Q1. First name
Allan

Q2. Last name
Richards

Q3. Phone

Q4. Mobile

Q5. Email

Q6. Postcode

Q7. Country
not answered

Q8. Stakeholder type
Industry group

Q9. Stakeholder type - Other
not answered

Q10. Stakeholder type - Staff
not answered

Q11. Organisation name
Blue Ridge Hardwoods Sawmill

Q12. What is your preferred method of contact?
Email

Q13. Would you like to receive further information and updates on IFOA and forestry matters?
Yes

Q14. Can the EPA make your submission public?
Yes

Q15. Have you previously engaged with the EPA on forestry issues?
No

Q16. What parts of the draft Coastal IFOA are most important to you? Why?
not answered

Q17. What parts of the draft Coastal IFOA do you think have a positive outcome on the management of environmental values or the production of sustainable timber? Why?
not answered
Q18. What parts of the draft Coastal IFOA do you think have a negative outcome on the management of environmental values or the production of sustainable timber? Why?

not answered

Q19. What are your views on the effectiveness of the combination of permanent environmental protections at the regional, landscape and operational scales (multi-scale protection)?

not answered

Q20. In your opinion, would the draft Coastal IFOA be effective in managing environmental values and a sustainable timber industry? Why?

not answered

Q21. General comments

It’s all in the submission

Q22. Attach your supporting documents (Document 1)

Q23. Attach your supporting documents (Document 2)

not answered

Q24. Attach your supporting documents (Document 3)

not answered
Submission surrounding the New Draft Coastal IFOA

1. **Introduction**

The NSW and Regional Forest Agreements were to provide for a comprehensive, adequate & representative reserve system that would provide long term stability for forest based industries. Now the NSW Govt considers the draft Coastal IFOA provides a new balance between maintaining environmental values and wood supply by proposing a multiscale approach to retaining undisturbed habitat across the landscape.

The NSW Govt has lost focus on the objective of State Forests as a land type, which is to supply sawlogs of a particular volume, dimension and quality on a sustainable basis. The new Coastal IFOA prohibits forest operations from further areas of State Forests and restricts harvesting activities in areas supposedly set aside for timber production. Total native forest reservation in the Eden Region is now calculated at 87%, leaving an industry to exist on what remains, which is about 13%. Of those areas that will remain available in the Eden Management Area, 11% is currently sub merchantable. Increased exclusions cannot be absorbed on any pretext of maintaining timber supply as it may have been in the past or as it may be postulated elsewhere in NSW.

The Draft Coastal IFOA, (in the Executive Summary), claims to be able to maintain wood supply and the State Government has committed to the process, claiming “no net change to wood supply” across all regions of the state. The new Landscape approach has the objective to disperse logging operations through time and space and thus reduce its environmental impact, but perversely, the increased area now permanently excluded from logging is contrary to this objective and will concentrate the logging in the remaining much smaller area. For the Eden Management Area more intensive harvesting, shorter rotations and smaller log sizes are inevitable. How this may amount to “no net change to wood supply” for the timber industry at Eden and as future sawlog resource for Blue Ridge Hardwoods, or any other appointed customer, is a mystery which remains unanswered by the EPA, FCNSW, DPI and the NRC.

Blue Ridge Hardwoods is not aware that any attempt has been made to assess the impact of the Draft Coastal IFOA at Eden, on the volume of Large Graded Sawlogs that would be committed to be available on industry on a sustainable basis, under this new regulation and its additional exclusions. Testing of the new Coastal IFOA only occurred on the mid north coast. The Natural Resources Commission in the release of its report to Government did not acknowledge Eden in any respect, nor allude to any issues that may occur.
2. **Eden Sawlog Supply (potentially to Blue Ridge Hardwoods)**

The present Wood Supply for Eden states that the Large Graded Sawlog volumes are 21,160 m\(^3\) p.a.

The new Coastal IFOA includes in table 8 of Schedule 2, a yield of “no more than 23,000 m\(^3\) p.a.” of High Quality Large Sawlogs (distinguished from the other categories described in clause 133), as the yield criteria aligning with the Regional Forest Agreement volume.

FCNSW (Post-2018 Yield Forecasts – Eden Regional Forest Agreement Area, 10/10/2017) assessed and published, its sustainable yield availability over a 100 year horizon of Large Graded Sawlogs as 5,037 m\(^3\) p.a. from 2019. (Even a 50 year horizon limits the yield to 7,743 m\(^3\) p.a of Large Graded Sawlogs). That assessment states that “High quality large (HQL) sawlogs are logs down to a minimum SED of 30cm under bark with a minimum centre diameter of 40cm under bark.” That definition is equivalent to Large Graded Sawlogs as defined in the Eden Wood Supply Agreement with Blue Ridge Hardwoods.

