



KEREPEHI STORMWATER NETWORK



TURUA STORMWATER NETWORK

Refer to appendix B of the HDC Stormwater Asset Management Plan for detailed descriptions of the urban reticulation networks.

19.2.3 Risks Attributable to the Absence of a Reticulated Stormwater Network

- Not required to be assessed due to this community having a reticulated stormwater network.

19.2.4 Assessment of the Quality and Quantity of Discharged Stormwater

19.2.4.1 Collection and Treatment

What type of collection and treatment is provided?

Street kerb sumps and direct residential and commercial connections are piped to the reticulated network and discharged to the receiving waters. No treatment of stormwater is undertaken.

19.2.4.2 Operation and Maintenance

How is the system operated and maintained?

Regular inspections of open drains for maintenance requirements. A programme of CCTV work to ascertain asset condition as outlined in the AMP is proposed.

19.2.4.3 Treatment Process Effects

Are there any detrimental effects from the treatment process, e.g. odour?

None.

19.2.4.4 Resource Consents

Is there a requirement for the system to have a resource consent and if so, is it valid?

Four Comprehensive Stormwater Discharge Consents issued by Environment Waikato are held for the urban stormwater networks in Whiritoa, Waihi Ward, Paeroa Ward, and Plains Ward. Detail is contained in the AMP.

19.2.4.5 System Capacity for Future Demands

Is the system capacity adequate for the future planned demands?

Capacity is currently being assessed as part of the Catchment Management Plans investigations.

19.2.4.6 Existing System Life Expectancy

What is the estimated life of the existing system?

The Hauraki District Council has no current intention of disposing of most of its stormwater assets. Apart from the surface drains, the assets are largely in-ground structures (pipes, manholes, floodgates and pump stations). Generally

the parts of the pump station structures above ground are the control shed housing the pump motors and control gear. These components are not logically separable from the remainder of the structure.

The service life of the structures is 50-100 years plus, at which time they will most likely be replaced or upgraded in a similar configuration to the existing.

The one exception to the above is the disposal of the Paeroa Main Drain Pump Station to Environment Waikato.

19.2.5 Current and Estimated Future Demands

This is currently being investigated and will be presented in the Catchment Management Plans.

19.2.6 Options to Meet Demands and their Suitability

This is currently being investigated and will be presented in the Catchment Management Plans.

19.2.7 Intended Role of the Hauraki District Council in Meeting the Demands

Hauraki District Council will continue to be the owner and operator of the urban stormwater network.

19.2.8 Hauraki District Council's Proposal for Meeting the Demands

This is currently being investigated and will be presented in the Catchment Management Plans.

Risk Management for Stormwater

Types of Medium Risk	Impact	Probability	Consequences
Subsidence/Land movement	3	4	12
Development contribution/planning/customer demand/Land Dev./ Design/ Runoff co-efficient/Loss of ponding/Flooding of properties/Urbanisation etc	3	5	15
Loss of Knowledge	3	5	15
Rainfall Intensity	4	5	20
Open drains	3	4	12
Pollution/contamination	3	3	9

SUMMARY OF SURVEY RESULTS

The returns from the newspaper questionnaire and the telephone surveys included with the water and wastewater surveys in Whiritoa and Waihi are attached.

The communities of Whiritoa and Waihi were surveyed selectively for the following reasons:

Whiritoa has a reticulated network which provides for the disposal of stormwater from the road surface only. On site disposal and/or retention is required for the residential lots.

Waihi has a network of open drains and piped systems which discharge to the receiving waters of the Ohinemuri River and its tributaries. There are no flood protection assets (stopbanks, floodgates, and pump stations) which control the discharge to the natural streams. Disposal of stormwater from the developed parts of Waihi is by a combination of on site disposal, some retention, and free discharge to the network.

