From:	noreply@feedback.planningportal nsw.gov au on behalf of Planning Portal - Department of Planning and Environment
To:	PPO Engagement
Cc:	eplanning.exhibitions@planning.nsw.gov.au
Subject:	Webform submission from: Western Sydney Aerotropolis Draft Precinct Plans
Date:	Friday, 12 March 2021 5:17:41 PM
Attachments:	2021-03-12submission-to-department-for-lot-31 pdf

Submitted on Fri, 12/03/2021 - 16:59

Submitted by: Anonymous

Submitted values are:

Submission Type

I am making a personal submission

Name

First name Nicholas

Last name Nasser

I would like my submission to remain confidential No

Info

Email

Suburb/Town & Postcode 2178

Submission file

2021-03-12---submission-to-department-for-lot-31.pdf

Submission

Submission relating to and Suppor ing submission from Cumberland Plain Conserva ion Plan from multiple land owners.

I agree to the above statement Yes

Disclaimer

This email has been scanned for viruses and malware, and may have been automatically archived by Mimecast Ltd, on behalf of Liverpool City Council.

12 March 2021

NSW Department of Planning, Industry and Environment 4 Parramatta Square 12 Darcy Street Parramatta NSW 2150

<u>Re: Submission in objection to the Wianamatta-South Creek Precinct with regard to the</u> <u>extent of area which is zoned Environment and Recreation.</u>

and

Submission in objection to the location of the Sydney Water Wastewater Treatment Plant.

This submission is tendered by the land owner of Mamre road Kemps Creek (

The reason for this submission is to object to the amount of land which is currently zoned as Environment and Recreation.

We firmly believe that the majority of this land should be zoned as industrial land due to the following reasons:

The dam which is currently built across Kemps Creek, see image below, is recommended to be removed in the Stormwater and Water Cycle Management Study due to safety concerns (see extract of page 50 of the Stormwater and Water Cycle Management Study below)



Page 50 from Stormwater and Water Cycle Management Study. Red circle shows dam.

Kemps Creek Dam is going to be removed by the landowners of lots and , with most of the adjoining land owners being supportive of the dam removal. This was detailed in a submission to the Cumberland Plain Conservation Plan. We have attached this submission at the end of this document. It should also be noted that Water NSW supports the removal of all dams in this area.

Removal of this dam, will reduce the flood impact which is currently modelled on this lot and other surrounding allotments. Considering the 1% AEP is what has informed the extent of the Environment and Recreation zone, a new flood study will need to be undertaken to allow for revised flood modelling. This will reduce the Environment and Recreation zone and allow more land to be zoned for employment. See extract from the flood study below:



Extract from the 2015 flood study prepared by Worley Parsons, which was relied upon for the Aerotropolis SEPP rezoning. The red circle at the bottom left of the extract marks the spillway of the dam called Kemps Creek Dam and is the reason for the flood affectation. This is the dam which is proposed to be removed in the current exhibition which we fully support. The oval at the top right of the image shows an existing dam wall called South Creek Dam which still exists and is increasing the flood water build up. Although this dam has already been dewatered the dam wall will also need to be removed and should be noted as such in the final precinct plans.

Once both of these dams are removed the flood impact on the area will be significantly reduced. Restoration of the riparian zones in accordance with NRAR will be implemented once these dams are removed which will result in an 80m + channel width. This will leave the majority of the area suitable to be zoned industrial.

Sydney Water Waste Water Treatment Plant

We object to the location of the proposed Sydney Water Treatment Plant, which is to be located against the southern boundary of lot . Its position is marked in the image below in purple.



Extract from page 8 of the Scoping Report Upper South Creek Advanced Water Recycling Centre.

The position of the Waste Water Treatment plant on lot should be moved further south to reduce the effect on Lot . It was previously proposed that the adjoining use to the south of lot would be educational.

The position of this waste water recycling centre will effectively sterilise the Environment and Recreational land use for the south western portion of lot approximately, 50 acres. Odour will be a major issue with the prevailing southerly winds pushing polluted air from the treatment plant over lot.

Further to this, the water treatment plant is going to be a large industrial facility. The area where is it proposed has a large area zoned Environment and Recreation being the same zone as lot . Considering that water treatment facilities are a prohibited use in the Environment and Recreation zone it is essential that this entire area including lot be zoned to industrial. This would be a compatible land use to adjoin the Water Treatment Plant.

Considering the land is currently zoned Environment and Recreation and that there is no chance for any kind of environment or recreation to be achievable due to the impost of the proximity of the treatment plant the area is not suitable for the Environment and Recreation zone.

