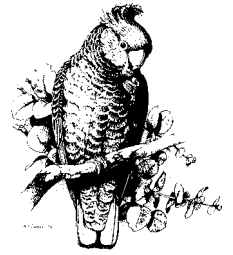


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Mr Mick Gentleman, MLA  
Chairperson  
Standing Committee on Planning and Environment  
ACT Legislative Assembly  
(email: committees@parliament.act.gov.au )

### **Molonglo Valley DV 281 (Molonglo and North Weston)**

I am writing on behalf of the Canberra Ornithologists Group (COG) in response to the invitation to provide submissions to the Inquiry into Draft Variation to the Territory Plan No 281 – Molonglo and North Weston

COG is dedicated to the study and conservation of native birds and their habitats. COG is especially concerned with better protection for native vegetation which provides habitat for various species of birds, especially birds which are associated with grassy woodlands. COG's surveys and research show that a number of woodland bird species continue to decline in abundance, including birds which are listed as threatened under ACT legislation. The primary cause is the overall loss of woodland habitat and fragmentation of habitat, overlaid by a variety of other pressures and threats including urban related pressures.

A copy of the submission COG made to the ACT Planning and Land Authority on the original DV 281 (dated 23 November 2007) is an Appendix to this submission. This has full details of our views and concerns. While COG is very pleased with the ACT Government's recent announcement of a 20 years moratorium on development in the Central Molonglo, we note that the moratorium decision needs to be reflected in a revised DV. COG also notes that little has changed in the revised DV 281 prepared by ACTPLA, despite many submissions from community groups, scientists and other experts, as well as studies commissioned by ACTPLA.

In relation to the Central Molonglo, COG recommends that this should become a large conservation area, a focus of research, restoration and rehabilitation of woodlands, building on the experimental research that has commenced at the Mulligan's Flat & Goorooyaroo Nature Reserves. There should be a planned, long-term approach to monitoring and evaluation initiatives, as well as restoration initiatives in the Central Molonglo.

The other matters which COG remains concerned about and recommends to the Committee are as follows. In COG's view, these are the absolute minimum measures needed (in addition to conservation of Central Molonglo woodlands), to assist woodland birds and birds of prey species:

- the widest possible buffers around the high quality Kama Woodland in Central Molonglo (proposed as reserve in the DV), to protect threatened woodland birds and the threatened Little Eagle from urban related impacts; the buffer area on the SE edge, i.e. in East Molonglo, should extend down to the drainage line known as Deep Creek
  - there is also an area of mapped, endangered grassy woodland extending beyond the existing planning boundary on the SE edge of Kama, around 100 metres wide, which should be part of the protected reserve.

- the widest possible buffers around the Molonglo River in East Molonglo, to preserve the river corridor function, birds of prey (principally Wedge-tailed Eagle) breeding sites and *Aprasia* habitat
  - COG is strongly opposed to a dam on the Molonglo River, the need for which has not been well demonstrated; we support more environmentally sensitive measures to deal with issues such as storm water/runoff
- within East Molonglo, rehabilitation of the river corridor and a wide buffer area as a priority, and this should be undertaken as an offset for clearance of native vegetation, trees etc elsewhere in the East Molonglo development
  - a rehabilitated and functioning river corridor reserve will be a far more positive outcome for birds and biodiversity more generally, as well as meeting other important needs such as healthy recreational opportunities for residents
- greater mitigating measures to offset the overall loss of habitats of birds of prey species; COG was very disappointed in the outcome for these species in the original DV 281; in particular we recommend:
  - the retention/conservation of significant patches of endangered grassy woodland community within the East Molonglo development; some of these patches have a number of exceptional trees, in particular
    - a large patch north of the Arboretum site abutting William Hovell Drive, which is also a Brown Goshawk breeding site; the retention of this woodland would also provide a greater conservation corridor of vegetation through to Black Mountain
    - a large patch around the middle of East Molonglo, west of Molonglo River, which, linked to a good buffer area around the river corridor, will assist in protecting a Wedge-tailed Eagle breeding territory/nest site/foraging area, and a Brown Goshawk territory
  - a rehabilitated river corridor and riverine buffer area, conservation of significant patches of endangered woodland community (as above), and appropriate buffer areas around nest sites in East Molonglo is the very minimum needed for iconic species like Wedge-tailed Eagle
- a change in planning principles for the location of critical management zones (CMZs) for prescribed burning/other management actions to protect assets; for new developments, these zones must be allowed for within the development footprint, and not extend into conservation areas; the Kama Woodland is an example
- cat containment for all the Molonglo Valley urban areas is warranted to protect threatened and other sensitive species, and wildlife more generally, and
- measures to minimise collision impacts of birds of prey, for example, install all new utility wires (eg powerlines) underground (recommended in the report by birds of prey expert Dr Stephen Debus (EASystems), commissioned by ACTPLA.

### **Protection of Kama Woodland and its Threatened Birds**

In COG's view, there is a need for a large buffer on the SE edge of what has been proposed as Kama Woodland reserve, which would otherwise have housing directly abutting the endangered woodlands area. This boundary should be re-drawn further south-east, down to the drainage line immediately to the south-east, known as Deep Creek. Such a buffer should incorporate the CMZ for bushfire protection. The existing plans provide for the CMZ within the endangered woodland community; it is a ridiculous outcome to propose to conserve a highly valuable conservation area and then burn it to protect houses.

If housing goes ahead in this block close to the SE edge of Kama Woodland reserve, COG believes this will be an issue for the conservation of the endangered woodland and its threatened and near threatened birds, especially for the ongoing survival of the small population of threatened Brown Treecreepers which are sensitive to urban related impacts. COG recommends that consideration be given to an appropriate broadacre use for this block/area, a use which has a small development footprint, and would conserve what is mostly a native grass covered paddock.

There is also an area of mapped, endangered grassy woodland extending beyond the existing planning boundary on the SE edge of Kama, around 100 metres, which should be part of the protected reserve.

### **Mitigating Measures to Protect Birds of Prey Habitats**

The Molonglo Valley is regarded as a very important area for 13 species of birds of prey, in fact this is unique close to a major city. With no development in the Central Molonglo, this will at least provide some opportunities for birds of prey such as the Little Eagle, the Peregrine Falcon and the Australian Hobby to continue to live and have a presence in the Molonglo Valley.

