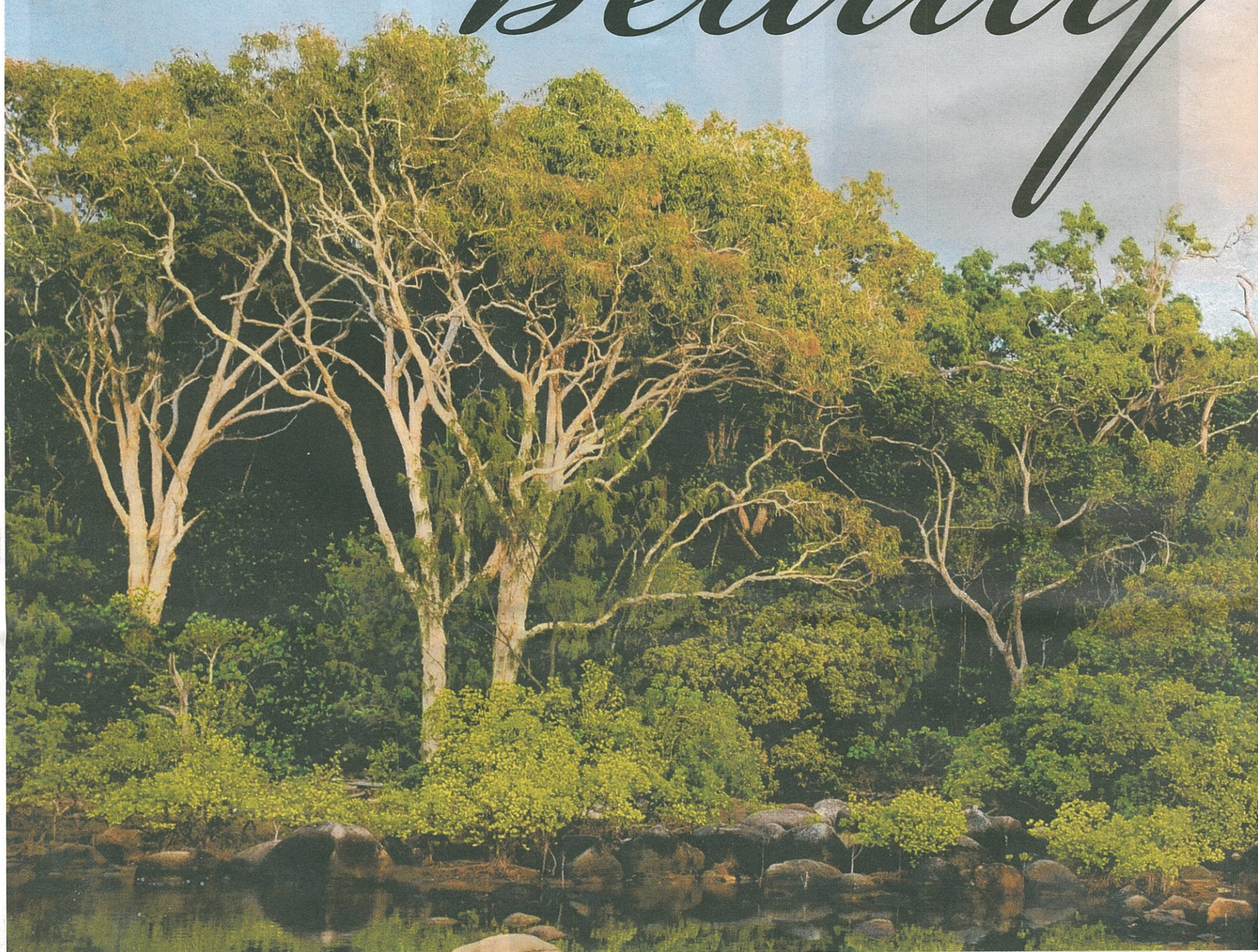


PRISTINE *beauty*

06



On a clear day, you can see the faint rocky speck of Hinchinbrook Island from Townsville.

