



Cumberland Bird Observers Club

PO Box 550, Baulkham Hills NSW 1755

www.cboc.org.au

8 October 2020

Attention:

Department of Planning, Industry and Environment, Green and Resilient Places Division,
Locked Bag 5022, Parramatta NSW 2124

via NSW Planning Portal

To whom it may concern,
Dear Sir/Madam,

Please find attached a submission from Cumberland Bird Observers Club Inc, with comments on some proposals concerning biodiversity conservation under the CPCP, mostly as detailed in the publication:

Draft Cumberland Plain Conservation Plan (CPCP) Sub-plan A: Conservation Program and Implementation - New South Wales DPIE, August 2020

and other information concerning CPCP.

Details are also included on some areas of Cumberland Plain wildlife habitat that we consider should be urgently protected.

Could you please acknowledge receipt of this submission. Thank you very much.

Sincerely,

[REDACTED]

[REDACTED]

Conservation Officer,
Cumberland Bird Observers Club Inc

e-mail: [REDACTED]

Draft Cumberland Plain Conservation Plan (CPCP) Sub-plan A: Conservation Program and Implementation

Submission by Cumberland Bird Observers Club Inc (CBOC), 8 October 2020

Main purpose of the CPCP

The CPCP (still in draft form) is being developed to meet requirements for strategic biodiversity assessment and certification in major development areas in the Cumberland Plain, under NSW and Commonwealth biodiversity conservation legislation. Officially, the CPCP sets out how strategic conservation planning (Comment: particularly ensuring adequate reservation of the ecological communities to be impacted by development) will be delivered in a large 200,000 ha section of the Cumberland Plain (the Plan Area), while massive urban and industrial development proceeds in four growth areas in the south-west of the Plain until 2056.

The relevant growth areas are: Greater Macarthur, Greater Penrith to Eastern Creek Investigation Area, Wilton Growth Area, and Western Sydney Aerotropolis. The Badgery's Creek airport site falls outside the areas considered in the CPCP.

We understand the CPCP will replace developers' legal requirements to compensate for (i.e. 'offset') environmental damage caused by projects in the growth areas named above. This appears to mean that development planned to occur over (say) the next 30 years can be "locked in" at the beginning, and the government has to find and deliver (probably early in the development period) appropriate offsets to cover 30 years of impacts. It remains to be seen whether this improves the quality and delivery of offsets compared with current systems. It may mean that all development is locked in up-front, but conservation is delivered at departmental discretion, depending on budgets etc. **It does sound like a risky procedure.**

Impacts on Cumberland Plain biodiversity

The great majority of natural vegetation communities on the Cumberland Plain has been cleared or severely degraded almost completely since European settlement began. Figures for percentage area of the woodland and forest communities still remaining emphasise the scale of vegetation loss. For example, the remaining area of Cumberland Plain Woodland (CPW) in fair to good condition is probably only about 7% (about 9,000 ha) of the original (with scattered trees in parks, gardens, streets, paddocks etc.). The loss of remnant patches of CPW and other woodland Plant Community Types (PCTs) has continued during the last few years, with the development of growth centres further east on the Plain.

Developments proposed in the CPCP will clear an estimated 10,470 hectares of land in total. Within this figure, projected losses of woodland and forest Threatened Ecological Communities (TECs) total 1,778 ha, including 1,014 ha of Cumberland Plain Woodland (CPW), 488 ha of Shale-sandstone Transition Forest, and 165 ha of River Flat Eucalypt Forest. **This scale of destruction of already endangered TECs is completely unacceptable to CBOC.** It would inevitably reduce the living space and food resources of many woodland bird species that have already declined severely in the Sydney area.

Proposed major road corridors will heavily impact two of the four NPWS reserves which currently protect significant areas of Cumberland Plain Woodland. Both of these reserves are themselves primary offsets for past developments. Losses in area of these reserves include:

Wianamatta Regional Park - 74.2 ha, for M9 Orbital Road
Shanes Park (pending NP) - 4.7 ha, for M7 - Ropes Crossing link
TOTAL: 78.9 ha

There is also a proposal to build a major road (M9 Outer Sydney Orbital) through about 3 km of the Cobbitty Hills, an area that still has a good coverage of CPW, frequented by a rich variety of birds, including several declining woodland species. The Cobbitty district is one of few expected to contain suitable areas for large woodland parks/reserves (See also Appendix 1).