However, with the loss of rural lands in East Molonglo, the best way to ensure that birds of prey generally can continue to have a presence and breed in the southern part of the Valley is to provide the widest possible buffers around the Molonglo River and around known nest sites for species such as the iconic Wedge-tailed Eagle, retain significant patches of trees/woodland, as well as NO dam:

- such buffers (300 metre riparian buffer for areas of high quality habitat) were recommended in the report by Dr Stephen Debus (EASystems), commissioned by ACTPLA
- the Debus (EASystems) report also supported the retention of woodland patches in East Molonglo, eg the area north of the Arboretum which is a Brown Goshawk nesting and foraging site (referred to in summary above)
- The Debus (EASystems) report also raised the possibility of re-routing of the Coulter Drive extension generally east of the Molonglo River, to better protect birds of prey habitats, particularly Wedge-tailed Eagle and Brown Goshawk. COG supports further detailed investigation of this recommendation.

COG has been particularly concerned that important and relevant information from commissioned consultants' reports on biodiversity and birds of prey issues was not reflected fully or accurately in the original PA/DVA, and that those documents proposed only very minimal measures to address the very significant loss of a range of habitats for birds and biodiversity generally, and to mitigate impacts on the rich birds of prey community in the Valley. The COG submission to ACTPLA dated 23 November 2007 (Appendix to this submission) has details.

It is COG's view that in the 21<sup>st</sup> century against a background of very significant loss and fragmentation of native woodland and other habitats in our region and the impacts of climate change, the ACT Government must adopt a policy (as have other jurisdictions such as NSW and Victoria) of 'no net loss' of native vegetation (or similar principle) for urban or infrastructure purposes. Only development on degraded lands can be justified, unless there are adequate, offsetting measures provided.

COG (myself and Jenny Bounds, Conservation Officer), would welcome the opportunity to appear before the Committee to discuss issues relating to the impacts of this development on woodland birds and birds of prey. We can be contacted respectively on ph: 6254 6324 or 6288 7802.

Yours sincerely

Chris Davey  
President

23 June 2008

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ACT Planning and Land Authority  
GPO Box 1908  
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Dear Project Team

**Molonglo Valley Preliminary Assessment and Draft Variation to the Territory Plan (DV 281); Draft Amendment 63 Molonglo and North Weston (NCA)**

I am writing on behalf of the Canberra Ornithologists Group (COG) in response to the release of the PA, DV 281 and Draft Amendment 63 for comments. COG has previously provided comments on the Structure Planning for this development and many of our views are reiterated here.

COG is dedicated to the study and conservation of native birds and their habitats. COG is essentially concerned with better protection for native vegetation which provides habitat for various species of birds, especially birds which are associated with grassy woodlands. COG surveys and research show that a number of woodland bird species continue to decline in abundance, including birds which are listed as threatened under ACT legislation. The primary cause is the overall loss of woodland habitat and fragmentation of habitat, overlaid by a variety of other pressures and threats including urban related pressures.

COG has never opposed the utilising of degraded rural land, such as the footprint of the former (burnt) pine forest area in the East location for urban development, but we have consistently and strongly opposed development in the Central Molonglo which would destroy valuable woodlands and grasslands. We were disappointed with the Structure Plan when that was released and are equally disappointed with the Plans in the PA/DVA which have changed the proposed urban areas very little from those in the Structure Plan. It is obvious that the community's views which have been put very strongly by community groups and individuals have largely been ignored.

Overall, COG is extremely disappointed that the Central Molonglo area remains on the Plan as previously, despite a great deal of information provided by the community and experts, indeed ACTPLA's own consultants' advice, supporting the conservation of these woodlands and grasslands.

COG believes that the Plans vastly underestimate the value of the Molonglo Valley overall as a system supporting varied habitats for many birds, reptiles and other animals. It is no mere coincidence that the Molonglo Valley has such a high diversity and number of breeding birds of prey; this reflects the significance of the prey species available and indicates very high biodiversity values overall.

COG believes the Plans as drawn, especially in the northern Molonglo Valley including around the Kama woodland, will be an absolute disaster for woodland birds and birds of prey in the Valley. The Plans will destroy breeding and feeding habitats of a unique assemblage of birds of prey breeding in the Valley, the loss of what is believed to be the last breeding territories for the Little Eagle, (a species in the process of being listed as threatened in the ACT). As well, the last urban fringe group of the threatened Brown Treecreeper will be lost – that species will become locally extinct in the Central Molonglo.

COG strongly disagrees with the approach which appears to underlie the discussion and conclusions in the PA, that only communities and species which have reached critical threatened status or that only high quality examples of habitat or landscape features should receive any consideration in the planning process. And even then, threatened status really does not appear to matter at the end of the day, as social and economic considerations are more important.

In our view the PA is inadequate in addressing environmental issues (despite a lot of rhetoric in the documents about ‘sustainability’), and fails to properly apply the ACT Government’s principles for sustainable development within the Territory Plan, and Government policy on woodlands, grasslands, riparian communities and threatened species conservation (Action Plans 27, 28 & 29):

- the key principles for ecologically sustainable development are inadequately assessed, with the result that social and to a lesser extent economic criteria are favoured against ecological criteria
  - a comprehensive examination of the social, economic and ecological opportunities this area presents, does not support the proposed destruction of large areas of endangered grassy woodlands and wildlife habitat in the Central Molonglo area
  - the Plans should equally address all three components of ecologically sustainable development principles; currently they emphasizes social sustainability, and there is a lack of analysis of ecological sustainability
  - a more up-to-date approach needs to be taken to addressing the modern interpretation of the term ‘ecologically sustainable development principles’
  - the Plans do not demonstrate that the development will be ecologically sustainable
- the Plans fail to take a whole of landscape or holistic approach, and do not assess areas as ecological systems; this is particularly evident with respect to the Central Molonglo area
- the Plans fail to recognise the habitat values of modified areas of woodlands and grasslands, especially for threatened and near threatened species of birds
- the Plans fail to deal with the cumulative impacts of clearing and fragmentation of native habitats (consultants briefs did not include assessment of cumulative impacts on any of the species or communities)
- the Plans fail to address the precautionary principle in relation to impacts on threatened and near threatened species
- the Plans fail to adequately address offsets or mitigation strategies for the clearance/destruction of native vegetation
- the Plans fail to address mitigations on the impacts on particular species of birds which will be significantly impacted (for example, Brown Treecreeper and iconic birds of prey Wedge-tailed Eagle, Little Eagle and Peregrine Falcon), and
- the Plans fail to take advantage of rehabilitation opportunities which could enhance biodiversity outcomes, against a background of substantial loss of the original native habitats on the Limestone Plains and in the broader region.

