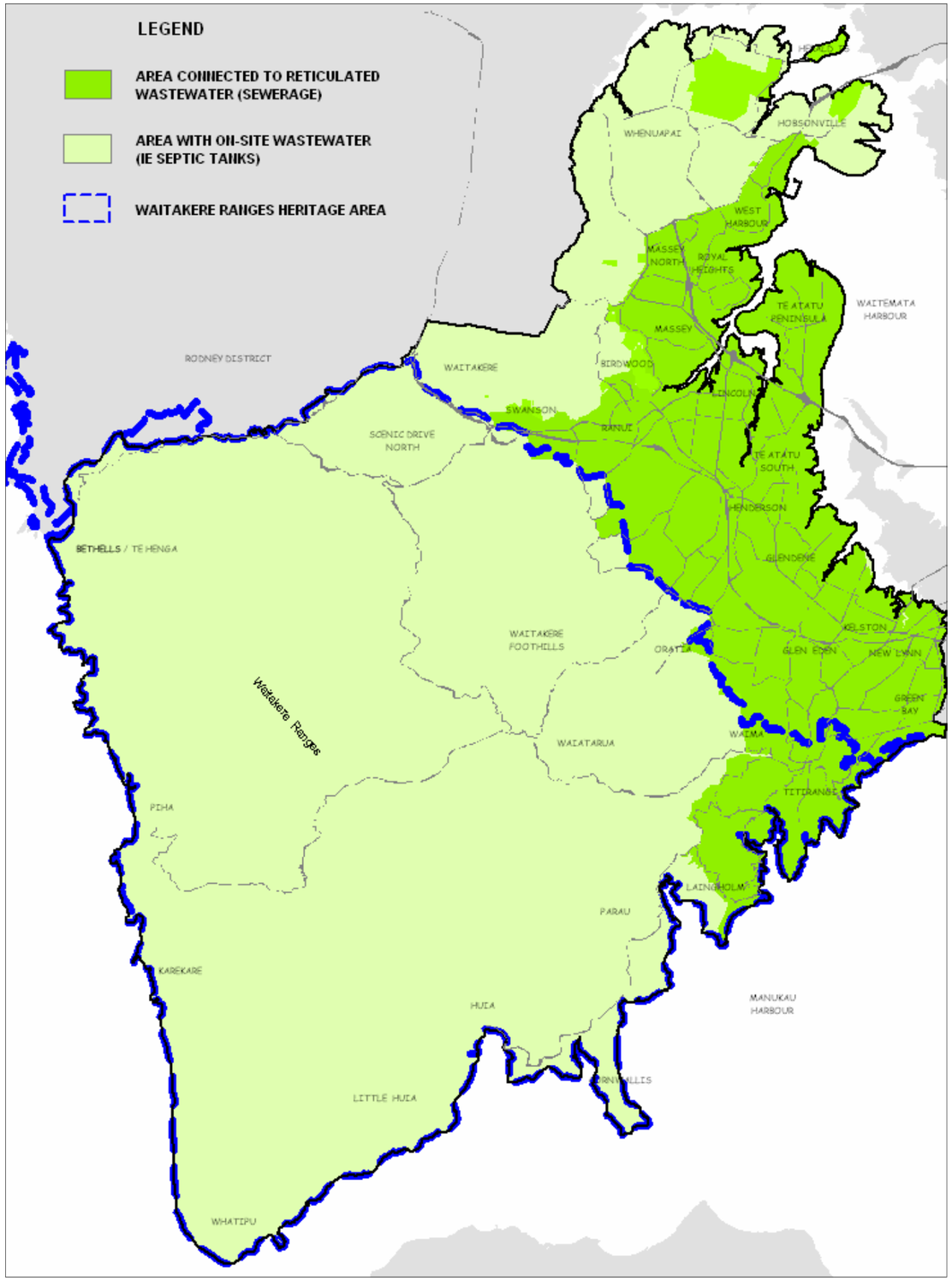

Website: www.waitakere.govt.nz

Phone: 24-hr call centre 839 0400

Waitakere City Council
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More information, on the three waters topics described below, is available on the council's website www.waitakere.govt.nz or information can be sent to you if you contact the council's 24-hr call centre (09) 839 0400.

ThreeWaters

Water Supply

EcoWater purchases around 16 million cubic metres of bulk treated water from Watercare Services Ltd each year. This water comes from Watercare's five dams in the Waitakere Ranges. The average three-person household in Waitakere City uses about 485 litres of water per day. If Aucklanders continue this trend we will need to build a number of expensive new water supply and wastewater facilities.

