

Submission to Wellington City Council Proposed District Plan, July 2023

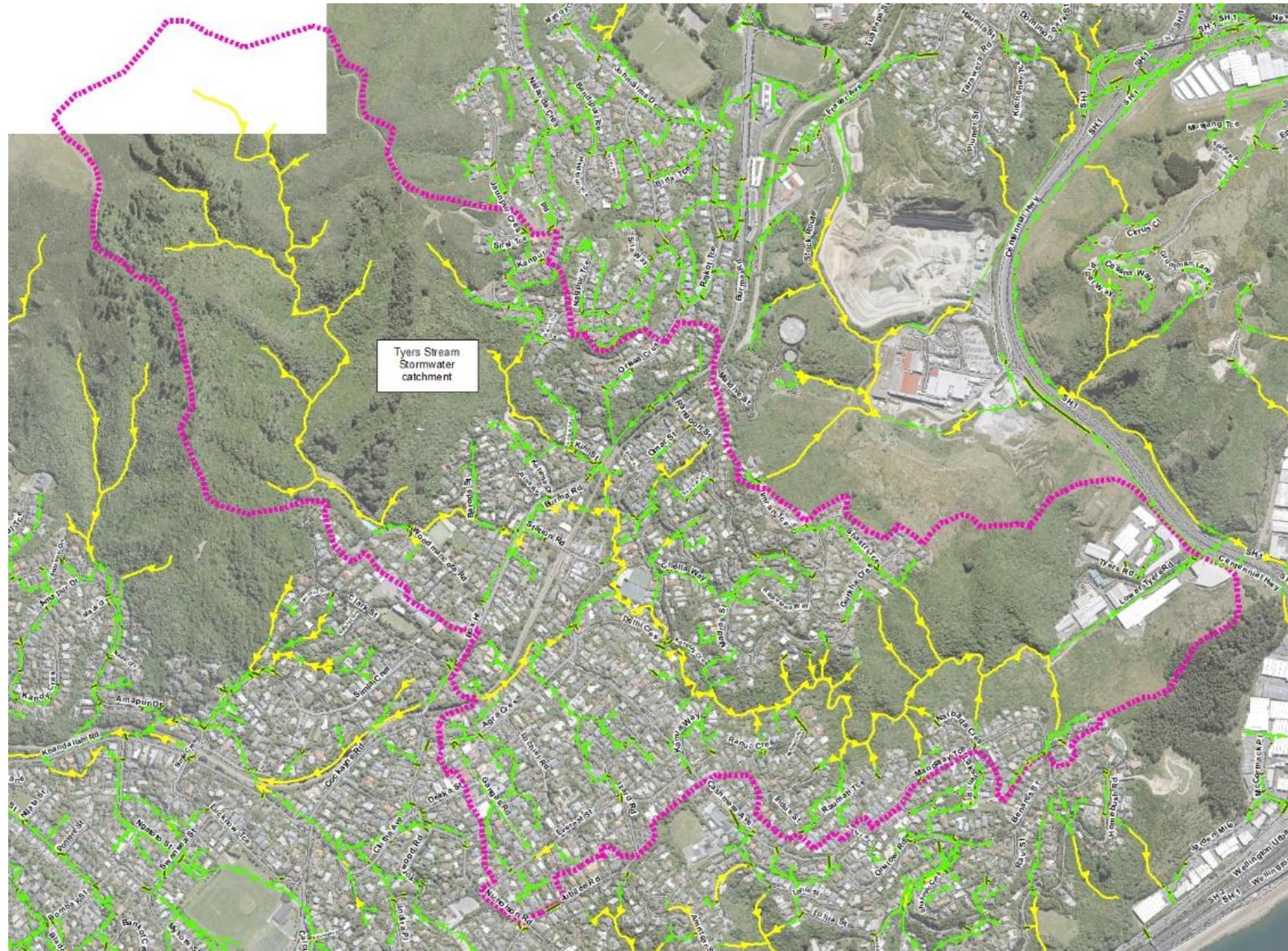
Tyers Stream Group

- The catchment of Tyers Stream includes most of Khandallah and some of Broadmeadows. The stream starts on the south-eastern side of Mt Kaukau, flows through Khandallah and the Tyers Stream Reserve, before being piped under the lower Tyers Rd industrial area and into the Waitohi Stream (the original name for Ngauranga Stream) and the sea at the base of Ngauranga Gorge.
- A major wastewater pipeline follows the stream alignment for most of its length; incidents of wastewater leakages are common, with associated discharges to the stream and air.
- Current public access to Tyers Stream Reserve is limited by private landownership and physical constraints. The lower reaches are accessible from Tyers Road off Ngauranga Gorge, through two private industrial premises.

