Development of the Great Barrier Reef Annual Report Card

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The Queensland Government and the University of Maryland Center for Environmental Science are developing an annual report card that creates and tracks metrics relating to the ecological health of the Great Barrier Reef system and agricultural land management drivers. The development of the report card began in 2010 with the preparation of a baseline report incorporating metrics for land management practice technique adoption, catchment land condition, pollutant loading, and reef water quality and biotic condition metrics.

Metrics are directly related to an ambitious policy directive from the Queensland Government that encourages agricultural land holders to adopt improved land management practices on their farms. Land practice adoption targets include 80% adoption of improved practices for nutrient, chemical and soils for most agricultural enterprises, and 50% adoption of improved pasture and riparian practices by grazing enterprises. The effect of these improvements will be tracked through continued monitoring of catchment land condition, pollutant loading through riverine inputs, and water quality and reef resource condition metrics. Program targets include a 50% reduction in nutrient and pesticide loading by 2013, and a 20% reduction in sediment loading by 2020.

Innovative reporting and visualization techniques are used to communicate results from the baseline report and will be incorporated into the annual report card. Although the Reef remains in moderate condition overall, initial results suggest that improvements to land management practice adoption should continue. The results highlight that there are significant areas of concern that justify the need for accelerated action to improve water quality and build resilience of the Great Barrier Reef. These include five to nine times the natural loads of pollutants; significant loss of some freshwater wetlands; decline of seagrasses in some areas and the exceedance of water quality guidelines for pesticides in marine areas.

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