Coastal Wetlands – Position Comment

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The Australian Coral Reef Society is philosophically opposed to further alienation of coastal wetlands. Mangroves, coastal swamps and wetland marshes are critical habitats. Aesthetically, coastal wetlands are important ecosystems for unique biota, maintenance of biodiversity and habitat for migratory/transmigratory birds. Importantly they fulfill a number of natural control functions greatly influencing coastal water quality, including the following:

- Wetlands are natural 'kidneys' filtering and cleaning waters of nutrients and chemicals entering coastal waters.
- Wetlands act as buffers to coastal erosion, trapping sediments from catchments and from tidal exchange.
- Wetlands provide vital habitats for coastal fisheries, acting as nursery areas for many commercial and recreational fish species.
- Wetlands provide vital areas of productivity for immediate food and for detrital food in estuaries and marine communities.

In tropical Queensland, coastal wetlands have a key role in ensuring of water quality in the Great Barrier Reef. The alienation and degradation of wetlands in much of the Queensland coastal areas has the potential to open up acid sulphate soils which can have major adverse effects on biological process and foodchains, and on engineering structures.

Common sense and specific scientific knowledge about the critical natural function of coastal wetlands militates against their modification and use for other purposes.

Demand for transformation of any area of coastal wetland must only be met where there is clear and agreed evidence of significant socioeconomic benefit to the Australian community as a whole, and appropriate safeguards put in place to ameliorate resultant coastal pollution.

The recent proposals by the Queensland Department of Natural Resources for channelisation and draining engineering in the Murray and Herbert catchments (SIIPS) do not meet either ecological or socioeconomic measures. Indeed, the engineering design and rationale demonstrate an 'end-of-pipe' concept, generally considered to be discarded some 20 years ago. Economic justification is absent – any agricultural advantage from the engineering work would need to exceed some US$14 785 per ha per year (the global yardstick value of coastal wetlands). The consultative process for the proposal could be best described as cavalier.

Aesthetics, biodiversity and international convention (Ramsar) issues aside, our best technologies cannot meet the function of wetlands as coastal buffers and water treatment facilities.