

# **CATCHMENT/NETWORK MANAGEMENT PLANNING AND CONSENTING – A CANTERBURY PERSPECTIVE**

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## **ABSTRACT (200 WORDS MAXIMUM)**

Canterbury has experienced a major shift in view point with regards to integrating urban stormwater management over the last 10 years to be more in line with practices occurring in other regions of NZ. Much of this change has been driven by Environment Canterbury (ECan) via their regional planning framework. The most significant change for the Canterbury Territorial Authorities (TA's) is the requirement under the operative and proposed regional plans to obtain catchment/ network stormwater discharge consents for their urban areas serviced by a reticulated stormwater infrastructure.

This paper will describe the regional planning framework's development, discuss the planning initiatives used by the ECan expedite district councils to prepare stormwater management plans (SMPs) and catchment/network discharge consent applications. Also discussed will be the specific issues relating to SMP's and catchment / network stormwater consents granted in the Canterbury region to date.

## **KEYWORDS**

**Canterbury, catchment/network consenting, regional planning framework**

## **PRESENTER PROFILE**

Brent Hamilton is a Principal Environmental Consultant at Opus, specialising in environmental management and planning. He has extensive experience in auditing and assessing environmental impacts associated with stormwater discharges to land and water from land development, state highway's and council stormwater networks in Canterbury. Brent has recently been helping Ashburton District Council to develop a stormwater network discharge consent application for the township of Ashburton (including Tinwald and Fairton), supported by a Stormwater Management Plan (SMP).

## **1 INTRODUCTION**

Canterbury and its districts, like other regions of New Zealand, have been moving towards the integration of urban stormwater management planning. Much of this change has been driven by the Canterbury Regional Council (CRC or Environment Canterbury) via their regional planning framework and more recently the Local Government Act amendments. These legislative requirements have led some Canterbury Territorial Authorities (TA's) to invest in obtaining global, catchment or management area consents for discharges from their stormwater networks, which have been supported by SMP.

An SMP is intended to be the fundamental stormwater planning and management mechanism at the individual catchment level. They are to outline the principal means by

which remedial and improvement projects are identified and management policies are set for the catchment or network.

Currently for most new development in Canterbury townships without stormwater catchment /network consents, individual stormwater discharge permits are obtained by developers for new urban developments. Following the developments infrastructure being vested with council, the associated stormwater discharge permits are subsequently transferred to the council, providing a set defects period is completed and full resource consent compliance is achieved. The outcome of this approach is multiple consents held by the TA.

The expected outcome of consenting existing and future stormwater network discharges is to provide much greater certainty, efficiency, flexibility and integration in the management of stormwater, while minimising duplication of effort.

This paper discusses the regional planning framework that has applied in Canterbury since the introduction of the Resource Management Act 1991 (RMA), as applied to stormwater discharges. Also outlined are other planning tools and mechanisms used by Environment Canterbury (ECan) to facilitate development of SMPs. The number of catchment/network consents granted to date is detailed. Finally there is a discussion on the cost/benefits of SMP's, effectiveness of the planning initiatives, risk management approaches, implementation, and environmental issues specific to Canterbury (and other regions), that have arisen from network consenting.

## 2 FRAMEWORK

### 2.1 REGIONAL FRAMEWORK OVERVIEW

Table 1 provides a summary of the regional plans that have and currently apply to stormwater discharges to land and surface water (freshwater).

The Regional Coastal Environmental Plan for the Canterbury Region was made operative in 2005. It is generally accepted that typical stormwater discharges from networks to the coastal marine area from a network is permitted by the stormwater rule.

