

Attachment A : Details of additional information required.

1. Clarification of onsite vegetation removal operation.

During the site inspection it was revealed that Forest Corporation NSW would remove harvestable timber from the area prior to construction/ inundation and the remaining vegetation would be cleared, this information was not included in the BAR.

OEH has sought advice from the Environment Protection Authority (EPA) who regulate forestry operations through the Integrated Forestry Operations Approval (IFOA). The EPA has advised this clearing is outside the scope of the IFOA. Removal of timber from exclusion zones (including riparian buffers) requires a separate Environmental Impact Assessment.

If the EIS for the Eurobodalla Southern Storage project is to include the impacts of the forestry/ vegetation removal operation all relevant details of the operation need to be described.

Detail is required on how the vegetation will be accessed and removed.

- The location of any new roads, snig or machinery access tracks should be mapped in the boundary of the development foot print (FBA 8.3.3)
- The location of any vegetation that will be removed for log dumps, vehicle loading, parking or other purposes should be mapped in the boundary of the development footprint (FBA 8.3.3)

Clarification of vegetation removal/ development footprint.

- Further detail is required regarding the area of vegetation removal within the mapped flood level.
- Details are required about disturbance at the edge of the flood level (will trees be felled into or outside of the flood level? – will felling machinery operate around the outside of the upper flood level? Will there be a disturbance, or protection buffer around the line of the mapped flood level.
- Details should be provided and a disturbance distance buffer for 'inadvertent' impacts (tree felling, trampling etc) mapped into the development footprint if necessary (FBA 8.4.1.4)

2. Missing area

The FBA (3.3) requires the assessment of biodiversity values at the development site. The development site crosses an area of approximately 15 ha of private property downstream from the proposed dam wall between the State Forest and the Tuross river pumping station. Despite proposed direct impacts (pipeline, roads and works) and indirect impacts (changed water flows and hydrology), this area was not assessed in the *Biodiversity Assessment Report*.

The field inspection indicated the area is likely to be the endangered ecological community (EEC) *River-Flat Eucalypt Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions*. This EEC has been confirmed at the site by the [EPA \(2016\)](#).

To properly calculate the biodiversity impacts of the proposal this area requires an assessment of the biodiversity values (FBA stage 1), the impacts (FBA stage 2) and the Offset requirements (FBA stage 3) and details of this assessment added to the BAR (FBA s.5).

In particular;

- The area requires a vegetation zone.
- PCT and ecological community described (FBA 5.2.1)
- A minimum of 3 plots are required in the missing area to determine site value (FBA Table 3).
- The area of direct impact in this zone needs to be calculated and mapped.

- Impacts on native vegetation quality (FBA 9.2.4) need to be assessed.
- The development footprint and biodiversity credit requirements needs to be updated.

3. Clarification of area to be cleared

The impact assessment refers to an area of 65.57 Ha to be cleared (BAR 7.2). The development footprint GIS shapefile provided is 97 Ha, not including the area missing (see point 2 above). It is also unclear from the development footprint map (and area cited) if all clearing has been calculated.

Further information is sought on the following:

- Clearing required for machinery access during vegetation clearing and construction phases,
- Clearing required for the road upgrade and realignment of road drainage,
- Clarity on whether the 5m wide clearing around the perimeter for the fence has been mapped in the development footprint.
- The location of soil, log and vegetation stockpiles.

4. Location and number of plots

The Biodiversity Assessment Report does not meet the requirements of the FBA to measure vegetation type and determine site value.

The FBA requires plots to assess the vegetation type and site value. Plots should be located randomly within a vegetation zone accounting for the level of variation in condition (FBA 5.3.2.8). The minimum number of plots for vegetation zones is specified in Table 3 of the FBA, if the vegetation zone is variable, additional plots are required (5.3.2.11). The following actions are necessary to meet FBA requirements;

- Plots are required in the area missing from the assessment on private land (see point 2 above). The minimum number of plots required should be determined by Table 3 of the FBA. Based on the estimated area (15 ha) within the development boundary a minimum of 3 plots are required.
- Vegetation zone 2 requires at a minimum an additional 2 plots to adequately meet FBA requirements. (The zone is 142 Ha, 4 plots are located within the vegetation zone. The minimum plots required by the FBA for a zone that size is 6).
- Vegetation zone 1 requires at a minimum an additional 1 plot to adequately meet FBA requirements. (The zone is 47 Ha and 3 plots are within the vegetation zone. The minimum plots required by the FBA is 4)
- Vegetation zone 1 may require additional plots - 2 out of the 3 plots in zone 1 appear to be close or on the edge of an ecotone (see notes in point 5 below).

