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Motivating People:
Using Management Agreements to Conserve Remnant Vegetation

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Executive Summary

Introduction

This report reviews the role of management agreements and other mechanisms for promoting conservation outside the reserve system on private and public lands. Focusing on remnant vegetation, it draws on lessons and the experience of innovative private land conservation programs currently in place in each State and Territory. In general, these programs are small and achieve outstanding results with very limited funding. With the prospect of increased funding through the Natural Heritage Trust, this report finds that management agreements have the potential to play an increased and significant role in conserving remnant vegetation.

In broad terms, a management agreement is a contract or binding agreement between a landholder and third party regarding the use and management of their land. In the case of remnant vegetation conservation, an agreement would generally restrict land uses that are harmful and prescribe the management actions required to sustain conservation values in the long term.

Management agreements have the capacity to successfully integrate agricultural and other productive landuses with the conservation of remnant vegetation.

A Stewardship Focus

The initial reaction of many people to management agreements is that they are a form of disguised regulation, with government seeking to impose land use restrictions on landholders. However, if management agreements are to be successful, they must seek to achieve and retain strong landholder support and commitment. For their part, governments will need to provide funding and service to demonstrate their commitment on behalf of the community to the contract. Incentives that retain the motivation of landholders during periods of changing community expectation are critically important for the attainment of conservation objectives across diverse areas.

Effective management agreements are therefore built upon a partnership between the landholder and a contracting organisation that enters an agreement. Properly designed management agreements can engender close cooperation between government and landholders to meet conservation objectives which are in the public interest. This notion of partnership and cooperation between government and landholder has been termed “stewardship”. In large part, it is the potential to achieve true stewardship that sets management agreements apart from other incentives used to promote conservation.

Policy Context

A broad overview of the existing State, Territory and Commonwealth government legislation and programs is provided. It is found that in States which have provided financial assistance to landholders and/or used legislation to trigger entry to management agreements have been more successful in encouraging landholders to enter agreements.

There is also considerable inconsistency in approaches to vegetation management in place in each State and Territory. There are significant differences between the States in relation to the regulation of vegetation clearance, the objectives and structure of

vegetation programs and the size of financial incentives available for vegetation conservation.

Drawing on the experience of existing Commonwealth and State approaches to vegetation management, a conceptual framework to guide the use of management agreements in vegetation policy is developed.

Conceptual Framework

Duty of Care and Cost Sharing Arrangements

An alternative framework to existing cost sharing arrangements associated with vegetation management is put forward in this report. The focus is on how property right mechanisms can be used to change behaviour. The clear definition of the property rights and associated entitlements and obligations tied to landownership is an essential starting point for addressing vegetation issues. A distinction can be drawn between:

- The **Duty of Care** for sustainable land management faced by a landholder; and
- The provision of non-marketable "**Public Conservation Service**" by landholders managing vegetation to meet conservation objectives.

Determining where "duty of care" stops and "public conservation service" begins is a difficult issue. It is suggested that the dividing line should be drawn between those management practices required to achieve landuse objectives at a landscape or regional scale and any additional practices required to sustain sites of unique conservation value. Hence, a public conservation service is provided when the community's interest lies in securing active and ongoing management of a particular site.

Achieving a transition throughout Australia to such a position is a challenging exercise. We identify a role for management agreements in facilitating this transition and in ensuring that ecosystem functions and biodiversity are conserved in an equitable and secure way.

In the long run, the higher the duty of care, the less expensive remnant vegetation conservation will be. In practice duty of care is defined by existing property rights, that is the legal institutions, legislation and regulations that control landuse. Duty of care is not a static concept because scientific knowledge and community expectations will shift through time. For example, the provision of incentives for vegetation clearance, maintained into the 1970's, provides a pertinent case study of our evolving understanding of sustainable land management as public policy is now directed strongly at the conservation of vegetation. The challenge is to develop mechanisms that allow duty of care to be revised and adapted through time.

Tension exists between providing clear guidance through State and Commonwealth legislative frameworks and maintaining flexibility to take account of regional differences and changing vegetation management objectives. Practical lessons can be learnt from other natural resource industries which have developed Codes of Practice to resolve these issues by institutionalising adaptive management.

An important policy guideline is that regional vegetation management plans, which operate under overarching legislation to ensure consistency at a State and National

level, can operate as a code of practice that provides a clear definition of duty of care for vegetation management which is able to be reviewed and adapted regularly.

The following policy guidelines for cost sharing arrangements are identified:

- Where community expectations resulting in legislative or policy changes cause duty of care to be shifted significantly over a short period of time, financial assistance may be provided to speed the transition to the new arrangements and maintain community support. Such payments should be "once off payments" in recognition of the need to adjust to a new regime;
- There are cases where the community may seek landholders to manage areas of remnant vegetation at a standard that is in excess of that required through regional planning processes. In these cases ongoing payments can be justified on the grounds of equity because a conservation service is being provided by the landholder; and
- Financial assistance should generally not be paid to landholders to meet their duty of care for sustainable land management.

Drawing on this framework the following roles for management agreements can be envisaged:

1. **Landowner-Initiated Agreements** - landholders with a strong commitment to vegetation protection are encouraged to voluntarily enter into agreements to ensure ongoing protection of vegetation they value;
2. **Transition Agreements** - Policy or legislative change is accompanied by incentives that assist landholders in meeting new vegetation management obligations. The emphasis is on equity so as to retain landholder support and motivation for the transition to a new management standard; and
3. **Unique-Site Agreements** - Management agreements may be used to secure conservation for priority ecosystems that are of high conservation value.

These agreements should be as binding on governments as they are on landholders.

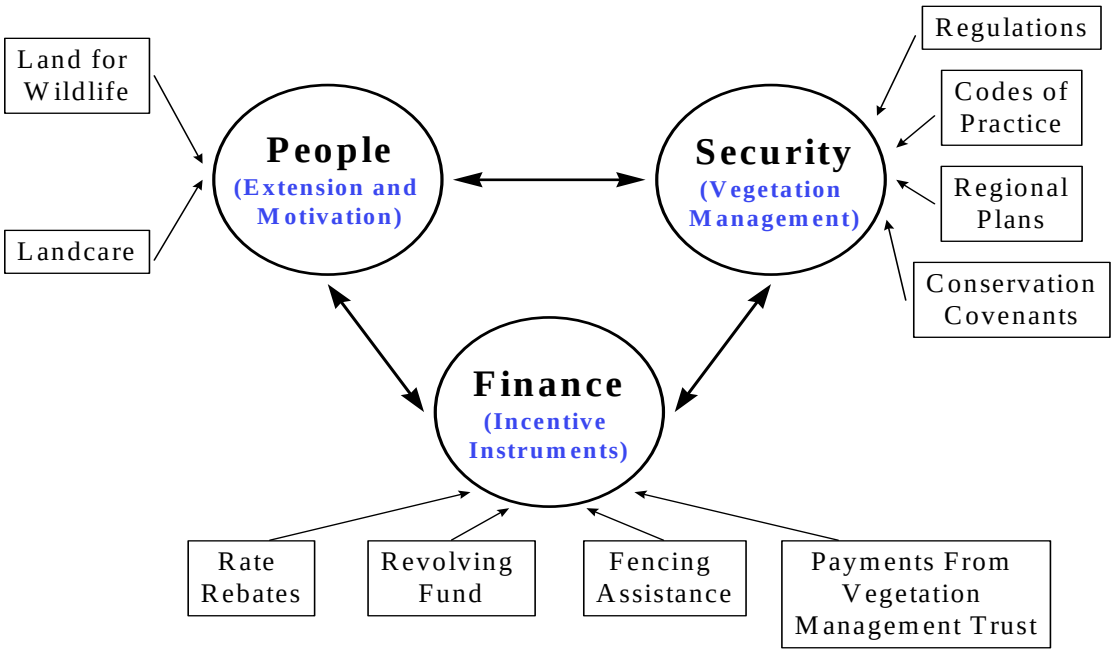
Opportunities for Expanding the Use of Management Agreements

A large number of policy guidelines which, if adopted, will facilitate the use of these agreements and improve vegetation management are identified in the report. The guidelines can be categorised in the following way:

- **People** - the tools that can be used to motivate and retain landholders support for vegetation programs;
- **Security** - the mechanisms that can be used to provide secure adaptive management of vegetation; and
- **Finance** - the incentives that can be provided to share the costs of managing vegetation.

Opportunities for immediate implementation of these guidelines are outlined in the following sections including options for the successful **Delivery** of incentives by government. The options are interdependent as any single mechanism is unlikely to

meet all policy objectives. The figure below places the individual options in the context of a comprehensive policy approach.



People

Policy Opportunity 1: That a **National Land for Wildlife Program** should be developed which establishes a network of landholders and funds extension and facilitation services for vegetation management. The Program should:

- Be based on the successful Victorian program, but draw on existing approaches in each state;
- Provide the extension support for all vegetation programs under Bushcare;
- Develop biological monitoring and performance measures for vegetation management that operate on a two yearly basis; and
- Be closely integrated with other vegetation programs including regulations, covenants and property management planning.

Such programs have an important role in building and maintaining motivation. They are critical to ensuring that the outcomes sought through vegetation policy are deliverable. In many cases, Australia does not know how to manage fragmented remnants. There is a lot to learn.

Security

Policy Opportunity 2: State based regulatory frameworks that put in place mechanisms for the development and implementation of **regional vegetation management plans** have the potential to be the most equitable and effective approach to meeting broad vegetation management objectives. In a budget constrained environment, there is opportunity for significant savings in avoiding selection of inappropriate sites through State wide prescriptions.

Policy Opportunity 3: Regional management plans can play the role of a **Code of Practice** for vegetation management that defines duty of care. These plans should:

- Be developed in close consultation with all stakeholders to ensure they have ongoing community and political support;
- Take into account differences in the quality and conservation status of areas of vegetation;
- Provide the practical and enforceable definitions of land management practices required for sustainable vegetation management; and
- Be reviewed on a regular basis to allow for sustainable management and hence ensure land management keeps pace with scientific understanding and community expectations.

Policy Opportunity 4: A series of **Protected Area Networks** should be established which include all public and private land managed for conservation. The Network would provide a mechanism to account for and provide formal recognition of the contribution that land outside the formal reserve system makes to the conservation of Australia's biodiversity.

- **Unique site agreements** and incentives can be used to secure protection of high priority ecosystems which are fragmented and where public ownership and management as a national park is impractical.

Policy Opportunity 5: Management agreements should be used to secure vegetation objectives when renewing, amending or upgrading leases over **leasehold land**. Conversion to a more secure form of tenure or permission to sub-divide, could be made conditional on acceptance of a management agreement that protects a unique site.

Finance

Policy Opportunity 6: A Fencing Assistance Scheme should be established under Bushcare for areas of conservation value. Increased support should be given to those who make the strongest commitment and for vegetation which meets regional conservation priorities. Assistance could be offered according to the following scale:

- 33% for non-binding agreement such as a person involved in Land for Wildlife;
- 66% for a fixed term agreement, for example, 30 years; and
- 100% for an agreement in perpetuity such as for a site that is unique to an endangered species.

Policy Opportunity 7: Commonwealth and State governments should encourage local governments to provide **rate rebates** for land covered by a management agreement that provides for vegetation conservation.

- A five year program to supplement costs to local government should be established. 100% supplementation could be provided in the first 2 years, decreasing by 33% each year thereafter; and
- Following this transition, rate rebates should be built into the rating base of local governments by reviewing the basis for land valuation and rating.

Policy Opportunity 8: A range of **Vegetation Management Trusts** should be established to provide funding for ongoing management needs of areas covered by a management agreement in perpetuity.

- The Trusts should be established with secure funding for 5 - 10 years. Review arrangements should tie any additional funding to demonstration of cost effective conservation outcomes. Public donations should be encouraged and be tax deductible; and
- The Trust could provide payments to landholders based on applications for funding linked to monitoring of management agreements undertaken on two yearly basis.

Policy Opportunity 9: To build coincidence between land of high conservation value and people willing to conserve unique sites, **Revolving Funds** should be established in each State. The revolving fund would be used for the purchase of land, placement of a unique site agreement on it and its subsequent resale to a committed landholder.

Delivery

Policy Opportunity 10: Financial assistance should be guided by **a nationally agreed process to achieve consistency in principles for vegetation management in** order to reduce inconsistencies between states and improve program effectiveness. Where no process to build consistency is in place, Commonwealth assistance should not be provided.

Policy Opportunity 11: To maximise the accessibility of vegetation programs, the delivery of incentives should be **devolved to Local Government** and other appropriate **regional and non-government organisations.**

Policy Opportunity 12: To effectively deliver incentives, Commonwealth and State governments should establish **strategic alliances** that seek the cooperation of key businesses, companies and other large landholders in conserving remnant vegetation.

Policy Opportunity 13: The **legislation** that enables covenants to be established in each State should be **reviewed** and broadened to enable a wide range of organisations to promote and use management agreements.

- In the first instance, mechanisms for allowing local governments to develop and administer management agreement programs should be developed.

Future Directions

The full report draws attention to the importance of designing an instrument mix, that appeals to all landholders including statutory authorities, local government, aboriginal landholders, hobby farmers and large corporations. There is an opportunity for program delivery to be devolved to independent bodies at arms length from government.

The report also stresses the need for an adaptive approach to the development and maintenance of management agreements. If management agreements are to be enduring they must be active documents that adapt to changing circumstances. Mechanisms for putting agreements in an adaptive management framework are identified.

The focus of this report is on management agreements and the opportunities that surround them. As part of our wider strategy to identify and develop opportunities to enhance the effectiveness of policies to conserve remnant vegetation, our next report will focus on the role of local government in native vegetation management with particular emphasis on the role of financial incentives. This will be followed by work on income tax initiatives and non-government organisations.

Policy Guidelines*

Conceptual Framework

Policy Guideline 3.1 - Do not provide ongoing subsidies for sustainable land management.

- Consistency with national competition and trade policies requires that costs associated with meeting a landholders "duty of care" are incorporated into and seen as normal costs of production. In the course of achieving consistency and redefining obligations, transitional arrangements can be justified.

Policy Guideline 3.2 - Ongoing payments that reimburse the costs of management can only be justified where it is directly in the community's interest to secure site specific ongoing management of vegetation by a landholder. Ongoing payments may also be used to off-set perverse incentives.

Policy Guideline 3.3* - Regional vegetation management plans have the capacity to provide an operational definition of duty of care. Regional management plans have the potential to play the role of a Code of Practice for vegetation management and in defining duty of care. These plans should:

- Be developed in close consultation with all stakeholders to ensure they have ongoing community and political support;
- Develop clear priorities for vegetation management taking into account differences in the quality and conservation status of areas of vegetation;
- Provide the practical and enforceable definitions of land management practices required for sustainable vegetation management; and
- Be monitored and reviewed on a regular basis to allow for sustainable management and hence ensure land management keeps pace with scientific understanding and community expectations.

Policy Guideline 3.4* - Financial assistance should be guided by a nationally agreed process to achieve consistency in principles for vegetation management in order to reduce inconsistencies between states and improve program effectiveness. Where no process to build consistency is in place, Commonwealth assistance should not be provided.

* Guidelines marked with a * have been used as the basis for the: "Policy Opportunities for Immediate Implementation" identified in the Executive Summary.

Policy Guideline 3.5 - Use incentive payments to retain motivation during threshold changes in the definition of duty of care.

- Where the definition of "duty of care" is shifted to a new threshold or where significant land use change is required, incentive payments can be used to speed transition and maintain community support. Such payments should be of a one-off nature and secure permanent changes in property rights. Sunset clauses, which limit eligibility to those that apply within a defined period of time, will speed transition.

Policy Guideline 3.6 - Voluntary programs are required to underpin the achievement of vegetation policy objectives, but they are unlikely in themselves to change behaviour in the short term.

Policy Guideline 3.7 - Management agreements can be most effectively targeted at: encouraging voluntary conservation effort; facilitating the transition to new land use entitlements; and protecting areas of high conservation value. Three types of agreement can be envisaged:

- **Landholder Initiated Agreements**: to further promote voluntary conservation on private land;
- **Transition Agreements**: to speed the transition resulting from legislative and policy change. Such transition should always result in a permanent change to entitlements under property rights;
- **Unique Site Agreements**: to conserve priority ecosystems on private and public lands outside the formal reserve system. Unique Site Agreements could form part of a Protected Area Network that formally accounts for all land managed for conservation irrespective of tenure.

The use of management agreements to meet these objectives would significantly boost conservation effort on private land.

Structuring Successful Agreements

Policy Guideline 4.1 - To give effect to stewardship management, agreements should clearly specify the obligations which both the contracting organisation and landholder are required to meet. The obligations on both parties to an agreement should be clearly stated and enforceable.

- Changes in land-use should be made in perpetuity and be non-negotiable; and
- Obligations for ongoing management should be shared noting that one party should not be able to enforce the terms of the agreement unless they can demonstrate that they have met the obligations placed on them by the agreement.

Policy Guideline 4.2* - That a National Land for Wildlife Program be developed which establishes a network of landholders and funds extension and facilitation services for vegetation management**.** The Program should:

- Be based on the successful Victorian program, but draw on existing approaches in each state;
- Provide the extension support for all vegetation programs under Bushcare;
- Develop biological monitoring and performance measures for vegetation management that operate on a two yearly basis (See Section 6); and
- Be integrated with other vegetation programs including regulations, covenants and property management planning.

Policy Guideline 4.3 - Vegetation management programs should include and market a range of non-binding, fixed term and in perpetuity management agreements.

- Non-binding schemes will attract motivated landholders, provide recognition of conservation services being provided and may act as a catalyst for landholders to ultimately enter into a binding agreement; and
- Where financial assistance is provided this should be tied to entry into a binding management agreement.

Policy Guideline 4.4* - To build coincidence between land of high conservation value and people willing to conserve unique sites, Revolving Funds should be established in each State.

- The Revolving Fund would be used for the purchase of land, placement of a unique site agreement on it and its subsequent resale to a committed landholder.

Policy Guideline 4.5* - Management agreements should be used to secure vegetation objectives when renewing, amending or upgrading leases over leasehold land.

- Conversion to a more secure form of tenure or permission to subdivide, could be made conditional on acceptance of a management agreement that protects a unique site.

Policy Guideline 4.6 - If the role of private land in meeting vegetation objectives is going to be enhanced, financial incentives will need to be used to secure permanent protection of significant areas of remnant vegetation.

Policy Guideline 4.7 - Willingness to enter into and honour a management agreement can be enhanced by using low cost incentive incentives, like rate rebates, that acknowledge public appreciation of a landholder's role as a steward of a remnant valued by society.

Policy Guideline 4.8* - A Fencing Assistance Scheme should be established under Bushcare for areas of conservation value with increased support being given to those who make the strongest commitment and for vegetation which meets regional conservation priorities. Assistance could be offered according to the following scale:

- 33% for non-binding agreement such as a person involved in Land for Wildlife;
- 66% for a fixed term agreement, for example, 30 years; and
- 100% for an agreement in perpetuity such as for a site that is important for an endangered species.

Policy Guideline 4.9* - Commonwealth and State governments should encourage local governments to provide **rate rebates** for land covered by a management agreement that provides for vegetation conservation.

- A five year program to supplement costs to local government should be established. 100% supplementation could be provided in the first 2 years, decreasing by 33% each year thereafter; and
- Following this transition, rate rebates should be built into the rating base of local governments by reviewing the basis for land valuation and rating.

Policy Guideline 4.10* - A range of Vegetation Management Trusts should be established to provide funding for ongoing management of areas covered by a management agreement in perpetuity.

- The Trusts should be established with secure funding for 5 - 10 years. Review arrangements should tie any additional funding to demonstration of cost effective conservation outcomes. Public donations should be encouraged and be tax deductible.
- The Trust would provide payments to landholders based on applications for funding linked to monitoring of management agreements undertaken on a two yearly basis.
- The Trust would provide performance payments for examples of exceptional management.

Institutional Arrangements and Delivery of Management Agreements

Draft Guideline 5.1 - To facilitate administrative simplicity and equity of access to government programs addressing vegetation issues on private land, overarching programs should be created to coordinate program delivery and act as a first point of contact for landholders for vegetation conservation issues.

Draft Guideline 5.2* - To effectively deliver incentives, Commonwealth and State governments should establish strategic alliances that seek the cooperation of key businesses, companies and other large landholders in conserving remnant vegetation.

Draft Guideline 5.3* - To maximise the accessibility of vegetation programs, the delivery of incentives should be devolved to Local Government and other appropriate regional and non-government organisations. The profile and accessibility of management agreement programs can be increased by:

- Increasing resources within existing programs in order to facilitate delivery to a wider client base;
- Devolving responsibility for negotiating and developing management agreements to **accredited contracting organisations** such as local government; and
- Developing partnerships with **supporting organisations** to encourage innovation and promote community acceptance.

Draft Guideline 5.4* - The legislation that enables covenants to be established in each State should be reviewed and broadened to enable a wide range of organisations to promote and use management agreements.

- In the first instance, mechanisms for allowing local governments to develop and administer management agreement programs should be developed.

Draft Guideline 5.5 - A Protected Area Network should be established which includes all public and private land managed for conservation to formally account for and provide recognition of the role that land outside the formal reserve system plays in meeting conservation objectives.

There is an opportunity to target “unique site” agreements to conserving areas of high conservation value and make cost effective contributions to the reserve system. Delivery of voluntary conservation programs can be most effectively targeted if:

- Programs are targeted at priority fragmented ecological communities and regions identified through regional vegetation management plans;
- Conservation effort is coordinated across land tenure;
- Existing auditing and inventory arrangements for public reserves are extended to areas of private land managed for nature; and
- Regional and ecosystem based “Protected Area Networks” are created utilising the full range of voluntary, incentive based and regulatory mechanisms available in each State.

Making Management Agreements Last

Policy Guideline 6.1 - The covenant or agreement between the landholder and contracting organisation should seek to establish the objectives, permitted landuses and systems for managing the site covered by the agreement.

- Negotiations should be focused on addressing the aspirations of the landholder in addition to ecological considerations;
- Where ongoing productive uses are consistent with conservation objectives, multiple land use models should be considered;
- Where management agreements are used to protect vulnerable ecological communities the environmental dependability of management arrangements should be given priority over other landuses; and
- Generic plans developed for priority ecological communities could provide the starting point for developing site specific agreements with individual landholders.

Policy Guideline 6.2 - Joint development of a Plans of Management with the landholder is an essential function for contracting organisations entering management agreements.

- Plans of management are a primary mechanism for resolving management issues with landholders, developing practical strategies and actions to manage threats and identify performance indicators for the management of remnant vegetation.

Policy Guideline 6.3 - Encouragement of active management by clearly identifying outcome oriented management strategies and actions will facilitate the achievement of ecologically dependable outcomes.

- To the greatest extent possible, management agreements should identify performance indicators which are monitored regularly and tied to the desired management “outcomes” rather than management “inputs”.

Policy Guideline 6.4 - In order to maintain active management the organisation that enters a management agreement will need to be directly responsible for providing regular management advice and initiating reviews of Plans of Management.

- Landholders should be contacted every year with site visits and monitoring at least every two years. Plans of Management should be formally reviewed every five years.