CBOC is strongly opposed to the proposed routing of major transport infrastructure through already protected land or land with potential to become NPWS reserve. We cannot afford the loss of scarce Cumberland Plain vegetation and wildlife caused by these road proposals. In all these cases, it must be possible to avoid all or most of the damage, e.g. by tunnelling under the impacted areas - certainly worth investigating.

The CPCP apparently involves the destruction of a large area (330 ha) of the Cumberland Conservation Corridor (CCC). This corridor concept was partly established, including with Federal money. It is not officially protected to our knowledge (but should be). With connectivity of isolated patches of habitat regarded as important by the Plan, it is surprising that so much destruction has already been sanctioned in the CCC.

The statement in the draft Plan document: "Not all major corridor projects identified in Future Transport 2056 for Western Sydney will obtain their biodiversity approvals through this Plan" is ominous, implying there is even more destructive infrastructure in the pipeline than is covered by this Plan.

Proposed offsets (as compensation for impacts)

The main offsetting activity in the Sub-plan A concerns the impact (1,778 ha) on Cumberland Plain Threatened ecological communities - TECs. The draft report has a "Commitment 8.2, *of protecting at least 5,475 hectares of impacted native vegetation communities within new conservation lands*". We take this to mean that the proposed compensation (offset) for the destruction of 1,778 ha is *at least 5,475 hectares* of native vegetation of similar types (TECs) to that impacted, and that the offset areas for the different TECs have a multiplier (e.g. typically offset = impact x 3 to 5). In this case, for example, for CPW the offset target is calculated as 3,170 ha (1,014 x 3.13). The oft-repeated 5,475 ha is the sum of offset targets including multipliers. Yet elsewhere it is stated the actual area is expected to be about double 5,475 ha. This does not seem to be explained in the sub-plan A report.

The new offset areas (total 11,000 ha?) are proposed to be protected and managed as "part of an expanded reserve system of national parks, council reserves and community reserves". Certainly we agree that offset areas with ecological communities in at least fair to good condition should be declared as National Park or Nature Reserve (a designation most likely to be durable). Council reserves or community reserves, which may imply cleared picnic areas or sporting grounds, *should not* be included in the spectrum of uses for land-based offsets. (Actually, the urban developers should include these types of heavy-use areas within their own land and budgets.)

The draft plan states that, over the life of the Plan, around half of the 5,475 hectares sought for offsets will be protected and actively managed through biodiversity stewardship agreements (BSAs). As for reserves (see above), stewardship sites are expected to be selected from the Plan's Strategic Conservation Area (SCA). (See below for more details about this SCA.) "A BSA is registered on the title of the property and provides *in-perpetuity* protection of the site's biodiversity values, with a secure, ongoing funding source". Even so, **it seems unlikely that BSAs would be able to provide the same long-lasting security for an area and its biodiversity, as National Parks and similar reserves do.**

CBOC is aware of various cases of holders of Biobanking agreements (forerunner of BSAs) rorting the system for their own gain. For example:

- In-house trading
- Duopoly control of market
- Lack of public scrutiny - details of agreement and progress kept secret
- Pocketing of a few years' funding without doing agreed work on site
- Empty credits - new 'species credits' allocated for discovery of threatened species on biobank sites without any additional management obligations.
- Drum mulching - leads to huge weed plumes in understorey 10-20 years later, after management funds mostly used up.

Serious abuse of offsetting:

- The use of existing reserves (including Council reserves, Western Sydney Parklands, and Botanic Gardens) for biodiversity offsets. It removes the conservation outcome from offsetting - no new bushland is protected - a major problem.
- We would also consider the use of largely or completely cleared areas as offsets, (with hopes of trying to rehabilitate vegetation there in the future) to be invalid.

We hope these and similar abuses of the offsets system will be strenuously outlawed under the CPCP. They cause a great loss of benefits to other, honest participants and to threatened wildlife; also a wastage of money and resources that we can ill afford. **Government agencies must be given the resources and incentive to undertake compliance checking** and be held to account for failure to adequately implement compliance.

