

Stop Auckland Sewage Overflows Coalition

Polluted overflows contaminate Waitemata Harbour and inland streams

Old sewerage system needs urgent upgrade to meet future needs

Auckland's failing sewerage infrastructure can no longer be ignored. In the older parts of the city, the wastewater/stormwater pipes, many dating back to the late 1800s, cannot cope with current demands, let alone the pressure from housing intensification.

Each year Auckland accommodates an extra 56,000 people – the same size as New Plymouth. Many of these make their homes in the new apartments of the central Auckland isthmus where the old sewerage infrastructure is inadequate to service the people already living there. The problem is present throughout the whole isthmus, where the old systems are inadequate for the planned increased housing density. One typical example: pipes which serviced two properties are now required to handle stormwater and wastewater from 42 new units on the redeveloped site, with less permeable land to absorb overground flows.

When the sewerage system can no longer cope, often after rain but also in dry weather, "safety valve" overflow outlets discharge directly into the Waitemata Harbour. Forty-one outlets between Pt Chevalier and Kohimarama discharge into some of Auckland's most popular beaches, where signs now warn against swimming after heavy rainfall. Additionally, inland overflows are polluting public spaces and streams such as Cox's creek, Meola creek and the Whau River.

This is not what Auckland's "most liveable city" and New Zealand's "100% pure" image promises. More importantly, inadequately managed sewage is a threat to public health. E-coli bacterial readings in a local (central isthmus) stream have been recorded at up to 190,000 – the swimmable level is set at 540.

Auckland's rapid growth has spotlighted housing and transport as two demanding infrastructure issues, but sewerage, long neglected, must be considered as part of this challenging triumvirate. Auckland region is expected to grow from 1.5 million to 2.3 million in the next 25 years. That's a lot of flushed toilets and run-off from roofs and roads. We need a long-term solution, and we need to find the funding. Short-term fixes are no longer enough.

AT A GLANCE

- More than 2 million cubic metres of contaminated overflows discharge each year into local waterways and the Waitemata Harbour.

- These discharges currently are permitted by resource consents granted by Auckland Council to Watercare Services (a council controlled organisation or CCO) following a non-notified application.
- In the USA, UK and Canada central governments have banned overflows of untreated sewage and introduced regulators to force faster compliance with new water purity standards.
- In March 2017 SASOC (Stop Auckland Sewage Overflow Coalition), a coalition of community groups concerned about sewage in stormwater overflows, was formed to research the background to this issue and lobby for a more efficient sewerage system. SASOC starting point is that polluted overflows will be largely eliminated if sewage is separated from stormwater – into separated pipes. If this is not totally feasible, then SOSAC seeks removal of a large part of the stormwater from the old combined network in the Auckland isthmus.
- Combined pipes/separated pipes.
 - In older areas combined pipes carry both sewage and stormwater. After rainfall as low as 5mm, stormwater mixes with wastewater in the pipe, and overflows can discharge this combined sewage and wastewater directly into the harbour and inland streams.
 - Separated pipes are required for all new dwellings and major renovations involving plumbing, but in older areas this separation usually ends at the road frontage, with the separated pipes flowing into an existing combined pipe.
- New builds with separated pipes are being required (at significant cost) to install holding tanks, which can retain and then discharge wastewater when the sewerage system is under less pressure.
- The former Auckland City Council adopted a policy of total separation and increased rates to provide for it. Unfortunately, these rates were not specifically reserved for upgrade work, and, following the formation of the super city, the funding obtained from the rates increase has been allocated elsewhere.
- In the meantime, the Auckland City Council's plans for a large collector pipe, known as the Central Interceptor, are going ahead. Running between Cox's creek and the Mangere treatment plant, the pipe should increase the capacity of the predominantly combined pipe network in central Auckland. However, overflows cannot be ruled out. Various local projects being planned to relieve overflows in the Western Bays catchment, and in other parts of the isthmus.
- Unless stormwater is separated from wastewater totally or substantially, the problem will get worse. The recently-established Auckland unitary plan permits increased density in much of the central Auckland isthmus, resulting in increased wastewater. Additionally, in these older suburbs it permits impermeable surfaces to increase from 42% to 62% of the land area, reducing the natural rainfall soakage and

increasing the stormwater collection (to illustrate this, the increase potentially creates an extra 2 sq km of impervious surface in two areas with the most alarming overflows, the Meola and Oakley catchments).

- Auckland's water services are managed by two distinctly separate arms of council, until recently with, apparently, very little, if any, liaison.
 - Watercare Services Ltd, a council CCO, is responsible for supplying potable water and collecting and treating the city's wastewater. However, in older areas with combined pipes Watercare is responsible for managing the combined pipes, even though they carry stormwater. Strangely, Watercare is not financially responsible for any stormwater upgrades to that system, only wastewater upgrades.
 - Healthy Waters, a section of Auckland Council, is responsible for collecting and disposing of stormwater.
- A recently-formed project team, drawn from both Watercare and Healthy Waters, has just reported to council on a long-term stormwater/wastewater solution, with a view to being included in council's 2018 long-term plan. This project is known as Western Isthmus Water Quality Improvement Plan (WIWQIP).
- SASOC understands that the cost of the various measures being proposed is likely to be in the order of \$2 billion. This raises serious questions for Council and Auckland ratepayers, including whether the cost is one for the whole of Auckland, or for a lesser group. SASOC believes that the work benefits the whole of Auckland (in a range of ways) and should therefore be carried by all Aucklanders.
- SASOC is one of several environmental and community groups being consulted on this report this month. SASOC believes it is vitally important that no conclusions are reached as to the optimum solution or the means of achieving it (including the means of funding the upgrade work) before the public has been consulted. It is unknown when it will be available for general public consultation.
- SASOC strongly believes that the WIWQIP report's conclusions should:
 - be available for early public consultation
 - be peer-reviewed by overseas experts.

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