Policy Guideline 6.5 - Funding for ongoing management activities should be tied to two yearly monitoring and review arrangements.

- Application could be made to a Management Trust (Policy Guideline 4.10) by the contracting organisation and landholder on the basis of actions jointly identified at a two yearly review.

Policy Guideline 6.6 - Enforcing management agreements requires mechanisms that reward good management, encourage flexibility and adaptive management and rigorous enforcement of penalties for non-compliance.

- Landholders should be rewarded for active management and identifying problems by providing assistance through a Vegetation Management Trust which is tied to monitoring and review arrangements;
- Landholders should be able to trigger a review of the Plan of Management at any time in order to provide a mechanism for resolving any disputes or unforseen problems;
- Standards contained within management agreements should be vigorously enforced and penalties tied to the cost of rehabilitating damage on site; and
- Whenever a landholder wishes to exit an agreement, this should be possible only via sale of the land in question to another party.

1. Introduction

This is the first report of a three year project: "Opportunities for the use of incentive payments to conserve remnant vegetation", funded by Environment Australia and the Land and Water Resources Research and Development Corporation (LWRRDC). It evaluates the potential for management agreements and associated incentive payments to play a significantly expanded role securing the conservation of remnant vegetation in Australia.

The objective of the overall project is to improve the delivery of vegetation management programs by government agencies and other organisations and thereby increase the contribution of public and private landholders to the management of remnant vegetation. In addition to evaluating the role of management agreements, the project will also be evaluating the role of local governments, non-government organisations and taxation arrangements in securing vegetation management objectives. Because this report is the first of the project, it develops a conceptual framework for the use of financial incentives for vegetation management in addition to evaluating the role of management agreements.

1.1 What is a management agreement?

A useful starting point is to define what we mean by a management agreement and how it might be used to meet vegetation objectives.

In broad terms, a management agreement is a contract between a landholder and a third party regarding the use and management of their land. Entry into management agreements is generally voluntary. Because management agreements are contracts, they are potentially a very flexible instrument which can by tailored to the needs of individual sites and landholders (Crompton 1990).

Management agreements have two important roles which they can play in vegetation management:

- **Changing Property Rights:** ownership of land consists of a "bundle of entitlements" which a landholder has a right to exercise. A management agreement limits or changes a landholder's ability to exercise one or more of these entitlements (Crompton 1990). In the context of conservation of vegetation, a management agreement could be used to limit disturbance to vegetation and prescribe the management practices required to conserve the vegetation through time; and
- **Defining Plans of Management**: a plan outlining detailed management strategies, actions and performance indicators for the area covered by an agreement may also be developed as part of a management agreement. These plans do not involve changing title but inform the types of management that may be practised on the land covered by the agreement. Plans of management are generally of a shorter term nature and can provide an ongoing facility to review contract performance or other specified management arrangements.

Because of their flexibility management agreements may involve a range of commitments from landholders. For example an agreement may bind the landholder

either for a fixed period or in perpetuity. Agreements of this kind are generally registered on the title to land through a legal instrument called a covenant. Agreements may also be non-binding, such as the Land for Wildlife scheme in Victoria, which relies on ongoing landholder support and participation.

Financial incentives are often used to encourage landholders to enter management agreements. Incentives may involve reimbursement of costs associated with management, compensation for foregone land-use opportunities or indirect payment such as through the taxation system.

1.2 What is remnant vegetation?

The term “remnant vegetation” is used broadly in this report to cover native vegetation that occurs within fragmented landscapes. Remnants are generally small to medium sized patches of vegetation surrounded by highly modified land, such as cropping or grazing lands. Remnants are often thought of as patches of trees and shrubs. However, remnants may also be used to describe any fragmented native ecosystem such as wetlands and native grassland.

A remnant may be viewed as both a relic of natural ecosystems and as a product of existing land-uses and management practices. This latter view places remnant vegetation in an economic context. In many cases, it is useful to recall that a remnant exists only because of prior decisions made by the landholder. Indeed, remnant vegetation might be thought of as a stand of native vegetation that reflects current and past management practices rather than a relic from pre-European settlement. Hence, securing the conservation of remnant vegetation can be perceived as securing and adapting existing management practices rather than imposing a new management regime.

Many of the recommendations in this report will have broader application than policies focused exclusively on remnant vegetation. For example, the conceptual framework outlined in Section 3 focuses on the role of vegetation management in achievement of sustainable land use practices. Management agreements might be used to provide:

- Security over publicly funded revegetation using native species endemic to a region;
- Rehabilitation and expansion of degraded remnant vegetation; and
- Plantings established to reverse land degradation such as salinity.

The distinction between remnant vegetation conservation, revegetation and rehabilitation programs is often drawn very strongly. However in many cases a management agreement will be more effective if it requires some rehabilitation as well as protection of the remnant vegetation.

1.3 Defining other terms used in the report

The terms “management agreement”, “covenant”, “easement” and “stewardship agreements” are used in the literature to describe similar contractual arrangements. There are legal differences and the use and definition of these terms varies between jurisdictions. For these reasons we have chosen a particular terminology that will be used consistently throughout this report:

- **Management Agreement**: we have chosen to use the term “management agreement” as the overarching term used to cover all types of agreement that can be made between landholders and contracting organisations. Hence, all types of agreement from a non-binding agreement through to a covenant which might seek to achieve highly specified outcomes in perpetuity are evaluated in this report;
- **Covenant:** A covenant is a legal instrument which restricts what people may or may not do on their land. In the initial negotiation stage, participation is a voluntary process, but once entered into, they become binding and attach to the title to the land. Usually covenants are in perpetuity. As such, they bind all future landholders. Covenants can come in two forms, common law and statutory. Common law covenants are generally restricted to negative action, for example, “you shall not clear land”, and generally can only be used and enforced by a neighbouring property that benefits from them. Statutory covenants are established through legislation and can prescribe both positive and negative management actions. An example of a positive action is, “you shall manage pests and weeds”. Covenants used for nature conservation in Australia are generally statutory (ANZECC 1996). The term covenant is used in this report to describe a statutory covenant which is registered on the title of land and binding in perpetuity on current and future landholders;
- **Contracting Organisation**: we have chosen the term “contracting organisation” to refer to the government agency or other organisation that enters a management agreement with a landholder. We have avoided using the term government agency because it can be envisaged that management agreements might be entered into by other organisations such as local governments or Trusts. Indeed one of the most important policy guidelines in this report recommends the devolution of management agreement programs to organisations such as these;
- **Conservation**: conservation is used in the report to refer to management of remnant vegetation to maintain its ecological integrity and its role in the function of the landscape. Conservation management may or may not allow other competing land-uses depending on their impact on the native vegetation and the status of native vegetation more generally within a region;
- **Financial Incentives**: Financial assistance may be used to provide an incentive to landholders to enter management agreements. Incentives can

be made directly in the form of financial payment or indirectly, for example, through tax concessions or provision of "free" management advice; and

- **Plan of Management**: A plan of management sets out the detailed management strategies and actions required to meet the objectives of the management agreement. Plans of management are most effectively developed as a separate document to a covenant allowing it to be reviewed on a regular basis.

1.4 Structure of the report

The report is developed in a number of sections.

Section 2 - Policy Context reviews the existing policy framework for native vegetation management. It summarises the existing legislation and programs in place in each State, Territory and the Commonwealth. A range of key issues emerging from the current policy landscape are identified and discussed.

Section 3 - Conceptual Framework develops a conceptual framework through which the potential roles that management agreements can play in meeting vegetation objectives are identified. Key issues discussed include defining responsibilities for vegetation management and criteria for determining who should pay for remnant vegetation conservation.

Section 4 - Structuring Successful Agreements discusses various alternatives to designing management agreements and payment mechanisms for providing incentives. It establishes guidelines on the conditions when various alternative agreements should be used.

Section 5 - Institutional Arrangements and Delivery of Management Agreements discusses how management agreements can be most effectively promoted and delivered through government and non government programs. The potential for expanding the role of management agreements through devolving program delivery is highlighted and evaluated in detail.

Section 6 - Making Management Agreements Enduring addresses the most significant challenge for the conservation of remnant vegetation, that is, how do we ensure their conservation in the long term? Mechanisms which provide positive incentives for landholders to actively manage and adapt to new challenges are discussed.

2. Current Policy

Any examination of the potential for using management agreements and covenants needs to take account of, and be integrated with, existing approaches to vegetation management. There are a wide number of policy objectives which are relevant to managing vegetation at a local, regional, state and national level. Integrating these objectives is a significant issue which policy makers concerned with vegetation management are expected to address.

This Section reviews the legislative and policy framework adopted by the State, Territory and Commonwealth governments for addressing vegetation issues. There are a wide range of programs that provide incentives to landholders to manage vegetation. The Commonwealth is also increasingly taking an active role in vegetation issues through the provision of increased funding and leadership in developing consistent approaches at a national level.

A more detailed summary of State and Commonwealth programs as at June 1996 can be found in the document: *Nature Conservation on Private Land: Commonwealth, State and Territory Legislation and Programs - A Report of the Working Group on Nature Conservation on Private Land prepared for the Australia and New Zealand Environment and Conservation Council - Standing Committee on Conservation* (ANZECC, 1996).

2.1 State and Territory Legislation

2.1.1 New South Wales

In 1995, the New South Wales Government introduced comprehensive controls on the clearing of native vegetation through a State Environment Planning Policy (SEPP 46). The objective of the policy is to halt clearing while a more permanent legislative approach is developed with stakeholders (ANZECC 1996). Under SEPP 46, consent is required to clear vegetation in areas greater than two hectares and applications are assessed according to biodiversity values, soil erosion, salinisation and catchment effects and Aboriginal sites. The introduction of SEPP 46 has been controversial leading to a number of the provisions of the policy being relaxed, particularly those related to native grasslands (Dept of Environment, Sport and Territories 1996). The *Threatened Species Conservation Act, 1995*, and *the Environment Planning and Assessment Act* also have direct relevance to the management of vegetation in New South Wales: The development of new legislation to regulate native vegetation management is well advanced with extensive involvement of stakeholders. The New South Wales Government has announced its intention to put in place a new *Native Vegetation Conservation Act* which will have jurisdiction over the whole State and will supersede provisions in existing Acts which regulate the management of native vegetation. Key features of the proposed approach include:

- Providing a range of State wide exemptions to clearance controls;
- All clearing will be required to be consistent with Regional Vegetation Management Plans (RVMP) to be developed by Regional Committees;

- Where a proposal to clear land is inconsistent with a RMVP, the application will be considered by the Minister for Land and Water Conservation;
- The establishment of a Native Vegetation Advisory Council to advise the Minister on the development and review of strategic native vegetation policies; and
- The option of developing property agreements as an incentive for landholders to adopt a whole farm approach to the management of vegetation. Landholders who enter property agreements will be able to seek funding from a Native Vegetation Management Fund (*NSW Dept of Land and Water Conservation 1997*).

2.1.2 Queensland

Queensland has vegetation clearing controls on leasehold land (77% of the State) and no controls on freehold land. On freehold land, the landholder is deemed to own trees on their land and therefore does not require a clearance permit.

A leaseholder requires a permit to clear trees under the *Land Act, 1962* from the Department of Lands. Under amendment to the *Land Act, 1994* stricter controls of vegetation clearance have been put in place. Clearing permits must be considered in light of the following principles for native vegetation management:

- Maintain the productivity of the land;
- Allow the development of the land;
- Prevent degradation of the land;
- Maintain biodiversity;
- Maintain the environmental amenity values of the land; and
- Secure public safety.

The *Land Act, 1994* also established a process for developing local guidelines to provide criteria against which applications for a clearing permit can be assessed. At time of writing, 38 local working groups have prepared draft guidelines and are moving towards Ministerial approval in 1997. Criteria for developing local guidelines include:

- Clearing of *Endangered and Vulnerable* ecological communities is prohibited. This occurs when less than 10% of the pre-European distribution of an ecological community remains intact;
- Clearing of ecological communities *Of Concern* is to be limited to 50% of the original extent on a lease. *Of Concern* is defined as where 10 - 30% of the pre-European distribution remains intact; and
- Clearing of ecological communities *Not of Concern* is limited to 80% of the original extent of the lease. *Not of Concern* is defined as where greater than 30% of the pre-European distribution remains intact.

In 1995 permits to clear 551 700 ha of land where provided, 72% of these being for regrowth (*Qld Dept of Natural Resources 1997* pers com).

2.1.3 Victoria

Comprehensive vegetation clearing controls are in place in Victoria. In 1989, the *Planning and Environment Act, 1987* was amended to regulate clearing on blocks greater that 0.4 ha in area. Issues taken into account in considering applications for vegetation clearance include:

- Habitat for native plants and animals is protected;
- Ecological processes and genetic diversity are maintained;
- Carbon is stored and does not add to the greenhouse effect;
- Soil is protected from degradation, including salinisation and erosion;
- Adverse effects on groundwater recharge are minimised;
- Rivers, streams, wetlands and water resources are protected;
- Land is used and managed in a sustainable manner; and
- Visual amenity and landscape quality are preserved and enhanced.

Local Councils are responsible for the administration of the planning controls relating to native vegetation retention. Applications seeking permission to clear more than 10 ha must be referred to the Department of Conservation and Natural Resources for advice.

Between 1972 and 1987 the average rate of clearing was 15 000 ha per annum. In the 18 months following introduction of the controls, approval was given for 5 000 ha to be cleared (Victorian Department of Natural Resources and Environment 1996).

2.1.4 South Australia

Comprehensive native vegetation clearing controls apply throughout South Australia under the *Native Vegetation Act, 1991*. The Act establishes a Native Vegetation Council which must approve any application to clear land. In effect, all broad scale clearing has been banned in South Australia since 1985. The Act provides that when consent is given to clear small areas or scattered trees, the consent will be tied to a plan to replace vegetation elsewhere on the property on a site acceptable to the Native Vegetation Council for a net gain in native vegetation (Government of South Australia 1995).

2.1.5 Western Australia

Under the *Soil and Land Conservation Act, 1945-88* landholders seeking to clear more than 1 ha of native vegetation in Western Australia have to apply to the Department of Agriculture. The approval rate for clearing requests has been high, usually over 80%.

In 1995, additional clearing controls where introduced under *the Soil and Land Conservation Act, 1994*. The controls include:

- Land clearing is restricted if less than 20% of a property is covered with vegetation;
- Land clearing is discouraged in country shires with less than 20% native vegetation; and

- If a property has more than 20% native vegetation but the shire less than 20%, the applicant needs to demonstrate that clearing will not compromise conservation values (Dept of the Environment, Sport and Territories 1996).

2.1.6 Tasmania

Tasmania does not have any legislation directly regulating native vegetation clearance. A range of controls under the *Forest Practices Act, 1995* do apply to land that is cleared as part of commercial timber harvesting operations. Under the Act, all commercial forestry operations must comply with the Forest Practices Code which amongst other things requires assessment of conservation values in developing a Timber Harvesting Plan.

The Forest Practices Code only applies during commercial forest operations and does not apply once operations are completed. In this case, agricultural clearing can take place unregulated after commercial harvesting operations are completed. Local governments in Tasmania may also place restrictions on clearance of native vegetation under planning legislation (Tasmanian Public Land Use Commission 1996).

2.1.7 Australian Capital Territory

All land within the ACT is leasehold and native vegetation may be protected through conditions and controls contained in lease agreements. Rural lessees renewing or purchasing a lease are required to develop a Property Management Agreement with the government which, amongst other things, considers the nature conservation value of vegetation. Under the *Nature Conservation Act, 1980* or *the Land (Planning and Environment) Act, 1991*, areas of high conservation value can be identified and given permanent protection (ANZECC 1996).

2.1.8 Northern Territory

The Northern Territory has no specific native vegetation clearance legislation. Under the *Pastoral Lands Act, 1992* lessees must apply to the Pastoral Lands Board to clear native vegetation.

Joint Management Agreements have been developed covering the land of some Aboriginal communities. These agreements, amongst other things, may establish guidelines for the management of native vegetation.

2.2 Programs and Incentives

Discussion in this section is limited to mechanisms which lie within the broad definition of management agreements (for a fuller discussion of vegetation programs see ANZECC 1996 or FORTECH 1997).

2.2.1 New South Wales

- **Voluntary Conservation Agreements** - are a statutory covenant created under Section 69 of the *National Parks and Wildlife Act, 1974*. The agreements are in perpetuity and are attached to the title of land and hence bind future landholders. Landholders entering a Voluntary Conservation

Agreement are strongly encouraged to develop a management plan for the area covered by the agreement. In the last two years the NSW government has provided funding for a program which encourages landholders to enter agreements. There are currently 34 agreements in place with approximately 160 expressions of interest actively being pursued.

Landholders who enter a Voluntary Conservation Agreement may apply to receive limited financial support for costs associated with entering an agreement and on-ground assistance with management activities. Funding is sourced from an allocation which is at the discretion of the NSW NPWS. The Parks Service also encourages local governments to provide rate relief to landholders entering nature conservation covenants;

- **Wildlife Refuges -** are a non-binding voluntary agreement under Section 68 of the *National Parks and Wildlife Act, 1974.* They are gazetted in the government gazette and provide formal recognition of conservation values on private land. Plans of management may be prepared for wildlife refuges but may be revoked by either party at any time. Approximately 500 Wildlife Refuges are in place;
- **Farming for the Future -** is a whole farm planning program run by agencies with an interest in land management in NSW. The NSW NPWS runs a nature conservation component of this program which aims to encourage farmers to take consideration of nature conservation issues in their farm planning; and
- **Land for Wildlife** - although not in place, NSW is actively considering putting in place a Land for Wildlife scheme based on the Victorian model (NSW National Parks and Wildlife Service 1996).

2.2.2 Queensland

- **Nature Refuges -** The *Nature Conservation Act, 1992* provides the basis for establishing statutory covenants on private land. Nature conservation covenants are entered into in perpetuity on the title to land and bind all future landholders. The Queensland Department of Environment has an active program of promoting Nature Refuges with particular emphasis on priority regions. Plans of management may be developed, but to date have usually been included within the covenant.

  Incentives to enter Nature Refuges have been provided in priority regions, however, uptake has been slow. There are currently 11 Nature Refuges with 33 being actively negotiated.

  A number of local councils also offer rate relief for landholders entering nature conservation covenants (Queensland Department of Environment *pers com*).

2.2.3 Victoria

Programs promoting nature conservation on private land are administered by both the Victorian Department of Natural Resources and Environment and the Trust for Nature.

The Trust for Nature is an independent body established under *the Victorian Conservation Trust Act, 1972*. The Trust's objective is to promote nature conservation on private land. It operates at arms length from government and receives funding both from public donation and government.

The Trust undertakes the following activities:

- **Land Purchase -** the Trust is able to operate freely in land markets and has purchased over 3000 ha of land;
- **Covenants -** the Trust encourages landholders to voluntarily enter statutory covenants which are binding in perpetuity. The Trust will cover the legal costs associated with entering a covenant but seeks a once-off donation of $3000 per property to fund ongoing monitoring and management of the covenant by the Trust. The Trust has 230 covenants in place covering over 6500 ha of land; and
- **Revolving Fund -** the Trust has established a revolving fund which purchases land, places a covenant protecting nature conservation values and then re-sells the land to a sympathetic landholder. As an innovative program, the revolving fund is regarded as having wider potential (Trust for Nature Victoria 1997).

The Department of Natural Resources and Environment offers the following programs:

- **Land Management Cooperative Agreements -** covenants binding future landholders in perpetuity can be negotiated by the Department through the *Conservation and Forests and Lands Act*. The Department does not have a program that actively promotes these agreements. Rather, their use would appear to be focused on resolving management issues raised through other statutory processes such as the *Flora and Fauna Guarantee Act, 1988; and*
- **Land for Wildlife -** is a voluntary, non-binding scheme which allows landholders to register their properties if areas within the property are actively managed for nature conservation. Participation in the scheme is voluntary and a landholder can remove their property from the register at any time. The program provides recognition of conservation effort, a network of other interested landholders, and extension support and management advice. The program has been particularly successful since the employment of 6 extension officers in 1991. Over 3 500 properties are registered with Land for Wildlife making it the most successful program, in terms of participation, in Australia (Platt and Ahern, 1995).

2.2.4 South Australia

- **Heritage Agreements -** a Heritage Agreement is a statutory covenant in perpetuity, registered on the title to the land, which binds all future

landholders. Entry into Heritage Agreements has always been voluntary, however, in the period 1985 - 1991, entry was tied to receiving financial assistance subsequent to an application to clear native vegetation being refused under new legislation. About 1050 Heritage Agreements have been entered into, 650 of these during the period of assistance triggered by native vegetation clearance controls. The overall cost of the scheme has been $70 million.

The cost of fencing Heritage Agreements is paid for in full from a Native Vegetation Fund. Approximately $6 million has been spent to date, with approximately half of the Heritage Agreements fenced. It is envisaged that fence construction and maintenance will be an ongoing cost as the SA government is committed to maintaining the fences.

Landholders may also apply for other management assistance for their Heritage Agreement, although funding to date has been limited, approximately $130 000 (Young E 1997).

South Australia has the longest history of using management agreements to protect native vegetation and is the only State using agreements to meet broad vegetation objectives (See Box 2.1).

Box 2.1

History of The Use of Management Agreements in South Australia

Like the majority of States, both the South Australian and Federal governments encouraged clearance of native vegetation into the 1970's. Indeed, many crown leases include a standard condition requiring clearance.

In 1977 a Committee was established to investigate the extent of clearance found that over 75% of land in agricultural regions had been cleared and a significant number regions had less than 10% of their original vegetation.

To combat this problem the SA government introduced the *South Australian Heritage Agreement Scheme* in 1980. At that time entry into a Heritage Agreement was voluntary and based on the conservation value of the land in question.

By 1982, it was clear that voluntary action would not meet vegetation objectives as only 0.75% of existing vegetation was covered by an agreement. To address this problem regulations were introduced in 1983 with no prior warning. Debate over clearance controls lead to the *Native Vegetation Act* being introduced in 1985 which tied refusal to clear to the gaining of financial assistance to enter a Heritage Agreements.

The current *Native Vegetation Act 1991* ceased financial assistance but maintained strict controls over land clearance. In rare circumstances where minor clearing is approved it is to conditions requiring replanting or other equivalent conservation works and the development of a management plan.

The scheme has been very successful in halting clearance. There are now 550 000 ha covered by 1050 Heritage Agreements (only 650 received compensation but all 1050 are eligible for assistance with fencing costs).

The scheme, however, has done very little to promote active conservation management . Many landholders feel disenfranchised by the process and perceive that the government is now responsible for the land. Further, no distinction is made between the quality of vegetation between various sites.

(Source: Young, E. SA Department of Environment and Natural Resources 1997)

2.2.5 Western Australia

- **Remnant Vegetation Protection Scheme -** this scheme provides assistance to landholders to fence remnant vegetation. Landholders apply for a subsidy which is assessed on the basis of nature conservation value. Funding is tied to entry to a 30 year contract deed for the protection and management of the native vegetation. Funding assistance was originally set at $600 per kilometre of fencing materials, that is about 50% of the cost of materials. Assistance has now been raised to $900 per kilometre with another increase to $1200 being considered. This is equivalent to 100% of material costs.