The big island's jagged peaks can be seen without binoculars on a blue-sky day, even though it's 160km northwest, at the far end of Halifax Bay.

Bushwalkers and boaties excluded, many of us have scant knowledge of this carefully conserved domain of mangrove forests, seagrass beds, crocodiles and sea turtles.

Expeditions through its World Heritage, National Park and Wild River protected waters and walking trails demand motivation and planning.

Hence for most North

Queenslanders, Hinchinbrook Island is a craggy vista glimpsed as the Bruce Highway crosses the Cardwell Range or else seen from the air between Cairns and Townsville.

More than 80 years of conservation laws, beginning in 1932 with creation of the Hinchinbrook Island National Park, have yielded the island pride of place in a new book rating the health of Australia's coastal estuaries.

Deluge Inlet, the estuary of Boyd's Creek at the southeastern end of Hinchinbrook Island, is praised in a new book, *Estuaries of Australia in 2050 and Beyond*, as being in near-pristine condition and a vital nursery for many animal and plant species.

Dr Eric Wolanski, the Townsville scientist behind the survey, sees the island's intact wilderness as Queensland's gift to the world.

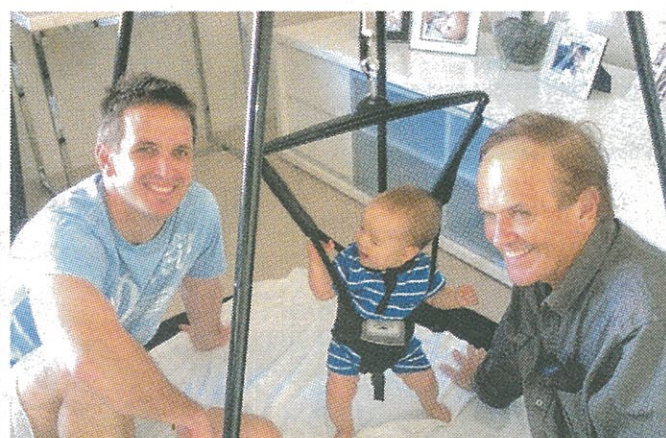
"We are very privileged to have one of the few places on Earth with an area so pristine," Dr Wolanski said last week.

Deluge Inlet, which feeds into Hinchinbrook Channel, is among 15 estuaries featured in the book edited by Dr Wolanski, of the JCU School of Marine and Tropical Biology, and his British colleague Jean-Paul Ducrotoy, of the Institute of Estuarine and Coastal Studies at the University of Hull.

Most estuaries are now under pressure.

The Lower Burdekin floodplain and estuaries of Hervey Bay and

HINCHINBROOK ISLAND HAS BECOME A SHINING EXAMPLE TO THE WORLD OF WHAT CONSERVATION CAN ACHIEVE, WRITES **IAN FRAZER**



Eric Wolanski, his son Philippe and grandson Oliver, and (below) Hinchinbrook Island's magnificent Thorsborne Trail.



FUTURE IS IN OUR HANDS

SAVVY public opinion can force political changes needed to repair damage to Queensland's ailing coastal estuaries.

That's the view of Dr Eric Wolanski, based on remediation projects in the US and southern states of Australia in response to public alarm over river and ocean pollution.

"Where impacts on human health are concerned we can't have a head-in-the-sand attitude," the world-renowned, Townsville-based coastal oceanographer said this week.

"Our future can be determined if our population is savvy and demands a healthy environment.

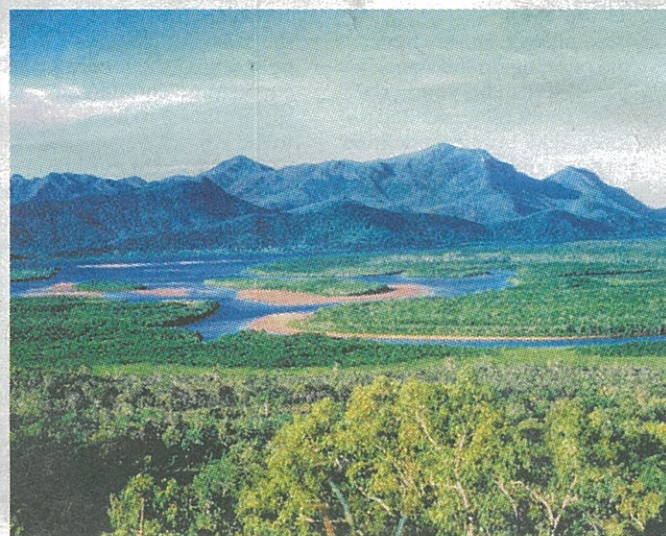
"The development-at-all-costs attitude is very prevalent in some circles in Queensland, but it's very feasible to have development in a sustainable manner."

