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Submission to Legislative Council Environment & Planning Committee Inquiry into Ecosystem Decline in Victoria

The Upper Maribyrnong Catchment (Landcare) Group (UMCG) welcomes the opportunity to provide a submission into ecosystem decline in Victoria.

1. Background

The UMCG was established in 1988 and covers more than 20,000 hectares. The group's area goes west from Old Sydney Road, Wallan, includes the township of Darraweit Guim, and its eastern boundary is in Springfield Road, east of Romsey. The group currently has around 75 landholder members.

2. Biodiversity values & assets in UMCG's area

2.1 Threatened fauna

The following is the list of threatened fauna found in the UMCG's area: Brush-tailed Phascogale, Growling Grass Frog, Mountain Galaxis, Southern Toadlet, Spotted Quail Thrush, and Swift Parrot.

2.2 Endangered Ecological Vegetation Classes

The UMCG's area also contains the following endangered and vulnerable Ecological Vegetation Classes (EVCs):

- EVC 55 Plains Grassy Woodland (endangered)
- EVC 83 Swampy Riparian Woodland (endangered)
- EVC 175 Grassy Woodland (endangered)
- EVC 18 Riparian Forest (vulnerable)
- EVC 23 Herb-rich Foothill Forest (vulnerable)
- EVC 47 Valley Grassy Forest (vulnerable)
- EVC 851 Stream Bank Shrubland (vulnerable).

2.3 Priority EVCs

The *Port Phillip and Western Port Native Vegetation Plan* (2006) recommended that the following priority EVCs in the UMCG's area should be increased in quality:

- EVC 23 Herb-rich Foothill Forest (Victorian Volcanic Plain Bioregion)
- EVC 47 Grassy Dry Forest (Central Victorian Uplands & Victorian Volcanic Plain Bioregions)
- EVC 55 Plains Grassy Woodland (Central Victorian Uplands & Victorian Volcanic Plain Bioregions)
- EVC 175 Grassy Woodland (Central Victorian Uplands & Victorian Volcanic Plain Bioregions)
- EVC 851 Stream Bank Shrubland (Central Victorian Uplands & Victorian Volcanic Plain Bioregions).

The UMCG's area also contains the following priority EVCs that were recommended in the *Port Phillip and Western Port Native Vegetation Plan* for increase in protection:

- EVC 55 Plains Grassy Woodland (Central Victorian Uplands & Victorian Volcanic Plain Bioregions)
- EVC 851Stream Bank Shrubland (Central Victorian Uplands & Victorian Volcanic Plain Bioregions).

2.4 Riparian zones

Deep Creek is an appropriate name for the one of the two main waterways that flow through the UMCG's area, as the Deep Creek is located in a deep valley that the watercourse has cut through the basalt plains over thousands of years. Both upstream and downstream from Darraweit Guim township, the Deep Creek has significant rocky escarpments and basalt cliffs that separate the creek from the surrounding farmland and provide habitat for fauna species such as Peregrine Falcons and Wedge-Tailed Eagles. The creek's riparian zone also contains important stands of riparian remnant vegetation.

There are also many deep pools that have formed in the creek bed of the Deep Creek that provide refuges for native fauna when the creek does not flow, i.e. during summer and early autumn, and at times of drought. The Deep Creek supports a robust population of platypus, as revealed by the surveys undertaken by the Australian Platypus Conservancy in and around Darraweit Guim, with the support of the UMCG.

The second main creek in the UMCG's area is Number Three Creek, and this creek's catchment is the rolling hills west of Kilmore, including Mt William. Number Three Creek also has gorge areas with basaltic escarpments that separate the creek from the surrounding farmland. The intactness of the high-quality native vegetation in the volcanic gorge section of Number Three Creek "is remarkable in the context of the Victorian Volcanic Plain and it has very high [bioregional] conservation significance". (See Ecology Australia, *Upper Maribyrnong Catchment Waterway Biodiversity Values Assessment* [2013])

Number Three Creek's has its confluence with Deep Creek in Darraweit Guim township. Both creeks are important landscapes that contain significant biodiversity assets, including remnant riparian vegetation and habitat for native fauna. Enhancing, protecting and restoring the biodiversity values in the riparian zones of these two creeks and their tributaries is critical both in terms of river health, and for the creeks' riparian zones to function as effective biolinks.

The highly erodible duplex sedimentary soils in the Central Victorian Uplands bioregion part of the UMCG's area have resulted in a large amount of gully erosion on private land, as well as streambank erosion. The basalt soils in the Victorian Volcanic Plain region part of the UMCG's area also suffer from gully erosion and streambank erosion.

