Applying Old Wisdom to Modern Dilemmas.

Listen to the story of The Brisbane River.
https://open.spotify.com/episode/53ZlJ3RCmiOzUGX934oGYi

Now read the following.

Tweeted by @sleepyJAK
'Indigenous Peoples warned early colonisers of Meanjin/Brisbane flooding. It was part of life cycle; telling stories of floods & maintaining scrubs, mangroves to mitigate impact. Colonisers believed they were superior to the Peoples & nature so the city was built on a flood plain.'

'First three are from Margaret Cook (2016)), 'Damning the Flood Evil' and the final is from Johnathan Richards (2019), 'Historical Changes of the Lower Brisbane River'.

Ellen Bow

A river capital

Brisbane is a port city, built on the lower reaches of the meandering Brisbane River in south-east Queensland, Australia (Figure 1). The Brisbane River is 309 km long, its source near Mount Stanley and its mouth at Moreton Bay, and it flows through a number of small townships before reaching the major metropolitan areas of Ipswich and Brisbane. Brisbane has a sub-tropical climate in a dry continent, with an average annual rainfall of 942 mm in its catchment of 13,560 km^2.[8] The climate is significantly influenced by the El Niño-Southern Oscillation, which is associated with long periods of dry weather bringing droughts (up to a decade long) and intense rainfall during the La Niña phase. Typically, major floods occur in summer when cyclones or large tropical depressions bring heavy rain over the upper catchment of the Brisbane River and its tributaries (primarily the Bremer and Stanley Rivers and Lockyer Creek). In most cases, two days after the headwaters are in flood, Brisbane is inundated.

Aborigines from the Yugarabul language group knew of the cycle of drought and flooding in the Brisbane River or 'mairwar' and accepted it as part of the life cycle.[9] In 1890 the Upper Brisbane River Cooyar people told the legend of the flood on Magenjie or Big River.[10] Although shared with settlers such as the McConnel family of Cressbrook in 1842, the newcomers gave this Aboriginal knowledge little credence. Augustus Charles Gregory, surveyor-general in 1893, dismissed Indigenous understandings of these matters as the unreliable 'indistinct aboriginal traditions of a flood'.[11] Many early European visitors, including the botanist Joseph Banks on board the *Endeavour* (1770) and later explorers inland such as John Oxley and Alan Cunningham (1824), had recorded evidence of floods. But this did not deter the British from setting up a penal colony right on the river, providing a port, water

and appease the Creator.[49] If not regarded as having been sent by God, the floods were certainly viewed as an extreme act of nature. Astonished witnesses described the floodwaters as 'something to look on with admiration and wonder, as a sample of the wonderful forces of nature'.[50] The *Brisbane Courier* declared the floods 'fascinated and inspired the onlooker as do all the mighty outbreaks of nature's forces'.[51]

Brisbane, at that time, thought of itself as a Christian society. According to the historian Donald Worster, for Christians the world was understood as a place where humans had authority over all things. Unlike pagan traditions, Christianity denied non-human entities a soul or spirit. This effectively separated humans from the environment and offered a 'mechanistic picture of nature'.[52] The secular Darwinian belief, of more recent origin, also conferred human superiority. As the environmental scientist Mark Everard has argued, in the prevailing 'Victorian paradigm, humanity saw itself apart from nature'.[53] 'Civilised man' had to tame the natural world, harness and control it in the pursuit of progress. In this grand struggle, hydraulic engineers offered a 'technocratic model of progress', whereby engineering solutions would control the river and ensure environmental security.[54] Large engineering projects became symbols of human domination over nature, with dams the largest and most visible manifestation of this power.[55] As Michael Cathcart has argued, civil engineering was seen to bring progress, order and civilisation.[56] The response to Brisbane's 1893 floods faithfully reflects this paradigm. Brisbane, it was believed, could be flood-proofed by controlling, or at least modifying, nature through technical ingenuity.

