Potential NRM structures for Western Australia

Department of Agriculture and Food, Western Australia

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NRM REGIONAL STRUCTURES
DISCUSSION PAPER

POTENTIAL NRM STRUCTURES FOR WESTERN AUSTRALIA

Department of AGRICULTURE
SUMMARY

NRM Regional Structures Discussion Paper

SUBJECT Potential NRM structures for Western Australia

PURPOSE
A discussion paper to scope and present options for regional Natural Resources Management (NRM) structures suited to Western Australia’s South West agricultural division.

1.0 BACKGROUND
Regions and catchments have been identified as the level most appropriate for integrating NRM and devising effective strategies for dealing with priority problems, and also for taking action and directing investments to meet targets.

At a State level NRM Agencies see a key role for appropriate regional NRM groups in supporting their business. This means a commitment to regional priority setting in accord with State goals and the subsequent coordination of NRM actions in partnership with regional community and private industry partners.

For it’s part the Commonwealth has also made it clear that it wishes to channel funding under the National Action Plan via regional groups who will ensure project delivery and accountability against priority outcomes identified in regional NRM strategies.

The existing NRM structures in this State, involve a number of, mainly discipline based, State government agencies and authorities with often overlapping or closely linked NRM (and other) responsibilities. There are also and a range of statutory and non-statutory organisations ‘owned’ by the separate agencies that are impacting on or undertaking NRM activities. At the local level, NRM activities are carried out by both statutory land conservation district committees (LCDCs) and non-statutory catchment and landcare groups. To date the current NRM structures have, with some notable exceptions, involved local government in only a minor way.

At the regional level, five non-statutory bodies have emerged as regional NRM groups. ‘Regional’ boundaries, established through NHT for the purposes of regional assessment of projects, provided the spatial basis for these groups. Each group is incorporated, with its own membership arrangements, objectives, strategies, mode of operation, level of community engagement and government resourcing. The regional NRM groups have received significant, regionally coordinated State agency support as well as a small amount of NHT funding to develop regional NRM strategies. State Government NRM agencies have provided operational/executive support to regional NRM groups. Each Group has prepared a draft regional NRM strategy that is receiving public input. These regional groups are, however, largely voluntary and are seeking assurances of Commonwealth and State Government funding as a sign that they are valued (legitimate) and so that the strains of volunteerism can be reduced. These regional Groups are the:
- Swan Catchment Council (SCC)
- South Coast Regional Initiative Planning Team (SCRIPT)
- South West Catchments Council (SWCC)
- Northern Agricultural Integrated Management Strategy Group (NAIMS)
- Avon Working Group (AWG).

In addition to the Government Departments responsible for NRM, the following table shows a snapshot of the current State, regional and local structures:

### Institutional arrangements for NRM in Western Australia

<table>
<thead>
<tr>
<th>Level</th>
<th>Name</th>
<th>Statutory</th>
<th>Est. No.</th>
<th>Main activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>Soil and Land Conservation Council</td>
<td>Yes</td>
<td>1</td>
<td>Promotion of soil and land conservation.</td>
</tr>
<tr>
<td></td>
<td>Pastoral Lands Board</td>
<td>Yes</td>
<td>1</td>
<td>Admin. of pastoral lands.</td>
</tr>
<tr>
<td></td>
<td>Conservation Commission</td>
<td>Yes</td>
<td>1</td>
<td>Admin. of national parks, State forests, etc. and advice on protection of biodiversity.</td>
</tr>
<tr>
<td></td>
<td>Environmental Protection Authority</td>
<td>Yes</td>
<td>1</td>
<td>Environmental impact assessment and EPPs.</td>
</tr>
<tr>
<td></td>
<td>State Salinity Council</td>
<td>No</td>
<td>1</td>
<td>Advice on salinity issues.</td>
</tr>
<tr>
<td>Regional</td>
<td>NRM Groups (Avon Working Group; SCRIPT; SWCC; NAIMS, SCC)</td>
<td>No</td>
<td>5</td>
<td>Varies from group to group, includes:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(possibly expanded to 8)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Regional local governments</td>
<td>Yes</td>
<td>Some for waste management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Committees of the W&amp;RC</td>
<td>Yes</td>
<td>2</td>
<td>Coordination of management for environmental water quality.</td>
</tr>
<tr>
<td></td>
<td>Waterway Management Authorities</td>
<td>Yes</td>
<td>5</td>
<td>Coordinate and regulate activities within a waterway conservation area. Preparation/promotion of management plans.</td>
</tr>
<tr>
<td></td>
<td>Regional Development Commissions</td>
<td>Yes</td>
<td>9</td>
<td>Economic development - no NRM role. Regional coordination.</td>
</tr>
<tr>
<td>Local</td>
<td>Land Conservation District Committees (LCDCs)</td>
<td>Yes</td>
<td>146</td>
<td>Promote and undertake land conservation works in district.</td>
</tr>
<tr>
<td></td>
<td>Local government</td>
<td>Yes</td>
<td>142</td>
<td>Manage local government functions within the district - limited NRM involvement.</td>
</tr>
<tr>
<td></td>
<td>Water Resource Management Committees</td>
<td>Yes</td>
<td>0</td>
<td>Undertake delegated functions in respect of water allocation of defined water resources.</td>
</tr>
<tr>
<td></td>
<td>Other landcare, bushcare, rivercare groups</td>
<td>No</td>
<td>~ 500</td>
<td>Vary according to group - usually ‘hands on’.</td>
</tr>
</tbody>
</table>
2.0 ISSUES

It is clear there is a need for some coordination and integration of NRM structures in Western Australia, and to provide a framework that allows regional implementation of State and National programs. The challenge for Western Australia is to put in place institutional structures that ensure:

- genuine NRM outcomes are delivered in accord with national and State goals through a regional framework;
- sufficiently wide representation of stakeholder interests; and
- a high level of accountability for the administration and use of public funds.

The Commonwealth Government has indicated that it supports providing funding to appropriate regional NRM groups to address ongoing natural resource and environmental issues. While existing NRM groups are currently able to manage Natural Heritage Trust and other funds they are not constituted to enter into the type of business contracts envisaged under the National Action Plan.

Current regional NRM groups in Western Australia have made considerable progress in NRM management, however there are some concerns about whether they are the appropriate structure in the future. The concerns include:

- representativeness and expertise;
- capacity to manage programs with adequate accountability;
- possibility that their constitutions may be amended by the members, which may include changing the objects of the organisation, the representation of the regional community, or the way in which accounts are audited;
- voluntary groups - no legislative authority to implement catchment strategies through planning laws;
- no legislative authority to raise revenue through rates;
- the need to avoid developing another administrative layer/burden when we already have a number of regional structures.

Nevertheless, draft regional strategies for natural resource management have been prepared for the four agricultural regions: south west (SWCC in 2001), northern agriculture (NAIMS in 2000), central agriculture (AWG in 2000) and southern agriculture (SCRIPT in 2000). All four strategies address the full range of natural resource management issues for that region.

3.0 PRINCIPLES

The proposals suggested in this paper are based upon the following principles:

- Effectively supported regional community based partnership groups provide valuable input to natural resource management priorities and programs and help build community ownership of programs.
- Optimising the number of NRM groups and minimising associated administration costs to the community and government.
Regional coordination of NRM and a partnership approach that includes key stakeholders and considers boundaries related to:
- communities of interest to give effective stakeholder engagement (for voluntary and compulsory activities);
- predominant land use systems; and
- the landscape processes driving environmental change.

Such regional zones to be of a scale and form which, for efficiency reasons, also allow reasonable alignment with current administrative/operational boundaries.

Focus on outcomes rather than process.

Appropriate levels of accountability for project management and funds.

Integration of social, economic and environmental factors.

Establishing a clearer role for local government.

Minimising duplication of legislation and building on current statutory strengths.

4.0 OPTIONS

Given the principles outlined in section 3, seven models are considered. Each model is discussed in terms of strengths and weaknesses in relation to key principles outlined above and a final summation against Commonwealth and State criteria presented. The seven models are:

1. Waterways Management Authority
2. Land Conservation District Committee (adjusted)
3. Cockburn Sound Management Council
4. Regional Development Commission
5. Regional Local Government
6. Existing NRM Regional Model (adjusted)
7. Catchment Management Authority.

4.1 Waterways Management Authority Model

Waterway management authorities are established under the Waterways Conservation Act 1976 and have the following attributes:

- Any area containing one or more rivers or catchments can be declared a management area on the recommendation of EPA - the EPA defines the boundaries.
- A management authority comprises a Chair and 5 to 11 other members appointed by Governor on recommendation of Water and Rivers Commission (WRC).
- Powers delegated to the authority from WRC.
- Authorities carry out works, establish facilities, control and manage land and water development proposals.
- Authorities can also make by-laws related to protection of watercourses in a management area.
Strengths

- Statutory base and broad regulatory powers that can be delegated under the Waterways Conservation Act s 22(1) also under s 22(3) a Management Authority may delegate to a public authority.
- Existing mechanism.
- Ability to develop local by-laws in the catchment.
- Ability to develop (with the Commission) a management plan for the catchment.
- Ability for regulations to require persons within a management area to comply with the provisions of a management plan.
- Authority of the Commission to liaise with local government to ensure the development of town planning schemes are consistent with a management plan.
- Can apply to associated land in a defined catchment (e.g. Albany WMA approach).
- Has project management ability under s 28(3)(d) Waterways Conservation Act.
- Works well for defined catchment areas where the communities of interest are based around a key waterway, wetland or estuary catchment.
- Membership of an authority (so far as is practicable) is to be drawn from the local community and relevant local governments and public authorities.

Limitations:

- Under the traditional approach (PIMA/LIMA, etc.) has applied only to watercourses and immediate surroundings.
- No authority in relation to biodiversity issues.
- Does not apply to private land without the agreement of the owner.
- A regional NRM model based on waterways only may disenfranchise many farmers, community and LCDC groups that want greater leadership in the sustainable land management and biodiversity areas.
- No ability to raise a general rate to fund NRM activities.
- Limited penalties for non-compliance with regulations or by-laws (currently maximum of $500).

