Bywong/Wamboin Greenways Master Plan

Prepared by

Bywong/Wamboin Greenways s. 355 Committee Queanbeyan-Palerang Regional Council

November 2024

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1. Introduction

1.1 Objectives of the Greenways Master Plan and Strategy

The primary objective of the Master Plan is to provide a 10-year strategy for the development and maintenance of the Bywong/Wamboin Greenways network, to be reviewed by the s.355 Committee on a regular basis (at least every three years).

This Plan also provides a framework for the development of Greenways networks in other parts of the Queanbeyan-Palerang LGA.

The objectives are:

- a) to provide and maintain the amenity of the Greenways for the enjoyment of the community
- b) to raise public awareness of the importance of the Greenways and to encourage community participation in
 - i) any actions recommended in implementing the Greenways development and management strategy
 - ii) use of the Greenways in accordance with their strategic objectives
- c) to minimise the effect of soil erosion that might arise from usage
- d) to encourage and otherwise ensure the conservation of natural flora and fauna
- e) to monitor and control the introduction and spread of weeds
- f) to protect all waterways, ephemeral or permanent
- g) to protect all identified significant areas or sites, whether environmental or cultural e.g. culturally modified trees.

1.2 Principles

The following principles provide the foundation for the management of the Greenways network:

- a) environmental protection is to be observed in relation to the management and administration of the Greenways
- b) the Greenways (both the land and its other resources) are to be used and managed in a sustainable manner
- c) safe and diverse (non-motorised) uses and enjoyment of the Greenways are to be encouraged
- d) the Greenways are to be maintained in as natural state as possible.

1.3 Background

Local interest in riding trails in the Geary's Gap[†] area first arose in the early 1980s, and in 1985 the Yarrowlumla Shire Council (YSC) established a working party to develop a Shire-wide approach to the establishment of a network of Greenways. The significance

of this project in the context of the Council's broader strategy for rural residential development was reflected in the fact that YSC adopted "Access to the Countryside" as its Bicentennial theme.

[†] The area currently known as Bywong was originally known as Geary's Gap. Much of the early documentation associated with the development of the Greenways network thus refers to Geary's Gap rather than Bywong, but the two references are to the same locality.

The resulting proposal centred on the identification of unused Crown road reserves and travelling stock routes (TSRs) that would form an integrated network of recreational riding and walking trails throughout the area.

In 1991, following initial work carried out by the Geary's Gap Community Association (GGCA), the forerunner of the current Bywong Community Incorporated, the YSC established a Steering Committee to formally identify corridors that could form the basis of the new Greenways network. It subsequently became evident that the conservation values of many sections of the proposed network were very high, adding considerable impetus to the establishment of reserves that would also provide wildlife corridors, these being recognised as essential to the welfare of flora and fauna.

In 1994 the Yarrowlumla Shire Council (YSC) implemented the initial Greenways project in the Geary's Gap and Wamboin localities along the lines recommended by the Steering Committee.

The current Greenways network comprises about 30 km of Council land, including road verges that connect the public-access tracks. Most of these Council areas were formerly crown road reserves or informal stock routes that were transferred to Council ownership when the Greenways were originally established. The network has become a valuable community asset (perhaps still unique in the State). Consistent with Council's overall responsibility for the Greenways, a community-based s.355 Committee provides advice to Council on their ongoing management including maintenance. In addition to its recreational use, the generally untouched nature of the land involved provides islands of endemic species, allowing a unique opportunity to retain and revitalise areas of native vegetation.

The localities of Bywong and Wamboin were ideally suited for this project from several points of view, not least of which was the fact that the original Crown Plans for the area comprised a large number of relatively small lots. As the Crown was obliged to provide access to every lot in the Plans, land was also allocated in support of an extensive road network. In the event, many of these lots were combined to become parts of larger holdings and it was never necessary to construct many of these roads. The associated road reserves thus remained largely unused and in the ownership of the Crown.

Establishing Greenways networks in other parts of the LGA, such as in the Carwoola area, has proven more challenging. Without the legacy of unused crown roads, there is an extra level of planning required to ensure that the relevant requirements are built into the conditions applied to individual subdivisions, so that appropriate reserves are created and identified as Greenways when subdivision plans are prepared.

1.4 Consultation

The Greenways Master Plan was updated by the Greenways s.355 Committee during 2023 and released for community comment in January 2024. Two public meetings were held in February 2024: one by the Bywong Community Association and the other by the Wamboin Community Association. Members of the s.355 Committee attended both these public meetings. Apart from the s.355 Committee members, 22 people attended the public meetings.