*Table 1. Timeframe and attributes of Canterbury regional plans*

<b>Transitional Plans</b>	<b>Regional</b>	<b>Natural Resources Regional Plan</b>	<b>Land and Water Regional Plan</b>
Operative between 1991 and 2011		Proposed 2004 to 2011 Operative 2011 to current	Proposed 2012 to current Operative late 2014?
Supposed to be a temporary plan		"Scientist Plan" - very detailed.	"Planners Plan" - simplified Chapters 4 to 8 of NRRP
One General Authorisation for Stormwater Roding to land permitted, Generally not permissive for other impervious surface types and land uses as was silent		Grandfathered lawfully established discharges in rules Separate rules for: <ul style="list-style-type: none"> <li>• discharge to land</li> <li>• discharge to surface water</li> <li>• discharge from area covered by a</li> </ul>	Simplified the three main rules in the NRRP  holding line until sub-regional chapters completed changes terminology to "reticulated stormwater systems"

Transitional Plans	Regional Natural Resources	Land and Water Regional Plan
	stormwater management plan Established requirements for SMP for "stormwater collection systems" and "areas"	
No water quality standards	Water quality outcomes and standards	Water quality outcomes and standards, introduced regional wide limits

## 2.2 TRANSITIONAL REGIONAL PLAN

With the introduction of the RMA a Canterbury Transitional Regional Plan (CTRP) was compiled from a variety of instruments, including the Water and Soil Conservation Act 1967.

The CTRP included General Authorisations (GA's) and Bylaws that formed the "rules" under the RMA.

Stormwater discharges were controlled by a GA that had four specified conditions (permitted activities). Essentially existing discharges were permitted, except for some types of discharges within Christchurch City. The GA allowed for some minor residential development (less than 30 lots) to surface water only on a first come first served basis. It also permitted all discharges from roading to land outside the Christchurch urban area.

The Christchurch City Council (CCC) sought selected global discharge consents to plug some of the gaps in the CTRP to reduce costs to small ratepayers, i.e. for roofwater discharges to land and residential hardstand discharges to land in 1999 . A global consent for new residential development in the upper Heathcote River catchment discharges to land where ground conditions were suitable was also sought in 1998.

As the district of Kaikoura was originally part of Marlborough, Kaikoura District had a separate Marlborough TRP as it applied to the Kaikoura District (KTRP). The KTRP GA essentially did not permit any existing stormwater discharges (was silent so was not expressly allowed) and was very limited in expressly allowing any discharges of stormwater from new development.

Within short periods of the RMA being enacted, any infilling or greenfield residential commercial or industrial development that did not obtain a resource consent and discharged via the existing stormwater network would have made the network discharge no longer permitted.

The CTRP and KTRP were the operative plans for the Canterbury regional for 20 years (1991 to 2011). With respect to the TRP stormwater provisions these were not properly enforced by Environment Canterbury (ECan) until 2004, and preceding this only some new developments obtained consents.

No existing stormwater network consents were sought by TA's so invariably most stormwater network discharges in the region would have had their permitted activity status compromised.

It should be noted that most Canterbury cities and townships have separate stormwater and wastewater networks (or on-site septic tank) so stormwater was not a priority or seen as a significant water quality issue in the 1990's.

### **2.3 NATURAL RESOURCES REGIONAL PLAN**

Given the size and diversity of the Canterbury region, and an over-emphasis in getting the first generation plan "right" the Canterbury Natural Resources Regional Plan (NRRP) took 13 years to be developed. The proposed NRRP Chapter 4: Water Quality, that contained the stormwater rules was finally notified in July 2004, and the Chapter was made operative in June 2011. The final version of the NRRP was relatively permissive with respect to discharges of stormwater to land, but less so for discharges to surface water. There was a grandfathering of existing discharges that were lawfully established at July 2004.

Enforcement of both the TRP and the NRRP with respect to stormwater rules coincided with the proposed NRRP notification. As a result both CCC and Kaikoura Territorial authorities sought and were granted (non-notified) global consents for their network discharges for a 7 year and 10 year duration respectively. These interim consents allowed for infilling and small-scale redevelopment and greenfield (with best practice treatment).

Without the CCC interim consent it was predicted that ECan would receive in the order of 1,500 stormwater discharge permit applications every year from private developments as enforcement was coinciding with a period of increased development.

Due to actual enforcement of rules, and TA's understanding the risk associated with accepting more discharges to network without ensuring they were permitted or expressly allowed by a resource consent private developers were faced with needing to obtain consent to discharge via networks to land and surface water.

