Chapter 1. Introduction

1.1 Introduction

An antinomy is literally a ‘conflict of laws’, or a contradiction between a principle and its opposite, where there is a compelling case for accepting both. Philosophers such as Kant (1929) and Quine (1966) have discussed various antinomies, aiming to resolve both the principles they describe, and the reasons for the contradictions (see Cohen 1995. p.40). This thesis does not present a philosophical debate of this kind. Instead, it explores a pair of compelling but contradictory principles, using them as the primary conceptual theme with which to analyse a practical problem. The principles are that:

- Australian local governments are statutory agencies of Australia’s state governments, with no power or authority beyond that which is ascribed to them by the states (the outside-in principle); and
- Local governments in Australia are independent agencies whose authority and capacity transcends their regulatory powers by nature of their attachment to their local areas (the inside-out principle).

The contradiction between these principles is labeled the local-state antinomy in this thesis. For brevity, it is sometimes referred to simply as the antinomy. This is not to suggest that it is the only antinomy affecting local government (LG), state government (SG), or any other Australian institution. Others certainly exist, that are also worthy of discussion. It would also be possible for instance, to express as an antinomy, the consumer-provider model currently being applied to many public good institutions. However throughout the course of this research, the local-state antinomy has emerged as a key concept providing insight into how LG functions in environmental decision making and action. It has helped to make sense of a complex research project, and similarly assists the discussion of findings in this text.

The thesis presents arguments and experiences to support both of the contradictory principles that make up the antinomy. It does this first by discussing the sources of LG authority, then by describing its environmental roles, responsibilities and interests (Chapters 2 and 3). This discussion shows that the local-state antinomy has
been a constant since formal LG was first established in Australia and it continues to impact on LG environmental capacity (as well as other areas of LG work). The thesis then presents evidence that the people who work in LG and SG have differing perspectives on LG, that generally adhere to one or other of the contradictory principles. SG officials tend to perceive LGs as creatures and servants of the state, while LG officials see them as creatures and servants of the local. They generally do not understand the contrary perspective. People with experience in both spheres appear more likely to recognise the existence of both viewpoints than those with experience in only one sphere, although this knowledge does not necessarily help them to resolve the antinomy in any practical way. Chapter 4 describes nine key issues where the perceptions of people with different perspectives on LG and SG contradict one another. These nine issues are then used to structure discussions about the findings from two extensive studies that make up the original thesis research and that is the second, practical theme of the thesis.

Discussion of the methods and findings from the two extensive studies accounts for the bulk of the substantive work presented in the thesis. The first study quantifies environmental and other outcomes from LG implementation of Queensland SG environmental protection legislation. The second study is a qualitative analysis of environmental priorities identified by LGs, and of LG experiences delivering environmental outcomes. Through these studies, the thesis takes both an outside-in and an inside-out approach to explaining LG environmental work in Australia. In this sense, LG are identified as the inside sphere for government, while the SG is one of several outside spheres. Inside-out initiatives are driven by LGs, but impact more broadly. Meanwhile, outside-in initiatives are driven by states but impact on local areas.

Regarding the context for the practical thesis theme, the achievement of sustainable solutions to environmental problems is critically important for the future of Australia and every other society. Australia’s environmental values are suffering extensive degradation as a result of population, management and lifestyle pressures. The study of environmental issues is also a highly complex and dynamic research area, requiring interdisciplinary analysis, long time-frame and flexible research methods (State of the Environment Advisory Council, 1996: WCED 1987). The many attempts made in Australia to deliver environmental outcomes have resulted in fewer major improvements than widely perceived as possible or desirable. This stems in part from the inherent difficulty of solving the often-intransigent problems. Research also
suggests that Australian institutions lack the purposeful design that might enable their systematic and effective pursuit of sustainability (Dovers, 2001).

