



Trial of the Coastal Integrated Forestry Operations Approval

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Trial of the Coastal Integrated Forestry Operations Approval

Project Manager:

[REDACTED]

Project Sponsor:

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Background and strategic alignment:

The NSW Government has committed to remaking the four Coastal Integrated Forestry Operations Approvals (IFOAs) with following objectives:

1. Reduce costs associated with implementation and compliance
2. Improve clarity and enforceability.

These objectives are to be delivered with no net change to wood supply and no erosion of environmental values.

The remake of the IFOAs will recognise innovation in regulatory best practice, incorporate advances in technology and deliver a contemporary regulatory framework that is fit for purpose.

The remake is also being guided by the following key principles:

1. Must not affect the commitments made under the Regional Forest Agreements (RFA) and Forestry Agreements (FA)
2. Will not change the Comprehensive, Adequate and Representative (CAR) reserve system
3. Will not reduce FCNSW ability to meet high quality wood supply commitments established in the NSW Forest agreements
4. Will be outcomes focussed, supported by monitoring and evidence and based on risk-management principles
5. Will better protect threatened species and their habitat through a greater emphasis on landscape-based measures
6. Will be a credible and transparent framework.

Negotiation of the multi-scale landscape threatened species licence is progressing. Key settings including landscape time and space limit settings, harvesting intensity and a number of specific landscape provisions are still being negotiated. Negotiations have been complex as these conditions must balance the objectives of delivering existing wood supply whilst not eroding environmental values.

In September 2014, the proposed threatened species licence, including options for the settings above, were provided to a panel of experts to review. Some members of the expert panel suggested that some of the proposed conditions and options could result in an erosion of environmental values.

On this basis the Government has decided to undertake a trial to demonstrate the range of proposed multi-scale landscape settings. The information obtained from the trial will inform negotiation around not yet agreed settings and help ensure the Coastal IFOA delivers against the objectives and key principles of the IFOA remake.

The trial will also allow testing of the wood supply implications of the various tree retention and time and space limits at an operational scale.

The results of the trial will be available for stakeholders to consider as part of stage 3 consultation on a draft Coastal IFOA. A draft Coastal IFOA will be release following the finalisation of the trial and further negotiation of the final outstanding conditions.

Project Description:

A trial will be conducted in two parts, a desktop planning assessment and field based exercise, to demonstrate a range of proposed options for multi-scale landscape habitat protection.

The trial is not intended to be a scientific study (these have been utilised in developing potential settings), but rather an opportunity to implement a range of options to help clarify and finalise negotiations around the TSL requirements at the landscape, stand and site scale.

The range of options to be demonstrated through the trial will be benchmarked against the current IFOA requirements. An amendment will be made to the existing Lower North East IFOA to explicitly permit the trial.

The document named “**IFOA Remake Trial Method**” as approved by the Chief Environmental Regulator of the EPA (current from time to time) sets the scope of the specific conditions, options and settings to be applied as part of the trial. The document also details methods for undertaking the trial, analysis of results and stakeholder engagement as agreed by the EPA, FCNSW and DPI Fisheries.

The desktop and field based harvesting trial will be conducted across a range of forest types and zones within the Lower North East IFOA region within a limited number of locations – see the document “IFOA remake Trial Method“ for specific details of the trial sites.

The desktop planning components of the trial are described in the Project Scope - **Table 1**.
The field application components of the trial are described in the Project Scope - **Table 2**.

The trial will also assess the ease of application (in both planning and field stages), enforceability, environmental outcomes, wood supply consequences and operational costs.

The trial will be jointly conducted by the EPA and FCNSW and will look to utilise the skills and experience of the Coastal IFOA Remake - Expert Panel and relevant independent experts – in the development and assessment of the process.

Project Scope:

Table 1: Desktop Components

Conditions	Component to be demonstrated or assessed
Zoning	<ul style="list-style-type: none"> • Planning and assessment of: <ul style="list-style-type: none"> ○ Regrowth Zone (intensive operations) ○ Regrowth Zone (non-intensive operations) ○ Non-regrowth Zone • Mapping
Local Landscape Areas	<ul style="list-style-type: none"> • Design of the Local Landscape Areas • Mapping • Planning of operations (using current plan of operations), including: <ul style="list-style-type: none"> ○ Adjacency management ○ Available harvest area ○ Return times ○ Maximum coupe size ○ Management area limits (% / year)
Biodiversity exclusion zones (minimum 20% thresholds)	<ul style="list-style-type: none"> • Planning: <ul style="list-style-type: none"> ○ Design ○ Regional threatened species and habitat considerations • Mapping
Landscape exclusion zones (including Rainforest, High Conservation Old Growth, Wildlife Corridors)	<ul style="list-style-type: none"> • Planning: <ul style="list-style-type: none"> ○ Database assessment ○ Design • Mapping
Landscape Species exclusion zones	<ul style="list-style-type: none"> • Planning: <ul style="list-style-type: none"> ○ Database assessment ○ Design • Survey planning and design • Mapping
Koala habitat protection	<ul style="list-style-type: none"> • Planning • Mapping