The proposed NRRP 2004 had provisions and policies for the establishment of Stormwater Management Areas and detailed the minimum requirements for the SMP's to support such applications for resource consents.

To encourage territorial authorities to prepare SMPs and lodge associated reticulated network applications, the NRRP permits new discharges to a network where a TA had only applied for a network consent (or had one granted), and that TA had provided written authority that the discharge can be carried out under the application or permit.

Subject to meeting conditions, an application under the NRRP for a stormwater network discharge resource consent could be classified a controlled activity - i.e. cannot be declined and the conditions imposed only relate to those matters for control listed. However the conditions are restrictive, for example an untreated network discharge would not likely be able to comply with the total suspended solids limits.

### **2.4 LAND AND WATER REGIONAL PLAN**

Within a year of the NRRP: Chapter 4 becoming operative ECan notified a new proposed Land and Water Regional Plan (LWRP) in August 2012. Following hearing of submissions the decisions have been recently released in January 2014. Subsequently the LWRP in its entirety has been appealed. The appeals may be resolved by the end of the year.

A two-step approach has been taken with the LWRP development this includes:

- Region-wide measures – “holding the line” (including revising limits in 2016/2017)
- Establishing limits with communities by establishing sub-regional chapters (which will then override region-wide measures).

The LWRP Regional-wide Rule 5.93 and related policies as amended by the decisions with respect to stormwater networks now refers to these as a “reticulated stormwater system” whereas previously the proposed version referred to a “community or network utility operator system” in the LWRP. The definition in the LWRP is quoted below:

*“Reticulated stormwater system means a network of pipes, swales, drains and channels which convey stormwater, wetlands and infiltration basins and treatment devices, which may include detention ponds, for the treatment of stormwater, prior to a discharge to land, groundwater, surface water or another reticulated stormwater system and that serves more than one property.”*

A ‘reticulated stormwater system’ and ‘operator’ is not limited to a TA. Rule 5.93 is primarily intended to apply to township reticulated stormwater system discharges, however for a proposed new subdivision that will have a stormwater reticulation network (which will likely have their assets vested to council) then Rule 5.93 is also the relevant rule.

The individual LWRP rules has extended the concepts in the NRRP further by permitting the discharge is into a reticulated stormwater system from individual sites when the discharger has obtained written permission from the system owner to discharge into the system, regardless of whether or not the system owner has an application lodged or resource consent.

There is no provision to permit (grandfather) in the region-wide rules existing lawfully established activities, and a reticulated stormwater network discharge cannot be permitted. However Rule 5.93 sets out the regime for lodgment of catchment/network applications. The presumption is that either there is a consent in place or an application is currently being worked on and will be lodged before 30 June 2018.

The discharge from a reticulated stormwater system can be classified as a restricted discretionary activity under the LWRP should three conditions be met. These relate to submitting an application with accompanying SMP for the system within an August 2018 timeframe, or agreed other date.

If an application for a reticulated network discharge was to meet the rule and conditions of the LWRP, the consent authority’s discretion (including imposing of consent conditions) is restricted to the matters outlined. These matters are all encompassing, so in terms of limiting discretion, there appears to be little benefit in an activity being a restricted discretionary activity, but the alternative is a non-complying activity classification.

## **2.5 WATER QUALITY OUTCOMES AND STANDARDS**

Freshwater outcomes for Canterbury Rivers are set in the NRRP and LWRP and use a range of stream health indicators. The standards in the plans for rivers is based on ANZECC 2000 guidelines and in most cases the % species protection classifications are inspirational.

Region-wide water quality limits have been introduced in the LWRP. Surface water limits are limited to nutrients, for groundwater are based on meeting NZDWS MAV or in the cases of inorganic or organic determinands 50% MAV's.