LG is a fundamental Australian institution with important environmental roles. LG is responsible for over half of Australian government environmental spending despite having a total budget of less than 5% of total government expenditure (Trewin, 2000. p.2; Searle 2000. p.8). Yet Australian LG receives very little attention in the refereed, academic literature (Mowbray, 1997). Even those relatively rare efforts to make sense of LG predominantly take an outside-in perspective, focusing on LG issues as they are defined by regional, state or federal agencies, rather than as they are perceived by local actors. LG environmental efforts have received even less consideration, although a handful of authors have made concerted efforts to raise the profile of these important issues, often producing reviews, discussion papers, training materials and off-the-shelf models, sometimes from an inside-out perspective (see Brown, 1994;1996; 1997; AHC, 1998; Binning et al 1999; Berwick and Thorman 1999 and others). This thesis fills some of the methodological, information and analytical gaps that to date have inhibited widespread understanding of LG environmental issues.

This short introduction to the thesis sets the scene for the remaining discussion. It first defines the key concepts that have already been used in the text above and that follow shortly below. Next, it formalises the major research questions that the thesis seeks to answer. Third, it outlines the thesis structure.

1.2 Key concepts and categories

This thesis integrates a variety of established and novel research methods in analysing the antinomy of environmental local governance in Australia. Despite this methodological pluralism it retains a central focus on discovering grounded theories about its topic. The articulation of analytical concepts and categories to support those theories is central to grounded research methods (Strauss and Corbin. 1990. pp.61-74). Grounded theory and the other methods are discussed in Chapter 4, while the specific research methods developed for the two major (outside-in and inside-out) analyses are presented in Chapters 5 and 7. Each of these chapters discusses the processes used in developing the analytical concepts and categories that have been adopted or discovered during the research process. However the thesis also requires consistent use of those concepts and categories throughout. For this reason, the terms that have already been
introduced here are defined in this section. The tables presented in this section are excerpts from the *thesis category map*, which appears in Appendix 1. That appendix contains the full list of analytical concepts and categories that are developed and used throughout the thesis.

The terminology used to describe the local-state antinomy demands early attention. The terms *outside-in* and *inside-out* have already been used to describe analysis and perspectives on LG environmental work (see Brown, 1996). Those terms are also used in the thesis to describe environmental initiatives, as defined in Table 1.1 below.

Table 1.1 Elements of the antinomy

<table>
<thead>
<tr>
<th>Elements of the Antinomy</th>
<th>Outside-In</th>
<th>Inside-Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perspectives</td>
<td>State government, federal government and other points of view based in spheres of understanding at broader than local scales.</td>
<td>Local government and mixed points of view based in spheres of understanding within local scales.</td>
</tr>
<tr>
<td>Analysis</td>
<td>Research into local government delivery of state or federal government initiatives, where the analytical categories derive from those initiatives.</td>
<td>Research into local government delivery of initiatives that are important in the local area, where the analytical categories are defined in terms of the local issues.</td>
</tr>
<tr>
<td>Environmental initiatives</td>
<td>Attempts originating in state or federal government spheres and excluding local initiatives.</td>
<td>Attempts originating in local areas and those where the initiative came from local, together with broader spheres.</td>
</tr>
</tbody>
</table>

Source: [Appendix 1, Thesis category map](#).

Table 1.2 presents the remaining terms that are used in this introduction. Again, this is an excerpt from the *thesis category map in Appendix 1*. Each time that a new concept or category is introduced in the thesis text, it will also be formally defined in a table such as the ones in this section. The categories are all interconnected, and many are nested together into higher and lower-order categories. This is an inherent and unavoidable feature that enriches the theories that are developed, but also has the potential to confuse the reader. The category map and Table 1.2 are designed to minimise confusion through shading of the higher-order categories and grouping the lower-order categories below them. In addition, every attempt is made to introduce categories in their entire nested groups throughout the thesis. As a result, the formal definitions support the logical flow of the text.
Table 1.2  Categories for local government, theories and environment