Tyers Stream Catchment, delineated by the purple line.

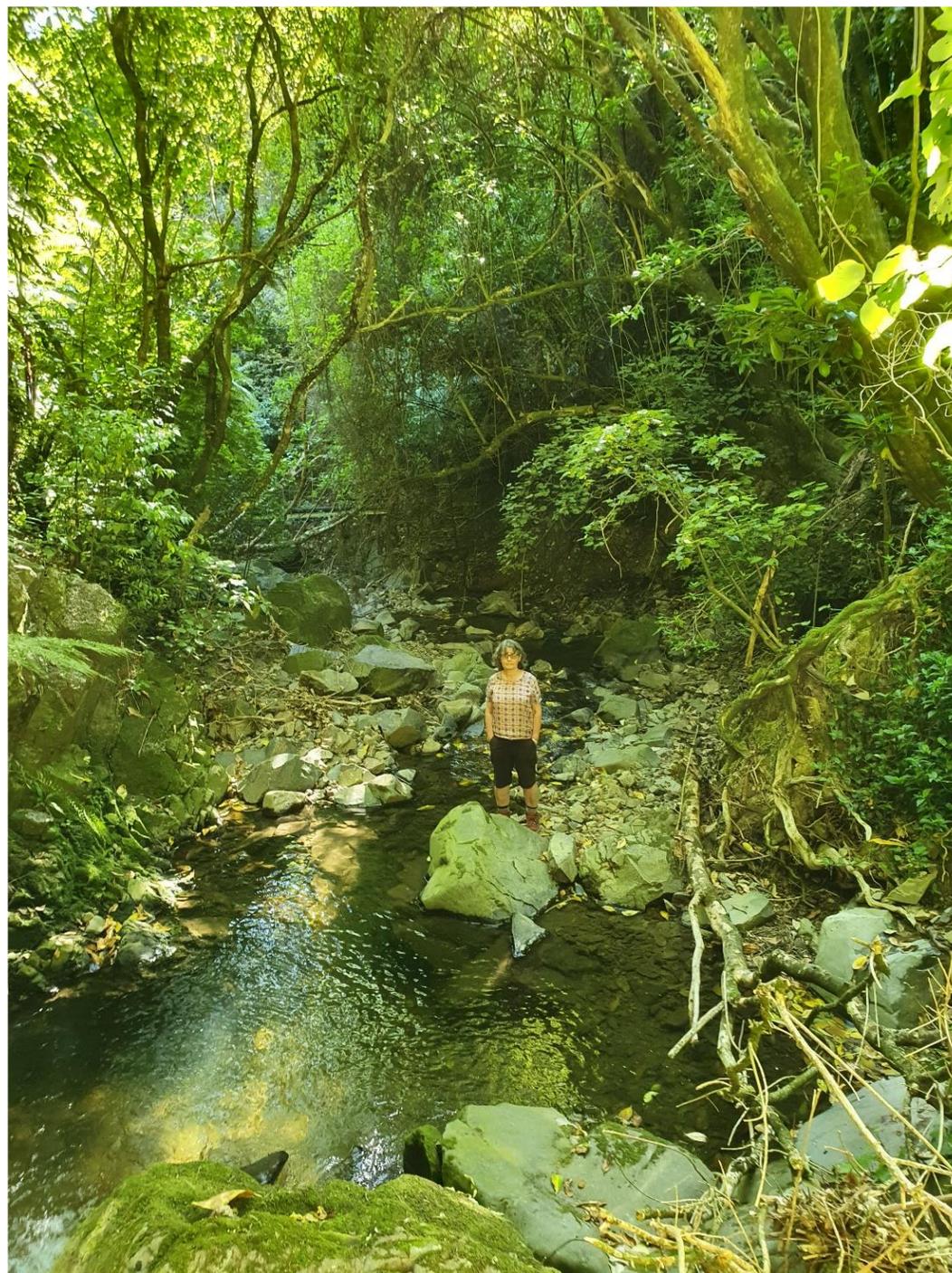
Yellow lines are open channels, with green lines being piped.

Mt Kaukau is to the top left and Tyers Stream Reserve the right.



Tyers Stream in Tyers Stream Reserve.

