

Summary of stakeholder feedback

Coastal Integrated Forestry Operations Approval Monitoring Program 5-year review

1 Background

This document summarises feedback from stakeholder submissions as part of the first five-year review of the Coastal Integrated Forestry Operations Approval (IFOA) Monitoring Program. It outlines the key themes and the Commission's responses to matters raised in the feedback.

2 Overview of submissions

Under [Coastal IFOA Protocol 38](#), the [monitoring program](#) must undergo a major review every five years. The review must include:

- detailed reporting of monitoring program progress and all results
- detailed analysis of trends
- an assessment of the adequacy of the monitoring program.

The Natural Resources Commission (the Commission), on behalf of the NSW Forest Monitoring Steering Committee, is working to address the review requirements. The Commission engaged First Person Consulting to conduct an independent evaluation of the adequacy of the program, and independent scientists to collate and consider evidence. The outcomes of the review will inform future adaptation and improvements to the monitoring program.

To support the independent evaluation, the Commission invited public submissions on the Coastal IFOA monitoring program. The submissions were asked to respond to the following:

- Does the monitoring program provide useful information and insights that meet your needs? If not, what are the key gaps?
- Is the monitoring program and its findings clear and easy to understand, or can this be improved?
- Are there any other ways we can improve the monitoring program?

Over 180 stakeholders including environmental and industry groups, individuals and government organisations were alerted via the Commission's mailing list. The public consultation and invitation to participate was also advertised on the NSW Government Have Your Say portal and the Commission's website.

The Commission received eight written submissions (see **Attachment A**). No submissions requested confidentiality. The eight submissions were provided to the independent evaluator to inform the evaluation.¹

The submissions have been published on the Commission's website consistent with our [submissions policy](#). The Commission thanks all stakeholders for their submissions.

3 Summary

This section provides a high-level summary of the key themes and suggested actions identified in the submissions. An outline of the suggested improvements by each stakeholder is also provided. Further details are available in each submission, published on the Commission's website.²

3.1 Key themes

1. Biodiversity and species protection

- Strong concern for endangered species including koalas, swift parrots, greater gliders, and southern brown bandicoots.
- Criticism of current monitoring methods (e.g., reliance on acoustic recorders) and lack of on-ground surveys.
- Calls for species-specific monitoring and updated focal species lists.

2. Koala conservation and post-fire impacts

- Emphasis on the vulnerability of koalas post-2019 bushfires.
- Recommendations for improved detection methods (e.g., drones, radio tracking) and revised tree retention protocols.

3. Monitoring program design and governance

- Concerns about lack of transparency, independence, and adaptive management.
- Criticism of the Commission's role and perceived bias; calls for independent audits and broader stakeholder representation.

4. Forest health and ecosystem decline

- Reports of chronic forest decline, soil fertility loss, and erosion.
- Need for long-term data on forest productivity and soil health.
- Lack of monitoring for hollow-bearing trees, riparian buffers, and coarse woody debris.

5. Regulatory and compliance gaps

- Allegations of Coastal IFOA's failure to enforce its own protocols.

6. Water yield and catchment protection

- Harvesting's impact on water yield and sedimentation raised as a major concern.
- Recommendations for riparian buffers and catchment rehabilitation.

¹ <https://www.nrc.nsw.gov.au/ifo-a-mer-reporting>

² <https://www.nrc.nsw.gov.au/ifo-a-mer-reporting>

7. Governance and stakeholder representation

- Criticism of the NSW Forest Monitoring Steering Committee's composition.
- Calls for inclusion of industry, forestry professionals, and biodiversity experts.

8. Data transparency and scientific rigor

- Concerns about outdated or flawed technologies (e.g., call recognisers).
- Requests for publication of raw data and improved scientific methods.

3.2 Suggested improvements by stakeholder submissions

- **Australian Wildlife Society:** Enhance monitoring to prioritise wildlife conservation.
- **BirdLife Australia:** Implement species-specific monitoring for Swift Parrots including habitat availability and condition; monitor presence absence of all threatened species; update focal species list and provide specific monitoring questions for each species.
- **Mr. Robert Bertram (individual):** Incorporate soil science and long-term forest health data; resume old growth mapping.
- **Timber NSW:** Resume old growth remapping; include industry in governance; benchmark Coastal IFOA against other sectors.
- **Rainforest Information Centre:** Conduct independent audits; reject flawed technology (e.g., outdated call recognisers); publish raw data.
- **North Coast Environment Council:** Cease native forest logging; revise koala and glider protections; increase tree retention standards.
- **Mr. Matthew Bell (individual):** Revise Coastal IFOA to reflect post-fire koala vulnerability; update browse tree list; improve monitoring methods; improve adaptive management of Coastal IFOA for more timely changes.
- **North East Forest Alliance:** Monitor and report on the effectiveness of Coastal IFOA conditions; reject landscape-scale masking; increase tree size thresholds.

