

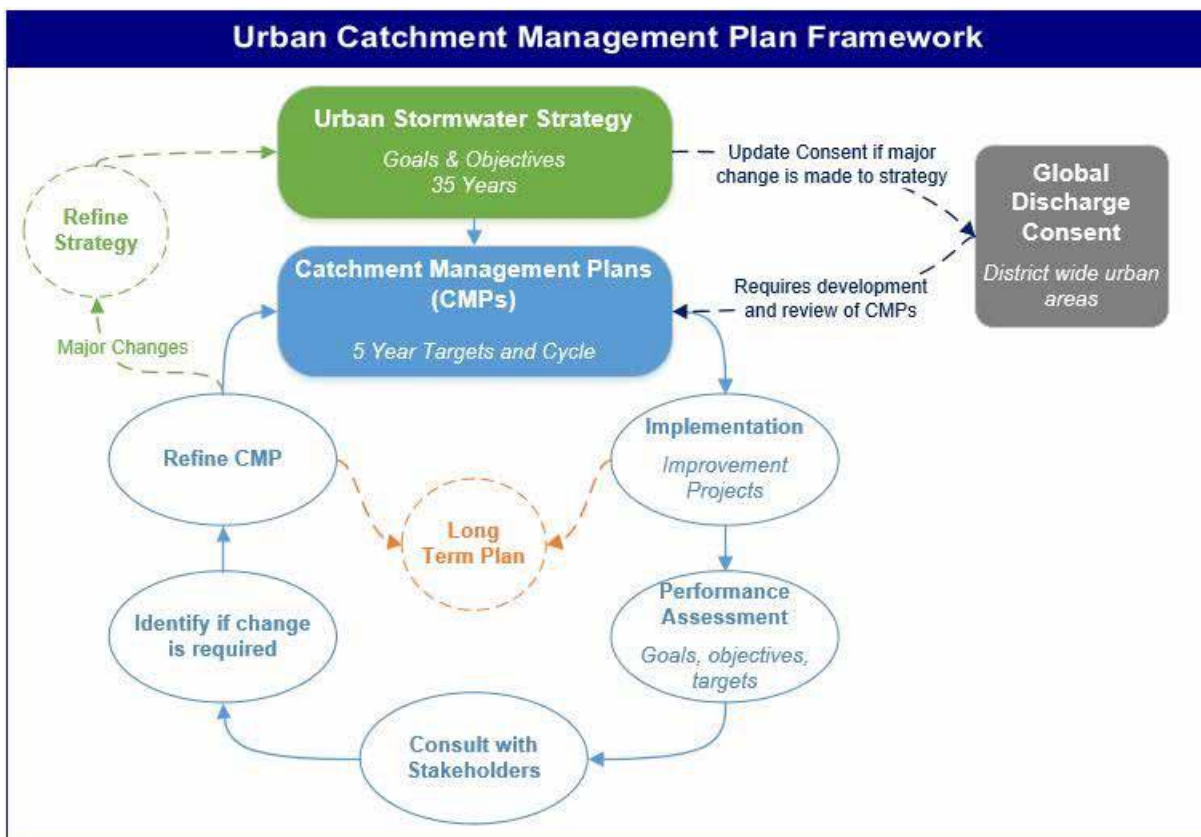
HOLISTIC STORMWATER CATCHMENT PLANS – JUST A PIPE DREAM?

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ABSTRACT

Tasman District Council (TDC) manages stormwater drainage systems in 15 Urban Drainage Areas (UDAs), located in varying environments from inland towns such as Murchison to coastal villages such as Ruby Bay. The UDAs differ in scale such as Richmond with a population of 18,000 and large greenfield development to areas in Golden Bay with a smaller number of permanent residents and booming summer population. In total, TDC manages over 14,000 individual property connections, 187 kilometres of stormwater pipes, 10 stormwater detention dams, and 15 kilometres of maintained channels.

Stormwater strategy and planning at Tasman District Council (TDC) has progressively evolved over the past five years to adopt a catchment-based approach for service delivery and infrastructure spending. This approach, known as the Stormwater Catchment Management Framework, consists of three key components, including the Urban Stormwater Strategy, the district-wide urban stormwater discharge consent, and the suite of Catchment Management Plans (CMPs) required under the consent to be developed for each UDA.



The evolution began with the Council's adoption of the Urban Stormwater Strategy in 2019, which established our vision and aspirations for the way stormwater should be managed in the District. It is anchored on our vision to protect and enhance the mauri of wai/the life force of water and to provide for: Te Hauora o Te Wai – the health of the water Te Hauora

o te Taiao – the health of the environment; and Te Hauora o Ngā Tangata – the health of the people. The Urban Stormwater Strategy identifies several long-term aspirations for stormwater management in Tasman District, including the following:

- Our urban streams, aquatic habitats and coastal marine environment are healthy and accessible
- Stormwater discharges do not degrade water quality and the ecosystem health of our streams and estuaries
- Stormwater flooding does not create a hazard to our community or cause damage to properties
- We enable water-sensitive growth for future generations
- We manage stormwater in a holistic, efficient and cost-effective manner

The adoption of a catchment management planning approach to stormwater issues and infrastructure is a central pillar of the strategy. This approach is supported by a global stormwater discharge consent for Tasman's 15 stormwater UDAs that was granted in 2021. The consent includes two key conditions that help to achieve our stormwater vision and aspirations: the requirement to complete a CMP for each of the District's 15 UDAs, with milestone dates set out for each CMP; and the requirement to develop and implement a monitoring plan to track progress against our aspirations and actions outlined in the CMPs, including the establishment of a stormwater-focused environmental sampling programme. The CMPs for each UDA are the key action-focussed tool in Tasman to work towards improved outcomes from stormwater discharges.

