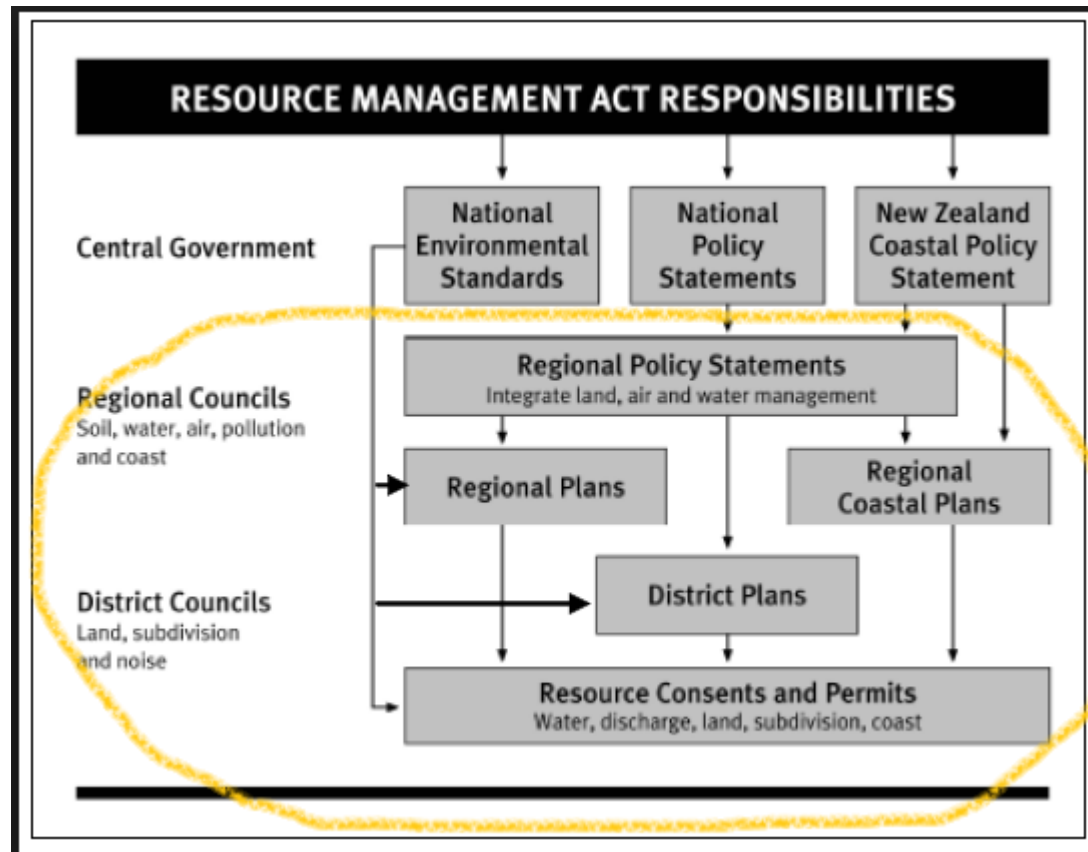


# Water Sensitive Design and the Auckland Unitary Plan Implementation Part 2

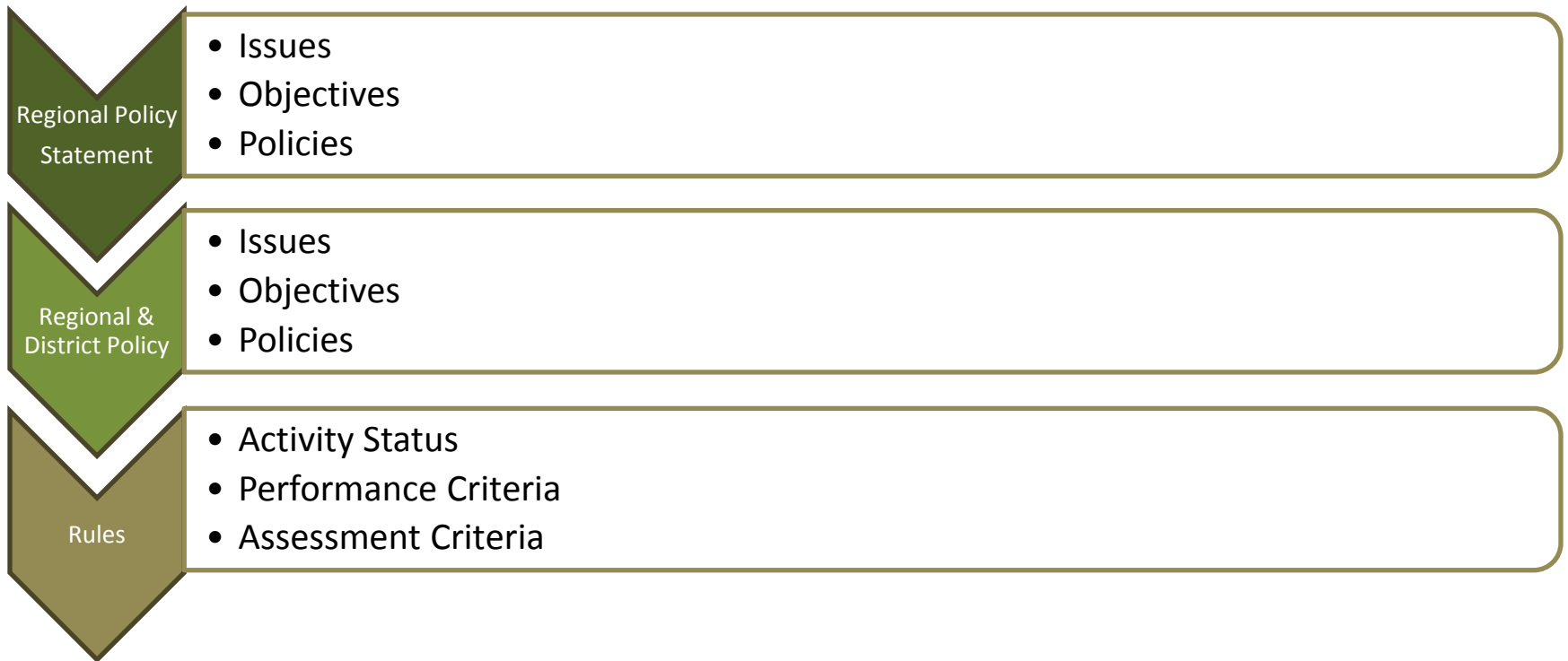
Katja Huls

	Air, Land and Water Plan/Legacy District Plans	Unitary Plan
Reclamation of intermittent streams	Permitted	Non-complying
Vulnerable activities in the 1:100 year flood plain	Various legacy approaches focussing on freeboard	Restricted Discretionary
Hydrology mitigation	Detention	Retention (volume loss via re-use or infiltration) and detention
Integrated land and water management	Reliance on TA catchment plans and network discharge consents or discrete stormwater discharge consents  Mostly communal management	Reliance on planning - water sensitive design, network consents, subdivision and land use  Emphasis on at source management  Apply to redevelopment
Stormwater quality	Treat whole site	Sensitive and degraded receiving environments  High contaminant generating activities  Impervious area only

# Plan Scope



# Plan layout



+ Chapter B Regional policy statement	
+ Chapter C General rules	
+ Chapter D Overlays	
- Chapter E Auckland-wide	E1 Water quality and integrated management
+ Natural Resources	E3 Lakes, rivers, streams and wetlands
+ Mana Whenua	E8 Stormwater - Discharge and diversion
+ Built Environment	E9 Stormwater quality - High contaminant generating car parks and high use roads
+ Infrastructure	E10 Stormwater management area - Flow 1 and Flow 2
+ Environmental Risk	E36 Natural hazards and flooding
+ Subdivision	
+ Temporary Activities	
+ Chapter F Coastal	
+ Chapter G Rural Urban Boundary (RUB)	
+ Chapter H Zones	
+ Chapter I Precincts	
+ Chapter J Definitions	
+ Chapter K Designations	
+ Chapter L Schedules	
+ Chapter M Appendices	Appendix 1 Structure plan guidelines

