

MOGGILL CREEK CATCHMENT GROUP

P.O. Box 657, Kenmore 4069



MOGGILL NEWS

February 2002

Newsletter of the Moggill Creek Catchment group

Notes from the Chairman

After working with us for about three years, Michael Reif has decided to move on and has accepted a position at Caloundra. This is a sad loss for the Catchment Group, but will clearly be more convenient for Michael, who now lives at Yandina. We all wish him the very best in his new position and offer him our thanks for all his good work in our Catchment.

Things will be tough for us for a while, but - be assured - it will be all systems go until (and after) we appoint somebody else to fill Michael's shoes. With the help of Brisbane Forest Park volunteers we will keep the nursery running and Brad Wilson (BFP) will also provide help in getting plants and mulch to landholders. Those who are starting a revegetation project and have filled in a 'Private Landowner Project Application Form', should send it to Brad Wilson (BFP, 60 Mt Nebo Rd, The Gap) or me (41 Gap Creek Rd, Kenmore Hills) for processing by experienced members of the Committee. We are currently making a drive to attract members, and any queries should be directed to me at 3374 1468. Meanwhile, we are putting out feelers for a new appointee and expect to have someone on board within a few weeks.

Because of space limitations in our Gold Creek Nursery, we are co-ordinating and promoting the efforts of a number of private growers of local-provenance seedlings. Graeme Wilson and his son Andrew are co-ordinating this group. Those with an interest in this area should contact Graeme on 3374 1218, especially where they have access to seed of some of the less common species. Many tree species are fruiting now, and it would be a pity to let a good opportunity go by.

Two other groups have also been set up within the MCCG Committee. One group, comprising Adrian Webb, Gordon Wilkinson, and Andrew and Graeme Wilson, will be using vegetation mapping, from aerial photographs, to identify priority areas for conservation and revegetation. An allied group, comprising Vic Blake (3374 2432), Tina Heybroek and Brad Wilson Sr will be looking at opportunities to develop a weed control strategy over our Catchment. This is an area in which the Council is interested, and there could be opportunities to work with them. Water quality is being looked after by Adrian Webb and Rob Waller.

Meanwhile, the Communications Group is busy, with Michelle St Baker looking into opportunities to develop a website. Thanks are also due to Margaret Hastie, who has brought her desk top publishing skills to our Group; giving Moggill News a much-needed facelift.

Bryan Hacker

Membership and Renewal

If you have overlooked your membership renewal for 2002, there is a membership form included in this newsletter. Membership is still only \$5.50 (including GST) for 2002 but will increase to \$10.00 for 2003. Please encourage friends and neighbours to join as membership numbers show support for catchment management and for those members helping to make a difference through working bees or managing their own properties in environmentally informed ways.

Plants available NOW

We have quite a number of plants at our Gold Creek Nursery which are getting to be too big for their pots, and need to be planted out. What is proposed is that we make available mixed lots of 20 or 40, with species selected for eucalypt woodland (lower slopes) or dry rain forest. The species included will be:

Eucalypt woodland: grey gum, tallow wood, brush box, blue gum, white cedar
Dry rainforest: peanut tree, brown Kurrajong, red cedar, river she oak, steel wood, various figs, including white fig, and Moreton Bay fig, lace bark, shiny-leaved stinging tree, deep yellow wood, ribbon wood, bottlebrush, white cedar, cheese tree.

Please phone orders to Bryan Hacker (3374 1468) or email to jbhacker@powerup.com.au, indicating whether you would prefer not to include any particular species (remember, the stinging tree lives up to its name!). Preference will be given to landholders who have provided a plan of their proposed revegetation project, or who are prepared to do so. Requested plants may be picked up from 41 Gap Creek Rd, by arrangement.

Bryan Hacker

Community Action

About a year ago, Upper Brookfield resident, Tina Heybroek, alerted neighbours and fellow MCCG members to the spread of elephant grass in the upper sections of Moggill Creek and its threat to the creek system as a whole. From Upper Brookfield Road around Kittani Street, extensive three metre high stands of the grass could be seen, its bamboo-like canes forming an impenetrable wall. Tina began the attack on the grass herself and was joined by neighbours. The Brookfield Chronicle helped with publicity and the BCC assisted with machinery. MCCG's Section 6, led by Michelle St Baker, joined in. Tina describes this successful community effort below. (Ed)

The Pennisetum Saga

News from the Frontline: I am pleased to advise that all elephant grass (*Pennisetum purpureum*) on the right and left side of Kittani Street, Upper Brookfield has been removed. The roots are sprayed and the canes burnt. There is no sign of regrowth.

