Answers to Questions taken on notice by Forestry Corporation of NSW

1. The CHAIR: You spoke of the recent fires and the impact of the fires on forests, which everybody is incredibly aware of and distressed about. How much timber has been estimated to have been lost from native forests as well as hardwood plantations and pine plantations in the recent fires?

Mr KEARNEY: I do not have a simple number of the quantity of timber at this stage. That is going to take some time to actually estimate. I can talk about the area that has been subject to fire. We are undertaking that analysis now. What we have across the landscape is—around about half of our hardwood forests have been subject to some form of fire. That is the coastal forests, I should say. So around about 600,000 or 700,000 hectares have been subject to some form of fire. We have satellite mapping that is looking at differentiating between those areas that were burnt severely and those areas that were burnt under less severe conditions, where the fire was more akin to a hazard reduction style burn.

At this stage I can say that probably around about 25 per cent of our forests have been burnt with a severe fire, in terms of the hardwood forests. In terms of softwood plantations I would have to take on notice the exact number, but the quantum is in the order of 50,000 to 60,000 hectares of softwood plantations and around about 3,000 to 5,000 hectares of hardwood plantations.

Answer:

2. The Hon. PENNY SHARPE: I apologise if you covered some of this while I was out of the room. I want to get a sense of the percentage of State forests that have been burnt. I do not know if you covered that.

Mr KEARNEY: Yes, I did. I do not know if I did a very good job of it. The percentage burnt was generally 50 per cent. I actually have some statistics here that I can give you, though, because it is not an even 50 per cent as such: on the North Coast, the area burnt, 49 per cent; on the South Coast, 75 per cent; Eden, 60 per cent; and Tumut, 46 per cent. On balance that comes out at 50 per cent of overall area.

The Hon. PENNY SHARPE: It would great if you could provide that to us.

Answer:

3. Mr KEARNEY: Yes, that’s right. But we largely know that they have strong preferences for a range of species, particularly red gums on the North Coast or tallowwoods on the North Coast. We do know they have strong dietary preferences and we can target those trees as the ones to be retained across that harvest area. That is not the only prescription that is in place, though, that increases the rate of feed trees for koalas. The other thing that we now have to do is that in each area we have to set aside what are called "tree retention clumps"—rather than just scattered trees throughout the harvest area, clumps
of trees. It is 5 per cent of any given harvest area that goes into those. There is another 5 per cent that are what is called—

The Hon. PENNY SHARPE: How close do they have to be together?

Mr KEARNEY: There is quite a complex rule set about the distribution of them, but there is a rule set about where they can and cannot be in the landscape, how big they are allowed to be, how small they are allowed to be. I will probably take that on notice if you would like further detail.

Answer:
This is detailed in the Coastal IFOA, which is available on the EPA website at https://www.epa.nsw.gov.au/your-environment/native-forestry/integrated-forestry-operations-approvals/coastal-ifoa. Information about measures in place to protect koala habitat is contained in both the Coastal IFOA Conditions and Coastal IFOA Protocols, and both should be read together.

4. The Hon. CATHERINE CUSACK: I lived on the far North Coast and the forestry-conservation relationship seems fairly acrimonious to me compared with what I encountered down in Port Macquarie. Are there conservation groups that you are working successfully with on the far North Coast? It just seems like World War III up there.

Mr KEARNEY: I can think of a number that are not working.

The Hon. SHAYNE MALLARD: You can take it on notice.

Answer:
Forestry Corporation has good working relationships with a range of community groups on the far north coast. Forestry Corporation engages with wildlife care groups, community groups and forest neighbours. Forestry Corporation grows and supplies seedlings to groups including Friends of the Koala Lismore to give away for community planting projects to increase koala habitat across the region and has particularly strong working relationships with recreational forest user groups such as mountain bike clubs.

This 2019/20 fire season, Forestry Corporation facilitated and funded $3500 of Bushfire Awareness Training for 35 koala care volunteers, including on the far north coast, to enable them to access firegrounds. Forestry Corporation also assisted groups with koala rescue and monitoring in both National Parks and State Forests.

Forestry Corporation is also undertaking restoration work in fire affected forests by constructing and installing nest boxes in partnerships with wildlife care groups, including groups on the far north coast.

Forestry Corporation maintains the principle of being open and transparent when engaging with all groups and individuals interested in operations in State forests.

5. The Hon. MARK PEARSON: To your knowledge, is it the case that the Forestry Corporation has paid a total of $119 million in dividends to the New South Wales Government in the past 10 years, but over the same period the New South Wales Government paid the Forestry Corporation a total of $136 million in grants?
Mr KEARNEY: I cannot confirm. I just do not know.

The Hon. MARK PEARSON: Will you take it on notice?

Mr KEARNEY: Yes, I have to take that on notice.