4 Response to stakeholder feedback

Table 1 captures the main feedback and responses from the Commission.

Table 1: Summary of stakeholder feedback and responses

Issues and suggestions raised		Response
Coastal IFOA monitoring program feedback		
1	Concerns about the composition of the Steering Committee, the independence of experts engaged and suggestion that the NSW Department of Climate Change, Energy, the Environment and Water – Biodiversity Conservation Division should be involved in	▪ The composition of the Steering Committee is specified in Protocol 38. ▪ Each of the independent experts are well recognised as leaders in their disciplines with track records of independent critical thinking and academic integrity. ▪ The Commission sought nominations for independent experts from all agencies prior to selection and appointment and a conflict-of-interest management process is in place.

Issues and suggestions raised	Response
the Coastal IFOA Annual Health Check.	▪ The Coastal IFOA monitoring program Annual Health Check meeting includes representatives from DCCEEW if there are relevant issues as outlined in the agreed process. Going forward, the committee Chair will invite DCCEEW to all meetings regardless of agenda items.
2 Suggestions for monitoring program improvements and priorities including focus on post-fire impacts, conservation issues, threatened species and silviculture regulation.	▪ Cost-effective improvements to the monitoring program are being actioned, including a focus on post-fire impacts. ▪ The NSW Forest Monitoring Steering Committee are considering further suggested improvements to the Coastal IFOA monitoring program as part of the 5-year review of the monitoring program. ▪ Note that Protocol 38 prescribes the minimum design elements the monitoring program must meet.
3 Lack of clarity around the connection between monitoring activities and their influence in decision making, management changes and improving outcomes.	▪ The independent evaluation found the program is providing useful data that is informing decisions about forestry policy and management. ▪ The 5-year review of the monitoring program will provide evidence and insights to feed into the five year review of the Coastal IFOA. This is the primary opportunity for the program to influence change. ▪ In addition, the NSW Forest Monitoring Steering Committee will consider ways to improve clarity on how monitoring activities contribute to ongoing adaptive management and decision making processes.

