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| Forest Audit Program |
| Acquittal of audit recommendations and  overall environmental conformance  – Forest Audit Program  2016 to 2022 |

## Overview

Each year, the Conservation Regulator commissions an independent, external auditing program, known as the Forest Audit Program (FAP) to assess VicForests’ conformance with the regulatory framework for timber harvesting activities in Victoria’s State forests, as well as any risks these activities pose to the State’s sustainable forest management objectives. The FAP is focused on creating an environment of continuous improvement to both the planning and conduct of timber harvesting, and the systems, processes and regulatory framework that inform it.

This report provides a summary of FAP recommendations from 2016 to 2022[[1]](#footnote-2) , and specifically provides information on:

1. The acquittal status of previous FAP recommendations over this period.
2. A year-on-year themed summary of findings over this period.

## Context

### Coupe Selection for Audits

A risk-based process is used to select coupes for auditing. The process is based on key requirements contained within the *Code of Practice for Timber Production 2014* (the Code) and the *Management Standards and Procedures for timber harvesting operations in Victoria's State forests 2014* (the Management Standards). It should be noted that the Code and Management Standards were subject to minor amendments in November 2021 and June 2022. Forest audits conducted to date are for timber harvesting operations that took place up until the 2020-21 financial year, hence these amendments have not yet been applied.

Prospective coupes are selected from a list of those harvested in the previous financial year. Coupe selection is targeted with a focus towards coupes with ‘high-risk’ elements. These elements include waterway crossings, steep slopes, erosive soils, presence of threatened species, rainforest and Special Protection or Special Management Zones (SPZ and SMZ respectively). This ensures a risked-based approach to audit targeting, which results in the cost-effective assessment of timber harvesting in locations where non-compliance is more likely, and any impacts are likely to be comparatively greater.

As coupe selection **is not** randomised, the findings of auditing cannot be taken as being statistically representative of VicForests’ operations overall. Furthermore, results across financial years are not directly comparable as auditing prescriptions can change. Additionally, audit themes and the number of coupes audited in each Forest Management Area (FMA) may change each year to ensure specific compliance priorities are targeted, ensuring that the FAP provides a robust analysis of environmental performance at different scales.

### Audit Themes

From FAP 2016 to FAP 2022, each audit has focused on one or more compliance themes and sub-themes. Compliance criteria considered in the audits draw on mandatory requirements of the Code, mostly as expressed in applicable clauses from the Management Standards and associated Planning Standards.

A summary of these with some relevant examples is provided in Table 1. It should be noted that the compliance themes have varied over the past four years, and not all themes or sub-themes have been audited each year.

**Table 1.** Audit compliance themes and sub-themes

|  |  |  |
| --- | --- | --- |
| **Themes** | **Sub-themes** | **Examples of matters assessed** |
| **Environmental** | Protection of forest soils | Soil erosion hazard in the upper layer of mineral soil (A horizon) or the well-developed subsoil that sits beneath this (B horizon).  Average coupe slope. |
| Protection of water flows, water quality and river health | Waterway crossing to be constructed to access the coupe.  Location in a Melbourne Water catchment area. |
| Protection of biodiversity values | Presence of forest zoned as SPZ/SMZ within or adjacent to the coupe.  Records of Victorian Biodiversity Atlas (VBA) listed threatened species from the coupe.  Rainforest and/or Montane Riparian Thicket vegetation identified as being present within the gross coupe boundary. |
| **Roading** | Road design | The length of in-coupe road required to access the coupe landing(s). |
| Road construction | Assessment of whether road construction follows any documented plan or design.  Identification of any evidence that road construction was inconsistent with need to minimise risk of erosion and water quality impact. |
| Road maintenance and closure | Temporary roads (including removal of all bridges, crossings and culverts on streams or drainage lines) closes as soon as possible after harvesting and/or regeneration is complete in all coupes that use the road.  Approaches to any bridge, culvert of log fill crossing that has been removed to restrict soil movement into the stream or waterway have been drained. |
| **Forest regeneration** |  | Harvested areas of native forest are successfully regenerated.  The natural floristic composition and representative gene pools are maintained when regenerating native forests by using appropriate seed sources and mixes of dominant overstorey species. |
| **Coupe planning** |  | Compliance elements considered under this theme are concerned with the development of the Forest Coupe Plan and the consistency of coupe operations with that plan |
| **Infrastructure** |  | Rehabilitation of coupe infrastructure, including landings, snig tracks and boundary tracks. |

