Towards a land use plan for the Great Western Woodlands

Stage One: Scoping Study

Summary document

A report by Ironbark Environmental to the Woodlands Initiative
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This report has been produced for use by the Woodlands Initiative and the development of a land use plan for the Great Western Woodlands.

The report was prepared using information available between 2010 and May 2011. All opinions expressed in the report are the professional opinions of Andrew Del Marco of Ironbark Environmental.

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Summary

This report scopes out a land use planning process for the Great Western Woodlands (the GWW or area) based on the views and preferences of those that have financial, environmental, social, or cultural interests in the land. Underpinning the project is the widely accepted view that the GWW is of special environmental significance and would benefit from land use planning that balances social and economic development with environmental protection.

Stakeholders and land uses

The GWW has a great variety of land values and uses spread extensively across a limited number of land tenures. The tenure and activities of the mining industry (collectively exploration, prospecting and mining) cover over half of the Region, with 60% of the GWW currently covered by exploration licences including parts of conservation reserves and pastoral leases. Many mining industry land uses are low-impact and temporary, but there is a visible, cumulative environmental impact that is worthy of attention. Most mining industry investments are focused on the mapped Greenstone belts and these are the location of most large-scale gold and nickel mines. The visually impressive ranges of the banded ironstone formations support a strong iron ore industry.

The Traditional Owners and custodians of land in the GWW value its cultural, spiritual, environmental and life-sustaining qualities. Native title claims cover over 70% of the GWW and the aspirations of Traditional Owners, amongst others, are to jointly own and/or manage conservation areas within the GWW in partnership with Government and to benefit from economic development within the area.

Pastoral leases cover 17.5% of the GWW with one-fifth of the lease area held by mining companies. The pastoral sector is in a state of change and reform, and the economic and environmental sustainability of some of these operations is debateable. Some leases offer opportunities to de-stock the land and increase conservation outcomes.

Tourist and recreational uses of the Woodlands such as four-wheel driving, gold prospecting and outback adventuring are considered low impact at this stage, but significant and growing. Tourism and recreation are generally positive land uses which can increase people’s connection with the area and its environmental and cultural values, but have potential to adversely impact areas if left unmanaged.

Timber harvesting is selectively carried out, either around townsites or targeting sandalwood.

The vast majority of the Region’s population is located in the towns of Kalgoorlie-Boulder, Coolgardie, Southern Cross, Kambalda and Norseman.
Conservation significance

Work by the conservation, scientific and government sectors has established that the Region, in its entirety, is an area of outstanding environmental value (Watson et al, 2008 & Government of Western Australia, 2010a). The authors of this report place this value at the level of national to international significance given:

- The GWW represents the largest and most intact eucalypt woodland remaining in southern Australia and one of the best examples of its type in the world (Government of Western Australia, 2010a);
- The GWW is home to 3000 flowering plant species, which is 20% of Australia’s known flora (Government of Western Australia, 2010a);
- The GWW is home to 160 eucalypt species (Government of Western Australia, 2010a);
- Most of the bird species which have declined or been lost from the Wheatbelt remain abundant in the Woodlands (Recher, 2008); and
- Nowhere else on earth do trees grow as tall in such an area of so little rainfall. The scientific community has not determined the reasons for this unique feature.

A growing amount of research and science is being conducted in the Region, often based on the Region’s intactness and the opportunities it provides to study the impacts of climate change on the environment. A study has also been conducted to determine the potential for carbon storage in the Woodlands and this has found that the Woodlands could store significantly more carbon if fires were better managed (Berry et al, 2010).

Consultation results

Following a survey of stakeholders and interviews to target each of the major stakeholder groups, aspects of common interest or likely conflict were identified across the spectrum of stakeholders.

Aspects or issues where there was broad support across stakeholder groups included:

- The GWW should benefit from development of a land use plan;
- A consultative approach should be adopted for plan development;
- An emphasis needs to be placed in the plan on clearer, more locally meaningful conservation objectives;
- Maintenance of access for multiple uses is to be encouraged as much as possible;
- The major threats to environmental values arise from poorly informed development, uncoordinated infrastructure development and the impact of fire, feral animals and weeds; and
- A landscape-scale approach needs to be adopted for conservation.

Aspects or issues that are contentious include:

- The maintenance of region-wide access for mineral exploration;
- The level of environmental impact that mineral exploration has on the Region;
- The importance of managing cumulative environmental impacts on the Region; and
- The creation of conservation zones in parts of the GWW which exclude mineral exploration.

A further issue of importance to the development of any land use plan is a desire for land use planning to reduce the level of unproductive bureaucratic processes for the exploration and mining industry, and others planning particular land uses, temporary or permanent.
Land use planning

This project has concluded that there is significant merit and a moderate to high level of stakeholder support for the adoption of a land use plan over the Great Western Woodlands.

The main reason for such an approach is that the area supports a number of land uses and values which are broadly scattered across the landscape, all developed in the absence of a long-term vision for the area. The intensity, number and extent of these impacts are increasing and cannot be addressed through localised management alone. There are also a number of collaborative initiatives involving a diversity of stakeholders that could be given greater support through a land use plan.