My next aim is to stop the growth of the imported legumes in the creekbed by preventing the grasses from going to seed. Trees have been planted on the side of the main road and the opposite side has been cleared of weeds but will have to be sprayed before replanting.

I 'did it my way': removing the cut canes, which were burnt, and then spraying the roots. Anyone interested will be able to see the different results by comparing the Kittani Street section with the site of the enormous patch of *Pennisetum* opposite number 472 which was slashed by Neil White, a giant effort! It could not be done any other way. There is a small patch of canes across the creek which I will gradually remove. There is a thick layer of mulch there, sometimes half a metre high which is a fire hazard. This should be burnt when it is safe to do so.

The Vegetation management Services of Brisbane City Council has been very helpful and also attended to the *Solanum hispidum* infestation close to the Carbine Road intersection. This weed, too, is spreading and most invasive.

Many thanks to Group 6 of the MCCG for help with weeding and planting. Also to John Wilson for spraying and Roy Panitz for mowing.

I appreciated the wave or beep of the horn from the passers-by or those who stopped for a chat. I hope the residents who still have this *Pennisetum* will take heart and agree with me that IT CAN BE DONE!

Tina Heybroek

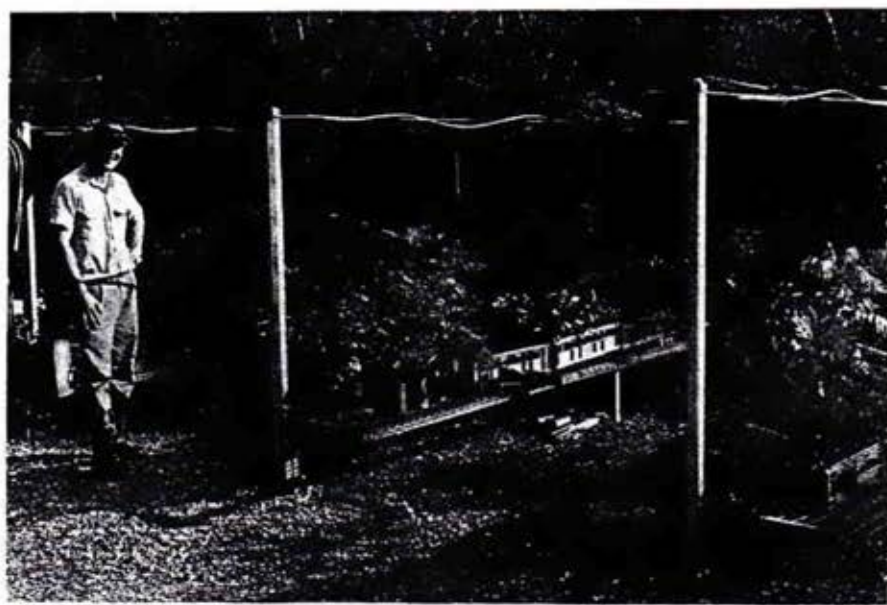
Farewell Michael Reif

The MCCG expresses its sincere thanks to Michael Reif for his valuable role as its foundation field officer. Michael's informed and energetic work has played a large part in the group's successful pursuit of its goals over the last three years. He has helped establish the weeding and planting routines for the volunteers working on the revegetation projects in the thirteen catchment subsections. In conjunction with BFP, he has organized the nursery at Gold Creek Reservoir as a source of plants for catchment projects. This has meant stocking the nursery with appropriate local plants, collecting local seed, and propagating and potting plants with the help of nursery volunteers. As a number of our sub-catchment groups became BCC Bushcare groups, Michael switched his focus to providing advice and assistance to private landholders. The application for project assistance he devised is itself a helpful way of looking at a large property in terms of vegetation management. Michael also began the water quality monitoring that is such an important indicator of the catchment's environmental health.