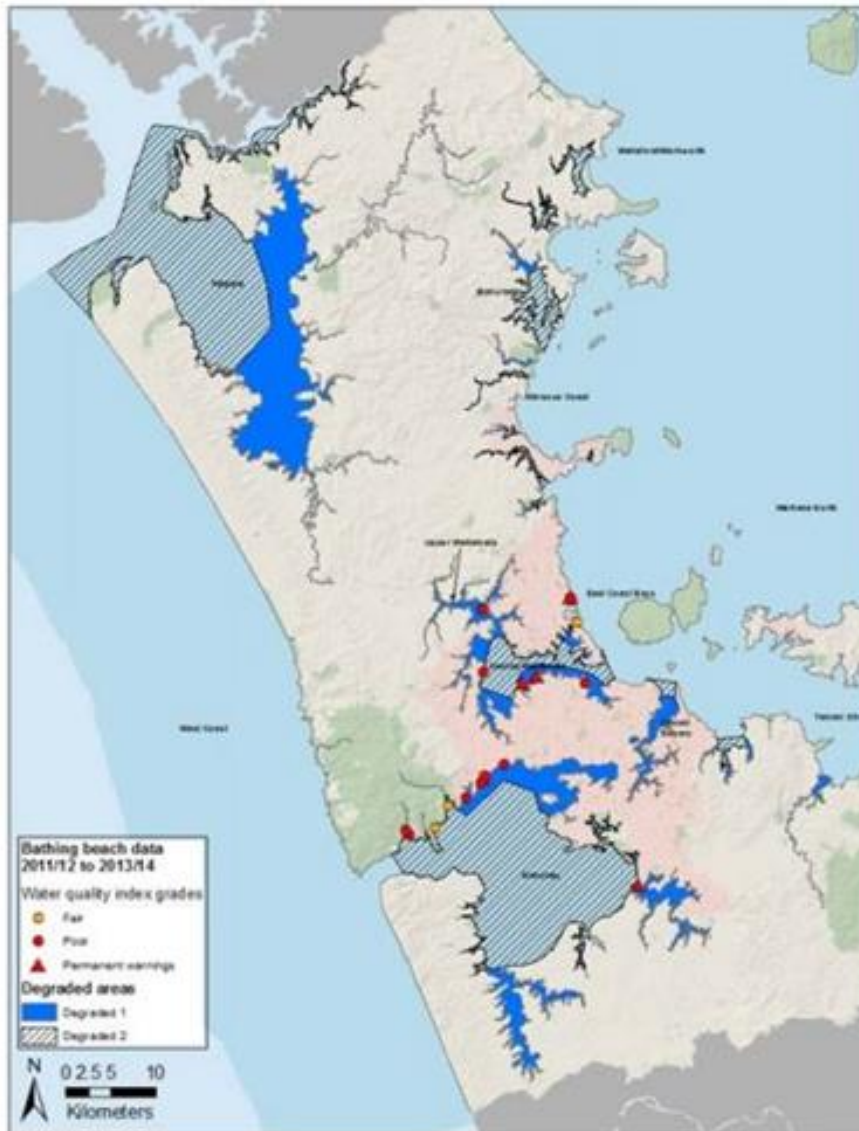


greenfields

large brownfields

small brownfields

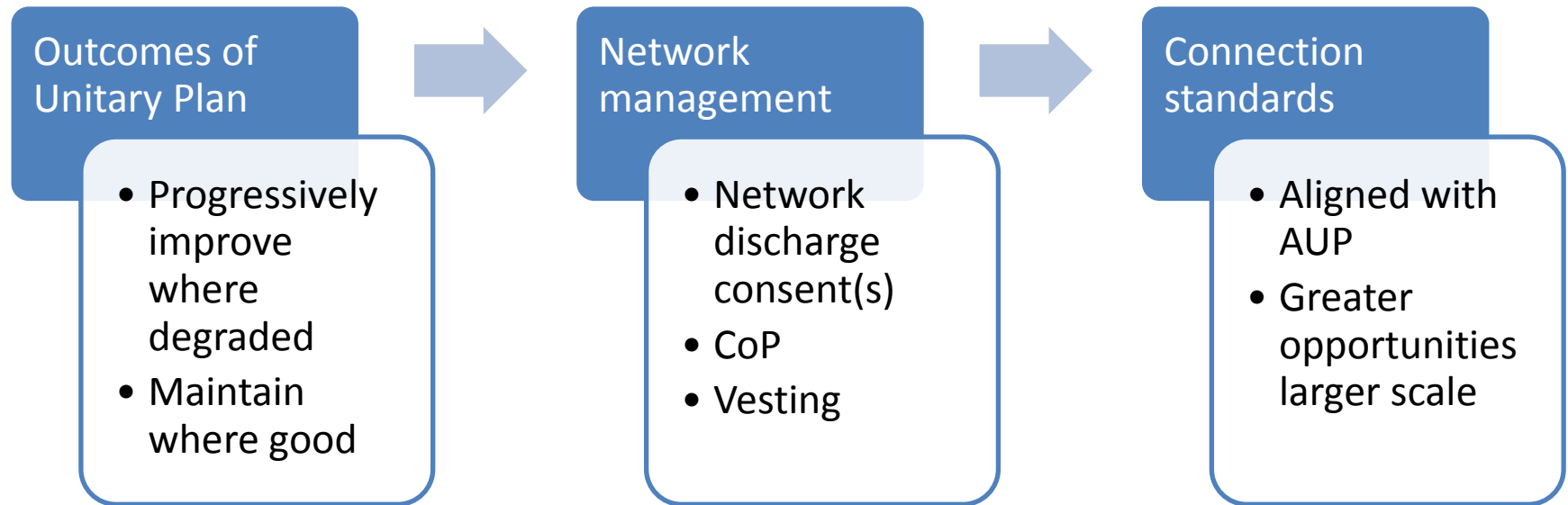