The report author has also concluded that a land use planning approach offers a significant advantage over a stand-alone conservation planning approach. It provides all stakeholders with the confidence of participating in a process which recognises a broad range of values and uses and is ‘not just about conservation’. Through this project, some stakeholders, including those in the pastoral and mining sectors have voiced concerns in regards to the conservation sector’s interest in the Woodlands. A land use planning process, managed by the Woodlands Initiative, should enable all stakeholders to be actively and continually involved in the process of plan preparation and maintain control over the process and its outcomes.

A Woodlands land use plan

The report recommends a three-phased planning approach to the development of a land use plan:

**Phase One:** Woodlands land use policy development

**Phase Two:** Clarification of priorities and standards for land use and conservation;

**Phase Three:** Development of a comprehensive plan with zones.

The main aspects of the process are shown in Figure 1. Key themes of the approach are to firstly build the plan on common interests and opportunities and keep stakeholders focused on the plan’s long-term objectives.

At each phase of the process there should be a clearer statement of each stakeholder group’s priorities, what is to be achieved through the plan and where it is to be achieved. Efforts should be made in each phase to pursue collaborative projects between stakeholders, especially where these can help achieve constructive changes on the ground and further long-term plan implementation.

Phase One is about building on the common ground that exists broadly across stakeholder groups. This common ground includes:

- Sharing information across stakeholder groups, including information on environmental values and threats to these values (e.g fire, feral animals etc);
- Developing shared, regional-scale conservation objectives;
- Conducting research to better define GWW management and protection needs (for on-ground projects and inform conservation planning in Phase Two);
- Initiating on-ground projects where synergies can be achieved across stakeholders.
A land use planning process for the Great Western Woodlands

**Phase one:**
- Develop over-arching land use policy
- Gather data to represent all land uses and values.
- Develop shared, regional-scale objectives for all land uses, including conservation.
- Share information across stakeholder groups.
- Conduct work to better define GWW management and protection needs.
- Initiate on-ground projects where synergies exist.

**Phase two:**
- Clarify on-ground priorities
- Consider use of sub-regions to better engage local communities and stakeholders to identify values, issues and synergies.
- Involve all stakeholders in a conservation planning exercise.

**Phase three:**
- Develop comprehensive plan
  1. Review & finalise over-arching land use policy.
  2. Zone land to clarify multiple use arrangements or prioritise land use.
  3. Create overlay zones as necessary to enable plan to consider additional issues & opportunities.
  4. Develop additional collaborative projects to support plan.
  5. Establish system to monitor plan.
  6. Consider need for supporting planning mechanisms (e.g. codes of practice).

**Figure 1:** Recommended process for developing a Woodlands land use plan
The intent of Phase One is to capture the common ground in a regional policy statement which guides the rest of the process and also acts as an operational policy for the Initiative to continue to work together collaboratively.

Phase Two is designed to develop more detailed information on which to make decisions about long-term management objectives for various parts of the GWW and develop a comprehensive land use plan. It does this through at least two major components:

- Working at the sub-regional level with local communities and stakeholders to encourage greater local community involvement in the land use planning process, determine land management priorities in more detail, and encourage collaboration between stakeholders; and
- A region-wide conservation planning process.

Further investigations to better describe and map other values, such as mineralisation, Traditional Owner cultural values or tourism assets may also be required in Phase Two.

The report suggests that the GWW could be divided into four sub-regions which recognise the social, cultural and economic catchments within the area. These sub-regions may only exist for the preparation of the plan, or may continue to assist in its implementation.

In Phase Two, a conservation planning exercise is recommended to help clarify more detailed conservation objectives for particular parts of the Region. This is important for all sectors, but especially many in the mining industry who are seeking a higher level of specificity in conservation objectives. It should also help identify opportunities for collaborative projects across stakeholder groups.

Conservation planning is the preferred method of developing conservation objectives as it ensures a high degree of scientific rigour in the process. All stakeholder groups should be directly involved in the conservation planning process.

In Phase Three, all of the work in Phases one and two is brought together to develop agreed land use zones, overlay zones and other planning tools that can serve all stakeholders best interests in the long-term. Again the focus should be on consolidation of common ground. Phase Three should lead to the development of a Land Use Plan (LUP) with six components as shown in Figure 2.

Most land in the GWW is likely to be zoned into categories which acknowledge multiple uses, such as mineral exploration and development as well as protection of natural and Traditional Owner cultural values. Other values can be directly recognised in these multiple use zones or other specific zones, or may be better considered through overlay zones. An overlay zone is one which sits across a number of underlying zones and allows the consideration of additional values, issues or opportunities. An overlay zone may also be a useful way of presenting management priorities in different parts of the GWW, thereby encouraging collaborative projects between stakeholders working in a given part of the area. Overlay zones do not replace the underlying zone, rather they allow the consideration of additional issues.

