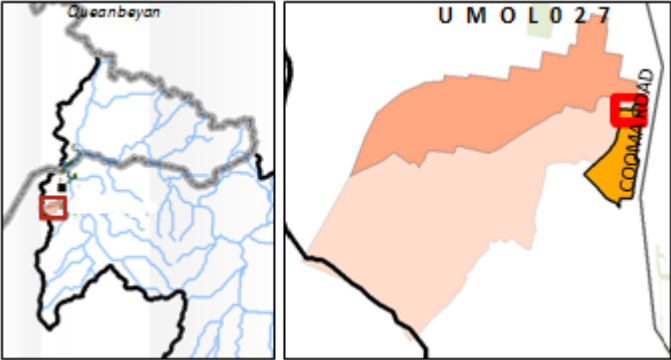


Option 5 Upper Molonglo Catchment: UM004 Reserve north of Margaret Donoghoe Park - Northern site

Bioretention system (catchment area 38.3 ha)



Site photo - Grassed area north of Alanbar Street



Precedent photo - Bioretention system integrated into public open space



Legend

ACT border

Upper Molonglo priority sites

Catchment area

10 m contours

Major road

Services

Stormwater drainage

Existing stormwater pit

Telecommunication

Sewer

Water

Concept details

Filter area

Total area/batter

New pit

GPT

Stormwater diversion

Seating

Habitat nest box

Path

Concept plan

A bioretention system with an approximate area of 460 m² is proposed within the Kenneth PI roundabout. It receives stormwater from a catchment with an approximate area of 38.3 ha. The bioretention system is sized to avoid impacting on the existing stormwater pipes to the east of the site. This site is not highly visible and is also not well utilised. The site possibly sits within an overland flow path for high flows from the stormwater drainage upstream. The site also contains a regional cycle path.

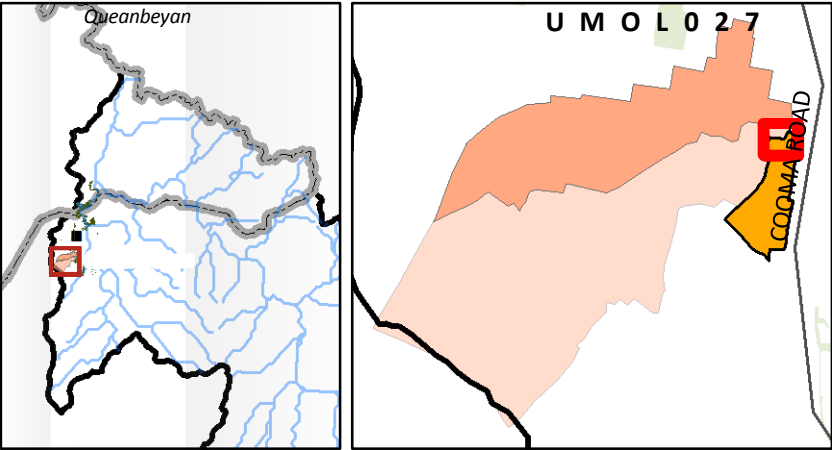
Construction of the bioretention system is expected to improve ecosystem value through increased diversity in habitat. It will also add diversity to the recreational use of the space (e.g. seating, bird watching, nature appreciation). A re-alignment of the walking path is required to incorporate the bioretention system.

Key Figures

Catchment area (ha)	38.3
Impervious area of the catchment (ha)	23.0
Treatment area (sq.m)	460
Treatment area as % of total catchment area	0.1%
Total asset area inc. batters (sq.m)	1,100
Cost estimate of both the northern and southern sites	\$1,509,000

Option 5 Upper Molonglo Catchment Reserve north of Margaret Donoghoe Park - Southern site (UM004)

Bioretention system (catchment area 70.3 ha)



Site photo - Grassed area north of Alanbar Street



Precedent photo - Bioretention system integrated into public open space



Legend

- ACT border

Upper Molonglo priority sites

Catchment area

10 m contours

Major road

Stormwater drainage

Stormwater pit

Telecommunication

Sewer

Water
- Concept details

Filter area

Total area/batter

New pit

Stormwater diversion

Seating

Habitat nest box

Path

Concept plan

A bioretention treatment with approximate area of 1,070 m² is proposed in the existing open space next to Alanbar Street. It receives stormwater from a catchment with approximate area of 70.3 ha.