Statutory changes recommended to meet criteria:

- Broaden function of authorities to include biodiversity and land management issues.
- Ensure management areas clearly include terrestrial areas within the catchment, irrespective of private landholder agreement.
- Ensure representation by all NRM agencies to establish confidence that management authorities are broadly based.
- Specify clearly that the Crown is bound by the Act and Regulations to ensure equity.
- Increase penalties for non-compliance with regulations and by-laws.
- Include power for Authorities to implement local rating to fund NRM projects within the district.
4.2 Land Conservation District Model

Land conservation district committees (LCDCs) are established under the Soil and Land Conservation Act 1945 (SLC Act) and have the following features:

- Operate in respect to a defined land conservation district (boundaries cannot overlap).
- Manage projects; carry out works; perform functions agreed; review, assess and report.
- Can recommend soil conservation rate be applied in the district to fund activities.
- Can recommend local laws be applied within the district.

**Strengths:**
- Builds on existing structure/network with track record in land and vegetation management.
- Membership representative of community interests.
- Effective linkages with government and community.
- Established links with Soil and Land Conservation Council.
- Ability to recommend local laws for matters such as clearing, land use, etc.
- Ability to recommend soil conservation rates be applied to fund land conservation projects.
- Record in attracting and managing external sources of funding (through NHT, State government and private sources).
- Rationalises existing LCDCs, reducing administrative costs and promoting more strategic focus.
- Useful intermediary between local ‘on-the-ground’ groups and regional groups (especially given the size of WA).

**Limitations**
- Prescriptive membership.
- Functions limited to land conservation - no reference to biodiversity or waterway conservation.
- No specific statutory planning role.
- Not bodies corporate, so question about ability to hold and manage funds.
- Current LCD areas too small for regional bodies.
- Proposals to amalgamate LCDCs may be seen as Government winding back support for local NRM action groups.

**Statutory changes recommended to meet criteria:**
- Remove some elements of the prescriptive membership in the Act.
- Establish the new LCDCs as ‘bodies corporate’ so as to make clear they can hold funds in bank accounts.
- Highlight and promote the sections of the Act that empower LCDCs to take an active role in developing local laws in their districts.
- Broaden functions to ensure water, biodiversity and sustainable development issues are taken into account.
4.3 Cockburn Sound Management Council Model

Under this model Councils can be established by Cabinet decision as needed to take a project management approach and specify roles and responsibilities and achieve particular outcomes for a priority issue.

It has the following features:

- Council established as subcommittee of WRC Board under clause 15 of Schedule 1 of the *Water and Rivers Commission Act*.
- Subject to the directions of the board and to the terms of any delegation, a committee may determine its own procedures.
- Could be a mechanism set up under a broader (non-statutory) regional organisation to bring together stakeholders to deal with a particular (sub-regional) priority issue on a project basis.
- In the case of the Cockburn Council it is responsible for implementing Environmental Management Program (EMP) under objectives, criteria from Environmental Protection Policy (EPP).
- Can acquire statutory powers delegated from EPA through an EPP.
- Composition of Council by Cabinet decision and can include State and local government representatives as well as industry and community representatives.

**Strengths**

- Established by Cabinet which can specify Agency agreements and commitments.
- EPP process ensures focus on priority areas and can define public/private issues to guide resource allocation.
- Develops clear targets/outcomes to ensure integration of effort.
- Statutory power and area defined by EPP.
- Enables Councils to be set up for specific project management cycles, review cycles and with sunset clauses to foster efficient and effective project management structures.
- Project management powers, ability to contract.
- Flexible mechanism.
- Is likely to meet Commonwealth requirements.
- Provides mechanism for coordinating government statutory responsibilities.
- Not limited to catchment boundaries - can be issues focused.

**Limitations**

- EPP process can be long and may delay action, especially if catchment management plan is already available.
- Close involvement of EPA could alienate rural community stakeholders if they are perceived as a remote regulator.
- Potential for agencies to dominate and disempower community members because of unequal distribution of resources (even though Cockburn Sound experience does not reflect this perception because of strong Chairman and strong community representatives).
- Could result in a large number of committees.
Committee membership must include a Board member or member of the WRC.

Cannot levy rates.

May have difficulty in representing a large number of LGAs.

**Statutory changes recommended to meet criteria:**

- May need to consider changes to committee membership arrangements and enable the ability to levy rates.

### 4.4 Regional Development Commission Model

Nine Regional Development Commissions are established under the *Regional Development Commission Act 1993* and have the following objects and functions:

- Maximise job creation and improve career opportunities for people working in regional WA.
- Develop and broaden each region's economic base.
- Identify infrastructure services to promote economic and social development.
- Identify and encourage regional investment.
- Provide information and advice to promote business development.
- Ensure that regional government services are comparable to the metropolitan area.
- Facilitate coordination between relevant statutory bodies and State government agencies.

It may be possible to integrate NRM issues into the activities of existing Regional Development Commissions, which would see a closer link to local government and natural resource and environmental issues considered along with social and economic issues.

**Strengths**

- Established groups with a strong role in promoting regional industry and tourism.
- Boundaries set by legislation as groups of LGAs, operates across catchments.
- RDGS already have assigned a coordination role on behalf of State Government.
- Potential to integrate economic and environmental focus at regional level.
- Has regional perspective and experience.
- Broad range of stakeholder involvement beyond NRM networks and strong political support.
- Subject to FAAA: receives appropriations and moneys lawfully received.
- Body corporate, legal entity, agent of the Crown.

**Limitations**

- Currently limited engagement on sustainable use of natural resources or environmental management - may take some time to adopt as 'core business'.
- Boundaries based on local government districts, not catchment or environmental boundaries.
- Cannot enter into activities managing contract situations as required under NAP.
- Not empowered to enter into business undertaking, acquire land, borrow money.
• Cannot rate.
• No regulation making power and accordingly no direct planning powers.
• Perceived by community as being too closely aligned with State Government objectives/policies and not having a local community focus.

Statutory changes recommended to meet criteria:
• Amend Act to include NRM and environmental criteria as part of functions.
• Provide for rating power to fund NRM projects.
• Provide for powers to manage and enter into contracts and to develop local laws.

4.5 Regional Local Government Model
Regional local governments are established under the Local Government Act 1995 and have the following attributes:
• Two or more local governments can establish a regional council subject to Minister for Local Government approval.
• Can be wound up at the direction of the Minister.
• Members, procedures and financial contributions set out in establishment agreement for any local government purpose.
• Purpose of the group set out in establishment agreement.
• Some Local Government Act provisions do not apply (constitution, elections, electors meetings, rates and service charges, borrowings) unless specified in establishment agreement.

Strengths
• Existing mechanism with some working examples in waste management.
• Regional local governments could be established based on existing NRM boundaries.
• Can rate for funds through individual LGA members.
• Can acquire/dispose of land and carry out land development.
• Democratically elected community representatives, with a sound understanding of local issues who are accountable to their constituents and State goals.
• Local government boundaries readily identifiable with community of interest.
• Empowers local government to increase their capacity to be an effective partner in NRM.
• Consistent with the National Action Plan on Salinity and Water Quality providing local government with a very tangible opportunity to be involved with setting the direction for NRM in WA.
• Ready linkage to land use planning powers.

Limitations
• Significant new direction for most existing local government authorities.
• Could be seen by local government as an attempt by the State to shift additional responsibility without additional resources, or as an attempt to rationalise local governments.
May meet strong resistance with arguments that NRM is not a direct function of local government.
High risk that many rurally based local governments do not have the capacity, skills base or values to effectively coordinate NRM.
No independent rating power.
No independent power to develop regional laws.
No direct representation of State government or community NRM interests.

**Statutory changes recommended to meet criteria:**
- NRM role of the model should be spelled out in the Act.
- Include ability of the regional council to develop regional NRM laws and rating.
- Provide for broader membership (including community and government representation).

**4.6 Formalise current NRM Groups**

Given the nature of rural WA the current four agricultural regions could be considered the right number. It may be desirable therefore to build on the strengths and progress of the current regional groups, reconstituting them to ensure representativeness and legitimacy and providing them with the necessary statutory standing and accountability mechanisms.

Draft regional strategies for natural resource management have been prepared for the four agricultural regions: south west (SWCC in 2001), northern agriculture (NAIMS in 2000), central agriculture (AWG in 2000) and southern agriculture (SCRIPT in 2000).

All four regional NRM strategies address a range of natural resource management issues including sustainable management of land and water resources, water quality, biodiversity protection, dryland salinity, community coordination and development, and integration of government agency support and services. The South West and South Coast NRM Strategies also address coastal management issues. All regional NRM groups have attempted to reflect the strategies of State and national level NRM programs and policies.

An option could be to amend the Soil and Land Conservation Act to provide for regional NRM groups. Given the Act provides for the establishment of the statutory groups at the State and local level, it would also be appropriate that it provide for the establishment of regional groups. The regional NRM Councils could be formally established as a sub-committee of the Soil and Land Conservation Council.

**Strengths:**
- Representation based on ‘earned knowledge and ability’.
- Representatives personal standing, relationships, networks and influence allows outcomes to be progressed.
- Decision making tends to be based on negotiated agreements rather than representative positions held by constituent groups.
- Previously involved in developing catchment management plans and regional strategies.
- Currently established good working relations amongst State agencies and key community members.
Enables building on current capacity (strategic planning, project assessment, priority setting) and achievements.

Limitations:
- Existing regional groups are voluntary, lack independent or institutional source of funds and rely on NHT funds and on-going agency support for survival.
- Would need financial accounting, administrative support and contractual powers to perform implementation roles.
- Some concerns over fairness, equity and breadth of representation.
- Despite attempts to provide feedback to local communities, little local knowledge/recall, particularly in peripheral areas within the regions.
- No statutory accountability (i.e. through FAAA) for the use and management of public funds.
- NRM groups currently run independently and it may be difficult to incorporate these groups into a single statutory model without substantially changing some management practices.

Statutory changes recommended to meet criteria:
Can possibly be constituted as a sub-committee of the SLCC and would need to ensure that this established financial accountability, contract management and levying powers.

