

Email to David Arseneau (Catchment Management Plan Co-ordinator TDC) with information from the Ruby Bay Coastal Homeowners group.

Hello David,

Your email of 15th August about the Mapua Catchment Plan was forwarded on me by the MDCA chair in response to your request for community information.

History:

I was convenor of the MDCA Water Infrastructure Subcommittee established after the significant flooding along the coast of Ruby Bay in February 2019 after the Fehi storm. The subcommittee was not only involved with coastal seawater inundation and its aftermath, but also with stormwater flooding in Ruby Bay.

We had numerous meetings, some resulting in good Council actions like the drainage system along Tait street. The MDCA submitted an extensive proposal to the draft 2018 LTP (in March 2019). All of which were rejected as we were told that TDC would only consider changes to the draft LTP plan if we could identify other items in the LTP that TDC could shelve. They wanted any changes to the plan to be cost neutral.

There was more interest in flooding protection in Ruby Bay than Mapua itself, so a year later the MDCA (Mapua and Districts Community Association) subcommittee transferred to the 140 strong Ruby Bay Coastal Homeowners group. This group invited Rob O'Grady (TDC Project Manager) to meet local residents. We spent 2 hours walking the streets of Ruby Bay and Rob took copious notes which resulted in a letter to residents in September 2019. I am sure that will be on file, but if not, I have copies of all reports.

Some of the items in the report were actioned out of "maintenance" funds, but more major works were not undertaken as no funds had been allocated in the LTP.

Many people in the Ruby Coastal Homeowners Group decided it was better to sell their houses in the flooded zone than push TDC to make improvements. Because these people did not want adverse publicity for their house sales, the activity of the Water Infrastructure group was curtailed.

The two key issues identified by local residents:

- 1) **The Broadsea Ave seawall was not fit for purpose.** Residents are well aware that seawall was never designed to prevent all overtopping. However when overtopping occurred the seawater had no effective drain back to return to the sea. So the seawater poured down Tait street and the walkways between houses (located from the seawall to Broadsea Avenue) resulting in massive flooding in Broadsea Avenue. As the wastewater (sewerage) infrastructure was inadequate, the sewerage bubbled into the seawater in Broadsea Avenue contaminating everything in the flooded area. Not only did all household items need to be discarded, but it also posed a health risk as few people were aware that the water was contaminated by sewerage. The inadequacy of the drainage system from the area behind the seawall was apparent as sea water remained on some properties months after the Fehi storm.

Although extensive work was undertaken by TDC behind Stafford Drive houses, this was never completed because the maintenance funds did not stretch that far. In particular, a natural drain from the flood prone area, back to the sea that had been covered over by the TDC seawall and pathway construction along "The Old Mill Walkway" was not restored. A suitable flap (like on the Tait Street outlet) could easily be installed to prevent seawater coming back in via the drain or pipe. An attached letter from a Ruby Bay resident outlining this and the delays is attached. The properties experiencing seawater inundation are also subject to freshwater flooding.

One of the issues with the Broadsea Avenue seawall and further along Stafford Drive is the uncontrolled nature of structures built or not built by private residents. Many of the folks along the Seawall have placed strong structures on the seaward boundary, so when water overtopping does occur, the water can go no further provided there is sufficient drainage back to the sea through the clay bund that is under the seawall. HOWEVER, not all properties have done this (neither has the

TDC on its walkways). All it needs is for one residence to have inadequate structures and the water will once again pour into Broadsea Avenue and also into neighbouring properties behind their perfectly adequate seawalls. The same goes for private seawalls north of Broadsea Avenue. No matter how good a seawall exists on private properties, if one property has an inadequate seawall, water will come through that and inundate all other properties from behind.

- 2) **The stormwater drainage along Pomona Road and other hillside sections** is almost non-existent. Stormwater from top hillside properties runs to lower properties, and hence to other properties further down the hill. This issue is apparent on all hillside areas in Ruby Bay, but we report on only one such property we investigated where, after rain, storm water poured onto that property from a property directly above. Also water poured from the drain onto properties near the base of Pomona Road and into neighbouring properties. Some of these issues were dealt with a very recent a concrete gutter/drain along the lower reaches of Pomona Road, but that drain did not go high enough up the road to capture the stormwater that ran onto properties on the south side of Pomona Road and was also inadequate to prevent flooding of the properties on the West side of Stafford Drive. When the Tait street drain was put in, the plan was not completely followed as there was insufficient funding. A section above Crusader Drive was never completed so the storm water from Pomona Road was never captured some way up the hill to supply sufficient head of pressure to force the stormwater into the sea via the drain, even at super high tide.

I have many examples and records on file, but it will take some time to retrieve them. More importantly some property owners do not wish their flooding issues to be made public as they fear it will impact on the resale value of their property. Please respect the details in this report for the same reason.

Bruno Lemke
Member of the MDCA exec.