Increased exclusion and a more restrictive IFOA will inevitably achieve substantially less than the FCNSW assessment of 5,037 m\(^3\) p.a. One needs to also consider that in the past 20 years, FCNSW future resource estimates have always been optimistic and as history has exposed, 100% wrong.

The NSW Government’s commitment of “no net change to wood supply” under the FCNSW most recent assessment and the new Coastal IFOA, is in complete contradiction. That Large Graded Sawlog volumes from Eden (already decreased from 21,160 m\(^3\) p.a. to only 5,037 m\(^3\) p.a.), might now be, if an assessment finally happens, as low as 3 – 4,000 m\(^3\) p.a. FCNSW also estimated that the Small Graded Sawlog supply, could be 10,000 m\(^3\) p.a., but that figure also needs assessment under the new exclusions. Blue Ridge Hardwoods currently processes around 36,000 m\(^3\) p.a. 14,000 m\(^3\) p.a. will mean that it could run out in May.

The efficiency and ease of implementation that the NSW Government declared for this new Coastal IFOA regulation, has failed to address the timber supply and other impacts in Eden. It has nothing to do with the application of the rules in forest operations, but their ease and efficiency of enforcement for the regulator, the EPA. At the same time the NSW Government is legislating to increase penalties associated with the new IFOA; however similar penalties do not exist for the failures of Government and its agencies to supply contracted volumes to industry and meet its commitments for sustainability and community values.

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1 Large Graded Sawlog is the term (defined and specified) in the current category of sawlog used in the Blue Ridge Hardwoods WSA, and therefore the term used in this document. Blue Ridge Hardwoods does not accept any use of the term High Quality with respect to the sawlogs of Eden as they are not generally high in quality, nor of the standard of hardwood logs elsewhere in NSW, primarily due to defect, strength, durability and drying issues.
3. Logging as a Threatening process

The basic assumption of the IFOA conditions is that logging is a threatening process to flora and fauna and exclusion is the only effective ameliorating measure. This new Coastal IFOA changes the focus from searching for animals to additionally searching for, and reserving habitat on suspicion.

Research studies in the Eden Management Area done in the 1980’s showed:

- arboreal and avifauna populations responded as the forest regenerated, with 78% of bird species present as little as 4 years after logging.²
- The Southern Brown Bandicoot Management Plan, states that the SBB is an early succession species and individuals have been found before and after both logging and thinning operations.³
- Many of the occasional sightings of Potoroos have been in logging regrowth.
- Research into large forest owls showed little decline in a mosaic of logged and unlogged forest. Both Powerful and Sooty Owls were commonly recorded in logged landscapes. The owls used riparian areas for nesting and roosting and foraged in logged areas, where numbers of Yellow-bellied Gliders and Ring-tailed Possums proliferated.⁴

The concept of a Landscape approach is that Flora & Fauna can find refuge in unlogged areas and can repopulate logged areas in a short time.

The original IFOA was based on a balance of values, environmental protection and timber production. The rationale of the precautionary principle drove a system of protection by reservation because scientists did not know enough about species and forest habitats at that time. Since then the NSW Government has added to these old exclusion conditions without any further knowledge of the species and habitats.

The NSW Government has had 20 years to review the original IFOA conditions to test whether they achieve a balance with the desired environmental objectives, yet they have failed to do so. The new Coastal IFOA concedes that scientists still have little idea about the species and habitat and use enhanced precaution as a basis for supposed environmental protection at all cost.

Section 5.20 under the Threatened Species Act (1995) made allowance for research to be undertaken into the effectiveness of Exclusion Zones. The new IFOA does not make allowance for any such research and there is no evidence that such research has ever occurred. The ecology, flora and fauna of Eucalypt forest ecosystems are the consequence of disturbance driven ecosystems that have evolved under regimes of significant disturbance events. NSW government agencies committed in the Regional Forest Agreements to monitor Threatened species across their respective tenures. Returns as stated in the EPA’s IFOA reports on forest harvesting operations show an increase in the records of Forest dwelling threatened Fauna. Graph 2 below clearly identifies an increase in forest dwelling threatened species but a distinct lack of records in reserved forests over the past 10 years.

⁴ R.Kavanagh: Conservation and Management of Large Forest Owls in South Eastern Australia, Jan 2002
Therefore it is quite reasonably concluded that forest dwelling species within the ecology of eucalypt forests, are well adapted and dependant on a regime of environmental disturbance.
4. The “New” Balance

4.1 Forested land areas
The following table 1 and graph 1 shows that for the Eden Management Area of Working Forests, the IFOA does not provide the balance between environmental values and wood supply.