People were also invited to provide written comments via email to the Deputy Chair of the Greenways s.355 Committee and the President of the Bywong Community Association. Eleven written responses were received, with two of these being from couples. Further, communication in relation to a Greenways extension which was received in 2023 was deemed to be relevant and incorporated into the comments received.

Our Bywong and Wamboin communities continue to support the existing Greenways, and their extension. Comments in relation to specific extensions are included in section 4.2 Potential for Extending the Greenways Network. The gist of public opinion is to maintain the Greenways as reserves, work to get them free of 'weeds', with Sifton Bush being specifically mentioned, and undertake repairs at specific sites to ensure the safety of people using the Greenways. The requested works have been incorporated into the identified program of Works (Appendix 2).

2. Greenways Network Management

2.1 Use of the Greenways

For the good management of the Greenways it is recognised that certain conditions of use should be promoted. The following conditions reflect legislative requirements, Council policies and general best practice in environmental conservation, informed by input from the various community groups whose members currently use the Greenways network:

- a) the Greenways network should only be used by pedestrians, equestrians and mountain bikes. Council has erected Greenways signs informing users that motor vehicles and motor bikes are prohibited on the Greenways. On the spot fines apply. Council considers that the use of 4WDs and trailbikes have the potential to damage vegetation, exacerbate erosion and generate noise disturbance
- b) access to the Greenways network by motorised vehicles is limited to maintenance vehicles (including mowers) and emergency vehicles, such as those from the NSW Rural Fire Service and the NSW Ambulance Service. Council does not support motorised vehicles using the Greenways to access private residential dwellings
- c) dogs must be controlled and leashed, in accordance with the NSW *Companion Animals Act 1998*
- d) stock should not be grazed on the Greenways
- e) noise is to be kept to a minimum

- f) the carriage of firearms or other weapons and hunting activities are not permitted
- g) users are to remove their own rubbish
- h) users must respect private property and adjacent resident's privacy
- i) gates or other exclusion mechanisms should be left as they are found
- j) camping is not permitted on the Greenways
- k) no fires are permitted on the Greenways other than as part of a legitimate prescription burning process agreed to and implemented by Council and relevant fire authorities. While reducing fire risk any such burning will be aimed at conserving the ecological integrity of the Greenways
- l) where possible, users must remain on defined track(s) within the Greenway
- m) there is to be no collection and/or removal of any natural or archaeological items (including firewood) from the Greenways unless otherwise approved by Council
- n) users are encouraged to report any issues or concerns to the s. 355 Committee or directly to Council.

In order to maintain wildlife corridors, neighbouring landholders are encouraged to take down any top or middle strand-barbed wire and maintain wildlife friendly fencing with safe access top and bottom.

2.2 Works Programs

The ongoing maintenance and development of the Greenways network is dependent on Council funding allocations or grants from other sources. To date the network has been maintained through s.355 Committee recommended works programs undertaken by Council and/or local volunteer and user groups.

The current works program identified by the Committee (at Appendix 2) revolves around specifically identified segments of the network and focuses on:

- a) stemming water erosion, with provision of appropriate drainage or step terracing as required
- b) revegetation plantings
- c) removal of weeds (list at Appendix 1) and management of problematic native species. Any use of pesticides on the Greenways network must be undertaken in compliance with the NSW *Pesticides Act 1999* and relevant Council policies
- d) mowing/slashing grass
- e) additional signage and general public awareness
- f) access and safety (removing fallen trees from tracks).

3. s.355 Bywong/Wamboin Greenways Committee

In July 2022 QPRC reviewed its community advice structures including its s.355 Committees. It resolved to maintain the s.355 Bywong/Wamboin Greenways Committee. Council also resolved to nominate a Councillor delegate to each s.355 Committee.

The ongoing existence of the Greenways Committee recognises the key contribution local community representatives make in assisting Council in the management of this important community asset.

Council also adopted revised guidelines for the operation of s.355 Committees available at https://www.qprc.nsw.gov.au/Council/Council-Business/CommitteeRepresentatives

3.1 Terms of Reference

3.1.1. General

The purpose of the Greenways s.355 Committee is to provide a body, which includes representatives of the community and Council, to provide advice and make recommendations to Council on the care, control and management of the Bywong/Wamboin Greenways on behalf of Council.

The Committee will operate as per Council's *Section 355 Committee Guidelines* adopted on 27 April 2023, and Council's *Section 355 Committee Delegations* adopted on 12 April 2023, or as amended in the future. These documents cover financial management, members' legal responsibilities, etc.