In the course of his work, Michael Reif built up extensive knowledge of local habitat and was generous and patient in sharing that knowledge with those of us who were not well informed. Advising landholders on what they should remove from or plant on their land requires not only knowledge but diplomacy. The sensitivity Michael displayed to the natural environment he readily transferred to the human environment as the function for him at Brendan Ryan's property late last year, attended by grateful landholders, demonstrated. Michael's regular reporting has been in the scientific terms of numbers of plants potted or planted, numbers of hectares cleared of weeds, amount of herbicide or mulch used. During his time as field officer, MCCG volunteers and landholders have planted over 20 000 trees and understorey plants as part of weed-clearing and revegetation projects on public and private land in the Moggill catchment. The environmental awareness and attitudinal changes he has been able to bring about among those he worked with and advised are also significant but not possible to quantify.

When the NHT grant application was initially rejected last year, Michael began making other arrangements for 2002. Those arrangements had been partly made when the grant decision was changed. We wish him well in his work with coastal vegetation at Caloundra.

Jack Talty



Michael Reif at the Gold Creek nursery



Nursery Assistance

NHT funding also means that MCCG in conjunction with Brisbane Forest Park will continue to manage the Gold Creek nursery as a source of local plants for assisting landholders. As supply depends on availability, the MCCG is seeking more assistance from volunteers this year in extending the numbers and variety of plants available through the nursery. Any members interested in offering nursery assistance should contact Graeme Wilson (3374 1218).

Velcro plant can kill small native animals



Figure 1.
Leaf of velcro
plant, *Desmodium*
uncinatum.

The pasture legume *Desmodium uncinatum*, commonly known as silver-leaf desmodium or velcro plant, has recently been shown to be capable of killing small native mammals. In a recent article by Darryl Larsen (Land for Wildlife, South-east Queensland Vol 11 Nov. 2001), instances are reported of a small bat, tawny frogmouths and eastern sedgefrogs being trapped in stems or pods of velcro plant. Velcro plant is a herbaceous plant with trailing stems that scramble over and through other vegetation; its leaves have three leaflets. Stems, leaves and pods are covered with short, hooked hairs and get caught up in fur of passing animals as well as in socks and other clothing of passers by.



Figure 2.
Leaf of the native
Desmodium
rhytidophyllum.

Velcro plant was introduced to Australia from Central America and released for use as a pasture legume in moister areas of the Australian subtropics. It is palatable and, in common with other legumes (pea-family plants) fixes atmospheric nitrogen, and thus is a good source of protein for grazing livestock. However, it is not very persistent under grazing and little is now sown for pasture purposes.

In the western suburbs of Brisbane it has become a significant weed along watercourses. It is readily distinguished by the pale silvery marking along the mid-veins of its three large leaflets, as well as its tenacious pods and stems. It can be controlled with roundup sprayed at commercially recommended rates, but seeds may lie dormant in the soil for several years, so vigilance is necessary.

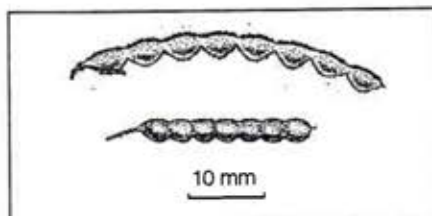


Figure 3.
Pods of velcro plant (above) and
D. rhytidophyllum (below).

There are several native species of the genus *Desmodium* in our area, but none with the silver marking of velcro plant. Also, another introduced species, *D. intortum* (greenleaf desmodium) is sown in pastures, but does not appear to be of significance as an environmental weed. One of the commonest of the natives in our area is *Desmodium rhytidophyllum*, which is widespread in eucalypt woodland. It also is covered with small hooked hairs, but they are not as tenacious as those of velcro plant. As a young plant, *D. rhytidophyllum* may easily be confused with glycine (*Neonotonia wightii*), but the latter species does not have the rough-textured leaflets of *D. rhytidophyllum*, is much more robust and has very different flowers and pods. Greenleaf desmodium also does not have the rough-textured leaflets.

Bryan Hacker

Death by a thousand Cuts? – We have the Treatments!

Those of you who read the Resource Assessment Commission (RAC 1993) reports from the Coastal Zone Inquiry several years ago might remember the use of the phrase "death by a thousand cuts"; it was used to describe the cumulative effect of planning and management activities on the environment. We have the same factors operating in Moggill creek catchment where the gradual changes of development and inappropriate management are degrading our land and water habitats.