**Answer:**
The proposition is incorrect. Forestry Corporation’s audited financial statements are published in its annual report, which includes information about dividends and grants.

Revenue and dividends are related to the timber business Forestry Corporation runs. Grants are for community services associated with Forestry Corporation’s role as a public land manager that a forestry business would not ordinarily provide.

There are more than two million hectares of native State forest in NSW of which only about one million hectares is available for timber harvesting and, in any given year, less than two per cent of it is harvested by Forestry Corporation.

Forestry Corporation provides thousands of kilometres of roads for community use, recreation sites like picnic and camping areas and walking and mountain bike trails for free public use, as well as managing weeds, feral animals and fire across all State forests.

Community Service Obligation (CSO) funding is provided to cover the costs of delivering services like roads for community use, recreation facilities and some aspects of weed and pest control and fire management on the forest land that is not harvested for timber production.

It is also important to note that the balance sheet of Forestry Corporation does not represent the timber industry. Forestry Corporation runs a forest management business and holds service and supply contracts with independent private businesses who carry out timber harvesting, haulage and processing, planting and a range of other tasks. Each of these businesses has a separate balance sheet.

6. The CHAIR: Your public native forest logging operations are not profitable, though. Is that correct?

Mr KEARNEY: No, the hardwood division, which runs on the native forest harvesting operations, has been net positive for the past five financial years.

The CHAIR: Is that including hardwood plantations?

Mr KEARNEY: It is, but hardwood plantations are only a small part of that overall picture. I will have to take on notice the actual quantities involved there but in general, hardwood plantations are round about 20 per cent of the supply, at most.

**Answer:**
Forestry Corporation’s audited financial statements are published in its annual report.

The Hardwood Forests Division manages both native forests and hardwood timber plantations and revenue from both sources is accounted for by that division.
Figures on the proportion of timber supplied from hardwood plantations relate to yield and not revenue. On average, hardwood plantations account for around 20 per cent of the timber yield on the north coast and 10 per cent of timber yield for the Hardwood Forests Division overall.

The CHAIR: We had a witness the other day from the Australian Workers Union talk about the mortality rate of koalas in forests that have been logged. I wondered if you could just shed some light on what your understanding is. Do you think that, in your experience, logging has killed more than one koala over the past 30 years?

Mr KEARNEY: That is not something that I could easily put a number on. I am aware of an incident last year where a koala died in one of our harvesting operations, or died after. The circumstances there are worth talking about so it is understood. The harvesting crew was in a timber plantation. They found a koala on the ground; it seemed okay, it did not have any external injuries. They took it to the Port Macquarie Koala Hospital and it died subsequently. The autopsy revealed it had internal injuries, it also had a broken leg that had partially healed, so it obviously had been injured beforehand. We do not know the circumstances, how it ended up where it did. It could well have been in the harvesting area and had been hit by debris or had fallen out of a tree—we are not certain.

I am satisfied at least that what was done there in terms of the response once that was found was sound and responsible. I am not aware of other instances of that nature occurring. I am aware of our people finding koalas that have died in the forest, but not in the post harvest environment, so pre-harvest. It is not something that happens regularly.

The Hon. SHAYNE MALLARD: That would be all documented, any koalas that were found in the forest? Would that be fully documented, such findings of koalas?

Mr KEARNEY: Yes. I can provide the Committee, if need be, with an incident report from that particular one where that koala was found.

Answer: A copy of the incident report is enclosed.
INCIDENT DESCRIPTION: On the 2nd May 2019, a koala was observed on the ground below where the head of a fallen tree was trimmed and removed. The harvester machine, under the control of the company owner, had fallen a tree after which the head of the tree was removed. As the owner swung the machine head back to process the log, the koala was observed on the ground. The koala was rescued by the koala hospital but subsequently died of injuries later at the Port Macquarie Koala hospital.

INVESTIGATION TEAM

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Investigator</td>
<td>Chris Slade</td>
<td>Senior Ecologist</td>
</tr>
</tbody>
</table>

Other investigation participants (E.g. interviewed Persons...)

