## DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT RESPONSE TO RECOMMENDATIONS OF THE REVIEW OF FIRE OPERATIONS IN FOREST REGIONS MANAGED BY THE DEPARTMENT

(Muller Review - December 2001)

Corporate Executive commissioned an internal review of the Department's fire operations in the south-west forest regions. The review was conducted by the Department's Pilbara Regional Manager, Chris Muller and his report has been published by the Department.

The Corporate Executive welcomes the report and the contribution it makes to ongoing examination of and improvement to our fire management.

This document outlines the Department's response to each of the recommendations in the report. It needs to be borne in mind that these responses will continue to evolve in the light of new information, changing circumstances and community expectations.

In making this response, Corporate Executive wishes to record its appreciation to Chris Muller for his report and in particular the insights he has presented.

## Recommendation 1.1: Greater resources be allocated to long term fire effects research.

Discussion: The Department currently has extensive biodiversity related research programs. It is essential that the Department continues to build its knowledge base of the impacts of wildfires and planned burning on the biota of the State.

Response: The Executive Director will request the Director of Nature Conservation and the Director of Sustainable Forest Management to explore, with the Director of the Department's Science Division, the purchase of an increased level of fire effects research consistent with overall science funding levels, subject to advice received from the Conservation Commission following its consideration of the report, and from the EPA following its planned formal review of Departmental fire operations. However, decisions on the level of funding will be determined by Statewide priorities.

## Recommendation 1.2: Relevant Science Division staff be directly involved in fire planning, including annual burn plan reviews.

Discussion: It is essential for there to be open and constructive dialogue between all specialist and operational areas of the Department during fire planning and that there be an active system of internal communications on fire activities including an agreed process of review when sub-optimal outcomes of planned burns or wildfire suppression activities occur.

Response: The Executive Director will issue an instruction that requires formal involvement of Nature Conservation, Parks and Visitor Services, Sustainable Forest Management and Science representatives in annual fire planning. The Executive Director will also require that a formal process of public involvement and consultation on fire planning be implemented to

ensure that the diversity of community views on proposed planned fire activities is available to the Corporate Executive of the Department and the Conservation Commission. The Director Regional Services is to implement this process and propose an internal communication system to keep key staff apprised of current fire operations.

Recommendation 2.1: The Department develop a consistent approach that complies with both the letter and the spirit of the Bush Fires Act. As the department is not bound by the Act it should not seek permits or approval, but it should consult with and seek concurrence from FESA and local authorities in situations where private landholders require permits.

Discussion: The report notes that the Department is not a member of the Fire and Emergency Services Authority. It is important that the Department establishes a formal relationship with the Authority and formalised arrangements for each area of the Department's responsibility where there is potential for an overlap with the interests of the Authority.

Response: The Department will seek a formal arrangement with the Fire and Emergency Services Authority, possibly through an MOU to avoid potential duplication, ensure compliance with statute law, and to establish agreed procedures with respect to activities that would equate to private landholder responsibilities. The Director Regional Services is to have responsibility for proposing the mechanism for implementation.

Recommendation 2.2: The Department seek amendment to State Emergency Management Committee Policy Statement 7 to properly reflect the Department's statutory powers and responsibilities.

Response: Agreed. The Director Regional Services to implement.

Recommendation 2.3: The Department seek amendments to the Bush Fires Act such that prime responsibility for adequate fire protection clearly rests with the person(s) who establish vulnerable assets in fire prone areas.

Discussion: This is a significant issue for the Department with considerable across Government policy implications. The Department is concerned that inappropriate development adjacent to conservation lands may require the Department to adopt management practices that are not in the best interests of the maintenance of biodiversity conservation objectives.

Response: The Department will seek the views of the Department for Planning and Infrastructure, FESA and the WA Local Government Association for on an appropriate policy to address fire management responsibilities for such developments. Director Regional Services to implement.

Recommendation 2.4: The Department formally respond to all applications for development adjoining lands managed by the Department, outlining the potential fire risks and hazards, and emphasising the responsibility for ensuring adequate fire protection lies with local government.

Response: As for recommendation 2.3

Recommendation 2.5: The Department regularly communicates to local government limitations on its contribution to fire protection in the local area, and immediately advises when there is any reduction or other factors that affect the effectiveness of fire protection.

Discussion: The issue of managing interactions with local governments across Western Australia on a consistent basis is an important consideration in addressing this recommendation.

Response: The Director Regional Services will review the formal arrangements for the provision of information to local government with respect to fire management and other significant Departmental issues to put systems in place to ensure that appropriate and consistent advice (including advice on changes to the Department's fire protection capability) is being provided by the Department's regional staff to local government across the State.

