

Canberra Ornithologists Group
PO Box 301
CIVIC SQUARE ACT 2608

ABN 72 534 628 789

Ms Meredith Hunter, MLA
Chair, Standing Committee on Climate Change, Environment & Water
Legislative Assembly for the ACT
GPO Box 1020
CANBERRA ACT 2601



Dear Ms Hunter

Email: committees@parliament.act.gov.au

Inquiry into Ecological Carrying Capacity of the ACT & Region

Thank you for the invitation for the Canberra Ornithologists Group (COG) to make a submission to this Inquiry.

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 several species of 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.

Firstly, COG would like to provide some research data to inform the Inquiry on the state of birds in the ACT and region, and the pressures on some species of birds due largely to urban expansion in greenfields. COG undertakes a number of monitoring programs for birds, including a long-term survey of birds in grassy woodlands which includes monitoring sites in peri-urban woodlands. This Project which has 142 monitoring sites, now has 10 years of data at its six foundation locations. This Project is capable of providing long-term trends on particular bird species. Attached is a copy of the latest Project report; this report can also be downloaded from the COG website: www.canberrabirds.org.au (under 'Conserving Birds').

Although the ACT still has regionally significant woodlands, particularly Yellow Box-Red Gum grassy woodlands in reserve (Mulligan's Flat/Goorooyaroo; Callum Brae), most of the fertile lowland woodlands have been extensively cleared already for urban and other infrastructure development, and only woodland and dry forest fragments remain, mostly of small size. This has had an enormous impact on woodland-dependent bird species in our area, some of which are in serious decline and face local extinction. There have been local extinctions of some species at some of these woodland fragments as urban development has spread.

- the Hooded Robin and Brown Treecreeper are both woodland-dependent bird species listed as vulnerable under the ACT's threatened species legislation (*The Nature Conservation Act 1980*); both have declined and are almost extinct in the ACT's peri-urban woodlands
- even in the largest woodland remnants of Mulligan's Flat and Goorooyaroo, Brown Treecreepers became extinct several years ago (until a recent reintroduction experiment); Hooded Robins are in critically low numbers in those woodlands and could become extinct there
- these two species can be regarded as flagship species for a suite of other woodland-dependent birds; COG data shows that a number of these birds have long-term, declining trends, including Scarlet

- clearance of habitat, reduction in size of woodland remnants, fragmentation and loss of connectivity of habitat are critical issues, which can be directly related to the spread of greenfields urban development in Canberra, and the loss of much of the most productive lowland habitats and habitat corridors
- “death by a thousand cuts” is a term often used to describe the process of habitat clearance and fragmentation, together with pressures from human influences.

In COG’s view, the “system” in the ACT is out of balance, and changes in thinking in relation to urban planning of greenfields development are needed to better protect woodland habitats remaining and to restore more biodiversity to local woodlands. Two areas of urban greenfields development, East Molonglo in the Molonglo Valley and East Gungahlin are cited as illustrations of a system out of ecological balance.

Molonglo Valley

The urban development of the Molonglo Valley (East Molonglo) to date, provides a good case in point as to the poor state of environmental planning in the ACT, and how the system is out of balance. This area is a very sensitive environment with a river corridor, habitat for a nationally threatened lizard (Pink-tailed Worm-lizard), a number of ACT listed bird species and high levels of biodiversity.

The Molonglo Valley is an important hunting and breeding ground for 12 species of birds of prey, including the iconic Wedge-tailed Eagle, the Little Eagle (an ACT listed vulnerable species) and the Peregrine Falcon. We understand this is an area unique to Canberra, and indeed in the Australian SE highlands, in its number and diversity of birds of prey species for a small area close to a major city. Such a number of birds of prey indicates a large assemblage of other animals and birds live in the habitats in the Valley. We are in danger of losing this diversity of birds of prey due to poor planning and design.