An industrial zone for this area would be more suitable. The building design would be able to turn its back on the water treatment plant shielding the view and odour of the treatment plant from the public. The building will have a minimum height of 20m. When the wind blows the odour towards the north against the building it will be forced upwards and dissipate over the building. The water treatment plant will also provide a vegetated buffer long the northern boundary of lot to help reduce any further impacts.

We are happy to work with Sydney Water to achieve the best industrial outcome for both lots and .



Purple outline shows the location of the water treatment plant (lot) with the green area being zoned environment and recreation. Red outline shows the extent of lot .

Summation:

The extent of the Environment and Recreation Zone is informed by the 1% AEP. Once Kemps Creek and South Creek dams are removed the flood impact on these areas will be reduced.

Restoration of the riparian zones in accordance with the NRAR will be implemented once these dams are removed which will result in an 80m + channel width. This will leave the majority of the area suitable to be zoned industrial.

We strongly object to the position of the Waste Water Treatment Plant. It will significantly reduce the opportunities for the land at Lot .

If it is determined that this is a suitable location for the Waste Water Treatment Plant it will be required to be zoned industrial. The entire area should then be zoned to an industrial use in accordance with the original Western Sydney Employment Area Land Application Map. See extract below:



Extract from the Land Application Map showing the Broader Western Sydney Employment Area.

We strongly object to the position of the Waste Water Treatment Plant. It will sterilise the two thirds or approximately 50 acres on lot

The water treatment plant should be located in an area where it will minimise impact on private property.

We would appreciate being included in the planning process for the water treatment plant as it is going to have such a high impact on the property.

It is imperative to maximise the industrial employment area available in this location. The expectation of industrial uptake has increased dramatically due to Covid 19, with multinational companies wishing to relocate to this industrial employment area, in close proximity to The Western Sydney Airport.

Submission to Draft Precinct Plans

If you could please contact me to discuss.

Regards,

Land owners of 3 Mamre road Kemps Creek

Please contact Nicholas Nasser in relation to this submission.

Mobile:

Email:

16 October 2020

NSW Department of Planning, Industry and Environment 4 Parramatta Square 12 Darcy Street Parramatta NSW 2150

Re: Submission in objection to the Cumberland Plain Conservation Plan, with regards to the extent of E2 zoning and flood study used to inform the area of flood affected land.

This submission is tendered on behalf of the land owners on the Western Side of Mamre road. Several of the landowners consulted in relation to this submission have indicated their support through signed letters attached to this submission. <u>Please contact Nicholas Nasser in relation to</u> <u>this submission on 0406 751 677 or nicholas@tierarchitects.com.au</u>

The reason for this submission is to object to the flood study and which was used to inform the extent of flooding along Kemps Creek and South Creek.

Additionally, the E2, Environmental conservation zone which is proposed is unsuitable particularly in areas which have almost no significant vegetation. A report from an ecologist accompanies this letter.



The properties are identified in the aerial image above.

Objection to flood study

There are currently two dams, shown in the 2015 flood study prepared by Worley Parsons, that are relied upon for the Aerotropolis SEPP. These are the dams on Kemps Creek and South Creek.

Kemps Creek Dam is positioned across lots 30 and 31. Both of these land owners are planning to remove this dam. The removal of the dam will reduce the flood impact on the properties in this area, allowing more of the land to be zoned for industrial purposes.

Removal of the dam will also reduce the danger which would occur in the event of a dam wall failure during a flooding event. This would in turn remove the present spillway on Kemps Creek dam allowing more of the land west and south of the dam to be zoned industrial.

South Creek dam does not currently hold water as the wall has been opened. Most of the dam wall still exists and, in the flood study, shows that it does have an effect on the flow of the flood waters.

If this wall was to be completely removed, it would also reduce the impact of the flooding on the up-stream properties, allowing more of the land to be utilised for industrial purposes.



Extract from Worley Parson 2015 Flood Study showing the dams on both South and Kemps Creek.

Objection to E2 and Recreation and Environment Zoning

The extent of the E2 and Recreation and Environment Zoning appears to be informed by the extent of the flood study. Whilst a riparian corridor along the water course is suitable once the area has been developed, currently the land is mainly being used for agricultural purposes with almost no significant vegetation. Added to this is the fact that the water courses of both Kemps Creek and South Creek have been significantly modified from their natural state with Kemps Creek still being dammed and South Creek's dam wall still in place.

A more appropriate strategy would be one that is consistent with the Natural Resource Access Regulator (NRAR). This suggests that for water sources of a 4th order or greater a total riparian corridor of 80 metres + Channel width is the preferable management option. This was proposed in the exhibition paper for the Mamre Road Precinct Rezoning and is shown in the extract below.