<table>
<thead>
<tr>
<th>Concepts and Categories</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Government</td>
<td>The sphere of government that is closest to the people and the environment.</td>
</tr>
<tr>
<td>Governance</td>
<td>The manner, acts and processes of governing, including the government, private and community sectors (UNDP 1997)</td>
</tr>
<tr>
<td>Components of theories</td>
<td>Analytical constructs that comprise the formal articulation of theories.</td>
</tr>
<tr>
<td>Concepts</td>
<td>The labels placed on discrete happenings, events and other instances of phenomena (Strauss and Corbin 1990. p.61).</td>
</tr>
<tr>
<td>Categories</td>
<td>Higher order classifications of concepts, discovered when the concepts are compared against one another, and appear to pertain to a similar phenomenon (Strauss and Corbin 1990. p.61).</td>
</tr>
<tr>
<td>Environment</td>
<td>Comprehensive, dynamic and complex systems encompassing nearly everything, living and non-living. Ecological, social and economic aspects are explicitly recognised here.</td>
</tr>
<tr>
<td>Environmental issue</td>
<td>An environmental problem associated with conflict between people (Conacher &amp; Conacher. p.16).</td>
</tr>
<tr>
<td>Environmental problem</td>
<td>A threat to environmental values with an adverse affect on people (Conacher &amp; Conacher. p.15).</td>
</tr>
<tr>
<td>Beneficial environmental outcomes</td>
<td>The practical, tangible effects of successful efforts to protect environmental values, in the context of current, often degrading environmental values. They do not necessarily imply a practical change to any situation. In this sense, the retention of an environmental value that has been under threat of degradation, is considered a beneficial environmental outcome.</td>
</tr>
<tr>
<td>Environmental value</td>
<td>A quality of physical characteristic of the environment that is conducive to ecological health, or public amenity or safety (from QG 1994. S.9).</td>
</tr>
<tr>
<td>Sustainable environmental outcome</td>
<td>Environmental outcomes that will continue over time.</td>
</tr>
</tbody>
</table>

Source: Appendix 1. Thesis category map.

1.3 Major research questions

This thesis argues the case that Australian LGs can and do deliver some sustainable environmental outcomes. However their capacity to do so is severely limited by a range of issues that can be understood in relation to the local-state antinomy. Four major research questions are addressed in developing this thesis. They are:

- How can Australian LG capacity to deliver beneficial environmental outcomes be understood?
- Within this capacity, what are the environmental outcomes now being achieved by Australian LGs?
- How can Australian local government extend its capacity to deliver beneficial environmental outcomes?
environmental outcomes? and

- What are the implications of the local-state antinomy on Australian LG capacity to deliver beneficial environmental outcomes?

The thesis does not explicitly tackle the question of why some LGs do not make attempts to deliver environmental outcomes, preferring to focus on the experiences of those that do. The focus was restricted to avoid too great a scope for a study with limited means. It was also thought that any steps taken to resolve constraints to LG environmental effectiveness might help to encourage other LGs to take similar action.

1.4 Research principles

In addition to the overall thesis and major research questions, several principles have been consistently applied throughout the research and write-up. These are also worth introducing since they explain much of the content, structure and presentation of the thesis.

The thesis addresses a primary goal of producing research that is directly useful to LG environmental practitioners. In many ways, this is a natural extension of the topic itself. The third research question makes it clear that the thesis is interested in improving LG environmental capacity. But LGs are extremely practical institutions and few people who are involved with LGs have the time or inclination to read weighty research reports such as PhD theses. Adopting this primary goal of practical value meant finding ways to bridge that gap and make the research accessible, interesting and relevant to LGs. The topics and presentation of the two major studies are a direct result of this goal. The first component of the outside-in study was a product delivered under contract to a specific LG. Guidance on how to ensure its value to that LG was written into the contract and reinforced during project meetings. The inside-out study is presented in three parts – two thesis chapters and the case studies that form Appendix 4. The case studies in the appendix are produced as stand-alone stories complete with references, pictures, and technical details necessary for source LGs to demonstrate their achievements, and for other LGs who read them to take action along similar lines. This principle led to the decision to produce the CD-Rom that forms part of this submitted thesis, and can also be produced cost-effectively to be given to each contributor. The author also gave many presentations to LG practitioners and others during the course of
the thesis research, as a way of addressing this principle. As well as being well-received by audiences, the responses assisted the development of the thesis ideas and arguments.