Species-specific / Species Management Plan feedback

4 <u>Koalas</u> : Issues around condition effectiveness, koala acoustic survey methods and site selection, and questions around the status/progress of the koala tree list update and retention of non-feed trees. Suggestions to improve koala monitoring and update tree retention size in the conditions.	▪ Recent published literature from a study compared the cost-effectiveness of three sampling methods for detecting changes in koala occupancy: thermal drones, passive acoustic recorders and camera trapping. The study found passive acoustic recorders were the most efficient sampling method for monitoring koala occupancy compared to cameras or drones. The study recommended further investigation of the effectiveness of these methods to detect change in koala abundance over time. ▪ The Koala survey of the Mid North Coast assessment area (DCCEEW 2025) conducted an extensive thermal drone survey for koala and found similar results as previous studies that used acoustic survey methods, including: - “key areas of high and low koala population abundance are correlated to 4 key ecologically relevant factors, including those previously shown to influence koala population parameters (such as occupancy) in this region (Law et al. 2024)” - a similar range in koala density estimates (Law et al (2021); Law et al (2022)) - severe fire negatively effects koala abundance (Law et al. 2022). ▪ Many issues raised will be addressed by continued research under the Koala Research Program and continued long-term monitoring under the Coastal IFOA monitoring program. ▪ The Coastal IFOA koala tree list has now been reviewed and the report published.
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Issues and suggestions raised	Response
	▪ Guidance on identifying high value koala habitat indicates that outside very hot and dry, or very cold environments, non-feed trees are not a limiting resource for koala. An investigation of non-feed / shelter trees is not being progressed under the Coastal IFOA monitoring program. ▪ The retained tree requirements reflect the use/preferences displayed for feeding activity, including that male and female koalas have different preferences.
5 <u>Greater glider</u>: Criticism for lack of greater glider prioritisation, and suggestions for pre- and post-harvest surveys.	▪ This is an area that has been prioritised more. ▪ The Coastal IFOA monitoring program is required to monitor the effectiveness of site-specific conditions to protect Greater Glider populations in mapped areas and the monitoring approach is being designed. ▪ In addition, research is underway to analyse historic pre-harvest survey records and assess the influence of climate, fire and harvesting on greater glider presence and abundance. This is expected to be published in 2025.
6 <u>Swift parrots</u>: Suggestion that species-specific monitoring of swift parrots should be undertaken.	▪ The Coastal IFOA requires species-specific monitoring to evaluate the effectiveness of actions in species-specific management plans. There is no species management plan for the swift parrot under Coastal IFOA Protocol 21. ▪ The swift parrot is included under Coastal IFOA Protocol 31 as a threatened species that is considered adequately protected by the multi-scale protection measures of the Coastal IFOA. The EPA may consider whether species-specific monitoring is required for the swift parrot. ▪ In developing the Coastal IFOA fauna monitoring program the cross-agency technical working group established by the Forest Monitoring Steering Committee, determined the species occupancy monitoring plan was not suitable for swift parrot. The group advised that monitoring of forest heterogeneity should offer insight on swift parrot habitat.
7 <u>Species Management Plans</u>: Criticism of monitoring, lack of published outcomes, FCNSW involvement and the report on Yellow-bellied glider SMP data.	▪ Species Management Plan (SMP) monitoring is ongoing. ▪ The Commission engaged scientists to analyse the data and report on occupancy trends for the yellow-bellied glider and southern brown bandicoot. These analyses have now been published following reviews by the cross-agency technical working group, independent experts and endorsement by the Forest Monitoring Steering Committee. ▪ SMPs are approved by the EPA. The Coastal IFOA monitoring program is generating evidence to support future review and revision of SMPs.
Project specific feedback	
8 Request for an update on Protocol 38 requirement to monitor: ▪ regeneration outcomes ▪ hollow-bearing tree outcomes ▪ coarse woody debris outcomes	▪ The monitoring program has undertaken research on changes in forest structure and species composition in regenerating forests, as well as research on forest recovery following the 2019-20 wildfires. ▪ Research to improve hollow simulation modelling is progressing. Reports on the first project stage are available including on predicting trees with suitable hollows for vertebrate fauna, and a study on the suitability of FRAMES to model perpetuation of hollow bearing trees under the

Issues and suggestions raised	Response
- Class 1 drainage protection outcomes - requirement to monitor intensive harvesting.	Coastal IFOA . Further work including on ground data collection is currently underway. Published literature on coarse woody debris (not part of the monitoring program) found it is not a limiting habitat factor in harvested forests. This area is not a priority area for the monitoring program to consider. Research on Class 1 drainage protection outcomes has been published and further work is underway. - Since the 2019-20 fires, there has been no intensive harvesting. Forestry Corporation of NSW has advised that no intensive harvesting is planned to occur in north coast state forests. This monitoring requirement will be revisited if intensive harvesting is planned to occur.
9 Request for access to data, specifically forest health and structure LiDAR data and the species occupancy final report and call recognisers.	- The Commission has now published raw LiDAR data on the Geoscience Australia online portal 'Elvis', making data access easier for stakeholders. Further work is planned in 2025 to publish spatial data generated by the monitoring program. - The species occupancy analysis report is being reviewed, and publication is expected in 2025. - Call recognisers are publicly available on the DPIRD Forest Science fauna identification service webpage. The Commission's website also provides information on the call recognisers developed and where to access these.
10 Criticism and questions around data and methods used in species occupancy projects and modelling for habitat features projects.	- The best available data and methods are being used for species occupancy projects and modelling habitat features. - New data collection is undertaken within available resources to achieve appropriate standards for meaningful monitoring. - The fauna occupancy work was delivered in stages with a pilot trialling the approach and assessing the effectiveness of the methods. - Independent experts provide advice on proposed methods and review project outputs.
11 Comment that hollow bearing tree removal under timber stand improvement practices is unsustainable.	- Timber Stand Improvement was used in the past but is not practiced under the Coastal IFOA. - Investigations are underway to better understand hollow retention and recruitment, including the impact of fires on the hollow resource. The program has published early hollow research – for example, literature review, simulation modelling and further data collection – and results from further research is due in late 2025. - The monitoring plan for habitat features is being revised to ensure better data on hollows is being collected, analysed and used to inform adaptive management.
12 Comment that the forest road network project focused on methods not Coastal IFOA conditions monitoring.	- This project was funded under the cross-tenure Forest Monitoring and Improvement Program (FMIP). It has flow on benefits for improving practices and outcomes for roads in any forest - including operational State Forests. - The forest road network project generated a method that could be considered in any forest environment.