The early planning for East Molonglo has followed the conventional, piecemeal approach where the planning process is largely to quickly tick off the environmental issues, and the driver is to provide the maximum number of house blocks as quickly as possible. Environmental issues and concerns raised by the community and researchers/scientists have been largely disregarded and some important environmental studies, surveys and impact assessments, which should inform development plans, have either not been undertaken or finalised. The planning fails to take a whole of landscape approach, which is what is needed to properly assess ecological issues and environmental impacts, does not allow adequate buffers between urban areas and bushland/conservation areas, such as around the river corridor, and will clear large patches of woodland. In essence, urban design should be undertaken around the environmental issues, not dealt with as a side issue to be fitted around a desired suburb design and maximising blocks of land, as is evident with the plans for East Molonglo (new suburbs of Coombs and Wright) made to date.

Many community environmental groups like COG have been very disappointed with a Strategic Assessment Report undertaken by the ACT Planning and Land Agency earlier in the year on matters coming under the Commonwealth’s environmental protection legislation (Environment Protection & Biodiversity Conservation Act). That assessment, in COGs view, failed to adequately address various environmental impacts, particularly on remnant woodland, the river corridor and birds. A copy of the COG submission is an attachment to this submission.

The sensitive Molonglo River corridor should receive the maximum protection from urban effects (edge effects, indirect impacts from inappropriate or excessive recreation use, weeds invasion etc), rehabilitation of degraded areas could be undertaken, and there should be a much wider buffer established between the urban areas and the river corridor to protect the river system and its biodiversity. At the present time, this is not happening.

In particular, COG has concerns about a proposed buffer of only 200 metres from houses on the south-eastern side of the Kama Nature Reserve proposed in the Draft Strategic Assessment; COG believes this is completely inadequate to protect this high quality woodland and bird habitat for several threatened species from urban related impacts/people pressures/edge effects.

Gungahlin – proposed new suburb of Throsby

Urban planning in Gungahlin now threatens the most significant breeding area of Superb Parrots in the ACT, on land which is proposed for the future suburb of Throsby which abuts the Mulligan's Flat and Goorooyarroo Nature Reserves. This is a spectacular migratory bird which visits the ACT region in the spring and summer months. Superb Parrots are listed as a threatened species under Commonwealth legislation.

It is noted that a significant area of Superb Parrot nesting and foraging habitat previously existed in what is now the suburb of Harrison in Gungahlin, which is adjacent to the remaining rural lands proposed as Throsby where the Superb Parrots still have a significant number of nesting sites. The Superb Parrot habitat in Harrison has largely been lost due to the same kind of poor planning and inadequate environmental assessment within the ACTs planning system, which is now replicated in greenfields development in the Molonglo Valley.

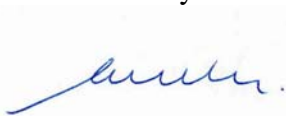
Conclusion/Recommendations

In summary, the reason woodland birds are continuing to decline in the ACT is largely because of habitat going under suburbs, especially woodland habitat. Because benchmark species such as Brown Treecreeper and Hooded Robin continue to decline, this is a sign that as far as birds are concerned, the ACT has reached or is reaching its maximum ecological carrying capacity in terms of the area of land going under development. COG is not saying that the ACTs population cannot increase, but rather that the urban spread must be limited or cease.

In broad terms, COG recommends:

- fundamental changes be made in the ACT's planning system for greenfields development to better balance ecological considerations, for example, a more holistic, landscape scale approach, and urban design undertaken around the environmental issues
- larger buffers are provided between new urban areas and conservation zones, eg the Molonglo River corridor, Kama woodland, Superb Parrot breeding habitat in Gungahlin
- cat containment in all new suburbs of the Molonglo Valley and remaining areas to be developed in Gungahlin, as a way to better protect biodiversity (viz, similar to the approach taken in the suburbs of Forde and Bonner in Gungahlin)
- fire management zones for new developments to be absorbed within the urban footprint, not within conservation areas, and
- the remaining critical areas of breeding and feeding habitat for threatened birds, such as the Superb Parrot in Gungahlin (Throsby), are fully protected and adequately buffered from urban related influences.

