

Forest Audit Program – Harvesting and Closure and Regeneration and Finalisation Audit 2014

Regulator's Response

The Department of Environment, Land, Water and Planning (DELWP) commissioned this audit project under its annual Forest Audit Program. The audit reviewed harvesting and coupe closure performance along with forest regeneration at timber harvesting coupes across the Central, Dandenong and Bendigo Forest Management Areas. 34 coupes were assessed during this project. The audit report contains a number of recommendations to improve timber harvesting operations conducted in Victoria's State forests.

At the time of this audit, timber harvesting operations in Victoria's State forests were managed by two separate entities. VicForests was responsible for planning and managing commercial timber harvesting, the sale of timber products and the regeneration of harvested coupes in the east of the State. The former Department of Environment and Primary Industries (DEPI) Forestry Services Group were responsible for management of harvesting conducted in other parts of the State (predominantly Western Victoria).

In November 2014, the Victorian Government transferred the management responsibilities of the former DEPI Forestry Services to VicForests to better separate the forestry governance and regulatory role from management of commercial operations. VicForests now has management responsibilities for all commercial harvesting in State forests and has responded to the relevant audit recommendations accordingly.

This audit assessed the regulatory requirements outlined under the previous version of the *Code of Practice for Timber Production 2007*. A new *Code of Practice for Timber Production 2014* (2014 Code) was released in October 2014. As a result, a number of issues and recommendations outlined in the audit report have already been addressed in the establishment of the new 2014 Code. DELWP has reviewed the audit report and prepared this regulator's response noting a number of areas that will be further considered for change in the next update of the Code.

DELWP's response to the 13 audit recommendations that are relevant to the environmental regulation of timber harvesting is provided in Appendix 1.

Paul Smith

Deputy Secretary Land Fire and Environment Division

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APPENDIX 1: REGULATOR'S RESPONSE TO AUDIT RECOMMENDATIONS

Recommendation or issue highlighted in audit report	DELWP response
<p>Recommendation REG1 - It is recommended that guidance be provided on the location of field assessments in relation to the coupe and on selecting the appropriate soil horizon to use in determining water quality risk.</p> <p>Auditor's Rationale: As discussed under the waterway crossings, waterway classification and water quality risk headings, the auditor notes some interpretation is required in assessing compliance with the requirements set out in Section 2.2.1 of the Code for field assessments to be used to determine water quality risk.</p> <p>Auditor's Suggested Priority: Medium</p>	<p>This recommendation was addressed in section 3.2.1.2 of the new <i>Management Standards and Procedures for timber harvesting operations in Victoria's State forests 2014</i> (MSPs).</p>
<p>Recommendation REG2 – It is recommended that 'steep slopes' be defined.</p> <p>Auditor's Rationale: A degree of interpretation is required to determine where requirements for steep slopes apply as the Code and Management Procedures do not provide a definition of 'steep slopes'.</p> <p>Auditor's Suggested Priority: Medium</p>	<p>This recommendation was addressed in section 3.4.1 of the new MSPs.</p>
<p>Recommendation REG3 - It is recommended that DEPI develops, in consultation with VicForests, a robust process for the reporting of threatened species information that has been detected by VicForests and requires zoning amendment.</p> <p>Auditor's Rationale: VicForests had identified Leadbeater's Possum 1A habitat at three coupes (C3, C9 (also a slope exclusion area) and C18) and set these areas aside in exclusion zones. These zones had also been incorporated into VicForests' "Reserves spatial layer" for future rezoning as Special Protection Zone for long-term conservation, as required. However, there was no clear and robust process evident for reporting threatened species information detected at coupes and requiring zoning amendment, to DEPI (responsible for administering and implementing forest zoning changes).</p> <p>Auditor's Suggested Priority: Low</p>	<p>This recommendation has been partially addressed in the 2014 Code. A process is underway to address this. Section 2.1.1 of the 2014 Code provides contextual information about forest zones and the Forest Management Zoning Scheme (FMZS). Section 2.5.1.1 notes that planning and management of timber harvesting operations must comply with relevant coupe management measures specified in the MSPs. Section 2.1.1.1 of the MSPs notes that when planning timber harvesting operations VicForests will refer to the department's FMZ100 geospatial layer for locations and information associated with the FMZS. Section 2.1.1.2 of the MSPs notes that where special protection or management zones are based on modelled values or incorrectly mapped features that do not exist in the field or are incorrectly located, application may be made prior to the harvesting operation to convert the zone back to a general zone. Section 2.1.1.3 of the MSPs notes that where evidence</p>