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company owner</td>
<td>Harvesting Contractor</td>
<td>Contractor</td>
</tr>
<tr>
<td>Dan Greenwell</td>
<td>Harvest Coordinator</td>
<td>FCNSW</td>
</tr>
<tr>
<td>Mark Drury</td>
<td>Senior Field Ecologist</td>
<td>FCNSW</td>
</tr>
</tbody>
</table>

Report prepared by: Chris Slade  
Report Reviewed by: (Justin Williams)  
Date Reviewed:  
Version: (1)
## 1. INCIDENT:

### DETAILS OF THE INCIDENT

<table>
<thead>
<tr>
<th>Date and Time of Incident</th>
<th>Date of Investigation</th>
<th>Address of Incident</th>
<th>Location of Incident</th>
</tr>
</thead>
<tbody>
<tr>
<td>02/05/2019</td>
<td>03/05/2019</td>
<td>Ballengarra State Forest</td>
<td>Near Dump 12 along Mangrove Creek Road</td>
</tr>
</tbody>
</table>

### Incident Classification

Environmental – injured koala located during plantation harvesting operation

### DETAILS OF PERSON(S) INVOLVED IN INCIDENT

<table>
<thead>
<tr>
<th>Name</th>
<th>Employment Status</th>
<th>Age</th>
<th>Length of Service</th>
<th>Company</th>
<th>Position</th>
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</thead>
<tbody>
<tr>
<td>Company owner</td>
<td>Harvesting Contractor</td>
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<td></td>
<td>Contractor</td>
<td>Company Owner</td>
</tr>
<tr>
<td>Dan Greenwell</td>
<td>Permanent Employee</td>
<td></td>
<td></td>
<td>FCNSW</td>
<td>Harvesting Coordinator</td>
</tr>
<tr>
<td>Mark Drury</td>
<td>Permanent Employee</td>
<td></td>
<td></td>
<td>FCNSW</td>
<td>Senior Field Ecologist</td>
</tr>
</tbody>
</table>

## 2. INCIDENT EVENTS

<table>
<thead>
<tr>
<th>No.</th>
<th>Pre-Incident Sequence of Events (Where applicable, list activities, practices and/or events prior to the incident)</th>
<th>Date/Time</th>
<th>Supporting Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ballengarra plantation harvesting plan completion</td>
<td>08/09/2017</td>
<td>Harvest plan</td>
</tr>
<tr>
<td></td>
<td>Harvesting operations had moved across the plantation and operations had commenced based out of dump located</td>
<td>02/05/2019</td>
<td>Phone call and IPAD data entry</td>
</tr>
<tr>
<td></td>
<td>Koala found by company owner who got out to assess the individual. Harvesting operation ceased.</td>
<td>02/05/2019</td>
<td>Phone call</td>
</tr>
<tr>
<td></td>
<td>Company owner phoned Dan Greenwell to report koala observation</td>
<td>02/05/2019</td>
<td></td>
</tr>
<tr>
<td>No.</td>
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<td>Date/Time</td>
<td>Supporting Evidence</td>
</tr>
<tr>
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<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
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<td>---------------------------</td>
</tr>
<tr>
<td>1</td>
<td>Dan Greenwell phoned Mark Drury to inform of koala on ground</td>
<td>02/05/2019 13:40 approx</td>
<td>Phone Call</td>
</tr>
<tr>
<td>2</td>
<td>Mark Drury leaves message for Chris Slade (who was in Sydney in meeting and did not receive message until approx. 15:00). Mark phones Port Macquarie Koala hospital and arranges for the koala to be picked up.</td>
<td>02/05/2019 13:50 approx</td>
<td>Phone call</td>
</tr>
<tr>
<td>3</td>
<td>Koala hospital rescuers collect koala and transport to Koala hospital.</td>
<td>02/05/2019 14:30 approx</td>
<td>koala hospital records</td>
</tr>
<tr>
<td>4</td>
<td>Koala dies at koala hospital. Individual is X-rayed at Port Macquarie veterinary clinic. Old femur break is noted. Femur break estimated to be approximately 4-6 weeks old – evidenced by calcification of break site</td>
<td>02/05/2019 15:30 approx</td>
<td>koala hospital records</td>
</tr>
<tr>
<td>5</td>
<td>Chris Slade conducts on-site investigation including interview with Chris Cooper.</td>
<td>03/05/2019 10:40</td>
<td>Interview notes</td>
</tr>
<tr>
<td>6</td>
<td>Chris Slade conducts site inspection including searches for additional koalas, additional koala detected</td>
<td>03/05/2019 11:40</td>
<td>Ipad traverse route and record observation details</td>
</tr>
<tr>
<td>7</td>
<td>Chris Slade and Bronwyn Ellis conduct additional koala searches and map proposed creek line corridor and linked reserved strips through area of plantation.</td>
<td>06/05/2019 08:30</td>
<td>record observation details and proposed exclusion zone</td>
</tr>
<tr>
<td>8</td>
<td>Proposed exclusion zone linking Threatened Ecological Community, creek line and other areas of plantation through to native forest implemented</td>
<td>08/05/2019</td>
<td>Ipad exclusion available to harvesting crew</td>
</tr>
<tr>
<td>9</td>
<td>Daily pre-harvest checks are conducted by Rick Kerrigan</td>
<td>07-17/05/2019</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Investigation conducted by Chris Slade</td>
<td>03/05/2019</td>
<td>Completed investigation report</td>
</tr>
<tr>
<td>11</td>
<td>Investigation report completed by Chris Slade.</td>
<td>30/07/2019</td>
<td>Completed investigation report</td>
</tr>
</tbody>
</table>
**NOTIFICATION TO AUTHORITIES:**

Does this incident need to be reported to the authorities (e.g. WorkCover NSW, EPA etc.)?