Yours sincerely



Jenny Bounds, Conservation Officer, for
Chris Davey
President
8 November 2010

ATTACHMENT

COG response dated 21 April 2010 to the Draft Molonglo Valley Plan for the Protection of Matters of National Environmental Significance (Draft Strategic Assessment Report)

I am writing on behalf of the Canberra Ornithologists Group (COG) in response to the release of the Draft Strategic Assessment Report and the invitation to the community to provide comments. In this response, COG is not commenting on all matters in the Draft Assessment, but only those matters which we feel are the most relevant for bird conservation.

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.

General Comments

While COG supports a more strategic method of undertaking environmental assessment for an important area like the Molonglo Valley, we believe that the wrong planning approach is still being taken to these kinds of developments. Most importantly, the urban design should be around the environmental issues, not dealt with as a side issue to be fitted around a desired design, as is clearly evident with the plans made by the ACT Government to date. It is clear that much of urban design/planning for Molonglo Valley has already been determined, some key on-ground works are already occurring, e.g. arterial roads, bridges, some new suburbs, before environmental issues and impacts are properly assessed, ostensibly to speed the process up.

COG believes that a change in thinking is needed to deal fully and properly with what is a highly sensitive area involving a river corridor ecosystem and threatened species habitats, to avoid clearing endangered habitats such as box-gum woodland, and not to simply move to trade off the environmental issues with offsets. COG also makes the observation that it is problematic to manage offsets in the long-term to ensure that they are resourced, effectively implemented, monitored and audited independently to ensure that genuine replacement value or a net gain occurs.

Furthermore, all ACT Governments have a poor record in effectively resourcing and implementing management plans and the like. We understand that the original management plan for Canberra Nature Park which included development of detailed plans for each reserve, has never been implemented. Similarly policy plans for threatened communities such as lowland woodland and natural temperate grasslands have never been properly implemented and little has improved, for instance listed woodland birds continue to decline. So, there is little confidence in the community that the ACT Government will be able to actually achieve offsets, unless there is a significant change in attitude to resourcing.

While COG considers that the Draft Assessment broadly identifies impacts (both direct and indirect) from the proposed development, we consider that these impacts have been underestimated or underemphasized, (particularly the indirect impacts from people and edge effects from a large urban area nearby). There is insufficient known to properly assess these impacts. This is largely because there have not been targeted surveys for some threatened species or there is a lack of detailed plans, such as proposed recreational use of the river corridor.

The value of the Strategic Assessment is very difficult to assess given that so much of the fate of bird habitats relates to policies that have not yet been developed or articulated by the ACT Government. The Draft Assessment assumes that a satisfactory, workable offsets policy will be developed. This may not be

the case and no alternatives are suggested in the Draft Assessment. What agreed penalties will be implemented by the Federal Government to ensure that any offsets are effective and produce the required conservation outcomes?

COG is particularly concerned that the Draft Assessment effectively writes off the river corridor upstream of Coppins Crossing as degraded, and therefore argues it can be used for more intensive recreation. The impacts on biodiversity generally, Pink-tailed Worm Lizard (PTWL) habitat, birds of prey habitat and connectivity with the effective loss of part of the river corridor system will be severe. In COG's opinion, the river corridor buffer must be wider to protect the corridor from potential urban related impacts, and the areas with mapped PTWL habitat need to be incorporated into and linked with the nature reserve proposed for the riverine area to Coombs.

COGs general view is that the proposed urban design is so close to the Molonglo River corridor that it will be very difficult to mitigate the likely impacts from a large urban area. We believe that more work needs to be done on assessing impacts, especially the indirect impacts, targeted surveys of some species undertaken, and more detailed plans required first e.g river corridor management strategy, detailed recreation strategy.