There is a number of ways to reduce water usage and costs (see our website for saving water, using rainwater, gardening with water, heating water).

In rural parts of the Ranges water is largely supplied by roof tanks (see the table below for roof tank maintenance). This helps to reduce the impacts of stormwater runoff as water is stored and re-used on site.

Monitoring roof tanks	**Frequency**	**Maintenance of roof tanks**	**Frequency**
Check orifice opening for trapped or floating debris	3 months	Remove floating debris from tank	3 months
Inspect all piping for restrictions or failures	1 year		

Wastewater

Wastewater is the water we dispose of from homes, offices and industry. It comes from toilets, sinks, showers, washing machines and industrial processes and was historically called sewage. Most of the rural parts of the Ranges are not serviced via public wastewater infrastructure (see map) and dispose of wastewater to septic tank.

SEPTIC TANKS

Caring for your Wastewater System and the Environment

Your house, like any other in rural Waitakere, has a wastewater system to treat domestic wastewater (e.g. originating from household activities, such as toilets, kitchens and bathrooms including shower, bath, washbasin and laundries). Properly installed and maintained, your wastewater system will protect the health of your family and the environment. Forget it and the system is likely to clog up, pollute the environment, put you and your neighbours' health at risk and be expensive to repair. See the leaflet *A Guide to the Management of Your On-site Wastewater System* for information on how to operate an efficient and environmentally friendly system.

Note: EcoWater pumps out your septic tank approximately once every three years (frequency depends on the type of system you have). This helps to prevent solids from getting into the disposal fields causing them to block.

Pump-outs are charged for as a rural sewage charge in your land rates.

A letter will be sent to you in advance of when your septic tank is due to be pumped out and a notice will be left, including a report on any defects found.

Owners' Responsibility: Wastewater Disposal System

To assist in the efficient operation of your wastewater system the council provides a regular pump out and checks the operation of your wastewater system, however, it remains the responsibility of the owner to ensure the efficient operation of his or her wastewater system.

Every property owner with a wastewater disposal system must ensure the system operates to a safe and satisfactory standard. Nuisances such as offensive odours, effluent seepage and other forms of environmental pollution caused by system failure must be stopped. It is the responsibility of the owner to upgrade, repair or replace the system and ensure any nuisances stop.

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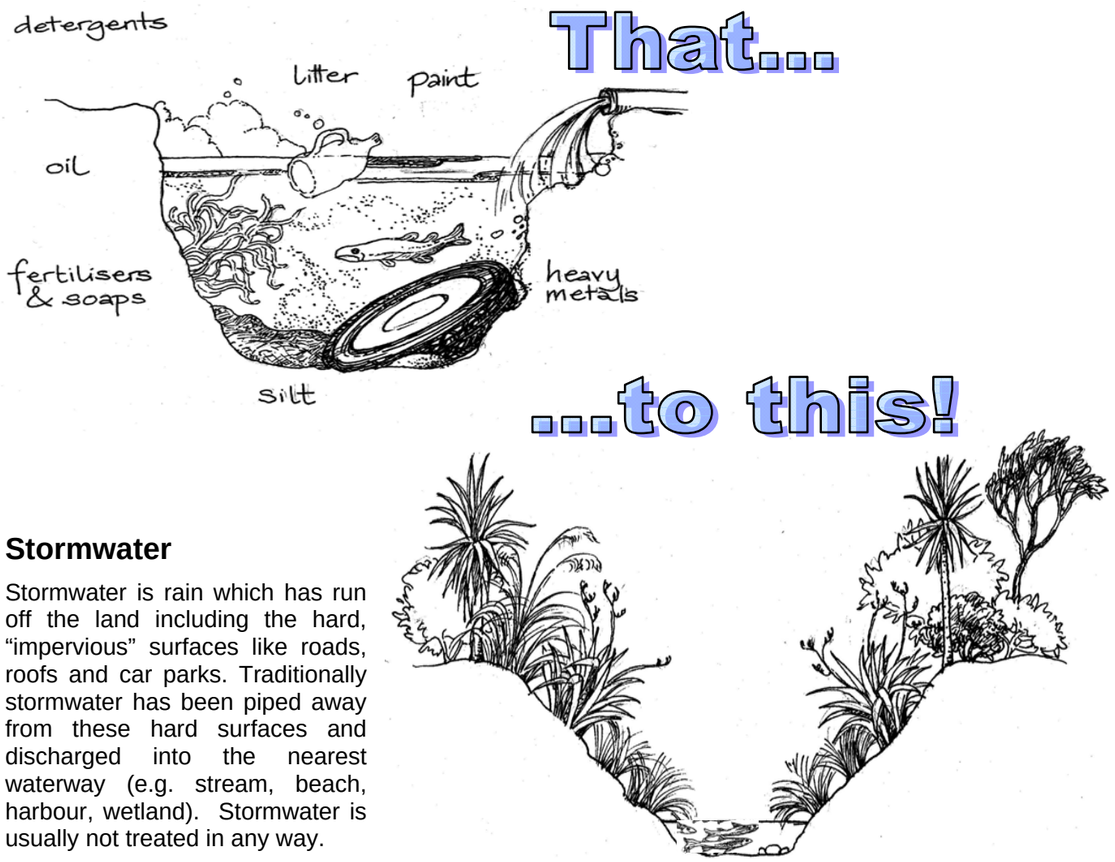

