## **Developing** National Water Sensitive Design Principles

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## The Ministry's vision

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#### Our goal

Make Aotearoa New Zealand the most liveable place in the world...

...by creating water sensitive cities that support healthy people and ecosystems.

### The problem

Urban areas in New Zealand have adverse effects on water ecosystems and resources, and people's relationships with them.

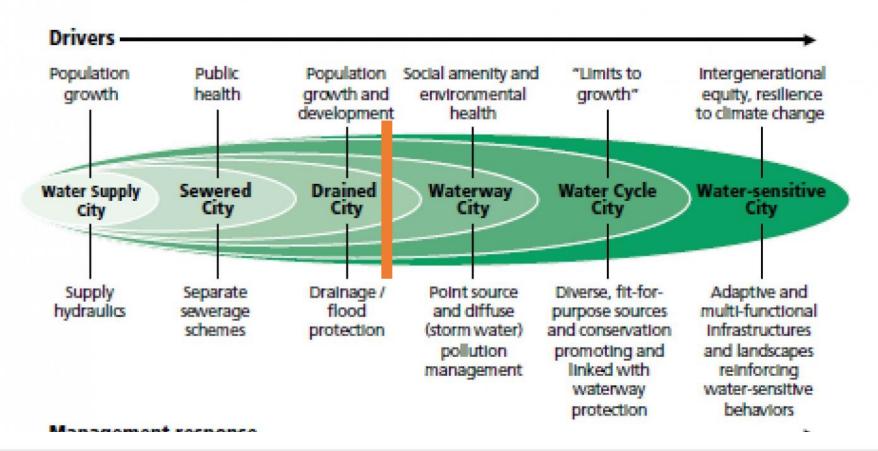




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## Where is NZ on the water sensitive scale?

Urban water transition phases







### A complex policy environment...

# Regional Policy Statements Regional Plans Regional Plans District Plans

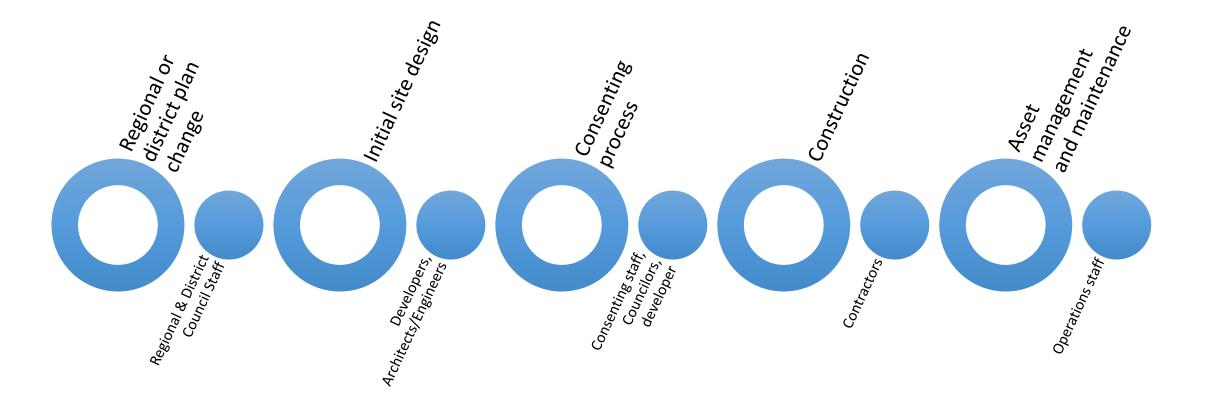
Consenting and planning guidance Codes of Compliance Monitoring and reporting





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### Critical chain of decision makers







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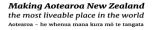


### Collaborating to develop national Water Sensitive Design Principles.











Establishing an expert working group





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# Identifying priority pressures

- Diffuse pollution of sediment, metals and gross pollutants (esp. road runnoff)
- Pollution related to the reticulated wastewater system intentional point source overflows (CSOs) or diffuse discharges (leaks)
- Altered hydrology due to increased impervious surfaces
- Altered channel form and habitat
- Climate change and flood resilience







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### **Providing for community values**

- Intrinsic existence values Ki uta ki tai, Mauritanga, Wairuatanga
- Spiritual/cultural values Whakapapa, Kaitiakitanga, Rangatiratanga, sense of place
- Physical/provisioning values Orangatanga, Mahinga kai, recreation
- Resilience values flood risk management, climate resilience
- Aesthetic values improved property value







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## Developing our initial 'long list' of principles

- Respect the intrinsic rights of water ecosystems te mana o te wai
- Uphold and foster kaitiakitanga
- Respect Rangatiratanga
- Ensure the health of the receiving environment
- Provide for community needs, values and aspirations
- Use adaptive, site-specific solutions that learn from and work with nature
- Explore a holistic range of perspectives when creating urban spaces





## Developing our initial 'long list' of principles

- Address pressures on natural waterbodies as close to source as possible
- Investments reflect a holistic consideration of costs and benefits
- Improve resilience of the built environment
- Ensure information on impacts and outcomes is communicated





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## Identifying specific good practices?

Example

#### Address stormwater effects as close to source as possible

- Minimise impervious surfaces
- Reduce vehicle use and promote walkability, bicycle use or mass transit
- Carefully manage urban earthworks
- Reduce littering behaviour and the prevalence of disposables
- Capture diffuse pollution before it reaches sensitive receiving environments
- Mitigate point source pollution, such as overflows from sewerage networks





### **Considering implementation options**

Traditional policy options

Monitoring and reporting framework Outreach campaign, guidance/ training Model business case/ CBA case studies

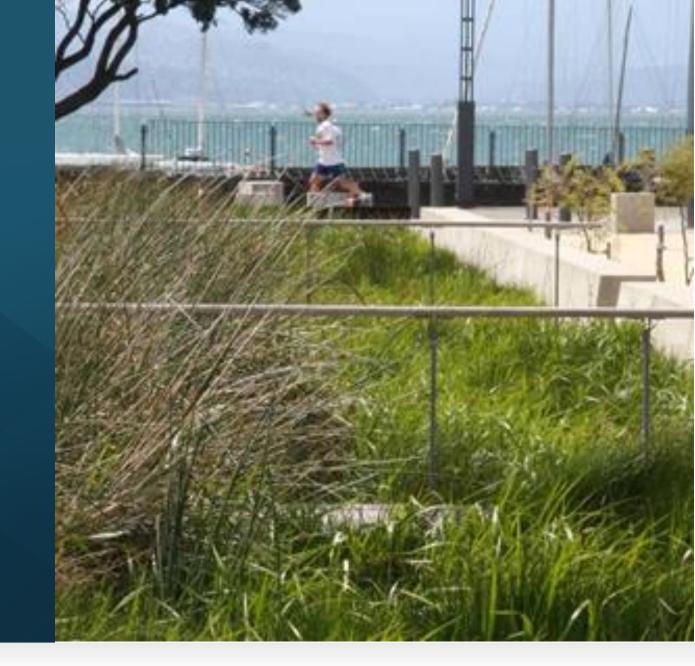




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### Where to next?

- Iterative drafting of principles
- Seek council and industry endorsement
- Aligning policies





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### Ngā mihi nui.

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