## Acquittal of FAP recommendations

A total of 79 recommendations have been made in annual audits for FAP 2016 to FAP 2022. Of these, 25 were assigned to DEECA and 54 to VicForests. The status of these recommendations and their priority where relevant, is provided in Table 2. 47 (59%) recommendations have been completed, 20 (25%) actions are incomplete, and 10 (13%) actions are ongoing. No response has been provided by VicForests for two recommendations (3%). It should be noted that the recommendations listed as ‘ongoing’ include elements that have at least been partially completed (e.g., VicForests’ modified burning project is continuing to look at alternate silviculture approaches and reducing the application of high intensity regeneration treatments) or require continued attention.

Table 2. Summary of the status of audit recommendations and their priority (where relevant). their priority (where relevant)

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| --- | --- | --- | --- |
| **Status / Priority** | **DEECA** | **VicForests** | **Total by Status and Priority** |
| **Complete** | **11** | **36** | **47** |
| High | 4 | 12 | 16 |
| Moderate | 5 | 12 | 17 |
| Low | 0 | 2 | 2 |
| Not Stated | 2 | 10 | 12 |
| **Ongoing** | **3** | **7** | **10** |
| High |  | 1 | 1 |
| Moderate | 1 | 6 | 7 |
| Not Stated | 2 |  | 2 |
| **Incomplete** | **11** | **9** | **20** |
| High | **1** | 5 | 6 |
| Moderate/Medium | 9 | 4 | 13 |
| Not Stated | 1 |  | 1 |
| **No Response Provided** |  | **2** | **2** |
| Moderate |  | 1 | 1 |
| Low |  | 1 | 1 |
| **Total by Responsible Entity** | **25** | **54** | **79** |

Seven high priority recommendations remain incomplete or ongoing (see Table 3), of which six are the responsibility of VicForests and one which is the responsibility of DEECA. All incomplete recommendations for which DEECA is responsible are associated with changes to the Code and Management Standards to improve clarity and environmental outcomes. DEECA is leading a review of the Code of Practice for Timber Production which will now occur in the context of the Victorian Government’s announcement to transition away from native timber harvesting by 1 January 2024. Where relevant, audit recommendations will be considered as part of this review.

Table 3. Recommendations that are incomplete or ongoing and have a ‘high’ priority status

|  |  |  |  |
| --- | --- | --- | --- |
| **FAP Year** | **Recommendation** | **Responsible Entity** | **Formal Response** |
| 2022 | V-01 That VicForests retain records of the full search effort, using surveys and habitat modelling, to identify threatened species that may be present within a coupe or may be affected by nearby harvesting activities. | VicForests | VicForests already maintains records of survey effort conducted by its staff and contractors, as well as the data from surveys conducted by the Forest Protection Survey Program. The Forest Coupe Plan is produced to provide guidance to the harvesting contractor on the requirements relating to the harvest operation in that coupe as required by the Code and is not a comprehensive list of all searches, surveys and planning work conducted for a particular coupe or its neighbours. The coupe file is the definitive source for the records referred to. VicForests would be happy to provide this detail to the auditor for any future audit. |
| 2022 | V-02 That VicForests develop an initiative to improve the quality and consistency of waterway crossing design, construction, maintenance, and rehabilitation, addressing both in-coupe road and snig track crossings. | VicForests | This recommendation repeats from similar recommendations in earlier FAPs. VicForests has developed and implemented standards for waterway crossing design in response to previous recommendations. We will continue to implement these standards and work to ensure they are applied consistently across the business. We have also implemented an ongoing monitoring and maintenance program. |
| 2022 | D-03 That DEECA review snig track crossing “design”, operational and rehabilitation requirements and develop new and more tailored management prescriptions. | DEECA | This recommendation will be considered as part of the comprehensive review of the Code, to be completed by December 2023. |
| 2021 | V-02 That VicForests and/or its roading and harvesting contractors develop and implement waterway crossing rehabilitation plans for all temporary in-coupe road and snig track crossings to ensure conformance with the Code and Management Standards and reduce, to the extent practicable, the mobilisation of sediment into waterways. Implementation of the plans should be confirmed by VicForests and any defects rectified before all harvesting/regeneration machinery is removed from the coupe | VicForests | VicForests is in the process of reviewing processes regarding the rehabilitation of waterway crossing on temporary in-coupe roads and snig tracks. With the goal of creating more detailed supporting documents or instructions on what is considered best practice in managing and rehabilitating waterways crossing within Timber Harvesting Operations. |
| 2020 | V-02: That VicForests develop or improve guidance for contractors on the placement of snig, boundary or other tracks, particularly to ensure they:  a) avoid constructing tracks along drainage depressions in which overland and sub-surface water flows will concentrate;  b) where reasonably practicable, avoid having multiple tracks converge downhill on locations with limited drainage capacity and, where this cannot be avoided, manage risks associated with overland flows and excessive water infiltration; and  c) avoid unnecessary waterway crossings. | VicForests | The inclusion of coupe infrastructure into the scope of the FAP in this and the previous audit highlighted several areas where practice is deficient and significant improvements in environmental performance of snig and boundary track networks could be achieved. Most improvements could be made cost-effectively, by better placement of snig tracks, more careful consideration of the management of convergence points and avoidance, where practicable, of waterway crossings. |
| 2020 | V-03: That VicForests develop specific guidance or instruction on the design, construction and rehabilitation of in-coupe road and snig track waterway crossings. | VicForests | The inclusion of coupe infrastructure into the scope of the FAP in this and the previous audit highlighted several areas where practice is deficient and significant improvements in environmental performance of snig and boundary track networks could be achieved. Most improvements could be made cost-effectively, by better placement of snig tracks, more careful consideration of the management of convergence points and avoidance, where practicable, of waterway crossings. |
| 2016 | It is recommended that VicForests develops a register of waterway crossings to monitor current installation status for its removal and rehabilitation program, and to also assist in scheduling and recording appropriate maintenance. | VicForests | VicForests is in the process of developing a register of waterway crossings as part of its roading review. |