We understand that a major issue is that the government, through the CPCP, is wanting to secure a huge clearing approval (totalling about 1,778 ha), **but may be unable to provide the level of funding that would be needed to meet its offset targets**, the bulk of which are in the 5,475 ha figure. In summary, it appears that all proposed development is locked-in up front, but conservation land (reserves, BSAs etc) could be delivered only as the government regards as fit and regards them as not being too expensive.

This is an alarming threat to the effective implementation of the CPCP, which needs urgent rectifying, before the few remaining high quality and sizeable potential areas for reservation, with largely intact ecology, are lost in the tidal wave of urban expansion.

Strategic Conservation Area (SCA) and reserve and offset selection

We understand that the Strategic Conservation Area (SCA) is the land area that the CPCP plans to prioritise (search within) when seeking voluntary offsets (mostly for landowners choosing to take up Stewardship Agreements). It could also be used to locate offset or reserve areas.

A conservation priorities method (computer modelling) was used to identify areas that represent large remnants of native vegetation with good connectivity, or areas with the potential to enhance connectivity on low- to medium-constraint land. The output of the method—the ‘Strategic Conservation Area’ or SCA -- covers 28,300 ha. This modelling seems to have given high priority to factors such as connectivity, proximity to large reserved areas like National Parks, and species-specific movement corridors.

The derived SCA is the land area that the CPCP plans to prioritise (search within) when seeking voluntary offsets (mostly for landowners choosing to take up Stewardship Agreements). However, it is not clear if this modelling could be used to identify particular TECs (like Cumberland Plain Woodland), which would be needed for locating possible offset areas containing prescribed TECs (including BSA sites).

We think an overly-rigid insistence on connectivity or size in future conserved land parcels would be a mistake. Although it may lead to more country being reserved, and more attractive "green spaces" for recreation being opened up, a lot of it could be of relatively low (faunal) biodiversity value (e.g. similar to much of the already protected rougher country near the borders of the Cumberland Plain).

Suggested priorities for securing land for reserves

To CBOC, the greatest conservation need NOW on the Cumberland Plain is securing, as far as possible, protection of practically ALL the remaining remnants of the western Sydney TECs. These cover the spectrum from box/redgum/ironbark/spotted gum forests and wodlands to scribbly gum and melaleuca, and river flat forests.

Our particular interest in the case of the CPCP is **woodland birds**. There is a fairly large, distinctive suite of generally inland-inhabiting birds that also occur in Sydney. Here, they are found almost exclusively in the fairly open woodlands (CPW) on shale soils in the Cumberland Plain, and in some ironbark-dominated areas on gravelly soils in the Castlereagh district. These bird species are appreciated for the extra diversity they bring to Sydney's birdlife, including the chance to find normally more inland birds fairly close to the city.

Typical woodland species that are still relatively common in W Sydney include: Weebill, Rufous Whistler, Dusky Woodswallow, Peaceful Dove, Jacky Winter, Fuscous Honeyeater. A more complete list is shown in **Appendix 2**.

Some points we emphasise:

- All patches of intact Cumberland Plain TECs in good-fair condition and greater than 1-2 ha in area are potentially useful to birds, as occasional food sources (e.g. nectar), stepping stones to other habitat areas, or refuges during inland drought, fires in Blue Mts etc. (e.g. Brown Treecreeper at Scheyville, Aug 2020).
- All fairly large areas of naturally established, relatively mature and good-fair quality Cumberland Plain Woodland or forest TECs (especially) that could become available for offsets or reserves, need to be proactively earmarked and acquired soon. (Appendix 1 has several suggested areas.)
- Do not set requirements that reserved or offset areas **must** possess very "special" features such as one or two highly endangered species. Such restriction could cause sites with higher but less exceptional biodiversity to be overlooked. Protected areas should aim to conserve diverse suites of species, not only rarities.
- Selecting reserves and offsets within the C Plain should not be too rigid a requirement. If desirable areas of CPW TEC cannot be found in the Plan area or County of Cumberland, it would be better to secure larger areas of analogous TECs in better condition, in outside regions (e.g. Hunter Valley).
- Resources of money and man-hours etc SHOULD NOT be put into attempts to artificially establish woodland or forest TECs on bare paddocks, at this stage. **"Ecological restoration" is not a substitute for protecting functioning ecosystems**, and requires more research into methodology (see later discussion).
- Razorback Range is being considered as a source of offset and reserve areas, but we suspect it is not a good source of offsets for Cumberland Plain TECs - steep topography, different soils, little CPW vegetation. Razorback could yield areas for interesting new reserves outside offsetting considerations. However, the Hunter Valley could be more likely to have TECs resembling those on the Cumberland Plain.
- National Parks and Nature Reserves remain the cornerstones of conservation in the Cumberland Plain and the expansion of these types of reserves, and creation of new reserves (with appropriate management funding), remains an urgent priority.

