Water Spells

Cavanbah was name the Bundjalung people used for what is now Byron Bay. The word is translated as 'the meeting place' in the sense of different peoples coming together. But the name could well describe a location where fresh and salt waters meet. Not quite land, not entirely sea. Coastal dunes and swamps. This is one of Australia's major hotspots for plants, animals and ourselves. But it also presents us with catastrophic cyclones, erosion, droughts and floods. How are we to live here?

The Byron-Belongil catchment is small, only 30 km². But it's an ecotone, a scientific term for transition zone. 'Eco' is from Greek 'oikos' meaning 'home' or 'family' and 'tonos' meaning 'tension'. The shifting sands, the growing peats, the ever-changing mixes and levels of fresh and salt water supporting many lives.

Bundjalung fisher-farmers managed themselves within this production zone of freshwater and marine animals, birds and reptiles as well as yams and other cultivations. Their complex self-government included enhancing conditions for important animals and plants. Historic records offer tantalising fragments about their coastal systems thinking.

There are also historic records of the fisher-farmers of Hawai'i. *Ahupua'a* is their word for catchment, which extends from the ridgelines to the outer edges of lagoons and reefs. Groups of people belonged within particular *ahupua'a,* and managed themselves to the unique qualities of place. Their knowledge grew, building from mistakes, aiming to enhance conditions.

From the 1800s, the rule of these first inhabitants was disrupted, the wildlife fragmented and wetlands drained. Here, British power dominated. To make a new way of living in this place, a new series of trial and error. But the genuine wealth of this ecotone has degraded. Now, residents here rely heavily on imports from other catchments. The natural hazards? Worse.

See, the Belongil always moderated between fresh and marine water. It sheltered the koalas' trees and grew the waterbirds' foodstuffs. It raised the prawns, crabs and fish which fed larger marine animals.

The Belongil also sluiced away the wastes of early industrial and residential Byron. Much as the farmers did, the townspeople cut drains through their swamp, channeling them into the waterway. This was 1950s urban engineering, whose motto was "move water away fast". They placed houses within this network of drains, renamed as reserves. These are still found in Sunrise, Pacific Vista, Lilli-Pilli and beyond.

The townspeople drained the CBD and the oldest residential zones via the Butler St drain. They also emptied a pond which became first the town tip and now the Byron markets. Finally, they drained the deep swamp ponds at the Sandhills and channelled more stormwater to drain on the sand at Main Beach, Clarkes and Cook's.

Unfortunately, this infrastructure exacerbates drought and flooding. Stormwater is never conserved and cleaned, but rushed along town drains too small to cope into a Belongil already force-fed by rural drains. This system relies on a mechanically dredged opening to the sea. The same allows for storm surges backing up to the town. No water reserves for drought. No flood protection during storms.

The latest water infrastructure, in 2005, was the sewage treatment plant. This award winner was at the forefront of the new town movement called Water Sensitive Urban Design (WSUD). To avoid an effluent outfall at sea, the idea was to redistribute it through a clever network of regenerated wetlands, filtration systems and storage ponds through town and farm. This would conserve and purify water, ease floods and revive wildlife.

This integrated Byron-Belongil catchment thinking is old and new. But it's yet to be completed. It risks being destabilized altogether by the rezoning at West Byron. By old school drain management. By plans to upgrade town using more 1950s engineering.

But this thinking is a key to how we can live here. Count it off the fingers of your hand. We can regenerate wetlands along farm drains and remodel town infrastructure so that rainwater **W**aits in ponds and reserves, which also **A**ccept and store stormwater. This will **T**urn lifecycles of water plants and microbes and **E**ngage coastal wildlife. Purified waters now carry organic carbon to marine food webs, ultimately **R**enewing the sea.

RAIN
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Altogether this spells WATER. It's another layer of meaning for Cavanbah: a meeting of insight and action.