## **2.6 POLICIES**

The NRRP and LWRP have specific policies for TA operated stormwater network discharges. Part of the relevant LWRP Activity Policy 4.16 (ECan 2013) is quoted below:

*4.16 Any public reticulated stormwater system for any urban area is shall be managed in accordance with a stormwater management plan that addresses the following matters: ...*

- (c) how any discharge of stormwater, treated or untreated, into water or onto land where it may enter water meets or will meet, the water quality outcomes and standards and limits for that waterbody set out in Table 1, Schedules 5 and 8 and Sections 6 to 15, (whichever applies); and...*
- (e) where the discharge is from an existing local authority network, demonstration of a commitment to progressively improve the quality of the discharge to meet condition (c) as soon as practicable but no later than 2025.*

It should be noted that the improvements to the quality of discharge is not necessarily limited to retrofitting roading etc, a local authority could require existing individual sites connected or redevelopment of existing sites to improve the quality of their runoff prior to discharging to the reticulated stormwater system.

However Policy 4.16 requires improvements to the quality of the reticulated discharge regardless of whether or not the receiving water body (surface water or groundwater) is meeting the water quality standards/outcomes/limits or not. To put this policy into perspective for any *non-complying* activity application by a TA's that:

- is not proposing improvements in the stormwater quality of their reticulated network in the next ten years; and
- where the adverse effects of the existing discharges on water quality are minor (or greater);

such an application will have a higher risk of being declined.

## **2.7 STORMWATER MANAGEMENT PLAN GUIDELINES**

Following consultation with TA's ECan released a guideline for the development of SMPs (ECan 2011). These guidelines outlined ECan's suggested approach to applying for resource consents for the discharge of urban stormwater through the Stormwater Management Planning process.

The guidelines were intended to be directly applicable to the needs of the TA's within the Canterbury region by aligning the Activity Management Planning process with the resource consent process.

Already, these guidelines are programmed to be revised and simplified after more consultation with TA's in mid-2014 so they can be more applicable to small townships.

## 2.8 PROTOCOLS

The CCC and ECan developed a Stormwater Management Protocol in 2006 and this was revised in September 2008 and November 2010 (ECan & CCC 2010). The protocol revisions have been formally signed by the Chief Executive of Christchurch City Council and the Chief Executive of Canterbury Regional Council. The stormwater protocol is a non-statutory document, but is binding on the actions of staff from both councils.

The principles and agreed practices of the protocol have informed the proactive approach that both authorities have taken to finding solutions to stormwater management in Christchurch. This is based on an improved working relationship between the CCC and ECan, and has seen a productive exchange of ideas, and outcome focused conditions for stormwater network consents have resulted.

However it has been signed by both Chief Executives, therefore it is binding on the actions of staff and there is a real and agreed expectation that all staff involved will adhere to the principles and other aspects of the protocol.

## 2.9 FUNDING / RESOURCING

The author is not aware of any funding by ECan with respect to assisting the development of SMP and associated consent applications.

ECan provides without-prejudice advice pre-lodgment but this will be at applicant's cost and usually focuses on completeness of the application rather than a detailed pre-audit.

## 3 CATCHMENT / NETWORK CONSENTS

Table 2 details the number of urban areas with reticulated stormwater networks in each Canterbury Territorial Authority area.

Some Canterbury TA's have a very small population and hence ratepayer base.

Table 2: *Urban areas with public reticulated stormwater systems per TA (source ECan 2008)*

<b>Territorial Authority</b>	<b>Population 2013</b>	<b>Number of Reticulated Networks / Names</b>
Kaikoura District Council	3,555	1 - Kaikoura Township including South Bay.
Hurunui District Council	11,529	9 - Hamner Springs, Culverdon, Waiau, Cheviot, Waikari, Waipara, Amberley, Leithfeild, Leithfield Beach.
Waimakariri District Council	49,989	16 - Sefton, Ashley, Sheffield, Oxford, Cust, Mandeville, Waikuku Beach, Rangiora, Fernside, Pegasus, Woodend, Tuahiwi, Ohoka, Mandeville, Kaiapoi, The Pines Beach.
Christchurch City Council	341,469	9+ - Brooklands, Kaianga - Stewards Gully, Spencerville, Christchurch, Lyttleton - Rapaki, Governors Bay, Diamond Harbour, Little River, Akaroa. + Potentially various Banks Peninsula small