4.7 Catchment Management Authorities
WA could establish it’s own regionally administered Catchment Management Authorities (CMAs) to provide the link between the national objectives and local implementation. CMAs would be statutory authorities under State legislation.

Functions of the CMAs could include:
- Engage the community in catchment planning.
- Provide shop-front for NAP/NHT and other funding opportunities.
- Provide local community with expertise in NRM.
- Develop management plans.
- Approval and accreditation of plans and broker projects.
- Coordination with other CMAs.

Strengths:
- Being a new model, the difficulties with the existing structures can be corrected (such as boundaries, representativeness, functions, legislative authority, etc.).
- Complies with a suggested national approach.
- Consistent with the National Action Plan.
- Provides mechanism for better coordination between local, State and Commonwealth in relation to NRM initiatives.
- Recognises land degradation problems are of national importance, and should be tackled in a consistent and integrated way.
May provide impetus for rationalising other NRM structures in the State, such as LCDCs, Waterway Management Authorities, Water Resource Management Committees, etc.

Limitations
- New structure, requiring new legislation and national agreement.
- Time consuming to establish.
- Potentially very costly.
- Might be perceived as the Commonwealth taking over NRM in the States.
- Establishes a new level of bureaucracy in a State overlaid with numerous statutory and non-statutory boards and authorities.
- Additional level of complexity leading to competition/tension within existing government structures.
- Likely to institutionalise conflict in relation to statutory responsibilities.

Statutory changes recommended to meet criteria:
Being a new model, new legislation will need to be drafted.

NRM Structures - Communities of interest and other factors in determining regional NRM boundaries

Key informants in each of the existing four NRM regions were contacted and asked to define regional communities of interest that would help decide natural resource management regions. Their specified task was to identify communities of interest as seen by rural communities themselves, ignoring existing agency or regional NRM boundaries.

Map 1 is the first preliminary result of the exercise and indicates 19 regional communities of interest for natural resource management.

Map 2 reflects a variation based on slightly altered criteria and is a crude attempt to amalgamate the communities and align with Shire boundaries. This results in eleven ‘regions’.

Map 3 shows existing boundaries for regional NRM groups together with Shire and Regional Development Commission boundaries.

These maps are a simplification of the raw data provided and reflect the difficulty and complexity in attempting to define a unique boundary for communities of interest. Communities of interest do not exist in isolation - they are socially constructed around a specific interest and will have different meanings for different stakeholder groups and among individuals within stakeholder groups. Nonetheless the range of maps are presented to stimulate discussion about the role communities of interest may play in determining spatial boundaries.

Using existing NRM boundaries
Each of the key informants was also asked whether the existing regional NRM structures were recognised as a community of interest. In all cases the key informants felt that at a larger regional scale, the existing boundaries were reasonably well understood by the community and appropriately sized and delineated for regional NRM management purposes.
Issues of representativeness and community engagement that arise at the margins of the larger regions, for example, Esperance/Ravensthorpe in relation to the South Coast and the Lockart/Yilgarn in relation to the Avon region do, however, need to be actively addressed.

If, however, an overriding issue is a lack of relevance and lack of interest in being involved in regional NRM issues, then creating a different structure will not necessarily improve efficiency or effectiveness. Moreover the potential need for regional groups to take a greater role in statutory enforcement in the future, may be hindered by the existence of smaller, more socially coherent communities. The latter would more be more desirable if a voluntary adoption model based on ‘win-win’ solutions was envisaged.

A composite approach to defining communities of interest

Based on existing NRM involvement, a belief that most rural communities are able to identify within their local government boundaries and with neighbouring local areas, and that there is some recognition of existing NRM regional structures, it is suggested that the most suitable criteria for developing or identifying regional NRM boundaries are:

- a conformation of local government boundaries;
- existing, recognised catchments; and
- some commonality in farming systems.

If the State chooses to have less regional NRM structures then it would appear that the community of interest criteria may be a more appropriate as a subordinate criteria for determining subregional representation or ‘project management’ boundaries within a larger NRM region.

Maps 4(a) and 4(b) indicate broadscale landuse mapping that has been used in the National Land and Water Resources Audit (NLWRA). Between 1985-1997 the mixed cropping/wool belt area has largely shifted to a predominantly cropping area. With the exception of parts of the Swan coastal plain and the coastal areas of the great southern, were more intensive land uses based on animal industries or horticulture exist, much of inland Western Australia is now predominantly cereal growing apart from a relatively small specialist wool growing zone. To determine NRM structures purely on this feature alone is not feasible since any regional boundary would be far too large.

Maps 5(a) and 5(b) show Interim Biogeographical Regions overlain by the community of interest zones it is difficult to see any clear logical boundaries, which integrate both criteria. It does serve to show that within a region different biophysical processes are at work that may impact on the actions taken.

Integrating spatial boundaries with appropriate models

For two of the models - the LGA Regional Councils and the Regional Development Commission - the use of local government boundaries to define operational areas is required by legislation.

With the CMA and the Water Management Authority models both are based on the principle of managing waterways or waterways and land use within a defined catchment. However, under the Cockburn Council model it is the EPP that defines the boundaries of the Council. Boundaries are thus flexible and it is possible to use local government or other boundaries if logical.
Under each of the other models it may be possible to use either local government boundaries or physical catchment boundaries to determine the spatial limits of each of the regions. Though this may not appear logical in the case of existing NRM groups, what it would mean is that for most cases, the boundary of the region would be adjusted to the nearest local government boundary. This would enhance effective local government involvement so that local governments were only within one region instead of being spread across two or three and also provide a stronger sense of community involvement.
### Tables summarising assessment of each management model against Commonwealth and State criteria

<table>
<thead>
<tr>
<th>Commonwealth criteria</th>
<th>Waterways Management Model</th>
<th>LCD Model</th>
<th>EPA/WRC Model</th>
<th>RDC Model</th>
<th>Regional LGA Model</th>
<th>NRM Group (adapted model)</th>
<th>CMA Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional/Catchment based body.</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td></td>
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<tr>
<td>Catchment plans which address salinity, water quality, and other NRM issues.</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td></td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Monitoring and measurement against agreed targets.</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td></td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Reporting against delivery requirements.</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td></td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Project management through regional delivery body?</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
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<td>*</td>
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<tr>
<td>Funds management and accountability.</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td></td>
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</tr>
<tr>
<td>Ability contract with landholders and State agencies to carry out certain actions.</td>
<td>*</td>
<td>*</td>
<td>*</td>
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<td></td>
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<tr>
<td>Integration of social, economic and environmental factors.</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td></td>
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<td>*</td>
</tr>
<tr>
<td>State criteria</td>
<td>Waterways Management Model</td>
<td>LCD Model</td>
<td>EPA/WRC Model</td>
<td>RDC Model</td>
<td>Regional LGA Model</td>
<td>NRM Group (adapted model)</td>
<td>CMA Model</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Efficiency of administrative arrangements - does not require separate regional admin. Structure.</td>
<td>*</td>
<td>•</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Fosters integration of community and government actions.</td>
<td>*</td>
<td>*</td>
<td>*</td>
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<td>*</td>
<td>*</td>
<td>•</td>
</tr>
<tr>
<td>Statutory basis or linked to current institutions.</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>•</td>
</tr>
<tr>
<td>Representative of community interest.</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
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<tr>
<td>Effective community consultation, reporting and feedback.</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>•</td>
<td>*</td>
</tr>
<tr>
<td>Local government in more central role.</td>
<td>•</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>•</td>
</tr>
<tr>
<td>Minimise duplication of legislation and ability to build on current statutory strengths.</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>•</td>
</tr>
</tbody>
</table>

* Can fully meet criteria.  
* Can partially meet criteria  
• Major impediment.  
• Not well suited.
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<table>
<thead>
<tr>
<th>Purpose</th>
<th>Page</th>
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</thead>
<tbody>
<tr>
<td>Purpose</td>
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</tbody>
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POTENTIAL NRM STRUCTURES FOR WESTERN AUSTRALIA

PURPOSE
A discussion paper to scope and present options for regional Natural Resources Management (NRM) structures suited to Western Australia’s South West agricultural division.

1.0 BACKGROUND
At the regional level, five non-statutory bodies have emerged as regional NRM groups for WA. ‘Regional’ boundaries, established through NHT for the purposes of regional assessment of projects, provided the spatial basis for these groups. The boundaries also coincide with the regions for the Department of Agriculture’s Sustainable Rural Development (SRD) program.

Each group is incorporated, with its own membership arrangements, objectives, strategies, mode of operation, level of community engagement and government resourcing.

These regional Groups are the:
- Swan Catchment Council (SCC)
- South Coast Regional Initiative Planning Team (SCRIPT)
- South West Catchments Council (SWCC)
- Northern Agricultural Integrated Management Strategy Group (NAIMS)
- Avon Working Group (AWG).

The regional NRM groups have received significant, regionally coordinated State agency support as well as a small amount of NHT funding to develop regional NRM strategies. State Government NRM agencies have provided operational/executive support to regional NRM groups. Each Group has prepared a draft regional NRM strategy that is receiving public input. These regional groups are, however, largely voluntary and are seeking assurances of Commonwealth and State Government funding as a sign that they are valued (legitimate) and so that the strains of voluntaryism can be reduced.

At the State level, as well as a number of peak advisory bodies established under the legislative requirements of individual agencies, e.g. the Soil and Land Conservation Council (SLCC), Environmental Protection Authority (EPA), there are other ad hoc coordinating bodies such as the State Salinity Council, which reports to a Cabinet sub-committee on the progress of the Salinity Strategy. In addition the Chairs of the regional NRM groups meet on a regular basis to raise their profile, voice common concerns and exchange information related to regional planning and Commonwealth/State relations regarding funding for NRM. These meetings are arranged under the auspices of the SLCC.

The Commonwealth discussion paper, Managing Natural Resources in Rural Australia for a Sustainable Future (December 1999), which sought input from stakeholders throughout Australia concluded the following regarding delivery of NRM outcomes:
“A regional approach offers a framework for planning and action for NRM, industry and community development that suits specific circumstances. It means that social, economic and environmental dimensions of a region can be considered in an integrated way.”