## Year-on-Year Conformance Comparison

A risk-based process is used to select coupes for auditing. This means that audit results may not be statistically representative of VicForests’ operations overall and audit results may not be directly comparable between years. Comparison of the results with previous audits is also confounded by the addition of new criteria and audit themes.

The mean audit conformance score (%) and individual coupe conformance scores for the lowest and highest ranked coupes (%) for 2017 to 2022 are provided in Figure . The annual mean conformance score is the sum of the individual coupe scores divided by the number of coupes assessed for that year. It represents audit criterion that were assessed to fully meet the regulatory requirements. The minimum and maximum scores reflect the lowest and highest ranked coupes within a given year, and how these coupes conformed to relevant audit criteria.

The 2022 results show an overall improvement against previous years, with the mean conformance score of 96% above the 6-year average of 91%.

Figure 1. Mean audit conformance score (%) and conformance scores for lowest and highest scoring coupes for 2017 to 2022

The mean conformance score (%) for assessed themes and sub-themes for 2017 to 2022 is provided in Table 5. While change between the annual conformance scores for each theme is marginal, a decline is evident in the 2019 results across all sub-themes. This decline reversed in 2020 and has generally improved in subsequent auditing years to the 2022 audit period.

**Table 5.** Mean conformance score for the assessed themes and sub-themes by year

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Audit Theme and Sub-themes** |  | **Conformance Score (%)** | | | | | |  |
| **2017** | | **2018** | **2019** | **2020** | **2021** | **2022** |
| **Environmental** | **86** | | **90** | **80** | **89** | **93** | **95** |
| Protection of biodiversity values | 90 | | 92 | 84 | 98 | 95 | **96** |
| Protection of forest soils | 83 | | 87 | 74 | 74 | 92 | **95** |
| Protection of water flows, water quality and river health | 85 | | 90 | 81 | 96 | 91 | **94** |
| **Roading** | **70** | | **81** | **77** | **87** | **88** | **96** |
| Road construction | 79 | | 92 | 81 | 85 | 86 | **93** |
| Road design | 57 | | 81 | 67 | 81 | 89 | **96** |
| Road maintenance and closure | 73 | | 71 | 83 | 96 | 88 | **99** |
| **Coupe planning** |  | |  | **92** | **96** | **97** | **97** |
| **Forest regeneration** |  | |  | **90** |  |  |  |
| **Infrastructure** |  | |  | **84** | **88** | **95** | **96** |

In 2016, three separate thematic audits were undertaken, and the coupes assessed varied across the three audits. As such it is difficult to directly compare these audits with those undertaken between 2017 to 2022. The three audit themes in 2016 included:

1. Construction and rehabilitation of waterway crossings.
2. Protection of mandatory exclusion areas from the impacts of harvesting.
3. Construction and maintenance of in-coupe roads.