In regard to the Central Molonglo, the Draft Assessment is incorrect with respect to its status; the Central Molonglo is to be protected in perpetuity. Another incorrect fact is the reference to the White-bellied Sea-Eagle as living in 'heavy mountain forest' (p67). This species does not live in 'heavy mountain forest'; it is found around the coast and coastal forests/woodlands, and also occurs inland in habitats along river and lakes systems.

The ACT Government's plans for urban development in the Molonglo Valley still have a dam/lake option on the plan which would effectively destroy the whole river corridor system and drown more habitat for PTWL. Environmental impacts from this lake/dam are excluded from and are not considered in this Draft Assessment. If a dam/lake option remains on plans and is considered later on, this effectively negates the purpose of the current assessment. COG seeks the removal of the dam/lake option off the plan permanently.

There must be provision for a substantial, funded community engagement in conservation program, to be funded from the development proceeds; this could be similar to the Bush on the Boundary model in Gungahlin (Forde/Bonner). Cat containment must apply to all the new suburbs in East Molonglo, to protect vulnerable wildlife, such as the PTWL.

Although it is made clear in the Strategic Assessment that the Report deals with matters of national importance it is disappointing that such a piece-meal approach has been taken by the planning authorities. There is still no document available that acknowledges the following concerns regarding impacts on the birds of prey community.

Birds of Prey

The Molonglo Valley is an important hunting and breeding ground for 12 species of birds of prey. We understand this is an area unique to Canberra, and indeed in the Australian SE highlands, in its number and diversity of these species for a small area close to the city. Such a large number of birds of prey indicates a large assemblage of other fauna including birds live in the habitats in the Valley.

The Draft Assessment does not include any discussion of impacts on the very rich birds of prey community, an integral part of the Valley ecosystem. This is a locally and regionally important issue, particularly for three species, Little Eagle (listed as vulnerable in the ACT), Wedge-tailed Eagle (which has a nesting territory in East Molonglo) and Peregrine Falcon. Impacts on the birds of prey community and these species specifically should have been dealt with as part of the Draft Assessment.

Important points to make with respect to these birds of prey are:

- the Peregrine Falcon nests in the gorge area of the Lower Molonglo River corridor nature reserve (downstream of Coppins Crossing). It may be impacted on by increased recreational use of the corridor upstream of the crossing. There is a need to ensure that any proposed walking trails are sited well away from the Gorge area in the Lower Molonglo Nature Reserve
- the Wedge-tailed Eagle territory on the river upstream of Coppins Crossing and adjacent to woodland Patch D will likely be lost under the current plans, due to the loss of foraging territory and nest disturbance from people.

Recommendations

1. A wider riparian buffer of at least 300 metres on either side of the river.
2. Retain woodland area D to form a large node of vegetation linked to the river system within East Molonglo.

Box-Gum Woodland

COG is disappointed that a loss of some 121 hectares of box-gum woodland in East Molonglo (chiefly in patches D and J which are of a substantial size) is proposed. It is unclear from the Draft Assessment whether serious consideration has been given to minimising the losses of some of these patches of woodland in East Molonglo. There will also be potential indirect impacts on the small patches of woodland remaining (human-related activities which degrade or simplify vegetation, weeds incursion, removal of rocks and timber amongst others).

In principle, COG supports a requirement for the ACT Government to identify offsets for box-gum woodland destroyed as part of the Molonglo development, however, we would like to more emphasis on first minimizing woodland losses. Also, COG would want to see what is specifically proposed by way of offsets before supporting the loss of, for example, a large part of the remnant woodland.

Patch D of some 51 hectares is noted in the Draft Assessment as of high quality with a number of exceptional/significant trees. The proposed loss is 32.4 ha out of 51 hectares of a high quality woodland with floristic diversity and abundance of tree hollows. That loss seems unacceptable without more reasons being put forward. COG would ask the question, what surveys have been undertaken there for hollow nesting species such as Superb Parrot and Brown Treecreeper? At the least there should be targeted surveys undertaken before the clearing of woodland is agreed.