We as individual landholders can halt the degradation and achieve a real improvement by continued (often small) actions, provided they are well targeted; the landcare thrust has demonstrated in many parts of Australia that local action leads to wide scale improvement.

The Moggill Creek Catchment Group (MCCG) has identified improvement in stream water quality and riparian zone condition as high priority goals. These can be achieved through common sense decisions and actions by all of us in the community.

Facts

- Erosion during house and road construction results in stream degradation from sediments and nutrients.
- Household wastewater (especially detergents) and chemical movements from gardens (excess fertilisers and pesticides) raise the nutrient loads in creeks and causes in-stream weeds and algae to flourish and degrades water quality.
- Overflow and back flushing drainage from swimming pools can result in salt movement into streams
- Poorly designed and managed septic systems become overloaded and are the cause of nutrient-drainage to streams, particularly during and following wet periods.

- Removal of riparian vegetation results in changes to the in-stream habitat qualities and allows major infestations of exotic weeds.

Recent studies by Lucy Eykamp and Jodie Smith, Honours students supported by the Moggill Creek Catchment Group, shows that many of these effects can be found in the urban and rural residential areas of the catchment.

Remedies

- Be careful about how you dispose of your wastewater; rural residential householders should make good use of it in watering gardens. Urban dwellers can be careful not to allow wastewater to find its way into the storm drainage systems (don't wash your cars in the street – do it on a lawn!)
- Rural residential dwellers should have their septic systems emptied regularly – it is a requirement that Council does not manage appropriately.
- If you have creek frontage, remove the exotic weeds and attempt to keep as much shade as possible over permanent water. Replant with native species.
- Prevent any erosion from driveways or other construction entering the creek.

Above all else – be positive and encourage your neighbours! We do not lack information – we lack commitment to action!

If you need to get advice give me a ring on 3374 2686.

Adrian Webb

Quiet Achievers: Graeme and Andrew Wilson



Graeme Wilson settled on his Wonga Creek property in 1950. The land was largely cleared, some completely for pineapple cultivation, much for no apparent reason (except perhaps the traditional belief that removal of trees was "a good thing") but carrying some trees ranging from isolated to small clusters, while there was some better vegetation in a few gullies. Although there is no record of what species were there, it can be fairly certain that original vegetation was poorly represented when he settled the property.

Grazing animals were removed and nature left to take its course. The result was lantana infestation (not an entirely bad thing - fertility restoration, water penetration) heavy in some areas, less so according to tree cover. There was considerable wattle regrowth (presumably long-term soil storage of seed) and some extension of trees, though little where there was dense lantana.

At first little was done about replacement of native trees. A rather large planting of *Eucalyptus maculata* on part of the old pineapple area, done on the basis of bad advice, had a poor outcome. However, Graeme's son, Andrew, began about 25 years ago to put in scattered native tree species, but nothing like the more complete stands they now work towards.

A few years ago, they started on some systematic work, and soon Voluntary Conservation Agreements came into effect. They had one of the original five in Brisbane. Then the MCCG arrived which gave encouragement to believe that what they were doing might not be so isolated.

Their current activity is based on the following:

- Weed infestation is their main enemy and they will achieve little without giving priority to removal. They try to minimize weed seed production on their land by at least cutting back flowering material until they can at some later time get rid of the plants. There is urgent need for catchment-wide action on reduction of sources of weed seed so that achievers like Graeme and Andrew can be successful.
- Planting is to a large extent inefficient. The early maintenance in the absence of close water consumes too much effort. Rather they depend mainly on natural regeneration, which is substantial for species carried by birds, provided there is a favourable environment for birds, in particular, trees. The main task is protecting the new arrivals from weeds.
- It is necessary to get some trees going in tree-deficient areas as starting points for natural regeneration.
- They have to plant many of the species whose seeds are not carried by birds.
- They work preferentially on areas of best vegetation to ensure their beneficial presence.
- They avoid substantial clearing of heavily weeded areas because they cannot deal with the replacement weeds which appear so rapidly.