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	<p>of a value that requires protection via special protection or management zones is found in the field, application <u>must</u> be made prior to commencement of the timber harvesting operation to create or amend the zones in accordance with Appendix 5 - the Planning Standards. Special management zone applications must be accompanied by an associated plan and must be complied with during timber harvesting operations.</p> <p>DELWP is currently working with VicForests to embed an appropriate reporting procedure.</p>
<p>Recommendation REG4 – It is recommended that DEPI reviews threatened flora and fauna models developed in association with the Permitted Clearing of Native Vegetation: Biodiversity Assessment Guidelines policy to assess applicability for forestry applications; and if appropriate, they be made available for use by VicForests and DEPI Forestry Services.</p> <p>Auditor's Rationale: DEPI has recently produced over 1,500 threatened flora and fauna models for the purpose of identifying offset requirements under the Permitted Clearing of Native Vegetation: Biodiversity Assessment Guidelines policy. The models were not developed for use in a forestry context; however they may be applicable.</p> <p>Auditor's Suggested Priority: High</p>	<p>A preliminary review into the flora and fauna models shows some promise to help in developing a checklist to determine the potential presence of threatened flora species that may occur in a given area.</p> <p>DELWP is working with VicForests to test this application in 2015/16 and determine how the current flora and fauna models and species checklists can best be used in the planning of timber harvesting operations.</p> <p>Further details about the results of this DELWP review will be announced when they become available.</p>
<p>Recommendation REG5 – It is recommended that the Central Highlands FMP be updated to:</p> <ul style="list-style-type: none"> • Ensure that Appendix J and K include all current FFG listed taxa and threatened taxa on the DEPI Advisory List, including but not limited to, VBA entries since 1995; • Update the conservation status of all taxa in Appendix J and K to reflect the DEPI Advisory list and/or the EPBC Advisory list; and • Update the management prescriptions to align conservation efforts with current conservation significance status. <p>Auditor's Rationale: The auditor notes that Appendix J of the Central Highlands FMP was compiled in 1998. The Flora Information System (FIS) database (1995) is cited as the source for records. The FIS has been</p>	<p>This recommendation has been partially addressed in the 2014 Code.</p> <p>The DELWP review project referred to in Recommendation REG4 (above) will include a stocktake in 2015/16 to identify any listed species that are not currently referred to in the Code and determine if they require consideration in the next update to the Code.</p> <p>DELWP is also currently undertaking other priority projects such as the development of a biodiversity strategy and review of the <i>Flora and Fauna Guarantee Act</i>. These may influence any review process.</p> <p>DELWP will work with VicForests and other relevant stakeholders in developing any new prescriptions.</p>



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<p>superseded by the Victorian Biodiversity Atlas. The conservation status of some of the flora listed has since been revised, for example, Crimson Spider Orchid (<i>Caladenia concolor</i>) is listed in Appendix J as vulnerable at a State level. The conservation status of this species has been elevated to Endangered at a State level, it is now also listed as Vulnerable at a Federal level. There are other, similar examples, including (but not limited to) Tree Geebung (<i>Persoonia arborea</i>) elevated to Vulnerable at a State level, and Slender Tree-fern (<i>Cyathea cunninghamii</i>) also elevated to Vulnerable conservation status at a State level. The conservation status, and the data source, of flora identified in Appendix J are now out-dated.</p> <p>Similarly, the auditor identified outdated data in Appendix K of the Central Highlands FMP. Discrepancies include that the conservation status of Smoky Mouse (<i>Pseudomys fumeus</i>) has changed to being Endangered at a Federal level, FFG-listed, and Near Threatened at State level; but shown in Appendix K as Vulnerable.</p> <p>Furthermore, the Code requires that "Forest management planning and all forestry operations must comply with measures specified in relevant Flora and Fauna Guarantee Action Statements and Flora and Fauna Guarantee Orders." The auditor notes that Action Statements or Guarantee Orders have not yet been developed for many threatened species. In the absence of Action Statements, the management prescriptions in the FMP need to be reviewed and amended to ensure they are adequate and current - to reflect the current conservation significance status of each species.</p> <p>The auditor notes that VicForests and DEPI Forestry Services may need to reassess the suitability of their on-ground species detection methodologies to ensure they are appropriate for detection of all target species. Changes required may include additional training; more targeted field methodologies; searching by specialists; and seasonal searches.</p> <p>Auditor's Suggested Priority: High</p>	