  Under the scheme over 1094 projects have been funded with in excess of 38 000 ha of remnant vegetation being fenced at a cost of approximately $2.25 million. Funding has been raised to $900 000 per annum for the next five years (FORTECH, 1997); and

- **Covenants -** under the *Conservation and Land Management Act, 1984*, provision is made for landholders to enter covenants in perpetuity. No program is in place to facilitate entry into covenants and no agreements have been entered into to date. However, the Western Australian Government is currently actively considering the establishment of a Vegetation Trust modelled on the Victorian Trust for Nature.

2.2.6 Tasmania

- **Conservation Covenant -** covenants in perpetuity are available under the *National Parks and Wildlife Act* and the *Conveyancing and Law of Property Act.* Tasmania is in the process of commencing a program to encourage the use of covenants and is in the process of negotiating its first covenant;

- **Private Wildlife Sanctuary -** similar in operation to NSW Wildlife Refuges, private wildlife sanctuaries are voluntary and entered on the land title in perpetuity. A sanctuary does not, however, restrict the landholder from carrying out normal activities;

- **Land for Wildlife -** Tasmania is currently developing a Land for Wildlife scheme based on the Victorian model; and

- **Forest Stewardship Agreements -** the Commonwealth and Tasmanian governments are currently considering the use of covenants in conjunction with stewardship payments for the conservation of private forests required for the forest reserve system (Tasmanian Public Land Use Commission 1997).

2.2.7 Australian Capital Territory

- Vegetation is protected through leasehold conditions (see above). There is no freehold land in the ACT.

2.2.8 Northern Territory

- **Covenants -** agreements binding in perpetuity may be entered under the *Territory Parks and Wildlife Act, 1993.* Incentives may be paid as part of an agreement. Two agreements have been entered to date covering 11 000 ha of land; and
- **Partnership Arrangements -** the Northern Territory government is actively pursuing cooperative arrangements for conservation with Aboriginal groups and landholders surrounding existing nature reserves. This process involves voluntary participation and the development of management plans (ANZECC 1996).

2.3 Commonwealth policy and programs

The Commonwealth Government has committed to implementing a $1.25 billion program through the Natural Heritage Trust of Australia to address key environmental issues. It is envisaged that the Trust will provide a secure funding source for programs which enhance, protect and rehabilitate Australia's Environment.

The Natural Heritage Trust will be a perpetual trust which is independent of consolidated revenue. The money invested in the Trust will be devoted to capital projects to maintain and replenish Australia's environmental assets. All interest earned from the Trust will be devoted to recurrent expenditure on environmental projects and the further development of sustainable agriculture. At the end of the five year program, over $300 million will remain in perpetuity in the Trust. It is anticipated that this will make about $15-$30 million available for ongoing Natural Heritage Trust programs.

Key programs to be undertaken through the Trust include:

- **Bushcare: The National Vegetation Initiative** - a major vegetation preservation and revegetation initiative to tackle the problems of land and water degradation in Australia ($360 million over five years);
- **A National Land and Water Resources Audit -** to provide a national appraisal of the extent of land and water degradation in Australia and its environment and economic costs to the nation ($32 million over five years);
- **Murray-Darling 2001 Project -** Implementation in partnership with the relevant States ($163 million over five years);
- **The National Rivercare Initiative -** to assist local communities in the restoration of their rivers and water ways ($85 million over five years);
- **The Coasts and Clean Seas Initiative -** to tackle the environmental problems facing our coasts and oceans ($100 million over four years); and
- **National Reserve System -** the development of a comprehensive National Reserve System.

As this paper has a focus on the conservation of remnant vegetation, the most relevant programs are the National Vegetation Initiative and the National Reserves System.

Natural Heritage Trust funding will be delivered at four levels:

- **Community Grants -** directed at on-ground activities by community groups and local government;
- **Regional Strategies -** major regional projects will be funded on the basis of strategic regional management plans, developed with the involvement of interested stakeholders. A range of regions are to pilot this approach in 1997-98;
- **National Partnerships -** a range of projects most efficiently managed by State and Territory governments and agencies will be funded; and
- **Commonwealth Initiatives -** the Commonwealth will directly fund projects which have national strategic benefits, including national research and education activities (Commonwealth of Australia, 1997).

2.4 Issues from existing policy, programs and legislation

2.4.1 Integrating the objectives of vegetation policy

Vegetation is central to maintaining the productive capacity of Australia's land base and associated ecosystems. Legislation and programs addressing native vegetation management have generally sought to meet a range of objectives through the promotion of vegetation retention and revegetation. For example, the National Vegetation Initiative has the following objectives:

- rehabilitate degraded land;
- strategically reduce water tables and hence lower salinity levels;
- protect and improve water quality;
- rehabilitate our coastal zone;
- protect biodiversity and prevent further loss of species;
- develop a strong and sustainable forest industry; and
- provide sinks for greenhouse gases.

Meeting these objectives concurrently represents a significant challenge for policy makers. Whilst the objectives are complementary at a general level, a focus on any one of the objectives may distort the direction of policy. For example, a focus on providing sinks for greenhouse gases could place priority on establishing fast growing plantations in fertile areas in order to capture the maximum quantities of carbon in the shortest period of time. Concentration on salinity would focus on plantings in agricultural areas worst affected by rising water tables. A focus on biological diversity conservation may direct funding to conserve areas which contain ecological communities which are poorly represented in the existing reserve system. Recognition of these considerations encourages a regional approach to implementation.

It is at the regional and local level that specific priorities for vegetation management can be most successfully made. Here, vegetation the various objectives outlined above can be considered concurrently and implemented in a single region. Without

integrated planning, perverse outcomes and inefficiencies may be created. For example, in a region suffering high levels of dry land salinity, steps to promote biodiversity conservation may be futile in the absence of effective strategies for salinity reduction (George et al. 1995).

Commonwealth and State processes have recognised the need for regional assessment and priority setting and are moving increasingly to direct programs through regional processes. A wide range of regional structures and committees are in place to consider a broad range of vegetation objectives. However, most existing processes have a limited mandate and do not consider the full range of vegetation management objectives. For example, catchment management committees with a focus on soil and water management have not generally considered nature conservation issues. It is important that these committees be encouraged to broaden the range of expertise and issues they draw on in developing management plans.

2.4.2 Consistency among state legislative and policy frameworks

There are significant differences in approaches to vegetation management across the States and Territories. It might be argued that these differences can be justified on the grounds that the status of native vegetation and landscape development varies significantly between States. But on land of similar ecological value and state of development, approaches can be radically different. For example, on freehold land on Queensland's coast there are no state controls, while across the border in New South Wales, controls through State Environment Planning Policy 46 are tight and permission to clear obtainable only after assessment of the ecological value of a remnant.

Table 2.1 Summary of State Legislative Framework

State	Legislation
New South Wales	Broad scale controls introduced 1995. New Legislation currently being developed. Control over all land.
Queensland	Regulation of leasehold land through permit system. No control on freehold land except where local government controls exist.
Victoria	Broadscale control through local planning schemes. State control of all areas over 10 hectares.
South Australia	Broadscale controls through native vegetation legislation.
Western Australia	Controls dependant on vegetation status of shire and property . Control over all land.
Tasmania	Minimal controls through Forests Code of Practice.
Australian Capital Territory	Controls usually included in lease conditions.
Northern Territory	Controls may be included in lease conditions.

Where native vegetation clearing controls are in place they are based on differing criteria for each State. The absence of national principles and any agreed set of scientific guidelines for vegetation management means that it is difficult to make any

judgement about the effectiveness of the different approaches. Current rates of clearance are a rough but poor guide as it is unclear whether clearing is in fact compromising vegetation objectives.

Consistency can be achieved either at the level of general principles or at the level of program delivery. As matters now stand, however, inconsistencies between the principles embodied in State programs have the potential to undermine the implementation of national programs such as the National Vegetation Initiative. For example, all landholders might argue that they are entitled to similar biodiversity conservation payments. Yet if landholders in South Australia are reimbursed for 100% of the costs of fencing out a remnant so that it will no longer be grazed, while those entering into a management agreement in New South Wales are only reimbursed for 50% of fencing costs, then on both efficiency and equity grounds, NSW landholders and/or the South Australian community have a case for complaint.

2.4.3 Covenant programs

Table 2.2 summarises current covenant schemes in Australia and the incentives provided by each State. Most covenanting schemes involve voluntary participation by landholders, although agreements are binding once entered, with only modest incentives offered to landholders managing their land for conservation. These programs have operated on very modest budgets and have only promoted voluntary conservation effort by landholders committed to conservation management. Covenants require significant commitment from landholders and may take a long time to negotiate. Because they are highly individual and limited in number, covenants are unlikely in themselves to act as a catalyst to creating significant cultural and behavioural change.

Table 2.2 - Summary of Covenanting Programs as at April, 1997

State	Scheme	Number/Area Covered	Incentives
New South Wales	Voluntary Conservation Agreements	33 - with 160 being actively pursued	Discretionary Fund ($100 000)
Queensland	Nature Refuges	11 - some of which bind successors in title	Funding for priority regions and rate relief in some areas
Victoria	Trust for Nature Covenant	200 covering over 6 000 ha	No Incentives
South Australia	Heritage Agreements	1050 covering over 550 000 ha	Assistance Payment, Fencing, and Management Fund, ($76 million)
Western Australia	Remnant Vegetation Protection Scheme (30 Year)	1094 covenants covering 38 000 ha	Fencing Assistance ($2.25 million)
Tasmania	Conservation Covenant	none	No incentives currently

Northern Territory	Conservation Agreement	2 covering 11 000 ha	Some fencing assistance

In Western Australia, entry into 30 year agreements has been tied to fencing assistance. This scheme has demonstrated that incentives have worked to significantly expand the number of landholders with an interest in participating in the program. The fact that agreements are for a fixed period of 30 years may also have contributed to greater uptake of the scheme.

In South Australia, covenants have been tied to assistance arising from native vegetation clearance controls, fencing subsidies and limited access to a management fund. The South Australian experience has demonstrated that where covenants are tied to legislative change and significant incentives, the scale of their application becomes sufficiently pervasive that broad scale vegetation objectives can be met. South Australian covenants, known as Heritage Agreements, are in perpetuity.

3. Conceptual Framework

Before discussing in detail the design and structure of management agreements it is important to discuss their role within the range of policies which might be used to meet vegetation objectives. There is general recognition that there are a number of high priority environmental problems which require increased involvement in vegetation management by governments. A key question for this project is: what is the potential for management agreements to play a significant role in this process?

To answer this question, we need a conceptual framework that reveals the role of management agreements in the protection of remnant vegetation and how other instruments can make them more effective. We assume that Governments aim to conserve remnant vegetation in a dependable, cost-effective and equitable manner. This can not be achieved solely by using management agreements. As noted elsewhere, a mix of policy approaches will always offer the most cost-effective solution (Young *et.al*, 1996).

Essentially, a management agreement is a contract between a landholder and a third party. Usually, payment is involved and, in most but not all cases, the "contract" is recorded on the title in the form of a conservation covenant. For the purposes of this report, it is useful to recognise three types of agreement.

1. **Landholder Initiated Agreements** - Management agreements can provide secure protection for remnants owned by a landholder with a strong commitment to conservation on their land. In these cases, the landholder is the motivating force seeking to find a mechanism which will provide secure and ongoing conservation of their land after its title moves to another person;
2. **Transition Agreements** - Management agreements may be used by governments to secure permanent land use change resulting from policy or legislative change. In these cases governments initiate the management agreement by changing policy and requiring all landholders to conserve remnants across one or more landscapes or catchments. Here there is an emphasis on equity so as to retain landholder support and motivation for the transition. Management agreements used to achieve policy change will generally be tied to financial incentives which provide assistance to a landholder to meet a new standard set through regulation or other binding standards; and
3. **Unique Site Agreements** - Management agreements may be used to secure conservation for priority ecosystems. In these cases it is argued that ongoing payments that reimburse costs of maintaining high quality sites can be justified.

In practice all these mechanisms can be superimposed upon one another. For example, an inspired landholder may enter into a "Landholder Initiated" management agreement because they personally value a particular remnant. Typically, the landholder will want to ensure that work undertaken is protected in perpetuity via a conservation covenant. A unique site agreement may subsequently be used if the remnant meets regional vegetation criteria to off-set fencing costs and control weeds.

3.1 A conceptual framework

From the perspective of public policy, the key issues which will determine the level of government involvement in the conservation of remnant vegetation are:

- **The conservation value of the remnant**. For example, from a nature conservation point of view, if a remnant is representative of an ecological community that is poorly represented within the existing reserve network then a central government, acting on behalf of society, is likely to afford it a higher priority than a remnant which is already well represented. Likewise a regional government is likely to give high priority to vegetation that is critical to the control of salinity or to halting other land degradation processes. As the safety margin increases, some ongoing loss as a result of poor management can be accepted and in this way100% protection is not always essential; and
- **The degree of protection currently afforded to a remnant**. A remnant may be protected through legislation or a variety of other mechanisms. They key issue is not the mechanisms through which remnants are conserved but the long term security and cost effectiveness offered by various alternatives.

At any one point in time, the degree of protection afforded to a remnant is essentially a function of four factors[1]:

- The definition of land-use rights, entitlements and obligations associated with the remnant;
- The costs associated with conserving the remnant;
- The willingness of a landholder to conserve and manage remnant vegetation through time because of his/her personal interest in conservation; and
- The mix of instruments that determine landholder attitudes to the remnant.

In the remainder of this section, we examine each of these issues and identify principles and guidelines for the use of management agreements and conservation covenants to protect remnants.

3.2 Definition of rights, entitlements and obligations

3.2.1 How should costs and responsibilities be shared?

An important question to be resolved in determining appropriate policy approaches is where the relative responsibilities for vegetation management should lie between landholders and the community represented by governments. Recent approaches to resolving this question have sought to identify mechanisms for "cost sharing" between government and individual landholders. Cost sharing is based on an approach of

[1] For completeness, we note that the extent of pressures arising from land-use decisions made elsewhere and the health of the land in question are also important considerations

identifying the costs and benefits of a project to various stakeholders and seeking contributions according to the relative share of benefits determined through this process (See LWRRDC 1996 and MDBC 1996).

An alternative approach is put forward in this report by focusing on how to use property right mechanisms to change behaviour.[2] This involves evaluating the responsibilities that governments and landholders have for the provision of sustainable vegetation management and following on from this identifying the policies and incentives required to secure changes in the behaviour of land managers. Mechanisms for equitably adapting property rights through time are developed below.

In practice, responsibilities for vegetation management at any point in time are defined through the policies and legal institutions that regulate land management practices. Land ownership can be described as a bundle of property rights which place a range of entitlements and obligations on landholders. For example, under present laws, a landholder may or may not have an entitlement to clear vegetation, draw ground water, cultivate erodible soils and so on. Because these entitlements are defined through legal mechanisms such as regulations and legislation, they are universal in their approach and hence place the same standard for land management on all landholders.

The critical question to be addressed is: who should bear the costs of changing the obligations and entitlements of landholders that are defined through existing property rights? That is, when our understanding of the impacts of past management practices improves or community expectations change who should bear the costs of that change?

In a budget-constrained environment, determining where private responsibility for adapting to changes in vegetation policy stops and where the public should begin to pay for the delivery of a conservation service is a difficult issue. The first can be achieved via regulations and regional information programs. The latter, however, requires that costs be reimbursed (Young, *et al*. 1996).

- On the one hand, landholders have a responsibility to manage their land in a sustainable way and meet normal costs associated with on-farm management. This responsibility can be termed a "**Duty of Care**".
- On the other hand, some landholders also provide a non-marketable public good - such as biodiversity conservation. When conservation values are high, society has the choice of placing such land in a national park or, alternatively, reimbursing landholders for the cost of the "**Public Conservation Service**" they provide.

In this latter case, society has the choice of placing such highly valued or unique areas under public management or working with the landholder to achieve conservation. For

[2] As a general rule, it is more cost-effective to change property rights once than to incur the high transaction costs associated with ongoing payment systems. If a permanent change in behaviour is secured, ongoing administrative support is not necessary.

many small fragments, reimbursing the landholder for management costs, over and above those necessary to achieve duty of care, will be the most cost-effective strategy.[3]

In the remainder of this section, we seek to operationalise these concepts.

3.2.2 Defining duty of care - a responsibility for landholders to pay for sustainable land management

It is possible to define property rights so that there is no obligation on a farmer to maintain any vegetation or, alternatively, to define rights so that landholders are obliged to meet all the costs of maintenance as a precondition to their entitlement to use that land for other purposes.

As a general rule, landscape-wide obligations, like obligations for weed control, can be incorporated most efficiently into costs of primary production. This is consistent with principles that seek to attain socially efficient outcomes by making producers throughout the world trade at prices which reflect the full economic, social and environmental costs of production.

Duty of care is essentially a requirement for sustainable land management. It is not possible to define any particular threshold as social and economic issues need to be considered in addition to environmental thresholds (see below). Pragmatically, we suggest that the dividing line should be drawn, at this stage in Australia's development (not biological evolution), between the management practices required to achieve sustainable land-use objectives at a landscape or regional scale and any additional practices required to sustain particular sites of unique conservation value.

The most efficient policy prescription will be one that forces incorporation of landscape wide costs of ecosystem maintenance into the normal costs of production. Putting transitionary arrangements aside, a general guideline based on this framework is that governments should not use management agreements to provide ongoing funding which can be defined as actions that are part of *all* landholders duty of care.

A defining characteristic is that duty of care can be defined universally for all landholders within a single consistent framework.

Policy Guideline 3.1 - Do not provide ongoing subsidies for sustainable land management.

Consistency with national competition and trade policies requires that costs associated with meeting a landholders "duty of care" are incorporated into and seen as normal costs of production. In the course of achieving consistency and redefining obligations, transitional arrangements can be justified.

The risk with this approach is that, while it may be more cost-effective, it is less ecologically dependable than the more expensive approach where landholders are regularly compensated for the foregone opportunity to clear a remnant. It also needs to be recognised that the recommended approach is dependent upon government

[3] Essentially, this is a principal-agent problem where payments are necessary to ensure that landholder and conservation objectives are coincident with one another. The principal is interested in conservation but the agent delivering it has other objectives leading to conflict.

willingness to enforce the regulations or standards that are in place. Other mechanisms are more dependable but require allocations of large amounts of money (See Section 3.3.3.).

3.2.3 Defining public conservation service

For unique sites, it can be argued that the community should always pay for maintenance of remnant vegetation when any individual landholder is expected to take actions which are in excess of the "Duty of Care" required of all landholders within their region and there is a risk of irreversible loss if that work is not carried out in a timely manner. For this reason it is important to consider when site specific actions might be required to achieve sustainable land management:

- **Land Management and Degradation Issues:** The costs of land degradation may not be borne in a region evenly. Actions required for sustainable management of soil and water resources and addressing problems such as salinity will fall on landholders to varying degrees depending on their location within a catchment. The actions required on any individual site will also depend on the management and status of other land within the catchment. For these reasons, the costs and benefits of remediation works will not generally be contained within the boundaries of a particular property. For example, a landholder may be expected to take actions that benefit the catchment as a whole but not them as an individual; and
- **Areas of High Conservation Value:** Where remnants represent ecosystems with unique biodiversity, aesthetic, cultural or heritage values their conservation may be in the public's interest. The identification of high conservation value is obviously site specific with the community being a primary beneficiary of any conservation actions. An obvious example, is a small remnant representative of an ecosystem not represented in any national reserve.

It is not clear that each of these types of management issue constitute a "Public Conservation Service" which would attract ongoing public funding. For example, in the long term it would be desirable for salinity to be managed in a way that ensures the costs of management are borne within the catchment boundary. The difficulty is the solutions to many degradation problems are spatially explicit and will place a greater burden on some landholders rather than others.

Site specific arrangements may involve two components:

- Firstly, the entitlement to undertake certain land uses and practices may be removed from the property right of land ownership. For example the right to clear land may be removed; and
- Secondly, active ongoing management may be required to ensure the continuing viability of the site.

The first of these problems may be addressed by acquiring or regulating the property rights to the land-uses and practices that are to be restricted on a particular site. This will be most efficiently and equitably achieved through a once off payment that compensates for the foregone opportunities of the landholder. Such changes are of a

transitional nature and no ongoing payment can be justified unless there is a significant perverse incentive such as the existence of local government rates which suggest that the remnant should be "developed."

It is this second characteristic that defines the need for public conservation service. A **public conservation service** is provided when the community's interest lies in securing active and **ongoing** management of a particular site. Typically, such services will be of a non-marketable character and hence, a cost that should be met by society.

Weed management in a large area covered by a management agreement that excludes grazing is a practical example of a non-marketable conservation service.

Policy Guideline 3.2 - Ongoing payments that reimburse the costs of management can only be justified where it is directly in the community's interest to secure site specific ongoing management of vegetation by a landholder. Ongoing payments may also be used to off-set perverse incentives.

3.2.4 Developing approaches which are capable of adapting to change

So far, the discussion has assumed that duty of care can easily be defined. Duty of care is essentially a requirement for sustainable land management. However, the definition of sustainability is itself problematic. Sustainability is not a static concept and it is clear that community expectations will change through time. As society's understanding of sustainable land management improves, so will the community expectation of any land manager's duty. For example, in recent years the regulations which control the clearing of native vegetation have been amended in most States. In the 1950's and 1960's, the Commonwealth Government offered a wide range of incentives to encourage vegetation clearance. This highlights the fact that entitlements to use resources defined by a property right, like a title to land, can and will change from time to time.

If landholders are to be expected to maintain a "duty of care" over their land it is very important that the practices they are required to observe are clearly articulated. Traditional approaches have involved the use of regulations to define landholders responsibilities. These regulations have been strongly criticised for failing to deliver sustainable land management. For example, in the post war period Soil Conservation Acts in most States placed significant requirements for sustainable land management on landholders. Crown leases usually contain a requirement that land be maintained in its current condition. These Acts have generally contained strong provisions which give the crown significant powers to enforce sustainable management. Bradsen (1991) argues that these acts have been ineffective in their objective of halting land degradation. He highlights the following weaknesses associated with soil conservation Acts of that period:

- They failed to address vegetation management as integral to soil conservation;
- They failed to adequately define an objective of sustainable land management;
- The objectives of the Acts were not effectively implemented through land conservation programs;

- Executive discretion meant that the Acts were ineffectively enforced;
- Inter-agency rivalry marginalised conservation concerns; and
- There was inadequate review of the operation and administration of the Acts.

Past failings with regulatory approaches to land use underscore the point that regulations are not a panacea. Legislation will only be effective if it provides clear guidance on the management practices expected of landholders. Further, regulations will only be effective if they enjoy wide community support and ownership and, hence, the political support required to enforce them.

Young *et al.* (1996) have argued that successful approaches to biodiversity conservation require subsidiarity, that is devolution of management responsibility to the individual or lowest institutional level able to take effective action. Further, they recommend that no level of government be able to reduce standards for management set by another level.