Recommendation 3.1: The Department seek wider community input into the classification of values for fire management analysis.

Discussion: The Department notes that the identification of the values for which the Department manages its lands will form an intrinsic component of a new Fire Management Policy.

Response: In formulating its new Fire Management Policy the Department will consult widely with the Conservation Commission, the community and stakeholders to ensure that management practices appropriately reflect community values. The forthcoming EPA review will also provide valuable input.

Recommendation 4.1: The Forest Products Commission undertake a more detailed quantitative analysis to define the commercial consequences of fire loss.

Discussion: With long-term planning being put in place for the restructuring of the timber industry to provide for the better utilisation of forest products it is essential that the inherent risk of the loss of forest through fire be factored into high level strategic planning considerations of the Forest Products Commission.

Response: The recommendation will be referred to the General Manager of the Forest Products Commission.

Recommendation 4.2: Forest Products Commission be requested to ensure its staff maintain and acquire fire skills and experience through training and participation in burning.

Discussion: The Department notes that as a result of high level training and experience in fire management many FPC staff represent an essential resource that must remain available if the Department is to continue to have the capacity to successfully manage forest fire. In view of its direct business interest in the management and protection of forest products the FPC should commit to the ongoing involvement of its personnel in fire management.

Response: The recommendation will be forwarded to the General Manager of the Forest Products Commission.

Recommendation 5.1: The Department ensures all forest fire fighters, controllers and supervisors are trained to understand the potential fire behaviour changes with increased fuel loads, with an emphasis on avoiding entrapment situations.

Discussion: The Department recognises and accepts the duty of care it has to its staff and to the community generally to ensure that fire is managed in a professional manner. The Department recognises that it must remain vigilant in ensuring that there is no decline in fire management capacity and training standards over time.

Response: Recommendation accepted. Formal and informal Departmental fire training courses will be structured to include an emphasis on isks and amelioration of risks relating to fire fighter safety. The Director Regional Services to implement.

Recommendation 5.2: Employment contracts for seasonal employees be framed to encourage annual re-employment to increase the experience level and hence safety of seasonal fire crews.

Response: Recommendation agreed. The Director Corporate Services and Director Regional Services to develop a standard seasonal employment contract that allows for annual reemployment on a seasonal basis.

Recommendation 5.3: A level of experienced fire fighters be maintained to enable forest fire crews to include in their total numbers not more than one third inexperienced personnel who in turn must meet the basic fire fighter accreditation standard.

Response: Recommendation agreed. The Director Regional Services to instruct Regional and District Managers accordingly.

Recommendation 5.4: Increased emphasis be placed on successional planning for key fire control staff.

Response: As for Recommendation 5.1. The Director Regional Services to identify key roles and implement succession planning for those positions.

Recommendation 5.5: The Department cooperate with FESA and local government authorities to encourage a high level of forest fire training for brigades likely to be involved in forest fires.

Response: As for recommendation 5.1. The Department will also seek to incorporate into brigade programs specific biodiversity protection training.

Recommendation 5.6: The Department consider the changes in the availability and experience of others involved with forest fire fighting when determining its resource and experience requirements for fire management in particular areas.

Discussion: The Department will seek the cooperation of other agencies such as the Forest Products Commission and industries with a commercial interest in the forest, particularly the mining and timber industries, to commit resources at an appropriate level for forest fire management. The Department may seek Government intervention if there is an unsatisfactory level of cooperation.

Response: The Director Regional Services is to maintain information on forest fire management resources both inside and outside the Department and provide input into Departmental strategic planning to ensure that appropriate fire response models can be maintained.

Recommendation 5.7: The Department provide a formal mentoring program for fire as a requirement of a formal in-service program for all new field personnel.

Response: As for Recommendation 5.1. The Department also notes that an overall mentoring program is desirable for all significant activities and that succession planning is required for all key functions including fire. Director Corporate Services to propose a departmental mentoring program.

Recommendation 5.8: Training programs be implemented so as to facilitate both attendance and learning outcomes.

Response: As for Recommendation 5.1.

Recommendation 5.9: The Department continue to monitor the development and effectiveness of crew protection systems and ensure best practice is implemented when replacing or upgrading fire fighting units.

Response: As for Recommendation 5.1.

Recommendation 6.1: Appropriate market research be conducted into what key stakeholders and the wider community know, understand, and perceive concerning fire in the natural environment and fire management practices in Western Australia.