<b>Territorial Authority</b>	<b>Population 2013</b>	<b>Number of Reticulated Networks / Names</b>
		settlements.
Selwyn District Council	44,595	14 - Darfield, Glentunnel, Kirwee, West Melton, Templeton, Prebbleton, Rolleston, Methven, Lincoln, Tai Tapu, Springston, Doyleston, Leeston, Southbridge
Ashburton District Council	31,041	5 - Rakaia, Ashburton, Tinwald, Fariton, Hinds
Timaru District Council	43,929	6 - Geraldine, Winchester, Temuka, Pleasant Point, Timaru, Pareora
Mackenzie District Council	4,158	4 - Tekapo, Fairlie, Twizel, Omarama
Waimate District Council	7,536	1 Waimate
Waitaki District Council	20,826	1 Kurow

Table 3 details the number of stormwater catchment/network resource consent applications lodged by, and granted to TA's, in Canterbury to date, these consents include existing as well as future network discharges. The network consents granted to date have varied in terms of scale, condition detail, and notification. Specific risk management (exclusions) has been consistently incorporated into the network consents granted. All have been granted for the maximum 35 year duration allowed.

*Table 3: Catchment / network consents lodged and granted to date*

<b>Catchment / Network Name</b>	<b>Size (ha)</b>	<b>Catchment Delineation</b>	<b>Notification</b>	<b>Granted Date</b>	<b>No of Conditions / (Duration)</b>
Christchurch - South-West	8,000	Upper river & TA boundary	Public	April 2012	25/ (35 yr)
Christchurch - Styx	6,940	River	Public	June 2013	32 / (35 yr)
Rolleston Township	545	Existing high density	Non-notified	Jan 2014	23/ (35 yr)
Lincoln Township	730	District Plan	Non-notified	Oct 2011	38 / 35 yr
Amberley Township	320	District Plan	Public, Appealed	Decision Feb 2013	30 / (35 yr)
Kaikoura Township	380	District Plan	No-decision	Lodged - Mar 2014	no decision



## 4 DISCUSSION

### 4.1 WHY DEVELOP A SMP

Without an integrated and holistic view of stormwater management within a catchment, understanding the cumulative impacts of stormwater discharges on various receiving environments can be difficult. This lack of integration can consequently result in adverse environmental effects being greater than the effects from discharges which occur under an integrated approach.

A SMP is effectively seen as the fundamental planning tool that can be used to manage natural and physical resources on a catchment/network wide-basis. They also streamline the resource consent process by enabling one resource consent to replace, in many cases, multiple existing resource consents. This simplifies the management of stormwater at catchment level, providing a degree of autonomy for management of stormwater, and reducing overall costs.

The following are considered to be the benefits for TAs at the completion of the SMP process:

- Assisting TAs in recognising the stormwater related impacts of land-use activities within catchments.
- Developing 'best practice' management strategies and programmes to address those impacts at the catchment level.
- Providing greater flexibility for the management of each "system".
- Substantially simplifying the management of stormwater discharges within catchments by removing the need for multiple resource consents.
- Providing greater security and certainty for administration by giving TAs the overall control of stormwater discharges within catchments.
- Encouraging cross-organisational communication.
- Providing an important source of information for long term asset management and land use planning and for financial programming.
- Reducing overall costs by linking the processes required under the RMA with those required under the LGA, thereby reducing duplication of effort.

Most of the north and larger Canterbury TA's have recognised for a number of years that stormwater is 'the next big thing' in Canterbury, and they have been planning to deal with this. However there are difficult issues to manage for small townships, where the cost of obtaining a network discharge consent may outweigh the community's ability or willingness to pay.

Smaller TA's with a low ratepayer base are reluctant to commit funding to catchment/network consenting, they also do not have the same greenfield development pressures and are often dealing with just infilling issues.

Catchment/network discharge consents can offer some advantages, in terms of consistency, reduction in separate resource consent administration and co-ordination, but there are costs and resource implications from the transfer of responsibilities for implementation with increased assessment, record keeping, monitoring and compliance.

Most TA consider the August 2018 timeframe set in the region-wide rules in the LWRP as unrealistic.

