MP07_0026 MOD 7
Our ref: DOC22/566965-19

Senior Team Leader, Industry Key Sites
Planning and Assessment Group
4PSQ, 12 Darcy Street
Locked Bag 5022
PARRAMATTA NSW 2124

Attention: Ms Michelle Niles

Dear Ms Clysdale

RE: Epiq Estate (Pacific Pines) Lennox Head (MP07_0026 MOD 7)

Thank you for your referral dated 8 July 2022 about the Modification 7 for the Epiq Estate (Pacific Pines) Residential Subdivision at Lennox Head seeking comments from the Biodiversity and Conservation Division (BCD) of the Biodiversity, Conservation and Science Directorate in the Environment and Heritage Group of the Department of Planning and Environment. I appreciate the opportunity to provide input.

The BCD was formerly part of the Office of Environment and Heritage, but now forms part of a Group that has responsibilities relating to biodiversity (including threatened species and ecological communities, or their habitats), National Parks and Wildlife Service estate, flooding, coastal and estuary matters.

We have reviewed the documents supplied and advise that several issues are apparent with the assessments for bushfire and stormwater management as they impact on biodiversity values. These issues have been previously identified and have not been satisfactorily addressed in the information provided as discussed in detail in **Attachment 1** to this letter.

In summary, the BCD recommends that:

1. To ensure there will be no requirement for clearing for bushfire asset protection in the CMZ, the proponent should provide an assessment by a qualified bushfire expert that:

    a) assesses the bushfire risks arising from the proposed infill planting in the Conservation Management Zone (CMZ) in accordance with *Planning for Bush Fire Protection 2019*.

    b) considers the extent and location of the proposed planting, the future composition of vegetation communities (i.e. rainforest and swamp oak/swamp sclerophyll forest) and the effective slope.

2. To address the stormwater management issues the proponent should provide a Stormwater Assessment and Management Plan that:

    a) contains a detailed assessment of the Superlot 5 development.

    b) identifies appropriate Water Sensitive Urban Design measures such as bio-retention basins and infiltration devices outside of the CMZ to capture and treat stormwater runoff

from impervious surfaces within Superlot 5 prior to discharge into the CMZ and freshwater wetland.

3. The ecological indirect impacts on the CMZ need to be adequately assessed. The assessment should consider the recent vegetation monitoring results and demonstrate that the wetland community and threatened plant communities in the CMZ will not be adversely impacted and will be sufficiently buffered from the impacts of the development.

4. The proponent should demonstrate how Conditions B1(6) and C17 for a Water Management Plan that addresses the hydrological regime of the freshwater wetlands and associated threatened species will be maintained through the life of the project have been met.

5. The proponent should clarify the status of the Stormwater Concept Plan Illustration C7 and ensure the correct and current one is included in all relevant revised documentation.

6. To address inconsistencies in documents provided the proponent should explain and correct differences in the proposed stormwater treatments or revise these as necessary following the above assessments.

The revised documents and required assessments should be provided to the BCD for further review and comment. If you have any questions about this advice, please do not hesitate to contact Ms Rachel Lonie, Senior Conservation Planning Officer, at rachel.lonie@environment.nsw.gov.au or 6650 7130.

Yours sincerely

19 July 2022

DON OWNER
A/Senior Team Leader Planning, North East Branch
Biodiversity and Conservation

Enclosure: Detailed BCD Comments – Modification 7 for the Epiq Estate (Pacific Pines) Residential Subdivision at Lennox Head

cc: Mr Ian Gaskell, Ballina Shire Council

Attachment 1: Detailed BCD Comments – Modification 7 for the Epiq Estate (Pacific Pines) Residential Subdivision at Lennox Head

The Biodiversity and Conservation Division (BCD) has reviewed the following documents under the Response to Submissions section on the Major Projects website:

- *8 Feb 2022 Updated Subdivision Design and Additional Information*
- *15 June 2022 Additional Information*
- *7 July 2022_S4.55 Assessment.*

The following comments are provided.