The large sediment and silt loads from this erosion impacts on water quality in the Deep Creek and Number Three Creek and ultimately finishes up in Port Philip Bay. (See Pat Condina & Associates, *Upper Maribyrnong and Werribee Catchments Waterway Management Plan* [2000]).

A large number of private landholders with frontage to the Deep Creek and Number Three Creek and their tributaries, have fenced off and revegetated their creeks with assistance from Melbourne Water's Stream Frontage Management Program.

3. Impact on environmental flows & biodiversity of diversions of water from catchments

The on-going subdivision of rural land in the UMCG's area into 40 hectare lots has a major impact on environmental flows in the Deep Creek and Number Three Creek.

Each landholder who builds a house on what was once broad-acre farming land can potentially divert water (from catchment) for domestic or agricultural uses in four ways:

- water tanks,
- dams,
- water bores,
- and pumping from creeks (if they have creek frontage).

The impact of the excessive diversion of water from the catchments is a lack of environmental flows and a reduction in the deep refuge pools in local creeks in summer and autumn, with a consequent negative impact on the biodiversity and habitat values of local waterways.

Recommendation 1: Control the unregulated (i.e. un-metered) pumping from creeks and bores for stock and domestic purposes, as this pumping has a significant impact on environmental flows in creeks.

4. High conservation value rural roadsides

Remnant native vegetation on rural roadside reserves may be locally or regionally significant. It may contain rare or threatened flora species and often provides habitat and ecological connectivity in fragmented landscapes. Road reserves account for a significant proportion of total remnant native vegetation on public land in Victoria.

Remnant roadside vegetation also provides examples of native plant communities that may be absent from adjoining cleared private land thereby providing a valuable genetic resource and seed bank for seed collection (with appropriate seed collection permits), to help propagate local plants for revegetation projects. Healthy stands of roadside remnant vegetation benefit adjoining farming land by providing shelter and shade for livestock and wind protection for pastures and crops.

Many Landcare groups and networks play important roles supporting nature conservation in their areas, including taking action to conserve and protect remnant roadside vegetation. The Upper Maribyrnong Catchment Group has had a strong focus on protecting areas of significant remnant native vegetation along rural roadsides since its formation in 1988. This has included undertaking weed control projects on roadside reserves with high or medium conservation values, which has required collaboration with local governments as the land manager of local rural roads.

Since the mid-1990s the UMCG has secured around $50,000 of grants for weed control across 30-40 kilometres of high and medium conservation roadsides in the group's area. This included securing four rounds of Victorian Government Bush Guardians funding, Parks Victoria Volunteer Group Grants (for Beckingsale Bushland Reserve), Victorian Landcare Grants, and Melbourne Water Community Grants. The main weeds treated using this funding were gorse, cape broom, briar rose, hawthorn and other woody weeds. Mitchell Shire has also undertaken weed control along designated sections of the same roadsides targeted by the UMCG for treatment, and Macedon Ranges Shire has funded the group to treat weeds along two sections of roadside.

Recommendation 2: Provide rural roadsides that have significant conservation value with a higher level (and on-going) protection.

Mitchell Shire manages more than 2,000 kms of rural roads and around 60 per cent of these roads have been assessed as having high conservation value. Macedon Ranges Shire manages approximately 1,700km of rural roads many of which have high conservation value. Both councils receive funding through the Victorian Government's Roadside Weed and Pest Animal Program to undertake weed control on Council managed roadsides. In Macedon Ranges Shire the Victorian Government's Roadside Weed and Pest Animal Program funds make up just 15 per cent of Council's overall spending on roadside weed control each year.

Recommendation 3: Victorian Government to significantly increase funding for the Roadside Weed and Pest Animal Program to provide greater incentive for local governments to undertake pest plant and animal control on the rural roadsides they manage to improve site condition, biodiversity and ecological connectivity.

5. Old Sydney Road Flora Reserve

David Laurie's *Report on the Conservation Values of Roadsides within the Shire of Kilmore* (1994), identified a 600-metre section of Old Sydney Road, Wallan, as containing the finest section of roadside remnant vegetation observed during the assessment. He rated it as an irreplaceable example of the original vegetation of the area, noting the almost total absence of weeds and intactness of the native ground flora. David Laurie wrote in his report that "…consideration should be given to gazetting as a flora reserve…Mature trees contain extensive nest hollows. An understorey of wattles and native peas is present. The ground flora is rich in native grasses, forbs, orchids and smaller shrubs. This section is also part of the important wildlife corridor [along Old Sydney Road] between Wallan-Darraweit Road and Stockdale Road."