- Yes ✓
- No □

Authority notified: DPI Plantations Officer

Notification type:

- Email ✓
- Phone ✓
- Both □

If phoned, name of person notified to: Brendan Groom

Date: 30/05/2019 approx.

Reference Number:

Any further comments:

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<table>
<thead>
<tr>
<th>Element</th>
<th>Type</th>
<th>Number</th>
<th>Version</th>
<th>Owner</th>
<th>Date Effective</th>
<th>Review Date</th>
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</thead>
<tbody>
<tr>
<td>5</td>
<td>Tool/Resource</td>
<td>5.2.1</td>
<td>1.0</td>
<td>H &amp; S Manager</td>
<td>July 2014</td>
<td>June 2019</td>
</tr>
</tbody>
</table>

*This document is not controlled when printed*
3. INVESTIGATION FINDINGS: List factual evidence, statements and any other information relevant to the incident.

If unable to verify any details then state this and refrain from personal opinions. When listing evidence, provide specific identifying details for traceability purposes should it be questioned (good practice is to take photocopies and maintain as attachments to the investigation report).

Key for each bullet point of findings: ✓ = all ok  ❌ = not ok, is a gap or potential cause  • = statement of fact only (e.g. Forklift registration No.)

3.1 WORK ENVIRONMENT – CONDITIONS (if more than one location, list separately – if internal and external list separately)
- Normal working environment

3.2 PLANT AND EQUIPMENT (if more than one, list separately – if internal and external list separately)
- Standard harvesting equipment

3.3 OTHER MATERIALS INVOLVED (e.g. substances or other materials – if internal and external list separately)
- Nil

3.4 PEOPLE: (If more than one person/company, list separately)
Training/competency and induction
- All staff competently trained.
- Koala was not detected before falling tree, noting that it may not have been in the tree, given its previous injury. Cryptic nature of koalas can make it extremely difficult to detect a koala in tree.

Task practice/behaviour (rushing, short cuts, no standard practice, intentional/unintentional etc.)
- Harvesting plan was developed
- Harvesting commences noting koala search requirements.
- All of the contractors were aware of the need to look out for and protect koalas.
- Company owner demonstrated awareness of the need to search for koalas, previously reported koala observations in nearby native forest operation in previous 6 months.

Supervision, Communication and Instruction (includes workload distribution, adequate information provided etc.)
- Regular supervision by FCNSW Harvesting coordinator, Dan Greenwell.
- The need for koala awareness by all people involved in the operation was at an appropriate high level.

3.6 MANAGEMENT SYSTEM (list applicable procedures/instructions related to incident and if followed)
- The need for searching, locating koalas prior and during operations was well known by Contractor Crew and FCNSW staff.
- Communication process once the koala was detected was highly effective.
✓ Koala hospital communication and rescue process was highly effective.

3.7 **PERSONAL FACTORS** (e.g. persona/home pressures, activities on weekend/sports/hobbies, personal illness/condition etc.)

- Personal factors were not a contributing factor to the incident
## 4. CONCLUSION AND PRIME/CONTRIBUTORY CAUSE/S

<table>
<thead>
<tr>
<th>Root Cause/s</th>
<th>Action</th>
<th>Person Responsible</th>
<th>By When</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Koala was not detected prior to tree being felled, noting the individual may not have been in the tree</td>
<td>Re-enforce the need for active searching for koalas during harvesting operations.</td>
<td>Harvest Coordinators, Harvest Planners</td>
<td>05/05/19</td>
<td>05/05/2019</td>
</tr>
<tr>
<td></td>
<td>Conduct pre-harvest assessment of upcoming areas of Ballengarra SF plantation operation</td>
<td>FNSW Field Technician</td>
<td>05/05/19</td>
<td>17/05/2019</td>
</tr>
<tr>
<td></td>
<td>Review Koala Field Guide for Forestry Operations and update in line with 2018 Coastal IFOA (CIFOA). Investigate appropriate medium ie electronic for tablet</td>
<td>Senior Ecologist / Communications and Media Officers</td>
<td>30/11/19</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Incorporate koala awareness into CIFOA training for all timber industry employees</td>
<td>Senior Ecologist / Communications and Media Officers / Strategic Planning Team</td>
<td>30/11/19</td>
<td></td>
</tr>
</tbody>
</table>

## 5. LIST ATTACHMENTS:

A1. - Autopsy report

A2. - Autopsy photos