1. Perimeter road versus access trail

The modified plan now incorporates a 20m buffer zone from the rear of the residential lots to the Conservation Management Zone (CMZ). This satisfies Condition B10 but will not be able to be fully vegetated due to the requirement to be managed as a bushfire asset protection (APZ) zone.

The *15 June 2022 Additional Information* response states the 20m buffer will contain an access track and the land will be dedicated to Ballina Shire Council. It will be a matter for the council to determine if they are willing to accept this land dedication and the ongoing maintenance requirements.

2. Bushfire assessment

The BCD has repeatedly raised the resolution of the proposed infill planting in the CMZ to replace the failed restoration areas of Hairy Joint Grass, and whether this has been appropriately assessed in the Bushfire Assessment Report. Our issue has been that there should be no requirement to clear or manage the vegetation within the CMZ to meet APZ requirements. This matter still requires clarification.

The letter from Bushfire Certifiers dated 7 February 2022 states "*The assessment assumes there are no changes to the vegetation classifications described in the previous bushfire report prepared by this office*." It appears from this statement that the bushfire assessment has not been revised to consider this issue. A further letter from Bushfire Certifiers dated 6 June 2022 provided in the 15 June 2020 Response to Submissions and Additional Information response only addresses the question of whether the 20m buffer including the 5m landscape strip will alter the bushfire threat.

Therefore, our previous advice dated 30 October 2020 is relevant and is repeated below:

> "The amended Bushfire Report dated 08/2018 considered the advice that only a small area in the southwest of the CMZ would be revegetated with rainforest vegetation. Table 1 in the Bushfire Report shows the assessment is based on the dominant vegetation formation being freshwater wetland with the exception in the south west that was both freshwater wetland and remnant rainforest.
>
> However, the recommendation by GeoLINK in their letter dated 26 August 2020 was to "*establish rainforest and swamp oak/ swamp sclerophyll forest in areas that are not suitable as freshwater wetland or HJG habitat*." Under the Planning for Bushfire Protection 2006 guidelines coastal swamp forests require a 20m asset protection zone compared to 10m for rainforest or freshwater wetland.
>
> The planting of swamp oak / swamp sclerophyll forest in the infill areas does not appear to have been assessed for bushfire purposes to date."

While the revised layout now does have a 20m buffer from the CMZ to the residential boundary to be managed as an APZ, and this may provide the required distance to the proposed infill vegetation, we note that 20m is only applicable if the effective slope is upslope or flat according to the *Planning for Bush Fire Protection 2019* guidelines. The distance would be greater if the effective slope is for example $0^0 > -5^0$. This issue remains unaddressed.

BCD Recommendations

1. To ensure there will be no requirement for clearing for bushfire asset protection in the CMZ, the proponent should provide an assessment by a qualified bushfire expert that assesses the bushfire risks arising from the proposed infill planting in the Conservation Management Zone (CMZ) in accordance with *Planning for Bush Fire Protection 2019.*

2. The bushfire assessment should consider the extent and location of the proposed planting, the future composition of vegetation communities (i.e. rainforest and swamp oak/swamp sclerophyll forest) and the effective slope.

3. Stormwater management

Stormwater Assessment and Management Plan

The BCD has previously requested the proponent assess the potential impacts to the wetlands and other vegetation communities of water flow that will be directed to the CMZ. The *15 June 2022 Additional Information* refers to a previously approved Stormwater Master Plan for the entire Epiq estate by Gilbert and Sutherland dated July 2014. It appears there has been no detailed stormwater management plan done for Superlot 5.

As the BCD has previously commented, the *Revised Stormwater Assessment & Management Plan Pacific Pines Estate* (SWMP) prepared for Lend Lease (July 2014) contains conceptual details for the entire site as required by Condition B6 only and a detailed assessment for Stage 1A only. The detailed assessment for Stage 1A required two bioretention basins to intercept and treat stormwater before it is discharged into the CMZ. We consider that a similar detailed assessment and appropriate stormwater treatment measures should be provided for the Superlot 5 development.

