

# STAFF REPORT

**TO:** Chairman and Members, Engineering Services Committee  
**FROM:** Sonya Leusink-Sladen, Consultant Policy Planner  
**DATE:** 20 November 2007  
**REFERENCE:** S750  
**SUBJECT:** **PROJECT STORMWATER**

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## 1 PURPOSE

The purpose of this report is to inform the Engineering Services Committee of recent progress on Project Stormwater.

Project Stormwater is a joint initiative between Engineering Services and Environment & Planning.

## 2 BACKGROUND

The purpose of Project Stormwater is to improve the way in which stormwater is managed throughout the District. The project affects Engineering Services through the management of stormwater infrastructure assets and the road network.

The following timeline sets key milestones of Project Stormwater so far:

- i. May 2005 – *Project initiated*. A report to the Environment & Planning Committee sets out a comprehensive list of stormwater issues and actions necessary to address them (REP05-05-10; See also Appendix 2 of this report with original task list).
- ii. October 2005 – *Plan change need identified*. Changes to the Tasman Resource Management Plan (TRMP) were identified as the necessary actions to address issues (EP06-12-13).
- iii. July 2007 – *Variation 56 notified*. The stormwater Variation 56 was notified for public submissions in update 26 to the TRMP (Update 26).

Variation 56 has made significant improvements to the requirements for consideration of stormwater effects through subdivision and land development. However there are still many issues that fall outside the scope of the TRMP.

These issues include the need for reliable and accurate information about stormwater reticulation and drainage characteristics with which to inform and make good decisions, as well as reaching agreements on acceptable stormwater management solutions that meet the expectations of both departments.

## 3 DISCUSSION

Following the notification of Variation 56 it became evident that the objectives of the new provisions would be limited in effectiveness without also addressing the other previously identified stormwater management issues.

The complete stormwater issues and options task list was thus refined into three main task areas for further work. The three priority tasks are:

- i. Better information – Currently Council staff have incomplete and limited access to good information upon which to make robust decisions about effective stormwater management. This may result in poor decision-making at various levels and inefficient processes;

The need to have a more complete understanding of all stormwater reticulation is the main implication of this task for Engineering Services (especially capacity and quality information as it relates to effective long-term financial planning).

- ii. Accepted management solutions - There is an absence of agreement about acceptable design solutions, or responses to development proposals that will satisfy all of Council's legal responsibilities in all situations. This results in in-house conflict, mixed messages to the public and ineffective solutions in terms of the environment;

Engineering Services staff must work closely with planning and environmental information staff to find, and then implement, solutions that are effective and efficient.

- iii. Resource Consents (discharge permits) for Council's own systems - Council does not hold any stormwater discharge permits for stormwater discharging from its reticulation.

Obtaining discharge permits for all of its systems is Engineering Service's long-term goal, which it will pursue over a realistic timeframe based on acquisition of better information (as it is gathered), and ongoing upgrades of existing systems .

The three task areas are outlined in more detail in *Appendix 1*.

Because so many functional areas of Council are affected by or will have an effect on stormwater management, it is important that a coordinated effort between Environment & Planning and Engineering Services staff is undertaken. For this to occur, Project Stormwater must be actively supported by management staff and both the Environment & Planning and Engineering Services Committees.

Each of the above task areas is being tackled jointly by staff across Environment & Planning and Engineering Services.

#### **4 BUDGET IMPLICATIONS**

The main resource requirement for all three tasks is staff time across both departments. Both Environment & Planning and Engineering Services staff need to work together on the project to ensure its success. There will also be a need for additional resources to monitor our existing stormwater systems more effectively.

The information gathered as a result of this work will help to address all three task areas above: contributing to a better understanding of Council's existing stormwater management; enabling staff to determine with more certainty the most cost-effective solutions for managing stormwater in the long term; and, contributing to consent applications for discharges to land and water from Council's own stormwater drainage reticulation.

The greatest benefit of Project Stormwater is however in the project process itself. By communicating and working together to achieve common goals, Engineering Services and Environment & Planning are making significant improvements to the way in which stormwater assets are being designed, managed and maintained.