The challenge is to develop structures which complement and provide guidance across all levels of government, industry and the community. Vegetation management should ideally occur within a nested structure that takes advantage of existing institutions and allows each level of government to take action at a scale which is appropriate to its jurisdiction. For example, jurisdictions have the following types of responsibilities:

- The Commonwealth government plays an important role is setting national objectives and priorities for vegetation management, promoting consistent approaches across all jurisdictions, monitoring performance and providing funding for on ground works;
- The States have a critical role in setting standards for regional vegetation planning processes, establishing framework legislation for regulating vegetation management and providing extension and monitoring services;
- Local government and regional bodies may have responsibility for assessing vegetation status and integrating vegetation management objectives into regional planning decisions; and
- Land managers have responsibility for taking action which is consistent with the sustainable management of vegetation.

Public policies will only be effective if they ultimately define the land management practices required of land managers in a way which can be given a practical interpretation. Tension exists between providing clear guidance through prescriptions and developing legislation which is flexible enough to: be durable over a long period of time; account for regional differences; and provide landholders sufficient flexibility in their management.

Principles established at the State and Federal level are unable to effectively address regional differences and allow for management practices to be adapted through time as knowledge and circumstances change. Practical lessons might be learnt from other natural resource industries, such as the mining and forest industries, which have developed Codes of Practice in an attempt to resolve these issues by institutionalising adaptive management.

Codes of Practice can operate under overarching legislation. They provide a clear interpretation of broad concepts such as sustainable management at any given point in time. They are underpinned by the concept of adaptive management which recognises that knowledge of best practice will improve over time. Codes of Practice are regularly reviewed to ensure they keep pace with scientific knowledge and community expectations.

Whilst the concept of a "Code of Practice", may seem foreign in an agricultural context it is analogous to the catchment and regional vegetation management plans which are beginning to form the central plank of Commonwealth State and local government approaches to sustainable land management. The development of regional environment strategies are being actively promoted by organisations such as the Australian Local Government Association and Greening Australia (See ALGA 1997 and Greening Australia 1995). The challenge remains to formalise these planning responsibilities and devolve management to the regional level. These issues are addressed in Section 5 which discusses institutional issues in greater depth.

Policy Guideline 3.3 - Regional vegetation management plans have the capacity to provide an operational definition of duty of care.

Regional management plans have the potential to play the role of a Code of Practice for vegetation management and in defining duty of care. These plans should:

- Be developed in close consultation with all stakeholders to ensure they have ongoing community and political support;
- Develop clear priorities for vegetation management taking into account differences in the quality and conservation status of areas of vegetation;
- Provide the practical and enforceable definitions of land management practices required for sustainable vegetation management; and
- Be monitored and reviewed on a regular basis to allow for sustainable management and hence ensure land management keeps pace with scientific understanding and community expectations.

If regional plans are to deliver sustainable land management over time it is important that they be developed in the context of State and National approaches to vegetation management. It is important that there is consistency in approaches between regions and, from a national perspective, between States. The discussion of legislative frameworks in Section 2 revealed that there are a number of important inconsistencies in approach between State governments.

Policy Guideline 3.4 - Financial assistance should be guided by a nationally agreed process to achieve consistency in principles for vegetation management in order to reduce inconsistencies between states and improve program effectiveness. Where no process to build consistency is in place, Commonwealth assistance should not be provided.

Program delivery will be more cost-effective, equitable and politically acceptable if vegetation management plans developed through regulations and codes of practice for each region are consistent with nationally-agreed principles.

The more consistent principles are between States, the greater the potential for Commonwealth contributions to the conservation of remnant vegetation.

3.3 Cost sharing arrangements - when should the community pay?

Because past policies encouraged activities which degraded the natural resource base and because of lack of information about the impact of land management practices there is a strong case for active involvement and investment by government in relation to both land degradation and conservation issues. However, it is important to distinguish between those cases where short term assistance may be warranted and where ongoing long term payments may be justified.

In the following discussion it is argued that land management activities should be incorporated into a landholder's duty of care through a once-off transition payment tied to a permanent change in property rights. In cases where a "Public Conservation Service" is provided, ongoing payments may be justified.

3.3.1 Managing change - who should bear the costs of transition

Vegetation and other public policies relevant to sustainable land management are often made in response to an emerging problem at a particular point in time. However, because vegetation management objectives are long term in their nature it is important that regulatory frameworks that make the policies adaptable through time are developed.

A problem emerges where community expectations contradict previous policies associated with vegetation management. Retention of positive motivation is likely to be higher if governments acknowledge past policy and regulatory failings. As the NFF has argued, a case for government assistance, and moving away from landholders meeting the full cost of large threshold changes to duty of care can be made when community expectations shift significantly over a short period of time (Wendy Craik in LWRRDC 1996).

As a general rule, the cost of conserving remnant vegetation will be much lower if landholders are motivated to retain native vegetation. This requires two things:

- Community acceptance; and
- A sense of equity or fairness whenever duty of care is revised (Young, *et al.* 1996).

On equity grounds and because of enforcement difficulties, a powerful case can be made for assistance payments during any transitionary period that imposes a significantly more stringent duty of care on landholders. In such circumstances, payments can act as a cost-effective, motivational circuit breaker that can be particularly effective in attaining acceptance of a transition to a more stringent definition of duty of care (Crosthwaite 1997). Essentially, such arrangements redefine property rights. In such cases, one-off payments can be made, for example, to assist farmers to re-configure fences so that management within the new definition is possible. It may, for example, be appropriate to assist a farmer to fence out remnant vegetation along a river bed that was previously open for grazing.

However, to ensure efficiency in the attainment of public conservation benefits, transition payments should only be made where a permanent change in land use practices is guaranteed. The dependability of policy change can be increased

significantly by linking transition payments to an arrangement, like a conservation covenant, that provides for a permanent change in the entitlements associated with a property right.

Policy Guideline 3.5 - Use incentive payments to retain motivation during threshold changes in the definition of duty of care.

Where the definition of "duty of care" is shifted to a new threshold or where significant land use change is required, incentive payments can be used to speed transition and maintain community support. Such payments should be of a one-off nature and secure permanent changes in property rights. Sunset clauses, which limit eligibility to those that apply within a defined period of time, will speed transition.

The concept of transition payments appears to be consistent with the existing policy framework set by the Commonwealth Government for delivery of the Natural Heritage Trust:

> "The Commonwealth owes it to tax payers to ensure that its investment leads to long term change towards sustainability.… In general, Natural Heritage Trust funds are designed to assist in overcoming impediments to sustainable environment and natural resource management. Trust funds will not be used to provide long-term assistance to biodiversity conservation and natural resource management activities more properly addressed by land users and directly responsible jurisdictions."(Commonwealth of Australia 1997)

Australia's position in trade negotiations have emphasised the importance of removing subsidies to agricultural production. For this reason, it is important that transitional payments that secure changes in land management practices are not offered on a long-term basis.

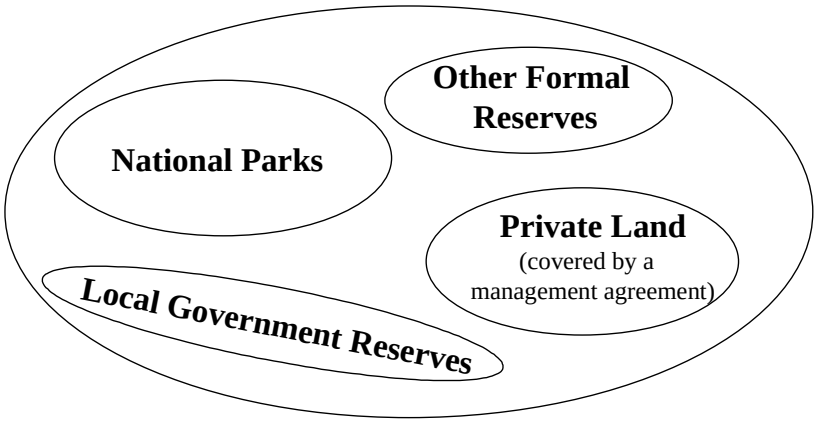
3.3.2 Paying for public conservation service

Where remnants represent ecosystems with unique biodiversity, aesthetic, cultural or heritage values, site-specific management arrangements may be necessary. This is because an individual landholder is expected to maintain a standard of management which is more onerous than that required of other landholders. It is the need for active ongoing management that defines the need for regular payments that reimburse landholders for the costs of providing this public conservation service. An example of a public conservation service would be management of a remnant in a manner that favours a threatened species of plant or animal. Without recognition of the ongoing costs of maintaining remnants of high conservation value their future cannot be guaranteed.

A Protected Area Network could be established which includes all public and private land managed for conservation. The Network would account for and provide formal recognition of the role that land outside the formal reserve system plays in meeting conservation objectives (see Figure 3.1). Criteria for priority ecosystems to be included in the Protected Area Network would be required to efficiently guide expenditure of limited public funding. Such an approach has particular advantages when applied to remnant woodlands and grasslands (Prober and Theile 1996) as these biomes tend to be fragmented in the landscape and do not lend themselves readily to public management which is focused on large contiguous areas of native vegetation.

A protected area network based on private management is likely to be more cost effective and politically acceptable than an approach based on acquisition alone (Howard and Young 1995). Indeed, the costs of meeting the objectives of the National Reserve System through acquisition of private lands is likely to be prohibitive and politically unacceptable. Issues of acquisition aside, the costs of managing publicly owned reserves are significant and generally thought to be under-resourced. In fragmented and widely dispersed communities, such as woodland remnants, the costs associated with management for a public agency are likely to be higher than for larger reserves. In such circumstances, a strong case can be made for making payments equivalent to the costs of public management.

Figure 3.1 Components of a Protected Area Network



The development of a publicly-funded private protected area network may seem well in advance of existing policy development for promoting conservation on private land. However, as regional planning and priority setting develops these issues will become increasingly important. For example, as a part of the Regional Forest Agreement process the Tasmanian Public Land Use Commission in Tasmania has recommended the development of "Stewardship Agreements"[4], with associated payments, be used as the primary mechanism for implementing a forest reserve system for Tasmania (PLUC 1997).

3.3.3 An alternative view of when the community should pay

In contrast to the targeted and cost effective approach of using management agreements and other incentives selectively and within regional frameworks, the European and American approaches adopt broad scale environmental funding. While superficially easier to administrate, this approach implicitly incurs higher and ongoing public sector costs.

For example, under the Conservation Reserve Program (CRP) the public of the United States shares responsibility for land management with landholders. Under the CRP, owners of highly erodible land are eligible for payments compensating for loss of income that could be earned if the land was cropped and for 50% of the cost of rehabilitation (Bradsen, 1991).

[4] We caution against the use of the term "stewardship" agreements for unique sites as stewardship would normally be expected of all people who hold land, not just those with land of unique value.

Likewise people who own land within Environmentally Sensitive Areas in the United Kingdom receive standard payments greater than that which they could receive if the land was not managed in an environmentally sensitive manner. The extent of agricultural protection in these countries makes it cheaper to pay landholders to do this than to subsidise their production. Such arrangements are justified on the grounds that they:

- Reflect a sharing of the costs of meeting conservation objectives, a public good;
- Are effective in meeting conservation objectives because full compensation is paid for environmental services making conservation the most profitable land use; and
- Assist in maintaining the competitiveness of agricultural commodities in distorted world markets.

These are compelling arguments. However, they reflect a significant divergence from the existing policy framework within Australia. In particular:

- Arguments surrounding impact of payments for public conservation services on trade liberalisation remain a very sensitive policy issue. Australia has maintained a strong stance at international fora such as the OECD and the World Trade Organisation against environmental payments being disguised protectionism and, hence, subsidies on agricultural production, and
- The revenue implications of compensating for lost production would be well beyond the resources of the National Heritage Trust, and more generally Commonwealth and State governments.

The dilemma facing policy makers is well summarised by one individual playing an active role in conservation at a community level who noted:

> "It is important to put into perspective the position that farmers currently find themselves in economically, because any debate on who pays requires some understanding of:
>
> - who can afford to pay? and
> - who benefits?" (Sheila Donaldson in LWRRDC 1996).

3.4 Maintaining and enhancing landholder willingness to conserve remnant vegetation

3.4.1 Is a voluntary approach sufficient

To varying degrees approaches to vegetation management have been dominated by encouraging voluntary action by landholders and managers to conserve vegetation. The concept of changing attitudes and developing a conservation ethic is the driving philosophy behind the development of management agreements, and is manifested at a broader level by the Landcare movement.

Both internationally and within Australia, Landcare is widely credited with empowering communities and creating a will to undertake the changes required to achieve sustainable management. This shift in attitudes and awareness is the foundation of any further policy development. Further, without exemplary on the ground extension and demonstration, other policy instruments, including regulations and incentives, will not generate the grass roots support they require to ultimately succeed. As such, the importance and contribution of voluntary programs such as Landcare cannot be overstated.

However an equally important question is whether encouragement of voluntary action by landholders is sufficient to ensure sustainable vegetation management. There is a considerable body of evidence to show that these programs in themselves are not sufficient to ensure a change in behaviour of land managers. For example:

> "[In the United States] research overwhelmingly indicates that farmers continue to use practices that degrade the land resource even when: (a) they are aware of erosion problems; (b) they believe they have a social responsibility to protect land; (c) they have favourable attitudes towards soil conservation; and (d) they have the knowledge required to prevent soil erosion" (Lovejoy and Napier in Bradsen 1990); and
>
> "[In relation to land owners seeking clearance permits from the South Australian Vegetation Authority] All firmly espouse a general land conservation ethic. Nevertheless, each of them, often for very individual reasons, wants to clear their bit. Some, of course, voluntarily retain vegetation. But if its comprehensive retention had relied on voluntary action clearance would have continued apace. Ironically landholders implicitly rely heavily on the Suzuki concept, "think globally act locally". The typical comment is that, "in an overall context, my little bit won't make any difference" (Bradsen 1990).

Voluntary programs may create behavioural change incrementally over the long term. A key question facing policy makers is the time frame within which change in vegetation management needs to be secured. Where policies to engender significant change in a short period of time are required to arrest ongoing decline, then legislation, incentives and strong political commitment will be required. Voluntary programs can also play a significant role in retaining a positive community orientation to vegetation protection during any period when duty of care is redefined.

Policy Guideline 3.6 - Voluntary programs are required to underpin the achievement of vegetation policy objectives, but they are unlikely in themselves to change behaviour in the short term.

Voluntary programs which rely on education and information are an essential component to the success of all vegetation programs. They will work to change attitudes and engender acceptance of the need for policy change. However, they are not sufficient to meet these objectives in themselves and must be underpinned by legislation and where justified, incentives.

3.4.2 Identifying and working with willing landholders

It is important to recognise that individual landholder attitudes towards remnant vegetation conservation will vary considerably. Some landholders will be highly motivated and work to conserve vegetation because of the personal values they hold. Other landholders, facing the same information set, may clear vegetation because they have differing personal preferences.

The dilemma facing policy makers is how to harness the motivation of the willing landholders while effectively regulating for minimum standards to catch those landholders that do not personally value vegetation conservation highly.

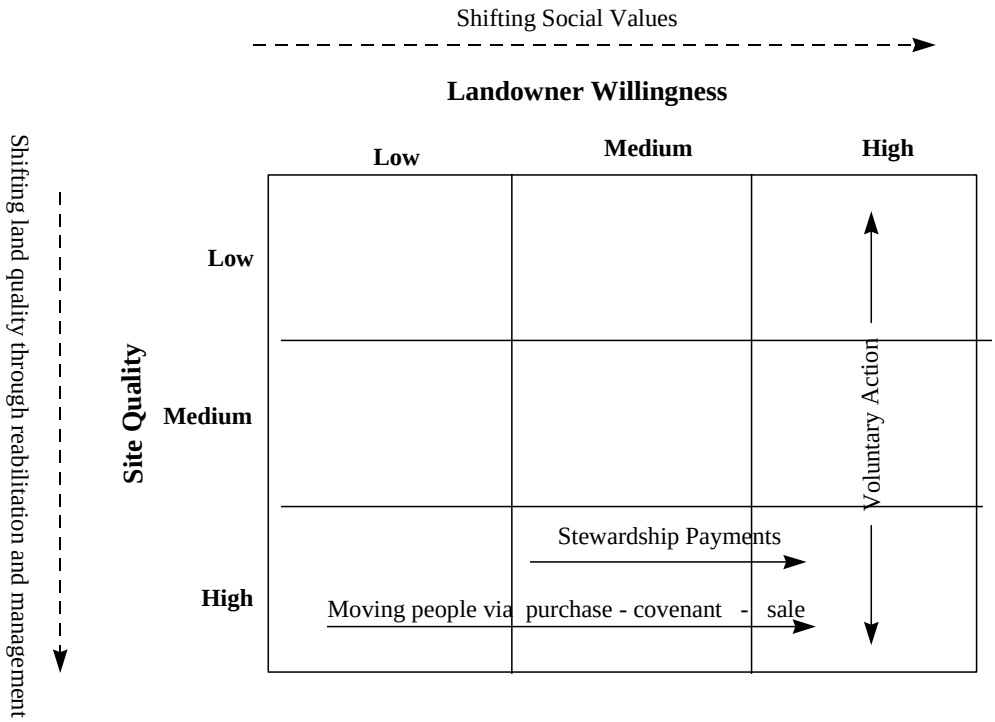
Figure 3.2 depicts a matrix of landholders and quality of vegetation. As a general rule, the likelihood of success in vegetation protection will be highest where there is a match between landholder willingness to conserve a remnant and remnants of highest value. Mechanisms available to match high-value remnants with willing operators include arrangements that:

- **Supply information** about the value of conserving remnants and techniques that make it possible such as those associated with Victoria's Land for Wildlife Program;
- **Intervene in the market place** to increase the likelihood that remnants will be acquired only by those willing to manage them;
- **Reimburse and/or compensate** landholders for the cost of remnant vegetation protection and/or compensate them for reductions in land value associated with a conservation covenant; and
- **Reimburse people for the cost of rehabilitating a remnant.**

Of the available options, one of most cost-effective is the two track approach developed by Victoria's Trust for Nature. First, the Trust seeks to encourage people to voluntarily protect land of special value to them. They do this by encouraging them to attach a conservation covenant to their land and make money available for the status of that area to be monitored. Second, as the risk of damage to a remnant increases when a remnant changes hands, the Trust uses a revolving fund to acquire land containing valuable remnants in the open market. They then place a conservation covenant on the remnant and offer the land with covenant attached for resale. This process modifies property rights in a manner that makes the property in question less attractive to a person not interested in remnant conservation. Paying for rehabilitation

of low value areas is not part of their strategy but conceptually it could be. The aim is to match areas of high conservation value with landholders who are keenly interested in protecting such areas.

Figure 3.2: Structuring Agreements to Encourage Willing Landholders to Conserve Vegetation



3.5 The role of management agreements in the mix of instruments

Management agreements and other incentive-based instruments will be more effective when they are underpinned by a framework that clearly defines the rights and responsibilities of landholders. As discussed, this can best be achieved through legislative frameworks at State government level which are supported and given effect through regional planning processes.

Conceptually, the strength of management agreements over other incentive instruments and legal instruments is their focus on defining management arrangements for an individual site. They are able to establish new entitlements and obligations on land ownership or remove or amend other entitlements and obligations. However, because management agreements are site specific they are resource intensive and may be administratively costly to set-up and enforce through time.

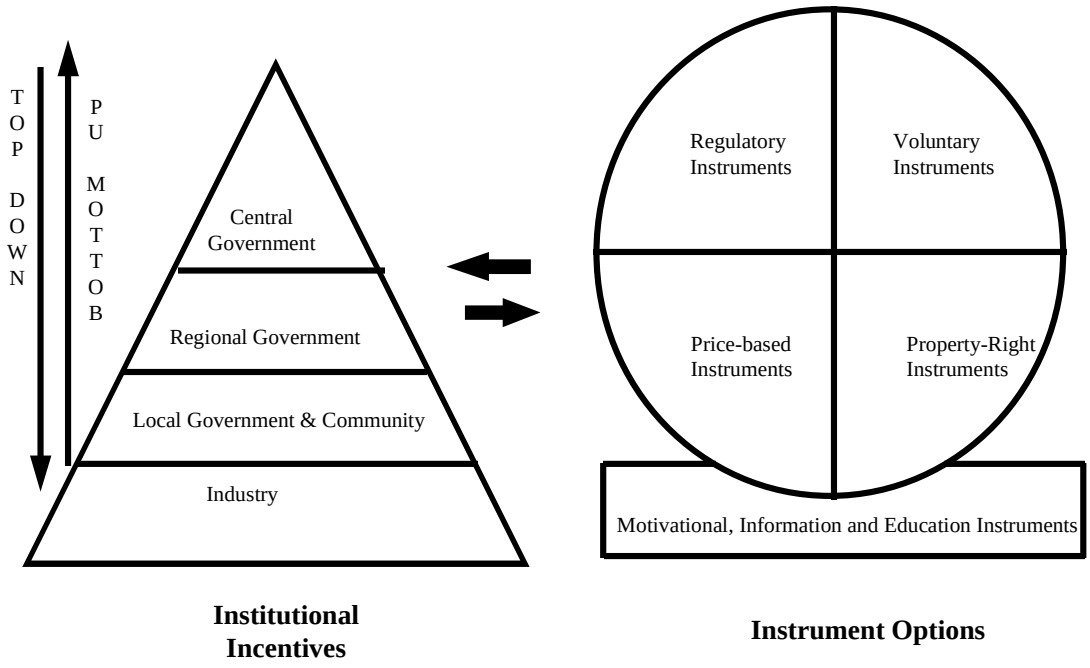
Because of their strength in developing site specific management arrangements they will generally be best suited to situations where site specific management actions are required. For this reason we would not advocate that ongoing management agreements be used to meet broad vegetation objectives. Rather, they should be used to target areas where securing a particular regime is of high priority and, as already said, to maintain a positive orientation during any transition period when duty of care is redefined.

3.5.1 Management agreements will be more effective if used in combination with a mix of other policy instruments

Policy makers have a broad range of instruments available to them for meeting vegetation objectives. Box 3.2 provides a classification of the array of instruments available for conservation of remnants. As a general rule, mixes of instruments have the potential to be more cost-effective and equitable than any conservation strategy based primarily on one instrument (Young, *et al*. 1996).

Box 3.2

A classification of incentive instruments available for remnant vegetation conservation



Source: Young, M.D. (1996)

3.5.2 Three broad models and uses for management agreements

The preceding discussion outlined a framework within which the functions that management agreements might play within the policy mix can be identified. These options are cast within the framework of a well defined "Duty of Care" and "Public Conservation Service". As discussed, these responsibilities are poorly defined in some jurisdictions and inconsistent at a national level.

Nevertheless the following roles for management agreements are proposed:

Landholder-Initiated Agreements

Most programs in Australia which promote the use of management agreements are targeted at promoting voluntary conservation effort. These programs have the benefit of recognising and promoting existing conservation effort and supporting motivated individuals.

Landholder initiated agreements can provide secure protection for remnants owned by a landholder with a strong commitment to conservation on their land. In these cases, the landholder is the motivating force seeking to find a mechanism which will provide ongoing secure conservation management for land they are currently managing for conservation purposes. In most cases the focus will be on the need to attach a conservation covenant to a title so that the landholder can be assured that his or her efforts are not undone by future people. In some cases it may even be possible for people to contribute to a trust set-up to cover the cost of monitoring the agreement.

Existing programs in each State have achieved an enormous amount with very limited funding. These programs should be enhanced and the powerful role they can play in the policy mix more fully recognised.