Figure 2. Mamre Road Precinct environmental considerations map

A report from Ecological Australia accompanies this submission. It identifies that large areas which are proposed to be conservation areas are of low biodiversity value. Due to the time constraints placed on the exhibition period, an ecological report was only able to be prepared for Lot 31. However, the neighbouring land holdings have similar biodiversity characteristics.

Considering the unnatural state of the water course, it is essential that a proper creek bed/channel is established during the development of this area along with the removal of dams which are currently present on the main water courses. During this process flood mitigation measures such as flood compensatory excavation should be considered. This will allow more of the area to be utilised for industrial purposes, which will generate future opportunities for employment. This is consistent with the original intent of the Western Sydney Employment Area SEPP 2009 and the strategic direction of the Penrith Council LEP.

The Covid-19 induced recession affecting Australia is a once in a century event. It is vital that the opportunities which present themselves to stimulate economic growth are used to their full advantage. So far, there has been tremendous interest and take up in the areas which have been zoned industrial. This is due to the shortage of existing industrial land in Sydney. This shortage has been stifling growth in this sector for the last decade.

Interest in manufactoring in Australia is gaining momentum, with the Federal Government providing stimulus and encouragement. This direction will support Australia through these difficult times and provide stability in the coming years. It is important that we have the greatest amount of available land zoned industrial to support this recovery.

Badgerys Creek Airport has been planned since the early 1970s. It is important that the land surrounding the area is developed to its highest and best use to support this essential infrastructure in Western Sydney.

As land owners in the area we should be involved in the plan making. Through consultation and partership with us, the Department will be able to achieve the best outcome for the local residents, environment and the future of Western Sydney.

Regards,

Land owners of West Side Mamre Road

Please contact Nicholas Nasser in relation to this submission.

Mobile: 0406751677

Email: nicholas@tierarchitects.com.au

Department of Planning, Industry and Environment

&

I

Penrith City Council 601 High Street Penrith NSW 2750

Dear Sir/Madam,

LOT 27 LOT 28 Address: 8/9 MAMRE ROAD KEMPS OREEK

Reason for submission:

Objection to flood affectation, E2 and Environment and recreation zoning at Kemps Creek.

I/we, the owner/owners of the property give our consent to lodge a submission in relation to the flood affection shown in the Cumberland Plain Conservation Plan, Aerotropolis SEPP and the Western Sydney Employment SEPP.

Yours Faithfully,

Name of land owner	Signature of land owner
DOMENICO Tasson	E D'Yasson
Name of Witness	Signature of Witness
MICHAEL NASSER	M. Mass
MICHAEL NASSER	M. Jassi

Department of Planning, Industry and Environment

&

Penrith City Council 601 High Street Penrith NSW 2750

Dear Sir/Madam,

Address: 859-869 MAMRE RD, KEMPS CREEK NSW 2178

Reason for submission:

Objection to flood affectation, E2 and Environment and recreation zoning at Kemps Creek.

I/we, the owner/owners of the property give our consent to lodge a submission in relation to the flood affection shown in the Cumberland Plain Conservation Plan, Aerotropolis SEPP and the Western Sydney Employment SEPP.

Name of land owner	Signature of land owner
DONATO D'ASCANIO	Dont Den
LUCIA D'ASCANIO	ducio Dibeanio
Name of Witness	Signature of Witness
A. A	
CARMELA ZAHRA	lameblahun.

Yours Faithfully,

Date: 8 10 2020

Department of Planning, Industry and Environment & Penrith City Council 601 High Street Penrith NSW 2750

Dear Sir/Madam,

Address: 871-883 MAMRE ROAD KEMPS CREEK NSW 2178

-

Reason for submission:

Objection to flood affectation, E2 and Environment and recreation zoning at Kemps Creek.

I/we, the owner/owners of the property give our consent to lodge a submission in relation to the flood affection shown in the Cumberland Plain Conservation Plan, Aerotropolis SEPP and the Western Sydney Employment SEPP.

Yours Faithfully,

Name of land owner	Signature of land owner
MICHAEL NASSER	M. Massel
Name of Witness	Signature of Witness
PAUL VU	fan -

Department of Planning, Industry and Environment &

Penrith City Council 601 High Street Penrith NSW 2750

Dear Sir/Madam.

Address: 901-915 MAMRE RD KEMPS CREEK 2178

Reason for submission:

Objection to flood affectation, E2 and Environment and recreation zoning at Kemps Creek.

