

Mr Peter Duncan AM  
Chair  
Independent Forestry Panel

By email: [forestryiap@ipcn.nsw.gov.au](mailto:forestryiap@ipcn.nsw.gov.au)

Dear Mr Duncan

Thank you for your correspondence of 3 October 2024 regarding your invitation for the NSW Environment Protection Authority (EPA) to give a briefing to the Independent Forestry Panel.

The EPA appreciates the opportunity to be involved in this work and have provided some documents below that may assist. We have broadly categorised these documents as follows.

1. **EPA published reports**, which include previous NSW Forestry Snapshot reports, NSW State of the Environment reports, and public data from the EPA on native forestry operations compliance actions taken until 30 June 2024.
2. **Ecological advice received post the 2019/20 bushfires** from the Natural Resources Commission (NRC), [REDACTED] and supporting reports which outline the effects of climate change and fire regimes on forests, biodiversity, major threatened species and water quality as well as the risks of harvesting practices in certain areas.
3. **Scientific evidence of climate change risks and impacts on forests:**
  - Various academic papers which discuss changes in climate and fire regimes in Australia, along with their effects on its forest ecosystems, as well as papers discussing the importance of carbon stored in forest biomass, which can be lost through logging and burning.
  - The NSW and Australian Regional Climate Modelling project 2.0 projections using Intergovernmental Panel on Climate Change greenhouse gas emission scenarios, based on 150 years of data ranging between 1951-2100.
4. **Resources and data in relation to forecasting timber supply in NSW:**
  - Data extracted from Forestry Corporation of NSW's Sustainability Report 2022-23, which provides an overview of predicted versus actual timber volumes harvested for hardwood forests and softwood plantations as well as summaries of how much timber may be needed for critical supply infrastructure, such as power poles.
5. **Economic research on the non-market values of forests:**
  - A high-level literature review on non-market values of forests, undertaken by Marsden Jacob Associates for the EPA.

**6. Scientific research on threatened species:**

- A literature review summarising the scientific basis underpinning the making of recent greater glider protections by the EPA.

- [REDACTED]

The EPA would be happy to arrange a briefing with you on these materials should you find this beneficial. We would also be happy to arrange a combined briefing with our Department of Climate Change, Energy, the Environment and Water colleagues. If you wish to do so, or have any further questions, you can contact Ms Shagofta Ali, Director, Strategy and Policy, Climate and Environment Protection, on [REDACTED] or at [REDACTED].

Yours sincerely

[REDACTED]

**TONY CHAPPEL**  
**Chief Executive Officer**

18 October 2024

Attachment

Title	Summary of reports	Author(s) and year
<b>EPA published reports and resources</b>		
1. NSW Forestry Snapshot Report 2020-2021 - Implementation of NSW Forest Agreements and Integrated Forestry Operations Approvals	These provide an overview of performance against the principles of ecologically sustainable forest management (ESFM) in NSW forests and compliance with the Integrated Forestry Operations Approvals (IFOAs).	EPA (2023)
2. NSW Forestry Snapshot Report 2019-2020 - Implementation of NSW Forest Agreements and Integrated Forestry Operations Approvals		EPA (2021)
3. NSW Forestry Snapshot Report 2018-2019 - Implementation of NSW Forest Agreements and Integrated Forestry Operations Approvals		EPA (2020)
4. NSW State of the Environment 2021	These report on the status and trends of the principal environmental conditions in NSW, including the health of native species and ecosystems.	EPA (2021)
5. NSW State of the Environment 2018		EPA (2018)
6. Native forestry compliance update <a href="https://www.epa.nsw.gov.au/your-environment/native-forestry/regulating/compliance-update">https://www.epa.nsw.gov.au/your-environment/native-forestry/regulating/compliance-update</a> <sup>1</sup>	Summary of compliance activities	EPA (2024)
<b>Ecological advice post 2019-20 bushfires</b>		
7. NSW Forest Monitoring and Improvement Program – Insights for NSW Forest Outcomes and Management	These documents outline likely effects of changes in climate and fire regimes on forest structure, health, recovery, biodiversity, major threatened species and water quality.	NRC (2022)
8. Risks to the NSW Coastal Integrated Forestry Operations Approvals Posed by the 2019/2020 Fire Season and Beyond: A Report to the New South Wales Natural Resources Commission		Bradstock <i>et al.</i> (2021)
9. [REDACTED] (Confidential)	[REDACTED]	[REDACTED]
10. Review of CIFOA Mitigation Conditions for Timber Harvesting in Burnt Landscapes	[REDACTED]	Smith (2020)
<b>Scientific evidence of climate change impacts</b>		

<sup>1</sup> Updated data as of 16 October 2024:

- Stop Work Orders - 4
- Prosecutions – for 8 offences
- Penalty Infringement Notices – 17
- Enforceable Undertakings – 1
- Clean Up Notices – 8
- Official Cautions- 19
- Formal Warnings - 15