Proposed "ecological restoration" and usefulness

There seems to be a quota of "conservation land" on which restoration is already proposed to be used: "Activities will include restoration of threatened ecological communities for up to 25% of the Plan's target to secure 5,475 hectares of impacted native vegetation within conservation lands." This is over 1,300 ha, spread over an unspecified time. We assume this would mostly use some ground preparation and planting method, different from traditional painstaking bush regeneration but including its methodology in some cases.

It needs emphasising that the "critical role played by restoration in improving biodiversity outcomes" would not be realised for many years, even assuming that all goes well during that time (e.g. few or no fires, little or no attack by animals or leaf-eating insects, no flooding, all understorey layers grow successfully; and (later) hollows develop in trees for hollow-nesters). Then, after say 80-120 years, the restored area might provide resources for a diverse suite of wildlife similar to that of mature natural woodland. Importantly, it would need to be self-sustaining from this point on.

Establishing trees (at natural woodland spacings) on a site with native grasses, herbs and other ground vegetation already established would be simpler, but it would still take a long time to develop into a true, functioning ecological community. Similarly, sites with natural regeneration of small trees might be amenable to restoration of a native understorey, but with similar caution re time to develop into an ecological community.

We understand that "ecological restoration" of CPW is being researched by various groups, beginning recently (in the past few years). There are conflicting views of its success so far. The CPCP draft report mentions trials at Scheyville NP (direct seeding of ground cover species, with topsoil scalping and some burning for weed control);

and in various corridors using simple mass tree planting (Stepping Stones project). We do not know if there has been analysis of the success or otherwise of various trials (really too early to judge).

The *State of the Cumberland Plain* booklet (2018) says, "Previous revegetation (e.g. Western Sydney Parklands) has occurred on a large scale despite scientific advice that this would not deliver the biodiversity outcomes claimed. The poor results predicted have now been retrospectively demonstrated." and: "New techniques offer improvements in revegetation outcomes including scalping. However these still present very poor outcomes compared to conservation. The mistakes of the past should not be repeated and the focus of offsetting must remain on the conservation of intact and even degraded natural systems."

We caution against relying to a significant extent on artificial restoration of ECs, given the current lack of proven protocols, for other than very small-scale applications. A lot more experimentation with restoration in different types of TECs is required, that can be run for many years and properly analysed. **It would be a major failure if lots of resources were thrown at restoration while existing areas of good, mature TECs (potentially good reserves) were neglected and destroyed.**

Three proposed reserves (announced in draft CPCP Sub-plan A report)

The introduction to the biodiversity conservation program under the CPCP Sub-plan A promises some fairly lofty achievements, such as "avoiding and minimising impacts; establishing new conservation lands as offsets in regionally strategic locations; new reserves critical to the protection of NSW BC Act and EPBC Act-listed threatened ecological communities".

No doubt intended as a "taster", three proposed key conservation reserves are described. They seem to be the only defined areas to be offered (maybe as offsets) for early in the plan period (about 5 years). They include:

Georges River Koala Reserve (see also separate CBOC submission on Sub-plan B): planned to conserve a significant portion of the SW Sydney koala population, but not located in a shale woodland environment - mainly sandstone; limited resemblance to most Cumberland Plain vegetation.