In addition, it is evident that important and relevant information from consultants’ reports is not reflected fully or accurately in the PA/DVA. It is also concerning that only very minimal measures are proposed to address the very significant loss of a range of habitats for birds and biodiversity generally, and to mitigate impacts on the rich raptors’ community in the Valley.

In summary, COG opposes development in the Central Molonglo and argues that this area should be taken off the Plans now. Our detailed reasons and arguments are outlined in Attachment 1, which include:

- the very significant loss of woodland habitat for birds, including a large area of endangered Yellow Box-Red Gum community which would be destroyed; our view is that this clearance of endangered ecological community cannot be justified on any grounds, particularly in light of the amount of degraded rural land in the East Molonglo which can be utilised for development
- the significant impact on what is a 'recognised wildlife corridor' from the open western lands, through the Pinnacle NR to Black Mountain
- the impact this will have on the Brown Treecreeper; development of the Central Molonglo will result in the local extinction there, of the Brown Treecreeper, an ACT threatened species; the precautionary principle must apply to conserve this species there
- the impacts on a range of other birds, some thirteen species which are listed as threatened or near threatened in the ACT, for example the Superb Parrot
- the loss of an important breeding and foraging habitat for twelve species of birds of prey, three of which are iconic species (Wedge-tailed Eagle, Little Eagle, Peregrine Falcon); by retaining the Central Molonglo and the open lands to the west, these birds of prey would have some chance to maintain breeding in the Valley
- the significant impacts on the Little Eagle, whose last two breeding territories are in the Central Molonglo Valley; this species has been nominated for listing as threatened in the ACT
- the severe impacts on a functioning river corridor and wildlife corridor if the lake proposal goes ahead and submerges a large stretch of the river; this will also destroy a significant area of threatened species habitat (Pink-tailed Worm Lizard). Very large buffers need to be retained around the river in the East Molonglo.

COG is opposed to a lake on the Molonglo River, as this would destroy the river's function, wildlife corridor and habitat values, as well as a nature reserve area. In COG's view, there are less environmentally damaging options available to deal with run-off and water quality issues, and a rehabilitated and functioning river corridor will be a far more positive outcome for birds and biodiversity more generally, as well as meeting other needs such as healthy recreational opportunities.

COG also recommends that the boundaries of the East Molonglo north of the Arboretum site, be re-considered and moved further west, to conserve a patch of woodland and secondary grassland and improve the corridor from the Arboretum through to Aranda Bushland, Mt Painter and Black Mountain Nature Reserves.

It is COG's view that in the 21<sup>st</sup> century against a background of very significant loss and fragmentation of native woodland and other habitats in our region and the impacts of climate change, the ACT Government must adopt a policy of no further clearance of native woodlands, forest and riverine community for urban purposes. Only development on degraded lands can be justified, unless there are adequate, offsetting measures provided.

Attachment 2 is COG's comments on the Draft Variation to the Territory Plan No 281.

Attachment 3 is COG's comments on Draft Amendment 63 Molonglo and North Weston – National Capital Authority

Yours sincerely

Chris Davey  
President  
23 November 2007

**Loss of Yellow Box Red-Gum Grassy Woodland habitat for birds**

COG is very concerned that the Plans will mean a loss of more of the Yellow Box/Red Gum grassy woodland community which provides important habitat for a suite of woodland birds. This community was declared an endangered ecological community under the ACT's Nature Conservation Act 1980, and in 7 May 2006 yellow box-red gum grassy woodland (YBRGGW) and derived native grassland was listed as a critically endangered ecological community under the Commonwealth's Environment Protection and Biodiversity Conservation Act 1999.

The PA indicates that there are approximately 12,100 ha of this critically endangered ecological community remaining in the ACT (Map 16) and that this accounts for approximately 38% of the original YBRGGW cover in the ACT. The PA goes on to argue that destroying more of this community, around 5 to 6% more is justified (page 131).

COG believes that the PAs assessment of the ACT's YBRGGW devalues the significant areas of this endangered ecological community left in the ACT, and does not give due recognition to the quality of the areas that are present in the central area of the Molonglo Valley. The PA also does not give due recognition to the habitat value of these woodlands for birds and other biodiversity, particularly in the central Molonglo, including those areas that are modified.

If an assessment of the quality of the remaining areas is properly undertaken, it is likely that a different outcome for the central Molonglo would be arrived at, and a more sustainable development overall would be achieved.

Furthermore, the PA seems to assume that all land is available for development, with only woodlands that are in the best condition being identified for protection. It should be noted that parts of the newly established Gorooyarroo Nature Reserve have been assessed as being in a similar ecological condition.

The Plans (p 131) use the CAR principles to argue that the loss of a further amount of Yellow Box - Red Gum woodland is justified as the ACT has more than 30% of this community remaining. What the Plans ignore is the other part of the CAR principles, that is, for endangered communities like Yellow Box - Red Gum community, 100% of what is left should be retained.

It is also erroneous to use the ACT's political borders in terms of parcelling up this community for assessment, rather than assessing on an ecological basis. A regional approach should be taken, and it is clear that regionally there is significantly less than 30% of this community remaining. The Plans ignore the ACT Government's policy guidelines on this matter, as outlined in its Action Plans 27 and 28 (lowland woodland and natural temperate grassland) and which take a regional approach to assessing species and communities for threatened status.

Most mainland States in Australia have legislation to protect native vegetation which prohibits the clearing of native vegetation, particularly vegetation which is listed as threatened. Where clearing of vegetation may be allowed, this provides for offsets based on 'no net' loss or similar principles. There is no mention in the PA of options which could be considered to offset the very significant loss of native vegetation as would occur in the Central Molonglo, although consultants' reports have provided some recommendations on these matters. The PA offers no assessment of alternative land uses, potential for recovery of its ecological condition, potential to add to the national conservation estate, opportunities to provide positive biodiversity outcomes, or potential for uses compatible with conservation.