Woodland patch Area D is a breeding area for Brown Goshawks, and a pair of Wedge-tailed Eagles have a nesting territory in the adjacent part of the river near D (although it's likely that the latter territory may not be sustained and the birds will leave once most of their foraging range is urbanised. Patch D provides a good-sized woodland node within the river corridor system as well as a buffer for some Pink-tailed Worm Lizard habitat, and this would have potential benefits for biodiversity if retained. The Draft Assessment has no discussion of this.

Connectivity of the woodlands/grasslands with the river corridor is a significant feature of the Molonglo Valley and this ecological connectivity is very important for birds, animals etc. This is acknowledged in the Draft Assessment (p 2-3, 36) and it's stated that this kind of connectivity has been lost in many parts of the ACT. The loss of connectivity impacts on biodiversity across the valley's landscape overall, due to the urban development and indirect impacts, are under-emphasized and not addressed adequately.

In principle, COG supports actions (e.g. POMs) to ensure the long term conservation of what remains as woodland patches in East Molonglo, but plans have to be effective, resourced properly, and effectively monitored to ensure they deliver on commitments in the long term.

COG supports the change in status of the special purpose reserve to nature reserve in the East Molonglo River corridor downstream of Coombs, but nature reserve status should be extended to cover the river

corridor and PTWL habitat upstream, and there should be a wider buffer area around the river than proposed, as part of the measures to protect the PTWL and provide greater connectivity. The riparian buffer will be subject to recreation pressure and increased width may allow expansion of the PTWL. Revegetating the lower quality more weedy areas particularly closer to the river corridor with shrubs would also encourage woodland birds.

Central Molonglo should be actively managed and enhanced for conservation, particularly for small mammals and woodland birds, and if offsets are agreed, this should be on the basis of 10:1. Given the area and stated high degree of quality of woodland habitat to be lost in East Molonglo (as well as regenerating woodland areas within the old pine forest footprint), together with the significant indirect impacts on a river valley ecosystem and rich biodiversity, a very significant offset should be required.

Recommendations

1. Consider minimising the losses of box-gum woodland in East Molonglo, and the retention of a larger node of vegetation linked to the river corridor (woodland Area D)
2. Any offsets for losses of box-gum woodland to be on the basis of 10:1.
3. Any zones on the urban/woodland interface required for bushfire management to protect housing etc, up to 300 metres in some cases, to be absorbed within the urban area footprint, not to intrude into and damage natural areas, woodland, riverine areas etc.
4. Priority for active management and enhancement for conservation of the Central Molonglo area.

Pink-tailed Worm Lizard habitat

The long-term outcome for the Pink-tailed Worm Lizard (PTWL) can only be regarded as uncertain and the mitigations suggested (essentially 20 metres buffer and genetics study) are not enough. The loss of around 16 ha of habitat and construction of the proposed bridges, for example, will effectively reduce habitat and fragment high quality habitat. Insufficient is known about the PTWL locally, and this gives a greater importance on avoiding impacts on this species habitat in the first instance. Whether the offsets recommended will be effective in protecting the PTWL remain unknown.

This gives support for a greater buffer area around the river corridor, which COG believes should be a minimum of 300 metres on either side of the river. Further investigation should occur and evidence provided as to why the bridge crossing needs to be in the proposed location where it will have a high impact on PTWL habitat. A range of measures need to be determined to ensure the PTWL habitat is not undermined over time, for example, education of residents, adequate fencing, siting of tracks away from habitat, protection from bushfire mitigation operations, signage.

Recommendations:

1. A wider riparian buffer of a minimum 300 metres on either side of the river.
2. Incorporate all PWTL habitat and the riverine area e.g. to break of slope, into nature reserve.
3. Require evidence/justification as to why the bridge crossing needs to go where it is proposed and consider other options which will not fragment or degrade PTWL habitat.

