

## **Submission in Support of Hydraulic Neutrality and Water Sensitive Design for Future Development in Updated District Plan**

### **Introduction**

I am writing to express the support of Friends of Waiwhetū Stream for the inclusion of hydraulic neutrality and water-sensitive design as requirements for future development within urban areas, as outlined in the Three Waters chapter. The Friends believe these measures are essential for addressing the increasing flood risks associated with urban growth, as well as ensuring the long-term health and sustainability of our water infrastructure and ecosystems.

In addition, we ask that the new District Plan include a requirement that all new houses and commercial buildings include water storage tanks for non-potable water use, and that the setback space for water courses be increased to allow for changes to their courses over time.

### **About the Friends of Waiwhetū Stream**

Friends of Waiwhetū Stream is a community organisation dedicated to the protection, restoration, and enhancement of the Waiwhetū Stream and its surrounding environment in the Hutt Valley. The group works in partnership with local councils, environmental agencies, and other community organisations to promote sustainable practices, raise awareness about the importance of waterway health, and engage in hands-on restoration projects. Through their efforts, the Friends aims to improve water quality, restore native habitats, and create a positive and lasting impact on the local ecosystem for the benefit of both wildlife and the community.

### **Support for Hydraulic Neutrality to Mitigate Flood Risks**

The requirement for future developments to maintain hydraulic neutrality—where the stormwater discharge flow rate is no greater than the pre-development runoff—is a crucial step in managing and mitigating the impacts of urbanisation on flood risk. With climate change and extreme weather events, coupled with urban intensification, it is important that new development does not increase flooding in already vulnerable waterways like Waiwhetū Stream. By ensuring that stormwater runoff is managed on-site to maintain pre-development flow rates this will reduce the risk of downstream flooding and improve the safety of communities that live near Waiwhetū Stream.

This principle of hydraulic neutrality not only helps in controlling flooding but also prevents unnecessary strain on existing stormwater infrastructure, which already is near

capacity as seen by local flooding events during heavy rainfall. By requiring developers to demonstrate that their projects will not increase runoff, this policy fosters responsible and sustainable growth that considers the broader environmental impacts.

### **Support for Water Sensitive Design for Improved Water Quality**

In addition to hydraulic neutrality, the requirement for incorporating water-sensitive design methods in new developments is a vital component of sustainable urban planning. By integrating techniques such as rainwater harvesting, green roofs, permeable pavements, and vegetated swales, new developments can reduce surface runoff, enhance water quality, and promote the natural filtration of pollutants. These methods not only mitigate the adverse effects of stormwater but also create positive outcomes, such as improving local biodiversity and enhancing the overall quality of life for residents.

Water-sensitive design offers a proactive approach to urban water management, emphasising the restoration of natural hydrological processes. Rather than merely managing stormwater as a nuisance, these methods work to treat stormwater as a valuable resource and integrate it into the landscape, ultimately contributing to the broader goal of environmental sustainability.

### **Support for Promoting Positive Effects and Mitigating Adverse Impacts**

The adoption of hydraulic neutrality and water-sensitive design not only avoids or mitigates adverse environmental effects but also promotes positive outcomes for water quality, public health, and the resilience of urban environments. By requiring developers to include these methods, we ensure that new developments are better aligned with the principles of sustainable urbanisation, where growth does not come at the expense of the natural environment.

### **Additional Mitigations for Three Waters Chapter - Mandatory Rainwater Retention Tanks for Non-Potable Water Use**

In addition to the requirements for hydraulic neutrality and water-sensitive design, The Friends strongly recommend that rainwater retention tanks be made compulsory for all new developments to manage non-potable water needs. These systems can capture and store rainwater for use in irrigation, landscape maintenance, and other non-drinking water applications, thereby reducing the demand on the potable water supply and alleviating pressure on the local water infrastructure. The integration of rainwater harvesting systems not only provides a sustainable water source for urban

environments but also promotes water conservation practices, which are increasingly vital in light of the growing demand for water resources. Mandating the installation of rainwater retention tanks in all new developments will further reduce the environmental impact of urban growth while enhancing the resilience of our communities to future water challenges.

### **Additional Mitigation – allowing space for water courses**

The Friends have observed that the current corridor for Waiwhetū Stream is in places too narrow and this is causing banks to be eroded and undercut, notably on Riverside Drive north of the Tilbury Street bridge. The District Plan should incorporate space for Waiwhetū Stream and other water courses as a critical consideration for both environmental and community well-being. By allocating dedicated space for streams, they can flow freely, reducing the risk of erosion and flooding in surrounding areas. Allowing for the natural change in stream courses over time in planning aligns with sustainable development practices and will help safeguard current and future residents.

Our submission is that the riparian margin be increased from 10 metres to 20 metres and that sub-paragraph 8 have point 2 deleted, and sub paragraph 20 have point 1 deleted and the words "any other" in point 2.

### **Conclusion**

In conclusion, The Friends of Waiwhetū Stream strongly support the inclusion of hydraulic neutrality and water-sensitive design in the Three Waters chapter for future development in urban areas. These requirements are crucial for mitigating flood risks, improving water quality, and ensuring that urban growth is conducted in a way that enhances the environment and community well-being. I encourage the continued emphasis on these strategies in all planning and development processes to ensure the future resilience of our urban areas.

Thank you for your attention to this important matter.

We would like to present to the Council in regards to our submission.