# WSD implementation



Response to receiving environment

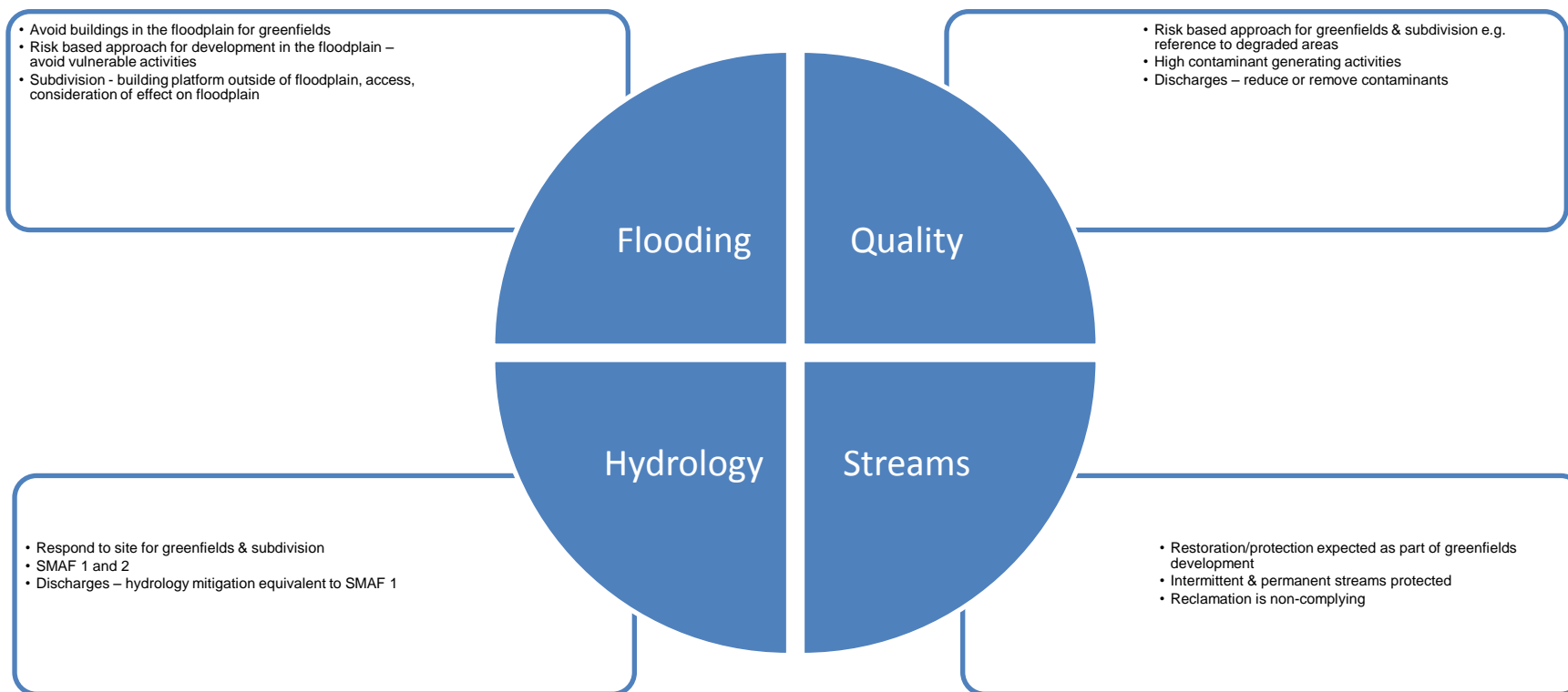


# Network management

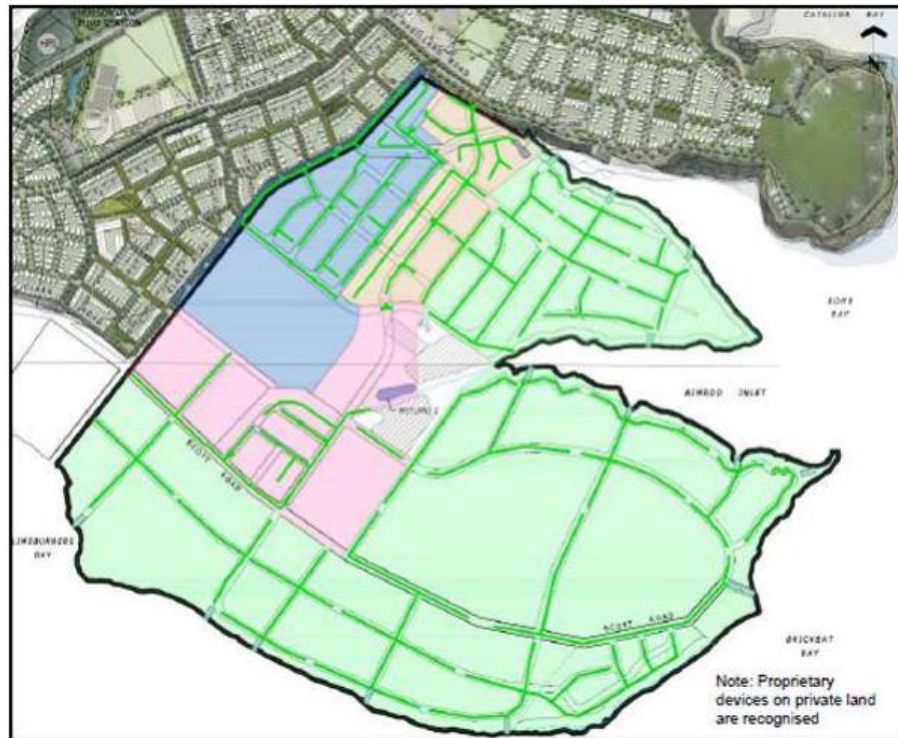




# Rules



# Precincts



## Appendix 1 Structure plan guidelines

This appendix forms part of the regional policy statement [rps].