ECan are at a stage of reformulating their approach and reviewing the benefits and issues around SMPs and network discharge consenting. ECan have had some initial discussions with TAs and plan having workshops with TAs to discuss stormwater consenting and the value/ risks of the SMP approach in early to mid this year. ECan are also reviewing the more recent approaches of other regions.

For districts with numerous small townships such as Selwyn and the Waimakariri, ECan have encouraged that a single generic SMP and associated resource consent application can be lodged for multiple small townships.

ECan have at times had difficulty resourcing the processing of the current status quo of developer lead stormwater consent applications when the property market has gone into over drive. More recently there have been post-earthquake resource issues, associated construction of new commercial and various large scale projects etc in the CBD. The benefits to ECan of catchment /network consents is this will significantly reduce the number of stormwater consents lodged and buffer them from the effects of market driven development peaks.

## **4.2 NON STATUTORY AGREEMENTS**

As a result of the stormwater management protocol being signed and agreed by both CCC and ECan, the general approach to conditions and the level of specificity and regulation entailed in those conditions to date for the South-West and Styx catchments, represents a paradigm shift from other network/catchment consent granted in Canterbury and elsewhere in New Zealand. Further the SMP's submitted with the applications are not attached to or form part of the consent.

The CCC catchment/network consents granted to date recognise that water quality standards for rivers are not likely to be met within the 35 year timeframe of the consent. Annual reports on water quality and ecological monitoring are submitted to ECan's compliance section but are discussed at management level. There are no absolute or statistical trend trigger levels for action.

As outlined in the protocol with ECan the CCC have programmed to lodge three more stormwater catchment consents to cover other priority parts of Christchurch City, and larger Banks Peninsula townships Lyttelton and Akaroa by 2019. The remaining parts of Christchurch City and Banks Peninsula are considered long term projects (2019 +).

Other TA's within Canterbury have not sought at this stage to enter into non-statutory agreements that is one mechanism to set an agreed timeframe beyond the August 2018 for network consent lodgment.

The NZ Transport Agency has a State Highway global stormwater discharge consent for Canterbury that includes existing discharges and minor increase in impervious areas up to 4ha.

### **4.3 RISK MANAGEMENT**

Network discharge consents can be inferred to transfer significant risks and potential liabilities to TAs from the regional council, the main issue of concern to TA's in Canterbury (as is elsewhere) is construction discharges and high risk industrial sites discharged via the reticulated network.

In order to limit TA liabilities the following exclusions (not part of the consent) have generally applied to network consents granted to date:

- Discharges during phases of development where land disturbances during construction are greater than 5 ha.
- Discharges during construction from historic or current sites on the Hazardous Activities Industries List (HAIL) (MfE 2011).
- Operational discharges from existing and new HAIL sites; or
- Mechanisms are in the consent conditions that audited industrial sites that represent unacceptable risk to meeting objectives can be removed from the consent.

A Canterbury TA has taken a novel approach to minimize liabilities further, and has partially transferred pursuant to section 137 of the Act, a portion of their network consent conditions to a developer to administer the construction phase and certification of the stormwater managements systems. It is then expected that the developer will transfer back the partial consent when full compliance is achieved.

In the absence of Stormwater Bylaws some TA's that have sought to consent existing sites under the SMP's are using the threat of being removed from an network consent to have improvements in on-site drainage where these have been identified to need to occur, as a de-facto statutory mechanism, in the absence of a stormwater bylaw, that can enforce a cancellation of connection.

Where industrial sites are unable to meet the required standards for discharge into the network, the site will be removed from the consent by surrender of the respective land parcel, or advice to ECan that the discharge no longer has written permission to discharge to the network.

### **4.4 SURFACE WATER QUALITY TARGETS**

The LWRP region-wide plan policies seek commitment from TA's to improve existing reticulated discharges quality to meet outcomes and standards by no later than 2025 if no sub-regional planning timeframe is set.

Within Ashburton for example, there are three spring-fed 'rivers' which are receiving direct urban stormwater inputs. They are: Mill Creek, Carters Creek, Lagmhor Creek.