The Biosis Research (2007) report for example, (pages 14 and 15, quoting from Falling 2002 and the NSWNPWS) says that the wider regional perspective is only 8.5% of the pre 1750 distribution of YBRGW remaining in the ACT and NSW southern tablelands, and less than 5% in the southern half of NSW. They conclude that there should be significant efforts to compensate for the loss of woodlands and grasslands in the central Molonglo by reserving additional areas of YBRGGW woodland or other lowland habitats in the ACT or by providing increased resources for the rehabilitation/revegetation of lowland woodland habitats. They offer an alternative approach to exclude all areas of partially modified YBRGGW and a substantial proposition of adjoining moderately modified YBRGGW from development within the Central Molonglo corridor.

While ecological studies provide some useful information and conclusions, it is noted that they were limited in scope (viz desk top review, determining raptor nesting sites), and did not include comprehensive ground surveys/studies; therefore important issues such as the cumulative impacts on species and communities and determining with sufficient accuracy, whether or not a significant impact was likely at the regional or national level was not possible.

### **Central Molonglo woodlands/grasslands including Kama woodland**

A woodland area of particular importance is located between East Molonglo and Central Molonglo. This area (south of William Hovell Drive) is known as 'Kama' (formerly a rural lease, now an agistment area). Kama consists primarily of partially modified YBRGGW and natural temperate grassland (NTG), and has been nominated for inclusion in the ACT Heritage Register. Key natural heritage values identified for Kama include the YBRGGW and NTG community, its relationship to the riparian habitats along the Molonglo River, the area's function as a habitat for a small population of threatened Brown Treecreepers and Pink-tailed Worm Lizard; and the wildlife and habitat connectivity function the area provides. Kama is shown in the PA as outside the proposed development areas, though is flanked on two sides by the proposed East and Central Molonglo development areas.

It is misleading for the PA to state (page 75) that Kama is 'outside the proposed development areas' when the maps of these areas clearly indicate the proximity of the proposed development on two sides and its consequential impacts from residents, development activities and other potential urban requirements so close by. Importantly, this statement ignores the fact that two-thirds of the proposed reserve would, under bushfire management plans, be utilized for bushfire protection measures such as prescribed burning, slashing, clearing of ground vegetation and litter.

Maps 26a and 26b (pages 113 and 114) show proposed (but not final) locations of Critical Management Zones (CMZs). Some 300 metres of this zone intrudes into the high quality Kama woodland on both sides, so two-thirds of this high quality area could in effect be impacted. This will result in significant destruction of the woodland habitat and loss of woodland bird species including the Brown Treecreeper population. Critically, there would be a loss of ground timber and old hollows which are an absolutely vital requirement for Brown Treecreepers (see the sub-heading Impacts on Brown Treecreeper). Thus the ecological values of this high quality woodland will be totally destroyed under this kind of regime, not conserved for future generations.

The Critical Management Zones for bushfire protection must be re-considered in the light of ecological considerations, and should be included within the proposed urban areas, not intruding into high quality reserve. Suggesting that this is in accordance with "leading practice bushfire risk management" (3.1.5, page 112), shows a complete lack of understanding of ecological considerations in a sensitive habitat, and shows that such bushfire risk plans are totally inappropriate in ensuring the preservation of important ecological values.

The PA ignores the fact that the Kama woodland is ecologically linked to the larger area of YBRGGW located in the rural leases within the Central Molonglo. The PA fails to consider these resources holistically, nor does the PA assess alternative land uses that better meet the Territory Plan's guidelines for ecologically sustainable development. Consultants' reports commissioned by ACTPLA provided some conclusions and recommendations worthy of further examination and study.

COG believes there is more than enough information available now to make a decision to conserve the Central Molonglo woodlands and grasslands, as a mix of nature reserve and conservation leaseholds. Even though this area may not be developed for many years and further studies on buffer areas around Kama are mooted in the Plans, we are very worried that once on the Plan, there will be little possibility of change or only changes at the margins. Keeping the Central Molonglo in limbo also prevents any rehabilitation investment occurring to improve the ecological functionality of some of the woodland that has been more cleared and modified.

COG also opposes urban development in the area immediately SE of Kama. The urban boundary of the East Molonglo (at its northern extent) should be re-drawn back to the drainage line downhill from Kama, as this provides a more natural buffer for the woodland from the urban edge; that area could be urban open space and include any required CMZ for bushfire protection on the SE edge, rather than have the CMZ within a high quality woodland area.

### **Remnant woodland within East Molonglo area**

COG would like to see better mapping of remnant native woodland undertaken within the East Molonglo and efforts taken to conserve as much of this as possible. Mature eucalypts and small patches of native vegetation provide important stepping stones for some species of birds to move across the landscape as well as cover and nesting sites.

A remnant patch of endangered Yellow Box Red-Gum woodland and secondary grassland in the East Molonglo to the north and north-east of the Arboretum site (south of William Hovell Drive near Caswell Drive junction) should be conserved and the urban edge re-located further west. It appears from the map in the PA (page 42) that this woodland is included in the urban area. The EASystems (2007) report (page 16) recommended that the urban boundary be re-drawn to conserve this woodland as potential raptor habitat. This would also incorporate scattered trees and an area of secondary grassland to the north of the remnant up to William Hovell Drive and provide a much wider vegetation band (corridor) and better ecological links from the Arboretum through to Aranda Bushland, Mt Painter and Black Mountain Nature Reserves.

This is one of the few reasonably sized patches with native vegetation remaining in the East Molonglo. Part of this area has been identified as a potential site on the edge of the Arboretum for the Southern Tablelands Ecosystems Park (STEP) and it would be appropriate to provide a more natural buffer for this park. There is also potential to improve ecosystems function with some assisted rehabilitation.

### **Impacts on wildlife corridors and river corridor**

The Plans interrupt and destroy natural corridors that currently provide linkages between areas of known high value habitat. The significance of establishing and protecting natural corridors as a buffer against the impacts of climate change was established at a conference held in Canberra in June 2007 by the International Union for the Conservation of Nature (IUCN) and WWF with the support of the Department of Environment and Water Resources. Conserving large-scale migration corridors was identified as a key strategy in enabling species to survive and adapt to climate change.