I/we, the owner/owners of the property give our consent to lodge a submission in relation to the flood affection shown in the Cumberland Plain Conservation Plan, Aerotropolis SEPP and the Western Sydney Employment SEPP.

Yours Faithfully, Name of land owner Signature of land owner ANTHONY MERCIECA a merce Name of Witness Signature of Witness

Department of Planning, Industry and Environment

& Penrith City Council 601 High Street Penrith NSW 2750

Dear Sir/Madam,

Address: 919-923 Mamme Road Kemps Creek

Reason for submission:

Objection to flood affectation, E2 and Environment and recreation zoning at Kemps Creek.

I/we, the owner/owners of the property give our consent to lodge a submission in relation to the flood affection shown in the Cumberland Plain Conservation Plan, Aerotropolis SEPP and the Western Sydney Employment SEPP.

Name of land owner	Signature of land owner
BURAKDINCEL	AL
Name of Witness	Signature of Witness
Eser Usta	JAD.

Yours Faithfully,

Department of Planning, Industry and Environment &

Penrith City Council 601 High Street Penrith NSW 2750

Dear Sir/Madam,

Address:

949-965 Mamre Rd Kemps Creek NSW 2178

Reason for submission:

Objection to flood affectation, E2 and Environment and recreation zoning at Kemps Creek.

I/we, the owner/owners of the property give our consent to lodge a submission in relation to the flood affection shown in the Cumberland Plain Conservation Plan, Aerotropolis SEPP and the Western Sydney Employment SEPP.

Yours Faithfully,

Name of land owner	Signature of land owner
Melina Rinaldi	M. Rinaldi
Angelo Rinaldi	A Rinaldi
Name of Witness	Signature of Witness
MICHAEL NASSER	M. Mars

Department of Planning, Industry and Environment & Penrith City Council

601 High Street Penrith NSW 2750

Dear Sir/Madam,

Address: 967-981 (LOT 38) MAMRE RD. KEMPS CREEK 2178.

Reason for submission:

Objection to flood affectation, E2 and Environment and recreation zoning at Kemps Creek.

If we, the owner/owners of the property give our consent to lodge a submission in relation to the flood affection shown in the Cumberland Plain Conservation Plan, Aerotropolis SEPP and the Western Sydney Employment SEPP.

Yours Faithfully,

Name of land owner	Signature of land owner		
JOHN PAPANDONY	Al		
LOT 38 in D.P. 258414			
Name of Witness	Signature of Witness		
ANDREAS GEORGIDS	Andrews Georgia a		
1/223 Solvania Rd MIRANDA NSW			

Date: 7th October, 2020

Department of Planning, Industry and Environment

& Penrith City Council 601 High Street Penrith NSW 2750

Dear Sir/Madam,

Address: (983 Marere Road Kemps Creek) Lot 39

Reason for submission:

Objection to flood affectation, E2 and Environment and recreation zoning at Kemps Creek.

I/we, the owner/owners of the property give our consent to lodge a submission in relation to the flood affection shown in the Cumberland Plain Conservation Plan, Aerotropolis SEPP and the Western Sydney Employment SEPP.

Yours Faithfully,

Name of land owner	Signature of land owner
LANCE LAGUDI	hlagesti
Name of Witness	Signature of Witness
ate:	



Level 3 101 Sussex Street Sydney NSW 2000 t: (02) 9259 3800

8 October 2020 Our Reference: 20SYD - 17365

Tier Architects Email: <u>Nicholas@tierarchitects.com.au</u>

Attention: Nicholas Nasser

Dear Nicholas,

871-883 Mamre Road, Kemps Creek, Review of Draft Cumberland Plain Conservation Plan

Eco Logical Australia (ELA) was engaged to undertake the following tasks to assist your consideration of the draft Cumberland Plain Conservation Plan (CPCP):

- literature review to understand what the site has been mapped as in the draft CPCP
- site visit to validate vegetation communities
- provide recommendations for changes if field survey confirms the draft CPCP is based on incorrect information.

The following sections provide detailed responses on the above. In summary the vegetation on site was similar to that mapped in the draft CPCP. The assessment report for the draft CPCP used terms such as 'intact, thinned, isolated paddock trees and derived native grassland' to describe the vegetation condition. Much of the vegetation on site did not easily fit into these categories as the growth forms were quite unusual compared to typical vegetation communities in western Sydney – presumably due to the historical clearing and grazing regime of the study area. In general, occurrences of Swamp Oak Flood Plain Forest were in low condition.