Table 1  Classification of reserved conservation areas on public lands in Eden MA.

<table>
<thead>
<tr>
<th>Eden Management Area</th>
<th>Ha</th>
<th>Cumulative Ha</th>
<th>Cumulative %</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total forested Public land</td>
<td>411,100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Parks &amp; Reserves</td>
<td>247,400</td>
<td>247,400</td>
<td>60.2%</td>
<td></td>
</tr>
<tr>
<td>Formal, informal Reserves &amp; Other mapped exclusions</td>
<td>62,168</td>
<td>309,668</td>
<td>75.3%</td>
<td>1</td>
</tr>
<tr>
<td>Wildlife Habitat Clumps</td>
<td>5,072</td>
<td>314,740</td>
<td>76.6%</td>
<td></td>
</tr>
<tr>
<td>Retained Tree Clumps</td>
<td>5,072</td>
<td>319,812</td>
<td>77.8%</td>
<td></td>
</tr>
<tr>
<td>Habitat Trees</td>
<td>4,037</td>
<td>323,849</td>
<td>78.8%</td>
<td>2</td>
</tr>
<tr>
<td>Net Harvest Area modifier</td>
<td>26,372</td>
<td>350,191</td>
<td>85.2%</td>
<td>3</td>
</tr>
<tr>
<td>Future exclusions</td>
<td>7,100</td>
<td>357,291</td>
<td>86.9%</td>
<td>4</td>
</tr>
<tr>
<td>Undersized Regenerating Forests</td>
<td>38,416</td>
<td>395,737</td>
<td>96.3%</td>
<td>5</td>
</tr>
<tr>
<td>Pulp Unfavourable species</td>
<td>5,581</td>
<td>401,318</td>
<td>97.6%</td>
<td>6</td>
</tr>
<tr>
<td>Area Merchantable for Pulp Operations</td>
<td>5,582</td>
<td>406,900</td>
<td>99.0%</td>
<td>7</td>
</tr>
<tr>
<td>Areas that contain volumes of Large Graded Sawlogs</td>
<td>4,200</td>
<td>411,100</td>
<td>100.0%</td>
<td>8</td>
</tr>
</tbody>
</table>

Graph 1  Diagram representing areas in Table 1.
Notes to Table 1:

1. This figure is based on the 38% as stated in the NSW Govt Coastal IFOA Executive Summary. It includes all mapped exclusions; FMZs 1, 2, 3a as well as Stream Order reserves, known fauna exclusions eg Smoky Mouse and 12,000Ha of Murrah Flora Reserves, dedicated in 2016.

2. Habitat trees have an area of exclusion associated with each tree. The zone of influence of retained trees on forest regeneration is estimated as 5m radii and thus reducing the net productive area from the estate.

3. There are areas not harvested in a compartment in addition to mapped exclusions, due to conditions that limit access to the trees. These areas have been referred to in the past as “buffer on buffer”. FCNSW have sampled harvested areas and developed algorithms for predicting this area that is unavailable for harvesting and is known as the Net Harvest Area modifier. For the Eden Management Area, FCNSW’s latest estimate is 26% of the Net Harvest Area or Base Net Area. The true impact of the new Coastal IFOA will not be able to be assessed until a number of compartments have been logged.

4. Future Exclusions. Future discoveries of ESAs or other fauna discoveries will occur during the planning process which will result in additional areas of exclusions. This was estimated as 7% of the Base Net Area as it was during the CRAs.

5. Regenerating forest with trees too small to sustain any merchantable operation, because of previous harvest events over the last 30 years.

6. Stringybark type forests contain the less favoured Regrowth Pulpwood, markets pending.

7. Areas of forest that are merchantable for pulpwood operations of favourable species.

8. Areas that contain reasonable quantities of Large Graded Sawlogs.

It is difficult to quantify the impact of the change in the IFOA conditions because it is unknown where the Wildlife habitat & retained tree clumps will fall, until they are implemented. The impact on harvesting can only accurately be assessed after the fact, similar to FCNSW’s project quantifying the Net Harvest Area Modifiers done for the Auditor General’s Performance Audit, 2010. This report was finalised 3-5 years after the logging was completed. It will take a similar time frame to truly assess the new IFOA conditions.

The above assessment is underestimating the impact of wildlife habitat clumps because of the carry over exclusion [Condition 57.3]. “Where carry over exclusions zones are more than 5% of the Base Net Area of each local landscape area, then all carry over exclusion zones must be retained”.