	<ul style="list-style-type: none"> • Assessment of triggers for surveys and protection measures
Wildlife habitat clumps	<ul style="list-style-type: none"> • Planning: <ul style="list-style-type: none"> ○ Design rules - size, rate and placement ○ Regional threatened species and habitat considerations • Mapping
Species exclusion zones	<ul style="list-style-type: none"> • Planning: <ul style="list-style-type: none"> ○ Database assessment ○ Design • Survey planning and design <ul style="list-style-type: none"> ○ Priority species lists ○ Models • Mapping
Harvest planning and mapping	<ul style="list-style-type: none"> • Development of harvest plans and operational maps for trial operations
Data management	<ul style="list-style-type: none"> • Documentation of trial • Information and record keeping • Data sharing • Data management
Reporting	<ul style="list-style-type: none"> • Reporting and publications

Table 2: Field Components

Conditions	Component to be demonstrated or assessed
Biodiversity exclusion zones (minimum 20% thresholds)	<ul style="list-style-type: none"> • Application • Boundary rules
Landscape exclusion zones	<ul style="list-style-type: none"> • Application • Boundary rules
Landscape Species exclusion zones	<ul style="list-style-type: none"> • Application • Boundary rules
Koala habitat protection	<ul style="list-style-type: none"> • Surveys • Application of Koala protection measures • Mark-up • Mapping updates
Wildlife habitat clumps	<ul style="list-style-type: none"> • Application • Boundary rules
Coarse woody debris	<ul style="list-style-type: none"> • Outcomes
Species exclusion zones	<ul style="list-style-type: none"> • Application • Boundary rules
Regeneration harvesting	<ul style="list-style-type: none"> • Regeneration harvesting practices applied in specific Blackbutt dominated stands • Comparison to Australian Group Selection and Single Tree Selection • Proportion/extent of the available harvest area • Maximum coupe size(s)
Basal Area (BA) retention	<ul style="list-style-type: none"> • Application of a range of retained BA thresholds in the Regrowth Zone (non-intensive areas) and Non-Regrowth Zone • Comparison to Australian Group Selection and Single Tree Selection
Tree retention	<ul style="list-style-type: none"> • Hollow-bearing, Recruitment, Stag, Giant and general feed tree application

		<ul style="list-style-type: none"> Retention rates in each zone Selection criteria for each type of retained tree Identification – including permanent marking Protection
	Riparian exclusion zones	<ul style="list-style-type: none"> Riparian exclusion zone application, including width of the zones, mark-up, bankfull and channel head determination Order classification and managing mid-stream change in class Boundary rules
	Ground protection zones	<ul style="list-style-type: none"> Application Mark-up
	Mark-up	<ul style="list-style-type: none"> Application of GPS only marking Operator selection Comparison to field based marking Data management and recording of markings
	Surveys	<ul style="list-style-type: none"> Pre-harvest surveys <ul style="list-style-type: none"> Targeted species surveys Broad area surveys Compartment mark-up surveys Reporting and data management
<p>The document named “IFOA Remake Trial Method” as approved by the EPA (from time to time) sets the scope of the specific conditions, options and settings to be applied as part of the trial.</p>		
Extent of Project:	<p>Desktop Assessment: All coastal IFOA regions Field Assessment: Lower North East IFOA</p>	
Areas approved for field assessment:	<p>The field component of the IFOA remake trial only applies to no more than six (6) harvesting operations in State Forest in the Lower North IFOA region. These sites will be distributed over the three harvesting zones. The zones and a short list of available sites is detailed in Appendix A</p>	
Legal Requirements:	<p>The conditions of the IFOA non-licence terms, Environment Protection Licence and Threatened Species Licence that will be modified for the duration of the field trial are detailed in Appendix B.</p> <p>The modified conditions proposed for the Coastal IFOA may only be applied for the duration of the field trial or unless earlier terminated by the EPA</p>	
Related projects:	<p>Coastal IFOA Remake</p>	
Objective/s of the IFOA Remake Trial:		
Objective	Success Criteria	
Trial the implementation of a range of multi-scale landscape conditions	Large scale planning of “operations” and a number of demonstration compartments harvested under a range of proposed multi-scale landscape options. Each demonstration site will test a range of different settings.	
Assess each option against: <ol style="list-style-type: none"> the scope and key principles of the IFOA remake and specific hypothesis (or specific questions) 	A publicly available report that clearly documents and analyses the results/outputs of the planning trial and field trial against the key principles of the IFOA remake and/or specific hypothesis or questions	
Use the findings of the trial to assist the negotiation and finalisation of a draft Coastal IFOA that meets the objectives and key principles of the IFOA remake	Evidenced based conditions incorporated into a draft Coastal IFOA and an accompanying report on how the IFOA delivers against the IFOA remake objectives and key principles.	
Improved ability to demonstrate to stakeholders that the remake Coastal IFOA and multi scale landscape provisions deliver against the remake objectives.	Field inspections and discussions with select conservation and industry stakeholders would occur with the release of a draft coastal IFOA. The EPA will continue to inform key industry and conservation stakeholders on the progression of the IFOA remake and the conduct of the trial.	