Transition Agreements

Transition agreements are probably the type of management agreement with the most potential for use within Australia. Agreements of this kind secure a permanent change in property rights through legislation and/or a nature conservation in exchange for a once off incentive payment.

Transition agreements are a very important element of the policy mix in that they share costs associated with redefining or clarifying the duty of care of landholders for sustainable natural resource management. Where land-uses are to be restricted on specific sites, a covenant may be used to amend the property right in perpetuity.

Their use will be guided by judgement over the costs of achieving change and the time-frame within which changes need to be brought about. As such, their use cannot be prescribed but is rather part of the political process where compensation is paid to secure an outcome. The important points that distinguish transition arrangements from ongoing subsidisation are:

- They are for a defined period; and
- They are associated with a permanent change in the property rights and, hence, land development entitlements which attach to a land title.

A practical example of the use of transition agreement would be the provision of incentive payments for fencing remnant vegetation. These payments could be tied to the landholder entering into a covenant to conserve that vegetation in perpetuity.

Another interesting example of the use of transition agreements would be in upgrading leasehold conditions. For example, if leasehold land was converted to freehold, or a perpetual term, this might be made dependent on the landholder entering a covenant for the conservation of remnant vegetation on the property. Here, greater security of tenure, something that is normally bought, is offered in return for an agreement to protect biodiversity.

Unique Site Agreements

In those instances where site specific arrangements for an ongoing public conservation service are required, unique site agreements can provide a useful alternative to public acquisition of that land. As already argued, this mechanism is likely to be particularly effective when such sites are fragmented and distant from offices occupied by National Parks and Wildlife Officers.

Private land covered by a nature conservation covenant and contributing directly to conservation priorities might attract a ongoing payment for the management of the land. This payment might be termed a unique site payment for the contribution private landholders make to public conservation service. However, such a system would have to be based on strict criteria relating to the conservation value of the site within both a national and regional context. In many cases, other land uses would be either highly restricted or prohibited.

Policy Guideline 3.7 - Management agreements can be most effectively targeted at: encouraging voluntary conservation effort; facilitating the transition to new land use entitlements; and protecting areas of high conservation value.

Three types of agreement can be envisaged:

- **Landholder Initiated Agreements**: to further promote voluntary conservation on private land;
- **Transition Agreements**: to speed the transition resulting from legislative and policy change. Such transition should always result in a permanent change to entitlements under property rights; and
- **Unique Site Agreements**: to conserve priority ecosystems on private and public lands outside the formal reserve system. Unique Site Agreements could form part of a Protected Area Network that formally accounts for all land managed for conservation irrespective of tenure.

The use of management agreements to meet these objectives would significantly boost conservation effort on private land.

4. Structuring Successful Agreements

4.1 Designing successful management agreements

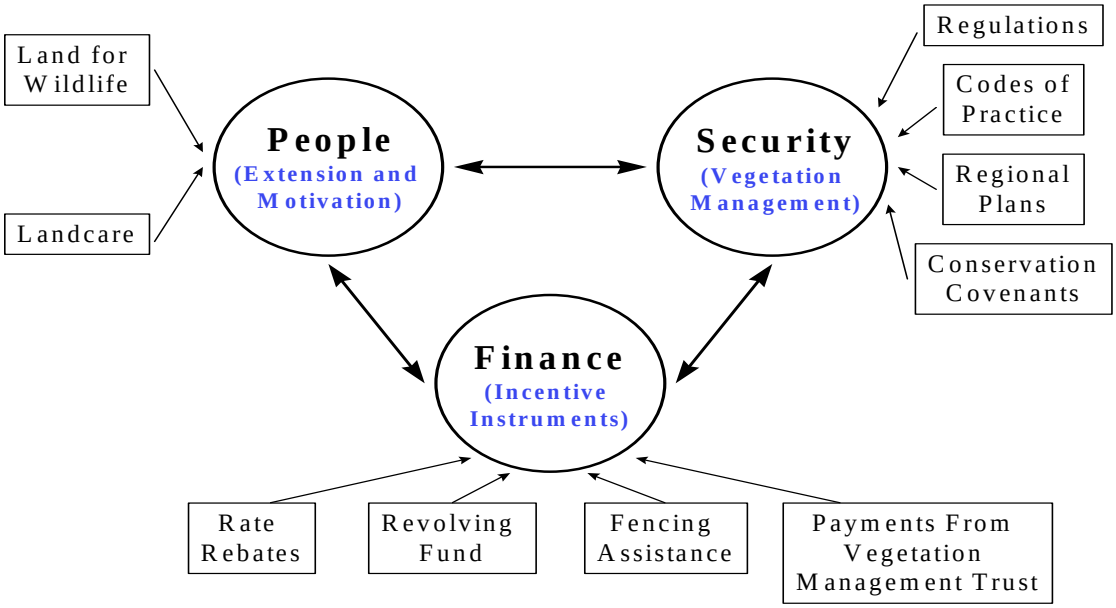
Because management agreements are a flexible policy instrument they can accommodate a wide range of different approaches to securing vegetation objectives. Flexible site specific arrangements can be developed. However, their flexibility also makes it difficult to be prescriptive about the design of any particular model agreement.

Rather than developing prescribed models for management agreements, this Section attempts to identify the principles that should underpin the design of agreements. The discussion is focused on developing approaches that address the following issues:

- **People** - to be successful, management agreements will need to develop a true partnership between the contracting organisation and the landholder for the management of vegetation;
- **Security** - the timeframe, entitlements and obligations that a management agreement places on landholder will determine how secure the arrangement is over time; and
- **Finance** - the incentives that can be provided to share the costs of managing vegetation.

Each of these issues is addressed in turn with the range of alternative approaches to addressing them identified. Options for immediate actions that improve the performance of management agreements are then highlighted. It is recognised that not all of the options canvassed will be appropriate in all States because each State is at a different stage of development.

It is important to note that the options discussed in this Section are interdependent as any single mechanism is unlikely to meet all policy objectives. Figure 4.1 puts forward a framework which places the individual options in the context of a comprehensive policy approach.



4.2 People - structuring agreements to give effect to stewardship

4.2.1 The concept of stewardship

The notion of stewardship has been developed where landholders and governments or contracting organisations work together in a partnership to protect vegetation to meet public objectives. As there are both public and private benefits, the approach is cooperative. Cooperation from the landholder is required because, as discussed above, active ongoing management of the vegetation is needed.

The rationale for developing stewardship is logical in that it is unlikely that a landholder facing a hostile government directive will cooperate in managing the vegetation on a regular basis. Even if compensation were paid it is unlikely that the landholder would make a very good manager (Farrier 1995).

As one farmer put it:

> "There are plenty of ways of getting around regulations. You can easily manage the land in ways which destroy the value of the vegetation and which will ultimately kill all of the vegetation" (pers comm).

The same farmer made another insightful comment relevant to developing the concept of stewardship:

> "There is no point in the public agency undertaking management for the farmer. Farmers do not want handouts. If they do that the farmer will never own the solution. For example, a couple of years ago the soil conservation people had a program where they put up fences on people's properties if they agreed to manage the fence. But when there was a problem with the fence the farmer would ring up and say: "there is a problem with <u>your</u> fence, my stock have got in, you had better come out and fix it". Because the farmer had no involvement in building the fence, the farmer will never manage it and never be part of the solution. If the farmer had been given the materials but had had to build the fence then they would have maintained it" (pers comm).

There is anecdotal evidence that this is an important insight. A manager from the South Australian Department of Environment and Natural Resources commented that because compensation was paid for landholders to enter Heritage Agreements following land clearance legislation, many landholders now do not perceive that they own the land covered by the Heritage Agreement. The Department is having significant difficulties in encouraging farmers to manage the land under Heritage Agreements (pers comm).

4.2.2 Making stewardship operational

Whilst stewardship is an attractive concept, there is little within the existing structure of conservation covenants that will give practical effect to stewardship. Because of their legal origins, which imply that one party should benefit over another, covenants tend to be worded negatively. Malpractice by the State but not by the landholder is to be tolerated. For example, in the case of Nature Refuges in Queensland, the following is a standard clause relating to the enforcement of the covenant.

> "…any failure by the State to enforce any clause of this Agreement, or an forbearance, delay or indulgence granted by the State to the Landholder, will not be construed as a waiver of the State's rights under this Agreement."

Despite these difficulties, organisations promoting agreements tend to emphasise the voluntary and flexible nature of agreements in order to emphasise an ethic of stewardship. Clearly a balance needs to be struck between making the obligations of an agreement clear and fostering stewardship. However, in their operation it must be accepted that covenants are generally negative in that they serve to restrict certain land uses and practices on landholders. Further, agreements are in perpetuity and legally enforceable which restricts future options for landholders. Many landholders with an interest in vegetation conservation are unwilling to enter agreements because they would like to retain the option of developing the land at a later date.

One way in which stewardship might be given greater effect is to emphasise the partnership between the contracting organisation and the landholder. In this way, clear responsibilities would be identified for both parties to an agreement. The idea is that the contracting organisation entering the agreement would have a range of ongoing obligations associated with the agreement such as providing regular management advice and/or contributing a proportion of the costs of management.

Examples of the kinds of obligations and rights are set out in Table 4.1.

Table 4.1 Obligations and Responsibilities of the Parties to Management Agreements

Contracting Organisation	**Landholder**	**Joint**
Assessment of conservation values	Commitment to manage for conservation passive = certain land uses are excluded (depend on values, management needs and natural systems etc) active = specified management activities	Development of the terms of covenant
Management advice & support	Land uses consistent with maintenance of values may be permitted	Development of management plan
Regular extension services	May initiate review of management plan	Review of management performance and revision of plan as required
Monitoring and compliance	Time, labour etc	
Payment		

Once obligations are more clearly identified, it would seem logical that one party can only hold the other responsible for their obligations if that party has demonstrated that they have met their obligations. In effect, if the contracting organisation does not deliver its side of the bargain, the agreement becomes null and void.

Concern has been raised that such an approach would provide an opportunity for governments or contracting organisations with little commitment to vegetation management to exit agreements, leaving public funds spent but with no enduring result (Young, E. pers. com).

A proposed solution is that a distinction be made between the property right registered on title to land and specified management actions:

- Changes in property rights to restricted land use would be made in perpetuity and hence be binding irrespective of the actions of either party to the agreement; and
- Obligations for ongoing management actions would be borne jointly, with one party being unable to enforce management actions without fulfilling their obligations.

Policy Guideline 4.1 - To give effect to stewardship management, agreements should clearly specify the obligations which both the contracting organisation and landholder are required to meet.

Developing a stewardship partnership between the contracting organisation and the land manager is fundamental to the success of management agreements. The obligations on both parties to an agreement should be clearly stated and enforceable.

- Changes in land-use should be made in perpetuity and be non-negotiable.
- Obligations for ongoing management should be shared noting that one party should not be able to enforce the terms of the agreement unless they can demonstrate that they have met the obligations placed on them by the agreement.

4.2.3 Providing facilitation and extension services

One of the most important roles for government in enhancing the protection of remnant vegetation is the provision of research and information to landholders on "best practices" for managing various types of native vegetation. This is because landholders are rarely able, as individuals, to devote the resources required to research, develop and implement vegetation management systems.

Landholders often do not act to conserve vegetation because they do not have information on the benefits or significance of vegetation retention or they do not know what management actions can be taken to effectively conserve vegetation. Well targeted extension services which ensure regular contact with landholders provides the basis for a stewardship arrangement. It is important however, to emphasise the importance of extension officers harnessing local knowledge and expertise and taking account of "whole farm" management objectives, rather than considering vegetation issues in isolation.

As has been discussed, motivational and education programs are critical in promoting remnant vegetation conservation as they facilitate landholder acceptance and participation in conservation and may act as a catalyst to entry to management agreements (Platt and Ahern 1996). They retain the interest of people already committed to vegetation conservation and may also act to harness the motivation of landholders that would otherwise resist government involvement in their land management.

The provision of extension services is fundamental to the success of management agreement programs. For example, the employment of extension officers for

Victoria's Land for Wildlife Program in 1990 lead to a dramatic increase in number of properties registered under the Program (Platt and Ahern 1996).

Policy Guideline 4.2 - That a National Land for Wildlife Program be developed which establishes a network of landholders and funds extension and facilitation services for vegetation management.

The Program should:

- Be based on the successful Victorian program, but draw on existing approaches in each state;
- Provide the extension support for all vegetation programs under Bushcare;
- Develop biological monitoring and performance measures for vegetation management that operate on a two yearly basis (See Section 6); and
- e integrated with other vegetation programs including regulations, covenants and property management planning.

4.3 Security - revolving funds, non-binding, fixed term and in perpetuity agreements

4.3.1 Different types of voluntary management agreements

Entry into management agreements is always voluntary in the sense that a landholder must willingly enter the arrangement. However, management agreements can be tied to compliance with legislation or receiving payments, both of which provide strong incentives for a landholder to enter the agreement, as was the case with assistance payments made to landholders entering heritage agreements in South Australia following the introduction of land clearing legislation.

Essentially there are three types of agreement that involve varying commitments from the landholder:

- **Non-binding agreements** - These agreements depend on voluntary participation by the landholder and are focused on establishing networks of landholders and the provision of extension services and management advice. They provide formal recognition of a landholder's conservation efforts without binding them or precluding future land uses. The Land for Wildlife Scheme in Victoria is an excellent example of a non-binding vegetation program;
- **Fixed-term agreements** - Fixed term agreements are used routinely in the United States where easements have generally operated for a period of 15 years. These agreements have the advantage that they do not bind a landholder in perpetuity and, hence, may not require as large an incentive to secure landholder participation. Their main disadvantage is that they do not bring about a transition to a new definition of property rights.
  The only fixed term agreement currently used in Australia is the Remnant Vegetation Protection Scheme in Western Australia. These agreements, however, only protect an investment in fencing. Following their expiration

permission would still be required to clear a remnant. Generally, fixed-term agreements have a critical weakness in that they need to be renegotiated and the landholder may seek payment for activities undertaken under a prior agreement. Sometimes, they give the landholder an opportunity to hold a valued environmental asset to ransom. Some of these problems have been overcome by requiring money to be paid back when a new agreement cannot be negotiated (Young *et al*. 1996); and

- **In perpetuity agreements -** involve placing a covenant on the title of land, making the entitlements and obligations contained in the management agreement binding on the current and all future landholders. Programs actively promoting perpetual covenants are currently in place in NSW, Vic, SA. Queensland gives people the choice between a covenant that binds all future landholders and one that only binds the current landholder.
  In perpetuity agreements have the obvious advantage of securing conservation outcomes and helping redefine duty of care. However, because of the structure of agreements, even those committed to conservation often have strong reservations about entering agreements. For example, landholders participating in a series of workshops held in central NSW regarding conservation of grassy white box woodlands had significant reservations about the use of management agreements because of their binding nature (Community Solutions 1997).

Each of these agreements has an important role to play in securing vegetation management objectives over time. Non-binding schemes have the potential to act as a starting point for landowners with an interest in vegetation management. Over time a landowner may become more comfortable with the concept of a binding agreement. Land for Wildlife has over 3500 registered properties. A significant number of landholders participating in Land for Wildlife have gone to enter in perpetuity agreements with the Victorian Trust for Nature which has some 230 covenants in place (Platt and Ahern 1996).

Binding agreements are generally tied to the provision of some form of financial assistance to the landholder. Where incentives are provided there is a strong case that some form of binding agreement be required from the landholder. The role of incentives is discussed in detail in the next Section, but a general guideline is that incentive payments should be tied to secure and binding management agreements.

For these reasons the various forms of management agreements should be viewed as being strongly complementary rather than in competition with one another. As a result no single model should be preferred. Rather, programs should seek to develop a range of agreements that will cater to different landholder and community needs.

Policy Guideline 4.3 - Vegetation management programs should include and market a range of non-binding, fixed term and in perpetuity management agreements.

- Non-binding schemes will attract motivated landholders, provide recognition of conservation services being provided and may act as a catalyst for landholders to ultimately enter into a binding agreement.
- Where financial assistance is provided this should be tied to entry into a binding management agreement.

4.3.2 Revolving funds

Whilst voluntary agreements are an attractive concept, they are unlikely to be of great assistance in securing sustainable management of vegetation on land owned by an individual who does not value vegetation highly, is suspicious of government involvement or is not attracted to binding agreements for areas of high conservation value.

A revolving fund which purchases land on the open market, places an in perpetuity covenant on the land, and then re-sells the land has the potential to overcome this difficulty. As the property right is changed, via the covenant, it is more likely that a landowner committed to vegetation management will purchase the land. In this way the market works to put a "willing" landholder in the place of an "unwilling" landholder.

Revolving funds are attractive because they are cost effective and also because they may be more ecologically dependable. As Farrier (1995) notes, it is difficult, if not impossible, to get a resistant landowner to change their management practices. This is irrespective of the approach taken: regulations, information or incentives. By acting in the open market, a dependable landholder identifies themselves through market. Moreover, because the seller is usually keen to sell, there is no need to offer more than market value to secure a remnant.

Policy Guideline 4.4 - To build coincidence between land of high conservation value and people willing to conserve unique sites, Revolving Funds should be established in each State.

- The Revolving Fund would be used for the purchase of land, placement of a unique site agreement on it and its subsequent resale to a committed landholder.

4.3.3 Leasehold land

A large part of Australia's pastoral and semi-arid zones are leasehold land where the crown retains title to the land. Leasehold conditions, as they relate to vegetation management, vary considerably between States. For example, leaseholders in Queensland require a permit to clear native vegetation under the *Land Act 1994.*

Where leases are renewed, amended or upgraded an opportunity exists to use management agreements, or equivalent leasehold conditions, to secure vegetation management objectives. A strong rational for such actions lies in adapting the

leaseholder's "Duty of Care" as information and community expectations change through time. Indeed, without provision for such actions there would appear to be little rationale for maintaining leasehold arrangements.

It should, however, be emphasised, that vegetation management requires cooperative management from any land manager. Any program to amend leasehold conditions relating to native vegetation management would need to be undertaken in close consultation with the leaseholder in a similar way to approaches advocated for the use of management agreements in this report.

Policy Guideline 4.5 - Management agreements should be used to secure vegetation objectives when renewing, amending or upgrading leases over leasehold land.

- Conversion to a more secure form of tenure or permission to subdivide, could be made conditional on acceptance of a management agreement that protects a unique site.

4.4 Finance - incentive payments

4.4.1 The need for incentive payments

The development of management agreements and more broadly, programs promoting nature conservation on private land, are not dependent on funding. As discussed in Section 2, most programs in Australia have only very modest funds available for payment of incentives.

Indeed, as discussed in relation to the security of management agreements, there is a need to provide for a range of different types of agreements. In the context of incentives, it may be that some landholders will have a negative reaction to what they perceive as "government handouts". They may prefer to remain in a voluntary program which does not bind them or restrict future land use options. This approach retains the intrinsic motivation of the committed landowner without tying them to binding agreements with a third party.

If the role of private land conservation is going to be significantly enhanced, then consideration will need to be given to mechanisms which encourage greater numbers of landholders to participate. Financial incentives are the most powerful and direct means of encouraging more people to consider participating in nature conservation programs.

Policy Guideline 4.6 - If the role of private land in meeting vegetation objectives is going to be enhanced, financial incentives will need to be used to secure permanent protection of significant areas of remnant vegetation.

Financial payment is not only significant in terms of the financial position of the landholder, but also in terms of the symbol of cost-sharing provided. Landholders might receive a small payment as due recognition for the conservation service they are providing the public. Indeed, many landholders feel strongly that the community should acknowledge their efforts. This may be one reason why lack of local

government rate relief has been consistently raised as a key impediment to entering management agreements (see below). It might be argued that the concept of stewardship will remain hollow in the absence of payments which provide public recognition of the contribution landholders are making to conservation.

Policy Guideline 4.7 - Willingness to enter into and honour a management agreement can be enhanced by using low cost incentive incentives, like rate rebates, that acknowledge public appreciation of a landholder's role as a steward of a remnant valued by society.

4.4.2 Payment mechanisms

There are a variety of potential payment mechanisms that could be used in developing management agreements. These are briefly discussed in this section:

- **Payment for Acquisition of Rights -** Payments could be made for the loss of rights to alternative land-uses. That is, a proportion of the income foregone by entering into a management agreement is paid. Payment schemes of this kind are compensatory in nature. Their rationale is based upon the advantages of using payments to retain motivation during a period when property rights are redefined.
  Generally, governments have been reluctant to pay direct assistance for natural resource management because of the potential for precedents to be set. In South Australia, landholders were compensated for entering Heritage Agreements that resulted from land clearing legislation. The payments were costly, over $70 million, but were effective in putting 650 agreements in place in a short space of time;
- **Upfront Payments for Management -** A payment can be made at the time of entering an agreement to cover some of the future costs of management. In these cases, payment is made on the basis of a Plan of Management. The payment has the advantage of providing an immediate "windfall" to the landholder and may act as a strong incentive for them to enter a management agreement. Upfront payments can either be based on a detailed assessment of likely management costs or made as a standard payment based on criteria such as the area of land covered by the agreement. Where payment is for work of a non-marketable nature, such an arrangement should not be regarded as compensation. A variant of this approach is a periodic payment every, say, 5 years;
- **Competitive Bidding -** Rather than administratively estimating the value of revenue/production foregone plus additional costs of management, payments could be based on competitive bidding. This would require landholders interested in entering management agreements to tender a price at which they would be willing to enter an agreement and/or perform certain management activities. The most competitive tenders measured against objective standards would receive funding.

  Competitive bidding is attractive as it encourages innovation and cost sharing by effectively capturing private benefits of vegetation retention.

However, the administrative costs of such systems need to be assessed carefully. Criteria would have to be developed for assessing tenders, individual tenders would be different and require complex selection processes. Conceptually, those most willing to conserve remnant vegetation will make lower bids than those less willing. As a result, the process should help discourage involvement of the least willing participants in a program;

- **Payment of Incremental Costs of Management -** This form of payment requires costs of specific management actions to be made either as a refund or as an upfront payment. An example is payment for the costs of fencing remnant vegetation. Payments under this scheme would need to be made incrementally. That is, as a management need is identified, costs are determined and a payment made. The result is that payments are effectively linked to management actions, but at a higher administrative cost; and
- **Performance Based Payments -** Payments could be made on the basis of an assessment of the performance of the landholders management. An example from the USA is that farmers receive a payment if a litter of wolf pups is successfully raised on their property (OECD 1995).

  Any assessment of performance would require clear management objectives to be identified and criteria set against which performance can be assessed. As a result, performance based payments are likely to be more complex and administratively costly than input based payment systems. However, they are the only mechanism directly linked to outcomes of management. For this reason they may be useful where there is considerable uncertainty over the impact of management actions and adaptive management is sought from the landholder. Well designed performance payments could provide a positive incentive to report management problems as they arise and cooperatively seek solutions. Such an approach might be useful in high priority areas for biodiversity conservation.
  The use of performance based agreements is discussed in some detail in Section 6: Making Management Agreements Enduring;
- **Payment Through a Trust -** Another option would be to establish a management trust with an upfront payment. Application could be made to the trust to undertake management initiatives. The Trust could either be established with a relatively large sum of money and payments made from interest earned or the Trust could receive recurrent funding. Trusts could be established for individual agreements or as a larger trust for a group of management agreements;
- **Payment through a Discretionary Fund -** A fund at the discretion of the manager of the private land conservation program could be used to fund *ad hoc* payments to landholders with covenants for particular management activities. Most existing State programs have a discretionary fund of this kind. A discretionary fund has the advantage of flexibility and the capacity to address management needs in a timely manner. However, if a program was to become large a discretionary fund may lack accountability and

transparency. For these reasons a grants process involving competitive bidding would be preferable in the case of larger programs; and

- **Non Financial Payments -** Payments can be made through in-kind provision of goods or services. An example of a service is provision of extension services for whole farm planning. In-kind payments have the potential to generate goodwill between the landholder and the contracting organisation entering a management agreement and may be useful in promoting ongoing management.