In Northern Nullica SF, Smoky Mouse exclusion zones are about 1,000ha. The gross area of this area of SF is 5,300ha or 3.5 local landscape areas, so wildlife habitat clump requirements (5% of BNA) will be 165ha yet [IFOA Condition 57.3] requires the carry over exclusion of 1,000ha to be retained. This will represent 30% of the base net area. Therefore the percentage of reserve required for habitat clumps will be far greater than 5% of the Base Net Area.

With all of these qualifications and overlays, it is extremely likely that only part of the 4,200 ha of forest will remain available to supply Sawlogs of any description for milling at Eden.
4.2 Future Exclusions

The strike rate modifier was used during CRA negotiations to estimate future exclusions created as a result of additional flora & fauna records discovered during the harvest planning process. This was estimated to be 7% of the Net Area. This could be a conservative estimate as the new Coastal IFOA Conditions have increased the species that require additional exclusions, particularly the nests or roosts of birds. These future exclusions are to be permanently excluded, [Condition 83.2], unless 2 consecutive breeding season surveys find that the nests are no longer used,[Condition 83.4 (b)].

The following table 3 is a list of bird species that require nest or roost exclusions that have increased or did not exist under the TSL 1995.

<table>
<thead>
<tr>
<th>Species</th>
<th>Exclusion around Nests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regent Honey Eater</td>
<td>0.2ha</td>
</tr>
<tr>
<td>Varied Sitella</td>
<td>0.2ha</td>
</tr>
<tr>
<td>Gang Gang Cockatoo</td>
<td>0.2ha</td>
</tr>
<tr>
<td>Black Chinned Honeyeater</td>
<td>0.2ha</td>
</tr>
<tr>
<td>Speckled Warbler</td>
<td>0.2ha</td>
</tr>
<tr>
<td>Diamond Firetail</td>
<td>0.2ha</td>
</tr>
<tr>
<td>Grey Crowned Babbler</td>
<td>0.2ha</td>
</tr>
<tr>
<td>Little Lorikeet</td>
<td>0.2ha</td>
</tr>
<tr>
<td>Flame Robin</td>
<td>0.8ha</td>
</tr>
<tr>
<td>Scarlet Robin</td>
<td>0.8ha</td>
</tr>
<tr>
<td>Hooded Robin</td>
<td>0.8ha</td>
</tr>
<tr>
<td>Glossy Black Cockatoo</td>
<td>0.8ha</td>
</tr>
<tr>
<td>Dusky Woodswallow</td>
<td>0.8ha</td>
</tr>
</tbody>
</table>

Table 3: Bird species requiring increased nest or roost exclusions

The following table 4 is a list of bird species that require nest or roost exclusions that have remained the same under the TSL 1995.

<table>
<thead>
<tr>
<th>Species</th>
<th>Area of exclusion around Roost Sites</th>
<th>Area of exclusion around Nest Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Powerful Owl</td>
<td>0.2ha</td>
<td>0.8ha</td>
</tr>
<tr>
<td>Sooty Owl</td>
<td>0.2ha</td>
<td>0.8ha</td>
</tr>
<tr>
<td>Masked Owl</td>
<td>0.2ha</td>
<td>0.8ha</td>
</tr>
<tr>
<td>Barking Owl</td>
<td>0.2ha</td>
<td>0.8ha</td>
</tr>
<tr>
<td>Bush Stone Curlew</td>
<td>0.2ha</td>
<td>3.1ha</td>
</tr>
</tbody>
</table>

Table 4: Exclusions for bird species that have remained constant.
4.3 Net Harvest Area Modifier
The Net Harvest Area modifier is the estimate of areas not harvested in a compartment in addition to mapped exclusions, due to conditions that limit access to timber.

FCNSW’s project quantifying the Net Harvest Area Modifiers done for the Auditor General’s Performance Audit, 2010, was last estimated at 26% of base net area. This estimate may be conservative as [Condition 113] of the new Coastal IFOA requires track crossings of any drainage feature to be a bridge, culvert, causeway or temporary log crossing and cannot be a side-cut causeway unless it is existing and stable. This condition may limit the application of side-cut snigging, which is safer and more environmentally friendly than uphill snigging. It may therefore severely limit the area that would be accessible in steeper country and greatly increase the net harvest area modifier.

[Condition102.2] of the new Coastal IFOA allows machines to enter 5m of drainage lines Class 2,3 &4 in other regions, but not Eden. Allowing this condition to be the same could make Sawlogs more accessible and reduce some of the negative impacts of the other IFOA conditions on sawlog availability.

