**Storm Reflection for St Andrew's on the Terrace 8 Sept, 2019**

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My prayer for this time is that we reflect anew about the power of storms in both the natural and personal sense, be strengthened in our resolve to live responsibly on planet earth, and appreciate more fully the sacred in our lives. So may it be.

***Storms***...... severe weather events ... Awesome, amazing, powerful forces of nature at play.

\*\* convectional storms with towering cumulonimbus clouds - thunder, lightening, hail, rainbows ....

\*\* frontal storms and deep depressions sweeping up from the south, so common to NZ

\*\* like this cold front ...colder air vigorously undercutting the warmer air, forcing the warmer air to rapidly rise, cool, condense and cause precipitation.

\*\* low pressure depressions coming in from the north, as in this last week, along with the occasional stronger but weakening tropical cyclones that drift down from tropical waters into the cooler waters off NZ, (often hitting Northland in January when our family was on a tenting holiday!)

\*\* the intensity and ferocity of tropical cyclones in the SW Pacific (in other parts of the world known as hurricanes, typhoons) .... up to 600 km across.... warm tropical air evaporating and holding moisture from the warm ocean; this warm air rising, lowering the air pressure on the ocean surface causing a storm bulge. Replacement air being sucked in to the centre, spinning beginning under the influence of the earth's coriolus force ... an 'eyewall' forming - that area of strongest winds and heaviest rain .... some of the rising air collapses back into the centre of the storm, slowly descending as a calm, rain-free 'eye', typically 30-65 km across. After the eye, heavy rain resumes, as do ferocious winds from the opposite direction. More warm water fuels the storm. The speed increases. This spinning storm system, with a life of its own, travels off where ever, until it is no longer fuelled by warm water.

\*\* Downpours and thunderstorms; hurricane force winds over 117 km/hour (Cyclone Dorian's speeds reached over 200km/h this past week.) - the hurricane surge or low pressure ocean bulge ... (Cyclone Dorian's was at least 7 m high); add to this high tide, or maybe even a king tide, of 1 metre above normal. Add surface waves whipped up by hurricane force winds, maybe 8-9 metres high. Storm surge + high tide + storm waves = BAD NEWS !

\*\* In NZ we are familiar with damage done by storms to people and their property. ... the Wahine disaster

\*\* coastal storm damage

\*\* slips, landslides, dammed-up blocked rivers, transported debris from timber felling

\*\* flooding

\*\* damage to infrastructure

\*\* For our Pacific neighbours .... on high islands, with people and their activities concentrated on the coastal volcanic toe slopes .... land slips, flooded rivers, river erosion and deposition, coastal erosion, sea flooded coasts.... on low islands or coral atolls only a few metres above sea level .... wave flooding, erosion, deposition of eroded coral. Let's not forget the noise factor and flying debris like corrugated iron .....

In a tourist village on Savai'i in Samoa, 2004, after Cyclone Heta, 14 year old Gracie described how the storm lasted 4 days. They didn't get the 'eye,' just high winds and rain. Trees fell over, roots of coconuts were exposed, palms tilted over, no leaves were left on trees. Waves came over the reef and lagoon, 5 metres of beach was lost and its slope steepened, 10 tourist fales were washed away, waves washed about 65 metres inland, the storm changed the river course. A bulldozer had to cut a new path for it but the flow was still less and the fish in the river had gone. After the storm, a lot of banana plants were planted.

In Vanuatu, nearly a year after Cyclone Ofa hit in 1990, my hosts said their vegetable garden was still too salty to be productive, and, for our visit to an outer island, we were asked to bring our own food.

As for Cyclone Dorian .... headline news this past week !

\*\* Why am I spending so much time on these storm descriptions ? Storms are already bad enough, causing deaths, dislocation, and massive damage to both physical and cultural environments. But with human induced global warming the **intensity** of those tropical storms is **increasing** and possibly the frequency, especially in the North Atlantic and Indian Oceans. The warmer the air the more moisture it can hold. The warmer the upper layers of the ocean the greater the ability to fuel cyclonic storms. Some data predictions say hurricane rainfall could increase by a third and wind speeds be boosted by up to 45+ km/hour at the rate that global warming is currently increasing.

The implications of this are huge for both rich and poor. The cost of hurricanes is increasing in richer places like the USA because of the increasing development in coastal areas where the huge storms are striking. The cost is even worse for the poor in storm prone areas, because of livelihoods based on natural resources like fishing and land crops. The poor have minimal financial activities or resources to face natural disasters, and their access to social services and protection is very limited.

Moral and ethical tensions arise in this rich/poor divide - like speedy, generous, post-storm aid to Florida or the opposite to Puerto Rico. NZ's challenge is how much aid for recovery and building long term resilience do we offer our SW Pacific neighbours hit by tropical cyclones.

It was good to see concern for the poor being mentioned in our St Andrew's submission on the Zero Carbon Bill recently. As Christians we are called to have a concern for the poor and vulnerable.

\*\* Recently a mantra formed in my head based on two words from a Pope Francis encyclical in 2015... 'common good, common good, common good' ... because climate is a common good, belonging to all and meant for all. The **common good approach** formulates policies, and action, to benefit society as a whole. Surely it is in the interests of the global common good to minimise extreme natural events like storms, which means that I must throw my energies into working to minimise climate change.