Management agreements essentially create a market for vegetation conservation. Some landholders will be willing to enter into management agreements with no additional incentives as their private benefit from vegetation retention outweighs any opportunity cost. Others will require significant incentives in order to enter a management agreement. The challenge is to design the agreements in a way that allows landholders to reveal their preferences, that is, the size of the payment/incentive they require in order to enter a management agreement.

In theory, and before consideration of administration costs, the most cost effective and efficient management agreement would be based on a competitive bidding system through which landholders reveal their preferences. In such a system, landholders are asked to tender for management agreements with the contracting agency selecting a balance between the highest conservation value sites and the most competitive tenders. In this way, private benefits are captured and the most cost effective outcome achieved (see Section 4.3).

However, there a wide range of considerations in addition to efficiency which guide instrument selection. Considerations such as environmental effectiveness, administrative simplicity, acceptability, equity and so on. However, the competitive bidding model does provide a useful benchmark against which to compare payment mechanisms. It is not possible to generalise which payment strategies will be most effective. However, there are a range of payment methods that might be favoured in different circumstances. For example:

- When tied to transition of land use resulting from legislative change, upfront or compensatory payments will be most effective;
- When funding for management agreements programs is modest, a discretionary fund will be the most efficient and cost effective approach;
- Where ongoing active management is required to maintain the remnant, incremental and performance based payments will be most appropriate;
- Where there are a large number of potential sites and applicants for incentives, competitive bidding will be most efficient; and
- Non-financial incentives are an important way for contracting organisations to demonstrate their commitment to jointly manage an area with the private landholder.

4.4.3 Options for incentive payments

As has been noted, approaches to management agreements in Australia have been dominated by "Landowner Initiated Agreements" which have involved minimal incentive payments.

A range of options for extending the use of incentive payments are outlined below. They address the issues that have been most consistently cited as impediments to an expanded use of management agreements by landholders, agencies and stakeholder groups in the preparation of this report.

The incentive payments identified represent a first pragmatic step in promoting the use of management agreements. If supported by appropriate regulatory frameworks, information and well structured management agreement programs these incentives have the potential to significantly enhance the uptake of management agreement programs. Section 4.5 discusses how these payments might be related to the model agreements developed in the Conceptual Framework.

Policy Guideline 4.8 - A Fencing Assistance Scheme should be established under Bushcare for areas of conservation value with increased support being given to those who make the strongest commitment and for vegetation which meets regional conservation priorities.

Assistance could be offered according to the following scale:

- 33% for non-binding agreement such as a person involved in Land for Wildlife;
- 66% for a fixed term agreement, for example, 30 years; and
- 100% for an agreement in perpetuity such as for a site that is important for an endangered species.

The steps in the assistance provided are designed to provide a strong incentive to landholders to enter in perpetuity agreements.

Costings for such a scheme will depend on the costs of fencing materials, labour and the ratio of the size of the remnant to its perimeter. A full cost of approximately $100 per hectare would seem reasonable. This is based on costs of $1250 per kilometre of fence covering an average of 12.5 hectares which assumes that the average remnant would be approximately 25 hectares in size.

These costings yield an estimated conservation of 10 000 hectares per $1 million of public funds spent. If remnants are larger than 25 hectares, or less than 100% assistance is provided, the number of hectares conserved per dollar spent will rise.

Policy Guideline 4.9 - Commonwealth and State governments encourage local governments to provide rate rebates for land covered by a management agreement that provides for vegetation conservation.

- A five year program to supplement costs to local government should be established. 100% supplementation should be provided in the first 2 years, decreasing by 33% each year thereafter; and
- Following this transition, rate rebates should be built into the rating base of local governments by reviewing the basis for land valuation and rating.

Rates are generally based on the unimproved value of land. It is assumed that all land is used for productive purposes, though this need not be the case. What is surprising is that despite the modest impact rates relief would have in most areas (approximately $10 ha per annum in Yass NSW), their absence is very often cited as a major impediment to entering management agreements. As discussed above, this may be because of the symbolic nature of rates being associated with productive land. It may be seen as an indication of government failure.

Rates may, however, be a significant issue in areas close to urban settlements which have been subdivided for future development. In these cases, the impact of rates and land taxes may be prohibitive.

Policy Guideline 4.10 - A range of Vegetation Management Trusts could be established to provide funding for ongoing management of areas covered by a management agreement in perpetuity.

- The Trust should be established with once off funding for 5 - 10 years. Public donations should be encouraged and be tax deductible;
- The Trust would provide payments to landholders based on applications for funding linked to monitoring of management agreements undertaken on a two yearly basis; and
- The Trust would provide performance payments for examples of exceptional management.

The objective of a Trust would be to provide landholders with a guarantee that access to ongoing funding will be possible. Governments are generally concerned that funding commitments be restricted to a finite period, usually not greater than five years. However, to be enduring, sites covered by management agreements will require ongoing adaptive management.

The Trust would hold funds to provide assistance for a range management actions, such as control of unanticipated pests and weeds. Application to the Trust would be made jointly by the landholder and the other party to a management agreement. This would be done on the basis of monitoring against agreed performance indicators every two years as discussed in Chapter 6.

The Trust might also provide payments to landholders who have excelled in their management or achieved a particular milestone in relation to rehabilitation. Such a scheme need not be complex and might be initiated as a simple awards scheme.

4.5 Integrating people, security and finance with vegetation objectives

Within the conceptual framework of this paper the following types of management agreement were identified:

- Landowner Initiated Agreements;
- Transition Agreements; and
- Unique Site Agreements.

For each of these types of agreements, consideration might be given to differing agreement structures and forms of financial incentive. It is important to note that each type of agreement is not mutually exclusive. For example a landowner may initiate a unique site agreement if the site meets criteria establishing it as being of high conservation value. Table 4.2 summarises the recommended choices.

Table 4.2 Matching Incentives With Different Types of Management Agreement

	Uses and Availability	**Type of Agreement**	**Plan of Management**	**Direct Payment**	**Rate Relief**	**Provision of Extension Services**
Landholder Initiated Agreements	All Vegetation All Landholders	Covenant in Perpetuity Fixed Term Non-Binding	Voluntary Extension Service Provided	Fencing Subsidy 33% - Non-binding Agreement	Yes	Yes
Transition Agreements	Vegetation Conservation tied to permanent change to property rights All Landholders Can Apply	Covenant in Perpetuity Fixed Term	Compulsory Management Plan Consistent with Regulatory Framework	Fencing Subsidy 66% - Fixed term 100% - In Perpetuity Limited Access to Management Fund	Yes	Yes
Unique Site Agreements	Areas Meeting Criteria for High Conservation Value Landholders may be Directly Approached by Agency/ Regional Council	Covenant in Perpetuity	Compulsory Management Plan Forms a Binding Contract	Fencing Subsidy 100% - In Perpetuity Full Access to Management Fund	Yes	Yes

5. Institutional Arrangements and Delivery of Management Agreements

The purpose of this section of the report is to outline the institutional arrangements and delivery mechanisms which can be used to increase the role and effectiveness of management agreements. It has been argued that considerable savings can be made by targeting management agreements at regional priorities. This section does not address the broad issue of how regional priorities might most effectively be set, rather it seeks to outline how programs designed to promote conservation of remnant vegetation might be most appropriately managed and delivered once the development of regional priorities is completed.

Covenant programs in Australia have generally taken the form of a statutory covenant that places restrictions on the land covered by the agreement (ANZECC 1996). More recently statutory provisions allowing the creation of nature conservation covenants have been supported by funding for programs to promote their use in the community. These programs have generally been administered from government departments, with the exception of Victoria where the Trust for Nature delivers management agreements. These programs have also, at various times, allocated funding to provide assistance to landholders in managing land covered by a nature conservation covenant.

There are a number of important issues surrounding the administration and delivery of management agreements. Management agreements have a range of attributes that make them unusual in terms of government programs. They:

- Are of a very long term nature, generally in perpetuity;
- Require a high level of information on the value and status of remnant vegetation;
- Are complex documents which often take time to negotiate. For example, it is not unusual for it to take an contracting organisation up to 5 years to negotiate a covenant (Brian Whelan pers. com);
- Require close cooperation and trust between the body entering the agreement and the landholder; and
- Are resource intensive in terms of the extension effort and personal contact required to successfully negotiate an agreement.

This presents a range of challenges in effectively designing programs that deliver nature conservation on private land. The following sections investigate opportunities for improving and expanding the capacity of programs to promote conservation on private land.

5.1 Coordinating the delivery of programs

As has been discussed at length earlier in this paper, programs associated with the promotion of management agreements and other incentives for conservation on private land do not operate in isolation. In each program, there is a range of mechanisms seeking to further the objectives of vegetation policy. Each mechanism has particular characteristics which differentiate it from others and makes it the most suitable for a particular situation. However, to landholders, who are not familiar with the full range of government activity and interest in vegetation, the range of programs and environmental legislation relevant to vegetation management on private land is often confusing and off-putting.

In simplistic terms, whilst it is desirable to develop a range of mechanisms to meet multiple objectives, there is only one group of clients for all programs - that is landholders and managers.

For example, in the case of NSW, the following mechanisms are available through the NSW Parks and Wildlife Service (NSW NPWS 1996):

- Acquisition or donation to NPWS;
- Voluntary Conservation Agreements;
- Memorandum of Understanding (For crown lands administered by a separate department, agency or Local Government);
- Wildlife Refuges;
- Wildlife Management Areas;
- Land for Wildlife (currently being developed); and
- Farming for the Future.

Other initiatives available in NSW include:

- Local Government environment planning instruments and zoning;
- Permanent Conservation Orders under the *Heritage Act 1977;*
- Environmentally Sensitive Land under the *Soil Conservation Act;*
- Listing as a "Threatened Community" under the *NSW Threatened Species Conservation Act 1995;* and
- Covenants under the *Conveyancing Act 1919.*

In addition, the NSW government has announced the possible introduction of a program of financial incentives to be introduced in the forthcoming Native Vegetation Conservation Act which is being developed to replace the State Environment Planning Policy 46. It is proposed that a Native Vegetation Management Fund be created which will provide assistance to landholders focused on achieving the following objectives (DWLC 1997):

- Protection of high conservation value remnant vegetation;
- Maintenance and enhancement of existing native vegetation; and

- Encouragement of revegetation of land with appropriate native vegetation.

Potentially landholders could also access Commonwealth programs offered through the Natural Heritage Trust or be affected by Commonwealth environment legislation.

The purpose of highlighting the range of possible mechanisms for achieving conservation on private land in NSW is not to evaluate the effectiveness of each program or regulatory process. Rather it is to highlight the complexity of government interest in vegetation issues. A review of these mechanisms, which is beyond the scope of this study, might recommend the rationalisation of some programs, but it is likely that a wide range of alternative routes to meeting conservation objectives on private land would still remain available. Indeed, the final outcome could be to widen the range of mechanisms available by involving trusts, local government and catchment committees in the delivery of private land conservation programs.

In terms of administrative simplicity and equity of access to government programs there are strong arguments for developing an overarching program which plays a coordination role and provides a first point of contact for landholders interested in conservation on their properties. At an national level, the Bushcare program provides a “one stop shop”. Similarly, the NSW Parks and Wildlife Service Coordinates private land conservation programs under their Community Conservation Program.

Draft Guideline 5.1 - To facilitate administrative simplicity and equity of access to government programs addressing vegetation issues on private land, overarching programs should be created to coordinate program delivery and act as a first point of contact for landholders for vegetation conservation issues.

5.2 Targeting different clients

A common perception is that conservation programs outside the public reserve system should be targeted at individual farmers or the family farm unit. Whilst a very important client for programs of this kind, there are many other organisations and people with responsibility for land management. Indeed, while we have not seen any data, it is possible that a very high proportion of valuable remnants are found on land not used for agricultural purposes. The full range of landholders includes*:*

- **Individual/family farmer** - Family farms are managed with a range of motivations including economic and lifestyle considerations. In these cases, individuals are closely tied to their land and have a high degree of ownership over existing management practices;
- **Government agencies such as pasture protection boards, state rail and road services** - Many of the remnants of highest conservation value lie on vacant crown land or land that has been set aside for a purpose which does not directly compete with the functioning of the ecosystem. Examples include stock routes and land around rail lines which have not been subject to the pressures of grazing and cultivation;
- **Local governments -** Local governments have day to day responsibility for land use planning decisions and as a result have the potential to have a significant impact on the conservation of remnant vegetation. Further, local

councils also directly manage public lands in which remnants of high conservation value are found, for example cemeteries and roadsides;

- **Large resource-based industries** - Industrial companies, such as mining and forestry companies, have a significant involvement in land management issues. As extractive industries they have potentially significant impacts on vegetation. However, they may also have a commercial interest in attainment of conservation objectives;
- **Agribusiness** - A significant proportion of farm land is owned by large organisations rather than individuals. Farm land owned by a large organisation is likely to be managed at a larger scale and more business oriented, potentially giving greater capacity to manage trade-offs;
- **Aboriginal and Torres Strait Islanders** - Aboriginal and Torres Strait Islanders are significant landholders. Many important ecological and management lessons can be learnt from indigenous management of vegetation. The development of Indigenous Protected Areas is strongly complementary to the use of management agreements with many of the same principles applying to their development; and
- **Lifestyle landholders** - The main motivation of this group is maintenance of a particular lifestyle that may or may not be consistent with vegetation objectives. Because there may not be a competing land-use to conservation, it is possible that collectively these landholders manage proportionately more remnants of very high conservation value. However, lifestyle properties tend to be smaller and as a result face other difficulties in management.

Each of the categories of land managers outlined above have significantly different motivations for land management. Different programs will encourage differing types of organisations. For instance, a community-based program such as Land for Wildlife is more likely to encourage lifestyle and individual/family farmers. This is borne out by the fact that over three quarters of approximately 3500 properties participating in Land for Wildlife are less than 50 hectares in size and as such, could be classified as "lifestyle" rather than working properties (Victorian Department of Conservation and Natural Resources *pers.com*).

As a general rule, efficient delivery will be achieved when the objectives of differing client groups are fully recognised and the mix of incentives available tailored to each combination of circumstances. For example:

- **Statutory agencies and local governments** have an interest and direct responsibility to consider conservation issues, but may not have the expertise or resources required. Further, conservation mechanisms must be integrated with and be consistent with the public decision making and administrative responsibilities that they have;
- **Large companies and organisations** probably have a preference for a direct and business-like approach with attention to potential costs and, most importantly, foregone commercial opportunities. However, as these organisations operate at a larger scale with large investment portfolio's they may have greater capacity to strategically plan and absorb costs.

Further, because of their size and public profile they can often be effective advocates of innovative programs. Excellent opportunities exist to develop partnership programs with organisations of this kind; and

- **Individual/family farmers and lifestyle landholders** are more effectively engaged through community based programs which operate at arms length from bureaucracies. An individual and tailored approach is often required.

Draft Guideline 5.2 - To effectively deliver incentives, Commonwealth and State governments should establish strategic alliances that seek the cooperation of key businesses, companies and other large landholders in conserving remnant vegetation.

5.3 Devolving delivery of programs

Devolution of program delivery may assist in resolving two of the most important impediments to expanding the role of private land conservation programs:

- **Inadequate Funding**: Managers of programs promoting conservation on private land have consistently emphasised the importance of maintaining a cooperative relationship with landholders both through the negotiation of a management agreement and with ongoing monitoring and management advice. Indeed, concern over the long-term resource implications of maintaining the monitoring effort has led the Victorian Trust for Nature to seek a $3000 contribution from landholders entering covenants (Brian Whelan pers com).
  Most programs currently in place in Australia have operated within moderate to small budgets. This has limited the level of extension support and on the ground promotion and delivery that the programs can achieve. Increased funding of these programs is desirable. However, it is unlikely that increased public funding alone would be sufficient to meet the needs of an expanded program. For this reason, alternatives to supplement government funded delivery will need to be considered; and
- **Negative Perceptions of Delivery Agency:** Another impediment identified during the project is that landholders have very different perceptions of agencies delivering management agreement programs. For example, a landholder with a strong interest in nature conservation may be very comfortable negotiating with a nature conservation agency. On the other hand, a landholder focused on production or a large company may view a nature conservation agency with suspicion and prefer to negotiate with a farming organisation or business group.

The model proposed to address these problems is one that encourages the government agency responsible for ensuring conservation to devolve its responsibility for delivering private land programs to other accredited contracting organisations. Accredited by the agency, these contracting organisations would oversee and negotiate agreements for the protection of conservation values on private lands. Money would be set aside in a Trust to finance ongoing monitoring. The model is based on the experience of The Nature Conservancy in the United States as described in Box 5.1.

Box 5.1: The Nature Conservancy

The Nature Conservancy is a non-profit organisation established in the United States. The Conservancy uses non-traditional market based solutions to protect high conservation land. The mission of the Conservancy is 'to preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and water they need to survive'. The Conservancy currently operates the largest private system of nature sanctuaries in the world with more than 1600 preserves in the United States. Originally, the Conservancy achieved its goal by simply purchasing land of high conservation value from willing sellers. However to increase effectiveness and to extend its role, the Conservancy now protects land through gifts, exchanges, conservation easements, management agreements, debt-for-nature swaps, and management partnerships. The Conservancy now protects more than 9 million acres of ecologically significant land in the United States.

The Conservancy places primary importance on developing partnerships with landholders, businesses, academic institutions and government. Some examples are:

- Aluminium Company of America (Alcoa) and The Nature Conservancy signed a cooperative agreement in January 1996 that will result in the conservation and management of 1058 acres in Arkansas, USA;
- A partnership was established in 1996 between the New Jersey Chapter of The Nature Conservancy and a utility company called Public Service Electric and Gas Company (PS&G). Under contract the Conservancy is required to manage 16,000 acres of land owned by PS&G, which is home to 376 rare plants, animals and natural communities. 101 of these are listed by the State of New Jersey as endangered;
- In response to declining longleaf pine forests and savannas across South-eastern United States, seven public and private landholders formed a partnership to protect the shrinking longleaf pine ecosystems. The partners include a private timber company, the Department of Defence, two national forest agencies, a state forest agency, a water management district and The Nature Conservancy. After nearly five years of discussion and 18 months of negotiation, the partners agreed to work with The Nature Conservancy to develop land management strategies based on ecosystem protection. A Memorandum of Understanding was signed in May 1996. The landholders together plan to develop strategies that provide better protection for the shared resources, most importantly the longleaf pine; and
- Microsoft co-founder Paul G. Allen pledged to donate $5 million to The Nature Conservancy of Washington in January 1997 in the form of a Challenge Grant donated through the Paul G. Allen Forest Protection Foundation. The Foundation will donate $1 for every $2 donated to the Conservancy until the $5 million limit is reached. Allan's intention is to spur additional private donations to a total of $15 million.

Through innovative programs of this kind the Conservancy has become one of the top 10 charities in the United States. This demonstrates the increased importance of nature conservation to individuals and corporations, who between them provide 80% of funding for the Conservancy. Whilst the Conservancy is limited by a reliance on donations, this has encouraged innovative ways of expanding the program.

In the model, the Agency retains the role of coordinating the program and developing regional, ecosystem conservation priorities. Rather than a direct role, however, the Agency would establish partnerships with contracting organisations who would be accredited to:

- Promote the instruments available through the program, such as management agreements;
- Negotiate with landholders; and
- Make payments to landholders as, and when, appropriate.

Importantly, such agreements would ultimately need to be registered with the Agency to ensure continuity and coordination of the program. The Agency would be

responsible for enforcing major breaches of a covenant or stewardship agreement that could not be resolved by the accredited contracting organisation. Organisations which might be appropriate to develop partnership arrangements with include:

- Dedicated conservation trusts;
- Local government;
- Large organisations or companies;
- Regional catchment or vegetation committees;
- Community groups (eg Landcare);
- Farming organisations;
- Business groups;
- Nature based societies (eg Royal Australian Ornithologists Union);
- Conservation organisations (including national and local groups); and
- Statutory authorities.

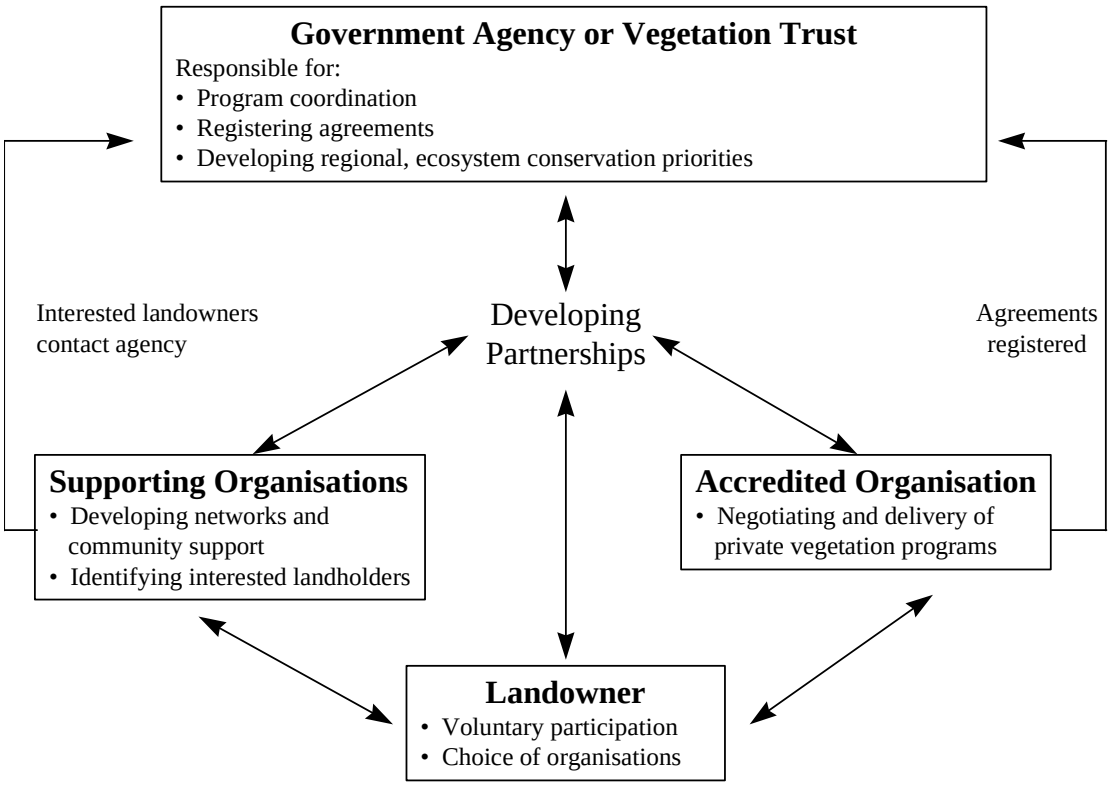
A flexible approach to developing partnerships may be desirable. Some organisations, such as local government or catchment committees could be accredited to develop, finance and negotiate agreements. Local government is particularly well placed to undertake such a role as they have the capacity to administer public funds. Some local governments, such as the Brisbane City Council and Coloolah Shire in Queensland have developed management agreement programs to promote vegetation conservation (James 1997)[5].