The report of this conference, “Protected Areas: buffering nature against climate change” identifies habitat fragmentation and degradation as significant barriers to the movement of species which are threatened by changing temperatures, invasion of competing or predator species and loss of breeding sites. The ACT is central to several large-scale migration corridors including Atherton to Alps and Kosciuszko to Coast. It has a key role to play in the movement of species across habitats as the climate changes.

It is no longer enough to merely plan for preserving a core element of at risk species at the local level. The ACT needs to plan for its role in a large-scale landscape approach which builds in capacity for adaptation and change across the continent. Protecting movement corridors at the landscape scale needs to be supported at a local scale by planning for connectivity between nature reserves, river corridors and other natural areas. Limitation of the Molonglo development to degraded areas which can be sacrificed for urban development (eg previous pine plantations) should be accompanied by avoiding large-scale clearing of woodland vegetation and low impact restoration of surrounding areas to improve its suitability and use for movement, adaptation and survival of species vulnerable to climate change impacts. Maintaining local scale connectivity will then support landscape scale connectivity as a coordinated response to climate change, thus enhancing the survival of the ACT’s biodiversity.

A totally inadequate wildlife corridor is proposed between the Central and East areas through the Kama woodlands to the Pinnacle and Mt Painter Nature Reserves. At barely one km wide this would be a narrow corridor with houses on both sides and subject to urban related impacts; this is not enough to function as a wildlife corridor for some species, or as a Brown Treecreeper habitat in the long term. As well, the proposed development will seriously compromise the wildlife corridor from the open western lands into Black Mountain proper.

### **Rehabilitation/regeneration potential**

Given that a very significant amount of our native ecosystems have been cleared and fragmented already, there is a good argument, supported by science, that there should be more focus on rehabilitation and restoration of areas which are modified and improving the river’s wildlife corridor values, rather than simply allowing areas which are viewed as not being in the highest or pristine condition as ‘degraded’ or ‘modified’ to be written off.

The Commonwealth Government’s guidelines regarding nationally threatened species and ecological communities, as published by the Department of Environment and Heritage, support modified areas being rehabilitated/re-generated, acknowledging that they may still provide important habitat for birds and other animals. Patches such as the Central Molonglo which are large, have mature trees, that link ecological communities in the landscape and also have rare, declining or threatened species would be a priority for rehabilitation action under the Commonwealth’s Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) guidelines.

The potential for assisted rehabilitation is recognised in the Biosis Research (2007) report, especially in relation to areas of secondary grassland and better quality grassland or grassy woodland which have value as wildlife corridors and or associated buffer zones. Rehabilitating drainage lines and the Molonglo River from Lake Burley Griffin to the Kama woodland area, with native riparian vegetation and streamside buffers is recommended in the Debus (2005) report as a way to minimise the impacts on raptor species as well as to maximise the retention of prey species and other raptor resources. The PA does not discuss or consider these views or recommendations.

## **Impacts on the threatened Brown Treecreeper**

The development of the Central Molonglo will result in the local extinction there, of the Brown Treecreeper, an ACT threatened species, which is known to be declining in woodlands around the urban fringes of Canberra. The Biosis Research (2006) report concluded that the current development model for East and Central Molonglo “would, in all probability, have a significant local effect on the population of Brown Treecreeper, resulting in its local extinction” (page 18).

Brown Treecreepers have managed to survive in small numbers in this relatively undisturbed location of the Central Molonglo over some years (COG surveys in the 1980s confirm the presence of a small population of the birds then). They have progressively disappeared from other woodlands around the urban fringes of Canberra as urban development has spread and reduction and fragmentation of habitat has progressed. Even in the largest woodland reserves of Mulligan’s Flat and Goorooyaroo in north Gungahlin, Brown Treecreepers have declined and are now extinct in those reserves. Brown Treecreepers need large areas of well-connected habitat, and are particularly vulnerable in cleared and fragmented landscapes due to their particular ecological requirements.

The Brown Treecreeper is not listed under the Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth), however the Commonwealth’s Action Plan for Australian Birds indicates the species is near threatened (Garnett & Crowley 2000). The Brown Treecreeper is listed as threatened (vulnerable) under the ACT’s Nature Conservation Act 1980.

Given the assessment that this species is ‘near threatened’, it is no longer appropriate for Governments to propose destruction of woodland habitat that is known to support the species as is the case for the Central Molonglo development. A precautionary approach is appropriate in an attempt to prevent another species moving from ‘near threatened’ to ‘threatened’, and before research into the species’ ecological requirements is undertaken.

It is incorrect to conclude as the PA does, that the local population of the Brown Treecreeper “is located in Kama, which is not in the development area” and therefore conclude only the Kama woodlands need to be conserved (page 133); this shows that there is little understanding of the ecological issues and requirements of this species. It is noted that ACTPLA has commissioned no ground studies of this species in the Central Molonglo. Information provided in community submissions, informed by researchers, indicated that the Brown Treecreeper population would be expected to utilize a wider area than the woodlands of Kama and recommended a full study of this population.

A project currently being undertaken by a former CSIRO researcher, clearly shows that the birds utilize the woodland area north of Kama for some distance, for feeding and utilize the hollows in trees for breeding. The woodlands to the north of Kama are ecologically connected to Kama and are a critical element of the endangered woodland community for this species due to the presence of breeding hollows and the amount of fallen timber (a requirement of the species). Based on these studies to date, that there is insufficient evidence to conclude that the demise of the Brown Treecreeper population in the central Molonglo, the largest known group in the ACT, will not have a significant impact on this threatened species within the ACT.

The PA, in the discussion on the Kama woodland and impacts on the threatened Brown Treecreeper (pages 132-133) does not fully or accurately represent the Biosis Research (2006) report’s comments and recommendations, that the population in and around Kama woodland will not be viable unless a much greater area of the Central Molonglo is conserved.