## **5 RECOMMENDATION**

**THAT the Engineering Services Committee receives this report.**

Sonya Leusink-Sladen  
**Consultant Policy Planner**

## Appendix 1: Project Stormwater – Priority Tasks

Objective	Tasks	Responsibility
<p><b>1. Information</b></p> <p><i>Objective - Council has a thorough understanding of existing systems and natural drainage conditions and are able to make proactive decisions<sup>1</sup> regarding stormwater.</i></p>	<p>Task areas:</p> <ol style="list-style-type: none"> <li>1. Gather and compile information (both reticulation and natural drainage – see below);</li> <li>2. Communicate it in an easy to understand way (e.g. GIS map layers; tables);</li> <li>3. Make sure information is accessible and kept up-to-date.</li> </ol> <p>Information needed:</p> <p><i>Reticulated systems –</i></p> <ul style="list-style-type: none"> <li>• Location of Council network;</li> <li>• Capacity of that network;</li> <li>• Identification of ‘problem’ - capacity restricted or bottlenecks – areas;</li> <li>• Urban Drainage Areas (UDAs);</li> <li>• Location of programmed upgrades;</li> <li>• Timing of programmed upgrades;</li> <li>• Development Contribution (DC) collection areas.</li> </ul> <p><i>Natural drainage –</i></p> <ul style="list-style-type: none"> <li>• Soil type – permeability;</li> <li>• Groundwater tables;</li> <li>• Topography;</li> <li>• Areas where soakage is not appropriate;</li> <li>• Areas where there may be other stormwater drainage issues (steep slopes, instable etc);</li> <li>• Water bodies, gullies and drainage features.</li> </ul>	<p>Reticulation – Engineering</p> <p>Natural drainage – Environmental Information</p> <p>GIS – Information Services</p>
<p><b>2. Acceptable Solutions</b></p> <p><i>Objective<sup>2</sup> – All staff across all departments agree on, have access to, and a good understanding of, the available solutions for stormwater disposal under any set of circumstances.</i></p>	<p>Task areas:</p> <ol style="list-style-type: none"> <li>1. Identify range of potential development scenarios;</li> <li>2. Outline possible responses and solutions for each scenario, including when, where and how Low impact Design (LID) solutions might be appropriate and acceptable;</li> <li>3. Discuss and agree on responses and solutions;</li> <li>4. Map out the consents and</li> </ol>	<p>Reticulated solutions, including LID – Engineering, Environmental Information and Policy Planning</p> <p>On-site solutions – Engineering, Environmental Information and Consents and Policy Planning</p>

<sup>1</sup> Proactive solutions might include: development restrictions (closed or deferred zones), re-prioritisation of reticulation works, and an inventory of accepted stormwater design solutions based on natural drainage conditions.

	<p>engineering design/plan approval processes, and legal implications of each accepted design solution, in terms of the requirement to obtain a discharge consent (i.e. to ensure that on-going responsibilities have been clearly defined);</p> <ol style="list-style-type: none"> <li>5. Compile and communicate within Council and to the public;</li> <li>6. Update TRMP and ES accordingly.</li> </ol>	<p>TRMP Plan Changes - Policy</p> <p>Engineering Services update - Engineering</p> <p>Guidelines and updated application forms – Consents</p>
<p><b>3. Council Discharge Consent(s)</b></p> <p><i>Objective<sup>3</sup> - Council holds discharge consents for all of its reticulated stormwater discharges, the effects of which are no more than minor.</i></p>	<p>Tasks</p> <ol style="list-style-type: none"> <li>1. Appoint a consents application project team;</li> <li>2. Draft project brief;</li> <li>3. Identify key implications of process;</li> <li>4. Gain Council (political) buy-in to process, including any necessary up-grades;</li> <li>5. Establish work programme and resource/funding inputs;</li> <li>6. Prepare and lodge appropriate consents.</li> </ol>	<p>Project Team – Engineering, Planning Consents, Environmental Information</p> <p>Resource Consent Application – Engineering</p> <p>Activity Management Plan/LTCCP alignment – Engineering</p>

<sup>2</sup> While this objective may be initiated, it cannot be completed until Issue 1 has been addressed

<sup>3</sup> An implication of this process is the installation of water quality control devices and/or stormwater treatment. Currently it is unknown if Council's stormwater would have an effect on the environment that is less than minor.