3.1.2. Membership

Committee membership shall comprise:

- Chairperson
- Vice-Chairperson
- Secretary
- Treasurer
- Three or more community representatives, including (where possible) representatives of local community organisations such as Landcare, the Pony Clubs and the two locality-based Community Associations
- One Council representative: a Councillor.

Council officers responsible for oversighting the Committee, and members of the public at large, are welcome to participate in meetings, but will not be eligible to vote on any matters under consideration.

Committee members shall serve a two-year term. At the conclusion of members' terms, advertisements calling for nominations for election to the Committee will be placed in local communication channels covering the Bywong and Wamboin localities at least two weeks prior to the Annual General Meeting.

At Annual General Meetings, all positions will be declared vacant. Current members may seek re-election. The election of Committee members will be conducted in accordance with standard committee meeting procedures.

3.1.3. Quorum

The quorum for meetings of the Committee is half of the Committee membership, plus one.

3.1.4. Meeting Procedures

The meetings will follow Council's procedures for committee meetings or, in the absence of a Council procedure manual covering this matter, in accordance with standard meeting procedures.

The Committee will meet at least every three months. Meetings can be conducted face-to-face, or virtually.

A minimum of two weeks' notice of meetings will be provided to members, unless an agendum needs to be dealt with urgently.

The Secretary or, in the absence of the Secretary, another member appointed by the meeting, will record the minutes of the meetings. The minutes will be distributed to all Committee members prior to the next meeting and, once confirmed, will be forwarded to Council to be presented at its next ordinary meeting. Alternatively, the minutes can be confirmed by the Committee out of session and forwarded to Council.

Recommendations, as contained within the minutes, will be considered by Council.

Council may adopt, not adopt, or amend recommendations proffered by the Committee. Council's decisions are binding on the Committee.

- 3.1.5. Service Agreement, including the Committee's roles and responsibilities

 Pending Council's promulgation of the Service Agreement for the Committee, the
 Committee is operating with the following roles and responsibilities:
 - a) Progressively implement the actions specified in this Master Plan.
 - b) Maintain a watching brief on the status of the Greenways, including reporting to Council regarding maintenance needs.
 - c) Develop and regularly review a Greenways priority works program for presentation to Council.
 - d) Undertake periodic working bees to address minor issues impacting on the Greenways, including weed removal, removal of minor fallen trees or other access considerations, and installation and maintenance of way-finding signs.
 - e) Provide advice to Council on community concerns and other issues impacting on Greenways, including management requirements or development applications where relevant.
 - f) Provide advice to Council on proposed changes to land management, ownership and control that could impact upon the Greenways, including as per the

- provisions of Council's *Crown Road Management Policy* dated 2 November 2023, and as amended in the future.
- g) Educate users of the Greenways of their conditions of use by means of, for example, the installation of adequate signage.
- h) Provide representation on other QPRC advisory bodies as requested.
- i) Liaise with the local Bushfire Management Committee to ensure that the Greenways are protected from fire hazards, and to ensure that any prescribed burns are implemented as per the applicable Fuel Management Plan.
- j) Periodically report to Council on the progress of the Greenways network development, including any recommendations relating to its modification, expansion and/or management procedures.

3.2 Community Liaison

Greenways maintenance has historically been undertaken, largely on a volunteer basis, by local users and interested community members. Community liaison though the Committee generally involves the range of stakeholders—local Community Associations, Landcare, the Pony Clubs and Greenways user groups like the former Greenways Renewal Working Group (GRoW).

In the broader interests of local communities, the Greenways Committee is to ensure that:

- a) all adjoining residents and user(s) have access to a contact number(s) where suggestions or complaints can be directed
- b) they act on those complaints for which it is feasible to do so, and refer to Council any complaints that they are unable to resolve
- c) any complaints are responded to in writing with any resolution clearly and unambiguously recorded in the Committee meeting minutes.

The Committee and various stakeholder groups also engage in:

- a) raising public awareness of the Greenways (e.g. Greenways walks)
- b) working bees to assist in native revegetation and general maintenance projects
- c) planning for the extension of the Greenways network
- d) stewardship relating to Greenways that are immediately adjacent to their members' own properties.

4. The Greenways Network

Most of the Greenways network sections are Council road reserves and some are Crown roads.

A number of the Council road reserves are also identified as Council owned community land and as such have an address and Lot and Deposited Plan (DP) number. Under the NSW *Local Government Act 1993* these lots are required to be placed into a Plan of Management and included in a Natural Area (Bushland) category.