Others, such as community groups, may seek to promote or support the program at a more general level and become involved in activities like fundraising, provision of information or simply raising awareness of the value of conservation activities. Such organisations are likely to be a source of innovative ideas and a catalyst for ongoing program improvement.

Any expansion of programs should build upon the goodwill associated with existing programs. The objective is to broaden the potential client base, increase the capacity to deliver private land programs and increase community/client ownership of the program. The proposed model is depicted in Figure 5.1.

[5] The role of local government in delivering native vegetation programs will be the focus of our next report.

Figure 5.1: Devolving Program Delivery



Draft Guideline 5.3 - To maximise the accessibility of vegetation programs, the delivery of incentives should be devolved to Local Government and other appropriate regional and non-government organisations.

The profile and accessibility of management agreement programs can be increased by:

- Increasing resources within existing programs in order to facilitate delivery to a wider client base;
- Devolving responsibility for negotiating and developing management agreements to **accredited contracting organisations** such as local government; and
- Developing partnerships with **supporting organisations** to encourage innovation and promote community acceptance.

A final issue in relation to devolving program delivery is the question of who the signatory to a covenant or management agreement should be. At present, all management agreements in Australia are given effect through legislation which require agreements to be entered by the relevant Minister administering the legislation. This stifles innovation and may discourage landholders from entering into a management agreement. Acceptance rates and hence the cost of a program would be lower if many agencies and organisations are empowered to negotiate conservation covenants and stewardship agreements. In the short term, consideration could be given to delegating this responsibility to the Agency delivering the program. In the longer term, consideration might be given to devolving the responsibility to the accredited

contracting organisation and/or local government. This would assist in creating confidence in the program being community based and oriented.

Draft Guideline 5.4 - The legislation that enables covenants to be established in each State should be reviewed and broadened to enable a wide range of organisations to promote and use management agreements.

- In the first instance, mechanisms for allowing local governments to develop and administer management agreement programs should be developed.

5.4 Ensuring the long term viability of private land conservation programs

An important consideration in developing programs that deliver management agreements is that they should provide secure protection for remnant vegetation in the long term. The need for long term security raises the issue of ensuring that the programs are themselves maintained in the long term.

The difficulty of meeting this objective is well demonstrated by experience with Wildlife Refuges in NSW. Wildlife Refuges are a voluntary measure which is not binding on the landholder. In the 1970s, over 500 Wildlife Refuges were established (pers. com). However, administration and support for the program lapsed. Now NSW NPWS is restabilising the program. A first step has been to contact landholders with wildlife refuges.

In this case, the effort to revitalise the program is commendable, and given the non-binding nature of the program, there are very few negative implications for the landholder. However, if the agreements had been binding but the partnership broken through neglect, it would be difficult to enforce the program.

Programs are more likely to be retained if they have a long-term funding commitment. Mechanisms to achieve this objective include establishing of an independent fund and seeking to move the administration of programs to contracting organisations at arms length from government. A guideline for establishment of management trusts is put forward in Section 4.

5.5 Targeting priority areas for conservation

As previously discussed, there is a significant opportunity to expand the role of management agreements to target unique sites of high conservation value. A number of State based programs are already doing this. For example:

- The Victorian Trust for Nature currently has a project focused on the protection of native grasslands;
- The NSW National Parks and Wildlife Service has projects for conserving forests in the Merimbula district, RAMSAR wetlands, Macquarie Marshes and Brushtailed Rock Wallaby habitat (Kangaroo Valley); and

- The Tasmanian Public Land Use Commission has proposed stewardship agreements as the primary mechanism for achieving conservation objectives in private forests.

Integration of these initiatives with other conservation activities to build a series of efficiently designed Protected Area Networks would significantly reduce the cost of building a comprehensive network of protected landscapes across Australia (Prober and Thiele 1996). The concept of a Protected Area Network was introduced in Section 3.3.

Partially funded through the National Heritage Trust's Bushcare initiative, such an approach would involve identifying high priority ecological communities, assessment of their conservation value and identification of conservation targets. Landholders identified as having areas of high conservation value would be approached and their involvement in construction of the "Protected Area Network" sought.

Such a system is particularly relevant in the context of conserving fragmented remnant vegetation where it is not administratively feasible or cost effective to acquire areas for the public reserve system. Conceptually, regular and more timely management input can be provided most efficiently by people who live near such sites. Unique site agreements coordinated through a Protected Area Network have the potential to provide cost effective and secure conservation through time.

For any region, a Protected Area Network could have the following characteristics:

1. In the case of remnant vegetation it would provide a coordinated approach to the conservation of ecosystems which are fragmented and widely dispersed across a large region. For example, Grassy White Box Woodlands extend from southern Queensland to Northern Victoria (Prober and Thiele 1996);
2. A wide variety of tenure and managerial arrangements that would allow people to learn which strategies are most effective;
3. Entry into the network would be voluntary but may be binding once land is committed;
4. The full range of mechanisms available for encouraging conservation on all tenures would be utilised. Whilst secure protection through a covenant, or equivalent, would be the ultimate objective landholders would be encouraged to participate in any way they were comfortable. Formal status would be limited to those who commit to secure protection via a permanent arrangement;
5. Although potentially widely dispersed, the Protected Area Network for each ecological community would be managed as a single unit. A management plan for the Network could be established to guide the development of management plans for each site; and
6. Each element of the Network would be formally recognised as contributing to the objectives of the National Reserve System. Further it would form a part of the inventory and auditing processes for the national reserve system. In this way monitoring and management advice could be provided within an integrated framework (Prober and Thiele, 1996).

In addition to formal public reserves the Protected Area Network would provide protection which is consistent with an IUCN classification VI. The *Interim Scientific Guidelines for the National Reserve System* (ANZECC 1997) note that the objective of the NRS is: "to establish a comprehensive, adequate and representative system of protected areas to conserve Australia's native biodiversity". A protected area is defined as: "An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means".

Unique site agreements that are in perpetuity would meet this definition as is also recognised in the interim guidelines which notes that implementation of the National Reserve System will include inter alia:

> "identification of opportunities for public lands managed by local government and other statutory authorities to be included in the NRS; and
> identification of opportunities for including in the NRS private and leasehold land covered by a voluntary binding conservation agreement which secures biodiversity conservation as the primary objective. Noting that the core reserve system needs at least to be comprehensive."

Concerns have been raised that "private reserves" will not provide the security of public reserves and may not preclude future land uses such as mining, however legislation could preclude this. Clearly any reserve system will require a variety of reserves of differing status, hence the use of IUCN categories I - VI. However, it is important to note that each category has an important role to play. As noted, a Protected Area Network that includes public and private land secured by a management agreement could be the most effective approach for fragmented remnant vegetation that occurs in productive landscapes such as many of Australia's woodlands.

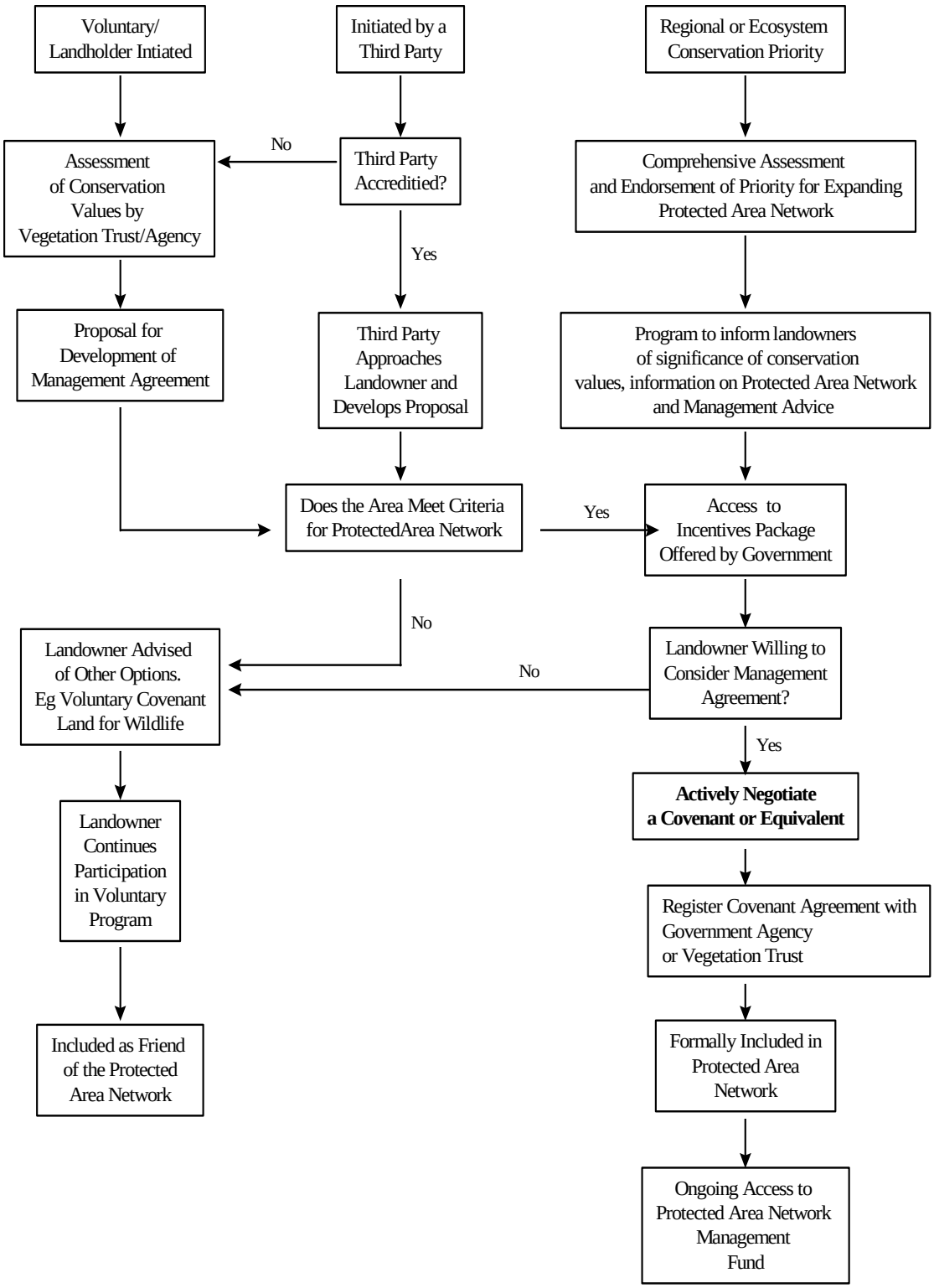
The model outlined provides framework for targeting conservation effort on private land. These points are summarised in the decision tree in figure 5.2. Some of the key issues and opportunities are summarised in the following guideline.

Draft Guideline 5.5 - A Protected Area Network should be established which includes all public and private land managed for conservation to formally account for and provide recognition of the role that land outside the formal reserve system plays in meeting conservation objectives.

There is an opportunity to target "unique site" agreements to conserving areas of high conservation value and make cost effective contributions to the reserve system. Delivery of voluntary conservation programs can be most effectively targeted if:

- Programs are targeted at priority fragmented ecological communities and regions identified through regional vegetation management plans;
- Conservation effort is coordinated across land tenure;
- Existing auditing and inventory arrangements for public reserves are extended to areas of private land managed for nature; and
- Regional and ecosystem based "Protected Area Networks" are created utilising the full range of voluntary, incentive based and regulatory mechanisms available in each State.

5.6 Summary of Institutional Arrangements For Effectively Delivering Private Land Conservation Programs



6. Making Management Agreements Last

This section of the report addresses what is perhaps the most significant challenge for meeting vegetation objectives: how to ensure that management agreements will be enduring and, hence, the conservation values of the vegetation retained in perpetuity.

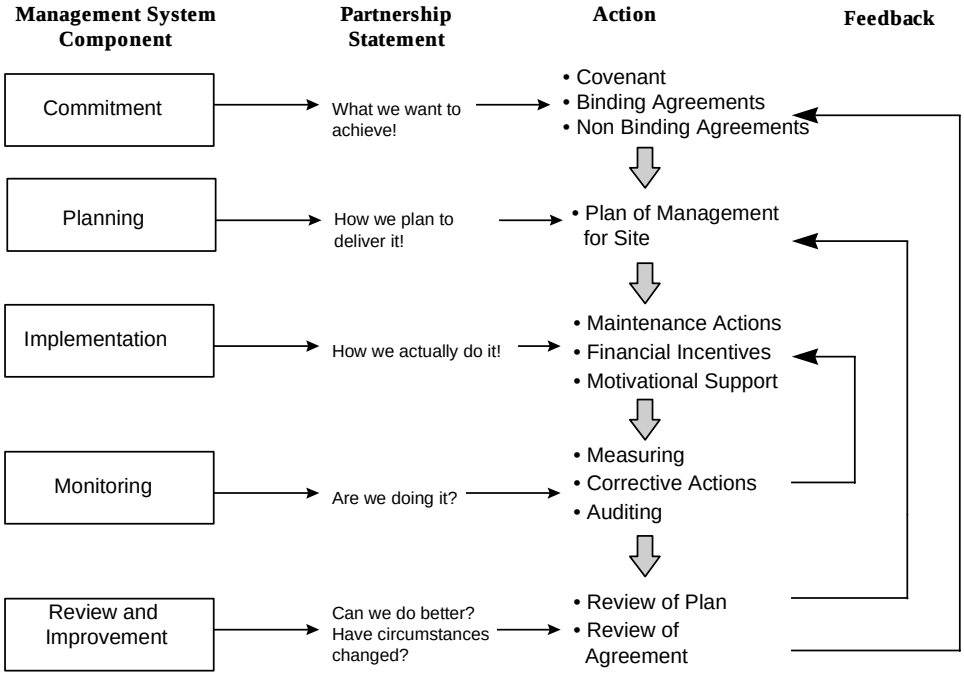
The challenge of making management agreements enduring is one which confronts any mechanism which promotes vegetation retention. Legislation, voluntary action, incentive payments and even public acquisition all face the challenge of managing conservation values in the face of continuing change. In the case of remnant vegetation, the difficulties faced in management are more acute because remnant vegetation occurs in small patches which are highly fragmented across the landscape.

Because of their focus on individual landholders and addressing site specific requirements within a framework that seeks to motivate landholders to conserve vegetation, management agreements are potentially the most dependable mechanism through which conservation of remnant vegetation can be achieved. The trade-off is their relatively high administrative cost.

6.1 Elements of adaptive management agreements

All good management is based on the principles of: establishing clear objectives; planning and implementing actions to meet those objectives; monitoring and evaluating the outcomes; and reviewing objectives and actions in light of lessons learnt. Adaptive management requires a strong commitment to manage for uncertainty and strive for continual improvement. Figure 6.1 sets out a framework for the development of management agreements which are adaptable and enduring in the long term.

Figure 6.1 Elements of an Adaptive Management Agreement System



Adapted from Davey et.al 1997

The framework in figure 6.1 is derived from the International Standards Organisation's 14000 Series: Environmental Management Systems (1996). It seeks to clearly distinguish between the various stages of successful vegetation management. It highlights the need to develop a dynamic structure for management agreements so that they can evolve through time as new information becomes available or circumstances change. Feedback which may result in changed management practices occurs in three ways:

- Monitoring will provide information on whether the **actions** undertaken to maintain vegetation are being undertaken effectively;
- Review of the performance of existing management practices will provide opportunity to review **strategies** for management and whether the **outcomes** sought are being achieved; and
- Periodic review of the **objectives** of management is necessary to ensure consistency with broader national goals and to facilitate fundamental changes to strategy.

The complexity of management system frameworks is initially very off-putting. The challenge is to interpret the above framework and develop cost effective ways of administering management agreements in the long term. Management agreements are complex because of their site specific nature. However, pragmatic steps can be taken to successfully address all of the elements outlined in figure 6.1.

6.2 Commitment - covenants, binding and non-binding agreements

The formal covenant or agreement between the landholder and contracting organisation should seek to establish the **objectives, landuses and systems** for managing the site covered by the agreement. In the case of a covenant in perpetuity the agreement is registered on the title to the land covered by the agreement. It is binding in perpetuity and administratively difficult to amend and, hence, should be broad enough to last over a 10 - 20 year timeframe without need for review. The process for review should be set out in the original document.

As noted in Section 3 agreements which clearly outline the obligations and entitlements of both parties to the agreement will be more effective than those that only commit landholders. Agreements that do not create a sense of partnership are unlikely to last. Broadly the agreement should cover:

- **Objectives** - which can be defined as the desired outcomes of management. An example would be maintenance of particular species of plants, habitat for endangered species or improved soil and water management;
- **Landuses** - the landuses that are permitted and those that are excluded from the area covered by the agreement. Careful consideration should be given to the issue of landuses as only those uses that are a direct threat to meeting the agreed objectives of the agreement should be excluded (see below); and

- **Systems -** the agreement should outline any additional processes that are to be observed in the management of the area covered by the agreement. At a minimum the agreement should provide for the development of a "Plan of Management" and "Monitoring and Review" mechanisms.

An example of a model agreement developed by Richard Harvey (1997) can be found in the Appendix.

6.2.1 Maintaining a landholder focus

Conservation planning for public lands is strongly focused on maintaining the ecological integrity of sites through the management of threatening processes. Conservation plans are generally developed exclusively from this viewpoint. However, in the case of management agreements, where tenure remains unchanged, the landholder will remain the primary manager of the land. For this reason, management arrangements must also take account of the human dimension in addition to ecological considerations.

It should not be forgotten that landholders who have entered a management agreement are making a significant contribution to remnant vegetation conservation. In many cases, it is useful to recall that a remnant exists only because of prior decisions made by the landholder. Indeed, remnant vegetation might be thought of as a stand of native vegetation that reflects current and past management practices rather than a relic from pre-European settlement. Hence, securing the conservation of remnant vegetation can be perceived as securing and adapting existing management practices rather than imposing a new management regime.

An interesting case exists where existing landuse practices have achieved conservation outcomes, not through design, but because of their low impact on native vegetation. For example, low input farming, characterised by lower stocking rates and no or minimal cultivation and fertiliser application, may be motivated by on-farm objectives such as minimising input costs and a belief that native pastures produce finer wool (Crosthwaite, 1997). Practices such as these may achieve good conservation outcomes but they are critically dependent on the attitude of the individual landholder to their farming business. As the landowner changes, there will be a high risk of changes in the management of the remnant.

Because the probability of conservation is higher if landholders are motivated, landholders should feel that they are being rewarded for sympathetic management and not have rigid management regimes imposed upon them. Whilst not always scientifically based, local knowledge of an individual site and the broader landscape is often the best source of management information. Management inputs from a contracting organisation should seek to harness local knowledge and complement it with an understanding of ecological principles (Young, *et al.* 1996).

Management and monitoring arrangements that foster the enthusiasm of the landholder and encourage innovation are likely to be more lasting than ones that create a sense of distrust. The best conservation manager is going to be an active and interested participant in conservation activities. There is also a strong case for maintaining some diversity in management practices as it is unlikely that ecologists can develop the perfect "recipe" for managing any particular ecological community.

Diversity in approach and a focus on outcome rather than input is crucial to ensure improvement.

6.2.2 Taking account of other landuses

In order to manage remnant vegetation to sustain its ecological processes, conservation management will need to be recognised as a primary management objective for the area covered by the agreement. This does not, however, imply that in all cases management agreements should have conservation management as an exclusive land use. If an area is to be managed as part of a "Protected Area Network," then management activities might be exclusively directed at maintaining the conservation value of the site. On the other hand, vegetation managed for soil conservation or water management might be managed for multiple objectives. In such cases, some of the budget available for this purpose may be used simultaneously to achieve conservation objectives.

Even in the case of management for nature conservation, consideration should be given to whether the remnant can remain sustainable with some ongoing use for production. In the case discussed above some native grasslands will remain dependent on continued light grazing. However, they may be extremely sensitive to overgrazing, cultivation or the application of fertiliser. As these grasslands are often an integral part of a farming enterprise, it may be extremely difficult to encourage farmers to manage the areas exclusively for nature conservation. An agreement which integrates management for conservation and grazing would be the most viable in cases such as these (Crosthwaite 1997).

If permitted under a management agreement, other land use practices may increase the acceptability of agreements and decrease the opportunity costs of negotiating an agreement. Landholders may seek to have access to graze in times of drought or to protect stock from bad weather.

An example illustrates the point well. In grazing country, larger properties often have large unfenced areas of native vegetation. They can be of high conservation value because they are only grazed in dry periods when other feed is short. However, in a whole farm context they are very important insurance against drought. A critical question is whether existing practices are consistent with maintaining the ecosystem in the long term. If they are then it may be much easier to negotiate a management agreement.

6.2.3 Underpinning landholder management with sound conservation principles

Having emphasised the need to take into account landholders' aspirations in identifying management objectives and agreed landuses, it is also important to note the role of conservation agencies and/or contracting organisations in providing professional advice and guidance.

It is important that the objectives and landuses agreed are consistent with one another. For example, in the case outlined above it would be pointless to allow grazing if this lead to degradation of the vegetation the agreement is seeking to conserve. At the same time, however, it needs to be appreciated that often the effects of occasional grazing on vegetation are poorly understood. Where objective advice is available it

should be provided. Where reliable advice is not available some experimentation, with close monitoring and adaptation over time should be allowed and supported by professional advice.

Many landholders will actively seek out professional advice because they understand that they do not have the specific knowledge required. One way in which conservation and contracting organisations might develop robust agreements is by developing generic management plans for priority ecological communities. These plans would provide information on the composition of particular ecological communities, highlight common management issues and identify options for management. These plans would then be used as the starting point for developing a site specific agreement with individual landholders.

Policy Guideline 6.1 - The covenant or agreement between the landholder and contracting organisation should seek to establish the objectives, permitted landuses and systems for managing the site covered by the agreement.

- Negotiations should be focused on addressing the aspirations of the landholder in addition to ecological considerations;
- Where ongoing productive uses are consistent with conservation objectives, multiple land use models should be considered;
- Where management agreements are used to protect vulnerable ecological communities the environmental dependability of management arrangements should be given priority over other landuses; and
- Generic plans developed for priority ecological communities could provide the starting point for developing site specific agreements with individual landholders.

6.3 Planning and implementation - plans of management

A "Plan of Management" is the document which sets out the desired management **strategies**, **actions** and **performance indicators** required for effective conservation. Plans of Management can be incorporated in the covenant that is registered on the title to land. However, such an arrangement has weaknesses because review of any management practices would require revisiting the entire agreement. Plans of Management are more effectively included as a schedule to a covenant, thus allowing for regular review and refinement of management practices.