Deliverables of the IFOA Remake Trial:		
Product, services and/or results that the project will deliver	Estimated completion date	Estimated cost
Finalisation of the document "IFOA remake Trial Method " as approved by the Chief Environmental Regulator of the EPA, that clearly describes the following: <ul style="list-style-type: none"> - Method - Trial sites - Timeframes - Criteria to be demonstrated and assessed - Baseline / controls - Reporting - Resourcing 	Early May 2015	Within existing agencies staffing and operating budgets.
Expert panel advice on trial design	Early May 2015	EPA - \$5,000 for contracted experts (including review at end of process)
IFOA amendments to permit the trial in the Lower North East IFOA region	Early May 2015 (pending MO approval and tabling timeframes)	FCNSW - Standard advertising costs
Commencement of planning stage of trial	Early May 2015	Within existing agencies staffing and operating budgets.
Engagement of suitable contractors (harvesting)	Early May 2015	FCNSW - Standard operating costs
Commencement of field stage of trial	Late May 2015 (pending IFOA amendments are finalised)	Within existing agencies staffing and operating budgets.
Conduct and finalisation of field and planning stages	August 2015	Within existing agencies staffing and operating budgets.
Analysis of results	August 2015	Within existing agencies staffing and operating budgets.
Engagement with the expert panel – findings of the trial	August 2015	EPA – budgeted with the costs for the design of the trial
Report preparation and finalisation	September 2015	Within existing agencies staffing and operating budgets.
Publication of trial on EPA website along with draft IFOA	October 2015	EPA – standard publication costs
Stakeholder engagement	October 2015	Within existing agencies staffing and operating budgets.
Out of scope:		
<ul style="list-style-type: none"> • Applying the trial in areas outside of the agreed trial sites • Comparing trial results to practices outside of the agreed benchmarking of current conditions. • Trialling conditions or practices that are not specified in the agreed trial, unless all Agencies have permitted such activities (in writing) • Trialling conditions or practices within areas of known or expected threatened species, populations and ecological communities as listed under Part 7A of the Fisheries Management Act 1994 • Logging or roading on steep slopes (Steep Slopes Trial) • Negotiation of the draft remake IFOA 		

Assumptions:

- Trial will only be a demonstration of proposed options for multi-scale threatened species protection, not a scientific study
- Available example areas to conduct the field trial are representative of the state forest estate
- There are sufficient areas available to provide suitable evidence to inform the outcomes of the trial
- Funding for the trial will be covered by each agency using standard operating budgets
- IFOA amendments to permit the trial are progressed and in place
- All areas outside of those specified in the agreed trial must continue to be harvested in accordance with existing IFOA requirements
- Timber harvested during the trial forms part of existing volume caps under the IFOA and is not additional
- FCNSW will contact suitable harvesting operators to undertake the harvesting in accordance with the agreed trial
- The findings of the trial will be written into a report that will be made publicly available with the release of a draft Coastal IFOA.

Constraints:

- Timeframes – need to finalise the trial by mid to late August 2015 to allow for further refinements that may be required to the proposed conditions
- Resourcing – needs to be conducted within current agencies operating budgets (ie not additional funding available)
- Scope and objectives of the IFOA remake
- Available contractors and operational areas (ie 2014/2015 Order of Works)
- Existing landscape – any proposed conditions to be tested need to consider harvesting to date)

Stakeholders:

Stakeholder	Background and interest in the project
Ministers	The Minister for the Environment and the Minister for Primary Industries have joint signoff on the Coastal IFOA. Both Ministers have an interest in ensuring that the Coastal IFOA meets the objectives and scope of the remake – including no change to wood supply , and no erosion of environmental values . The information collected during the trial will be useful in demonstrating to both Ministers that the Coastal IFOA delivers its intended objectives.
Key conservation groups and general public	Interest in ensuring that the IFOA remake maintains or improves environmental values.
Key industry groups and general public	Interest in ensuring that the IFOA remake maintains wood supply volumes and maintains a sustainable timber industry.