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<p>Recommendation REG6 - It is recommended that the Code or Management Procedures be amended to include a requirement to assess the risk of spread of pathogens.</p> <p>Auditor's Rationale: Although the Management Procedures contain prescriptions for management of spread of pathogens from areas of known risk, there is no requirement to undertake a risk assessment to determine risk.</p> <p>Auditor's Suggested Priority: High</p>	<p>This will be reviewed in 2015/16 in consultation with relevant forest/ plant pathologists. Any required changes will be captured in the next update of the Code.</p>
<p>Recommendation REG7 - It is recommended that management prescriptions for the protection of threatened flora within riparian zones be reviewed to better manage potential impacts associated with construction of waterway crossings.</p> <p>Auditor's Rationale: The management prescriptions for significant flora outlined in Appendix J of the Central Highlands FMP apply to harvesting operations without giving due consideration to roading operations. In particular, the Central Highlands FMP does not specify management actions for species that grow in riparian areas, as it states they are adequately protected by waterway buffers and filters prescribed by the Code. The auditor notes however that roads do impact riparian zones at crossings.</p> <p>Auditor's Suggested Priority: High</p>	<p>This recommendation was addressed in section 4.3.1.1 of the new MSPs and the definition of a timber harvesting operation provided in the 2014 Code which includes roading operations.</p> <p>Any listed threatened species (riparian or otherwise) that are not currently referred to in the 2014 Code will also be considered in the planned stocktake mentioned under Recommendation REG 5 (above).</p>
<p>Recommendation REG8</p> <p>It is recommended that DEPI formally documents whether or not the following requirements apply to temporary roads:</p> <ul style="list-style-type: none"> • Management Procedures Section 1.6.1, notification and approval requirements for snigging forest produce or moving heavy machinery along or across temporary roads; • Management Procedures Section 2.3.6, conformance of temporary road construction and maintenance to standards in the Road Management Agreement; and • Management Procedures Section 1.6.3.1 construction and maintenance of temporary roads in accordance with the Review of Road Classifications, Geometric 	<p>This recommendation was addressed in chapter 6 of the new MSPs and section 2.4 of the 2014 Code.</p>



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<p>Designs and Maintenance Standards.</p> <p>Auditor's Rationale: The audit found that it was unclear whether the requirements are intended to apply to permanent roads only, or also to temporary roads.</p> <p>Auditor's Suggested Priority: Low</p>	
<p>Recommendation REG9 – It is recommended that DEPI reviews the requirements for road crossings of waterways and provides guidance relating to movement of native fish through crossing structures.</p> <p>Auditor's Rationale: Standard culverts are likely to present barriers for native fish species most often found in catchment headwaters. Appropriate crossing designs and structures can reduce these barriers, enabling natural migration cycles of native fish to continue. Culvert discharges at three coupes were found to be non-compliant as they project above the bed of the stream in a way that is likely to inhibit the passage of native fish. The EIA risk ratings were assessed as Major for one coupe with a permanent road and Moderate for two coupes with temporary roads. In all three cases, the stream beds were on gradients and of variable terrain such that installation of culverts without suspended outlets would require considerable excavation or result in significant acceleration of water flow. In these cases, a crossing type other than a conventional culvert is likely to be more appropriate.</p> <p>Auditor's Suggested Priority: High</p>	<p>DELWP's Timber Harvesting Compliance Unit has investigated the three fish barrier issues identified in the audit report and notes that the current 2014 Code would benefit from additional guidance in relation to fish migration and culvert construction.</p> <p>To prevent the future occurrence of barriers to fish migration DELWP will review the requirements for waterway crossings in the code and will work with VicForests to develop new operational guidance on facilitating the movement of native fish.</p> <p>DELWP will incorporate relevant details in the next update of the Code/MSPs.</p>
<p>Recommendation REG10 - It is recommended that the following regulatory documents be revised to eliminate inconsistencies.</p> <ul style="list-style-type: none"> • Management Procedures Section 2.3.6 notification requirements for retention of temporary roads for use in the permanent road network is inconsistent with processes specified in the Road Maintenance Agreement 2014. • The Review of Road Classifications, Geometric Designs and Maintenance Standards (ARRB 2001) document referred to in the Management Procedures section 1.6.3.1 specifies 5D roads should have 1 m wide table drains. The Road Maintenance Agreement 2014 referred to in Management Procedures section 2.3.6 	<p>This recommendation was addressed in chapter 6 of the new MSPs and section 2.4 of the 2014 Code.</p>