Without having attempted a careful survey, the Wilsons are aware of well over 200 woody (including vines) species on their property. An inexperienced look at areas on which they have worked would not give the impression of wide species representation. A more expert look shows a wide range of natives, largely as young plants, and relatively few weeds; and the prospect that given a few years of better seasons than of late, there will be a dramatic improvement over what was there a few years ago (a weed dominance) and what was there 50 years ago, which in turn was a very poor representation of the Aboriginal vegetation.

A pleasing aspect of the Wilson story is that father commenced the restoration process and that his son has now become the brains and brawn of the project. They understand natural processes. They work with nature emphasising natural regeneration and have a long-term view and patience with their restoration project.

Gordon Wilkinson



Graeme and Andrew Wilson working on their revegetation project

MCCG Help to Landholders

Success late last year with gaining NHT funding for 2002 has meant that the MCCG is able to continue to offer help to landholders within the catchment. The goal is to extend the assistance given so far by its foundation field officer, Michael Reif, from around 90 landholders to 150 by September.

The focus on assisting private landowners is related to the significant proportion of the catchment occupied by large residential blocks and their proximity to forest parks. Informed management of these blocks is essential in reaching those catchment management goals related to weed control, native habitat and water quality. Allowing for wildlife corridors connecting forests and creek systems across and through private land is also important.

Help to landholders is mainly in the form of advice and plants from the MCCG's field officer. The field officer can lend assistance with such matters as weed recognition and eradication as well as planning that uses local plant species in revegetation. Advice can also include such larger catchment issues as fire management and providing habitat for local wildlife.

For approved projects, the field officer is able to offer some free plants, mulch and herbicide to help with implementing any advice.

Until the field officer's position is confirmed, MCCG chairman, Bryan Hacker, can be contacted regarding MCCG assistance at 3374 1468 or email, jbhacker@powerup.com.au.



Seed Collectors

Graeme Wilson is keen to contact any volunteer seed collectors with knowledge of local species as part of a plan to boost nursery plant supplies and help conserve some of the less common local species. Seed collection from local plant species is important as local seed produce the best plants for local growing. Anyone with that interest and knowledge can contact Graeme on 3374 1218.

New Look, New Life for Glyphosate

Glyphosate has been used as a herbicide around the garden, farm, commercial and public property for 30 years now. It was introduced to the marketplace by Monsanto as "Roundup", which has remained as a household name throughout the world ever since.

"Roundup" and other look-alike products have remained the same all this time with little or no change to the original formula. These herbicide products are still highly soluble in water, highly ionic with strong positively and negatively charged ions ever-ready to attach themselves to minerals, clay particles and organic matter in soils, plants and water. This explains why Glyphosate has a short life in soils and water, and, of course, this is why we have been able to use "Roundup" in our vegetation regeneration and re-planting activities. Can you imagine how more difficult life would be without "Roundup"?

There are, however, quite a few problem weeds that "Roundup" will not kill for a number of reasons. All available Glyphosate products are highly ionic, water soluble and fat insoluble. As such, they are not capable of penetrating thick waxy cuticles on many of our weeds such as Mother-of-millions, Ochna, Madeira vine, Prickly pear, White root, Glycine and Wild passion vines. How can we achieve this with our present Glyphosate products? The answer is by converting the Glyphosate molecule into a non-ionic fat soluble one. We now have a way of doing this.

A "Do-it-yourself" kit is available locally from Brookfield Produce in the form of "Holdfast AF". "Holdfast" singles out Glyphosate and combines with it chemically neutralising the positive and negative ionic charges, converting it into a non-ionic, fat soluble compound. This compound can then be mixed with kerosene, mineral turpentine or emulsified in water.

The emulsion spray is able to penetrate thick plant cuticle such as we find in plants in many of our desert and tropical wet areas where excessive water loss or gain needs to be resisted by plants for healthy growth to be sustained.

In preparing the emulsion, we need firstly to make the non-ionic form of Glyphosate by mixing 1 part Glyphosate 360 or preferably Glyphosate 450 with 1 part "Holdfast". Mix for five minutes. Now form the emulsion by adding equal parts water and shaking or stirring for a few minutes. Then add the remainder of the water to make up the final volume.

