SUMMARY

OF

PROCEEDINGS OF A WORKSHOP ON

ECOLOGICAL SUSTAINABILITY

HELD AT THE

DEPARTMENT OF CONSERVATION AND

LAND MANAGEMENT

COMO, WESTERN AUSTRALIA

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DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

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SUMMARY OF WORKSHOP PROCEEDINGS

WORKSHOP AIMS

The Department of Conservation and Land Management is currently undertaking a major review of its nature conservation and forest management strategies. The Ecological Sustainability Workshop was held as an integral part of those reviews. Its aims were:

1. To gain input from people with a broad range of interests and backgrounds.
2. To achieve definitions of ecological sustainability and sustainable development acceptable to all interest groups.
3. To identify the main issues relevant to CALM and key steps to be taken by CALM towards achieving ecological sustainability in Western Australia.

Six workshop groups were formed to address these aims. The morning sessions were given over to consideration of definitions. The afternoon sessions dealt with issues arising from the morning's discussion, leading to identification of guiding principles for CALM in seeking ecological sustainability and of actions that should be taken towards it achievement.

The opening address by Roger Underwood, General Manager, CALM, and the closing address by Barry Wilson, Director for Nature Conservation, CALM, are contained in the full report of the workshop proceedings.

MORNING SESSIONS

The six workshop groups considered the definitions of "ecological sustainability" and "ecologically sustainable development". They were given the following material as examples:

- The definition from the Commonwealth Government's recent discussion paper on sustainable development:

  > "ecologically sustainable development means using, conserving and enhancing the community's resources, so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased."

- Definitions provided by CALM:

  > "ecological sustainability (is) management of ecosystems so that the full suite of biological species, and ecological and evolutionary processes, of each ecosystem is retained in the long term, even though short term changes may occur."

> "ecologically sustainable development is therefore: conserving, using and enhancing ecosystems so that the full suite of biological species and ecological and evolutionary processes of each ecosystem is retained in the long term, even though short term changes may occur."

No final definitions of "ecological sustainability" and "ecologically sustainable development" were achieved by the workshop. Some groups agreed broadly with the definitions given. Other groups developed their own definitions, as follows:

> "Ecological sustainability is the management of ecosystems so that the full suite of biological species, and ecological and evolutionary processes, of each ecosystem is retained in perpetuity."

> "Ecologically sustainable development means using, conserving (and restoring) the ecosystem's resources, so that the full suite of species and evolutionary processes, on which life depends, are maintained and the total quality of life, now and in the future, can be maintained or if necessary increased."

> "Conservation is the maintenance of nature."

> "Ecological sustainability is the management of ecosystems to ensure conservation of nature."

> "Ecologically sustainable development is development within the context of ecological sustainability."

> "Recognising the dynamic nature of ecosystems, ecological sustainability is the maintenance in perpetuity of biological diversity within an ecosystem, defined on an appropriate spatial scale."

> "Ecological sustainability is the management of populations, species, communities, landscapes and the planet so that the loss of biodiversity and changes in ecological and evolutionary processes are minimised."

ISSUES ARISING FROM THE MORNING SESSIONS

The development of definitions gave rise to a number of issues, discussed further at the post-lunch plenary session. The following key issues in achieving ecological sustainability were identified:

1. Can/should humans influence evolutionary processes?

2. What is the "full suite" of species? Can/should it be maintained?

3. What is "management"?

4. What is a "baseline ecosystem"?

5. What is CALM's role in influencing implementation of ecologically sustainable development on CALM and non-CALM lands?

6. What does "quality of life" mean in W.A.? Should the quality of life be improved?

7. How should success/failure be monitored and judged in pursuing ecologically sustainable development?

8. What are the horizons for "short", "medium" and "long-term"?

9. What is an appropriate "spatial scale" for ecologically sustainable development on CALM and non-CALM lands?

10. Does CALM have a role in issues such as "limiting growth" and establishing "carrying capacity" of humans?

11. How do we manage change in ecologically sustainable development in human context?

12. What are the legislative requirements for ecologically sustainable development?

Two issues were allocated to each workshop group for discussion and identification of principles by which CALM should be guided in seeking ecological sustainability, and of actions to be taken towards its achievement.