Crown Roads fall under the NSW *Roads Act 1993* and their use is also informed by Council's November 2023 Crown Roads Management Policy (section 4.2.1 refers).

4.1 Greenways Maps

An overview map of the current Greenways network, and potential extensions to the network, is presented in Figure 4-1, illustrating the context of the Greenways network within the Wamboin/Bywong area.

The network itself is expanded in Figure 4-2 for easy Greenway identification, and segment identification is shown in Figure 4-3, which is taken from Council's On-line Mapping. Descriptions of the individual Greenways and labelled segments are provided in Table 4-1.

The maps have been prepared by the s.355 Greenways Committee, using a base map provided by Council.

With reference to both Figures 4-1 and 4-2, existing Greenways are marked in **solid green** lines and proposed Greenways in dashed green lines. In Figure 4-2, existing Greenway numbers have a black background and potential Greenway extension numbers have a green background. Dashed black lines are dirt roads.

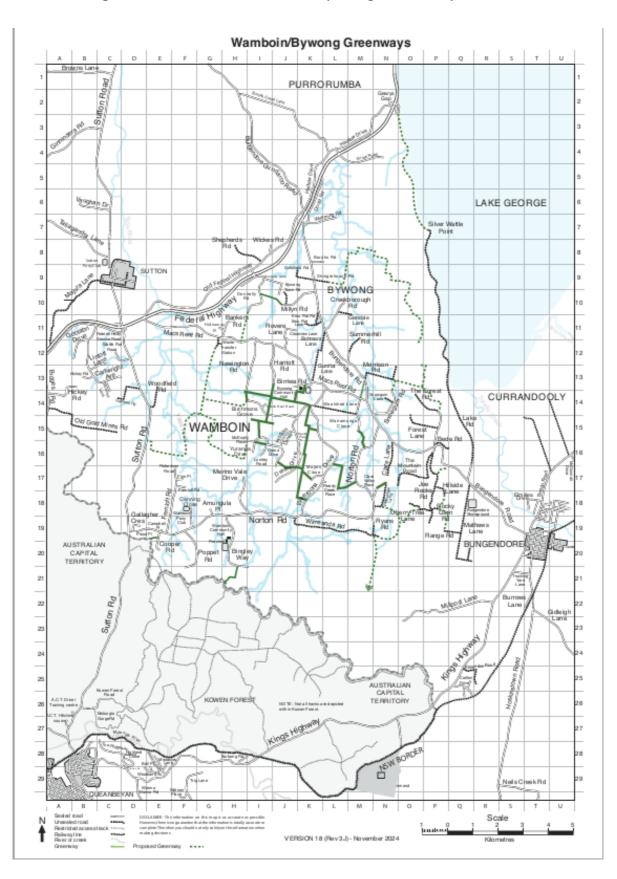


Figure 4-1 Wamboin/Bywong Greenways Context

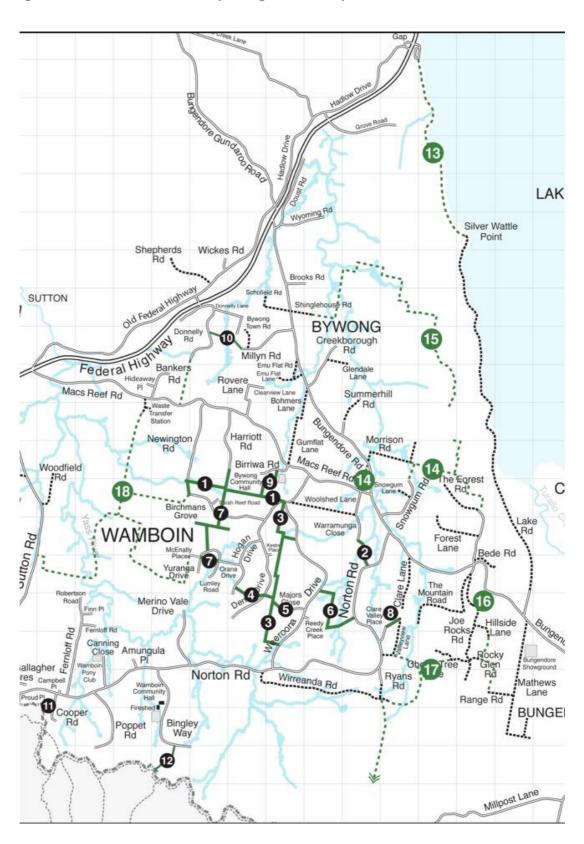


Figure 4-2 Wamboin/Bywong Greenways Network

Table 4-1 – Greenways Identification

Greenways are marked on the QPRC cadastral map https://www.qprc.nsw.gov.au/Building-Development/Planning-Zoning/OnlineMapping, and the segments are labelled as below.