Gulguer NR extensions: investigation area only at this stage. Most of extension area (1,400 ha on sandstone), requires "restoration" of couch and kikuyu paddocks. Revegetation aiming to create links to Blue Mountains NP.

"Confluence reserve": Investigation site, NE of Windsor Downs NR. We understand it is a large (c 400 ha) swampy paddock of exotic grass, subject to flooding and rampant weeds, with a few large eucalypts, no intact forest or woodland. The CPCP Plan seems to envisage "rehabilitating" some sort of nat vegetation there, over about 25 yrs.

Disappointingly, these three reserves **deliver little to none of the actual offsets required for CPCP impacts on the Cumberland Plain**, where the predominant vegetation to be destroyed is CPW (box-redgum-ironbark woodlands). The "Confluence" proposal particularly sounds likely to turn into a money and resources pit, with little to show for it conservation-wise. It would probably be best not used. The koala reserve sounds more worthwhile since it is potentially aiding a threatened "iconic" species (but still hardly a like-for-like offset).

However, since three initial reserves are envisaged, it should be possible to find suitable areas of typical CP vegetation to replace two (preferably) of the three mooted above, which would give more credible offsets. Another possibility is that the two new reserves could be created independently of CPCP offsetting considerations.

Proposed "avoided" land

Avoided land describes the area which has been avoided from the certified-urban capable land in the nominated growth areas. It comprises *at least* 4,795 ha of native vegetation, made up of BC Act and EPBC Act threatened ecological communities, riparian corridors and steep slopes. (In other parts of the Sub-plan A report, a figure of 3,670 ha is mentioned.)

These areas may have some conservation value, despite probably being small fragments in some cases. They are proposed to get E2 (environmental conservation) zoning; but this designation in previous growth centres was

shown to fail in its intended role of conserving vegetation. On E2-zoned private land in these areas there was a lot of illegal clearing. For the proposed CPCP areas, avoided land (E2) should be under the control of local councils, as community land, not privately owned.

It sounds like a rather risky way of conserving habitats long-term. It would be better if higher quality sections (ecologically) were conserved securely in National Parks or equivalent, even if some of these were in several smaller scattered parcels. (Not all pieces of reserved land need be connected to be worth keeping.)

Conclusions

The Cumberland Plain Conservation Plan (CPCP) proposes the destruction of a large area (about 1,800 ha) of threatened ecological communities (TECs), particularly Cumberland Plain Woodland (CPW) which is poorly represented in reserves. Part of the impact would be from roadworks, removing 79 ha of existing and proposed National Park land. These roads must be redesigned to avoid damage to protected areas.

Land-based offsets must be fully delivered for each stage of development before the next stage is authorised to commence. Otherwise there is a real danger that offset selection and/or delivery could fall behind and valuable biodiversity areas would be lost for ever.

An intention to create a range of different "offset" and reserve types, including NPWS reserves independently of offsetting requirements, is welcome. However, in the Plan there is a disappointing absence of specific proposals by DPIE to secure land with substantial areas of high quality Cumberland Plain TECs for offsets or reserves, to compensate for the CPCP impacts.

Choice of land areas for offsets or reserves should not be constrained by limiting the search area to, say, a strategic conservation area. If better examples of target TECs or similar can be found in neighbouring regions like the Hunter Valley (for box-ironbark and spotted gum-ironbark) they should be utilised.

Biodiversity Stewardship Agreements need closer oversight to prevent a repeat of the rorts and corrupt practices perpetrated by some holders of Biobanking agreements, which damaged the scheme's integrity.

"Ecological restoration", intended to reinstate original ecological communities on bulk areas where they have been destroyed a long time ago, is still at an early research stage. Therefore, it should not be attempted on other than a small scale at this time. Sites with advanced natural tree regeneration or intact native grasses and ground flora but lacking trees should be more suitable as targets for restoration; however, conversion to functional ecosystems would still take a very long time.

The "Confluence" land is likely of no use as a CPW offset site or a biodiversity reserve, though it might be useful as a research area for restoration methodology.