Swift Parrot

COG believes the Draft Assessment gives a weak argument for essentially dismissing potential impacts on the Swift Parrot with the generalized response that other offsets should benefit the species, especially when the Draft Assessment concludes there is a level of uncertainty and that significant impacts cannot be ruled out. Given that no offsets are specifically defined, and there have been no targeted surveys for Swift Parrots in the Molonglo Valley, viz at migration times, COGs view is that the impacts on this species have not been sufficiently addressed.

COG acknowledges that there is some difficulty in assessing the impacts on a migratory species which forages for nectar in blossoming eucalypts across a large area of the landscape in SE Australia, and can

turn up opportunistically when there is a suitable flowering event. It should be noted, however, that species like Swift Parrots have already lost substantial foraging habitat across the SE of Australia due to the loss of much of the box-gum woodlands generally, this woodland continues to be nibbled away through clearing, and any further reduction in potential foraging habitat can impact on a species such as this.

Recommendations:

1. Targeted surveys be undertaken for Swift Parrot.
2. Offsets to consider foraging habitat restoration such as high value nectar producing eucalypts, e.g. Yellow Box, possibly Ribbon Gum (*E. viminalis*).

Superb Parrot

In recent years, it has become apparent that the Superb Parrot has spread its range within Canberra, particularly in Gungahlin and Belconnen, and the species is now recorded regularly in the Central Molonglo. Loss of trees with hollows for breeding is a critical issue for the species. Existing tree hollows suitable for nesting in are scarce in the landscape and there is competition for them. It cannot be discounted that the Superb Parrot may have nesting trees and foraging sites in East Molonglo.

There has not been targeted survey work on this species to properly inform and assess impacts, through surveys in the breeding season in woodland patches to identify nesting sites, potential hollows and the corridors used by any birds (they are known to use wooded creek lines and strips of trees when moving between nesting and feeding sites). At the least, there must be a systematic survey in East Molonglo woodland patches, over a couple of seasons during the months of September to December together with an assessment of trees with potential nesting hollows, using similar methods as the survey COG undertook for the ACT Government (TAMS) in Gungahlin in 2009.

COG is disappointed that the only mitigating measure put forward for Superb Parrot is a weak argument that there are likely to be benefits for this species from offsets. There can be no certainty of benefits for this species from offsets which are essentially undefined, especially when a critical issue for this species is loss of suitable nesting hollows and these cannot simply or quickly be replaced somewhere else in the landscape.

It is noted that a significant area of Superb Parrot nesting and foraging habitat in what is now the suburb of Harrison in Gungahlin, was lost due to inadequate environmental assessment.

Recommendation

1. Targeted surveys for Superb Parrot in both East and Central Molonglo, to identify nesting trees, foraging areas and corridors used by the species. Surveys to be undertaken over two years, in the months from September to December.
2. Offsets to consider habitat enhancements, suitable nest tree species, e.g. Blakely's Red Gum.

Rainbow Bee-eater

Although no specific surveys for this species have occurred, COG does not disagree with the conclusion that the development is unlikely to have significant impacts on bee-eaters in the Canberra area. It needs to be pointed out that in addition to breeding in excavated tunnels in banks and erosion gullies, the birds also nest in tunnels dug into sandy beaches. Any increase in recreational activities on beaches within the corridor could have an impact on breeding success of Rainbow Bee-eaters.

Management of East Molonglo River Corridor

The river corridor is a thoroughfare for birds, particularly small birds on migration, as well as providing nesting sites for birds of prey. Urban and infrastructure development and destruction of habitat near the river is likely to impact negatively on some species of birds, particularly the Wedge-tailed Eagle, and may alter migration patterns of some species, such as honeyeaters. Although degraded in parts with some

exotic plants, this area still provides habitat structure for birds, cover, resting and foraging opportunities etc.

The sensitive river corridor must receive the maximum protection from urban effects (edge effects, indirect impacts, weeds invasion etc), rehabilitation of degraded areas could be undertaken, and there should be a much wider buffer established between the urban areas and the river corridor to protect the river system and its biodiversity.