Note topography and waste water line across the Stream in the background



Biodiversity in Tyers Stream & the Waitohi Catchment



Redfin Bully



Koaro photographed Tyers Stream Grill



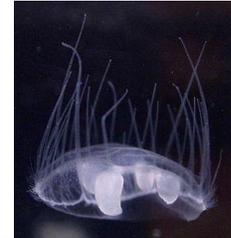
Toitoe, Common Bully



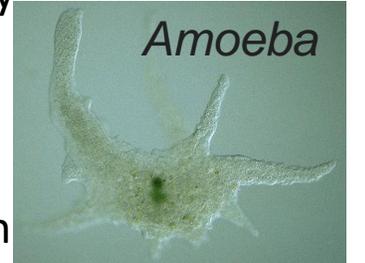
Koura



Hydra



Freshwater Jellyfish



Amoeba



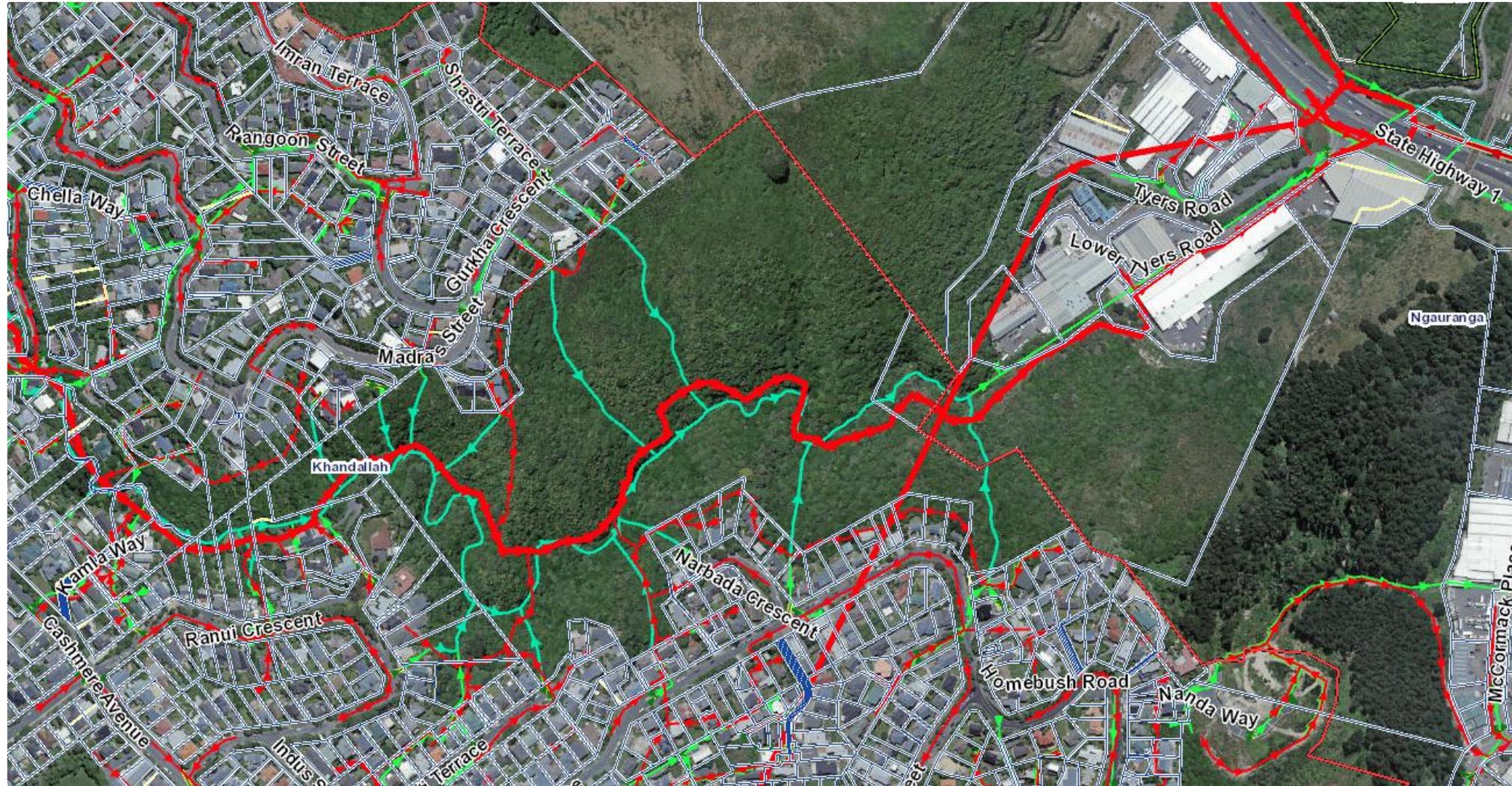
1.2m Tuna kuwharuwharu (longfin eel), & 23cm Banded Kokopu, photographed mid Tyers Stream