Dr Wolanski said he had conceived the idea of a survey of 15 key Australian coastal estuaries when he became a grandfather for the first time, two years ago.

Dutch publisher Springer Science and Business Media had backed the project and his plan to commission the studies from teams of researchers.

"When I became a grandfather, I thought of all the damage I've seen in the 30 years I have been in Townsville," he said.

"That really made me think about doing a kind of state-of-the-nation of our estuaries to see what can be done so my grandson, Oliver, can have the standard of living I have enjoyed."



Hinchinbrook Island.
photo // FIONA HARDING

Southern Moreton Bay will face continuing problems as Australia's population grows in the coming 35 years, according to latest research by the 50 or so scientists who have contributed to Dr Wolanski's book.

"Australia as a whole has developed at explicit cost to the environment," Dr Wolanski told *Townsville Eye*.

"We are only realising now that environmental issues are important in planning for the future."

For example, Townsville's Cleveland Bay, fed by the Ross and Bohle rivers, has experienced significant degradation.

Dr Wolanski argues Townsville's government-owned port should be sold to private

enterprise to ensure independent monitoring of potentially harmful practices evident in elevated levels of lead in harbour sediment

"The Queensland Government has a conflict of interest because it owns several ports – and thus wants to maximise economic returns – and at the same time it has a duty of care to the population and the environment," he writes in his introduction.

He predicts public concern about water resources and the future viability of prime agricultural land will force progressively tighter management of the Lower Burdekin floodplain, surrounding Ayr.

The book examines a Rubik's cube of conflicting interests in the Burdekin, only partially managed in State and Federal environmental laws dating back to the Great Barrier Reef Marine Park Act of 1975 and, more recently, the revised Reef Plan of 2009.

Dr Aaron Davis, an aquatic ecosystem researcher from JCU's Australian Tropical Science and Innovation Precinct, warns against procrastination in his chapter on water-resource development on the Burdekin.

He and his co-authors report agricultural pesticide levels remain high in Barratta Creek, which flows into the world-renowned wetlands adjoining northern Australia's largest and

most intensively developed agricultural floodplain.

This is despite regulation of five major herbicides under the Great Barrier Reef Protection Amendment Bill five years ago.

Completion of the Burdekin Falls Dam in 1987 doubled irrigated farmlands on the Burdekin floodplain to 43,000ha, but has caused a reported rise in the water table from 10m to 2m below ground level and lifting levels of soil salinity.

"The legacy of earlier decisions provides enduring management challenges for lower Burdekin coastal wetlands and ultimately the viability of irrigation areas themselves," Dr Davis concludes.

In contrast, Deluge Inlet on the north-western fringe of the

Herbert River sugar cane farmland seems likely to withstand most human threats, according to Dr Marcus Sheaves, also of the Australian Tropical Science and Innovation Precinct.

Dr Sheaves and colleagues Katya Abrantes and Ross Johnston studied this Hinchinbrook Island treasure for *Estuaries of Australia in 2050*.

"At present, Deluge Inlet appears to remain close to its pristine condition, although anecdotal reports suggest its fish resources were more abundant in the past," they conclude.

"With sensitive and effective management, there is no reason the inlet's current condition should not be maintained for the foreseeable future."

Estuaries of Australia in 2050 and beyond

Wolanski, E. (Ed.)

2014, XVII, 292 p., Hardcover

ISBN: 978-94-007-7018-8