[Protocol 16] Introduces the concept of “Bankfull level”, the point from which the exclusion zone is measured. This is not appropriate for the drainage systems of the Eden Management Area because they are not permanent water courses. The weather is such that these water courses can remain dry for ages or flood to extreme levels; therefore aquatic vegetation would not be present or scour marks could be extremely high and thus further reduce the area available.

4.4 Coarse Woody Debris
The rationale to protect coarse woody debris is the presumption that fauna may dwell in them. Studies into CWD found that there is 70 tonne.ha⁻¹ of CWD presently on the forest floor. The reality is that it poses as a major fire threat not only to the animals but also to the people of Eden and surrounding localities.

The NSW bush fire brigade recommend that private land holders reduce their CWD below 10 tonne.ha⁻¹ in order to reduce bush fire risk.

The practice of not post log burning, existed prior to both the 1972 & 1980 wildfires. The 1980 fire convinced all critics of the practice that it was essential to reduce this fuel in order to reduce the intensity of any wildfire that may occur.
5. Regeneration
The objective of intensive logging operations should be to create regeneration at sufficiently high stocking rates to ensure Large Graded Sawlog sustainability.

The new Coastal IFOA’s objective is only to ensure forest coverage of the same floristic composition [Condition 127.1] & [Protocol 37]. Firstly, the concept that any forests containing less than 14m²ha⁻¹ overstorey must achieve regeneration is flawed. Basal Area is a function of site quality and setting a state wide standard is not appropriate for the poor quality forests of Eden.

Unlogged multi-aged forests in Eden have been measured as low as 26 m²ha⁻¹. FCNSW have undertaken thinning operations that have left remaining trees that are less than 14m²ha⁻¹ so that the growth from the site can be concentrated into the remaining trees to reduce the time trees take to reach sawlog size.

If the silvicultural objective of a logging operation is to achieve regeneration then counting the overstorey basal area makes no sense [Protocol 37.9(5)].

Eucalypts regenerate after fire or mechanical disturbance and more prolifically where the soil is bared. Poor regeneration has occurred in Eden Management Area, poor both in stocking levels and in tree form and this has been because practices in the 1990’s focused on minimal soil disturbance using less soil disturbing machinery, or from 2010 onwards when Post log burning has failed to occur.

The Coastal IFOA conditions should allow FCNSW to correct these areas by allowing for sufficient soil disturbance to create conditions for a bumper crop of regeneration.

Large Graded Sawlog sustainability requires that the resulting regeneration be dense in number, which produces tall straight seedling as future sawlogs. Any IFOA condition that hinders this is reducing the sawlog sustainability of the forests.

6. Forest Management Sustainability
The NSW Government’s approach to forest management is one of remainders. The new Coastal IFOA enforces logging exclusions on a macro, landscape and micro level. What remains appears to be irrevocably opposed to satisfying the current industry’s requirements.

Management of State Forests to produce future large graded sawlogs as a priority, is no longer an objective in the Eden Management Area. Other areas of NSW, without an alternative market for export pulpwood, are still maximising future sawlog production at every opportunity.

BRH have estimated that only 4,200 ha of Base Net Area currently contain sufficient quantities of Large Graded Sawlogs, of which 1,400ha are currently located in Nadgee Management Section. According to IFOA [Protocol 8.2(2)] at least 15 local landscape units have to be created in Nadgee; 705 ha must be retained for Wildlife Habitat clumps, another 705 ha for Retained Tree clumps and 555 ha associated with Habitat Tree retention, plus further exclusions for large owl finds either 0.2ha or 0.8ha for each roost or nest respectively. The 1,400ha of sawlog
merchantable forest in Nadgee, most probably will end up being reserved to meet the new IFOA conditions.

The quantity and quality of sawlogs in Eden is not evenly distributed across the landscape and therefore it could well prove impossible to absorb the new Coastal IFOA conditions in areas where the sawlogs are.

6.1 Harvest Areas
The new Coastal IFOA, in creating additional areas of permanent reservation, reduces the area of available harvest areas and further concentrates logging operations in the remaining areas (as has been noted by the NRC Report). That is contrary to the espoused principle of the landscape approach.

In the future, additional areas of permanent reserve; Habitat & Tree Clumps and Ecological Sensitive Areas, will be considered as “formal reserves” and the future Base Net Area will require the exclusion of further habitat areas, thus continually reducing the area available. Sustainable yield must be recalculated, to account for these additional areas of permanent reservation, so that the NSW Government can evaluate its “no net change to wood supply” commitment, and determine real options for replacement of the lost productive forest that is about to occur and has occurred over much of the life of the RFA, NSW FA, the IFOA and the BRH WSA, from the Eden Management Area.