A botanical survey by the UMCG in 1995 found more than 80 flora species at the site of the proposed flora reserve along Old Sydney Road, Wallan, including 16 different orchids. The UMCG has organised many spring wildflower walks along Old Sydney Road and other high conservation roadsides to observe the beautiful wildflowers and increase awareness of the relatively intact, diverse and rich remnant local flora along these roadsides. UMCG has also produced a colour brochure on the flora of the proposed flora reserve.

The UMCG sought support for the site to be declared a flora reserve, and support came from parties including the Maribyrnong Catchment Committee set up by the Port Phillip Regional Catchment and Land Protection Board (now Port Phillip and Westernport CMA) that included an action in the *Maribyrnong Catchment Action Program* (1999) on gazetting the flora reserve. The Mitchell Shire Environment Advisory Committee included an action in the shire's previous Environment Strategy (2008) that supported the gazettal of the Old Sydney Road Flora Reserve.

However, over the past seven years Mitchell Shire has failed to complete the work required for the 2.66 hectares Old Sydney Flora Reserve to be gazetted.

Recommendation 4: Undertake and complete the gazettal of the 2.66 hectares Old Sydney Road Flora Reserve, Wallan.

6. Unused Road Reserves

Victoria has more than 120,000 hectares of unused road reserves that support native vegetation. They are often overlooked as biodiversity assets despite containing an important proportion of our remnant vegetation. DELWP provides licences over unused roads for agricultural uses (such as livestock grazing), for up to 99 years to owners of adjoining private land.

The Victorian Environmental Assessment Council (VEAC) in its *Remnant Native Vegetation Investigation* (2011) estimated that about half of the total area of Victoria's unused road reserves have been fully cleared of native vegetation, with a substantial remaining portion in a degraded condition. Despite this, the report found that some unused road reserves contain significant stands of remnant vegetation including an understorey structure with good biodiversity values, as they have been fenced off to exclude grazing by livestock.

The VEAC investigation recommended a comprehensive inventory of road reserves (both used and unused), including site condition and the mapping of significant native vegetation be undertaken. According to VEAC, biodiversity conservation and ecological connectivity should be adopted as management objectives for appropriate unused road reserves. The management of unused roads needs to be altered so that there is an option for private landholders to have a biodiversity licence for an unused road reserve, instead of an agricultural licence.

Recommendations 5, 6 & 7: implement the following recommendations from VEAC's *Remnant Native Vegetation Investigation* (2011)

Recommendation 5: Victorian Government to develop a comprehensive inventory of road reserves in use and used and unused rail reserves across the state, which is populated with survey data including:

- **location (GIS polygons mapped)**
- **extent and ecological vegetation class (EVC) of native vegetation**
- **other known biodiversity values such as presence of threatened species**
- **site condition, landscape context, and likely trends in and threats to these**
- **current and proposed management responsibilities and arrangements and maintained in an up-to-date spatially explicit database accessible to interested organisations and community groups.**

Recommendation 6: Victorian Government to develop a system to identify and map significant native vegetation values on road reserves in use and used and unused rail reserves, with appropriate management objectives and guidelines for categories including:

- **significant native vegetation within such reserves**
- **reserves with little or no native vegetation but relevant to ecological connectivity (e.g. for revegetation or maintaining the condition of nearby native vegetation)**
- **other native vegetation on road and rail reserves and that, using the data collected for the inventory recommended above, all appropriate rail and used road reserves across Victoria be managed accordingly.**

Recommendation 7: Victorian Government to develop a policy to facilitate and guide the adoption of biodiversity conservation and ecological connectivity as management objectives for appropriate unused road reserves, with options for maintaining potential for future access where required.

7. Increased support required for private land conservation

Around 65 per cent of Victoria is private land. Addressing the loss of remnant vegetation and habitat across the landscape is a major issue in the UMCG's area. The clearing of land since colonisation for agricultural and farming purposes has had a serious impact on biodiversity and ongoing loss of habitat for native fauna species.

Trust for Nature covenants

Private landowners can play a critical role in protecting and enhancing local ecosystems by protecting quality native vegetation on their land by placing a Trust for Nature covenant on the Title, protecting the land in perpetuity. However, more incentives need to be provided to encourage private landholders to put a conservation covenant on significant remnant vegetation on their land.

Recommendation 8: Victorian Government to increase the support (through extension programs and incentives, e.g. statewide rate rebates) for private landowners, to encourage and incentivize them to protect and enhance biodiversity on their properties by placing Trust for Nature covenants on high value remnant native vegetation for conservation purposes.