Issues and suggestions raised	Response
	- Available literature continues to highlight that unsealed roads and tracks continue to pose sediment generation risks in forest environments. - Investigations are underway considering risks associated with snig tracks.
13 Suggestion that there should be riparian protections for the top of catchments and question if the Commission will recommend 30 metre riparian buffers all the way up the catchment.	- Riparian protections at the top of catchments have been required for many years. These buffer zones are applied to give protection to ephemeral and perennial streams. The detailed specification of these buffer zones in public forests can be found in the Coastal IFOA conditions and protocols. - On-going monitoring program research activity has focussed on buffer zone effectiveness in reducing the connection of runoff from tracks to streams during major, infrequent rainstorms. The results of this will inform any recommendations for changes to settings under the current framework. - All evidence – including the performance of existing buffers – will be considered as part of the 5 year evidence review.
14 Comment that there is insufficient water metering on FCNSW state forest catchments.	- FCNSW implements water monitoring and report findings in their annual sustainability reports. - A large-scale baselines project on forest water trends in the RFA region was performed under the cross-tenure monitoring program before funding ceased. This work drew on existing data and meters where available. - Continuation of this work has not been included in the current Coastal IFOA Monitoring Program after cross tenure funding ceased. This was due to the inherent difficulty in distinguishing meaningful results for operational forests located within larger catchments that are subjected to other land management practices, and the resourcing required to undertake such work.
15 Query if logging history could have been considered as a variable in the post-fire erosion mapping in southern NSW project.	A conclusive assessment of the impact of forest roads or localised effects of land use including native forestry was not possible due to the high-level spatial scale of the analysis.
16 Criticism on soil health assumptions in the Coastal IFOA monitoring program and regulatory regime.	- Soil health is not identified as a monitoring priority under the Coastal IFOA monitoring program and is not specified in the Protocol 38 requirements. However, the Commission recognises that soil health is an important factor affecting forest health/decline. - Under the cross-tenure monitoring program, the baselines, trends and drivers for soil stability and health in forest catchments explored some of these issues. Funding for cross-tenure monitoring ceased in 2022.
17 Questioning the validity of the carbon balance project statement that “Fire is a key driver in carbon loss in NSW forests”.	Research under the Forest Monitoring and Improvement Program showed that years with extensive forest fires had the largest net loss of carbon.
18 Comment that there are gaps relating to wood supply in the Coastal IFOA monitoring program and the report for	Analysis of baselines and trends in wood supply has been published.

Issues and suggestions raised		Response
	the wood supply project has not yet been released.	Further work analysing the impact of the Coastal IFOA on wood supply is in progress. To be completed once long-term sustainable yield projections have been released by Forestry Corporation of NSW.
19	Criticism that the Commission and FCNSW should not be involved in the design of the compliance evaluation.	- The Commission provides independent evidence-based advice. It has been appointed as independent chair of the Forest Monitoring Steering Committee and is required to oversee all elements of the program as prescribed in Protocol 38. - The monitoring program has governance arrangements to ensure that agencies have input as part of technical working groups and endorse key decisions as part of the Steering Committee. Four independent experts are required to sit on the Committee. Agencies involved include the EPA, Department of Climate Change, Energy, the Environment and Water, Department of Primary Industries and Regional Development, and Forestry Corporation of NSW. Full details on governance and all agency Committee members are on the Commission's website. - The Commission, on behalf of the steering committee engaged an independent party to undertake the compliance evaluation and is working closely with the EPA and Forestry Corporation of NSW to deliver the work. This is important to ensure evidence needed for the independent evaluator is identified and used. - The Commission is working with all agencies on the Steering Committee to undertake the compliance evaluation, consistent with the endorsed evaluation framework for the project.
Feedback on the Commission		
20	Comments and criticism of the Commission's 2016 advice on CIFOA outstanding conditions particularly related to the Commission's position compared to EPA's position, conditions related to koalas and timber harvest/wood supply shortfalls.	- This matter is outside the scope of the Coastal IFOA monitoring program to address. - The Commission provides independent evidence-based advice to the NSW Government. The best available evidence and advice from independent experts is used within available resources and timeframes to inform our advice.
21	Criticism on the Commission's advice on old growth / rainforest mapping and comment that the old growth remapping project remains a key gap in the monitoring program.	- This matter is outside the scope of the Coastal IFOA monitoring program to address. - Coastal IFOA Protocol 38 does not require the monitoring program to remap old growth mapping. - The Commission provides independent evidence-based advice to the NSW Government. The best available evidence and advice from independent experts is used within available resources and timeframes to inform our advice.
22	Criticism of the Commission's impartiality, for example as shown in the May 2023 'Koalas and forestry on the NSW north coast' research note.	- The content of the research note is based on detailed research findings prepared by research teams. - The research was conducted under the Commission's Koala Research Program. An expert panel, comprising two koala and one forestry experts and including DCCEEW