Preliminary constraints:

Estimated project duration:	Total of 4 – 5 Months (by End of August 2015) – field component to be no longer than a three month period
Estimated project cost:	TBD

EPA Approval:

Name:	Mark Gifford
Position:	Chief Regulator – Environment Protection Authority
Signature:	
Date:	14/05/2015

Appendix A – Shortlist of State Forest Compartments Available to Conduct the Trial

The trial must only apply to no more than six compartments in the Lower North East IFOA region. Trial will occur across three separate having treatment zones.

“Compartments” for the purpose of the trial has the same meaning as that defined in the Threatened Species Licence, Environment Protection Licence and the terms of the IFOA.

To allow for flexibility due to wet weather, contractor selection, or timing of the field trial - the six trial sites may be selected from any of the following State Forest compartments:

1. Ingalba State Forest ; Compartments 35, 36, 37, 38, 39
2. Queens Lake State Forest; Compartment 10
3. Mount Boss State Forest; Compartments 62, 184, 185, 186, 193, 205, 206
4. Bulga State Forest, 11, 16, 17, 20, 21, 25, 26, 27, 158, 159
5. Lansdowne State Forest; Compartments 193, 194, 195, 199, 200, 201, 202
6. Kiwarrik State Forest; Compartments 17, 18, 19, 20
7. Bulahdelah State Forest; Compartments 129, 130, 131, 132, 140, 141, 143
8. Burrawan State Forest; Compartments 21, 22, 23
9. Styx River State Forest; Compartments 512, 515, 516, 523, 524, 525, 526, 527
10. Chichester State Forest; Compartment 22
11. Riamukka State Forest; Compartments 95, 98, 99, 155, 156, 157, 341
12. Middle Brother State Forest; Compartment 232
13. Bulls Ground State Forest; Compartments 54, 58, 60, 61, 62

Note: “Compartments” for the purpose of the trial has the same meaning as that defined in the Threatened Species Licence, Environment Protection Licence and the terms of the IFOA.

Appendix B - IFOA conditions that will be modified for the purpose of the field trial

The document named “**IFOA Remake Trial Method**” as approved by the Chief Environmental Regulator of the EPA (current from time to time) will provide the scope of the specific conditions, options and settings to be applied as part of the trial, including the field component. The field trial must not commence until this document has been prepared and approved by the Chief Environmental Regulator of the EPA.

The following conditions will be modified to varying extents in the conduct of the field trial:

IFOA Clause	Measure	Reason for modification
<i>Non-Licence Terms</i>		
Clause 5 (3)	Silvicultural practices	<p>The Government has committed to remove current specifications of allowable silvicultural practices.</p> <p>The trial will instead assess new measures that have been designed to place limits on the conduct of timber operations in time and space.</p>
<i>Environment Protection Licence</i>		
Schedule 4 – Conditions 6 to 23 (inclusive)	Protection of Drainage Features	<p>The Government is proposing to adopt new LiDAR technology to develop a more accurate stream network. The technology has proven to be more accurate and efficient at locating and classifying streams.</p> <p>The trial will implement a new identification, classification and protection conditions of drainage networks established under this new technology. This includes the incorporation of previously unmapped streams into the drainage network.</p>
<i>Threatened Species Licence</i>		
Clause 5.2	Compartment Mark-up Surveys	<p>The Government is proposing to streamline surveys and move toward landscape based protection for threatened species and communities where possible.</p> <p>The trial will apply a range of new measures designed to provide greater landscape protection for species, regardless of their identified presence in a specific area. The trial will also apply improved surveys for specific habitat and species that still require a more targeted survey effort.</p>
Clause 5.2.2	Koala Mark-up Surveys	<p>The Government is proposing to improve the efficiency, transparency and suitability of the current koala mark-up surveys and move toward a landscape based habitat protection for koala.</p> <p>The trial will apply a range of new measures designed to provide improved landscape protection based on habitat type, quality and suitability for koala.</p>
Clause 5.3	High Conservation Old Growth Forest	<p>There will be no change to the location and extent of the current High Conservation Old Growth Forest protection network.</p> <p>The trial will apply a range of new measures designed to simplify and improve the clarity around activities permitted near the boundary of these important landscape areas.</p>
Clause 5.4	Rainforest	<p>There will be no change to the location and extent of the Rainforest protection network.</p> <p>The trial will apply a range of new measures designed to simplify and improve the clarity around activities permitted near the boundary of these important landscape areas.</p>
Clause 5.6	Tree Retention	<p>The Government is proposing enhancements to the tree retention requirements as part of the multi-scale protection approach. This includes improving the minimum retention rates across the landscape,</p>