Stormwater

Stormwater is rain which has run off the land including the hard, “impervious” surfaces like roads, roofs and car parks. Traditionally stormwater has been piped away from these hard surfaces and discharged into the nearest waterway (e.g. stream, beach, harbour, wetland). Stormwater is usually not treated in any way.

WHY STORMWATER HAS BECOME A PROBLEM

In the past, stormwater run-off was of prime concern as it could cause flooding. Now, stormwater is internationally acknowledged as being a major source of pollution in the world’s waterways and water quality is also a key concern. Our modern lifestyle contributes to stormwater pollution, often unwittingly.

Stormwater is contaminated by:

- Motor vehicles through metals such as lead, copper, zinc and oil washing off roadways (it is estimated that 70% of stormwater pollution is caused by cars)
- Rubbish such as plastic bags, bottles and other street litter
- Herbicides, garden fertilisers, rotting lawn clippings
- Detergent from car washing
- Domestic animal faeces
- Illegal and accidental spills/dumping into stormwater drains
- Air pollution
- Siltation

The impacts of stormwater quantity and contamination can be minimised through a number of methods. These include:

- Roof tank stormwater collection
- Wetlands
- Swales
- Rain Gardens
- Revegetation
- Streamside planting (see ARC streamside planting guide)
- Permeable paving
- Minimising impervious surfaces (driveways, buildings, paving, parking areas)
- Minimising vegetation clearance
- Silt control
- Low Flow water devices

Some of the many stormwater topics available on the council’s website are listed below:

- Assessment of Water and Sanitary Services
- Countryside & Foothills Stormwater Management Code of Practice
- Disposing of unwanted paint
- Permeable paving
- Private Drains Information - Who owns that pipe?
- Project Twin Streams
- New Connections
- Pollution fact sheets
- Solutions for Residential Sites

Plants help improve water quality

Planting native trees around the ponds and waterways helps improve water quality. The value of such plantings is shown here:

- Shades the water lowering the temperature to promote better water quality for a wider range of freshwater species
- Provides a belt of vegetation around the ponds to filter any surface water which flows through it
- Removes some of the pollutants from the water through transpiration (by which water absorbed by plants, usually through the roots, is evaporated into the atmosphere from the plant surface, such as leaf pores).
- Enhances the aesthetic and recreational value of the area

Project Twin Streams

Project Twin Streams focuses on working together for healthy streams and strong communities. The Project aims to improve the wellbeing of the city through restoring natural systems for managing stormwater by replanting stream banks, bringing people together and putting them in touch with each other and with their natural environment.

The Project is delivered by community organisations working with the Waitakere City Council and covers Swanson, Ranui-Massey, Henderson Creek, Opanuku Stream, Oratia Stream and Glen Eden.

PROJECT TWIN STREAMS WAITAKERE

Three Waters education

Council staff, through its EcoWater unit, assist Waitakere schools with a variety of educational projects relating to stormwater, wastewater and water supply. This includes topic planning, resource selection and providing a visiting speaker service for classes. We encourage partnership arrangements with schools and involve local students in many successful projects of this type.

THE GUARDIANS OF THE MAURI

Te Kawerau a Maki and the Waitakere City Council have developed an animated underwater adventure as a classroom resource, aimed at children under twelve years old. The story is about two young fish confronted by pollution from our urban lifestyles as they swim upstream to find Te Awhiorangi, the taniwha. Also provided in Maori as ‘Nga Kaitiaki o Te Mauri’ the story challenges viewers to realise that they have a part to play to protect local streams.