This ‘regional approach’ is also confirmed in the recommendations of the National Action Plan for Salinity and Water Quality and the Report of the Inquiry into Catchment Management by the House of Representatives Standing Committee on Environment and Heritage (December 2000).

The move towards a regional approach in NRM is reflected in actions already taken in a number of States, including Western Australia. Such moves had been stimulated in Western Australia by the need to improve the efficiency and effectiveness of regional service delivery through existing agencies. Further stimulus was provided by the NHT program, which encouraged regionally based partnership approaches to NRM through funding guidelines and State/Commonwealth partnership arrangements.

The Commonwealth has made it clear that it wishes to channel funding under the National Action Plan via regional groups that will ensure project delivery and accountability against priority outcomes identified in regional NRM strategies.

Regions and catchments have been identified as the level most appropriate for integrating NRM and devising effective strategies for dealing with priority problems, and also for taking action and directing investments to meet targets.

The existing NRM structures in this State, involve a number of, mainly discipline based, State government agencies and authorities with often overlapping or closely linked NRM (and other) responsibilities. There are also a range of statutory and non-statutory organisations ‘owned’ by the separate agencies that are involved in or undertaking NRM activities. At the local level, NRM activities are carried out by both statutory land conservation district committees (LCDCs) and non-statutory catchment and landcare groups. To date the current NRM structures have, with some notable exceptions, involved local government in only a minor way.

In addition to the Government Departments responsible for NRM, the following table shows a snapshot of the current State, regional and local structures:

**Institutional arrangements for NRM in Western Australia**

<table>
<thead>
<tr>
<th>Level</th>
<th>Name</th>
<th>Statutory</th>
<th>Est. No.</th>
<th>Main activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>Soil and Land Conservation Council</td>
<td>Yes</td>
<td>1</td>
<td>Promotion of soil and land conservation.</td>
</tr>
<tr>
<td></td>
<td>Pastoral Lands Board</td>
<td>Yes</td>
<td>1</td>
<td>Admin. of pastoral lands.</td>
</tr>
<tr>
<td></td>
<td>Conservation Commission</td>
<td>Yes</td>
<td>1</td>
<td>Admin. of national parks, State forests, etc. and advice on protection of biodiversity.</td>
</tr>
<tr>
<td></td>
<td>Environmental Protection Authority</td>
<td>Yes</td>
<td>1</td>
<td>Environmental impact assessment and EPPs.</td>
</tr>
<tr>
<td></td>
<td>State Salinity Council</td>
<td>No</td>
<td>1</td>
<td>Advice on salinity issues.</td>
</tr>
</tbody>
</table>
| Regional | NRM Groups (Avon Working Group; SCRIPT; SWCC; NAIMS, SCC)             | No        | 5 (possibly expanded to 8)                                                      | Varies from group to group, includes:  
  • preparing NRM plans;  
  • coordinating activities;  
  • leveraging funding. |

2
Institutional arrangements for NRM in Western Australia continued ...

<table>
<thead>
<tr>
<th>Level</th>
<th>Name</th>
<th>Statutory</th>
<th>Est. No.</th>
<th>Main activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Regional local governments</td>
<td>Yes</td>
<td>Some</td>
<td>Coordination of local government functions within a region (as agreed by the</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>for</td>
<td>parties to the regional council).</td>
</tr>
<tr>
<td></td>
<td>Committees of the W&amp;RC</td>
<td>Yes</td>
<td>2</td>
<td>Coordination of management for environmental water quality.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Cockburn</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>and</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Geocatch</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Waterway Management Authorities</td>
<td>Yes</td>
<td>5</td>
<td>Coordinate and regulate activities within a waterway conservation area.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Preparation/promotion of management plans.</td>
</tr>
<tr>
<td></td>
<td>Regional Development Commissions</td>
<td>Yes</td>
<td>9</td>
<td>Economic development - no NRM role. Regional coordination.</td>
</tr>
<tr>
<td>Local</td>
<td>Land Conservation District Committees (LCDCs)</td>
<td>Yes</td>
<td>146</td>
<td>Promote and undertake land conservation works in district.</td>
</tr>
<tr>
<td></td>
<td>Local government</td>
<td>Yes</td>
<td>142</td>
<td>Manage local government functions within the district - limited NRM involvement.</td>
</tr>
<tr>
<td></td>
<td>Water Resource Management Committees</td>
<td>Yes</td>
<td>0</td>
<td>Undertake delegated functions in respect of water allocation of defined</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>water resources.</td>
</tr>
<tr>
<td></td>
<td>Other landcare, bushcare, rivercare groups</td>
<td>No</td>
<td>~500</td>
<td>Vary according to group - usually ‘hands on’.</td>
</tr>
</tbody>
</table>

From the foregoing, it is clear there is a need for some coordination and integration of NRM structures in Western Australia, and to provide a framework that allows regional implementation of State and National programs.

2.0 ISSUES

An approach to NRM needs to take account of Western Australia’s unique circumstances, in particular it’s population base, geographic size and existing institutional arrangements. Thus the challenge for Western Australia is to put in place institutional structures that ensure:

- genuine NRM outcomes are delivered in accord with national and State goals through a regional framework;
- sufficiently wide representation of stakeholder interests;
- catchment management plans are produced that address salinity, water quality and other resource degradation issues;
- a high level of accountability for the administration and use of public funds, including monitoring and reporting on performance against regional/catchment targets; and
- land owners and other stakeholders can be contracted to undertake joint projects.
There would be advantages in using existing structure such as local government, regional development commissions or the current regional NRM groups. With the exception of the Rural Towns Program, local government engagement in NRM delivery has been limited, with NHT funding either being utilised by State agencies or by-passing them to support local action groups such as LCDs. Arguably local government with a strict local/regional focus and broad range of functions related to community sustainability and commitments to Agenda 21 is well placed to facilitate delivery of NRM outcomes. They have the administrative capacity to manage project delivery and levy funds. As the arm of government responsible for land use planning, a greater involvement in NRM would ensure closer linkage of NRM objectives and landuse/community development planning.

Local government participation is currently limited by their fragmentation, small size, a lack of drivers for collaborative action, and spasmodic or poor relationships with State agencies that have the bulk of natural resource expertise and information.

The Commonwealth Government through it’s national discussion paper has indicated that it supports making funding available to appropriate regional NRM groups to address ongoing natural resource and environmental issues. While existing NRM groups are currently able to manage Natural Heritage Trust and other funds they are not constituted to enter into the type of business contracts envisaged under the National Action Plan.

Regional Development Commissions (RDCs) are another existing regional structure with administrative support. Their main functions are in regional economic development/business facilitation and are constrained in the contractual arrangements they can enter into.

Current regional NRM groups in Western Australia have made considerable progress in NRM management, however there are some concerns about whether they are the appropriate structure in the future. The concerns include:
- representativeness and expertise;
- capacity to manage programs with adequate accountability;
- possibility that their constitutions may be amended by the members, which may include changing the objects of the organisation, the representation of the regional community, or the way in which accounts are audited;
- voluntary groups - no legislative authority to implement catchment strategies;
- no legislative authority to raise revenue through rates;
- the need to avoid developing another administrative layer/burden when we already have a number of regional structures.

Nevertheless the four regional NRM groups cover the entire agricultural region, and include some areas that are not at risk or currently affected by salinity. Generally, the regional NRM strategies recognise that the role of the regional NRM group is that of integrator and coordinator for the region, and that ‘on-ground’ action and implementation is carried out by catchment and community groups.

Draft regional strategies for natural resource management have been prepared for the four agricultural regions: south west (SWCC in 2001), northern agriculture (NAIMS in 2000), central agriculture (AWG in 2000) and southern agriculture (SCRIPT in 2000).
All four regional NRM strategies address a range of natural resource management issues including sustainable management of land and water resources, water quality, biodiversity protection, dryland salinity, community coordination and development, and integration of government agency support and services. The South West and South Coast NRM Strategies also address coastal management issues.

Other States in Australia have developed appropriate mixes of statutory and non-statutory structures to manage natural resources (see Appendix I). Generally, statutory or formal structures are favoured at regional levels.

3.0 PRINCIPLES
The proposals suggested in this paper are based upon the following principles:

- Having regional community based partnership groups that are effectively supported will provide valuable input to natural resource management priorities and programs and help build community ownership of programs.
- Optimising the number of NRM groups and minimising associated administration costs to the community and government.
- Having regional zones of a scale and form that allows reasonable alignment with current administrative/operational boundaries.
- Focus on outcomes rather than process.
- Having regional coordination of NRM and a partnership approach that includes key stakeholders and considers boundaries related to:
  - communities of interest to give effective stakeholder engagement (for voluntary and compulsory activities);
  - predominant land use systems; and
  - the landscape processes driving environmental change.
- Building on the existing regional NRM structures and their progress to date.
- Ensuring appropriate levels of accountability for project delivery and financial control.
- Integrating social, economic and environmental factors related to NRM.
- Establishing a clearer role for local government; and
- Minimising duplication of legislation and building on current statutory strengths.

3.1 Minimum Commonwealth requirements
The Commonwealth’s, National Action Plan requires the following:

- Regional/catchment based body.
- Catchment plans which address salinity, water quality and other NRM issues.
- Project management through regional delivery bodies.
- Funds management and accountability.
- Ability to contract with land owners.
- Monitoring and measurement against agreed targets.
- Reporting against delivery requirements.
3.2 Desired State requirements
From a State perspective additional requirements are:
- efficiency by minimising the number of NRM groups and avoiding duplication of administrative arrangements;
- fosters integration of community and government actions;
- statutory basis or linked to current institutions;
- representative of community interest;
- effective community consultation, reporting and feedback;
- more central role for local government; and
- minimising duplication of legislation and building on current statutory arrangements.

4.0 OPTIONS
Given the principles and criteria outlined in section 3, seven models are considered. Each model is discussed in terms of strengths and weaknesses in relation to key principles outlined above and a final summation against Commonwealth and State criteria presented. The seven models are:
1. Waterways Management Authority
2. Land Conservation District Committee (adjusted)
3. Cockburn Sound Management Council
4. Regional Development Commission
5. Regional Local Government
6. Existing NRM Regional Model (adjusted)
7. Catchment Management Authority.