Of course, the recalculations of the sustainable yield of Large Graded Sawlogs, should not be done by chicane either, as in the new Coastal IFOA, where FCNSW, with the obvious consent of the EPA, has simply changed the words within the definition of High Quality Large Sawlogs, to also include other sawlog categories (that are currently defined as high quality small sawlog; veneer log, pile, pole or girder log). Additionally, High Quality Small sawlogs now mean anything less than a Large, (but under its new definition), all the way down to ZERO diameter. Believe it if you can. The changed definitions of Sawlogs, exclusively reserved for the Eden Region, attempts to cover up the fact that the NSW Government and FCNSW has not managed the Eden Region as a sustainable resource of Graded Sawlogs and are trying to inflate the figures by deception. With the introduction of this new regulation, we have abandoned the previous regional perspective by rolling 4 IFOA’s into 1 and yet the “state-wide” application of competitive fairness and a level playing field has been discarded.

The NRC report noted that increased protections at a landscape scale will result in an increase in harvest intensity in specific coupes. This practice is already happening in Eden Management Area. FCNSW have changed their practice of retaining “future sawlogs”.

The Harvest Plan conditions have changed from;

“All future sawlog trees, capable of net merchantable increment, are to be retained for a subsequent cutting cycle.”

To

“Crew to remove all merchantable stems not marked for retention”.

This past and current practice has signalled the FCNSW intention to intensify harvesting in Eden, decrease the size of sawlogs, (potentially to unmerchantable size), and increase production of higher quality pulpwood.

The NSW Government’s claim to be managing the forests sustainably as a timber resource, with a wide range of socio-economic and community values, must be questioned while FCNSW are currently cutting down some of the best regrowth, that we have determined is predominantly the Future Sawlogs, and selling them as pulpwood for export. What has been and is happening
within Eden Management Area, is a direct contradiction of nearly all facets of the Forestry Industry Roadmap, purported to be a “whole of Government” policy.

6.2 Merchantability across the landscape

Under the Draft IFOA, there are still areas available for forestry operations, but those areas have to ensure a reasonable chance of viability for the land manager, the Principal Licensee and the Contractor. This also relates to that not all of the remaining forest is currently of merchantable size and therefore is not available for harvesting yet. The forests of Eden currently comprise mostly even-aged stands of regrowth trees that were generated from integrated logging post 1970’s under the alternate coupe system. The areas of forest that now have trees large enough for sawlogs are a function of the age of the stand and the quality of the site. The distribution of these stand ages is not even across the landscape as the IFOA assumes, but a reflection of site quality and the forest’s past management.

In the 1970's the dispersion of harvesting was restricted by the roading network, and dispersed through the landscape by harvesting on an alternate coupe pattern. In the 1994-97 EIS, the Department of Urban Affairs and Planning deemed it environmentally preferred to log the retained alternate coupes, rather than dispersing operations; thereby concentrating stand age classes in certain parts of the Management Area. They are also a reflection of past forest management practices, and the plan to thin the regrowth stands was to accelerate the time it takes for trees to meet sawlog size. Unfortunately, there has been no review of this practice on whether FCNSW have succeeded with this strategy in Eden. However, it appears that the thinning operations removed some of the best regrowth as pulpwood and have only created areas that contain fewer trees that are still below sawlog size.

Under the old IFOA conditions since 1999, restrictions on return times and adjacency restrictions to harvesting coupes, has further intensified operations within any one coupe, (as leaving small areas of good regrowth to grow into Large Graded Sawlogs became impractical) and further dispersed harvesting areas across the whole Management Area.

6.3 Reduction in Sawlog size

The Coastal IFOA has changed the definitions of sawlog for the Eden Region exclusively. Sawlogs in Eden are the poorest quality in the state, yet the specifications of its sawlogs have changed to make them appear superior to the quality of all other hardwood regions.

As evidence of this separation of quality, recovery of suitable sawn material and known difficulty of drying, the royalties in Eden from the FCNSW created “Hardwood Log Pricing System”, are only about 60% of the royalty value of other logs across the state. Eden sawlogs also carry significantly higher defect allowances than other price zones. As a sawmilling company that has been in the business for 60 years and understands how the royalty system works, we are at a complete loss to explain the logic of promoting the Eden resource to a level that means, despite all its known faults, it is capable of achieving an economic return, regardless of diameter and is best in the state.