Section	ID	Segment	Status
End of Newington Rd (to be deleted as has now been developed as a road)	1	1a	Council land
End of Newington Rd to end of Harriott Rd	1	1b	Council land
End of Birchmans Grove to end of Newington Rd	1	1c	Council land
Harriott Road extension	1	1d	Council land
Harriott Road extension to T-junction	1	1e	Council land
T-junction to Denley Drive	1	1f	Council land
Warramunga Close to Norton Road	2	2a/2b/2c	Council land
Denley Drive to back of 441 Weeroona Dr	3	3a	Council land
Beside 441 Weeroona Dr	3	3b	Council land
Back of 441 Weeroona Dr to Weeroona Dr south	3	3c/3d/3e/3f	Council land
Hogan Drive to Millpost Hill	4	4a	Council land
Millpost Hill	4		Crown land
Millpost Hill to Denley Drive	4	4b	Council land
Denley Drive to Greenway 3	4	4c	Council land
Greenway 3 to Majors Close	5	5	Council land
254 Weeroona Drive to 1203 Norton Road	6	6a/6b/6c	Council land
Harriott Rd extension to Birchmans Grove	7	7a	Council land
Birchmans Grove to Yuranga Drive	7	7b/7c/7d	Council land
Yuranga Dr to Yuranga Dr past community bore	7	7e	Council land
Clare Valley Place to Valley View Lane	8	8	Council land
Birriwa Road to back of Les Reardon Reserve	9	9a	Council land
Les Reardon Reserve to T-junction	9	9b	Council land

Millynn Rd to Donnelly Rd (middle section)	10		Council land
Cooper Rd to Kowen Forest	11		Council land
Bingley Way to forest (road)		12a	Council land
Forest to ACT border		12b	Crown land

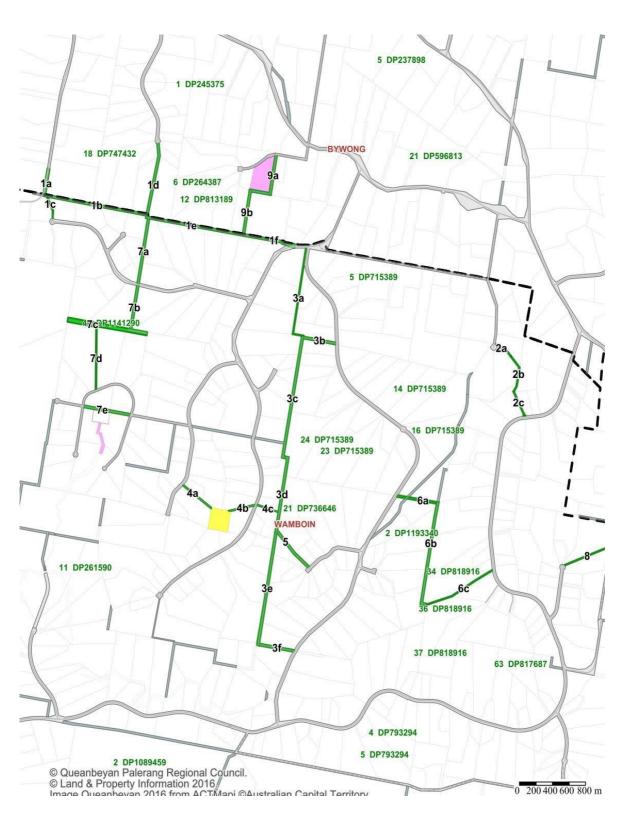


Figure 4-3 Segment numbers on QPRC Online Mapping System

4.2 Potential for Extending the Greenways Network

It is desirable to extend the Greenways Network where possible and, arising from discussions with community groups actively using the Greenways, this section identifies possible network extensions within the Wamboin/Bywong area. There is no timeframe attached to the development or inclusion of any particular segment. The segments are simply identified here (refer to Figure 4-2) to assist Council in planning future development in the area and responding to matters relating to the disposition and management of Crown Lands.

Council's Rural Lands Strategy (2017) identifies where additional rural residential development may be appropriate. Through its scoping and planning proposal processes, Council has agreed to identify the Greenways Master Plan as a strategic document that is required to be addressed prior to any amendment to the Queanbeyan-Palerang Regional Local Environmental Plan 2022.

It is appreciated that some of the possible extensions listed here are unmade crown roads running through freehold properties, and that this has implications for extending the Greenways Network there.