Appendix 1. Some suggested key areas with Cumberland Plain plant communities or other natural values **that should be protected as soon as possible** -- while still possible

A. Areas recommended in *State of Cumberland Plain 2017-18* publication (Greater Sydney Landcare Network)

Note: Abridged text for sites. See original publication for full details and aerial photos.

Windsor Downs-Castlereagh Corridor

Crown land with natural ironbark forest (mainly on John Moroney Correction Centre site, N and E sections), linking Windsor Downs NR and Castlereagh NR.

Extra note: Woodland birds likely- Fuscous HE, Speckled Warbler, Buff-rumped Thornbill, Shriketit, Peaceful Dove, Red-capped Robin, Dusky Woodswallow, Weebill.

Erskine Creek Corridor opportunities (WS Freight Line)

"The hole in the Erskine Creek Biodiversity Corridor comprises the entire corridor linking Ropes and South Creek. This small property is an obvious and immediate priority for conservation."

Proposed Cobbitty Hills Reserve

"The large commercial holdings of Cobbitty provide one of the last opportunities to create a large public reserve. Unoccupied and unfarmed portions of 7 investment properties total 1,200 hectares, predominantly Cumberland Plain Woodland and grasslands. These properties are impacted by the proposed Outer Sydney Orbital and could be compulsorily acquired".

Extra note: Woodland bird species in Cobbitty area, 2002-18: JackyWinter, Peaceful Dove, Restless Flycatcher, White-winged Triller, Dusky Woodswallow, Yellow-rumped Thornbill, Pallid Cuckoo, Rainbow Bee-eater, Striated Pardalote, Crested Shriketit.

Kingshill Migratory Fauna Corridor

Kingshill Road offers one of the last opportunities to secure a decent connection for altitude migrants, linking the large areas of woodland at Defence Establishment Orchard Hills with the Blue Mountains.

Agnes Banks Corridor

"The two largest areas of vegetation remaining in the Cumberland Plain area are linked by a small corridor near Bonner Road at Agnes Banks. This corridor is actively used by diverse native fauna to move between the Ham Common Wildlife Refuge (crown land now managed by Western Sydney University) and the large areas of crown and ex-crown land of Castlereagh to the south.

A single property - No. 2 Bonner Road - is the only option to preserve this link, and this property should be acquired as an urgent priority."

Agnes Banks Nature Reserve additions

"The rear portions of two private properties create a major inclusion into the Nature Reserve. These rear portions are protected by a Heritage Order and were meant to be incorporated in the Nature Reserve, however they have never been acquired, and are being degraded, threatening the surrounding reserve. The Heritage Order portions of these properties should be purchased and incorporated into the Agnes Banks Nature Reserve as originally intended".

Extra note: Mixture of inland woodland birds and more coastal species.

Doherty's Corridor - Minto to Scenic Hills

"A corridor of public land identified since the 1970s 'Doherty' paper, it links the Holsworthy-Campbelltown bushland (and koala corridor) with the Cumberland Plain Woodlands of the protected Scenic Hills. One property currently under use containing the historic 'Odyssey House'. The house and its surrounds could continue under this arrangement while also securing this key landscape corridor".

Fairlight Road

"Lots 1 & 2 Fairlight Road remain undeveloped and protect 25 hectares of Cumberland Plain Woodland. These properties adjoin the large Fernhill BioBank site on two sides and offer high strategic conservation value. These properties are best suited to purchase."

Fernhill West

"The 'Western Precinct' of the historic Fernhill estate protects over 100 hectares of Shale-Sandstone Transition Forest regenerating after past illegal clearing. This is a core portion of the regional koala corridor. While the Mulgoa koala corridor has been recognised in OEH mapping, there has never been a survey of the population. This site has outstanding strategic conservation value, adjoining the Blue Mountains National Park and Fernhill BioBank sites."

Extra note: Part or all of this estate purchased by NSW Government, early 2020.

Greendale opportunities

"Large private and corporate holdings at Greendale offer one of the few opportunities to secure large consolidated areas of Cumberland Plain Woodland. A total area of 420 hectares, most of it CPW, is located across approximately seven holdings adjoining the proposed Western Sydney Airport offset site. Serious conservation of the Cumberland Plain Woodlands as a functional ecosystem cannot be achieved without establishing large consolidated protected areas of this nature."