4.1 Waterways Management Authority Model
Waterway Management Authorities (WMA) are established under the Waterways Conservation Act 1976 and have the following attributes:
- Any area containing one or more rivers or catchments can be declared a management area on the recommendation of EPA - the EPA defines the boundaries.
- A management authority comprises a Chair and 5 to 11 other members appointed by Governor on recommendation of Water and Rivers Commission (WRC).
- Powers delegated to the authority from WRC.
- Authorities carry out works, establish facilities, control and manage land and water development proposals; and
- Authorities can also make by-laws related to protection of watercourses in a management area.

Waterway Management Authorities have power under section 47 of the Waterways Conservation Act to issue licenses permitting a person to make discharges into a watercourse within a management area. Regulations may prescribe fees and charges with respect to the issue of such licenses, although these will usually be on the basis of cost recovery rather than revenue raising for other conservation initiatives. The current schedule of fees (Schedule 1,
Waterways Conservation Regulations 1981) shows that the value of the licenses is consistent with cost recovery only.

WMAs have been established for the Peel Inlet, Albany Harbours, Avon, Wilson Inlet and Leschenault Inlet. The waterways management model has to date had limited scope as the focus has been on estuarine areas. Modifications to this model would be needed to ensure acceptance by many farmers, community and LCDC groups who want greater leadership in the sustainable land management and biodiversity areas.

To overcome limitations of the more ‘traditional’ model a revised management structure established under the Water and Rivers Commission Act is the Geographe Catchment Council (GeoCatch). The GeoCatch model has strong involvement of local government and local community and has corporate support for managing funding and staff resources through the Water and Rivers Commission.

Though GeoCatch, which was established as an ICM group for the ‘wet’ catchment areas, is regarded as successful the cost may have been a deterrent to establishing similar bodies in other areas, for example the Leschenault and Peel catchments.

Committees established by the Water and Rivers Commission (such as GeoCatch) have no statutory authority to raise rates, charges or fees. Any funding they require must come through the Commission. The Commission has authority under its legislation (including the Rights in Water and Irrigation Act) to set fees and charges for licences issued in respect of water use.

The Albany Waterways Management Authority, which has the whole catchment as its gazetted area, probably has the most developed coordination mechanism through the Government Officers Technical Advisory Group and close involvement in SCRIPT.

Considerable debate has occurred as to a suitable ICM model for the Leschenault catchment and a Peel Harvey catchment coordinating group was recently established.

Strengths

- Statutory base and broad regulatory powers that can be delegated under the Waterways Conservation Act s 22(1) also under s 22(3) a Management Authority may, with the approval of the Commission, delegate to a public authority.
- Existing mechanism.
- Ability to develop local by-laws in the catchment.
- Ability to develop (with the Commission) a management plan for the catchment.
- Ability for regulations to require persons within a management area to comply with the provisions of a management plan.
- Authority of the Commission to liaise with local government to ensure the development of town planning schemes are consistent with a management plan.
- Application to associated land in a defined catchment is possible (i.e. Albany WMA approach).
- The formulation and implementation of schemes (projects) directed to the abatement, control and prevention of litter and other forms of pollution exists under s 28(3)(d) Waterways Conservation Act.
• Well suited to defined catchment areas where the communities of interest are based around a key waterway, wetland or estuary catchment; and
• Membership of an authority (so far as is practicable) is to be drawn from the local community and relevant local governments and public authorities.

Limitations:
• Under the traditional approach (PIMA/LIMA, etc.) has applied only to watercourses and immediate surroundings.
• No authority in relation to biodiversity issues.
• Does not apply to private land without the agreement of the owner.
• A regional NRM model based on waterways only may not appeal to farmers, community and LCDC groups seeking greater leadership in the sustainable land management and biodiversity areas.
• Need to operate at a broad catchment scale.
• No ability to raise a general rate to fund NRM activities; and
• Limited penalties for non-compliance with regulations or by-laws (currently maximum of $500).

Statutory changes recommended to meet criteria:
• Broaden function of authorities to include biodiversity and land management issues.
• Ensure management areas clearly include terrestrial areas within the catchment, irrespective of private landholder agreement.
• Ensure representation by all NRM agencies to establish confidence that management authorities are broadly based.
• Specify clearly that the Crown is bound by the Act and Regulations to ensure equity.
• Increase penalties for non-compliance with regulations and by-laws; and
• Include power for Authorities to implement local rating to fund NRM projects within the district.

4.2 Land Conservation District Model
Land Conservation District Committees (LCDCs) are established under the Soil and Land Conservation Act 1945 and have the following attributes:
• Operate in respect to a defined District (boundaries cannot overlap).
• Manage projects; carry out works; perform functions agreed; review, assess and report.
• Can recommend a soil conservation rate be applied in the district to fund activities; and
• Can recommend local laws be applied within the district.

There are currently 146 gazetted land conservation districts covering the majority of the State’s agricultural and pastoral regions. As many of these LCDCs are inactive, there is an opportunity to amalgamate defunct or inactive LCDCs with active groups to form larger, more effective groups operating at a larger ‘regional’ scale. LCDCs would ideally cover two to three local government districts, and operate as umbrella groups for the non-statutory local action groups in the area (a role many LCDCs successfully perform now).
Current LCDCs could continue in their role as the primary drivers for NRM action in at the local level. Provisions exist under the S&LC Act to develop scaled up regional LCDCs that could function as regional NRM bodies.

Strengths:
- Builds on existing structure/network with track record in land and vegetation management.
- Membership representative of community interests.
- Effective linkages with government and community.
- Established links with Soil and Land Conservation Council.
- Project management ability.
- Ability to recommend local laws for matters such as clearing, land use, etc.
- Ability to recommend soil conservation rates be applied to fund land conservation projects.
- Record in attracting and managing external sources of funding (through NHT, State government and private sources).
- Rationalises existing LCDCs, reducing administrative costs and promoting more strategic focus.
- Useful intermediary between local ‘on-the-ground’ groups and regional groups (especially given the size of WA).

Limitations:
- Prescriptive membership.
- Functions limited to land conservation - no reference to biodiversity or waterway conservation.
- Limited statutory planning role.
- Not bodies corporate, so question about ability to hold and manage funds.
- Limited ability to develop sustainable farming practices.
- Current LCD areas too small for regional bodies; and
- Proposals to amalgamate LCDCs may be seen as Government winding back support for local NRM action groups.

Statutory changes recommended to meet criteria:
- Remove some elements of the prescriptive membership in the Act.
- Establish the new LCDCs as ‘bodies corporate’ so as to make clear they can hold funds in bank accounts.
- Highlight and promote the sections of the Act that empower LCDCs to take an active role in developing local laws in their districts; and
- Broaden functions to ensure water, biodiversity and sustainable development issues are taken into account.
4.3 Cockburn Sound Management Council Model

Under this model Councils can be established by Cabinet decision as needed to take a project management approach and specify roles and responsibilities and achieve particular outcomes for a priority issue.

It has the following features:

- Council established as subcommittee of WRC Board under clause 15 of Schedule 1 of the *Water and Rivers Commission Act*.
- Subject to the directions of the Board and to the terms of any delegation, a committee may determine its own procedures.
- Could be a mechanism set up under a broader (non-statutory) regional organisation to bring together stakeholders to deal with a particular (sub-regional) priority issue on a project basis.
- In the case of the Cockburn Council it is responsible for implementing Environmental Management Program (EMP) under objectives, criteria from an Environmental Protection Policy (EPP).
- Can acquire statutory powers delegated from EPA through an EPP; and
- Composition of Council by Cabinet decision and can include State and local government representatives as well as industry and community representatives.

**Strengths:**

- Established by Cabinet which can specify agency agreements and commitments.
- EPP process ensures focus on priority areas and can define public/private issues to guide resource allocation.
- Develops clear targets/outcomes to ensure integration of effort.
- Statutory powers and area defined by EPP.
- Enables Councils to be set up for specific project management cycles, review cycles and with sunset clauses to foster efficient and effective project management structures.
- Project management powers, financial accountability and ability to contract through host agency.
- Flexible mechanism.
- Is likely to meet Commonwealth requirements.
- Provides mechanism for coordinating government statutory responsibilities; and
- Not limited to catchment boundaries - can be issues focussed.

**Limitations:**

- EPP process can be long and may delay action, especially if catchment management plan is already available.
- Close involvement of EPA could alienate rural community stakeholders if they are perceived as a remote regulator.
- Potential for agencies to dominate and disempower community members because of unequal distribution of resources (even though Cockburn Sound experience does not reflect this perception because of strong Chairman and strong community representatives).
• Could result in a large number of committees.
• Committee membership must include a Board member or member of the WRC.
• Cannot levy rates; and
• May have difficulty in representing a large number of LGAs.

Statutory changes recommended to meet criteria:
May need to consider changes to committee membership arrangements and enable the ability to levy rates.

4.4 Regional Development Commission Model
Nine Regional Development Commissions are established under the Regional Development Commission Act 1993 and have the following objects and functions:
• Maximise job creation and improve career opportunities for people working in regional WA.
• Develop and broaden each region’s economic base.
• Identify infrastructure services to promote economic and social development.
• Identify and encourage regional investment.
• Provide information and advice to promote business development.
• Ensure that regional government services are comparable to the metropolitan area; and
• Facilitate coordination between relevant statutory bodies and State government agencies.

Each Commission has a Board of Management or Governing Board, with an appointed Chairman and Director. Membership comprises one third community, one third local government and one third ministerial appointments. They report to the Minister for Regional Development and their roles are detailed in the Act.

It may be possible to integrate NRM issues into the activities of existing Regional Development Commissions, which would see a closer link to local government and natural resource and environmental issues considered along with social and economic issues.