Discussion: The Department notes with concern the inconsistency of public information on fire, particularly in the media, with proper concern being paid to wildfire events but often negative reactions to planned burning. The Department also notes that there may be some ambiguity regarding the Government wide approach to fire management due to the number of different agencies involved and the different management approaches being adopted. Whilst there may be sound reasons for different approaches to fire management it would seem to be desirable to reflect the Government's intentions in a broad Government-wide fire management policy, and thereby ensure that agencies implement the practices required by the Government rather than a range of separate approaches to such a serious issue.

Response: The Department through the Director Regional Services will consult with FESA and other agencies as appropriate regarding the potential development of a Government policy on fire management to ensure that there is a consistent platform from which to promote public awareness and understanding of the natural role of fire and the need for appropriate fire management practices. This issue will also be raised in the forthcoming EPA review.

Recommendation 6.2: The Department implement a strategic communication and advocacy program that will develop key stakeholder and community awareness and understanding of the role of fire in the natural environment, and will assist in encouraging informed community discussion concerning fire management in the State's natural environment.

Response: As for Recommendation 6.1.

Recommendation 7.1: The development of remote sensing and GIS tools to support fire management planning is continued.

Response: Recommendation accepted. Director Regional Services and Director Corporate Services to implement.

Recommendation 7.2: An adaptive approach to burn planning is taken, based on fire diversity/structural models for vegetation units.

Response: Recommendation accepted. Implementation is to be by the Director Regional Services in consultation with the Director of Science and the Director of Nature Conservation.

Recommendation 7.3: Policy Statement 19, Fire Management Policy, be revised to more accurately reflect the values and intended practices of the Department.

Discussion: Following the enactment of legislation to create a separate Forest Products Commission and remove commercial forest harvesting and sale responsibilities previously held by the Department, it is appropriate that the Department continues internal processes to focus its land management practices on biodiversity conservation outcomes. All Departmental policies are to be reviewed in the context of this focus.

Comments made in response to Recommendation 6.1 regarding the possible development of a Government-wide policy on fire management are also pertinent to this recommendation.

Response: Recommendation accepted. The Director Regional Services to implement through the Corporate Executive with consultation with the Conservation Commission, peak stakeholder bodies and the community at the draft policy stage.

Recommendation 7.4: The size of individual burn operations be maximised where possible, with the objectives to provide for diversity and a mosaic of burnt and unburnt patches within the boundaries of the overall burn envelope.

Discussion: It is noted that this recommendation may be considered contentious unless it is recognised that the intention is to adopt a more natural and therefore less interventionist approach to planned burning. The intention is that burn boundaries will be larger allowing for the establishment of mosaic burning patterns over larger burn areas.

Response: This issue will require careful consideration in the context of the development of a new Departmental policy and strategies on fire management. Other bodies with a key interest in this matter including the Conservation Commission should be consulted. This will also be a key issue in the forthcoming EPA review.

Recommendation 7.5: Prescription objectives clearly identify both the reason(s) and intended outcomes for each burn.

Discussion: It is proposed that key specialist areas of the Department be involved in all burn planning and particularly that Nature Conservation, Parks and Visitor Services, and Sustainable Forest Management representatives ensure that burns be carried out to meet the requirements of those outputs. This process will result in the proper identification of the objectives and proposed outcomes for each burn.

Response: Recommendation accepted. Implementation by the Director Regional Services with input from the Directors of Nature Conservation, Parks and Visitor Services, Sustainable Forest Management, and Science.

Recommendation 7.6: The Department, the Department of Health and the Department of Environmental Protection/Environmental Protection Authority be involved in determining a fire management strategy that provides for optimal overall outcomes.

Discussion: This recommendation relating to the maintenance of air quality recognises the sound work that has been undertaken to date in building cross-agency linkages on the issue of fire and its impact on air quality. Involvement of all relevant agencies to develop appropriate fire management strategies based on the analysis of all factors should provide opportunity for optimising outcomes and gaining wider acceptance.

Previous comments in response to Recommendation 6.1 regarding the need for an overall Government-wide fire management policy are pertinent to this issue.

Response: The Department accepts that there is an active role for key agencies in the establishment of appropriate fire management practices to ensure the maintenance of appropriate air quality standards. The Director Regional Services is to establish formal relationships with the newly created Department of Environment, Water and Catchment Protection, the Environmental Protection Authority, and the Department of Health to ensure that there is a mutually agreed strategy for meeting conservation and protection objectives whilst minimising any adverse impacts resulting from Departmental burning activities.

## Recommendation 7.7: A framework be established to integrate fire management with other plans.

Discussion: It is noted that fire management represents a key issue that must be addressed within Departmental land management plans as well as plans for specific issues (e.g. recreation site plans; recovery plans for threatened species and ecological communities). The need for integration of planning across outputs is acknowledged.