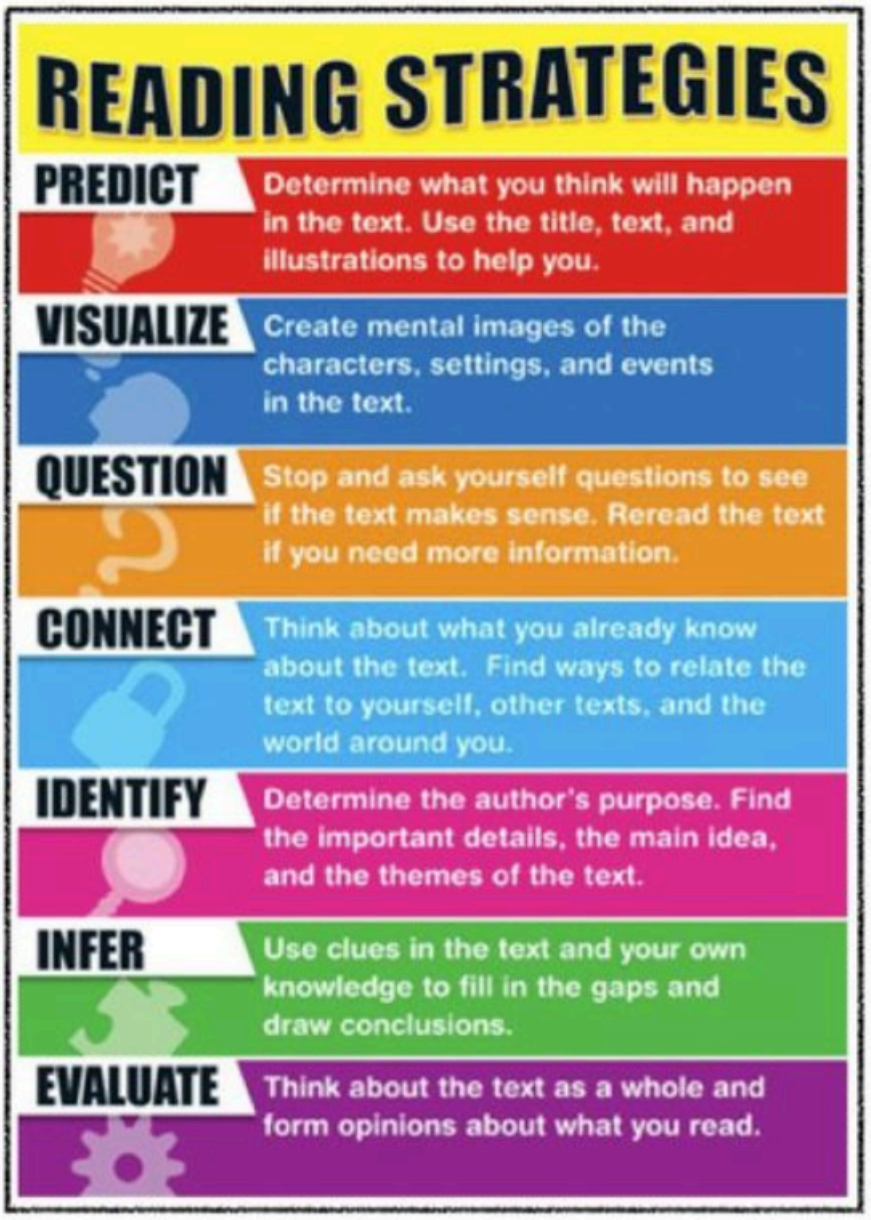
In nineteenth-century Queensland, flooding was understood as a 'problem of water control'.[57] The solution of major works required a hydraulic engineer, not least to

the junction of the Bremer River. Similar scrubs have been found on the North Pine River, and probably along Pumicestone Passage (28). There were also extensive scrubs further upstream on the Brisbane, on the Logan and its catchment, and in the Border Ranges. The area of scrubs within the region was widespread, and may have exceeded the better known "Big Scrub" of the Richmond River district in northern New South Wales (28).

European colonists attacked the powerful connection between Aboriginal people and country, disrupting their lives, access to food and participation in traditional laws. Indigenous tribes and nations were unused to coping with permanent invaders, and their greed for water and other resources. Government and settlers took part in forced relocations of Aboriginal people after violence, disease and starvation had massively reduced their population size. Development and increased use of the Pine, Brisbane, Albert and Logan rivers and their floodplains followed the arrival of non-Indigenous settlers. Changing uses of rivers and coastal waters, including transport, fishing and recreation, led to significant modifications that often spread to the adjacent landscape. Once again, the accounts of explorers and early surveyors offer us insights into the original vegetation and how it was altered.

With the Indigenous and early European flood knowledge discredited or ignored, the floodplain was not treated as part of the river system and urban development proceeded unfettered. Gilbert White, the American geographer, in his pioneering thesis in 1942, fundamentally altered the understanding of floods by declaring that while floods were 'acts of God', 'flood losses are largely acts of man'.[17] The current literature recognises that these supposed 'natural' flood disasters are actually the result of human interaction with the environment.[18] As the Brisbane economist and engineer Trevor Grigg reiterated in 2010: 'flood hazard is manmade', an inevitable consequence of building on a floodplain.[19] This dynamic has been identified by the environmental historian Uwe Lübken; that while rivers offer cities opportunities, they also create a hazard which increases with urbanisation.[20] Accordingly, the flood risk grew with Brisbane's growth. As a member of the United States Geographical Survey informed Queensland's Royal Geographical Society in 1900:

> There is one prominent fact which must not be overlooked – namely, that rivers of the character of the Brisbane must be allowed to retain a large territory in their own possession over or through which to discharge the waters of unusual floods. If man encroaches on these domains, he must take the consequences, from which no ordinary exertions can save him.[21]



TASK:

Use the scaffold above to structure a reflection on your reading of the tweet and excerpts. Write at least two sentences for the last four cognitions on the scaffold. Please delve deeply. You can draw upon this in your assignment.

Now draw an illustration to illustrate your key learnings from the readings.