		<p>specifying permanency for trees retained and simplifying the criteria for identifying these features.</p> <p>The trial will apply a range of these new measures to ensure they deliver greater landscape protection for species. The trial will assess the application of hollow bearing and recruitment trees, feed trees and giant tree provisions.</p>
Clause 5.7	Riparian Habitat Protection	<p>The Government is proposing to adopt new LiDAR technology to develop a more accurate stream network. The technology has proven to be more accurate and efficient at locating and classifying streams.</p> <p>The trial will implement a new identification, classification and protection conditions of drainage networks established under this new technology. This includes the incorporation of previously unmapped streams into the drainage network.</p>
Clause 5.8	Ridge and Headwater Habitat	<p>There will be no significant change to the location and extent of the Ridge and Headwater protection network. However minor refinements will be made to align the network with the actual ground location of the corresponding stream network.</p> <p>The trial will also apply a range of new measures designed to improve the clarity around activities permitted near the boundary of these important landscape areas.</p>
Clause 5.9	Wetlands	<p>There will be no significant change to the current requirements for the identification and protection of wetlands.</p> <p>The trial will apply a range of new measures designed to simplify and improve the clarity around activities permitted near the boundary of these important landscape areas. It will also test new requirements for the mapping of these features.</p>
Clause 5.10	Heath and Scrub	<p>There will be no significant change to the current requirements for the identification and protection of Heath and Scrub.</p> <p>The trial will apply a range of new measures designed to simplify and improve the clarity around activities permitted near the boundary of these important landscape areas. It will also test new requirements for the mapping of these features.</p>
Clause 5.11	Rocky Outcrops	<p>The Government has committed to improving the clarity around the identification and protection of rocky outcrops.</p> <p>The trial will apply a range of protection measures designed to simplify and improve the identification of these features. It will also apply new rules that are intended to improve clarity on activities permitted near the boundary of these important landscape areas. It will also test new requirements for the mapping of these features.</p>
Clause 5.13	Bird Nest and Roost Protection	<p>There will be no significant changes to the Bird Nest and Roost protection conditions. Minor modifications designed to simplify and standardise the current requirements will be trialled.</p> <p>The trial will also apply a range of protection measures to improve the clarity on activities permitted near the boundary of these features.</p>
Clause 5.14	Bat Roost Protection	<p>There will be no significant changes to the Bat Roost identification and protection requirements. Minor modifications designed to simplify and standardise the current requirements will be trialled.</p> <p>The trial will also apply a range of protection measures to improve the clarity on activities permitted near the boundary of these features.</p>
Clause 5.17	Ground Habitat Protection	<p>The protection of ground habitat will be included into new landscape protections at the site, stand and landscape scales.</p>

		The trial will apply a range of new measures designed to provide greater landscape protection of ground habitat - including habitat clumps, landscape exclusion zones and coarse woody debris standards.
Clause 6.9	Large Forest Owls	The will be no change to the Large Forest Owls protection network. The trial will apply a range of protection measures to improve the clarity on activities permitted near the boundary of these important landscape areas
Clause 6.14	Koala	The Government is proposing to move toward a landscape based protection for koala. The proposal will see improvements to the identification and management of koala habitat across the landscape. The trial will apply a range of new measures designed to provide greater landscape protection based on habitat type, quality and suitability for koala.
Clause 6.22 to 6.28 (inclusive)	Threatened Plants	The Government is proposing to simplify the ruleset and move to a landscape protection model where appropriate for the management of Threatened Plants. The trial will apply a range of protection measures to improve the clarity on activities permitted near threatened plants.
Clause 6	Species- Specific Conditions (other than those specified above)	The Government is proposing to move toward a landscape based protection of threatened species. The proposal will see improvements to the identification and management of threatened species habitat across the landscape. Improvements are also proposed for species and habitat that would still require targeted protection. The trial will apply a range of new measures designed to provide greater landscape or site protection based on habitat type, quality and suitability.
Clause 8	Pre-logging surveys	The Government has committed to moving towards greater landscape protections and effectiveness monitoring rather than targeted surveys. The trial will apply a range of new measures designed to provide landscape protection for species, regardless of their identified presence in a specific area. The trial may also apply improved surveys for specific species that sill still require a targeted survey effort.