- a) Possible connection from Lake George lookout at Gearys Gap towards the escarpment (Segment 13)
- b) Possible connection from Woolshed Lane across Macs Reef Road to Morrison Road and then connection to Snowgum Road (Segment 14)
 - Property owners have advised that Morrison Road is private property, as is a section of the crown road south of Alchin Lane, potentially excluding connecting Woolshed Lane to Morrision Road via Alchin Lane
 - Possible connection from the end of Snowgum Road to The Forest Road.
- c) Possible connection from the end of Brooks Road to the escarpment overlooking Lake George (Segment 15)
- d) Possible use of the Road Reserve from Joe Rocks Road to the old quarry along Bungendore Road, for connection down the escarpment to the Bungendore Showground (Segment 16)
- e) Possible connection from development off the eastern end of Wirreanda Road to the current Greenways network (Segment 17)
- f) Possible connections to Sutton Road and Macs Reef Road from the ends of Newington Road, Birchmans Grove, McEnally Place and Robertson Road (Segment 18)
- g) Possible Greenway from the end of Donnelly Road to Macs Reef Road (un-numbered in Fig 4-2)

4.2.1. Crown Roads

Crown roads are the backbone of our Greenways network. The NSW Government is the roads authority for crown roads, not Council. Under the *Roads Act 1993*, a crown road may be transferred to Council without the consent of Council. That said, the NSW Government's policy is to consult with Council about any such proposal. Except in circumstances specified in Council's *Crown Road Management Policy* (adopted 22 November 2023), Council will oppose the transfer of a crown road to Council. It is desirable that Council refer any proposed crown road closures or transfers to the Greenways s.355 Committee to ensure that appropriate consideration is given to any impacts these may have on Greenways planning or management.

Furthermore, it is noted that Council's *Crown Road Management Policy* states, at section 6.8 'When Council is notified of proposed Crown Road Closures, or sale that have a border, or provide immediate access to ... part of the existing or proposed Bywong/Wamboin Greenways network it will object to the sale and notify the 355 Committee responsible for the Greenways'.

When crown road closures are proposed for other parts of the LGA, that could potentially become Greenways, it would be productive for Council to consider the option of them becoming Greenways in those areas, instead of being closed, where such action would enhance access to recreational opportunities and/or biodiversity enhancement.

4.2.2. Rural Residential Subdivision

Future subdivision proposals should involve consultation with the Greenways Committee so that any associated Greenway connectivity options can be identified and explored.

Appendix 1 Weeds of Wamboin – list*

The table below lists species identified by Paul and Luke Downey that have naturalised and/or invaded the local area and is based on observations made across the Wamboin-Bywong area. See also the Canberra Nature Map field guide which has photos of these species (https://canberra.naturemapr.org/Locations/Guide/1005/431?1=1).