COG does not believe that the Draft Assessment sufficiently identifies the likely connectivity losses or appropriate mitigations for losses. If part of the river corridor is used for intensive recreation it is likely connectivity will be compromised for some species. The Draft Assessment does not deal adequately with this and does not consider options such as bigger buffers, identifying restoration and rehabilitation options to mitigate loss of connectivity, e.g. the river corridor upstream of Coppins Xing.

A previous report (EASystems) commissioned by ACTPLA recommended a 300 metres buffer on either side of the river to assist in protecting birds of prey and their nesting areas along the Molonglo River etc. From the maps available, it has been difficult to work out how wide the river corridor is proposed in places, but if this is a minimum 300 metres on either side, and a larger part of Area D woodland were conserved as a big node of vegetation in East Molonglo, this could give a better outcome for birds of prey overall (as well as for biodiversity more generally). This would also in some way address the potential loss of connectivity better as there would be a reasonable river corridor reserve and a large patch of woodland available, for the use of birds particularly but also for other fauna.

Potential recreational impacts from human use on the river corridor are a serious issue which has been underemphasized in the Draft Assessment, especially in relation to the river upstream of Coppins Crossing. There is no detail yet regarding what is proposed recreation wise, except that linking horse trails across the river, cycling etc are referred to (e.g. p76). The river corridor upstream of the crossing (which is regarded as more degraded) will effectively be sacrificed through this assessment - see statement p 112 'the upper part of the river corridor would be appropriate for more intensive recreational uses given its lower ecological values'. Rather than regard the upper river corridor as another use-area, this is an opportunity for focused regeneration in an urban setting.

Illegal mountain bike activity has proven to be very damaging to some areas of Canberra Nature Park, eg O'Connor Ridge; and is an ongoing problem. This activity needs to be excluded from the river corridor and provided for in more suitable areas.

COG supports the change in status of the special purpose reserve to nature reserve in the East Molonglo River corridor, but this should be extended to incorporate PTWL habitat and the riverine area up to, for example, the break of slope.

Recommendations

1. A 300 metres minimum width buffer area on either side of the river in East Molonglo, to provide a reasonable river corridor for biodiversity.
2. Nature Reserve status for the riverine area, e.g. to break of slope and PTWL habitat.
3. Options developed for restoration and rehabilitation of the riverine community.
4. Minimisation of recreation impacts (passive recreation such as walking only) within the riverine area/buffer.
5. Active recreation needs accommodated largely within the urban area or on the edge of the urban area or in other suitable areas, e.g. cycling, mountain biking.
6. River crossings for active recreation activities (cycling, horses) to be direct and minimized so as not to run along the length of or intrude into the river corridor or to allow weeds to spread.
7. Remove the lake/dam option permanently from plans.

Kama Woodland

While COG supports the concept of a buffer area on the eastern boundary of Kama woodland, the proposed buffer of 200 metres from houses on the eastern side of Kama woodland proposed in the Draft Assessment is totally inadequate to protect this high quality woodland and bird habitat from urban related impacts/people pressures/edge effects.

There is little or no detail in the Draft Assessment as to how this width of buffer has been arrived at or the rationale for it being regarded as sufficient to guarantee that indirect impacts can be sufficiently minimised or mitigated. Given the high quality nature of this woodland and its importance for threatened woodland birds, there is even more argument for greater protection. In one section of the Draft Assessment (p102), Kama NR is labelled as an 'area of least concern', presumably because it will be reserve, however, COG would argue that the long-term protection of this high quality woodland from indirect impacts should be of the highest concern.