Strengths:
• Established groups with a strong role in promoting regional industry and tourism.
• Boundaries set by legislation as groups of LGAs, operates across catchments.
• RDCs already have assigned a coordination role on behalf of State Government.
• Potential to integrate economic and environmental focus at regional level.
• Recognised at regional level.
• Has regional perspective and experience.
• Broad range of stakeholder involvement beyond NRM networks and strong political support.
• Subject to FAAA: receives appropriations and moneys lawfully received.
• Body corporate, legal entity, agent of the Crown.
Limitations:

- Currently limited engagement on sustainable use of natural resources or environmental management - may take some time to adopt as ‘core business’.
- Boundaries based on local government districts, not catchment or environmental boundaries.
- Cannot enter into activities managing contract situations as required under NAP.
- Not empowered to enter into business undertaking, acquire land, borrow money.
- Cannot rate.
- No regulation making power and accordingly no direct planning powers.
- Perceived as being too closely aligned with State Government objectives/policies and not having a local community focus.

Statutory changes recommended to meet criteria:

- Amend Act to include NRM and environmental criteria as part of Commission functions.
- Provide for rating power to fund NRM projects; and
- Provide for power to manage and enter into contracts and develop local laws.

4.5 Regional Local Government Model

Regional local governments are established under the *Local Government Act 1995* and have the following attributes:

- Two or more local governments can establish a regional council subject to Minister for Local Government approval.
- Can be wound up at the direction of the Minister.
- Members, procedures and financial contributions set out in establishment agreement for any local government purpose.
- Purpose of the group set out in establishment agreement.
- Some Local Government Act provisions do not apply (constitution, elections, electors meetings, rates and service charges, borrowings) unless specified in establishment agreement.

Strengths:

- Existing mechanism with some working examples in waste management.
- Regional local governments could be established based on existing NRM boundaries.
- Can rate for funds through individual LGA members.
- Can acquire/dispose of land and carry out land development.
- Democratically elected community representatives, with a sound understanding of local issues who are accountable to their constituents and State goals.
- Local government boundaries readily identifiable with community of interest.
- Empowers local government to increase their capacity to be an effective partner in NRM.
- Consistent with the *National Action Plan on Salinity and Water Quality* providing local government with a very tangible opportunity to be involved with setting the direction for NRM in WA; and
- Ready linkage to land use planning powers.

**Limitations**
- Significant new direction for most existing local government authorities.
- Could be seen by local government as an attempt by the State to shift additional responsibility without additional resources, or as an attempt to rationalise local governments.
- May meet strong resistance with arguments that NRM is not a direct function of local government.
- High risk that many rurally based local governments do not have the capacity, skills base or values to effectively coordinate NRM.
- No independent rating power.
- No independent power to develop regional laws; and
- No direct representation of State government or community NRM interests.

**Statutory changes recommended to meet criteria:**
- NRM role of the model should be spelled out in the Act.
- Include ability of the regional council to develop regional NRM laws and rating.
- Provide for broader membership (including community and government representation).

### 4.6 Formalise current NRM Groups

Given the nature of rural WA, the current four agricultural regions may be about the right number. It may be desirable therefore to build on the strengths and progress of the current regional groups, reconstituting them to ensure representativeness (social cohesion) and legitimacy and providing them with the necessary statutory standing and accountability mechanisms.

Draft regional strategies for natural resource management have been prepared for the four agricultural regions: south west (SWCC in 2001), northern agriculture (NAIMS in 2000), central agriculture (AWG in 2000) and southern agriculture (SCRIPT in 2000). The four regional NRM groups cover the entire agricultural region, and include some areas that are not at risk or currently affected by salinity. Generally, the regional NRM strategies recognise that the role of the regional NRM group is that of integrator and coordinator for the region, and that ‘on-ground’ action and implementation is carried out by the responsible agencies in partnership with catchment and community groups.

All four regional NRM strategies address a range of natural resource management issues including sustainable management of land and water resources, water quality, biodiversity protection, dryland salinity, community coordination and development, and integration of government agency support and services. The South West and South Coast NRM Strategies also address coastal management issues.
All regional NRM groups have attempted to reflect the strategies of State and national level NRM programs and policies, however most are still in draft form and detailed Business Plans or Action Plans to implement regional strategies have not yet been developed. All regional NRM groups are planning on completing this work once their Strategy documents are completed.

All regional strategies address salinity issues in ways that are generally consistent with the State Salinity Strategy 2000. An assessment of this is detailed in the following table. The criteria are drawn from the State Salinity Strategy 2000 assuming it reflects State agreement on appropriate salinity actions.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>NAIMS</th>
<th>SWCC</th>
<th>SCRIPT</th>
<th>AWG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional planning</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Priority setting</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Biodiversity conservation</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Water resources</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Infrastructure protection</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Flood risk assessment</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Research and development</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Changing agricultural practices</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Commercial farm forestry</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Using saline lands productively</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N*</td>
</tr>
<tr>
<td>Productive use of saline water</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Irrigated agriculture</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Native vegetation management</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Engineering options for SWM and drainage</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Social impact management</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

* AWG mentions support for Salt-land Pastures Group, but no specific actions or strategies.

While the general goal areas of the State Salinity Strategy 2000 are addressed in each regional NRM strategy, there is little definition at regional level of the Salinity Actions, detailed in the March 2000 report. Strategies such as changing farming systems, reducing recharge, investigating hydrological processes and developing suitable commercial deep-rooted perennials are all addressed in regional NRM strategies, however are not coordinated with State Salinity Strategy 2000 actions in a consistent way. The exception is the SWCC draft regional strategy, which has detailed strategies aligned with State Salinity Strategy 2000 actions.

The Avon Working Group has documented an Operational Plan that focuses on integrated water management to address the main NRM priorities in the region. The Operational Plan lacks detail on how actions will be implemented, expected outcomes, costs, who will implement the actions and expected timeframes. The AWG regional strategy includes dates for major milestones in changing agricultural practice, community awareness, improved water use, and improved land management techniques. Some targets are quantified and measurable, however most are general in nature and will be difficult to establish clearly when it has been achieved. SCRIPT has developed targets (objectives) for each outcome or goal.
area in the South Coast regional strategy. South Coast targets vary with many being clear and measurable, and some being general objective statements that are not measurable.

The NAIMS and SWCC regional strategies do not include clear targets aligned with the State Salinity Strategy 2000, however SWCC has recognised that community agreed targets for NRM need to be developed for the region to underpin the regional strategies.

Current groups thus have a considerable track record in regional planning and coordination, partnership development and project development. In the process, a network of people with considerable influence and capacity in strategic planning and project assessment has developed.

Concerns have been expressed over their legitimacy and profile in the regions. Nevertheless a community of interest related to regional NRM is emerging and some regional sub groups, for example, Blackwood and Geocatch are strong. Such bodies will see little value in forming new regions unless they end up as regions in their own right.

An option could be to amend the Soil and Land Conservation Act to provide for regional NRM groups. Given the Act provides for the establishment of the statutory groups at the State and local level, it would also be appropriate that it provide for the establishment of regional groups. The regional NRM Councils could be formally established as a sub-committee of the Soil and Land Conservation Council.

This can be achieved through insertion of a separate division into the Act to provide for regional NRM groups. The groups could have prescribed membership and appointment processes, and roles and functions in the same way that SLCC does.

According to Jennings and Moore (2000) for regionally based NRM planning and implementation to occur, it is essential for regional institutions to maintain a presence and function over time. If this argument is accepted then this may favour making adjustments to the existing Groups, or at least those with a long history such as the BBG or AWG. On the other hand if new NRM structures are formed it seems they need to be there for the long haul to be successful. The findings of Jennings and Moore (2000) are somewhat at odds with a strict project management approach.

Strengths:

- Representation based on ‘earned knowledge and ability’.
- Representatives personal standing, relationships, networks and influence allows outcomes to be progressed.
- Decision making tends to be based on negotiated agreements rather than representative positions held by constituent groups.
- Previously involved in developing catchment management plans and regional strategies.
- Currently established good working relations amongst State agencies and key community members.
- Enables building on current capacity (strategic planning, project assessment, priority setting) and achievements.
Limitations:
- Existing regional groups are voluntary, lack independent or institutional funding and rely on NHT funds and on-going agency support for survival.
- Would need financial accounting, administrative support and contractual powers to perform implementation roles.
- Some concerns over fairness, equity and breadth of representation.
- Despite attempts to provide feedback to local communities, little local knowledge/recall, particularly in peripheral areas within the regions.
- No statutory accountability (i.e. through FAAA) for the use and management of public funds.
- NRM groups currently run independently and it may be difficult to incorporate these groups into a single statutory model without substantially changing some management practices.

Statutory changes recommended to meet criteria:
Can possibly be constituted as a sub-committee of the SLCC and would need to ensure that this established financial accountability, contract management and levying powers.

4.7 Catchment Management Authorities
This model is recommended in the Report of the Inquiry into Catchment Management by the House of Representatives Standing Committee on Environment and Heritage. This approach sees the establishment of a National Catchment Management Authority (NCMA) to coordinate catchment planning across the country. As part of this national framework, each State will establish their own regionally administered Catchment Management Authorities (CMAs) to provide the link between the national objectives and local implementation. The report recommends CMAs be established in respect of each catchment system, being surface water management areas as designated by the Australian Water Resources Council.

Irrespective of this WA could establish it’s own regionally administered Catchment Management Authorities (CMAs) to provide the link between the national objectives and local implementation. CMAs would be statutory authorities under State legislation.

Functions of the CMAs would include:
- engage the community in catchment planning;
- provide shop-front for NCMA to deliver services;
- provide local community with expertise in NRM;
- develop management plans;
- approval and accreditation of plans; and
- coordination with other CMAs.

Strengths:
- Being a new model, the difficulties with the existing structures can be corrected (such as boundaries, representativeness, functions, legislative authority etc); complies with a suggested national approach.
- Complies with a suggested national approach.
• Consistent with the *National Action Plan.*
• Provides mechanism for better coordination between local, State and Commonwealth in relation to NRM initiatives.
• Recognises land degradation problems are of national importance, and should be tackled in a consistent and integrated way; and
• May provide impetus for rationalising other NRM structures in the State, such as LCDCs, Waterway Management Authorities, Water Resource Management Committees, etc.

