South East Queensland, and that recognises the impact of personal and collective actions on the environment.

SEQ Catchments is highly concerned about the condition of waterways in South East Queensland and in particular Pumicestone Passage and associated waterways. Increasing population and associated development will create further pressure on key natural resources and unless managed innovatively and appropriately significant decline will occur having a detrimental impact on core environmental, economic and social assets. Water quality trade-offs is one of a suite of policy levers that can use to arrest this continued decline.

Eutrophication of waterways is a key regional issue. International experience shows that taking a broader perspective on landscape functionality and allowing trade-offs between sources can lead to a more cost effective outcomes and greater environmental benefit.

The existing poor condition of the Pumicestone waterways provides ample opportunity for sediment and nutrient reduction to be undertaken through a combination of built infrastructure solutions and environmental restoration. The failure of traditional approaches to manage cumulative impacts, the increasing cost of end of site solutions and a growing understanding of the sources and management of diffuse sources of sediment and associated nitrogen and phosphorous release into the landscape makes this an opportune time to move toward a program of water quality trade-offs in relation to the Caloundra South development.

The United States Environment Protection Authority has supported water quality trading between point and non-point sources as an alternative to command and control mechanisms in recognition of the opportunity to deliver greater environmental benefit through nutrient reduction at reduced cost. A study by Bacon (1992) in Washington State estimated that the cost of point source reduction could be 65 times higher than non-point source reduction. In a major case study of point, non-point source water quality trading in the Minnesota River Basin, Fang et.al. (2005) found that in terms of cost effectiveness in reducing pollutant loading to the environment, long term structural non-point source pollution control measures such as stream bank stabilization were substantially more cost effective than further treating point source waste water. The study also found that in addition to cost savings in pollution control, offsets trading projects brought other social benefits to the catchment including a balancing of environmental protection and regional economic growth.

SEQ Catchments has experience in reducing diffuse sediments within a landscape based on the outcomes of a major project undertaken by SEQ Catchments over the past two years entitled *Targeted Works to Reduce Sediment Exports to Waterways Entering Moreton Bay*. The project funded by the Australian Government under the Caring for Country program completed works in three focal catchments. Sediment reduction was achieved at an approximate average cost of \$145 per tonne.

SEQ Catchments recognises that the PER attempts to mitigate the effects of construction and ongoing runoff. However we are concerned that while the proposed measures may exceed current recommended performance criteria the development will impact on the water quality downstream and at the same time be costly to build and maintain. This is more significant in the construction phase but will also apply post construction. The downstream waterways are already in a highly degraded state and any additional loads regardless of how small will further degrade the system.

It is logical that effective best practice design and construction for the site in association with investment in catchment management activities will result in an improved overall water quality in the whole Pumicestone system. This would result in the development contributing to an improvement in the condition of the waterways (net gain) rather than the proposed best case scenario of no net loss.

SEQ Catchments recommends that Stockland Development Pty Ltd revise the proposal to include investment in catchment management elsewhere in the Pumicestone Catchment designed to reduce sediment in the system as a whole. Through advanced measurement and monitoring techniques it will be possible to ensure that the level of investment can be matched with the need to procure an overall reduction in sediment loads into the system. The

evidence shows that this will be able to be achieved at significantly lower cost as compared to the engineering solutions proposed.

SEQ Catchments would be happy to provide further information and evidence to support this recommendation should you need it. Please contact Mr Simon Warner CEO SEQ Catchments Ltd should you want further information regarding this matter.