Response: It is agreed that there needs to be greater integration and consistency of planning for and the application of the Department's fire management policies across all Departmental lands. Implementation by Director of Parks and Visitor Services and Director of Nature Conservation in consultation with the Director Regional Services.

Recommendation 8.1: Clear objectives for the protection/enhancement of values be agreed between representatives of the purchasers (Forest Products Commission and Output Directors) and providers (Regional Services fire representatives) during the planning process, and these form the basis for cost allocation.

Response: Recommendation accepted. Implementation by the Director Regional Services with input from the Directors of Nature Conservation, Parks and Visitor Services, Sustainable Forest Management, and Science, as well as from the Forest Products Commission.

Recommendation 8.2: The budget allocation process be amended to account for annual variations between outputs in fire activities.

Discussion: The accounting for fire management is a significant undertaking given the size of the annual program. There is potential for improvement. It is appropriate that guidelines for fire costings be agreed between Directors to ensure that the cost of the program is properly and consistently costed to the relevant outputs, and recorded as a community service obligation in the case of relevant wildfire suppression and community protection burning.

Response: The Director Regional Services in consultation with the Director Corporate Services and Output Directors is to review the accounting system and develop guidelines for the proper and consistent costing of fire components, for Corporate Executive consideration.

Recommendation 8.3: Accounting procedures be amended to provide for all costs to be debited to a single account for each fire related job, with automatic redistribution on a predetermined basis.

Response: As for recommendation 8.2.

Recommendation 8.4: The fixed costs of specialised equipment such as heavy duties and fire fighting plant be separately identified and debited to wildfire suppression and burning.

Response: As for recommendation 8.2.

Recommendation 8.5: The cost of providing community protection be identified through the creation of a separate program or sub-programs within the core output programs.

Discussion: It is important that the cost of providing community protection be properly identified. However providing such protection arises from the fact that the Department manages land for the core purposes of biodiversity conservation, recreation and forest production, and costs incurred should be identified against those core purposes. Creation of a separate program is not supported.

Response: As for recommendation 8.2.

Recommendation 9.1: The Wildfire Threat Analysis be retained as an appropriate means of identifying where additional actions are required to provide fire protection.

Response: Recommendation accepted. The Director Regional Services to implement.

Recommendation 9.2: The GIS analytical tools developed for the Wildfire Threat Analysis be maintained and further enhanced to support fire management planning and analysis.

Response: Recommendation accepted. The Director Regional Services to implement through Service Provider Agreements with Output Directors.

Recommendation 9.3: Science and Nature Conservation Divisions investigate spatial models to incorporate research findings in fire management analyses.

Response: Recommendation accepted. The Director of Science to implement in consultation with the Director of Nature Conservation.

Recommendation 10.1: Remote sensing/GIS analysis techniques be further developed and implemented to monitor fire distribution.

Response: Recommendation accepted. The Director Regional Services to implement through Service Provider Agreements with Output Directors.

Recommendation 10.2: Resources and appropriate techniques be applied to enable sufficient prescribed fire to be applied to maintain an overall fire diversity (including wildfire) as near as practicable to the fire distribution models.

Response: The recommendation is accepted subject to consistency with planned burning prescriptions to be developed in consultation with Output Directors, as well as consistency with proposed policy and operational directions (see also Recommendations 3.1, 7.3 and 7.4).

Recommendation 11.1: A risk management approach be implemented for all activities to provide weightings for allocation of resources to meet a range of obligations.

Discussion: The qualitative risk assessment approach developed for fire management has applicability to other major programs conducted by the Department.

Response: Recommendation accepted. The Director Regional Services is to consult with Output Directors to determine a strategic approach to risk assessment and resource allocation.

Recommendation 12.1: This report on the Review of Fire Operations be made widely available to departmental staff, including through publishing on CALMWeb.

Response: Recommendation accepted. The Director Regional Services to implement and concurrently publish Departmental response.

Recommendation 13.1: Fire service provisions be given a priority for award alignment, to develop uniform and equitable provisions that reflect the duties performed.

Response: Recommendation accepted. The Director Corporate Services to implement in consultation with the Director Regional Services.

Recommendation 13.2: Fire management be identified as part of the duties of all departmental staff in the forest regions, and relevant skills base be maintained.

Response: Recommendation accepted to the extent that it is consistent with overall Departmental needs and priorities across all Outputs. The Director Corporate Services to implement in consultation with the Director Regional Services and Output Directors.

Recommendation 14.1: Consideration be given to greater use of the internal web to facilitate operational planning and to improve accuracy of recording data.

Response: Recommendation accepted. Director Regional Services to implement in consultation with the Director of Strategic Development and Corporate Affairs.