**Limitations:**
• New structure, requiring new legislation and national agreement.
• Time consuming to establish.
• Potentially very costly.
• Might be perceived as the Commonwealth taking over NRM in the States.
• Establishes a new level of bureaucracy in a State overlaid with numerous statutory and non-statutory boards and authorities.
• Additional level of complexity leading to competition/tension amongst existing government structures; and
• Likely to institutionalise conflict in relation to statutory responsibilities.

**Statutory changes recommended to meet criteria:**

Being a new model, new legislation will need to be drafted.
### Tables summarising assessment of each management model against Commonwealth and State criteria

<table>
<thead>
<tr>
<th>Commonwealth criteria</th>
<th>Waterways Management Model</th>
<th>LCD Model</th>
<th>EPA/WRC Model</th>
<th>RDC Model</th>
<th>Regional LGA Model</th>
<th>NRM Group (adapted model)</th>
<th>CMA Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional/Catchment based body.</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
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</tr>
<tr>
<td>Catchment plans which address salinity, water quality, and other NRM issues.</td>
<td>*</td>
<td></td>
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<td>*</td>
<td></td>
<td>*</td>
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<tr>
<td>Monitoring and measurement against agreed targets.</td>
<td>*</td>
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<tr>
<td>Reporting against delivery requirements.</td>
<td>*</td>
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</tr>
<tr>
<td>Project management through regional delivery body?</td>
<td>*</td>
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<tr>
<td>Funds management and accountability.</td>
<td>*</td>
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<tr>
<td>Ability contract with landholders and State agencies to carry out certain actions.</td>
<td>*</td>
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<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Integration of social, economic and environmental factors.</td>
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<td></td>
<td>*</td>
<td></td>
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<td>*</td>
</tr>
<tr>
<td>State criteria</td>
<td>Waterways Management Model</td>
<td>LCD Model</td>
<td>EPA/WRC Model</td>
<td>RDC Model</td>
<td>Regional LGA Model</td>
<td>NRM Group (adapted model)</td>
<td>CMA Model</td>
</tr>
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<td>-------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Efficiency of administrative arrangements - does not require separate regional admin. structure.</td>
<td>*</td>
<td>●</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Fosters integration of community and government actions.</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>●</td>
</tr>
<tr>
<td>Statutory basis or linked to current institutions.</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Representative of community interest.</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Effective community consultation, reporting and feedback.</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>●</td>
<td>*</td>
</tr>
<tr>
<td>Local government in more central role.</td>
<td>●</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Minimise duplication of legislation and ability to build on current statutory strengths.</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

* Can fully meet criteria.  
● Major impediment.  
* Can partially meet criteria.  
● Not well suited.
References:
Appendix 1.  NRM Structures - Communities of interest and other factors in determining regional NRM boundaries.

Key informants in each of the existing four NRM regions were contacted and asked to define regional communities of interest around potential natural resource management regions. All key informants were given the same instructions, which stipulated that their task was to identify communities of interest as seen by rural communities themselves and to ignore existing agency or regional NRM boundaries.

These maps reflect the difficulty and complexity in attempting to define one clear boundary for regional communities of interest for natural resource management. Communities of interest do not exist in isolation - they are socially constructed around a specific interest and will have different meanings for different stakeholder groups and among individuals within stakeholder groups. Nonetheless the following maps are presented to stimulate discussion about the role communities of interest may play in determining spatial boundaries.

Map 1 is the first preliminary result of the exercise and indicates 19 regional communities of interest for natural resource management.

Map 2 reflects a variation based on slightly altered criteria and is a crude attempt to amalgamate the regional NRM communities of interest at a larger scale. This results in eleven ‘regions’.

Map 3 shows existing boundaries for regional NRM groups together with Shire and Regional Development Commission boundaries.

An analysis of Map 1 reflects the complexity that occurs because of different interpretations of criteria and because people’s social interactions will inevitably influence spatial boundaries. Each person has a different understanding or definition of an appropriate scale for regional groupings, how a community operates and how it is defined.

For instance, three communities of interest in the Northern Region are determined primarily based on local government boundaries. An underlying assumption being that existing rural communities most readily identify with local government boundaries and that these remain the simplest and most unifying definition of rural communities in terms of a range of services and interests.

Within the more Central Wheatbelt region, communities of interest were defined by perceptions of how people related to each other, their orientation towards service centres, where they send their children to school or shop. It also reflects expectations or beliefs about how people orientate towards different regional towns, the transport routes they travel along and a perception of how closely they align with each other in terms of commonalities of farming types, etc. Communities of interest defined for this part of Western Australia do not align closely to local government boundaries.

Along the South Coast region, communities of interest have been defined according to existing river catchment boundaries as it is believed that people here have already developed an affinity within that subcatchment in relation to natural resource management activities. It is believed this is the primary determinant of the community of interest as opposed to local government boundaries or purely social boundaries based on other predominant factors.
Within the South West communities of interest have been drawn based on local government boundaries and a perception of a well understood definition of the existing Regional Development Commissions (with some minor adjustments). At this scale, there has been no attempt to break up communities of interest in accordance with other social factors such as used in the Central Wheatbelt example. If this was done case, further subdivisions would emerge, particularly around the Augusta-Margaret River/Busselton and the Warren-Blackwood regions.

There is also a broad community of interest that exists in what some people know as the Wool Belt. This has been developed not so much because it exists as a clear community of interest, rather is a collection of communities of interest that have limited social ties, but are brought together by a series of overlapping commonalities. For example, Kojonup and Boyup Brook relate to each other, Kojonup and West Arthur relate to each other, West Arthur and Williams relate to each other and Boddington and Williams relate to each other and so on.

Quite clearly communities of interest are complex and socially constructed around different issues or interests. There are several broad options to deal with this issue:

- Recognise that they are complex and accept best bet options.
- Accept that overlapping of regions will occur and work with these irrespective of the exact boundaries.
- Employ sophisticated techniques to map communities of interest once an appropriate model has been decided (since the model chosen may influence the weighting of criteria for determining boundaries); and
- Seek community input.

Using existing NRM boundaries

Each of the key informants was also asked whether the existing regional NRM structures were recognised as a community of interest. In all cases the key informants felt that at a larger regional scale, the existing boundaries were reasonably well understood by the community and appropriately sized and delineated for regional NRM management purposes.

Issues of representativeness and community engagement that arise at the margins of the larger regions, for example, Esperance/Ravensthorpe in relation to the South Coast and the Lockart/Yilgarn in relation to the Avon region do, however, need to be actively addressed.

There are two ways in dealing with this marginalisation problem. One is that existing NRM structures revise how they do their business and explicitly ensure that groups at the extremities of the region are included much more and feel that their issues are being dealt with. There will, however, be a cost attached to this.

A second option is to create additional sub-regions covering these marginal areas. This may overcome the tyranny of distance and thereby foster more inclusive regional involvement and promote enhanced communication.

If, however, an overriding issue is a lack of relevance and lack of interest in being involved in regional NRM issues, then creating a different structure will not necessarily improve efficiency or effectiveness. In addition the potential need for regional groups to take a greater role in statutory enforcement in the future, may be hindered by the existence of smaller, more
socially coherent communities. The latter would more be more desirable if a voluntary adoption model based on 'win-win' solutions was envisaged.

**A composite approach to defining communities of interest**

Based on existing NRM involvement, a belief that most rural communities are able to identify with their local government boundaries and with neighbouring local areas, and that there is some recognition of existing NRM regional structures, it is suggested that the most suitable criteria for developing or identifying regional NRM boundaries are:

- A conformation of local government boundaries.
- Existing, recognised catchments; and
- Some commonality in farming systems.

If the State chooses to have less regional NRM structures then it would appear that the community of interest criteria may be a more appropriate as a subordinate criteria for determining sub-regional representation or ‘project management’ boundaries within a larger NRM region.

Maps 4(a) and 4(b) indicate broadscale landuse mapping and is shown to illustrate the value of using land use units as a basis for determining potential NRM regions. From the data presented below, it seems obvious that between 1985-1997 there has been a dramatic shift in land use within Western Australia. Essentially the mixed cropping/wool belt area has largely shifted to a predominantly cropping area. With the exception of parts of the coastal plain and the coastal areas of the great southern were more intensive land uses based on animal industries or horticulture exist, much of inland Western Australia or wheatbelt is characterised by cereal growing regions with a small specialist wool growing zone. To determine NRM structures purely on this feature alone is not feasible since any regional boundary would be far too large. Similarly the map of current or potential soil salinity as described in the NLWRA, also indicates that salinity risk is pervasive throughout the wheatbelt and the coastal plain of Western Australia. Again there are no clear reasons for delineating regional boundaries on this basis alone.

Maps 5(a) and 5(b) shows Interim Biogeographical Regions. When overlain with community of interest maps it is difficult to see any clear logical boundaries which integrate both criteria. It does serve to show that within a region different biophysical processes are at work that may impact on the actions taken.

Each of the key factors such as managing salinity, managing biodiversity, managing waterways and managing other land degradation problems, as well as integrating natural resource management with economic development involves a complex array of factors, none of which fit easily with natural (biogeographical) or social and economic boundaries.

**Integrating spatial boundaries with appropriate models**

For two of the models - the LGA Regional Council and the RDC models - the use of local government boundaries to define spatial units is clear cut. Under these two models it would not be appropriate to use catchment or social boundaries since the legislation seems to require that boundaries are composed of whole government units.
Under the CMA and the Water Management Authority models, it may be possible to use local government/community of interest boundaries to determine regional boundaries, however, the logic of this is dubious given that both models are premised on the principle of managing waterways and related land use within a defined catchment. However, under the Cockburn Sound Management Council model, it is the EPP that defines the boundaries of the Council. In this case it is possible to use local government boundaries or other boundaries if logical.