Camden Airport - Wivenhoe Conservation Link

"The two largest conservation areas in Camden LGA are separated by just two private landholdings along the Nepean River. To the south the Environmental Zone (approx 55 hectares) of Camden Airport is protected by a Commonwealth Property Agreement while to the north is over 60 hectares of BioBank (at Wivenhoe) and the biodiversity offsets of Wivenhoe and Harrington Park. Linking these existing conservation areas along the river would create one of the largest conservation areas in the Cumberland Plain."

Bargo-Nepean National Park proposal

"The Crown Lands of the Bargo River catchment are presently afforded no protection and are increasingly damaged. They offer outstanding passive public recreation opportunities especially along the Bargo River Gorge and at Mermaids Pool. The National Parks Association has long been proposing a national park for these lands, known as the Bargo-Nepean proposal. Progression of the proposal also provides the opportunity for long-overdue resolution of Aboriginal land claims. Resolution of these claims may see an Aboriginal management agreement for a National Park."

Extra note: May have more diversity of rare fauna than proposed Upper Georges River NP.

Blaxland Creek Corridor

"Western Sydney's most pristine creek, Blaxland Creek, is impacted by the proposed North-South Rail Line and Outer Sydney Orbital. Two properties connect the Defence Establishment Orchard Hills with the South Creek corridor and are obvious opportunities for conservation & restoration".

Northern Road Corridor

"While considerable vegetation remains in the Castlereagh-Londonderry region, the opportunities for retaining connectivity between existing reserves are extremely limited due to the development of narrow residential lots along Northern and Londonderry roads. Lot 5//223798 Northern Road and other private lots present opportunities for connectivity if the owners are interested."

Londonderry Road Corridor

"Like Northern Road, the Londonderry Road retains very few opportunities for securing corridors linking Rickaby's Creek with existing conservation reserves. Lot 2/10743 Londonderry Road is a private unoccupied lot which presents the best opportunities for connectivity if the owners are receptive."

Proposed Upper Georges River NP

"The Department of Planning & Environment and other government agencies own almost all remaining koala habitat on the east side of Appin Road. This presents an opportunity to readily secure the proposed Upper Georges River National Park. Just one corporate, unoccupied property east of Beulah requires acquisition in order to secure a functional wildlife corridor for our iconic wildlife."

Extra note: Whole area now proposed NP by NSW Govt (ultimately).

Old-Growth - Whitegates Road

"Very little mature vegetation remains in the region. The largest known area of old-growth is this patch of Castlereagh Scribbly Gum Forest at Whitegates Road (near Castlereagh NR). These trees are understood to be the primary breeding habitat for the local population of Yellow-bellied Glider (the last in the Cumberland Plain) as well as the endangered Squirrel Glider. This irreplaceable forest is corporate land and under threat of development."

Old-Growth - EMAI

"The 'Macarthur Forest' at Elizabeth Macarthur Agricultural Institute is a popular site accessed by a mountain bike trail. This majestic old-growth was protected by the early Macarthur family in the early 1800s by a hedge fence (still standing). This forest is threatened by a sand mining licence. CCN support the buy-back of this sand mining licence to conserve this heritage."

Old-Growth - Menangle Road

"The magnificent old-growth at Lot 2//747563 Menangle Road is the only known patch of old-growth Cumberland Plain Woodland remaining and a sacred site for the Dharawal Aboriginal community. This site is owned by corporate mining company and leased for private uses. The old-growth has been suffered heavy damage from grazing with a number of trees now ringbarked. The landowner has now worked to fence off and restore a selection of trees on the property."

Old-Growth Barkers Lodge Road

"This property is presently unoccupied and is not used for agricultural purposes. The landowner may be amenable to conservation. Has 6 old trees on mounds, left after sand-mining."