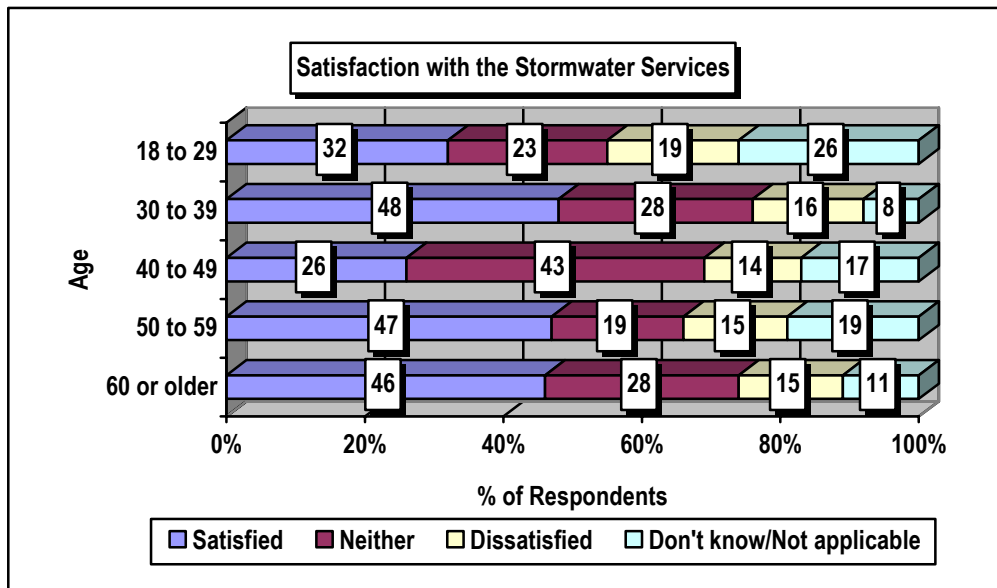
The maintenance of open drains in private property in Waihi is the responsibility of the landowner. This is not the case in the remainder of the District where Council maintains an extensive network of land drains in the rural drainage districts of the Plains and Paeroa Wards, and in the urban area of Paeroa.

The graphs of the survey results follow.

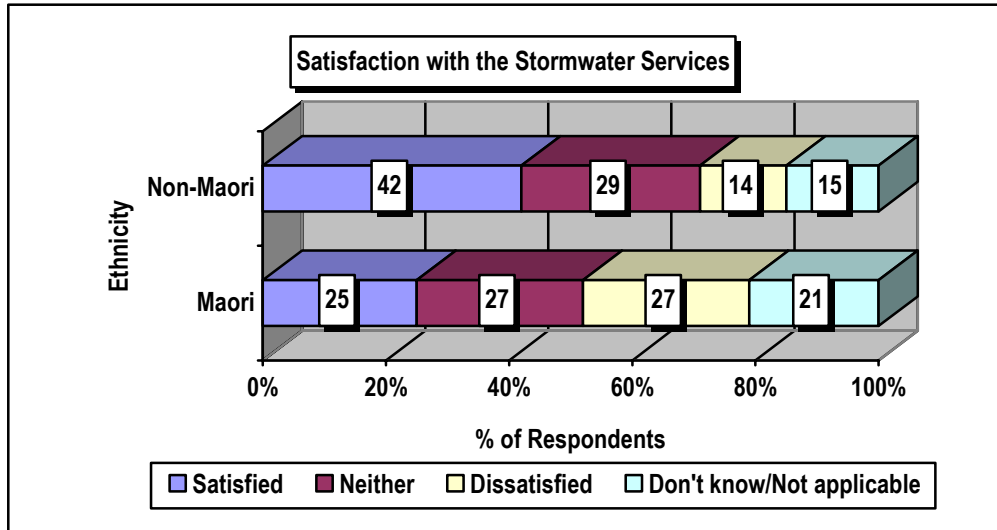
The overall level of satisfaction with the stormwater services is:

Satisfied	40%
Neither satisfied nor dissatisfied	28%
Dissatisfied	16%
Don't know/not applicable	16%