BCD Recommendations

3. To address the stormwater management issues the proponent should provide a Stormwater Assessment and Management Plan that contains a detailed assessment of the Superlot 5 development.

4. The Stormwater Assessment and Management Plan should identify appropriate Water Sensitive Urban Design measures such as bio-retention basins and infiltration devices outside of the CMZ to capture and treat stormwater runoff from impervious surfaces within Superlot 5 prior to discharge into the CMZ and freshwater wetland.

Ecological assessment of the impacts on wetland and threatened species habitat

The proposal is to now divert stormwater from the north west corner of the development under Montwood Drive and away from the CMZ. However, there are no provisions to treat the remainder of the stormwater from Superlot 5. The advice justifies this by stating freshwater wetlands are dynamic ecosystems that have generally remained constant since 2016. However, this claim is not supported by the most recent Vegetation Monitoring Report (April 2021), which shows an overall reduction of Hairy Joint Grass (45 % decline since baseline monitoring in 2011) and Square-stemmed Spike-rush (54% decline in 2021 since baseline monitoring in 2011) in the CMZ.

The *15 June 2022 Additional Information* states it is not "*anticipated that the designed stormwater system would result in permanently higher water levels or prolonged inundation that would significantly adversely affect vegetation within the conservation zone. It is not anticipated that the*

composition of native species would be permanently altered or that the freshwater wetland would extend beyond its natural dynamic range". No supporting evidence is provided for these assumptions and there has been no satisfactory explanation for the significant decline in the threatened plant communities as part of the ongoing monitoring program.

We reiterate our issue that the ecological impacts from stormwater from the Superlot 5 need to be adequately assessed. This should consider the recent CMZ vegetation monitoring results.

BCD Recommendation

5. The ecological indirect impacts on the CMZ need to be adequately assessed. The assessment should consider the recent vegetation monitoring results and demonstrate that the wetland community and threatened plant communities in the CMZ will not be adversely impacted and will be sufficiently buffered from the impacts of the development.

Concept Plan consent conditions

The MOD 4 Director-General's *Environmental Assessment Report* considered hydrological impacts on the CMZ. As it states the maintenance of the existing pre-development hydrological regime is critical to the viability of the on-site freshwater wetland ecosystem and on-site offsetting arrangements agreed to by the department as part of the second modification to the approval.

The report referred to the concept plan approval requiring all future applications for development on the site to include a detailed stormwater management plan. It proposed as a further measure to ensure the ongoing health of the wetland to insert a new requirement for all future applications on the site that required the proponent to review and update a revised Water Management Plan (WMP) with all future development applications for the site.

The report stated "The department is of the opinion that this will also more appropriately address Term B1(6) of the concept plan approval which requires an EMP that, amongst other matters, details the methods to be used to protect all threatened flora and fauna habitat and EECs throughout the life of the project . This includes demonstrating that the post-development hydrological regime mimics that of the existing natural state as changes in this regime would potentially impact on the threatened flora and fauna habitat and EECs in the conservation zone." (page 18)

The MOD 4 approval amended the original Concept Plan approval conditions as follows:

7) Immediately after term B1(6), inserting the words:

" including a Water Management Plan (WMP) that addresses the manner in which the hydrological regime of the Freshwater Wetlands EEC and associated threatened species will be maintained throughout the life of the project. The WMP is to include, but not be limited to:

a. An assessment of the predevelopment hydrological regime including surface and groundwater inflows and outflows;
b. Measures to be implemented to ensure the pre-development hydrological regime is maintained;
c. Mapping of the extent of the seepage areas and measures to ensure their ongoing protection; and
d. Detailed design, installation and maintenance methods of the proposed weirs and other infrastructure identified in Illustration C7 dated November 2012 to ensure the maintenance of the existing hydrological regime.