B. Other very high priority areas known to Government, which CBOC is very keen to have protected

1. Airservices Australia site, Shanes Park

560 ha total area. Varying types of Cumberland Plain vegetation, with best quality woodland at the eastern end. Minor portion cleared at W end, with several old buildings previously used by Airservices. Very rich birdlife - both land and water-birds. 18 "Woodland" species observed (2012-2020): Speckled Warbler, Crested Shrike-tit, Varied Sittella, Striated Pardalote, Buff-rumped Thornbill, Weebill, White-winged Chough, Restless Flycatcher, Fuscous Honeyeater, Red-capped Robin, Scarlet Robin, Jacky Winter, White-winged Triller, Rufous Whistler, Dusky Woodswallow, Masked Woodswallow, White-browed Woodswallow, Masked Woodswallow, Pallid Cuckoo, Horsfield Bronze-cuckoo.

Transfer as conservation land (National Park) from Commonwealth to NSW was agreed on as long ago as 2011, but has stalled since then, due to plans by the State to build a major road along most of the southern edge of the land. We wonder why the great bulk of the land, unaffected by road proposals, cannot be dedicated as park, with the road reserve added to the park later if the road is not built. Any more delay risks this vital bird conservation area being lost.

2. Defence Establishment, Orchard Hills

Area not known, but at least 1,000 ha. It has for a considerable time been expected to be transferred from Commonwealth to NSW management as conservation land, in the fairly distant future. The vegetation is

almost entirely Cumberland Plain Woodland, with some patches of Cumberland Riverflat Eucalypt Forest along the creeks. It has a good range of declining woodland birds - Speckled Warbler, Flame and Scarlet Robins etc.

The current and future protection of this ecologically extremely valuable site (which sounds like one of the best, if not **the** best, large area of CPW still existing on the Cumberland Plain) is confused. It is conserved (though probably not securely) through listing as natural heritage under the Commonwealth Heritage Register. This *status-quo* was breached by the Department of Infrastructure & Regional Development (DIRD) Western Sydney Airport Biodiversity Offset Strategy, which relabelled the land as an offset comprising about 70% of their biodiversity offset requirements. It is apparently not yet securely conserved; but 'protected' only by a 20-year MOU between the current owners, allowing future development (in about 2040?). **The site should be secured as a future NPWS reserve, as a matter of urgency.**

3. Riverstone wetland

This consists of four old shallow settling ponds originally built by the Riverstone Meatworks early in the 1900s, off Garfield Rd, west of Riverstone. Over time, they have developed into diverse wetland habitats including open water, mud flats and reedbeds. This makes them attractive to a surprising variety of water-birds, including some migratory shorebirds and the endangered Painted Snipe. A crucial reason for this wetland's attractiveness for birds is its altitude - it uniquely remains flood free when lower-altitude areas of the Hawkesbury floodplain are inundated and birds have few places in the region to retreat to; thus they flock to these ponds (and also do so out of flood times).

CBOC has been attempting for a few years to have the ponds and some surrounding paddocks protected, but there is no resolution at this stage. The tourist potential, if properly planned, could be great.

Appendix 2. "Woodland specialist" bird species which, in Sydney, are confined entirely or mostly to the Cumberland Plain

Species	Comment
Bee-eater, Rainbow	
Button-quail, Painted	
Chough, White-winged	
Cuckoo, Black-eared	
Cuckoo, Horsfield's Bronze	
Cuckoo, Pallid	
Dove, Diamond	
Dove, Peaceful	
Emu	Remnant of introduced birds
Finch, Plum-headed	Very rare
Flycatcher, Restless	
Honeyeater, Black-chinned	Rare
Honeyeater, Fuscous	
Honeyeater, Painted	Rare
Honeyeater, Regent	Very rare
Jacky Winter	
Pardalote, Striated	
Parrot, Red-rumped	
Parrot, Turquoise	
Robin, Flame	
Robin, Hooded	Presumed extinct
Robin, Red-capped	
Robin, Scarlet	
Shrike-tit, Crested	
Sittella, Varied	
Stone-Curlew, Bush	Presumed extinct
Thornbill, Buff-rumped	
Thornbill, Yellow-rumped	
Treecreeper, Brown	Very rare
Triller, White-winged	
Warbler, Speckled	
Weebill	
Whistler, Rufous	
Whiteface, Southern	Presumed extinct
Woodswallow, Dusky	
Woodswallow, Masked	Vagrant
Woodswallow, White-browed	Vagrant