Biosis Research recommended (pages 22 & 23) in their report that serious consideration should be given to conserving a significant part of the moderately and partially modified grassy woodland and secondary grassland in the Central Molonglo, and that there should be a focus on rehabilitation of this woodland. Biosis Research indicated that the loss of woodland habitat and fragmentation, would mean a range of problems for the Brown Treecreeper including maintaining a viable population size, direct loss of foraging resources and a reduction of dispersal capacity of females.

For the PA to simply conclude that some buffers will be determined around Kama is a simplistic view of a highly sensitive species. The critical issue for the survival of the Brown Treecreeper in the Molonglo Valley is not how many metres of buffer area there should be around the Kama woodland; the critical issue for the survival of this species is the protection of a very large patch of well connected woodland, that is the whole of the central Molonglo woodlands as part of a recognised wildlife corridor, and their enhancement by assisted rehabilitation.

### **Impacts on other woodland birds**

The statement in the PA, comprising three lines (page 90), about regionally or locally uncommon birds is totally inadequate, in order to identify and assess possible impacts on particular species from urban development.

Ninety-two species of birds have been recorded in and around the Kama woodland in the Central Molonglo since a local study was commenced by COG in September 1995.

Of 13 bird species listed in the ACT as threatened or as species of concern by the ACT Flora and Fauna Committee, nine have been recorded. These are:

- Superb Parrot
- Brown Treecreeper (breeding)
- Varied Sittella (breeding)
- Flame Robin
- Crested Shrike-tit
- White-winged Triller (breeding)
- Dusky Woodswallow (breeding)
- Diamond Firetail (breeding), and
- Jacky Winter.

Of particular interest is recent observation of the Superb Parrot inspecting tree hollows in an area of farmland outside the Kama woodland. This species is highly mobile, utilising large areas of the landscape for foraging and relies on large woodland patches, as well as smaller remnants and paddock trees. At this stage there is every reason to expect to record the breeding of the threatened Superb Parrot in the Central Molonglo. EASystems (2007) report which included an inspection of a woodland patch to the north of Kama, recorded Superb Parrots foraging.

More generally, the Valley's varied habitats are known to support a large range of bird species, including those in the list above, as well as other locally declining or uncommon species such as Speckled Warbler, Brown Songlark, Singing Bushlark, Restless Flycatcher and White-fronted Chat. Riverine River-oak community has potential habitat for the Painted Honeyeater, a rare visitor to the ACT and a species listed as threatened in the ACT.

### **Impact on birds of prey (raptors)**

The Molonglo Valley has long been known as an important hunting and breeding ground for 12 species of birds of prey, as an exceptional area within the ACT so close to the city, for its diversity and abundance of breeding raptors. Such a large number of birds of prey indicates a very rich and large assemblage of other fauna including birds, living in the mix of habitats in the Valley, which

also includes the very important indeed critical river corridor. The Plans do not acknowledge or address how very rich the Molonglo Valley is for the raptor community and biodiversity more generally.

COG notes that some provision has been made for 'buffer' areas in the East Molonglo around the river corridor, and that the open lands to the west of Coppins Crossing will not be developed. However, we are disappointed that the PA does not fully and accurately address the very significant impacts of loss of habitat and urban development on raptor species generally, and in particular on the sensitive 'iconic' species like Wedge-tailed Eagle and Little Eagle. We are also disappointed that possible mitigation measures to protect and manage sensitive raptor breeding territories (including some detailed recommendations in consultants' reports) are not referred to or mentioned in the PA.

The PA does not, in our view, fully consider or mitigate the whole of landscape impacts on the raptor community in the Molonglo Valley in an ecologically sustainable way. With respect to this raptor community, the PA fails to achieve an appropriate balance between ecological considerations and the other (social, economic) considerations. The PA takes a minimalist approach to mitigation impacts on birds of prey (and biodiversity generally), and argues that most are widespread species so the losses do not matter. Cumulative impacts are not addressed. The PA fails to understand or address the sensitivity of many birds of prey to human disturbance.

The PA acknowledges that there will be loss of habitat for nesting and foraging and reduced breeding and abundance of some species of raptors (3.3.5, page 141). The PA also lists a few areas, largely high quality individual features/sites, including Kama woodland and Molonglo Gorge, where habitat will be "retained and managed to reduce the long-term impact of development on the local raptor community" (page 142).

The retention of a few high quality areas is insufficient to compensate for the huge loss of much of the open lands and river corridor habitat in the Valley to urbanisation. What is proposed as conservation measures appears to be based on a (flawed) view that only some high quality sites/areas need to be kept, rather than being based on a balanced consideration of impacts across the whole landscape, sound ecological principles (eg the required home ranges of species) and science-based mitigations.

We are also concerned that important information, conclusions and recommendations from consultants reports regarding impacts on raptors and how these impacts could be mitigated, and what needs to be done by way of further studies, are either not reflected in the PA, or in other instances, what is in the PA does not fully or accurately reflect the consultants' reports.

It is noted that in relation to the raptor community, only one limited, on-ground study was commissioned, focussed largely on locating raptor nest sites, involving a walk through eight woodland patches and the river corridor over six days. EASystems (2007) report (page 8) said that "any assessment of actual impact on raptor species from development would require a much more in-depth study". Olsen and Fuentes (2004) report (pages 31-33) said there needed to be further, detailed studies of home ranges and foraging habitats over a recommended minimum period of a year; no such studies have been commissioned.

The focus on identifying raptor nesting sites rather than looking at species ecological requirements over the whole landscape, ignores the critical ecological requirements that birds of prey require foraging territories, some species need very large foraging territories, as well as suitable breeding habitat to survive, and some are highly sensitive to disturbance. So, a general presumption that a species will survive as long as a nest site tree is retained or efforts are made to protect a nest area from disturbance is not necessarily true.

By urbanising both the northern (Central Molonglo) and the southern (East Molonglo) parts of the Molonglo Valley and drowning much of the river corridor with a lake, the existing breeding assemblage of birds of prey in the Valley will be largely lost, and the iconic species, Wedge-tailed Eagle, Little Eagle, and probably Peregrine Falcon, will not persist in the longer term.

For example, EASystems conclude (page ii) that the nesting and foraging territories for Wedge-tailed Eagle and Little Eagle in the Molonglo Valley are critical to retain the species breeding in the Molonglo Valley. They also indicate that these factors are important for three other species of raptors (Brown Goshawk, Peregrine Falcon and Brown Falcon). These issues and mitigation measures are not specifically addressed in the PA.