The sawlog descriptions defined in the new Coastal IFOA have changed from those included in the Wood Supply Agreements. The definitions in the Coastal IFOA are shown in table 2 below:
<table>
<thead>
<tr>
<th>Product</th>
<th>Description Length</th>
<th>Description Diameter</th>
<th>Toe Diameter</th>
<th>Butt Diameter</th>
<th>WSA definition</th>
<th>Coastal IFOA definition for Eden</th>
<th>Coastal definition for UNE, LNE &amp; SouthCoast Regions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quota Sawlog</td>
<td>&gt;2.4m</td>
<td>&gt;= 40cm Centre diameter</td>
<td>Large Graded Sawlog</td>
<td>Large Graded Sawlog</td>
<td>HQLarge</td>
<td>HQLarge</td>
<td>HQLarge</td>
</tr>
<tr>
<td>Quota Sawlog (Eden only)</td>
<td>&gt;4.0m</td>
<td>&lt;40cm Centre diameter</td>
<td>&gt;30cm</td>
<td>&gt;36cm</td>
<td>Small Graded Sawlog</td>
<td>HQLarge</td>
<td></td>
</tr>
<tr>
<td>Ex Quota</td>
<td>&gt;2.4m</td>
<td>None</td>
<td>&lt;36cm</td>
<td>Salvage or Pulpwood</td>
<td>HQLarge</td>
<td>HQSmall</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Product description described in the IFOA definitions

Smaller sawlogs cost more to process, require different equipment, technology and markets. In order to accommodate more areas of reserve for flora & fauna, the NSW Government must want BRH to absorb the additional cost of processing small sawlogs rather than growing the trees to an optimal processing size. The NSW Government apparently expects BRH, (or any other new investor), to spend capital on machinery that is able to saw smaller and smaller logs. Eventually it reaches a size that becomes physically impossible to saw anything, even with the best technology, but the definition has NO MINIMUM diameter.

The new Coastal IFOA definitions are quite confusing, the definitions of both Sawlog and Pulpwood cover a range of products and overlap. Table 3 below shows the confusion:

<table>
<thead>
<tr>
<th>Products</th>
<th>Sawlogs Definition</th>
<th>Pulpwood Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poles, Pile, Girders &amp; Veneer</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>High Quality Large Sawlog</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>High Quality Small Sawlog</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Low Quality Log</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Pulpwood</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

Table 3: Product Classifications according to the IFOA definitions

According to the definitions a HQ Small Sawlog has no minimum diameter and could be pulpwood. Also a low Quality log does not include pulpwood, but pulpwood can include low quality log.

6.4 Scheduling

The new Coastal IFOA’s do not accommodate forests that are not uniform in volume or quality, such as what normally exists within the Eden Management Area. The forest does not contain an even mix of sawlogs and pulpwood on a compartment by compartment basis. Therefore FCNSW need flexibility in locating crews across the Management Areas to provide an even flow of products. So when the IFOA is then combined with the vagaries of the weather, legalities, threatened species discoveries, capricious political decisions, local protests and wildfire; the ability to provide an even flow of all products, especially sawlogs, becomes more difficult and threatens industry viability.
The new IFOA conditions increase FCNSW’s planning requirements and therefore the lead time required to change the harvesting schedule in response to any of the above mentioned reasons. This lead time is already estimated, (under the current IFOA), to be 24 weeks before the commencement of operations.

BRH also needs the flexibility of adjusting the flow of sawlog supply, so when a compartment contains a high percentage of sawlogs then flexibility is needed in the IFOA conditions to allow multiple visits to these compartments. The opposite is true for compartments low in sawlog production. Otherwise sawlog flow to the mill will be highly variable and it will either be a “feast or famine” and not necessarily consistent with the required planning, processing and market schedules.

6.5 Costs
The NSW Govt changed the Forestry Act in 2012 with the main objective for FCNSW;

10 (1) (a) “To be a successful business” (Forestry Act, 2012)

Since the Forestry Corporation was created, the focus of forest management has primarily been on financial return.

The increase in costs for FCNSW to comply with the new Coastal IFOA conditions for planning, monitoring and reporting may well make large areas of forest resource “economically unviable”. Their cost benefit analysis may well deem that many of the operations to be uneconomic and therefore reduce the net area available, and consequently further reduce Sawlog and pulpwood supply.

The cost of the EPA to police all of the new regulations is intended to be legislated that FCNSW pay the cost of EPAs compliance and enforcement activities and this fee could be astronomical, as it is an undetermined amount; a “blank cheque” if you will. FCNSW’s business model will undoubtedly pass on this fee to its customers – the timber industry, in some form or another, simply because they are a monopoly supplier and they have an enforceable right to run their business profitably. It is written in Legislation.