5. Classification of Vegetation zones and PCT's

The classification of vegetation zones in the Biodiversity Assessment Report requires clarification about the extent of the zones attributed to the threatened ecological community (TEC) "River-flat Eucalypt Forest on coastal floodplains of the NSW South Coast region including Sydney Basin (south of the Shoalhaven River) and South East Corner bioregions".

The FBA (5.2) requires the assessor to identify and map the distribution of Plant Community Types on the development site. The assessor should review existing data and information relevant to the development site (FBA 5.2.1.3). The EPA (2016) published a detailed *Assessment of River-Flat Eucalypt Forest on Coastal floodplains TEC on NSW Crown Forest Estate*. This assessment confirmed the presence of this EEC at the development site. Appendix G of the EPA report includes a *Field key for identification of River-flat Eucalypt Forest on coastal floodplains of the NSW South Coast region including Sydney Basin (south of the Shoalhaven River) and South East Corner bioregions*.

Following the EPA key; 7 plots on the site fall within the River-flat Eucalypt Forest EEC. Plots 14 (zone 5) and 2,5,8 (zone 4) are within vegetation zones attributed to this EEC. However

plots 1,3 (zone 1) and 4 (zone 3) fall in vegetation zones not attributed to the EEC when the plot data indicates they are the EEC. Plots 1 and 3 appear to be on an ecotone and highlight the problem of insufficient sampling where there is site variability.

To rectify;

- The boundary of zones 1, 3 and 4 should be revised to ensure plots meeting the definition of the EEC are incorporated into the appropriate vegetation zone.
- Additional plots may be required to determine the extent of the EEC in zones 1 and 3.

6. Threatened species

The Southern Myotis appears to be missing from the list of candidate species. The FBA (6.5.1.2) requires the assessor to prepare a list of candidate species by consulting the Threatened Species Profile Database to identify species known from the IBRA subregion and plant community types present on the site. The Southern Myotis meets these criteria in vegetation zone 5 and should be added as a candidate species (site inspection confirmed that zone 5 is highly likely to be habitat for Southern Myotis).

The Biodiversity Assessment Report indicates that threatened species credits are not required for the proposed development because no threatened species (requiring credits) were located during surveys. This conclusion is not supported for the following species (listed in the table below) because the surveys did not adequately sample the species's potential habitat in the development site to determine absence.

Species	PCTs associated with the species	PCTs surveyed in the development area	Number of associated PCTs surveyed
Chefs hat correa	SR 544	SR 609	0/1
East Lynne Midge orchid	SR 643	SR 609	0/1
Tall Knotweed	SR 533	SR 609	0/1
Tangled Bedstraw	SR 608	SR 609	0/1
Southern Myotis	SR 609, 643	SR 533	0/1
Eastern Pygmy Possum	SR643,551,609,533	551, 609	2/4
Giant burrowing frog	SR643, 551,609,533	609, 642	2/4
Koala	SR643,551,609,608,533	533, 609	2/5
Southern Brown Bandicoot	SR643, 609,533		1/3
Stuttering Frog	SR551, 533	609, 643	0/2

Actions required to meet FBA requirements:

- The candidate species list should be reviewed and Southern Myotis added.
- The presence of the above species should be then determined in accordance with 6.5.1.9 of the FBA either;
 - Additional representative survey of the above species habitat should be conducted to determine presence or absence, or
 - Assumed presence
 - Expert report.

7. Clarification of changes/ modifications to the development foot print.

The EIS refers in several places to potential changes during the construction and operational phases that may change the area of impact on biodiversity. It should be noted that the biodiversity offset calculations are based on the final development footprint and BAR. It should be clarified that any changes to the project that change the development footprint or impacts will require a modification and updated credit requirements calculations to reflect the changed impacts.