For general spraying of leaves and stems to point of runoff, the following proportions are quite satisfactory:

1 part Glyphosate 360
0.5 parts "Holdfast"
100 parts water

For low-volume spotting of leaves and stems the emulsion should be made 10 times the concentration given above:

1 part Glyphosate 360
0.5 parts "Holdfast"
8.5 parts water

In both high volume spraying (thorough wetting) and low volume spraying (just spotting) the plant leaves and stems must be covered with the spray emulsion evenly all over.

George Diatloff

(Many thanks to George for allowing us to print this article, which appeared in Streamlines, the newsletter of the Pullen Pullen Catchments Group, late last year. In a subsequent conversation, George agreed that this procedure makes "Roundup" more persistent in the soil, so that it could adversely affect regenerating or planted seedlings. The procedure is therefore only recommended for spot spraying of 'difficult' weeds. Ed)

Wildlife Talk

Thanks to Peter Ogilvie for his informative and entertaining talk at the MCCG 2001 AGM, 'Living with Wildlife'. Peter, who lives at Upper Brookfield, coordinates the management of World Heritage areas in Queensland for the Department of Parks and Wildlife. His message of the need for tolerance and understanding was illustrated with many local experiences with anything from scrub turkeys and ticks to bandicoots and carpet snakes. His slides of local birds and animals showed the rich variety surviving in our area and illustrated the important links between the survival of wildlife and the revegetation work of the MCCG, particularly along creeks and wildlife corridors. His talk effectively made the point that although our fellow creatures might at times create problems for us, maintaining and expanding wildlife habitat whether in backyards, on properties and farms or in parks and reserves was an important part of preserving wildlife as an essential element of our biosphere.

Jack Talty

That's the Spirit....

Malcolm Frost, leader of Section 3, had a spell in hospital before Christmas, suffering from a severe bout of pneumonia. Fortunately, he is now back at home, and in full health.

Even while in hospital, though, Malcolm was not one to let a little thing like pneumonia dampen his enthusiasm for revegetation work in our Catchment. Almost daily his wife received a long list of instructions to pass on to his weary Section 3 crew. With this level of enthusiasm, it is no wonder that Section 3 is amongst the most productive in the Catchment. (Many thanks to Brian Dean, Pullen Pullen Catchments Group, for the sketch, which shows Malcolm planning the next moves from his Wesley Command Centre).



COMMITTEE

Chairman					
Bryan Hacker		3374 1468	Michelle St Baker	Sect 6	3374 4171
Vice-Chairman			Brad Wilson	Sect 7	3300 4855
Adrian Webb		3374 2686	Gordon Wilkinson	Sect 8	3374 1576
Treasurer			Graeme Wilson	Sect 8	3374 1218
Barbara Cox		3374 1640	Gordon Grigg	Sect 9	3374 1737
Secretary			Frank Rudd	Sect 9	3374 1859
Robyn Frost		3374 0649	Chris Mackey	Sect 10	3374 1676
Publicity			Dylan Bowker	Sect 10A	3374 0127
Jack Talty		3374 1738	Bryan Hacker	Sect 11	3374 1468
Photo Comp			Michael Humphreys	Sect 12	3374 1467
Judy Gower		3878 4790	John McKenzie	Sect 13	3407 0013
Section Leaders			Members		
Rob Waller	Sect 2	3378 9979	Vic Blake		3374 2432
Malcolm Frost	Sect 3	3374 0649	Margaret de Wit		3403 5929
Stephen White	Sect 4	3374 1653	Peter Metzdorf		3374 2774
Tina Heybroek	Sect 5	3374 1401	Leonie Short		3371 4360



MOGGILL CREEK CATCHMENT GROUP

Do you know?

The Moggill Creek Catchment contains more bushland than any other catchment in Brisbane;

The Catchment Group was formed in 1997 in response to the release of the Brisbane City Council Catchment Management Plan for the area;

Local residents hold regular working bees on public and private land;

The Group is supported by Habitat Brisbane (BCC) and a Field Officer funded by Natural Heritage Trust.

**We need your help to restore native habitat
in our catchment!**

**Your membership helps us to obtain support
from Government to continue our work!**



Membership Application/Renewal Form

(Where two or more members of a household wish to take out membership, each should apply separately.)

Title: First/Preferred name: Surname:

Address:

Postcode:

Telephone number: Email:

I hereby request membership/renewal of membership of the Moggill Creek Catchment Group.
The annual subscription of \$5.50 is enclosed.