The process of zoning land should occur through a stakeholder negotiation process which considers the values of the land and the interests of all stakeholders, including mineralisation and mining sector priorities, the outcomes of conservation planning, the interests of Traditional Owners, and other relevant stakeholders (e.g. pastoral leases, tourism and recreation).
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1. Woodlands land use planning policy
   (Includes plan framework, objectives, scope.)

2. Zones

3. Overlay zones
   Encourage consideration of additional issues across zones.

   Examples of zones:
   - Woodlands multiple use zone: high mineralisation area
   - Woodlands multiple use zone: restoration and investigation area
   - Woodlands multiple use zone - priority protection area
   - High Protection Woodlands zone

   Examples of overlay zones:
   - Mineralisation prioritisation
   - Priority management actions
   - Traditional Owner cultural values
   - Tourism assets
   - Infrastructure

4. Collaborative projects to support plan

   Example 1: Woodlands ranger program

   Example 2: Coordinated on-ground management programs

   Collaborative projects can form overlay zones in Plan

   Example 3: Sharing of information for all land users.

5. Information and monitoring system
   E.g. Intactness tracker, mapping of distribution of feral animals, etc.

6. Optional supporting mechanisms:
   - Land use codes of practice
   - Land use compatibility table

Figure 2: Model for a Woodlands land use plan showing six major components
Each zone must provide clear land use and management objectives and priorities so that all stakeholders have greater certainty overall. This objectives-based approach to planning can help keep all stakeholders focused on the overall objectives of the plan and see how their interests are planned alongside those of others.

The types of zones that could be considered should provide for a range of land use options, only differing in the relative priority of each land use. An example of some of the zones is provided in Table 7 (main report) as they relate to mining and conservation land uses. Other zones, potentially other multiple use type zones, will need to be created to categorise land where other primary land uses are the dominant value, such as pastoral lands and sites of scientific importance.

In effect, the zones in the LUP create a diversity of lands managed for different mixes of multiple use, including different management needs and levels of protection for conservation.

**Recommended next steps**

The Woodlands Initiative has an opportunity to provide leadership to the community and Government by establishing a land use plan for the Region. The approach recommended in this report will require stakeholders to reach agreement on a long-term vision for the GWW by clarifying shared land use objectives and remaining focused on areas of common interest before addressing more complex issues.

Reaching broad agreement amongst stakeholders of the conservation objectives for the GWW is pivotal to the success of any land use plan. Despite the challenge of defining these conservations objectives, they should lead to frank discussions in regards to the implications of a LUP for all stakeholders.

The following recommendations are provided to the Woodlands Initiative for its consideration.

1. The Woodlands Initiative should carefully consider the implications of establishing a land use plan, or not, and the recommended planning approach. A stakeholder-led LUP process will require external funding, but may be superior to a Government-led process given that stakeholders would be in greater control of the process and negotiations.
2. The preparation of any LUP for the GWW must be carried out in full consultation, and with the significant involvement of, major stakeholders. A recommended stakeholder engagement process for development of a Land Use Plan for the Great Western Woodlands is included in Appendix 5 (main report).
3. The preparation of any LUP for the Woodlands should be carried out by a professional land use planner with neutrality and sufficient expertise in strategic planning, participatory approaches to plan development, conflict resolution, and environmental protection.
4. Stakeholders willing to be part of a plan’s development should reach agreement on a preferred methodology and timetable for the plan’s development. Stakeholder’s participation in a plan’s development should not be binding on their adoption of the plan.
5. Any resultant LUP can be adopted by the Woodlands Initiative as an advisory document for all willing groups and stakeholders to voluntarily adopt. Adoption by key groups should not necessarily bind all stakeholders in that sector.
6. Implementation of the plan would be dependent on ratification by involved groups and stakeholders rather than by Government. However, this should not preclude it from being used in the future as the basis for Government policy.

7. Any land use plan should include base information on the relative mineralisation values across the Region. A sample map has been included in Figure 7 (main report), but this is likely to require refinement prior to its use in a LUP process. The assistance of the peak mining industry groups and the Geological Survey of Western Australia should be sought to undertake the refinement of this information and the subsequent production of a LUP information layer.

8. Any land use plan must include clear statements for the all major land uses and stakeholders: Mining, Conservation, Traditional Owners, Tourism, Pastoral land use, Townsites, Infrastructure Provision, Timber-harvesting, Carbon storage and so on. To the extent possible within the resources of the Initiative, each of these land uses, interests or values should be included in the LUP as a mapped layer(s) of information, possibly used in the development of zones and overlay zones.

9. Meaningful, SMART\(^1\) conservation objectives are sought by the majority of stakeholders, including the mining industry, and critically underpin any Woodlands land use plan. Conservation objectives should be set through a conservation planning exercise with the assistance of scientific experts and environmental professionals (academic, Government and consultants) to ensure that objectives are scientifically-based and SMART.

References


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\(^1\)SMART objectives are Strategic, Measureable, Achievable, Relevant to the issue, and Timely.