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The Research Director
State Development, Infrastructure and Industry Committee
Parliament House
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Regional Planning Interests Bill 2013

I congratulate the Newman Government for its initiative in proposing the **new legislation which will** declare the Steve Irwin Wildlife Reserve and the Wenlock River in Cape York as Queensland's first ever "strategic environment area", and by so doing protect these areas from open cut and strip mining in perpetuity. There is a substantial body of scientific evidence that identifies the Steve Irwin Wildlife Reserve and the Wenlock River as containing some of the highest natural values in Australia.

I received a PhD in hydrology in 2002 and I have since being teaching and researching in this discipline at Australian Universities. I currently hold a 'Chair of Excellence' from the French research agency and I am a member of the UNESCO scientific committees on groundwater vulnerability from anthropogenic activities and arid zone hydrology. My research at the Steve Irwin Wildlife Reserve and across the Wenlock catchment started in 2010, and the objectives are to provide a better understanding of the hydrology of the Cape York region.

The climate of northern Australia is characterized by a prolonged dry season bearing little or no rainfall. With the exception of the Great Dividing Range, ephemeral springs and intermittent rivers sparsely punctuate most of this landscape. The Steve Irwin Wildlife Reserve on the contrary is characterized by the presence of vast and perennial spring systems. All of which are adjacent to the bauxite plateau and no more than a few kilometers away from the Wenlock River. These permanent springs support healthy groundwater dependent ecosystems of significant ecological value. Surrounded by savannah, the springs sustain distinct tropical rainforests that provide habitat for iconic species. The assemblage of plants appears to be unique to each spring.

The scientific data collected during our research clearly indicates that the bauxite plateau is the recharge area for these perennial springs in the Steve Irwin Wildlife Reserve and that therefore mining activities on the plateau would strongly affect the water quality and quantity at the springs.

The Wenlock River drains a pristine catchment. Hydrological data collected at the gauging stations show that the Wenlock River has a remarkably high baseflow when compared with other rivers of northern Australia. That is even during the dry season a substantial discharge of freshwater continues to flow in the Wenlock River. This perennial flow contributes to maintain rich and abundant aquatic ecosystems and lush riparian vegetation. Noticeably, before reaching the Gulf the Wenlock River forms a very large and significant estuarine system.

For these reasons, I wish to endorse the announcement by the government that any activities that risk irreversible, or widespread impacts to the ecological integrity of the natural values of the Wenlock strategic environmental area as identified in the Draft Cape York Regional Plan, will not be allowed. Legislation leading to this outcome will be seen as safeguarding this ecologically significant part of Queensland for future generations.

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Dr Marc Leblanc

ANR Chair of Excellence