ELA understands that the client is seeking to determine if any parts of the site have lower biodiversity values that may justify an alternative land use. Most of the study area is dominated by market gardens or exotic grasses which are considered of low biodiversity value and there may be a reasonable case for seeking an alternative land use. Narrow fringes of native vegetation in the study area along Kemps Creek and South Creek's existing riparian corridors were identified as an Endangered Ecological Community or habitat for threatened species and therefore meet the criteria that the draft CPCP used for identifying areas to be 'avoided' (i.e. conserved).

The proponent may have grounds for seeking an amendment to the land categorised as non-certified for biodiversity values due to the limited biodiversity value and recovery potential.

Please do not hesitate to contact me to discuss the contents of this letter.

Regards,

Aran

Rebecca Ben-haim Environmental Consultant

02 9259 3745

1. Methods

1.1 Literature and Database Review

A desktop review of the following sources was conducted:

- Flora and fauna database searches, BioNet (Atlas of NSW Wildlife) database search (5 km) for threatened species, populations and migratory species listed under the NSW *Biodiversity Conservation Act 2016* (BC Act) and Protected Matters Search Tool for species listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)
- Fisheries Spatial Portal and threatened species distribution maps (Riches et al, 2016)
- Aerial mapping and vegetation mapping, to assess the extent of vegetation including mapped threatened ecological communities (TECs) listed under the BC or EPBC Act
- Desktop assessment utilising aerial photographs, topographical maps and GIS data systems
- Draft CPCP, including biodiversity overlays.

1.2 Field Survey

ELA ecologists Claire Wheeler and Carolina Mora undertook a rapid field survey on 6 October 2020. The field survey undertook the following tasks:

- Validating the extent and quality of vegetation and existing vegetation mapping
- Identifying the presence of threatened species/populations or whether potential habitat for these species/populations is present
- Any other potential ecological values such as regionally or locally significant flora and fauna, including aquatic and riparian values.

2. Results

2.1 Vegetation Communities

Most of the vegetation within the study area consisted of exotic pasture grasses impacted by long term grazing (Figure 1). Dominant species include *Nassella neesiana* (Chilean Needlegrass), *Lolium perenne* (Perennial Ryegrass) and *Eragrostis curvula* (African Lovegrass). Other dominant weed species include *Senecio madagascariensis* (Fireweed), *Cirsium vulgare* (Spear Thistle) and *Solanum linnaeanum* (Apple of Sodom). These areas of vegetation did not conform to any native vegetation communities.

Native vegetation was limited to small, scattered occurrences of Swamp Oak Floodplain Forest (Figure 2, Figure 3). Swamp Oak Floodplain Forest of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions is listed as an Endangered Ecological Community under the NSW BC Act and Commonwealth EPBC Act. Occurrences of Swamp Oak Floodplain Forest within the study area were characterised by limited areas where *Casuarina glauca* (Swamp Oak) and *Bursaria spinosa* (Blackthorn) were regenerating along the large dam, which forms part of Kemps Creek, and on the small island within the dam. Some regeneration of *Casuarina glauca* (Swamp Oak) and *Acacia parramattensis* (Parramatta Wattle) was also present along the banks of South Creek. Ground cover in these areas was dominated by exotic species, however creek edges and a wet soak near south creek also included native species *Carex appressa* (Tall Sedge), *Typha orientalis* (Cumbungi) and *Ludwigia peploides* (Water Primrose).

Vegetation	Plant Community Type Code	BC Act	EPBC Act	Area	SAII Candidate	Percent Cleared
Community	and Name	Status	Status	(ha)	(Y/N)	of original extent
Swamp Oak Floodplain Forest	PCT 1234: Swamp Oak swamp forest fringing estuaries, Sydney Basin Bioregion and South East Corner Bioregion (Estuarine Swamp Oak Forest)	Ε	Ε	0.88	No	90%

Table 1: Vegetation communities identified within the study area

E = Endangered



Figure 1: Exotic pasture grasses present within the study area



Figure 2: Swamp Oak Floodplain Forest along Kemps Creek (left) and South Creek (right)



Figure 3: Vegetation Communities within the study area (ELA 2020)

2.2 Threatened Species and Habitat

No threatened flora species or habitat features suitable for threatened flora species were identified within the study area during survey.

No threatened fauna species were identified within the study area during survey. A list of threatened fauna species with the potential to occur within the study area was compiled based on habitat features identified within the subject site during field survey and BioNet (Atlas of NSW Wildlife) database records for threatened species within 5 km of the study area. These species, and the habitat features relevant to them, are presented in Table 2.

No threatened species have previously been recorded within the study area (Figure 4).