16) Inserting a new term C17:

C17 Water Management Plan

Future applications for the development require the submission of an updated Water Management Plan, prepared by a suitably qualified person(s) that ensures the hydrological regime of the Freshwater Wetlands EEC is maintained and associated threatened species will be protected throughout the life of the project.

The BCD questions whether the consent conditions for a Water Management Plan have been addressed for Superlot 5.

BCD Recommendation

6. The proponent should demonstrate how Conditions B1(6) and C17 for a Water Management Plan that addresses how the hydrological regime of the freshwater wetlands and associated threatened species will be maintained through the life of the project have been met.

<u>Differences in Stormwater Concept Plans</u>

We understand the approved Stormwater Concept Plan (Illustration C7) included directing stormwater from the Superlot 5 to the CMZ. However, this required Water Sensitive Urban Design (WSUD) systems to treat and attenuate the stormwater before entering the CMZ.

The *June 15 Additional Information* includes a different C7- Stormwater Concept Plan (REF F) to the one that was part of the MOD 4 approval (see comparison in Figure 1 below). We question if this is the correct and currently approved Stormwater Concept Plan (SCP) or if the MOD 5 and MOD 6 SCPs were incorrect as they reverted to an earlier version of the SCP, noting REF F describes the incorrect layout for Superlot 5.

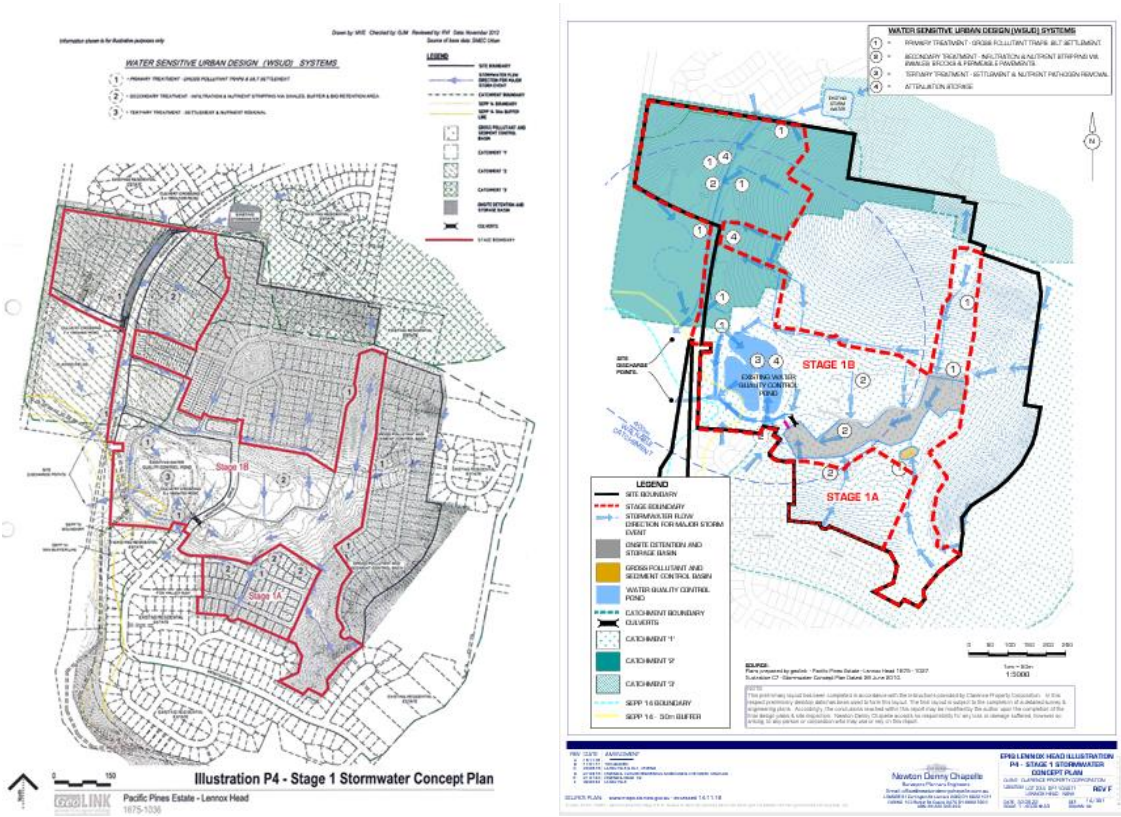

Figure 1. Stormwater Concept Plan in the Approved Modified Project Plan for MOD 4 compared to the one labelled P4- Stage 1 Stormwater Concept Plan REV F' in the 15 June Additional Information.