Tuna, Shortfin eel

Three Waters Context

Tyers Stream receives stormwater runoff from a large residential area, including unplanned discharges to water and air from water supply and waste water pipelines, as well as frequent unauthorised domestic discharges.



Tyers Stream Reserve showing mayor waste water pipe through the Reserve from Khandallah to SH1.

As clearly demonstrated in *The Mayoral Taskforce on the Three Waters Report* and in the *Wellington City Council - Spatial Plan Three Waters Assessment - Growth Catchments Mahi Table and Cost Estimates March 2021* there is no capacity for growth in the current three waters infrastructure in the Tyers Stream catchment due to lack of maintenance and renewals.

The wastewater infrastructure shows signs of significant failure, causing ongoing and significant contamination (water and air), erosion events and other problems in Tyers Stream.



The waste water pipe has a high risk rating in the Wellington Water(WW), operational risk register and has been highlighted to WW Service planning as *in the event of failure it is unlikely that the pipeline will be able to be repaired, reconstructed or rehabilitated in the existing location due to safe access.*

Overview of changes requested for Three Waters

The Tyers Stream Group seeks the following changes and/or provision for the following matters:

1. Land use intensification and all development (e.g., residential growth) to only occur if there is a fully functional and resilient Three Waters Infrastructure in place prior to development. Three Waters Infrastructure must have the capacity, the upgrades, the resilience, and appropriate monitoring and maintenance to manage growth, without causing damage to or contamination of the stream, the catchment's biodiversity, and its airshed. The group is not opposed to densification or growth in principle, but wishes to ensure there is adequate provision for infrastructure and protection of environmental values *before* development commences.
2. The Spatial Plan has phasing for the upgrading of the three waters infrastructure. However, the Proposed District Plan does not adequately reflect this phasing approach towards development. The Proposed District Plan needs a mechanism to direct development into areas where upgrades have already occurred or to phase in development as the upgrades to the three waters occur.
3. The protection of riparian land, public access to and along water bodies, development setbacks, no build areas near waterways, the provision of SNA's, the retention of vegetation and the maximum site coverage all contribute to good stormwater management and protection from flooding. Linkage is required between all the rules that influence stormwater.
4. Redundance in the rules is needed as District Plans have no influence on the provision of appropriate monitoring and maintenance of infrastructure to ensure retention of capacity, necessary upgrades, resilience and avoidance of adverse environmental effects of three waters infrastructure. Redundance is also needed as it is unknown if WCC will require compliance of any rules to restrict buildings and infrastructure in areas covered by the Stream Corridor Overlay, the Overland Flow Path Overlay and the Ponding Overlay.

5. Appropriate esplanade provision must be made along the margins of Tyers Stream and other waterways whenever subdivision occurs (as is required by the RMA). This creates better public access, increases linkages, facilitates more liveable spaces and reduces stormwater runoff. This is especially important in areas that allow increased housing density.
6. It is essential that all building developments, including infill housing, mandate at least neutral or lesser stormwater runoff, compared with pre-development. Retention of stormwater to manage stormwater volumes to avoid flashy rainfall runoff requires an initial depth of rainfall to be captured and not allowed to discharge as stormwater. Where soils allow, this can be via infiltration but in Wellington is likely to require rainwater harvest and reuse to reduce volume which is fundamental to mimic natural losses from vegetation and undeveloped soils. The district plan should stipulate a required metric relating to retention as a rule for future development at all scales.
7. Water sensitive urban design needs to be better defined.
8. Building on unbuilt or built legal roads providing access to Reserves should be non-complying.
9. Piping of waterways other than **short** sections less than 10metres for access should be non-complying.
 - Pipes can block, causing upstream and downstream flooding
 - There is an ongoing cost to keep pipe entrances clear.
 - Pipes remove instream habitat and can impede fish passage reducing access to suitable upstream habitat.
 - Pipes destroy the natural character of riparian margins.
 - Piping separates people from streams and can decrease knowledge about and respect of local waterways.