Tasman District Council have already adopted two CMPs beginning with their largest urban areas: Richmond and Motueka. The CMPs were delivered in an online Story Map format for widespread public consumption, an approach which has proven effective for communicating key messages and outcomes. These catchment management plans provide long-term direction for the management of stormwater within each UDA and provide the foundation of stormwater infrastructure programming and Long-Term Plan development. Work is currently underway on plans for the Mapuā, Ruby Bay and Tasman village UDAs, as well as early planning for the Brightwater and Wakefield UDAs.

TDC have already learned several lessons during the catchment management planning approach and are continuing to make changes as we tackle future catchment management plans and monitor progress. TDC aims to share the lessons learned through its ongoing process of integrated stormwater planning with other local government organisations that are on a similar journey.

The importance of community engagement is a key lesson TDC has recognised throughout this process as being critical to the success of a catchment-based management approach. By involving the community in the planning process, TDC gathers valuable input and feedback from residents, iwi, property owners and stakeholders. This input helps to ensure that the Council's plans align with the community's needs and to ensure that the community is more likely to support and adopt the plans. However, meaningful engagement takes time, and there is the constant risk of rushing the engagement process to fit with the timeframes stipulated in the consent. Based on this experience, TDC emphasises the importance of maintaining flexible project timelines and resources to enable effective engagement, as well as open and honest communication with consenting officers to share progress.

TDC has also learned lessons about how to engage with the community. Meeting with the community and stakeholders prior to initiating the plan and providing them with direct

contact information for the Council officers developing the plan helps enable strong relationships and trust. Additionally, TDC strives for engagement that is inclusive, therefore material and engagement should be provided in multiple formats and levels of detail. A key part of the CMP process is providing a narrative about how the decisions and actions have been developed, therefore providing background reports and cost-benefit assessments has been important.

By taking a catchment-based management approach, TDC is theoretically able to address stormwater issues and infrastructure in a holistic and integrated manner. However, in practice to achieve this Council's ongoing work programmes under environmental policy, environmental information (hydrology, groundwater, water quality), land use planning, and Council-wide iwi engagement need to be aligned with stormwater asset management and operations, and long-term capital project planning. This alignment is important both to ensure that Council's left hand knows what the right-hand is doing, thus avoiding duplication or contradictions in Council plans, as well as to effectively communicate with the community. This has been highlighted recently during the early stages of the Mapuā, Ruby Bay and Tasman CMP which was being carried out in parallel to several other Council initiatives in that area. Strong feedback from iwi and the community have raised the issue of engagement "burnout", and being unable to provide proper feedback on issues that may span several Council programmes. For this reason, TDC has decided to pause several concurrent work streams in the Māpua and Ruby Bay catchment in order to align them under a single master planning umbrella, an initiative that will be called the Māpua Community Plan. This master plan will include a structure plan update, streetscaping enhancements ("Streets for People") and commercial property strategy along with the CMP. This integrated approach has already received positive feedback from iwi and the community.

TDC is still learning how to develop a holistic catchment management plan when the scope is limited to the urban area by scope of the global stormwater discharge consent and internal division of responsibilities for water management among several Council departments. Generally, the UDAs make up only a small portion of the catchment, typically located at the downstream end of the catchment, and many other factors affect stormwater system performance beyond that of the infrastructure assets. TDC has learned that the separation of urban stormwater and natural river flows can lead to complications and conflicts for hazard management; as well, focussing only on stormwater infrastructure assets is not compatible with the "ki uta ki tai" approach that is foundational to iwi water management strategy.

Another challenge that TDC has encountered is the inextricable linkage between urban stormwater and coastal hazards in our seaside communities. As sea levels rise and coastal erosion and flooding continues to threaten low-lying areas, it is crucial to take a comprehensive approach to stormwater management that considers the potential impacts on coastal communities and infrastructure, as well as the impact of coastal hazards on our ability to manage and resolve stormwater issues. In response, TDC has developed strong internal lines of communication with staff involved in coastal hazard and coastal adaption discussions and include information about coastal hazards in the CMP along with discussions of the impacts coastal hazards will have on stormwater infrastructure.

Lastly, TDC is still learning how to monitor progress against our aspirations and actions outlined in the CMPs, without "monitoring for the sake of monitoring" and getting "monitoring fatigue". TDC has developed a monitoring plan for the Richmond CMP (in collaboration with Morpium Environmental consultants) which they hope to roll out to the other catchments, made up of two primary components: an environmental sampling programme, and a progress monitoring programme. The environmental sampling

programme seeks to characterise the quality of urban runoff in key catchments of Richmond, as well as the health of the receiving environment, in order to establish a baseline to gauge success of future improvements; a key challenge has been to target the sampling programme specifically enough to yield meaningful information on the stormwater system, in contrast to a more general State of the Environment programme which is already carried out by Council. The progress monitoring programme has identified a wide range of criteria under the five Urban Stormwater Strategy aspirations to be tracked and has assigned a 10-year and 30-year target achievement score to work towards.

TDC hopes that by sharing lessons learnt, the industry can continue a journey towards holistic catchment management plans that are implemented and monitored.

KEYWORDS

Stormwater, strategy, planning, catchment management, community engagement, discharge consent, lessons learned