The bioretention was sized to avoid impacting on the existing tree in the north of the site. The construction of the bioretention system is expected to improve ecosystem value through increased diversity in habitat.

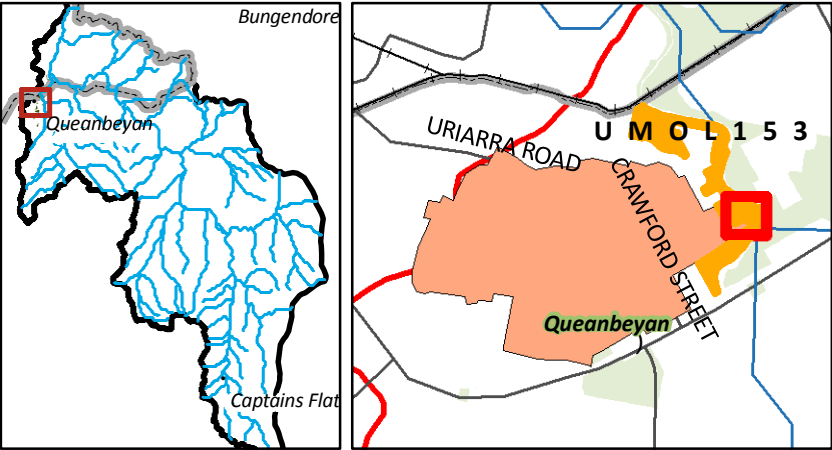
This is not a highly visible site, nor well utilised. Currently the land acts as an overflow path for high flows in the stormwater drainage upstream, and contains a regional cycle path. The bioretention system will add to diversity of recreational space (e.g. seating, bird watching, nature appreciation). A realignment of the walking path is required to incorporate the bioretention system.

Key Figures

Catchment area (ha)	70.3
Impervious area of the catchment (ha)	42.2
Treatment surface area (sq.m)	1,070
Treatment area as % of catchment	0.2%
Total land take area (sq.m)	1,732
Cost estimate of both the northern and southern sites	\$1,509,000

Option 15 Upper Molonglo Catchment Riverside reserve (UM015)

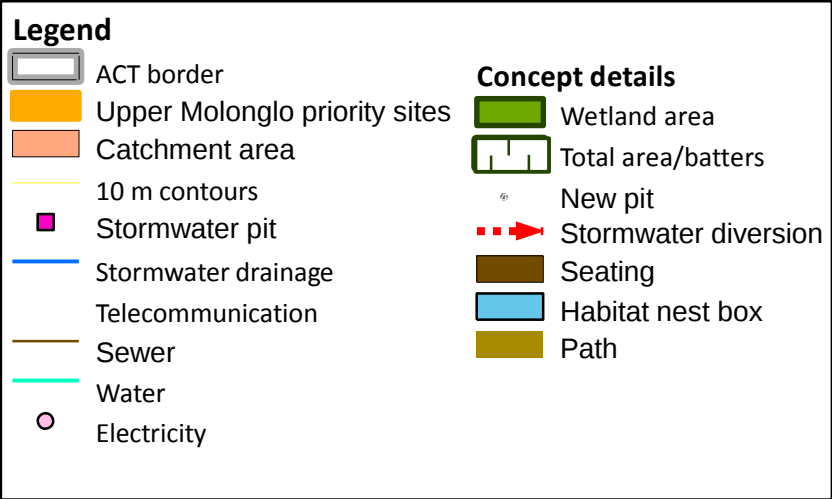
Wetland (catchment area 145.8 ha)



Site photo - Grassed area between Morisset Street and Queanbeyan River



Precedent photo - Wetland system



Concept plan

A wetland with an approximate area of 3570 m² is proposed for this site to treat an upstream catchment area of approximately 145.8 hectares. The wetland is located within the existing open area within the Queanbeyan River floodplain. This is site is currently used for passive recreation and dog walking. The wetland will add to the diversity of recreational space (e.g. seating, bird watching, nature appreciation), while leaving some areas open for existing uses (e.g. dog walking).

Key Figures	
Catchment area (ha)	145.8
Impervious area of the catchment (ha)	87.5
Treatment surface area (sq.m)	3,570
Treatment area as % of catchment	0.2%
Total land take area (sq.m)	6110
Initial cost estimate	\$1,868,000