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<p>does not specify table drain requirements for 5D roads.</p> <p>Auditor's Rationale: The auditor noted two inconsistencies between regulatory documents referred to from the Management Procedures.</p> <p>Auditor's Suggested Priority: Low</p>	
<p>Recommendation REG11 – The auditor recommends that the requirement in Section 1.6.3.7 of the Management Procedures to utilise topsoil stockpiles to rehabilitate road batter slopes be reviewed for removal.</p> <p>Auditor's Rationale: Technical references relating to low volume road engineering indicate slope design, retaining structures, buttresses, brush layering and drainage are effective means of stabilising exposed batters, and that topsoil placed on slopes greater than 40 degrees may be subject to sliver fill failure. The auditor also considers that stockpiled topsoil would be of greater value in rehabilitating temporary road alignments after they have been reshaped to a more natural profile on completion of harvesting.</p> <p>Auditor's Suggested Priority: Low</p>	<p>This recommendation was addressed in section 6.2.2 of the new MSPs.</p>
<p style="text-align: center;">(Regeneration and finalisation)</p> <p>Recommendation REG12 - It is recommended that the Code prescription relating to suitability of silvicultural methods for regeneration of understorey species be reviewed and revised to clarify its intended purpose; and that the standards and methods for the regeneration and assessment of regeneration of understorey species are developed and documented.</p> <p>Auditor's Rationale: The audit found the Code prescription 'Silvicultural methods for regeneration must be appropriate to the forest type (including understorey species) and local conditions' could not be fully assessed in relation to treatment of understorey species. It is unclear whether this prescription is introducing further requirements to provide for these species at a coupe level, or whether it is aimed at the more disturbance tolerant understorey species. It is also noted that the inclusion of standards and methods for regenerating understorey species within Victorian native forestry guidelines and manuals would aid consistent interpretation of this requirement, as they are largely</p>	<p>This recommendation was addressed in sections 2.2.2.10, 2.5.1.7, 2.6.1.4 to 2.6.1.6, 2.6.1.8, 2.6.1.9 and 2.6.2.3 of the 2014 Code.</p>



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<p>focused on overstorey species.</p> <p>Auditor's Suggested Priority: Medium</p>	
<p style="text-align: center;">(Regeneration and finalisation)</p> <p>Recommendation REG13 - The auditor recommends that in future regeneration audits, a desktop assessment of compliance of a sample representative of all harvested coupes completed in a given year be undertaken to determine if actions are being taken to successfully regenerate all coupes, not only those submitted as regenerated.</p> <p>Auditor's Rationale: The FAP audits only those coupes that VicForests has submitted as being adequately stocked. There is no check of whether actions are being taken to successfully regenerate all coupes and whether a backlog of unregenerated coupes is accumulating.</p> <p>The 2013 Victorian Auditor-General's Report, Managing Victoria's Native Forest Timber Resources, identified deficiencies in both VicForests' and DEPI's processes of reconciliation of regenerated areas with harvested areas.</p> <p>Auditor's Suggested Priority: Medium</p>	<p>DELWP notes the issues raised in this audit report and the Victorian Auditor General's Office audit of 2013.</p> <p>This recommendation will be considered by DELWP when designing the next Forest Audit Program project to assess the regeneration of timber harvesting coupes.</p>

