IPART NSW

Terrigal Haven Supporter (Community Group)

RE: Submission to support continuous funding for the Terrigal Water Quality Project (TWQP) and additional water quality improvement infrastructure—as part of the IPART Issue Paper: *Prices for Central Coast Council for 1 July 2022*

Dear Sir, Madam

In 2018 Central Coast community members formed the Terrigal Haven Supporters Group (THS). This group's formation occurred due to local community frustration from a lack of governance and action to fix poor ocean water quality and associated health risk issues at Terrigal Beach, Terrigal Haven and Terrigal Lagoon (referred to as Terrigal Precinct) over decades.

Terrigal Precinct is considered the Jewel in the Crown of the Central Coast, and welcomes tens of thousands of local, state and international tourists per year. It is renowned for its shallow swimming beaches and picturesque bay, which attracts many families and children, ocean swimming groups, bathers, board paddlers, surfers, divers, snorkelers, and fishers.

The New South Wales Governments independent water quality monitoring and reporting program "Beach Watch", had consistently rated Terrigal Beach as very poor to fair for over a decade, in terms of *Enterococci* contamination, except in 2020 and 2021, which may have been influenced by lengthy Covid lockdowns and associated dwindling tourist numbers (less sewage) and major remedial sewer works by Central Coast Council (Council) to repair damaged, broken and misaligned sewer and storm water pipes, and illegal connections to the sewer system at that same time.

In Feb. 2019 it was the ocean swimming groups who bitterly complained about the stench, murkiness, and even foul taste of the ocean water at Terrigal Beach and Terrigal Haven Beach that ultimately triggered Council and the State Government investigating the community complaints. In particular, and following the Easter 2019 Terrigal Ocean Swim Event, some swimmers subsequently developed serious bacterial infections and auto-immune health issues, which required some to receive intensive medical interventions. This has led to Terrigal developing a bad reputation in terms of its poor ocean water quality and prevalence of health related issues for ocean users.

As a consequence, in 2019 the community went to the media, and held a community forum with 200 participants, and commenced lobbying government to take action to investigate and rectify the issues. Council has now erected signage advising water users not to swim in Terrigal Lagoon or the adjoining ocean beaches within three days of rain events. Local water users (surfers & swimmers) know the health risks of ocean water after rain events, particularly in front of stormwater outlets, which are not where Beach Watch water samples are taken (once weekly in front of Terrigal Surf Life Saving Club (TSLSC) and Terrigal Lagoon and only during swimming season).

In Mar. 2019, after establishing that there actually was a bacterial contamination issue in Terrigal Lagoon and Terrigal beaches, Council in collaboration with State Department of Planning, Industry and Environment (DPIE) established the Terrigal Water Quality Project (TWQP), and commenced some microbial source tracking in Terrigal Precinct.

It was established that the water pollution was coming from human bacterial contamination. Council and DPIE developed an audit of the sources of water pollution in the Terrigal Precinct. Staff members from Council, DPIE, the University of Newcastle (UoN) and University of Technology (UTS) undertook extensive storm water testing and investigations to identify the water contaminates.

Further investigations were undertaken to locate the sources of contamination and, subject to financial constraints, initiated repairs to aged and deteriorated infrastructure such as storm water pipes, sewer pipes and sewer pumping stations. A colour coded map indicating the priority of remedial works to damaged sewer and storm water pipe networks within Terrigal Catchment was made available by Council to Central Coast residents via the internet. The lagoon has one of the highest bacterial counts in the reports. It is opened regularly to avoid flooding of local

residents but once opened, the polluted water drifts past the TSLC. This presents a major health issue to local Terrigal Swimmers, TSLC members, young nippers and tourists who are all swimming in this polluted water.

THS understands that little maintenance of storm and sewer infrastructure had been undertaken since the original installations some 30 years prior, and longer in some areas of Terrigal Precinct. THS also understands that a significant amount of funding is needed to remediate the highest priority infrastructure as identified in the TWQP, and which should have been undertaken by previous Councils.

The TWQP evolved over time, and its complexity was communicated via the Council website, and well received by the community. Community members were also involved in collecting standardised scientific data for the project from ocean water, and the Terrigal Water Quality Sub Committee was established by Council, which gave community representatives the opportunity to bring their concerns to the attention of Council, and for Council and State Government to communicate their findings and updates to the community.

THS understands that to date the highest priority repairs and replacement of sewer and storm water pipes have been completed. However, as detailed in Technical Paper 4, there is much other important remediation works yet to be done. It is understood that some of these works involve pipe infrastructure that lead in to Terrigal Lagoon, and that are located in remote and steep locations. Nevertheless these tasks are important to the overall condition of Terrigal Lagoon which is recognised as the most polluted water body in the entire Terrigal Precinct.

There has been some improvement to the ocean water quality in terms of *Enterococci* bacteria, but the ocean water in Terrigal Bay remains consistently murky with excessive green algal influence. It has significantly deteriorated over the last 15 years to the stage that swimmers now actively seek other cleaner beaches such as Toowoon Bay or Avoca Beach for a clearer & cleaner ocean water swimming experience.

Most seagrass beds in Terrigal bay (compared to 2007) have now been largely depleted or gone, possibly due to increased volumes & velocities of stormwater and sediment running off developed areas denuded of vegetation in place of concrete surfaces, sewer, excess nutrients and disturbance from boat anchorage and adverse weather events (abnormal beach erosion events attributed to climate change). This issue is of great importance as the denuded seagrass beds provide critically important fish nursery habitat and food sources to the very diverse and protected marine species in Terrigal Bay.

THS does not hold a view or have a position on the justification and or quantum of Council's pricing proposal. It is noted that Council has provided budget estimates to ensure the rectification work in the Terrigal Precinct is completed. We do, however, hope that the continuation of the Terrigal Water Quality Project will be high on the priority list.

Terrigal Haven Supporters Group strongly supports and advocates for:

- The continuation of the Terrigal Water Quality Project and the sewer and storm water infrastructure remediation works with Interflow. A lot of the remaining remedial works are on steep and difficult to access sites especially in the catchment above Terrigal Lagoon. We don't want any more sewage leakage into Terrigal Lagoon and the Terrigal Beach catchment area. This needs immediate attention as it is a health hazard to the children who are swimming in the southern end of the lagoon.
- Additional funding for the erection and maintenance of gross pollution traps & riparian vegetation plantings, infiltration basins (SWALES) and any other methods that provide carbon filtration or purification, and slows the velocity of storm water flow in to Terrigal Lagoon and in to Terrigal Bay from the Terrigal Precinct.
- Educational initiatives to prevent rubbish entering the storm water pipes, for example by placing visual drain stencils (see below) adjoining well-walked drains in streets and walkways in the lower catchments. It could event become an art project. (see images below)
- Pollution grates to be erected in road drains within the catchment, targeting locations of significant littering such as drains in The Haven Precinct.
- Replacement of temporary A4 warning signs 'poor water quality after rain events' at Terrigal Lagoon, Terrigal Beach, and Terrigal haven. Existing signs have been defaced or ripped off. Replace with permanent bold and visual signs in obvious and visible locations.

The community would enjoy their recreational time at Terrigal far more when the ocean water is clean and safe to swim in, and when it is not dangerous for children to play near the storm water outlets in to Terrigal Bay.



Yours Sincerely

Terrigal Haven Supporter Committee Members