7. Conclusions
None of the concepts of the Coastal IFOA conditions are new, they just reduce the available area and then apply a new balance. The rationale of the “Landscape approach” to conservation is that Flora & Fauna can cope with disturbance and the concept of dispersing operations to reduce the environmental impact was the foundation of the original alternate coupe logging pattern circa 1976.

The concept of a multi scale landscape approach was created in response to the “Native Forest Policy” of 1979 when the concept of linking areas of reserve (National Parks) with wildlife corridors which were based on forest types favoured by arboreal mammals. The corridors, areas of reserve and retained alternate coupes were the foundation of a landscape approach for the management plan for Eden in 1982. These measures were complemented with habitat tree retention in the logging areas where arboreal mammal preferred forest types existed, and drainage features were protected by filter strips as early as 1977.

Since 1982 there has been
- an increase in National Parks of 194,500 ha
formal and informal reserves (Forest Zoning) have increased by 11,800ha

The original Landscape approach in Eden MA has been compromised over the years by;
- Legal moratoria (Jarasius V Forestry Commission 1988),
- Govt moratoria (Areas nominated for the Register of the National Estate, 1989),
- DUaP determination of the Eden 1994-97 EIS of preferring logging the retained alternate coupes in over logging unlogged compartments, and thus reducing the original return time,
- Continuing species specific exclusions; Smoky Mouse, Southern Brown Bandicoot, Giant Burrowing frog and others.
- The creation of the Murrah Flora Reserve 2016

The Coastal IFOA has not created a new Landscape approach to conservation but just added to the precautionary principle of exclusion.

More exclusion means more loss of resource and no amount of positioning is likely to change the viability of a forest industry, on the limited areas, (and those areas particular issues), that remain for sawlog and pulp production, or pretending that pulpwood can become sawn timber, with the stroke of a pen.

Much of the regrowth that could have been reserved for future sawlogs, has been utilised for pulpwood and that means that the new resource is much younger regrowth, smaller in size and destined to be harvested as pulpwood, (no matter what it is named).

Blue Ridge Hardwoods was originally set up 20 years ago to process a significant volume of Large Graded Sawlogs, about 80%, accessed from Multi-aged Forest, and obviously that is the current technology employed within the sawmill. Despite many attempts by this company to try and maintain that type of resource over a longer time frame, so that it could disappear as the 70’s regrowth was large enough to become the new Large Graded Sawlog resource, those attempts were denied by Forest Corp NSW, Forests NSW, State Forests of NSW and the various NSW State Governments.

Blue Ridge Hardwoods is now in a position, (because of a number of agency decisions, including the systematic silvicultural treatment of this regrowth resource to maximise profit and to virtually eliminate the future sawlog resource, and broader Government decisions, including resource exclusion across a wide number of fronts), to be incapable of viably processing this new resource, that will become available in 2019.

The unfortunate consequence of this Government direction to manage Eden the way that it has, through a deliberate short rotation policy that promotes smaller stem size, means that the sawlog balance will move from 80+ % of Large Graded Sawlogs, to 80+ % of Smalls and Super-smalls, but of a smaller volume than historically taken. That sort of diet in Mixed Species Eucalypts, demands totally different technology.

If the consequence of how Eden has been managed, is not in direct conflict with the entire concept of what the NSW Forestry Industry Roadmap wants to deliver, then we are very poor judges. We quote from the front page: “The NSW Governments vision is that NSW will have a sustainably managed forest estate that underpins a dynamic, economically efficient
forestry industry, which continues to support regional economies and delivers social and environmental benefits”.

Paul Toole, Minister for lands and forestry, stated “The government is determined to get the right balance between the environment and industry; environmental standards can be strengthened at the same time as providing long-term security of wood supply and certainty to investors and the industry”. That statement does not reflect the reality facing the owners of Blue Ridge Hardwoods at Eden, as they consider what they can possibly do with a $20 million, (replacement value), asset, liability, next year, in an environment of complete uncertainty. 

It is unfortunate for the Government and the people of the Eden Region, as well as for the Company and its staff, contractors and customers, that this $12 million joint-venture, that has been so successful over the last 20 years, is now about to enter the annals of history and become registered as another Govt, supported, (initially), business failure. But that is really not the true story; the fact is that it was and is a very successful company, ably supported by a highly skilled and enthusiastic workforce, that sells over $13 million worth of high quality products into the Australian market every year and that was just not shown the respect it deserved, so that it could have continued on. It is a victim of greed and short-sighted vision and is sadly based in a town that desperately needs it,( and the rest of the industry framework), to remain a cornerstone of that community.