PRINCIPLES AND ACTIONS IDENTIFIED

A total of 45 principles and 30 actions were identified during the afternoon workshop and the last plenary session. These are listed in full on pages 16 to 21 of the workshop proceedings.

The Table below summarises these principles and actions in relation to each issue (as listed 1 - 12 on previous page and above).

ISSUE	PRINCIPLES	ACTIONS
1	. Intervene in degraded ecosystems only. . Minimise changes.	
2	. Aim to restore to pre-European state— . Need baseline data. . Human actions not to reduce biodiversity. . Need continuity of conservation actions across different areas. . Maintenance of biological diversity is a community responsibility.	. Gather data . Identify high biodiversity areas. . Give priority to least disturbed areas. . Involve community. . Conservation program to apply to all lands. . Equal partnership. . Present range of options/views.
3	. Management is planning and implementing processes to achieve ecological sustainability.	
4	. Natural systems have intrinsic value. . Cannot be seen in isolation. . LGAs, LCDCs, developers etc. to do own environmental audits. . All ecosystems can/should be managed to retain conservation values.	. Study representative ecosystems. . Improve monitoring. . Seek indicators. . Provide audit guidelines. . Publicity.
5	. Land ownership should not dictate conservation estate. . Need broad-based management; practical, relevant research. . CALM to set example. . Importance of liaison.	. CALM involvement in ecological ethic development. . Link research with management. . Set measurable goals, monitor, reassess priorities.
6	. Three levels of needs/ wants: 1 basic needs 2 well-being, i.e. culture 3 excessive consumerism	. Emphasise 1 and 2 and encourage people to move from 3 to 2 by education and extension.

ISSUE	PRINCIPLES	ACTIONS
7	. Concentrate on processes. . Need flexibility. . Resource assessment not just on economic factors. . Decisions to be largely ecologically based. . Maximise future options. . Limit human population to carrying capacity. . Education.	. Seek objective measures of . baselines . acceptable changes . keystone species . index of change . Monitoring & assessment - an iterative process. . Involve the public. . Recognise resource limitations; determine priorities.
8	. Retain in perpetuity. . Short term - 0-5-10 years. Medium term - 20 years. Long term - > 100 years. . Need long term biocentric philosophy. . Systems have a continuum of scale. . Vision may change with different information.	
9	. Scale dictated by what is left. . Recognise repeated patterns and provide replication to protect biodiversity. . Ensure size/time/linkages. . Community approach . Integrate anthropocentric/biocentric philosophies.	. Conserve on ecological boundary basis. . Protect non-CALM remnants. . Speed legal changes. . Improve acquisition system. . Improve inventory. . Study spatial patterning, keystone species. Assist vegetated corridors.
10	. CALM role only if impacts are occurring/likely. . CALM to be proactive in issue of carrying capacity. . Greater input of conservation values in planning. . Community involvement in economic development/ policy.	. CALM to take lead role in development planning. . Education.
11	. Minimise human induced changes.	. Train managers to recognise and manage human induced change.

ISSUE	PRINCIPLES	ACTIONS
12	. Cultural needs (Aboriginal). . Conservation as a factor in urban development. . Coordination of Acts/ responsibilities needed.	. CALM to be involved in "catchment management" and other large area management as in pastoral areas.

WORKSHOP CONCLUSIONS

The workshop proved to be extremely valuable in clarifying the issues raised by the concept of ecological sustainability, and in putting forward directions for CALM's activities in this area.

All workshop groups emphasised the need to give consideration of biological diversity a very high priority. There was general agreement that biological diversity contributes significantly to the quality of life and should be a major factor in economic development decision-making.