For me, studying and teaching about natural processes of our planet, from a non-interventionist God perspective, really fills me with awe, wonder and fascination at nature's interactions and forces at work. I do feel just a little speck in all this. I feel guilt about Western Christianity's anthropocentric views like 'multiply', 'subdue' and 'dominate' emanating from the biblical creation story.... and resulting in exploitation of the earth's resources, an ecological crisis and increased intensity of storms. I value the Maaori concept of 'kaitiakitanga' (guardianship)

Someone has said 'we must move beyond a spirituality focused simply on the divine and the human to a spirituality concerned with survival of the natural world .... *(an American Catholic priest, Thomas Berry)*

\*\* I recommend Lloyd Geering's booklet The Greening of Christianity, 2005, but there are other people doing eco-theology too. Interestingly, Lloyd uses the description '**a gathering storm'** for the global ecological crisis!

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\*\* **Storms and their effects provide powerful imagery** - Let's reflect on our own inner stormy experiences using some pictures:

Here, a storm is brewing ... we see it coming and probably anticipate the worst ...... this one actually didn't eventuate into much! Such is life?

\*\* Even in a sheltered bay, storm winds whip up surface waves and lots of spray. Days are grey and overcast. Such is life?

\*\* from starting high and dry out of harm's way to being buffeted, jostled, tipped up, turned, swamped, tossed .... uncontrollably

\*\* normality was in the security of a forest community .... then came undercutting from storm waves, separation from the community, a descent into a heap at the bottom of a bank .... what does the future hold?

\*\* carried by powerful storm waves and currents .... dumped into an unexpected foreign environment .... outer bark stripped off ... bleached as well as beached .... branches reaching out .... such is life?

\*\* water-logged, a dead-weight .. not going anywhere for a long time ... caressed by a gentle swash

\*\* overwhelming amounts of small debris thrown up .... where did it all come from? Such is life?

\*\* scoured and undercut by storm waves .... not overly dramatic but significant. Roots exposed ..... starved of soil nutrients, some dying, some just hanging on ....

\*\* stripping away of the top layer of soft sand by storm waves ... washing the sand out to sea .... exposing basement cobbles .... or bringing up ancient stump remnants

\*\* heavier boulders and cobbles, thrown, piled up and stranded at the back of the beach .... for how long?

\*\* reshaping of the beach by the swash and backwash of storm waves .... beach cusps with their high and low parts

\*\* rounding and smoothing of rough edges with the constant back and forth movement

\*\* marram grass stabilising and protecting dunes from storm damage .... fencing to protect the fragile area.....

\*\* steps and paths to show the best route to avoid further damage

\*\* uncovering hidden treasure as with this old Maaori midden of shells ... bringing to mind the Maaori saying of looking back in order to move forward ....

\*\* despite all the damage, roots still embedded .... by hanging in there, new growth starts to sprout from unexpected places

\*\* even going through to plentiful fruiting

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\*\* The St Andrew's monthly *'Exploring Faith Group'* is currently studying David Tacey's, Beyond literal Belief**:** Religion as Metaphor. Tacey no longer believes in an interventionist God nor the biblical miracles and wonders of childhood faith. BUT he sees hope for the future of Christianity and hope for our faith being reignited, if we view the Bible as a form of literature using poetry or myth stories for teaching about things of the spirit .... Scripture is to be read non-literally, as stories of soul and spirit, using imagination.

Let's apply David Tacey's approach to our gospel reading today .... \*\* the supernatural act of calming the storm. It was **'as if'** Jesus calmed the storm. (Mark 4:35-41 Jesus calms the storm) Here's what someone has written from a symbolic, metaphorical perspective .....

*We develop through our lives. Like fishers who fished the Sea of Galilee learnt their profession.*

*We get skilled knowing how to mend a net well, developing callouses hauling nets, developing instincts about wind and weather, water and way-finding, barely noticing the rocking of the boat, easily balancing ourselves between peaks and troughs of fortune.*

*As we grow older, these skills gather. Nothing can throw us, at least not on a daily basis.*

*Then, one day, everything changes. The storm we had sensed was brewing is bigger and more ferocious than every other storm thus far in our life. It rocks our little boat so severely that we are mortally afraid our life will totally capsize.*

*The usual tricks don’t work – denial, obfuscation, pretence that all is well – the storm still rages. Depression wraps the brain in cotton wool, relationships breakup, careers fail, what has been satisfying is dull and boring, the joy goes out of life. The danger of being swamped by it all, is real.*

*So we look around for another remedy – one we haven’t tried before. In a metaphorical sense we find we need to wake up to the seriousness of this challenge. This is no time for our deeper self to be snoozing away at the heart of our craft. We can’t sort this while we remain unconscious.*

*The story continues .... Desperate, we wake up the wisdom within. Shaking the sleeping shoulder, we discover with a shock that the teacher of wisdom we need is our own self.*

*\*\* The effect is uncanny. While the practicalities of the moment take a little longer to sort, in the moment we surrender to that inner wise voice, we access stillness. We are in the eye of the storm. Serenity floods the soul, not the raging waters. Now we are wide awake to the inner resources which were there in our little boat all the time. Peace replaces panic. No storm will frighten us as much ever again. (*Susan Jones, adapted with permission*)*

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\*\* Wisdom from storms ..... wake-up calls ! As in our gospel reading ... a story written for soul and spirit**;** as in recognising the planet is groaning, whipping up ever intensifying storms. Let's respond pro-actively, intentionally and constructively.

\*\* 'CHOOSE LIFE' (Deuteronomy 30:19b) .... for our planet and all thereon .....