BCD Recommendation

7. The proponent should clarify the status of the Stormwater Concept Plan Illustration C7 and ensure the correct and current one is included in all relevant revised documentation.

WSUD measures

A further difference in the SCP versions is that the MOD 4 SCP version includes bioretention basins as one of the WSUD systems. The other measures described in the SCP are infiltration and nutrient stripping via swales, brooks and permeable pavements. No details have been provided of any WSUD measures for Superlot 5 in the current documentation.

It appears from the discussion under point 6 in Attachment 2 in the *15 June 2022 Additional Information* that the proponent relies on the following to demonstrate that Condition B6 will be satisfied:

- Reducing the density of the development will increase the pervious areas and reduce the pollutant and nutrient loads discharged to the CMZ.
- Diverting over half the site around the CMZ (North West and South West Catchments)
- Increasing the vegetated buffer between the edge of the development and the CMZ
- Outlet protection has been provided for all the outlets into the CMZ. This will slow and dissipate piped stormwater flows prior to them entering the CMZ.

While we support the above measures, we again state the need for WSUD systems for Superlot 5 to treat stormwater before it is discharged from the site. We also note that the diversion of stormwater is not for “over half of the site” as seen in the diagram (Figure 2) below:

Figure 2. Plan in the *June 15 Additional Information* showing area in the North West corner of the current site where stormwater will be directed under Montwood Drive (purple highlight).

BCD Recommendations

8. As above appropriate Water Sensitive Urban Design measures such as bio-retention basins and infiltration devices outside of the CMZ should be provided to capture and treat stormwater runoff from impervious surfaces within Superlot 5 prior to discharge into the CMZ and freshwater wetland.

Inconsistencies in documentation

Our previous advice dated 30 October 2020 referenced further advice provided by GeoLink (Ref No:1675-1655 dated 29 October 2020). The information provided by the proponent’s stormwater

consultant demonstrated that it was not possible to provide stormwater detention basins along the southern edge of the development where it adjoins the CMZ due to the site levels. Instead, it was proposed to include two HumeCeptor stormwater quality treatment units to treat stormwater for the north-east and south-west catchments (ref: Civil Services Plan Dwg No. 14351-S5-DA-CI-21) (see Figure 3 below). This outcome was the result of the onsite meeting in October 2020 and detailed discussions with the stormwater consultant.

Figure 3. Extracts from Civil Services Plan Dwg No. 14351-S5-DA-CI-21 prepared by Newton Denny Chapelle for Clarence Property, HumeCeptor locations circled in blue.

However, the Site Plan in Attachment 2 in *8 Feb 2022 Updated Subdivision Design and Additional Information* (DWG 140351-S5-DA-AA-01) does not show the HumiCeptors and now depicts three discharge points that stop just short of the CMZ (see Figure 4 below). We question these discrepancies.

Figure 4. Extracts from Site Plan DWG 140351-S5-DA-AA-01 prepared by NDC dated 15/11/2021. On left hand side there is no HumiCeptor shown, on the right hand side three locations are identified where stormwater will be discharged in the CMZ (circled in red) and no HumiCeptor is shown.

Therefore, the information provided in this latest Response to Submissions is not consistent with previous advice and does not provide sufficient details regarding the assessment and design of stormwater management measures for Superlot 5.

BCD Recommendation

9. To address inconsistencies in documents provided the proponent should explain and correct differences in the proposed stormwater treatments or revise these as necessary following the above assessments.