### 1.1. Introduction

Structure plans are an important method for establishing the pattern of land use and the transport and services network within a defined area. They can provide a detailed examination of the opportunities and constraints relating to the land including its suitability for various activities, infrastructure provision, geotechnical issues and natural hazards. They should identify, investigate and address the potential effects of urbanisation and development on natural and physical resources in the structure plan area and in neighbouring areas, particularly those that have been scheduled in the Unitary Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage and special character. They should then explain how the

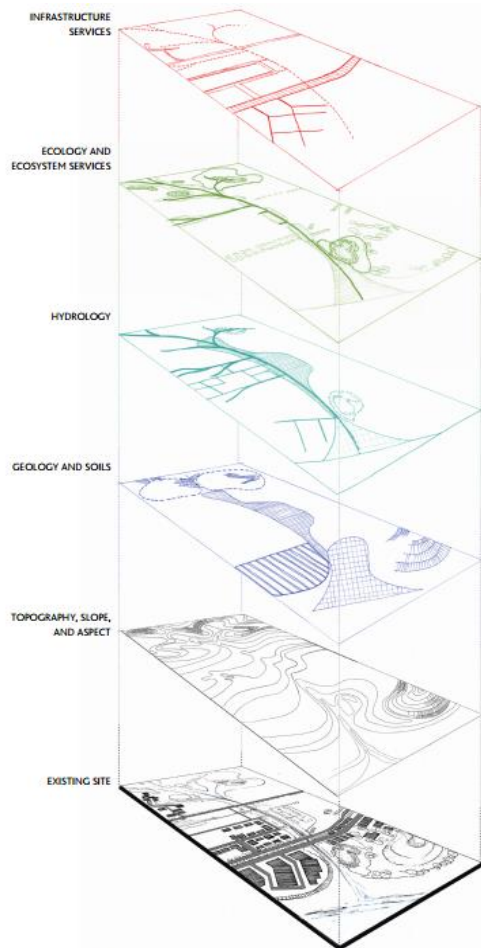


Figure 11: The layers of information that make up a site's biophysical attributes







## Structure Planning



## Structure Planning





# Water Sensitive Design

Select your technical guidance type:

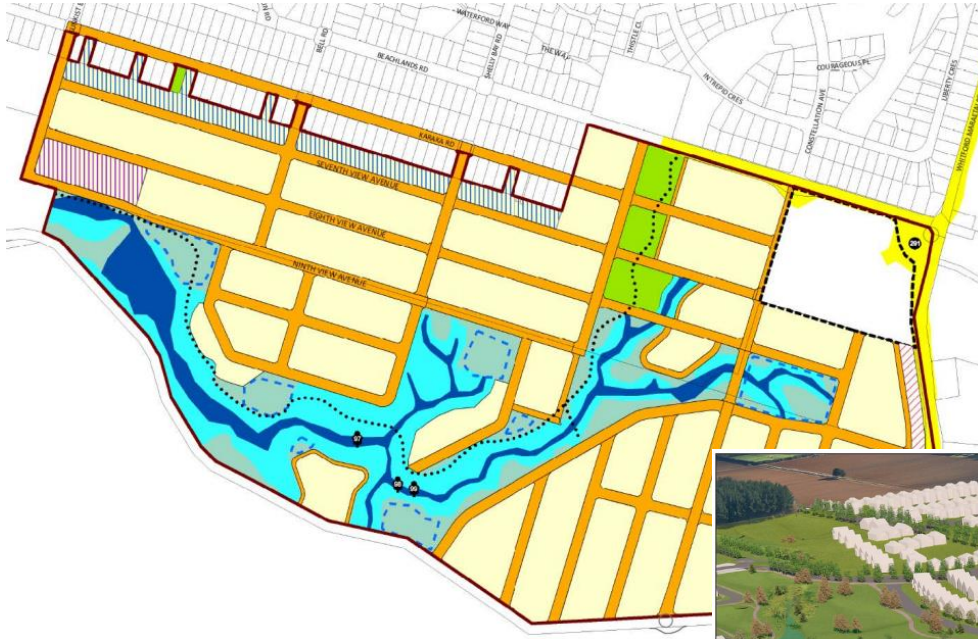


1. Introduction
2. Definition of WSD for stormwater
3. How to use GD04
4. WSD principles for stormwater
5. WSD approaches to stormwater management
6. Statutory context
7. Land development process
8. Project team

## 3. How to use GD04

The Intended audience for GD04 includes policy planners, stormwater engineers, landscape architects, and other design practitioners associated with land development and land use planning where stormwater and freshwater management is a consideration.





Practicality



# Integration with Local Government Act

