



Update on the urban working groups

1 December 2016

What we've been up to

- Stormwater and Wastewater Working Group
 - Extensive management options explored
 - Some ideas retained for later
 - Seeking modellers' input
 - **Set of management options**
- Urban Development Working Group
 - Management options explored
 - Getting the scale right...
 - Stormwater management is key
 - **Set of narrative scenarios**

Stormwater and wastewater management options

STORMWATER

- Infrastructure/devices

- Stormwater first flush diversion
- Proprietary devices (e.g. filter pods)
- Rain gardens
- Stormwater treatment wetlands
- Rain water harvest and reuse

- Source control of inputs

- Replace/paint high zinc roofs
- Replace brake pads with ceramic
- Improve site practice and handling of contaminants
- Road sweeping to remove fines
- Reduce impervious surface catchment cover

Stormwater and wastewater management options

WASTEWATER

- Treatment plant
 - Upgrade WWTP for higher level of treatment
 - Extend WWTP outfall
- Network
 - Renew pipes ahead of life span
 - Increase storage capacity in network
 - Reduce infiltration and inflow

RIPARIAN RESTORATION

Urban development narrative scenarios

- 1** – Business as usual 1 (District Plan zones)
- 2** – Business as usual 2 (District Plan zones + likely identified growth areas)
- 3** – Best management practice (BMP) new development
- 4** – Better than best practice (WSUD) new development
- 5** – Shrinking the urban development footprint
- 6** – Expanding the urban development footprint

Stormwater practice vs development area

Development area	Type of stormwater practice		
	Low level mitigation (current practice)	Best existing practice (BMP)	Better than best (WSUD)
District Plans	Scenario 1		
DP + likely IDed growth	Scenario 2	Scenario 3	Scenario 4
Shrink footprint	Scenario 5a?	Scenario 5b?	
Expand footprint		Scenario 6?	

Stakeholder work

- Ongoing stakeholder engagement planning with Jon
- Bringing UD and SWWW groups together
- Workshop session(s) in new year
- Aim: to understand SWWW and UD motivations and perspectives on opportunities