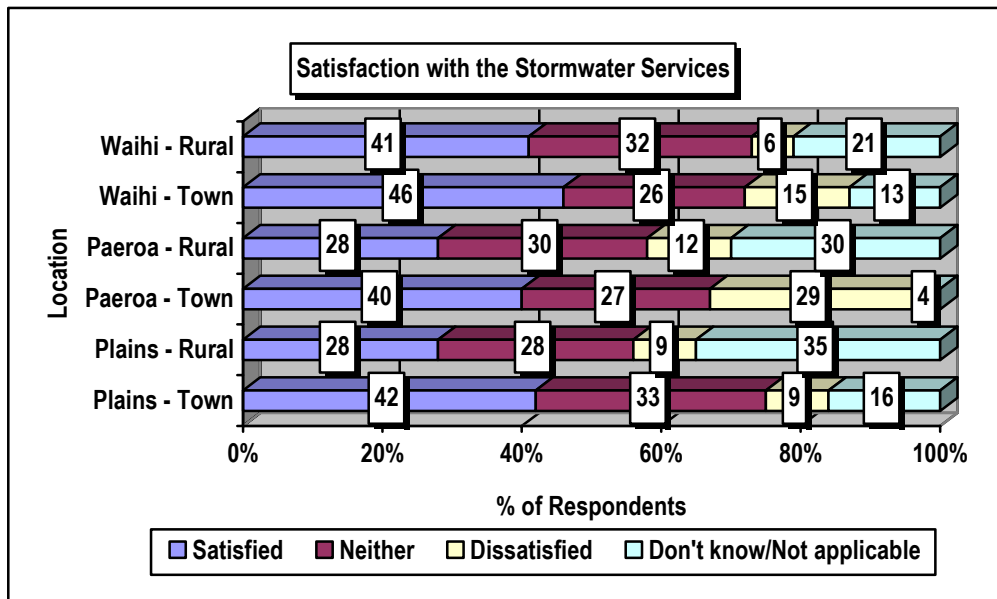
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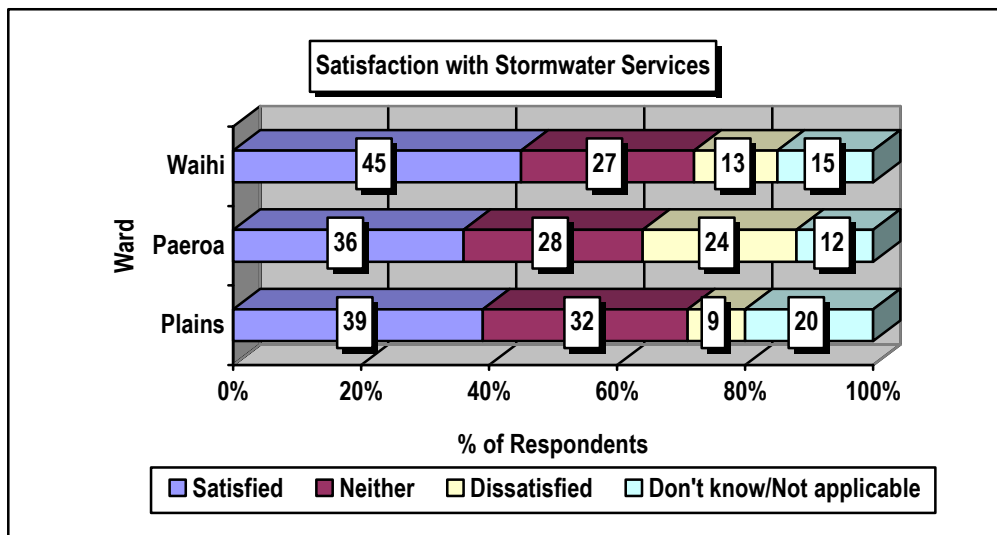
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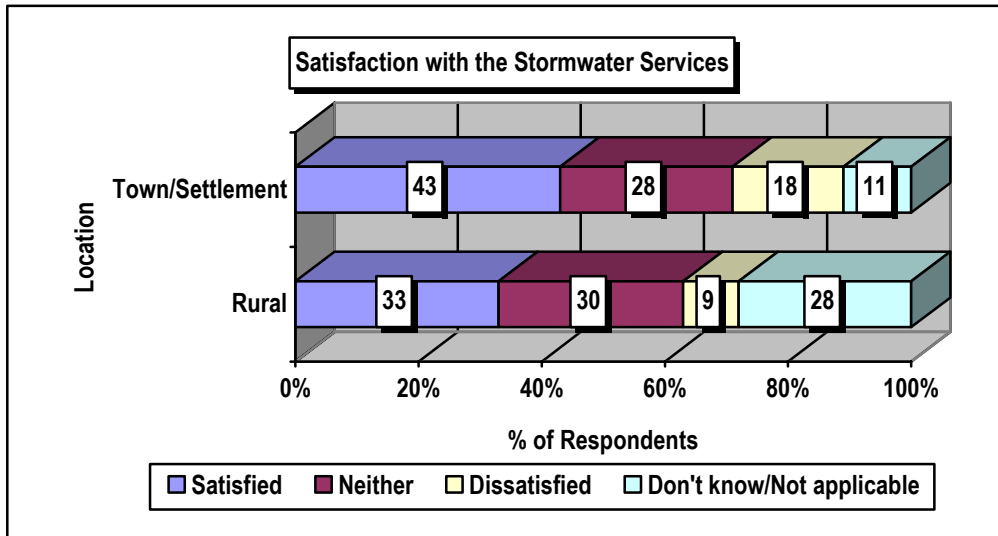
WARD-LOCATION



WARD



TOWN-RURAL



20.0 Conclusion

This report is the first of the Assessment of Water and Sanitary Services report for Hauraki District Council. Considerable information has been collected, and there is considerable information to be collected as time allows for prior to the 2006 Long Term Council Community Plan.

Further information on the water, wastewater, stormwater, cemeteries, public toilets assets can be found in the asset management plans available by calling 07 862 8609 or 0800 734 834 (from within the District).