Common Name	Scientific Name	Plant type	Common Name	Scientific Name	Plant type
Capeweed	Arctotheca calendula	Herb	Black-berry Nightshade	Solanum nigrum	Herb
			Three-flowered		
Asparagus	Asparagus offincinalis	Herb	Nightshade	Solanum triflorum	Herb
Shepherd's Purse	Capsella bursa-pastoris	Herb	Chickweed	Stellaria media	Herb
Common Centaury	Centaurium erythraea	Herb	Dandelion	Taraxacum officinale	Herb
Branched Centaury	Centaurium tenuiflorum	Herb	Yellow Hawkweed	Tolpis barbata	Herb
Mouse-ear Chickweed	Cerastium glomeratum	Herb	Wandering Jew	Tradescantia fluminensis	Herb
Chamomile Daisy	Chamaemelum nobile	Herb	Oyster Plant	Tragopogon porrifolius	Herb
Fat Hen	Chenopodium album	Herb	Haresfoot Clover	Trifolium arvense	Herb
Lance-leaf Coreopsis	Coreopsis lanceolata	Herb	Hop Clover	Trifolium campestre	Herb
Common Thornapple	Datura stranomium	Herb	Yellow Suckling Clover	Trifolium dubium	Herb
Stinkwort	Dittrichia graveolens	Herb	Clustered Clover	Trifolium glomeratum	Herb
Paterson's Curse	Echium plantagineum	Herb	White Clover	Trifolium repens	Herb
Viper's Bugloss	Echium vulgare	Herb	Subterranean Clover	Trifolium subterraneum	Herb
Fleabane	Erigeron bilbaoanus	Herb	Giant Mullein	Verbascum Thapsus	Herb
Flaxleaf Fleabane	Erigeron bonariensis	Herb	Green Mullein	Verbascum virgatum	Herb
Canadian Fleabane	Erigeron canadense	Herb	Purple-top	Verbena incompta	Herb
Long Storksbill	Erodium botrys	Herb	Creeping Speedwell	Veronica persica	Herb
Common Storksbill	Erodium cicutarium	Herb	Greater Periwinkle	Vinca major	Herb
Egg-leaf Spurge	Euphorbia oblongata	Herb	Saffron Thistle	Carthamus lanatus	Thistle
Petty Spurge	Euphorbia peplus	Herb	Spear Thistle	Cirsium vulgare	Thistle
Wall Fumitory	Fumaria muralis	Herb	Scotch Thistle	Onopordum acanthium	Thistle
Cleavers	Galium aparine	Herb	Prickly Sowthistle	Sonchus asper	Thistle
Cudweed	Gamochaeta calviceps	Herb	Common Sowthistle	Sonchus oleraceus	Thistle
Cranesbill Geranium	Geranium molle	Herb	Delicate Hairgrass	Aira elegantissima	Grass
St John's Wort	Hypericum perforatum	Herb	Quaking Grass	Briza maxima	Grass
Smooth Catsear	Hypochaeris glabra	Herb	Shivering Grass	Briza minor	Grass
Catsear	Hypochaeris radicata	Herb	Soft Brome	Bromus hordeaceus	Grass
Prickly Lettuce	Lactuca seriola	Herb	Panic Veldtgrass	Ehrharta erecta	Grass
Henbit	Lamium amplexicaule	Herb	African Lovegrass	Eragrostis curvula	Grass
Common Peppercress	Lepidium africanum	Herb	Yorkshire Fog	Holcus lanatus	Grass
Corn Toadflax	Linaria arvensis	Herb	Perennial Ryegrass	Lolium perenne	Grass
Pelisser's Toadflax	Linaria pelisseriana	Herb	Annual Ryegrass	Lolium rigidum	Grass
Scarlet Pimpernel	Lysimachia arvensis	Herb	Serrated Tussock	Nassella trichotoma	Grass
Dwarf Mallow	Malva neglecta	Herb	Common Wheat	Triticum aestivum	Grass
Horehound	Marrubium vulgare	Herb	Squirrel Tail Fescue	Vulpia bromoides	Grass
Horeiloulid	Marrubium vuigare	пето	Squitter ran rescue	vuipia bromotaes	Grass
Red-flowered Mallow	Modiola caroliniana	Herb	Umbrella Sedge	Cyperus eragrostis	(sedge)
Red-Howered Mariow	Moaioia caroiiniana	пето	Unibrena Sedge	Cyperus eragrosus	
Yellow-and-Blue Forget-me-not	Myosotis discolor	Herb	Spanish Lavender	Lavandula stoechas	Shrub (small
Nemesia	Nemesia strumosa	Herb	Buddleja	Buddleja davidii	Shrub
TVEHICSIA	iveniesia sirumosa	Ticio	Buddieja	Cotoneaster	Siliub
Lesser Broomrape	Orobanche minor	Herb	Cotoneaster	glaucophyllus	Shrub
Rough Poppy	Papaver hybridum	Herb	Scotch Broom	Cytisus scoparius	shrub
Red Bartsia	Parentucellia latifolia	Herb	Cape Broom	Genista monspessulana	Shrub
Proliferous Pink	Petrorhagia nantueilii	Herb	Kohuhu	Pittosporum tenuiflorum	Shrub
Ribwort Plantain	Plantago lanceolata	Herb	Sweet Briar	Rosa rubiginosa	Shrub
Wireweed	_	Herb		_	Snrub
	Polygonum aviculare		Blackberry	Rubus anglocandicans	
Sheep Sorrel	Rumex acetosella	Herb	Japanese Honeysuckle	Lonicera japonica	Vine
Wild Sage	Salvia verbenaca	Herb	Honey Locust	Gleditsia triacanthos	Tree
Field Madder	Sherardia arvensis	Herb	Apple / Crab Apple	Malus pumila	Tree
Tomato	Solanum lycopersicum	Herb	Radiata Pine	Pinus radiata	Tree

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*This list was published in the *Wamboin Whisper* in November 2020. Thank you to Paul Downey for permission to use it in this Plan.

Appendix 2 QPRC Bywong/Wamboin Greenways s.355 Committee - Assessment of Greenways Works

Works are identified by the Committee in recommended order of priority. Refer to Greenways maps (Figures 4-2 and 4-3) and Table 4-1 to locate and identify segments.