The plan of management should be an active document that is used to guide the day to day management of the site and include:

- **Strategies** - which identify threats to managing the site and mechanisms through which threats are to be managed;
- **Actions** - which outline the specific activities for managing threats; and
- **Performance indicators** - which allow the success of strategies and actions in meeting management objectives to be measured.

In some States, covenants and stewardship agreements do not require the development and regular review of Plans of Management. This is a significant weakness as the

conservation value of sites will inevitably be eroded without conscious planning for conservation. The Plan, however, need not be a complicated or lengthy document. In most cases, a small number of pages with a map of the site should be sufficient.

Policy Guideline 6.2 - Joint development of a Plans of Management with the landholder is an essential function for contracting organisations entering management agreements.

- Plans of management are a primary mechanism for resolving management issues with landholders, developing practical strategies and actions to manage threats and identify performance indicators for the management of remnant vegetation.

Most strategies for management are input based in that they articulate particular actions the landholder is to perform such as maintaining fences or controlling pests and weeds. The main weakness of any input based covenants is that it locks in a management regime which may not deliver the outcome sought. This problem can be minimised, however, by facilitating periodic reviews of the agreement and including at least a general statement about the outcome sought.

Developing clear outcome-based indicators for assessing the performance of management activities is a significant challenge. Landholder acceptance will be higher if such indicators are practically oriented at a level which the landholder can monitor on a regular basis. Nevertheless, it is important to realise that performance indicators encourage landholders to identify management problems as they arise in order to develop adaptive strategies in consultation with the contracting organisation.

Performance indicators can relate to activities either aimed at directly controlling threatening processes or achieving desired environmental outcomes. Examples might include:

- Weeds and pests successfully controlled; and
- The continuing presence of particular species of grasses and shrubs.

Policy Guideline 6.3 - Encouragement of active management by clearly identifying outcome oriented management strategies and actions will facilitate the achievement of ecologically dependable outcomes.

- To the greatest extent possible, management agreements should identify performance indicators which are monitored regularly and tied to the desired management “outcomes” rather than management “inputs”.

6.4 Monitoring and review - evaluating performance and reviewing agreements

Arrangements for monitoring the performance of management of a particular site and regularly reviewing management practices are critical to the success of these agreements. Monitoring and review will involve:

- **Information** - on the existing practices as measured by the performance indicators contained with the Plan of Management;

- **Evaluation** - of the information against the objectives of management; and
- **Review** - of management actions, strategies and, where necessary, objectives in light of the outcomes the evaluation.

One of the primary functions of the contracting organisation is in providing professional advice to landholders. As has been discussed earlier, a landholder cannot be expected to maintain their commitment to a management agreement unless the contracting organisation also meets their obligations.

Regular contact with landholders is integral to the success of any management arrangement. The key difficulty faced by contracting organisations is the resource intensive nature of providing these services. Approaches to delegating these roles and securing ongoing funding for programs have already been discussed in detail in previous sections of this report. However, within the context of a discussion of management arrangements, it cannot be over-emphasised that the provision of these services is the minimum requirement of the contracting organisation. In the absence of funding for these activities, it cannot be expected that the conservation values for which an agreement has been entered into will be maintained.

As a Policy Guideline, it is suggested that landholders are contacted at least every year, with site visits and monitoring jointly conducted every two years. Similarly, we suggest review of a plan of management at least every five years. Covenant conditions should only be reviewed when the objectives for managing the site are revised to permit a change in landuse.

Policy Guideline 6.4 - In order to maintain active management the organisation that enters a management agreement will need to be directly responsible for providing regular management advice and initiating reviews of Plans of Management.

- Landholders should be contacted every year with site visits and monitoring at least every two years. Plans of Management should be formally reviewed every five years.

A further role for contracting organisations in maintaining management agreements lies in providing assistance for ongoing or unexpected management costs. Previously it has been noted that financial assistance for ongoing management should be restricted to unique site agreements where a public conservation service is being provided to the community.

A problem emerges where such payments may involve an ongoing commitment from government. In Section 3 an option of establishing a Vegetation Management Trust to make ad hoc payments for ongoing management activities was recommended. It is suggested that payments through such a Trust could be linked to monitoring arrangements every two years. In this way the contracting organisation and the landholder would jointly identify management needs, provide a performance review and put forward proposed management actions for funding over the following two years.

Overall funding levels required to maintain an effective Vegetation Management Trust at a State level could be determined on a 3 - 5 yearly budget cycle. If the Trust

operates efficiently and delivers conservation outcomes in a cost effective way, a strong case can be made to continue its funding. A poorly performing Trust would have difficulties in justifying continued funding. It could be hoped that funding Trusts of this kind would become a part of the core business of conservation agencies as is the case with National Park management.

Policy Guideline 6.5 - Funding for ongoing management activities should be tied to two yearly monitoring and review arrangements.

- Application could be made to a Management Trust (Policy Guideline 4.10) by the contracting organisation and landholder on the basis of actions jointly identified at a two yearly review.

6.5 Motivations for breaking a management agreement contract

Up until this point it has been assumed that landholders who enter management agreements will be conscientious managers of remnant vegetation. This view is consistent with the voluntary nature of most existing management agreement programs which have tended to attract highly committed landholders who require only modest incentives to enter into stewardship arrangements. However, it cannot be assumed that landholders will remain committed to conservation in the long term. Some of the factors which may influence landholders to change management arrangements include (see Crosthwaite, 1997; Bowers, 1997):

- **Changes in ownership and management**: When management of land passes from one individual to another there is no guarantee that the next manager will have the same commitment to conservation of a remnant;
- **Financial resources**: Changes in the financial position of a landholder can have both positive and negative impacts on approaches to management. Lack of resources may stop a landholder clearing vegetation to establish pasture despite the fact that it is economic to do so. On the other hand, high levels of debt may force a landholder to exploit a remnant they would otherwise have conserved;
- **Changes in technology and markets**: New markets and technologies may emerge making it profitable to develop land that was previously not economic. For example, the advent of woodchip exports has generated a market which makes harvesting of dry eucalypt forests in the midlands of Tasmania profitable;
- **Environmental attitudes**: An individual's attitude to conservation is subject to change as experiences and information modify their behaviour; and
- **Climatic variation**: Landholders may be willing to conserve remnant vegetation in good seasons, but may feel "forced" to graze a remnant in drought years or to protect stock from bad weather.

For these reasons, the design of management agreements must take account of the fact that landholders may not remain committed to conservation outcomes in the long

term. Contracting organisations should try to anticipate changes in motivation and seek to step in to resolve any outstanding issues as they emerge. For example, where land covered by a management agreement changes hands, it would be wise to require notification to the contracting organisation and to ensure the new landholder is contacted immediately to seek to develop an understanding of the objectives of the new manager and hence achieve ongoing stewardship.

It is obvious that organisations responsible for managing management agreements will not be able to identify all of the risks to management. Landholders are likely to be the first to recognise conflicts or opportunities to benefit from breaking their agreement. Where landholder's have such an incentive they may to do so through processes defined as "moral hazard" and "first mover advantage" (Bowers, 1997).

- **Moral hazard:** Long term conservation of remnant vegetation is a challenging task, the success of which is difficult to monitor. In the case of decline of a remnant, it would be difficult to assign responsibility for mismanagement. Hence, a landholder seeking to break an agreement has a motivation to mismanage the remnant and blame its subsequent demise on external factors. This motivation is known as moral hazard.
- **First mover advantage:** When new market opportunities emerge, a landholder may have a significant incentive to break the intent of an agreement because the benefits of doing so are greater than any penalties imposed. Because the landholder has a chance to act before penalties and monitoring arrangements can be changed, this is known as "first mover advantage". It is a serious issue when the loss, as is the case for remnants, is irreversible. It is less of a problem when many replicates exist and some learning is possible.

6.6 Mechanisms for enforcing the conditions of management agreements

No mechanisms are available that will ensure that management agreements are adhered to in every situation. However, there are a number of ways in which landholders can be provided with strong incentives to maintain their commitment to an agreement:

1. **Rewarding good performance -** where ongoing payments are made for management activities, these should be tied to performance wherever practical. For example, payment might be based on the continuing presence of particular species in an area protected by a covenant. In this way, the landholder has a strong incentive to report and seek advice on problems as they emerge;
2. **Flexibility and willingness to renegotiate plans of management -** If the landholder feels they are unable to meet prescriptions contained in a Plan of Management, they should be encouraged to seek a review of these prescriptions. This will trigger negotiation on how management problems can best be resolved. The ability to trigger a review empowers the landholder to adapt to new challenges. A review does not imply that the core conditions of an agreement should be compromised;

3. **Enforcing regulations -** Where the conditions of a management agreement or Plan of Management are broken without the landholder seeking advice from the contracting organisation, these conditions should be enforced and penalties imposed. It is critically important that where standards are set, they are enforced unless the landholder notifies that they are having difficulties;
4. **Tying penalties to rehabilitation of damaged land -** Penalties associated with breaching agreements are best tied to the costs of any rehabilitation works required on the site. In this way, the landholder will not be able to wilfully break the conditions of an agreement for financial gain, because full rehabilitation of the site will preclude any development of the site;
5. **Providing additional assistance -** Where a landholder reports a management problem, contracting organisation should be willing to consider assistance through a Management Trust. In this way, the landholder is rewarded rather than penalised for identifying management problems. For example, if a significant weed problem emerged, funding might be considered to assist the landholder in controlling the problem. Clearly, criteria for when assistance can be provided would need to be developed. Payment should not be made for actions the landholder had an existing commitment to; and
6. **Allowing landholders to exit agreements -** A disgruntled landholder is unlikely to make a very good manager and is unlikely to successfully maintain the conservation value of a site. Provision for the mechanisms through which a management agreement might be dissolved should be clearly set out in the contract. Dissolving one agreement may put the credibility of an entire program and the managing authority at risk. For this reason it is suggested exiting an agreement should generally only be possible via sale of the land in question, thus leaving the agreement in place. Where both parties agree to dissolve an agreement any assistance provided prior to dissolving the contract must be paid back in full and the contracting organisation should have first right of purchase over the land at market price minus any incentives provided in the past.

Clearly there is a tension between maintaining flexibility to renegotiate the terms of an agreement and enforcing the conditions contained in the “Plan of Management”. The need to strike a balance between these two options is best explained through use of an example. In some regions of South Australia, there is considerable pressure to clear isolated standing trees in paddocks suitable for vineyard development. Whilst in individual cases it may be appropriate to allow clearance, it would be extremely detrimental for the entire policy to allow individual cases to proceed unregulated. In these cases, permission to clear might be given if it was tied to securing protection for other remnant vegetation that yields a net gain in native vegetation conservation (Government of South Australia 1995). However, if the trees are cleared without consent, it is critical to enforce the law/agreement in a way which will provide an ongoing deterrent. For example, the penalty may be that the trees cut down be replaced in the identical location by trees of the same type possibly protected by a security deposit.

Policy Guideline 6.6 - Enforcing management agreements requires mechanisms that reward good management, encourage flexibility and adaptive management and rigorous enforcement of penalties for non-compliance.

- Landholders should be rewarded for active management and identifying problems by providing assistance through a Vegetation Management Trust which is tied to monitoring and review arrangements;
- Landholders should be able to trigger a review of the Plan of Management at any time in order to provide a mechanism for resolving any disputes or unforseen problems;
- Standards contained within management agreements should be vigorously enforced and penalties tied to the cost of rehabilitating damage on site; and
- Whenever a landholder wishes to exit an agreement, this should be possible only via sale of the land in question to another party.

7. References

ANZECC (1997) *Interim Scientific Guidelines for the National Reserve System.* Environment Australia, Canberra.

ANZECC Working Group on Nature Conservation on Private Land (1996) *Nature Conservation on Private Land: Commonwealth, State and Territory Legislation and Programs: A Report of the Working Group on Nature Conservation on Private Land prepared for the Australian and New Zealand Environment and Conservation Council, Standing Committee on Conservation.* Australian Nature Conservation Agency, Canberra.

Australian Conservation Foundation (1997) *Protecting our unprotected lands.* Habbitat Australia Vol 25 No 2 April 1997, Melbourne.

Australian Local Government Association (1997) *Regional Environmental strategies: How to prepare and implement them.* Australian Local Government Association, Canberra.

Bowers J (1996) *Policy Instruments for the Conservation of Remnant Vegetation: a British Perspective.* CSIRO Wildlife and Ecology Working Document, Canberra.

Bradsen J(1991) *Perspectives on Land Conservation.* Environment and Planning Law: March 1991.

Commonwealth of Australia (1995) *Regional Forest Agreements.* Commonwealth Department of Prime Minister and Cabinet, Canberra.

Commonwealth of Australia (1996a) *The National Strategy for the Conservation of Australia's Biological Diversity.* Commonwealth Department of the Environment, Sport and Territories, Canberra.

Commonwealth of Australia (1996b) *State of the Environment Australia 1996.* Commonwealth Department of the Environment, Sport and Territories, Canberra.

Commonwealth of Australia, (1997) *Natural Heritage Trust: guide to Community Group Applications 1997-98.* Environment Australia, Canberra.

Crompton J. (1990) *Protecting Park and Natural areas Without Purchasing Term: A Review of Methods Adopted in the USA.* Vol 13 Journal of Society and Leisure, Quebec.

Crosthwaite J (1997) *Native Grassland: at what cost.* Paper to the 41st Annual conference of the Australian Agriculture and Resource Economics Society, Gold Coast.

Davey. S, Hoare. J, Binning. C and Bright. C (1997)*Assessment of Ecologically Sustainable Forest Management for Regional Forest Agreements.*

Department of the Environment sport and Territories (1996) *Clearing controls in states and Territories*. Unpublished paper.

Farrier D (1995), *Off-Reserve Management and the Conservation of Biodiversity, With Particular Reference to the Management of Land in Private Ownership*. Report to the Tasmanian Forests and Forest Industry Council, Tasmania.

FORTECH (1997), *Review of Vegetation Programs 1989 - 1995.* Draft Report to Environment Australia, Canberra.

George R.J., McFarlane D.J. and Speed R.J. *The consequences of a changing hydrologic environment for native vegetation in Southwestern Australia* in ed Saunders D.A., Craig J.L. and Mattiske, Nature conservation 4: The Role of Networks E.M. Surrey Beatty and Sons.

Gilfedder, L and Kirkpatrick J (1995) *A Survey of Landholder Attitudes and intentions Towards the Long term Conservation of Native Lowland Grasslands.* Report to the Australian Nature Conservation Agency, Canberra.

Government of South Australia 1995 *Guide to the Native Vegetation Act: how it affects Rural Land Owners.* South Australian Department of Environment and Natural Resources, Adelaide.

Greening Australia (1995) *Local Greening Plans.* Greening Australia, Canberra.

Harvey R (1997) *Model Voluntary Conservation Agreement.* Unpublished paper, Hobart (See Appendix A).

Howard and Young (1995) *Selecting and costing a Representative Expansion of the NSW Protected Area Network.* CSIRO Wildlife and Ecology Working Document, Canberra.

International Standards Organisation (1996), *ISO 14001 Environment Management Systems - Specification with guidance for use.* International Standards Organisation, Geneva.

International Standards Organisation (1996), *ISO 14004 Environment Management Systems - General guidelines on principles, systems and supporting techniques.* International Standards Organisation, Geneva.

James, David (1997) *Environmental Incentives - Australian Experience with Economic Instruments for Environmental Management.* Consultancy Report to Environment Australia, Canberra.

LWRRDC (1996) *Sustainable Management of Natural Resources: Who Benefits and Who Should Pay.* Land and Water Resources Research and Development Corporation, Canberra.

MDBC (1996) *Cost-Sharing for On-ground Works.* Murray Darling Basin Commission, Canberra.

NSW Department of Land and Water Conservation (1997) *Native Vegetation Reform Package - Question and Answer Sheet.* NSW DLWC, Sydney.

NSW National Parks and Wildlife Service (1996), *Voluntary Conservation Agreement Guidelines.* NSW National Parks and Wildlife Service, Sydney.

OECD (1989) *Agriculture and Environmental Policies: Opportunities for Integration.* OECD, Paris.

OECD Expert Group on Economic Aspects of Biodiversity (1996), *Making Markets Work for Biological Diversity: The role of Economic Incentive Measures.* Organisation for Economic Cooperation and Development, Paris.

Platt, S.J. and Ahern L.D. (1995) *Nature conservation on private land in Victoria, Australia the role of Land for Wildlife* in ed Saunders D.A., Craig J.L. and Mattiske E.M. Surrey, Nature conservation 4: The Role of Networks Beatty and Sons.

Pressy (1995) *Conservation Reserves in NSW: Crown Jewels or Leftovers.* Search, Vol.26, No.2, March 1995.

Prober and Thiele (1996) *Reserve Concepts and Conceptual Reserves: the Grassy White Box Woodlands and Beyond.* Unpublished paper.

Tasmanian Public Land Use Commission (1996) *Inquiry into areas to be reserved under the Tasmania-Commonwealth Regional forest Agreement. Background report Part F: Mechanisms for achieving conservation management on private forested land: a discussion paper*. Tasmanian Public Land Use Commission, Hobart.

Tasmanian Public Land Use Commission (1997) *Inquiry into areas to be reserved under the Tasmania-Commonwealth Regional forest Agreement. Proposed Recommendations Report Part II: Mechanisms for achieving conservation management on private forested land*. Tasmanian Public Land Use Commission, Hobart.

Trust for Nature Victoria (1997) *Information Pamphlet,* Trust For Nature, Melbourne.

Victorian Department of conservation and Natural Resources (1996) *Planning Guidelines for Native Vegetation Retention Controls,* Victorian Department of conservation and Natural Resources, Melbourne.

Young, M.D., Gunningham, N., Elix, J., Lambert, J., Howard, B., Grabosky, P. and McCrone, E. (1996) *Reimbursing the Future: An evaluation of motivational, voluntary, price-based, property-right, and regulatory incentives for the conservation of biodiversity*. Department of the Environment, Sport and Territories Biodiversity Unit Biodiversity Series Paper No. 9.

Young, M. D. (1992) *Sustainable investment and resource use: Equity, environmental integrity and economic efficiency*. Parthenon Press, Carnforth and Unesco, Paris.

Young E (1997), *Use of covenants in off-park conservation in South Australia*. Unpublished paper, Department of Environment and Natural Resources, Adelaide.

8. Appendix

Example of a Voluntary Conservation Agreement prepared by Richard Harvey and generalised to be made consistent with this report. Changes include:

- A section enabling periodic payments;
- Provision for a conservation covenant; and
- Contracting Organisation has been used in place of "Minister".

DESCRIPTIONS	VOLUNTARY CONSERVATION AGREEMENT
Date	**THIS AGREEMENT** made the ……day of ……, One thousand nine hundred and ninety seven (1997)
Contracting Organisation name and description	**BETWEEN** The Contracting Organisation **AND**
Names and addresses of other parties	**Joe Blow and Jill Blow** both of First Street of Second Town in a State of Australia
LEGAL RECITALS	**WHEREAS**
Ownership of the land	A. The Owner is the registered proprietor of "Farm" being that parcel of land shown in Diagram A annexed to this Agreement and referred herein as the farm.
	B. The farm is that part of Portion …….., Parish of ……, County of ……
Bio and geo description	C. The conservation area contains {forested dolerite with high shrub stratum.}
Common purposes/values	D. The conservation values of the conservation area are {For example}: • forested dolerite is rare on the Australian mainland; • the high shrub stratum is an important habitat for native plants and fauna once common in the region; • the conservation area contains habitat for fauna listed on *Schedule 2, Vulnerable Species of the Threatened Species Conservation Act, 1995* (list either here or in an annexure); and • the conservation area contains Winged Broom Pea *Jacksonia scorparia* which is regionally uncommon at its southern limit in this area, and occurs as disjunct populations.
Vision for the land	A. The Owner and the Contracting Organisation recognise the need to conserve remnant bushland on private land and the need to protect and preserve water quality.
Missions of the parties	B. The Owner and the Contracting Organisation are to take steps to ensure the protection and preservation of the native plants and fauna and catchment values of the conservation area, in particular, those values stated above.
Goals of the missions	C. The Owner and the Contracting Organisation wish to achieve:

	• an improvement of water quality within the catchment; • maintenance or improvement of the occurrence of etc; • etc - need to state goals clearly (but in general terms)
Strategy to achieve goals	D. The two general directions to achieve the goals are: • the Owner shall manage the conservation area in accordance with a plan of management but subject to specific stipulations contained in this Agreement; • the Contracting Organisation shall provide assistance and advice as generally specified in this Agreement.
LEGAL RELATIONSHIPS	**NOW THIS AGREEMENT WITNESSES:**
Commencement	1. This Agreement shall have effect from the day of execution shown on last page.
Use of the conservation area	2. (insert in here any positive uses of the area eg removal of firewood for domestic purposes, removal of seed, light grazing in certain times etc) (also the provision in relation to the use by servants, agents, lessees and licensees).
Objectives	3. The Owner and the Contracting Organisation agree the objectives of this Agreement are: • provide what by when or over a period; • achieve what by when or over a period; • undertake certain actions by a specific time; and • etc.
Planning and management of the conservation area	4. The Owner shall manage the conservation area in accordance with a plan of management as follows: • the plan is to be prepared by …….. in conjunction with ……..and is to be completed by ……; • the plan is to be updated regularly with a major review every ……years. • the plan is to contain the stipulations contained in Section 6. below; and • the plan shall (any other requirements).
Joint obligations	5. In relation to this Agreement and actions arising from this Agreement, both the Owner and the Contracting Organisation will notify each other of: • any proposed action or threat which could have an adverse affect; • any important information which could be of benefit; and • any deterioration of any of the natural or cultural (Aboriginal or historic) values of the conservation area.
Owner's obligations	6. The Owner shall not: • carry out, omit to carry out, cause or permit to carry out any act or omission which could adversely affect any fauna or

	native plants or their habitats on the conservation area; • construct any new road, access track, building or internal fencing or carry out any other development on the conservation area; • construct any new road, access track, building or internal fencing or carry out any other development on the conservation area; • be permitted to destroy or cause the destruction or removal of any native plants, (including trees, shrubs, grasses) from the conservation areas; • shall not sow or plant trees, grasses or other plants on the conservation area other than local indigenous flora; and • undertake or permit, etc.
Contracting Organisation's obligations	7. The Contracting Organisation shall: • arrange for the provision of such assistance and technical advice as the Contracting Organisation deems necessary; • bear the following costs: – costs of and incidental to preparation of the Agreement; – payment of the Owner's reasonable legal costs connected with the execution of the Agreement; – any necessary stamp duty and registration fees; and – make payments to the Owner as per the plan.
Research	8. The Contracting Organisation shall undertake the research as necessary to ensure the objectives of this Agreement are achieved and shall inspect the area covered by the plan at least once before the major review.
Contracting Organisation's powers	9. Any person officially representing the Contracting Organisation may at all times enter upon the conservation area to inspect progress and compliance with this Agreement.
Registration of conservation covenant	10. The Contracting Organisation shall ensure that any use conditions in Section 2 are registered on the title to the Owner's land in a manner that: • respects arrangements set out in the plan for the conservation area; and • binds all heirs, successors and assigns to the land.
Execution	{Insert details for witnessing and executing document here}.