If a balanced and truly sustainable approach were taken, the central Molonglo would not be developed at all. In combination with the open lands to the west, this would, at the least, give these three iconic species (and other raptor species) some chance to continue breeding in the Valley, albeit in some reduced numbers and reduced territories in parts of the Valley.

It is noted that the Little Eagle has been nominated to the ACT's Flora and Fauna Committee for listing as a threatened (vulnerable) species under the Nature Conservation Act 1980, and has been recommended to the relevant Minister for this listing.

Biosis Research (2006) concluded that the Little Eagle “could, as a result of woodland clearing within the Central and East Molonglo Valleys, suffer a significant impact at the ACT and regional level” (pages 20, 21). The information included in the PA (p 9, second paragraph) is generalised and does not fully or accurately represent what the consultants actually said regarding the local and regional impacts on the Little Eagle.

The PA fails to include critical facts regarding the Little Eagle. There are (probably) two Little Eagle breeding territories remaining in the ACT, both in the Central Molonglo area. The Little Eagle could, therefore, become extinct as a breeding species if all of the Molonglo Valley is developed. This adds further argument to the conservation of the Central Molonglo. The PA also fails to consider options or measures that might be proposed to avoid this loss of a breeding species.

EASystems (2007) report on the potential impacts of proposed urban development on raptors in the Molonglo Valley (pages ii and 15) makes a number of recommendations, particularly for the Little Eagle which they describe as an “iconic ‘umbrella’ species for priority management”. These recommendations do not appear in the PA, nor is it apparent that they have been seriously considered.

EASystems recommendations to mitigate impacts on raptors include:

- as far as practicable, preserving the Little Eagle breeding and foraging habitat in the Central Molonglo
- retaining the woodlands of the Central Molonglo (both Kama remnant (remnant 1) and the remnant off William Hovell Drive (remnant 4 which includes the old cemetery area), as well as the adjoining interconnecting woodland, and maintaining these as part of the existing wildlife corridor connecting with the river corridor through the woodlands east of William Hovell Drive to the Pinnacle and beyond (this is much of the Central Molonglo).

EASystems understood that the Central Molonglo was part of a wider corridor of critical habitat; they use the words “recognised wildlife corridor” in referring to the woodlands of the Central Molonglo.

It is noted that EASystems also recommended (page 16) modifying the footprint for East Molonglo to leave a riparian buffer and to preserve an area of woodland and secondary grassland to the north/NE of the Arboretum site, moving the urban edge further west, to provide more cover/habitat for raptors and other fauna. COG supports this recommendation. This would also provide better ecological links from the Arboretum to Aranda Bushland, Mt Painter and Black Mountain Nature Reserves.

Rehabilitating drainage lines and the Molonglo River from Lake Burley Griffin to the Kama woodland area (no lake), with native riparian vegetation and streamside buffers is recommended in the Debus (2005) report (page 12), as one way to minimise the impacts of urban development on raptor species and particular nest sites, as well as to maximise the retention of prey species and other raptor resources. The PA does not reflect these views or recommendations on minimising impacts on the raptors community.

It is noted that owls were not specifically surveyed in the commissioned studies. However, EASystems notes (page 6) that large hollow trees, both living and dead occur throughout the wooded parts of the study area, and that there is potential roosting and foraging habitat for Boobook Owls and possibly Barn Owls.

In summary, the Plans will clearly impact very significantly on the community of breeding raptors in the Molonglo Valley, including iconic species like Wedge-tailed Eagle, Peregrine Falcon and Little Eagle, through loss of foraging and breeding habitat, destruction of the river corridor by the lake, and disturbance from close human settlement and influences. COG does not consider that the PA has sufficiently addressed these impacts and how they could be mitigated, nor has it achieved a balanced outcome. The studies undertaken to date, while providing useful information and some good recommendations (much of which does not appear to have been taken up), are insufficient to fully assess the actual impacts on individual species and the raptors community generally, including the cumulative impacts.

## **Molonglo Lake**

COG opposes the lake proposal for the Molonglo River below Scrivener Dam. The lake proposal is another example of where the planning does not properly balance ecological considerations. We are advised by scientists that large lakes to deal with water retention and quality is outdated thinking, is unsustainable under climate change scenarios, as well as highly destructive to the natural environment.

The proposed lake will essentially destroy the river's function, will drown raptor nest sites, will mean the loss of riverine and ecotone habitats for a range of birds and other animals, (threatened and near threatened birds include Varied Sittella, White-winged Triller, Speckled Warbler, Flame Robin, Diamond Firetail), and will destroy significant habitat for the Pink-tailed Worm Lizard. The lake also would flood a nature reserve declared in 2001 along the Molonglo River downstream of Coppins Crossing.

The River Corridor is an important thoroughfare for birds, particularly small birds on migration, as well as providing nesting sites for birds of prey and breeding areas for migratory species like the Rainbow Bee-eater and Dollarbird. Development and destruction of habitat near the river is likely to impact negatively on some species of birds and is likely to alter migration patterns of some species, such as the seasonal migrations of millions of honeyeaters in and out of the ACT which use the river systems as corridors.

The Plans significantly undervalue the importance of the river corridor system for birds and other wildlife, and do not adequately identify offsets or mitigation measures to allow for the loss of

native vegetation, fauna, heritage and corridor values. There is no substantial discussion of the impacts on the values of and impacts on native vegetation to be destroyed by the lake, such as the River Oak community and riverine shrub associations, as well as the loss of the ecotones between the river and woodland/grassland communities upslope.

In COGs view, a rehabilitated and functioning river corridor upstream of Coppins Crossing to Lake Burley Griffin will be a far more positive outcome for birds and biodiversity more generally, as well as meeting other needs such as healthy recreational opportunities.

COG suggests that the arguments given for the lake in the PA are ill considered or marginal (eg to supply water for fire-fighting, when there is another lake very close by), and that the alternative options which are less destructive to the environment have not been given due and proper consideration.

**Draft Variation to the Territory Plan No 281**

COG opposes any changes to the Territory Plan which would allow Lake Molonglo, as we do not believe this is a sustainable outcome for birds and biodiversity generally. The DV seems to be more concerned about ensuring that the urban areas cannot be seen from the parliamentary triangle (NCAs requirements), than it is about properly protecting our local biodiversity assets.