Indicative costs*

Major works	\$21,000 (segments 6 and 2)		
Minor works	\$3,500		
Maintenance	\$3,000		
Other	\$5,600 – Biodiversity project		

^{*} Major works and costs relate to activities on Greenway segment 6 (1(a) below refers) and segment 2 (4(a) below refers) and are based on independent quotes obtained in October 2023.

Major Works

1. Segment 6a, 254 Weeroona Drive

(This is immediately north of 244 Weeroona Drive).

Two creek crossings, the second of which is almost completely washed out.

The worst section has eroded to the extent that the pathway is dangerous and probably needs to be closed. A temporary bypass has been identified and signposted but it is only suitable for walkers and is not suitable for vehicular access and possibly horses. In the long term this is a safety issue and solutions to the problem of ongoing erosion require further detailed investigation by Council.

Two quotes to repair the damage were obtained in October 2023. The higher quote (\$15,590.00 GST inclusive) would allow for the following works: excavate causeway, import fill recompact and re-construct to levels; supply and install 4.8m x 900mm concrete culvert with headwalls; supply and place recycled asphalt causeway surface; and surface downstream embankment with 100mm concrete. The lower quote (\$12,320.0 GST inclusive) proposed less comprehensive works and did not include the cost of sourcing the required rock fill.

2. Segment 4c, below Denley Drive

The segment of Greenway 4 between Denley Drive and the intersection with Greenway 3 appears to be very narrow, less than 5m in parts. This segment should be $\sim \! 10m$ wide along its entire length. The correct location of boundary fencing needs to be verified and neighbours need to be notified by Council to rectify appropriate alignment.

3. Segment 3d, north of Greenway 4

North of junction with Greenway. Three sections with serious mud, requiring users to go around. A detailed assessment to identify the most appropriate option to address the issues needs to be undertaken.

The minor works costs and maintenance costs are indicative and would need to be confirmed.

A short-term fix could involve the use of a bobcat to top the wettest parts of the track with gravel and to cut drains or to re-route the track around the worst spots. A quote will be required to establish the indicative cost. Following appropriate assessment and the boundary issues are resolved depending on the cost this work could be undertaken as a community working bee.

4. Segment 2a, downhill from Warramunga Close

There are two crossings across Reedy Creek downhill from Warramunga Close that require all weather passage. Due to the recent rainfall the Reedy Creek has been flowing and remains very wet. Detailed investigations (perhaps by Council) into options including installation of causeways, bridges or culverts are required.

A works quote, obtained in October 2023 (\$4,840.00 GST inclusive) by the Committee, proposed filling the crossing with recycled concrete - 90mm in size, to make an access path for wet weather conditions and costs were inclusive of machinery, labour and materials.

Small Works

The Committee has identified the following small works:

1. Segment 9b – gate at back of Les Reardon Reserve

A dip needs to be filled in where Greenway 9 enters the south gate of Les Reardon Reserve.

2. Segment 7a – north of Birchmans Grove

A wetland near the source of Black Joes Creek on Greenway 7 needs to be protected. The recent rainfall has highlighted this problem. Options may include re-routing the track which may involve encroachment on neighbours' property or close that part of the Greenway when it is very wet. A further higher cost option could involve the construction of a boardwalk which would require Council investigation and design.

3. Provision of Council Greenways signs at key access locations

Ongoing Maintenance

- a) Mowing
- b) Weed management
- State and Regional Priority Weeds Council responsibility. Blackberries are of most concern in terms of impact on the use and amenity of the Greenways. Complaints from residents refer to Segments 1b, 3c and 7a.
- Other weeds of most concern is the widespread infestation of Sifton Bush, but recent rains have also seen significant infestations of wild roses and thistles, at times impeding passage along areas of Greenways. Complaints from residents refer to all Greenways and Millpost Hill in particular.

c) Path erosion

The continuing wet weather through 2022 and consequent water run off has resulted in serious erosion on a number of Greenway segments resulting in potential safety issues for users. Segment 1b was identified by a resident.

d) Fallen trees and branches and clean up after storms

The Committee will identify the most pressing areas that require maintenance and inform Council on a regular basis.

Other projects

Wamboin/Bywong Greenways biodiversity assessment and community engagement for Greenways as a biodiversity corridor.

Some Greenways have conservation values and include identified Endangered Ecological Communities (EEC). This project would catalogue the biodiversity assets of the Greenways in the community.

A cost estimate of \$5,600 (GST inclusive) was provided by a professional ecologist to undertake this work.