I live in subcatchment (see map overleaf)

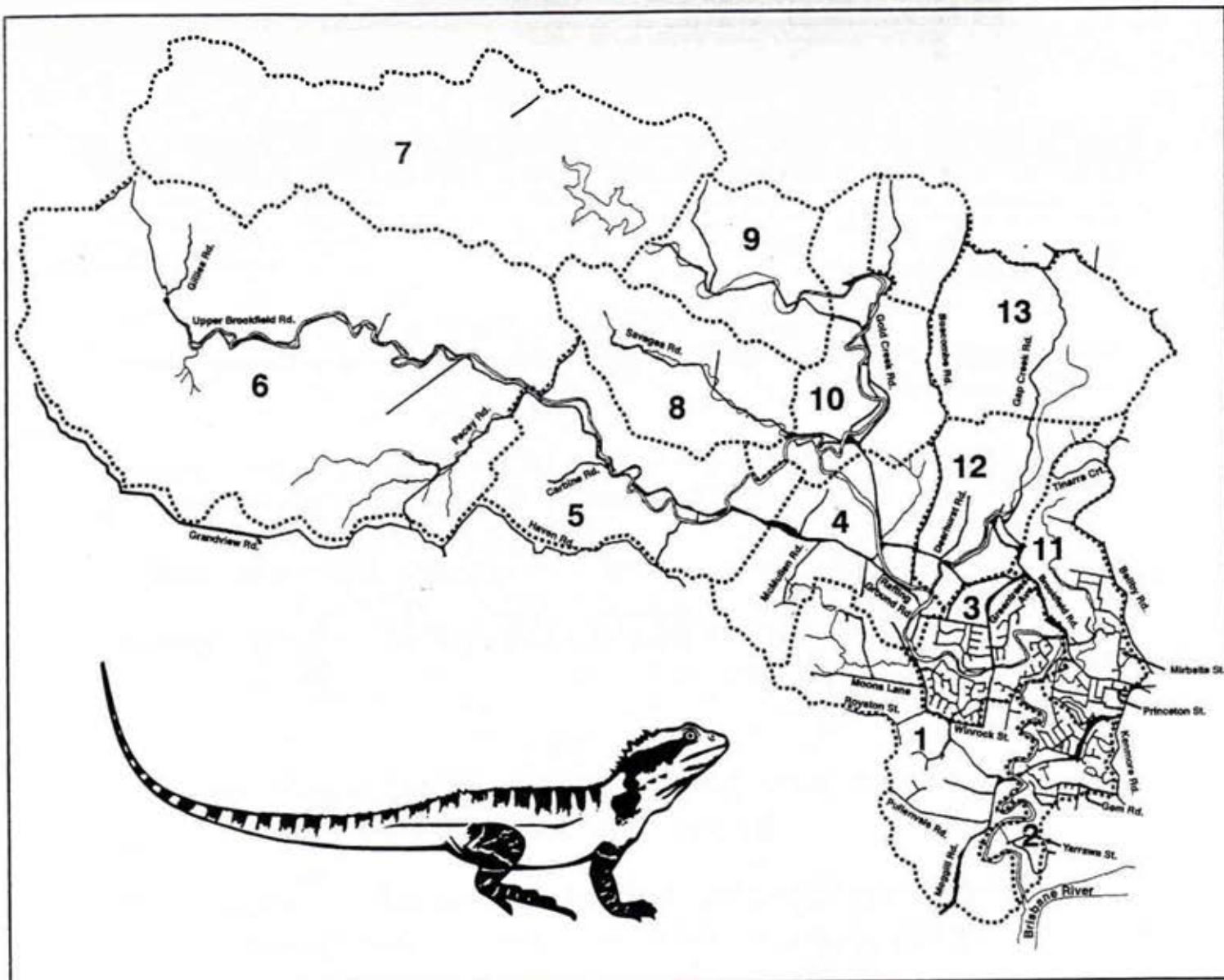
and would like to participate in working bees on public land ☐

am looking for advice/help in revegetation on my own land ☐

(Please tick one or both)

Signed: Date:

Please send completed form and annual subscription to the Secretary, MCCG, PO Box 657, Kenmore, Qld 4069.



MOGGILL CREEK CATCHMENT

Section boundaries