Scientific name	Common name	BC Act Status	EPBC Act Status	Habitat features present within subject site	BioNet records
Apus pacificus	Fork-tailed Swift	-	М	Open farmland	2
Calidris acuminata	Sharp-tailed Sandpiper	-	М	Dam and South Creek	1
Gallinago hardwickii	Latham's Snipe	-	М	Dam and South Creek	22
Myotis macropus	Southern Myotis	V	-	Dam and South Creek	16
Rostratula australis	Australian Painted Snipe	E	E	Dam and South Creek	1
Stictonetta naevosa	Freckled Duck	V	-	Dam and South Creek	1
Tringa nebularia	Common Greenshank	-	М	Dam and South Creek	1

Table 2: Threatened fauna species with the potential to occur in the subject site

V = Vulnerable, E = Endangered, M = Migratory, - = Not Listed.



Figure 4: BioNet Atlas records within 5 km of the study area

2.3 Watercourses and Riparian Habitat

There are two mapped watercourses within the study area: Kemps Creek, a 4th order watercourse and South Creek, a 6th order watercourse, within the Hawkesbury Nepean Catchment (Figure 11). Both of these watercourses are mapped as Key Fish Habitat (KFH) by NSW Fisheries and would be considered as 'rivers' under the *Water Management Act 2000* (WM Act) as they had defined channel beds and banks.

A review of the Fisheries Spatial Portal found that DPI Fisheries have assigned a Freshwater Fish Community Status of 'fair' to both South Creek and Kemps Creek. This status was developed to spatially represent the status of fish communities across NSW to provide support for strategic planning.

Threatened species searches identified four aquatic species listed under the *Fisheries Management Act 1994* (FM Act) and EPBC Act with potential to be found within the study area: *Archaeophya adamsi* (Adams Emerald Dragonfly), *Maccullochella peelii* (Murray Cod), *Macquaria australasica* (Macquarie Perch) and *Prototroctes maraena* (Australian Grayling). As there are no records of these species within the South Creek catchment and a lack of suitable habitat on site, it is unlikely these species would be found within the site.

The location of the mapped Kemps Creek tributary within the study area was in the middle of a large dam (Figure 5) that extended to the north and south beyond the study area. The water in the dam was very turbid and many large *Cyprinus carpio* (Carp) were observed. This species is a pest species which destroys bottom-feeding habitats. Emergent macrophytes were observed on the edges of the dam, including *Typha orientalis* (Cumbungi), *Ludwigia peploides* (Water Primrose) and *Persicaria* sp. A few tree species were growing around the edges of the dam including *Casuarina glauca, Bursaria spinosa* and *Salix fragilis* (Crack Willow). There were a number of islands within the dam that were unable to be accessed, however the vegetation on this island appeared to be providing good habitat for water/wetland birds including *Cygnus atratus* (Black Swan) and *Porpyrio porphyrio* (Purple Swamphen).

Downstream of the large dam, Kemps Creek was a defined channel (Figure 6), with a constant flow as the result of a pipe installed by WaterNSW, bringing water from the upstream dam to alleviate salinity within the creekline.



Figure 5: Location of mapped Kemps Creek within the study area, looking south



Figure 6: Kemps Creek downstream of the study area, looking north.

Near the western extent of the property, South Creek passed through the site, flowing north west. Within the site, South Creek was slow flowing, approximately 10 m wide with turbid flow. A small number of macrophyte species were growing on the edge of the channel, including *Typha orientalis, Ludwigia peploides, Azolla pinnata* (Ferny Azolla) and *Lemna disperma*. The creek banks sloped away relatively gradually from the channel; however, erosion of the right bank was observed downstream. Vegetation within the riparian zone was limited to exotic pasture grasses and occasional tree species (Figure 7 and Figure 8)





Figure 7: South Creek near the western end of the study area, looking south

Figure 8: South Creek near the western extent of the study area, looking north

Within the western part of the site, there were a few small wet soak areas where standing water was observed and aquatic macrophytes growing (Figure 9 and Figure 10). These were not connected to any of the mapped waterways within the site and the landowner explained that these areas were once part of a large farm dam. Flora species observed within these areas included *Juncus usitatus, Ludwigia peploides* and *Cycnogeton procerum* (Water Ribbons).



Figure 9: Wet depression in western part of site, looking west



Figure 10: Wet depression near southern corner of site, looking south





2.4 Draft Cumberland Plain Conservation Plan

The draft CPCP was released for public comment between 26 August and the 9 October 2020. The plan intends to provide certainty regarding biodiversity impacts and conservation outcomes within the study area.