Under each of the other models it may be possible to use either local government boundaries or physical catchment boundaries to determine the spatial limits of each of the regions. Though this may not appear logical in the case of existing NRM groups, what it would mean is that for most cases, the boundary of the region would be adjusted to the nearest local government boundary. This would enhance effective local government involvement so that local governments were only within one region instead of being spread across two or three and also provide a stronger sense of community involvement.
Map 1
Areas of Community Interest
(as determined by regional informants)

Overlying Shire Boundaries
(Note shows 19 potential "regions")
Map 2
Amalgamation of Areas of Community Interest Modified as far as Possible to Align with Shire Boundaries
(Note shows 11 "regions")
Map 3
Current NRM Regions showing Regional Development Commission and Local Government Authority Boundaries

NATURAL RESOURCE MANAGEMENT REGIONS
- NAIMS Boundary
- Avon Working Group Boundary
- SW Catchments Council Boundary
- SCRIPT Boundary

Regional Development Commission Boundary
Local Government Authority Boundaries
Agricultural Region Boundary

0 100 200 kilometres

Job No. 2001096
Date 5/06/01
File Name: 2001096map3v4.dgn
Spatial Resource Information Group
Map 4 (a)  Majority area put to crop or pasture in 1985
Map 4 (b) Majority area put to crop or pasture in 1997
Map 5 (a)
Areas of Community Interest Overlying Interim Biophysical Zones

INTERIM BIOGEOGRAPHIC REGIONALISATION OF AUSTRALIA (IBRA) REGIONS

- Great Victoria Desert
- Murchison
- Warren
- Coolgardie
- Mallee
- Esperance Sandplain
- Jarrah Forest
- Swan Coastal Plain
- Avon Coastal Plain
- Avon Wheatbelt
- Yalgoo
- Geraldton Sandplain

Community of Interest Boundaries
Agricultural Region Boundary

Job No. 2001096
Date 25/6/01
File Name: 2001096.map5Av1.dgn
Spatial Resource Information Group
Map 5 (b)
Amalgamated Areas of Community Interest Overlying Interim Biophysical Zones

INTERIM BIOGEOGRAPHIC REGIONALISATION OF AUSTRALIA (IBRA) REGIONS
- Great Victoria Desert
- Murchison
- Warren
- Coolgardie
- Maltee
- Esperance Sandplain
- Jarrah Forest
- Swan Coastal Plain
- Avon Wheatbelt
- Yalgoo
- Geraldton Sandplain

Community of Interest Boundaries
Agricultural Region Boundary

0 100 200 kilometres

Job No. 2001096
Date: 6/06/01
File Name: 2001096map6Bv1.png
Spatial Resource Information Group

Agriculture Western Australia
Appendix 2. Other NRM Structures in Australia.

Victoria

a) Catchment Management Authorities

The Catchment Management Authorities (CMAs) were established on 1 July 1997 with the aim of creating a whole of catchment approach to natural resource management in the State. The new CMAs combined the roles of the former, River Management Boards and Catchment and Land Protection Boards, and community based advisory groups such as salinity plan implementation groups and water quality working groups.

The primary goal of each CMA is to ensure the protection and restoration of land and water resources, the sustainable development of natural resources-based industries and the conservation of our natural and cultural heritage. The five principles that govern the way catchment management is implemented throughout the State are:

1. **Community empowerment**
   - Catchment management is a partnership between community and Government. Planning and implementation of natural resource management programs should maximise opportunities for community involvement.

2. **Integrated management**
   - Management of natural resources should recognise the linkages between land and water and that the management of one element can impact on the other.

3. **Targeted investment**
   - Government and community need to ensure that resources are targeted to address priorities and deliver maximum on-ground benefits.

4. **Accountability**
   - Those making decisions on natural resource management should be clearly accountable to Government and the community, both in a financial sense and for outcomes.

5. **Administrative efficiency**
   - To maximise on ground results catchment management structures should facilitate more efficient procedures and protocols.

The CMA Structure

The basic structure of a CMA is designed to maximise community involvement in decision-making. This structure comprises:

1. **The Board** - who are directly responsible for the development of strategic direction for land and water management in the Region. They set priorities, evaluate the effectiveness of outcomes, monitor the external and internal environment and identify opportunities.

2. **The Implementation Committees (ICs)** are the conduits for local community input, and are responsible for the development of detailed work programs and the oversight of on-ground program delivery for specific issues or sub-catchments.
3. The Staff are there to support the Board and ICs, oversee development and implementation of programs and liaise with the community, government and other catchment-focused organisations.

b) Port Phillip Catchment and Land Protection Board

The Port Phillip Catchment and Land Protection Board manage the catchments of the Melbourne metropolitan region and its rural fringe.

Currently, the role of the Port Phillip CaLP Board includes:
- review of the Regional Catchment Strategy and provide advice to the Government on its implementation;
- advising the Minister on:
  (i) regional priorities;
  (ii) matters relating to catchment management and land protection; and
  (iii) the condition of land and water resources in the region;
- promoting cooperation in the management of land and water resources in the region; and
- promoting community awareness and understanding of catchment management.

Unlike the CMAs, the Port Phillip CaLP does not have operational responsibility for provision of waterway and floodplain management activities and programs.

New South Wales

In December 1999, the Minister for Land and Water Conservation announced that the community-government partnership in natural resource management would be strengthened by the establishment of 18 new Catchment Management Boards across New South Wales. The new boards now replace 43 of the 45 catchment management committees and the five regional catchment committees.

On 31 May 2000, the Minister announced the appointment of members to the boards drawn from representatives from the community, industry and government:
- Nature conservation interests.
- Primary producers/natural resource users.
- Local government.
- Aboriginal interests.
- State government.

The new boards are established under the Catchment Management Act 1989 and the Catchment Management Regulation 1999. The objective of the establishment of the Catchment Management Boards is to enhance the capacity of total catchment management to substantially improve the quality and sustainability of NSW’s natural resources and environment.

The Department of Land and Water Conservation’s staff, along with other government agency staff and local government work with communities and industry groups to implement strategies developed by the new boards.
Role of the Boards

The boards will focus on five specific tasks:

1. Identify the opportunities, problems and threats associated with the use of natural resources to support rural production and protection and enhancement of the environment.

2. Identify the first order objectives and targets, within the overall legislative and policy framework, for the use and management of the region’s natural resources.

3. Develop management options, strategies and actions to address the identified objectives and targets.

4. Assist in developing a greater understanding within the community of the issues identified and action required to support rural production and enhance the environment.

5. Initiate proposals for projects and assess against the targets, all projects submitted for funding under Commonwealth and State natural resource management grant programs.

Catchment Management Plans

In the first year of operation, each Board will produce the key components of a draft Catchment Management Plan as represented by the first three of the above tasks. The draft Plan will be submitted for consideration by the Minister in consultation with other Ministers involved in natural resource management. The purpose of the draft Plan is to ensure the health of the landscape is improved by meeting key targets. The draft Plan will provide focus and direction to individual and community initiatives, help coordinate government investment, such as extension work and grant funding, and contribute to the implementation of legislation such as the Native Vegetation Conservation Act 1997 and the Water Management Act currently being drafted.

South Australia

In the past four years the Minister for Environment and Heritage has appointed six Catchment Water Management Boards in South Australia under the provisions of the Water Resources Act 1997. Board members are selected through a public call for persons with skills and experience in catchment issues and knowledge of the catchment area. The Act requires the Board to prepare a Catchment Water Management Plan for its area and to develop the Plan in close consultation with the catchment community so that the major issues for the community are addressed. The Catchment Water Management Plan is funded through a levy with each of the Boards operating with an annual budget of between $2-3.5 million.

Prescribed resources are subject to more stringent management and Water Allocation Plans are developed. The Water Allocation Plans can apply to both surface and/or ground water depending upon which source is stressed.

In addition to the above (legislated) activities there are numerous community based natural resource management programs and projects which have catchment management as a focus. These programs broker resources for implementation of catchment management projects which are carried out by community landcare groups. The landcare groups generally operate within the planning and coordination frameworks of the larger programs. Most of these projects are funded through NHT with community support.
South Australia is currently working to develop a mechanism for integrated natural resource management. Soil Conservation Boards, Animal and Plant Control Boards, Catchment Water Management Boards and other natural resource management groups will all feed into probable natural resource management regional bodies. South Australia is looking initially to developing overarching legislation to enable this to occur.

Queensland

To assist in the objectives of integrated resource management (IRM) the Landcare and Catchment Management Council (LCMC) provides strategic advice on landcare and catchment management issues to the Minister for Natural Resources and Minister for Environment and Heritage. The LCMC also provides strategic direction for the NHT in Queensland.

Landcare and ICM groups develop strategies and management practices for effective land management. There are more than 187 landcare groups across the State and more are forming on a regular basis. Whilst landcare is concerned about local action, integrated catchment management draws together, on a catchment basis, those involved in primary production, environmental conservation, land-use planning, river engineering and other aspects of natural-resource management. There are in the order of 30 catchment management groups in Queensland.

Community organisations relating to IRM in Queensland

In Queensland, there are various community bodies that are involved in managing and delivering natural resource management outcomes. The main groups are regional strategy groups (RSGs), river improvement trusts (RITs) and catchment committees.

a) Regional strategy groups (RSGs)

Regional strategy groups can help communities answer questions about what they want their region to look like in the future, and give them direction on how to go about achieving this. They do this through vision and values statements, in the context of identifying the critical issues, setting long-term objectives, priorities and strategies.

b) Catchment committees

Catchment committees are established to address catchment management issues that are relatively complex and involve a significant number of community groups and government agencies. They comprise representatives of the major sectors of the community and government which are involved in, or influenced by, the management of land, water and vegetation resources in the catchment.

c) River Improvement Trusts (RITs)

An RIT is a statutory authority, which:
- protects and improves the bed and banks of rivers;
- repairs and prevents damage to the bed and banks of rivers; and
- prevents or mitigates the flooding of land by waters flood.

The primary roles are to plan, design, finance, undertake and maintain stream-improvement works to benefit the community within its river improvement area.
Each RIT is required to submit an annual report to the Minister for Natural Resources, Environment and Heritage in accordance with the *River Improvement Trust Act 1940*. The Minister has in accordance with the *Financial Administration and Audit Act 1977*, directed the preparation of a summarised report for presentation to parliament.