

## Stormwater System

### Why treat stormwater?

When it rains, stormwater runs off roof tops, roads, carparks, industrial areas and parks. It may look clean, but it can be dirty and may contain pollutants such as heavy metals, sediment, nutrients, oil and grease.

This stormwater device has been designed to:

- reduce flooding
- manage the water quality entering and exiting our waterways and ecosystems.

### Te Paaka Tohorea Ko te taatari wai aawhaa

#### Te take hei whakahaumanu i te wai aawhaa?

Ka heke iho te wai aawhaa i ngaa tuanui, rori, waahi tuunga waka, waahi ahumai me ngaa paaka. Toona titiro he maa te wai, engari anoo pea kua piritia e ngaa paru whakakino, konganuku taumaha, parawai, ngaa kai me ngaa momo hinu. Kau hanga teenei puurere hei:

- whakaheke i te waipuke
- whakauu i te kounga o te wai rere ana ki ngaa waikeri me nga puunaha rauropi

### Stay safe around water

Water may contain bacteria of algal blooms that are commonly found in stormwater systems and can make people and animals sick.



Avoid contact with water



Don't drink water



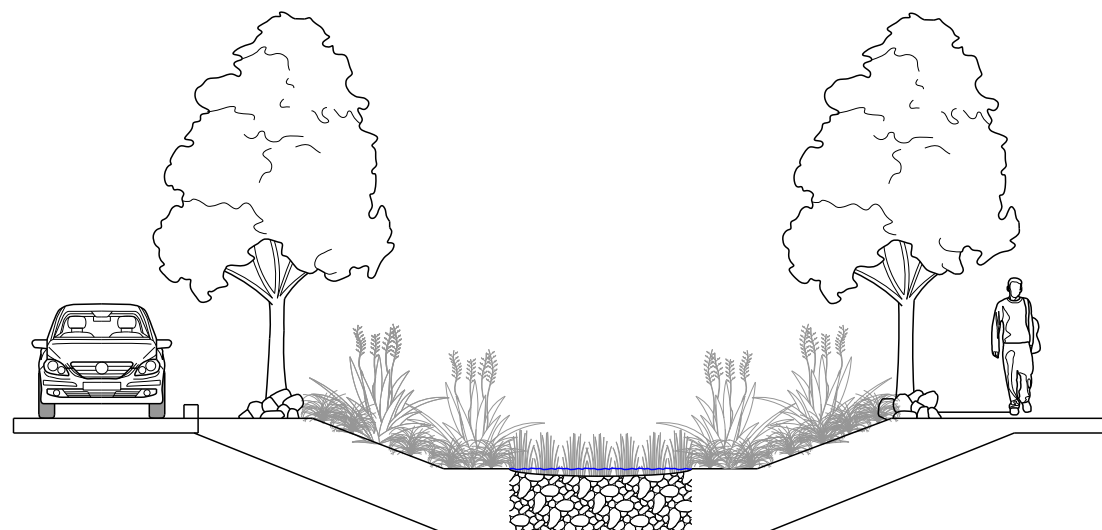
Do not eat fish from this stormwater system



Prevent animals or livestock from entering water



No recreational activities



### STORMWATER SWALE

### Main Pollutants

**Heavy metals** - lead, zinc, copper and cadmium washed into the system from roads. These are extremely toxic to both animals and plants.

**Sediment** - loose sand, clay, silt and erosion washed into the system from roads, building sites and driveways. These can increase stream temperatures and reduce the amount of food and oxygen for plants and aquatic life.

**Oil and grease** - fuels, motor oil, cooking oil, hydraulic oil, run from the road, discarding of liquids that can't dissolve in water and are toxic to the ecosystem.

**Nutrients** - nitrogen and phosphorus run off from fertilizers and pet and garden waste. Small amounts aid in plant growth, but high levels can result in toxic algae blooms known as blue-green algae.