8. Pest plants & animals

Weeds

Weeds have significant impact on biodiversity values and agricultural productivity in the UMCG's area. Over the past 10-15 years Chilean Needle Grass has moved northward from Sunbury area to infest large areas of private land in and around Darraweit Guim, including the public land along the Deep Creek in the township. Chilean Needle Grass is hard to identify and eradicate and is basically 'out of control' as it continues to move northwards towards Lancefield and Willowmavin.

Other weeds that landholders expend significant resources to control in the UMCG's area include: willow, gorse, blackberry, serrated tussock, hawthorn, broom, sweet briar, artichoke thistle, as well as broad leafed weeds such as capeweed. These weeds also have a significant impact on biodiversity values and agricultural productivity.

Pest animals

Grazing by pest animals such as rabbits, feral deer, goats and pigs can have a significant impact on conservation values on public and private land by preventing natural regeneration of trees, shrubs and grasses, causing erosion, and allow weeds to establish in disturbed areas. They also compete with native mammals and birds for food and alter, trample and destroy habitats, and predator species such as foxes and cats, prey on native wildlife.

Deer

There are reportedly over a million deer in Victoria, which have a significant impact on biodiversity and conservation values in state forests, national parks, and private land. Deer have been listed as a potentially threatening process under the Flora and Fauna Guarantee Act 1988. However, deer are not a declared pest species, but instead are protected under the Wildlife Act 1975.

The absence of a state-wide deer strategy and the limited resources available for deer control has resulted in significant increases in deer populations in the UMCG's area, which includes parts of both Macedon Ranges and Mitchell Shires.

Recommendation 9: Victorian Government to declare deer a "pest" species under the *Catchment and Land Protection Act 1994* and remove deer from the list of protected "game" under the *Wildlife Act 1975*.

9. Lack of land management knowledge

Within the UMCG's area there are only 10-20 broad acre farmers who depend primarily on farming for their income. Like many areas on the urban-rural fringe in the UMCG's area there is frequent turn over in land ownership. The majority of landholders in the local area are lifestyle or hobby farmers. These landholders often have good intentions about being good land managers and improving the agricultural productivity, and environmental and aesthetic values of their properties. However, some landholders lack knowledge or experience about land management issues, which can result in poor land management practices that in turn has a significant impact on biodiversity values and agricultural productivity. It is not unusual for the Landcare group to try to engage a succession of different landholders who have owned the same parcel of rural land.

Poor land management practices impact on biodiversity and can result in: weed invasion and lack of weed control; over grazing by stock in and along streams and riparian zones (with associated damage to streambanks and native vegetation); gully erosion; and nutrient input into waterways from stock (that have access to waterways and due to over grazing).

Recommendation 10: Victorian Government to significantly increase the support provided for private landowner education to increase landholders' awareness about land management issues and biodiversity values. This support should include one-on-one extension with landholders about land management issues and assistance to develop property management plans.

10. Multi-year funding for landscape scale projects to build ecological connectivity

The Victorian Government needs to do more to encourage the retention, protection and restoration of native vegetation and habitat across both private and public land, by fostering the establishment of biolinks at local Landcare group and Landcare network scales, as well as at broader landscape and regional levels.

Biolinks are linkages that improve ecological connectivity between patches of natural habitat and existing remnant vegetation and provide an important and effective mechanism for landscape restoration and connectivity.

In the UMCG's area there could be a series of biolinks based on riparian zones and connectivity between remnant patches on private land and high conservation roadsides. For example, a Deep Creek Biolink could provide connectivity along the length of the Deep Creek in the UMCG's area. However, it could also be part of a catchment-scale Deep Creek Biolink along the whole length of the creek from Sydenham Park to the creek's headwaters in and around Newham.

Victorian Government funding programs for on-ground works such as the Victorian Landcare Grants (VLG) provide funding for projects from one year to 18 months, with the maximum amount of VLG funding for projects limited to $20,000 per project. To enable on-ground works to take place at landscape scale (e.g. biolinks), the Victorian Government needs to invest significant funding for multi-year (i.e. 3 to 5 years) for community-based on-ground projects to implement long-term, landscape-scale projects for conservation and restoration activities across both public and private land.

Recommendation 11: Victorian Government to provide funding for multi-year (i.e. 3 to 5 years) community-based on-ground projects to implement long-term, landscape-scale projects for conservation and restoration activities across both public and private land at local Landcare group and Landcare network scales, and at landscape and regional levels.

11. Summary - list of recommendations

Recommendation 1: Control the unregulated (i.e. un-metered) pumping from creeks and bores for stock and domestic purposes, which has had a significant impact on environmental flows in creeks.

Recommendation 2: Provide rural roadsides with significant conservation value with a higher level (and on-going) protection.

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John Robinson

Secretary
On behalf for Upper Maribyrnong Catchment Group's committee