The Molonglo Valley has the largest population of the ACT threatened species Brown Treecreeper remaining in the peri-urban area. This species has progressively disappeared from other woodlands around the urban fringes of Canberra as urban development has spread and reduction and fragmentation of habitat has occurred. Even in the largest woodland reserves of Mulligan's Flat and Goorooyaroo in Gungahin, Brown Treecreepers became extinct several years ago (recently there has been a re-introduction program). While the Draft Assessment acknowledges Kama's function as habitat for a small population of Brown Treecreeper (p38), COG believes this is underemphasized in the context of possible impacts across the Central Molonglo landscape where Brown Treecreepers are also known to occur.

Brown Treecreepers are a locally/regionally important species, in serious decline in the peri-urban areas. This is a locally important matter and there should have been discussion of how the planning around Kama would ensure the protection of this species (and other vulnerable woodland bird species) from the impacts of close urban settlement.

COG strongly believes that there is a need for a significant buffer on its eastern edge where Kama would abut the northern edge of East Molonglo urban area, and for a number of reasons, this buffer should incorporate the whole of the block down to the creek line. The creek line forms a natural geographical barrier and would be sufficient distance from the urban edge and downhill to reduce the edge effects and indirect impacts on Kama. Strategically placed fencing on the eastern boundary of Kama and strategically placed/limited entry points into Kama from that boundary, could further mitigate indirect impacts and reduce the opportunities for people, dogs etc to quickly access Kama on a short, direct line from houses.

COGs view is that the most effective way to ensure the long-term conservation values of Kama woodland and the Brown Treecreeper population within the Central Molonglo is for the whole of the block east of Kama not to have houses on it, and not to have people living in very close proximity with easy access to the reserve. The indirect impacts from edge effects and urban related influences on this very high quality woodland and bird habitat are underestimated and underemphasized in the Draft Assessment, (eg statement on p 102 says they are of less concern due to the mitigations proposed if adequately implemented). Experience with other Canberra Nature Park areas is that the indirect impacts from human related pressures, viz high levels of people usage, weeds, removal of rocks and fallen timber, roaming dogs etc degrade the conservation values. It is also pertinent that the ACT Government has poorly resourced on ground activities to monitor and protect its other nature reserves and there is little public confidence that mitigations will be adequately implemented.

Within the block COG is suggesting becomes a buffer area, there is a small area of mapped box-gum woodland outside the Kama boundary which we recommend be fenced, protected and allowed to regenerate further, and become part of the reserve. There should be a minimum 300 metres allowed within the buffer block for any bushfire asset protection measures, and some of the block nearest housing beyond the creek line, could be used for appropriate broadacre purposes which have a small footprint on

the land, for example bushfire shed, community hall, recreation area for residents, walking trail down to the river etc.

COG is pleased to see that an assessment of tree hollows has been incorporated into the Draft Assessment, but we doubt its validity given that the Kama Nature Reserve has been classified as low (see Table 4); that is tree hollows rarely observed (p 58). The number and extent of the tree hollows in Kama, along with course woody debris is one of its greatest assets.

Recommendations

1. A much greater buffer area on the eastern edge of Kama woodland down to the deep creek line, and appropriate management measures to protect the Kama boundary from edge effects/indirect impacts.
2. The area of regenerating box-gum woodland just outside the eastern Kama boundary be fenced, allowed to further regenerate, and added to the reserve.
3. Measures to control people access to Kama on the eastern boundary, such as appropriate fencing, limited or strategically placed entry points.
4. Adequate resources for managing weed incursions in Kama Nature Reserve and the buffer area.
5. The buffer block to incorporate any area needed (viz 300 metres outer asset protection zone) for bushfire mitigation.

Development within West Molonglo

COG supports the exclusion of the large patch of box-gum woodland from West Molonglo broadacre zone, and its long-term management/conservation as part of hills, ridges and buffers.

Proposed Plans of Management

COG supports this in principle, but implementation and compliance must be adequately resourced. All ACT Governments have a poor record in implementing and resourcing ecological plans.

Adaptive Management

COG supports this in principle, but there is a need to ensure the design is adequately planned and resourced. All ACT Governments have a poor record in implementing and resourcing ecological plans.