Our earlier comments on the PA are relevant. In relation to some statements in DV 281, we make the following comments or corrections (there has not been time to address every issue/deficiency):

- 2.1, page 10, comments such as “environmental conservation and ecologically sustainable development are integral to the planning of the area .....” are statements not backed up by the evidence and show complete lack of understanding of these matters by the writers; see comments in Attachment 1 regarding the failure of the Plans to properly balance environmental considerations
- 2.2, page 13 – it is totally unacceptable to be destroying another 5-6% of an endangered community, the Yellow Box Red -Gum community in the ACT
- 2.2, page 13 – there are (probably) two Little Eagle territories remaining in the Molonglo Valley, not three as the DV says; the statement in the DV needs to be seen in the context that these are believed to be the last two Little Eagle territories remaining in the ACT; the statement in the DV significantly under-emphasizes the impact on this species locally and regionally if the Central Molonglo is urbanized
- 2.2, page 13 – the statement that the Little Eagle is “currently declining, possibly due to habitat modification and increased Wedge-tailed Eagle numbers” tends to generalise the reasons for the decline and exaggerate the influence of the larger Wedge-tailed Eagle; in fact, habitat loss is the critical reason for the decline, the loss of lowland woodlands to urban and other infrastructure development; there are also a number of other factors believed to be adding or contributing to the decline, including competition for the remaining territory from the Wedge-tailed Eagle
- 2.2, page 14 – COGs earlier comments relating to Kama woodland apply; this is not a simple issue of establishing some buffer around this woodland on two sides to protect the Brown Treecreeper from urban related impacts; the whole of the Central Molonglo needs to be conserved to ensure the Brown Treecreeper population at Kama will survive into the long term. The DV take a simplistic view and under-emphasizes what is a complex matter. Consultant’s advice regarding impacts on the Brown Treecreeper and recommendations to address this, is not fully or accurately represented in the documentation
- 2.2, page 14, Molonglo Lake – the documentation fails to demonstrate that the lake will be sustainable development, will be a sustainable outcome for birds and biodiversity generally
- 2.2, pages 13 and 14 – to promote a proposal which will destroy 25% of the habitat of a nationally threatened species, (Pink-tailed Worm Lizard) cannot be regarded as ecologically sustainable
- 2.2, page 15 – what is the scientific basis for the statement that a deep, narrow lake would provide “more extensive habitat for aquatic life and foraging opportunities for birds .....compared to smaller ponds”; in our view a deep, steep sided lake such as this will offer little habitat for birds, no edge vegetation, few aquatic plants etc; we believe there will be much greater loss for many species of birds including threatened and declining species
- 2.3, page 17
  - COG does not agree that the outcomes for biodiversity will be sustainable, nor do we agree that conserving the Kama woodland patch (70 hectares) is “ensuring its ecological values remain for current and future generations”; the suite of special woodland birds which currently have habitat in and around Kama and the wider Central Molonglo woodlands will not remain in the long-term with close urban settlement on both sides; the woodland is likely

to become degraded and heavily impacted by people, not to forget more than two-thirds of it burned, slashed or cleared to protect the urban assets on two sides.

– Similarly, for detailed reasons given previously, COG does not agree that retaining only the Kama woodland area, “will ensure that connectivity between key habitat areas remain”; we question what is the scientific or ecological basis for this conclusion?; we argue that the corridor will be too narrow and will become too degraded to achieve this function; the Plans seriously compromise and impact on the ‘recognised wildlife corridor’ of the central Molonglo woodlands through to the Pinnacle and beyond to Black Mountain Nature Park.

- 2.14, page 29 et al; COG is disappointed with the comments of the Conservator of Flora and Fauna, which do not go far enough to ensure that threatened and near threatened communities, birds and other animals are protected for the long-term. This adds more weight to the view that the Conservator’s role needs to be more independent, at a distance from the managing Government agencies.
- Central Molonglo, page 42; although COG supports further, detailed on-ground studies, COG believes there is sufficient known to make a decision now to conserve all the central Molonglo area.

**Draft Amendment 63 Molonglo and North Weston – National Capital Authority**

COG notes the matters of national significance listed at page 2 in this document. With respect to the Central Molonglo, COG does not consider that the development proposed meets some of these principles.

The development does not “respect the environmental values”, nor does the proposed development “support and promote environmentally responsible urban development practices”, when what is being proposed will destroy a large amount of native vegetation and impact significantly on threatened communities and threatened species. See Attachment 1 for detailed facts and reasons.

The Central Molonglo development will impact significantly on the landscape values of the hills, and ridges in the northern part of the Valley and the landscape backdrop leading from the open western lands into the city, including the value as a ‘recognised wildlife corridor’. This landscape backdrop value of the Central Molonglo corridor appears to have been underestimated in the planning documentation.

With respect to the East Molonglo area, COG argues that the urban boundary north and north-east of the Arboretum site should be re-drawn further west, to conserve a small patch of woodland and secondary grassland up to William Hovell Drive. This is one of the few reasonably sized patches with native vegetation remaining in the East Molonglo. The conservation of this area was supported in a consultant’s report (EASystems 2007) to conserve potential raptor habitat. Part of this area has been identified as a potential site on the edge of the Arboretum for the Southern Tablelands Ecosystems Park (STEP). This would also provide a wider vegetation band (corridor) and better links from the Arboretum through to Aranda Bushland, Mt Painter and Black Mountain Nature Reserve.

While independent environmental studies were commissioned by ACTPLA, the Plans do not fully or accurately reflect consultants’ reports, and recommendations from consultants for mitigations of impacts on ecological communities and species are absent from the PA and DVA documentation. See Attachments 1 and 2 for detailed comments.

While the principles listed for river corridors (page 6), appear reasonable, the outcomes of the Plans are not balanced, and do not achieve good outcomes for local biodiversity assets. COG opposes the proposal for Lake Molonglo, as we do not believe this is a sustainable outcome for birds and biodiversity generally.

In conclusion, the Draft Amendment appears to be more concerned about ensuring that the urban areas cannot be seen from the parliamentary triangle, than it is about properly protecting our local biodiversity assets and landscape values.