These creeks make up the receiving environment for stormwater generated by Ashburton Township. Under the current regional planning framework, all three streams are classified as 'spring-fed – plains' rivers which has a water quality standard of 95% species protection (slightly – moderately disturbed system). Because each stream with the Ashburton urban area originates in farmland, they are not classified under the sub-group of 'spring-fed – plains – urban' which has a more modified or disturbed water standard classification of 90% specifies protection (moderately disturbed), despite

significant upper reaches of each creek flowing through an urban environment and being affected by urban influences.

The Ashburton creeks are highly modified, Mill Creek and Lagmhor Creeks baseflows are supplemented by stockwater flows that in the future may be ceased. In the case of Mill Creek the stockwater flows are the dominant source of the baseflow.

Due to the relatively small baseflows of the three Creeks through Ashburton it is expected that during most rainfall events, given the large urban areas contributing that the LWRP water quality standards for nutrients, E. coli, and toxicants - zinc and copper, would not be met.

For example should 18 mm of rainfall fall in 24 hours, the average flows from the existing urban areas contributing to Wakanui/Mill Creek would be 1.4 m<sup>3</sup>/s compared with its baseflow (which is supplemented by stockwater) of 0.25 m<sup>3</sup>/s. Given the discharge flows are 5.6 times that of the baseflow, even with retrofitting best practice treatment this would not likely achieve compliance with the water quality standards in the regional plan for zinc and copper.

Stormwater infrastructure is usually engineered to a lifespan of 100+ years, but the maximum allowable duration of a consent is only 35 years. It is expected that some improvements to existing discharge quality through industrial site auditing and compliance, and brownfield redevelopment in the short term will occur). However cost effective and practicable opportunities to reduce street impervious areas, and to capture and treat stormwater are only likely to be implemented when streets come up for renewal. Street renewals are typically programmed to occur over 50 or so years which is the minimum life cycle for these assets.

Overall the 10 year timeframe imposed by the LWRP to demonstrate a commitment to progressively improve the quality of the discharge to meet the standards is considered by most Canterbury TA's as unrealistic, and this was a major component of submissions by TA's on the stormwater provisions of the NRRP that have been duplicated in the LWRP following the decisions. Overall the policies require further thought in sub-regional plan development and it is also important to note that the policies in plans need to be read collectively rather than individually. In other words, the objectives and policies are not a series of hurdles each of which has to be cleared.

It is reasonable to apply the new standards to greenfield developments, but TAs are likely to be reluctant to commit expenditure in the absence of certainty until sub-chapters have been prepared that can override region-wide outcomes for water quality, rules and policies.

Through the consent process, in the past and likely in the interim until the LWRP sub-regional chapters are developed, most TA's will likely be seeking, for any network consent lodged:

- A re-classification of urban impacted rivers to be less aspirational and based on the local communities aspirations and the realistic level of improvement that can be achieved given the permanent restrictions as a result of urban development that exist.
- Long term objectives based on only improvements to existing reticulated discharges towards (not meeting) the regional plan limits in the receiving environment.

## 5 CONCLUSIONS

Canterbury is experiencing a rapidly changing regional planning framework that has gone from slow to ever evolving, and Canterbury TA's are finding it challenging.

ECan has used initiatives in the NRRP and LWRP rules to encourage SMPs to be lodged, due to costs and uncertainty of the rapid changing regional planning framework, that have not been entirely successful.

The cost and benefits for small councils with little development occurring in townships are debatable, and ECan is working with TA's to review and simplify what is required to be submitted, and reduce the potential ongoing compliance costs associated.

The catchment/network consents that have been granted to date have exclusions to reduce potential liabilities to the consent holders for high risk phases of development or industrial sites.

Non-statutory planning agreements have been used to reduce the level of specificity and regulation entailed in consent conditions.

Timeframes in the current policies in the Canterbury regional plans are of concern and do not take into account the lifetime of existing assets, and TAs are concerned at having to commit expenditure in the absence of certainty until sub-chapters have been prepared.

It is generally the TA's position that environmental outcomes need to be weighed against costs to ratepayers, and stormwater discharges managed in accordance with the most cost-effective option, rather than water quality standards or aspirations that are not achievable in some areas.

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