2.4.1 Vegetation Communities

The draft CPCP maps the site as containing Swamp Oak Floodplain Forest around the fringes of the existing dam associated with Kemps Creek (Figure 12), which is listed as an Endangered Ecological Community under both the NSW BC Act and Commonwealth EPBC Act. This vegetation is also mapped as 'Native Vegetation 'under the draft CPCP.

2.4.2 Land Category

The department used avoidance criteria to identify areas of high biodiversity value to avoid development and to designate urban capable land to be biodiversity certified in each nominated area. The study area contains the following land categories (Figure 13):

- Certified lands designated for urban development.
- Excluded areas either as it is protected land, Commonwealth land or land already developed.
- Non-certified lands due to existing high biodiversity values.
- Non-certified lands due to riparian and watercourse values.

The implication of the draft CPCP is that the non-certified lands would not be available for development.

2.4.3 Intended Effect

The non-certified lands are also intended to be zoned Environmental Conservation (Figure 14).



Figure 12 Vegetation Mapping from the CPCP Interactive Map accessed 6 October 2020 showing fringing Swamp Oak Floodplain Forest (purple)



Figure 13 Land Category from CPCP interactive map accessed 6 October 2020 showing certified lands (red), excluded areas (yellow), non-certified lands – avoided for other (blue) and non-certified lands – avoided for biodiversity (green)



Figure 14 Existing Conservation Areas (solid orange) and Proposed Conservation Areas (orange hatching) from the CPCP interactive map accessed 6 October 2020

3. Analysis Against Draft Cumberland Plain Conservation Plan

Appendix B of the draft CPCP details the 'avoidance criteria' of the plan, which are essentially the criteria for what was considered to have sufficient conservation value to warrant its 'avoidance' or protection. Table 3 below compares these criteria to what ELA found on site.

Appendix B of the draft CPCP also describes what flexibility there is for changing the maps in the draft CPCP.

Box 1 Avoidance criteria	ELA assessment
(a) TECs and PCTs	
1. Critically endangered ecological communities (CEECs) or PCTs ≥90% cleared in large patches and in good condition; or serious and irreversible impact (SAII) entities (TECs)	 Occurrences of Swamp Oak Floodplain Forest did not meet the criteria for the following reasons: The ecological community is listed as an Endangered Ecological Community, not a Critically Endangered Ecological Community. 90% of PCT 1234 has been cleared, however the occurrences of this PCT within the study area are not large (scattered degraded patched equating to a total of 0.88 ha) or in good condition (lack of native groundcover and limited mid-storey and canopy diversity and cover). Swamp Oak Floodplain Forest is not a SAII candidate entity.
2. EECs or PCTs \geq 70% to <90% cleared in large patches and in good condition	90% of PCT 1234 has been cleared, however the occurrences of this PCT within the study area are not large (0.88 ha total) or in good condition.
3. PCTs ${\geq}50\%$ to ${<}70\%$ cleared in large patches and in good condition	N/A
4. PCTs <50% cleared in large patches and in good condition	N/A
(b) Threatened species	
1. Known habitat ^A for critically endangered species, SAII entities (species), Saving Our Species (SOS) species polygons (where species-specific habitat is present), or large populations of threatened species (relative to typical size for that species); or known primary koala habitat	ELA did not undertake threatened species survey, however there are no BioNet records for threatened species within the study area. No threatened flora species or habitat features suitable for threatened flora species were identified within the study area during survey. No threatened fauna species were identified within the study area during survey and no Critically Endangered species are thought to potentially occur (Table 2). The study area lacks Eucalypt species and is therefore unlikely to contain any koala habitat.
2. Known habitat ^A for endangered species or known secondary koala habitat	ELA did not undertake threatened species survey, however there are no BioNet records for threatened species within the study area.