11. Impacts of changing fire regimes on hollow-bearing trees in south-eastern Australia	These discuss increases in drought, fire frequency, fire danger days and area burnt as contributing to increases in rates of tree collapse, decreases in numbers of hollow-bearing trees, on top of changes in species' resilience levels, vegetation composition and structure and ecosystem functioning. The EPA provided these papers to KPMG for consideration early in the business case development process.	Gibbons <i>et al.</i> (2024)
12. Adapting the Tasmanian forest practices system to climate change – Report to the Board of the Forest Practices Authority		Koch (2023)
13. Summary of scientific expert feedback on the potential impact of climate change on Tasmania's production forests and potential adaptation strategies - Report to the Board of the Forest Practices Authority		Koch (2022)
14. The carbon cost of the 2019-20 Australian fires varies with fire severity and forest type		Nolan <i>et al.</i> (2022)
15. Multi-decadal increase of forest burned area in Australia is linked to climate change		Canadell <i>et al.</i> (2021)
16. Limits to post-fire vegetation recovery under climate change		Nolan <i>et al.</i> (2021)
17. Increased extreme fire weather occurrence in southeast Australia and related atmospheric drivers		Richardson <i>et al.</i> (2021)
18. Seamless climate change projections and seasonal predictions for bushfires in Australia		Dowdy (2020)
19. Tree hollows and forest stand structure in Australian warm temperate Eucalyptus forests are adversely affected by logging more than wildfire		McLean <i>et al.</i> (2015)
20. The NSW and Australian Regional Climate Modelling (NARClIM) project 2.0 <a href="https://www.climatechange.environment.nsw.gov.au/news/get-ready-narclim2">https://www.climatechange.environment.nsw.gov.au/news/get-ready-narclim2</a>	This is the NSW Government's climate change projections	DCCEEW (2024)
21. Climate change risks for forests	This document contains public information outlining potential future climate scenarios and specifically highlights expected increases in temperatures, drought occurrences and bushfire occurrences, along with reductions in rainfall and soil moisture content. The EPA's view is that such scenarios should be considered in timber yield model forecasts for the next 100 years.	EPA (2024)
<b>Scientific evidence of value of forest carbon</b>		
22. Substantial and increasing global losses of timber-producing forest due to wildfires	A range of peer-reviewed papers by various authors on carbon stored in forest biomass. Some findings include: - 4% of the forest becomes timber product. This means 96% of logged forest becomes emissions within a few years because the "slash" left in the forest is burned or rots, and the woodchips	Bousfield <i>et al.</i> (2023)
23. A call to reduce the carbon costs of forest harvest		Moomaw and Law (2023)
24. Net carbon accounting and reporting are a barrier to understanding the mitigation value of forest protection in developed countries		Mackey <i>et al.</i> (2022)

25. The carbon costs of global wood harvests	<ul style="list-style-type: none"> <li>become paper which ends up in landfill and becomes emissions.</li> <li>Tasmania went from being an emitter to a carbon sink when it reduced its logging substantially following the collapse of logging company Gunns</li> <li>There are opportunities for reducing emissions by limiting wood harvests.</li> </ul>	Peng <i>et al.</i> (2022)
26. Under what circumstances do wood products from native forests benefit climate change mitigation?		Keith <i>et al.</i> (2015)
27. Accounting for biomass carbon stock change due to wildfire in temperate forest landscapes in Australia		Keith <i>et al.</i> (2014)
28. Trophic rewilding can expand natural climate solutions – Appendix 1		Chapin (2006)
<b>NSW timber supply data</b>		
29. Carbon emissions and power poles	[REDACTED]	EPA (2024)
30. [REDACTED] ( <i>Confidential</i> )		[REDACTED]
31. Summary of predicted versus actual timber volumes based on the FCNSW Sustainability Report 2022-23	This provides publicly available information on the predicted sustainable yield forecasts from FCNSW's FRAMES model compared to actual volumes of timber harvested historically.	EPA (2024)
32. FCNSW Sustainability Report 2022-23 <a href="https://app.powerbi.com/view?r=eyJrIjoieYWM4OTc5M0tItZTRkNC00YzI1LTg3MjMtZjk4MGZlNjZkMzdmlwiidCI6IjI0ODcyMjA5LWY3MGItdDU3OC1hNzk5LTA4YTdjZjAzODI3NSJ9">https://app.powerbi.com/view?r=eyJrIjoieYWM4OTc5M0tItZTRkNC00YzI1LTg3MjMtZjk4MGZlNjZkMzdmlwiidCI6IjI0ODcyMjA5LWY3MGItdDU3OC1hNzk5LTA4YTdjZjAzODI3NSJ9</a>		FCNSW (2023)
<b>Environmental economic analysis</b>		
33. [REDACTED] ( <i>Confidential</i> )	[REDACTED]	[REDACTED]
34. Community perceptions of Australia's forest, wood and paper industries: implications for social license to operate	This paper reports on research on the social licence of the forestry industry	Schirmer et al (2018)
<b>Scientific research on threatened species</b>		
35. Literature review for greater glider protections	This provides a background of the threats faced by greater gliders, protections needed for gliders and other hollow-dependent species that benefit from these, and surveying for greater gliders, all of which helped to inform the recent protocol update.	EPA (2024)
36. [REDACTED] ( <i>Confidential</i> )	[REDACTED]	[REDACTED]