The results for the 2016 audits, summarised by sub-themes and overall scores, are presented in Table 7.

Table 7. 2016 audit results, summarised by sub-themes and overall scores

|  |  |  |
| --- | --- | --- |
| **Audit Title** | **Audit Sub-theme** | **Conformance Score (%)** |
| Construction and rehabilitation of waterway crossings | Planning for crossings | 72 |
| Design and construction of crossings | 59 |
| Removal and rehabilitation of crossings | 42 |
| *Overall* | *65* |
| Protection of mandatory exclusion areas from the impacts of harvesting | Protection of biodiversity values | 100 |
| *Overall* | *100* |
| Construction and maintenance of in-coupe roads | Water quality, river health and soil protection | 87 |
| Pests, weeds and diseases | 100 |
| Road planning and design | 75 |
| Road construction | 77 |
| Road drainage | 75 |
| Road maintenance, operations and closure | 80 |
| *Overall* | *80* |

## Appendix 1: Audit Report Summary by FAP Report Year

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| --- | --- | --- | --- |
| **FAP Report Year** | **Audit Title** | **Financial Year of Timber Harvesting Operations** | **Link to Audit Report** |
| 2022 | Report into the 2021/22 Forest Audit Program | 2021-2022 | TBA |
| 2021 | Report into the 2020/21 Forest Audit Program | 2020 - 2021 | [2021 FAP Report](https://www.vic.gov.au/sites/default/files/2022-06/is377900-03%20fap2020-21%20audit%20report-final_0.docx) |
| 2020 | Report on the 2019-2020 Forest Audit Program | 2019 - 2020 | [2020 FAP Report](https://www.vic.gov.au/sites/default/files/2021-06/Report%20FAP%20201920.docx) |
| 2019 | Report on the 2018-2019 Forest Audit Program | 2018 - 2019 | [2019 FAP Report](https://www.vic.gov.au/sites/default/files/2021-06/FAP%20201819.docx) |
| 2018 | Report on the 2017-2018 Forest Audit Program | 2017 - 2018 | [2018 FAP Report](https://www.forestsandreserves.vic.gov.au/__data/assets/pdf_file/0019/443800/Report-on-the-2017-18-Forest-Audit-Program.pdf) |
| 2017 | Report on the 2016-2017 Forest Audit Program | 2016 - 2017 | [2017 FAP Report](https://www.forestsandreserves.vic.gov.au/__data/assets/pdf_file/0023/330098/is206000_fap2016-17_audit-report-revD-11042018.pdf) |
| 2016 | Environmental audit of the construction & rehabilitation of waterway crossings | 2015 - 2016 | [2016 Waterway Crossing Audit Report](https://www.forestsandreserves.vic.gov.au/__data/assets/pdf_file/0025/118366/Environmental-Audit-Waterway-crossings-Final-Report-24Feb2016.pdf) |
| 2016 | Environmental audit of the construction and maintenance of in-coupe roads | 2015 - 2016 | [2016 In-coupe Road Audit Report](https://www.forestsandreserves.vic.gov.au/forest-management/forest-audits#Environmental_audit_of_the_construction_and_maintenance_of_in-coupe_roads-118361-2) |
| 2016 | Environmental audit of the protection of mandatory exclusion areas from the impacts of timber harvesting | 2015 - 2016 | [2016 Protection of Exclusion Areas Audit Report](https://www.forestsandreserves.vic.gov.au/forest-management/forest-audits#Environmental_audit_of_the_protection_of_mandatory_exclusion_areas_from_the_impacts_of_timber_harvesting-118361-3) |

1. The 2016 to 2022 audits are for timber harvesting operations that occurred from 2014-15 to 2020-21 financial years. The 2016 audit program assessed timber harvesting operations in the 2014-15 financial year, and the 2022 audit program assessed timber harvesting operations in the 2020-21 financial year. In 2021 a new naming convention was introduced to make it easier to understand the relation between the title of the audit and the year in which timber harvesting operations were conducted. [↑](#footnote-ref-2)