Table 3: Assessment against draft CPCP Avoidance Criteria

Box 1 Avoidance criteria	ELA assessment
	No threatened flora species or habitat features suitable for threatened flora species were identified within the study area during survey. No threatened fauna species were identified within the study area during survey. Some Endangered species may have the potential to occur due to existing habitat features such as Kemps Creek and South Creek (Table 2). The study area lacks Eucalypt species and is therefore unlikely to contain any koala habitat.
3. Known habitat^ for vulnerable species	ELA did not undertake threatened species survey, however there are no BioNet records for threatened species within the study area.
	No threatened flora species or habitat features suitable for threatened flora species were identified within the study area during survey. No threatened fauna species were identified within the study area during survey. Some Vulnerable species may have the potential to occur due to existing habitat features such as Kemps Creek and South Creek (Table 2). The study area lacks Eucalypt species and is therefore
	unlikely to contain any koala habitat.
(c) Ecological processes	
 Land identified as priority conservation lands, BIO Map core areas, or important local habitat corridors for key species including koalas 	 The following databases were reviewed: The Biodiversity Investment Opportunities Map, including core areas and regional biodiversity corridors (OEH, 2015); and Cumberland Plain Priority Conservation Lands DPIE, 2019).
	The study area is not identified as priority conservation land or a biodiversity investment opportunities core area, however, is mapped as a regional biodiversity corridor (Figure 15) on the BioMap. Both Kemps Creek and South Creek would be utilised as a local habitat corridor for many native species.
	The study area lacks Eucalypt species and is therefore not considered koala habitat.
2. Land identified as BIO Map regional corridors or as areas that provide significant opportunities to support important local habitat corridors for key species, including koalas	As above.
3. Areas identified on the Biodiversity Values Map	Both Kemps Creek and South Creek, and the associated riparian buffers within the study area are identified on the Biodiversity Values Map, when accessed 7 October 2020 (Figure 16).
Boundary rationalisation	
Consider removing:	
Small nodes or isolated patches of features identified in (a), (b) or (c) if future land use change will lead to significant edge effects	Land within the study area, east of Kemps Creek is categorised as certified urban capable land and will likely be developed in the future. So, too is land to the

Box 1 Avoidance criteria	ELA assessment
and low viability over the timeframe identified, and there is no feasible opportunity to enhance connectivity and extent.	south of the study area, which is categorised as both non-certified Western Sydney Aerotropolis and certified urban capable land. Lands categorised as non- certified for biodiversity values within the study area and directly north may improve habitat connectivity however, within the study area, lack native vegetation and consist of exotic pasture and therefore, have low recovery potential. Both Kemps Creek and South Creek and associated riparian corridors contain biodiversity value and should be protected.
Corridors that do not link important areas of habitat, including 'blind corridors'. ^ As indicated by BioNet records or recent survey data.	Dependent on whether the areas categorised as non- certified for biodiversity values within the study area and directly north are revegetated, this may continue to stay a blind corridor. Both Kemps Creek and South Creek and associated riparian corridors will remain as important habitat corridors.



Figure 15: Biodiversity Investments Opportunity Map within the study area



Figure 16: Land mapped on the Biodiversity Values Map within the study area (accessed 7 October 2020)

During public exhibition, landholders may seek to have the urban capable boundary amended prior to the finalisation of the draft CPCP. The urban capable land boundary will only be updated if the criteria in Table 4 can be proven.

Table 4: Criteria required to amend urban capable boundary

Draft CPCP Criteria	ELA recommendation
Creeks and water features are mapped incorrectly, in which case they must be updated to match the topography and vegetation indicating movement of water through the landscape	The draft CPCP mapped both Kemps Creek and South Creek as watercourses and riparian buffers. Based on field validation, the mapping does not appear to be incorrect.
On-site data collected by accredited assessors supports updating the boundaries	Field survey validated the native vegetation on site, which is limited to fringing vegetation around Kemps Creek and South Creek. The area currently categorised as non-certified for biodiversity values contains exotic pasture grasses, with limited recovery potential.
There is no net change to impact of threatened ecological communities, SAII entities or vegetation in an intact condition state	If the land categorised as non-certified for riparian values remains the same, all of the fringing Swamp Oak Floodplain Forest around Kemps Creek and South Creek will still remain protected resulting in no net change to impacts.
There is no impact on an identified landscape corridor	This term is not described or mapped in the draft CPCP.
Authorised clearing has occurred. (The relevant Council will review cleared areas and determine if the clearing was permitted. The urban capable land boundary will not be changed if the clearing was unauthorised.)	ELA is not aware of any recent clearing on the property.

4. Conclusion

In summary the vegetation on site was similar to that mapped in the draft CPCP. However, the majority of the area proposed for 'Non-certified – Avoided for Biodiversity' does not currently contain significant biodiversity values. This area generally had a large on-line farm dam and exotic grasses. If retention of existing biodiversity values was the intention of the draft CPCP, a reasonable case for refining the draft CPCP map in this location could be made.

The 'Non-certified – Avoided for Biodiversity' area boundary however seems to more closely reflect the BioMap regional corridor. Achieving biodiversity outcomes across this area would be expensive as recreating terrestrial habitat from exotic grasslands is very labour and material intensive. Removing the farm dam and creating a narrower but more natural channel (potentially with associated wetlands) with rehabilitated native vegetation riparian species, consistent with Swamp Oak Floodplain Forest, may provide a more cost-effective way to achieve the intended biodiversity corridor.