Issues and suggestions raised	Response
	representatives, supported the program to deliver robust and scientifically credible research. ▪ The research was carried out by eminent scientific researchers from the Australian National University, Western Sydney University, and the Department of Primary Industries Forest Science Unit. ▪ The research has been published in peer reviewed scientific journals. ▪ The Commission provides independent evidence-based advice to the NSW Government. The best available evidence and advice from independent experts is used within available resources and timeframes to inform our advice.
Feedback on Forestry Corporation involvement in monitoring program and activities	
23 Criticism that FCNSW have not been meeting RFA monitoring obligations, specifically to report against forest age/structure and to conduct the 'Strategic Inventory' and 'Permanent Growth Plot' program as ongoing projects according to initial commitments.	▪ The Commission acknowledges this comment and while it is outside the scope of the Coastal IFOA monitoring program some additional information is provided. ▪ The NSW Regional Forest Agreements were originally signed by Australian and NSW governments in the late 1990s and early 2000s and were varied in 2018. ▪ The Coastal IFOA monitoring program was established in 2019 and since then has been contributing data and evidence to Australia's State of the Forests Report as part of NSW forest reporting commitments. ▪ Forestry Corporation of NSW have been active participants and contribute in-kind data collection to the Coastal IFOA monitoring program. This includes providing data it has collected as part of systematic repeat surveys at strategic inventory and permanent growth plots. ▪ The Coastal IFOA monitoring program has completed and published studies on forest structure. Researchers have under data agreements used inventory and permanent growth plot datasets to consider species composition in regenerating forests, forest recovery following the 2019-20 fires, and to support design of future monitoring. ▪ The Commission supports making data and evidence publicly available where possible.
24 Comment that the NSW government should have been legally bound under the Eden and other Regional Forest Agreement to collect 25 years of data as part of the regrowth forest monitoring program.	▪ The Commission acknowledges this comment and notes it is outside the scope of the Coastal IFOA monitoring program. ▪ The NSW Regional Forest Agreements were originally signed by Australian and NSW governments in the late 1990s and early 2000s and were varied in 2018. ▪ The Coastal IFOA monitoring program was established in 2019 following the Coastal IFOA coming into effect in 2018. Researchers commissioned by the program have used a range of historical monitoring data to generate findings and insights.
25 Criticism around FRAMES model legitimacy.	▪ The Commission acknowledges this comment and notes it is outside the scope of the Coastal IFOA monitoring program. ▪ Forestry Corporation of NSW is responsible for yield modelling in public native state forests, including addressing sustainable yield modelling commitments under NSW Regional Forest Agreements.

Issues and suggestions raised	Response
26 Suggestion that raw data on inventory and growth rate should be made public to verify sustainability of timber harvested.	▪ This matter is outside the scope of the Coastal IFOA monitoring program to address. ▪ Forestry Corporation of NSW is the custodian of this information and responsible for yield modelling. ▪ The Commission supports making data publicly available where possible.
Feedback on community engagement / consultation process for the 5 year program review	
27 Criticism on the submission process timing and the notification/mailling list for consultation.	▪ The Commission will consider the timing of future public submission processes it facilitates and, where possible, will ensure submission times and processes help to maximise stakeholder involvement. ▪ The Commission contacts interested stakeholders through our submission processes, primarily to people and organisations who have expressed an active interest to be involved via our stakeholder contact list. We also advertise stakeholder consultation on our website, through LinkedIn posts and via the NSW Government Have Your Say portal.

Appendix 1: Submissions received for the first five-year review of the CIFOA monitoring program

Name of stakeholder	Organisation	Date of submission
Patrick Medway	Australian Wildlife Society	23-Jan-2024
Mathew Bell	Individual	13-Feb-2024
Lainie Berry	BirdLife Australia	18-Feb-2024
Dailan Pugh	North East Forest Alliance	18-Feb-2024
Susie Russell	North Coast Environment Council	18-Feb-2024
Greg Hall	Rainforest Information Centre Inc	18-Feb-2024
Maree McCaskill	Timber NSW	18-Feb-2024
Robert Bertram	Individual	18-Feb-2024