A second research principle was to be respectful of LG situations, accommodating LG interests wherever possible. One impact of this principle was that each LG area that is included in this thesis was visited by the researcher, and LG practitioners were interviewed on-site. This avoided a common difficulty faced by LG practitioners confronting mailed surveys and other ‘distant’ research tools which can fail to pick up on key local issues, and may seem irrelevant in local settings. It also enabled the research themes to be developed gradually as the visits proceeded, and tested through discussions with LG practitioners in different settings. LG practitioners were typically very happy to meet face-to-face in their local area to discuss their environmental issues, and often expressed pleasure and satisfaction at the chance to reflect on their experiences within settings that they could define. Another outcome from the principle of respect was the ongoing contact that was maintained with contributors. For the outside-in research, this relationship was formalised through the contract, and continued through further development of a risk assessment method that emerged from that study. For the inside-out research it meant that each case study was written in consultation with at least one LG practitioner, and many are co-authored. All case studies are being provided to the LGs who have been involved with this thesis so that they may put them to further use. In both cases, the ongoing relationships brought an action-research element into the thesis and this is discussed further in Chapter 4 (see Homan 1991 for a detailed discussion on the ethics of social research).

A third research principle was to recognise indigenous Australian communities. Chapter 2 argues that indigenous Australians were the first local authorities and that they remain important stakeholders in formal LGs across the country. This principle also makes sense because LG is the sphere of government that is most accessible to indigenous Australians, with over 13 per cent of the current formal LGs being indigenous. This principle led the researcher to visit and stay in many indigenous communities throughout Australia. Indigenous issues however proved too different and complex to be effectively covered by much of the original research in the thesis. They are recognised in the typology of LG that is proposed in Chapter 2, discussed briefly in that chapter, and presented in one of the case studies. But even these minor efforts have

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1 Tj on the Mirrar’s struggle to avoid uranium mining at Jabiluka in the Northern Territory.

1. Introduction
been interesting to this author and may also help others to see indigenous and other LGs in context.

1.5 Thesis structure

Part one of the thesis comprises its literature review and overall methodology and lays the foundations for the original thesis research. The thesis has a two-chapter literature review that develops arguments for both principles involved in the local-state antinomy, and also shows that the first two research questions have not previously been posed or answered. Chapter 2 introduces Australian LG, outlining its history, its structure, the rapid changes that it is currently undergoing and some of the systemic constraints to its effective operation. It also proposes a simple typology of LG that establishes the analytical categories for LGs that are used in the remainder of the thesis. Chapter 3 discusses Australian environmental local governance, outlining the many important environmental roles played by LGs, and the major constraints and opportunities that they face. Together, these chapters detail the context within which LGs perform their environmental roles and the paucity of scientific knowledge about LG environmental efforts and outcomes. This discussion supports the decision to adopt a grounded theory methodology, together with a range of specific methodologies designed to find out how LG capacity to deliver environmental outcomes can be understood, and what outcomes are being achieved. Chapter 4 outlines the grounded theory approach to the original research presented in Part 2 and the plurality of other methods that are integrated into the grounded framework.

Part 2 presents the two major thesis studies and is both descriptive and analytical. Chapter 5 details the methodology for the outside-in study of Queensland LG implementation of the Queensland Environmental Protection Act 1994 while Chapter 6 discusses the findings. Chapter 7 presents the comparative case study methods developed for the inside-out study whose findings appear in Chapter 8. There are other important differences between these studies, beyond their outside-in and inside-out focus. The first was undertaken as a series of consultancy projects and is predominantly quantitative. The second was self-funded through the profits from the outside-in study, is predominantly qualitative and has an Australia-wide focus, involving 34 case studies from four states and both Australian territories. These and other features are discussed further in Chapter 4.
Chapter 9 synthesises the findings from Part 2. This chapter presents the grounded theories that were discovered to explain LG environmental efforts and outcomes in ways that integrate outside-in and inside-out perspectives and attempt to transcend the local-state antinomy. In doing so, this chapter tackles the predictive third major research question posed in the thesis. The overall thesis structure is pictured in Figure 1.1.

The thesis also includes four appendices. Much of the detail of each appendix is presented on the accompanying CD-Rom, rather than as printed material. A summary of all documents on the CD-Rom is presented at the start of the appendices. In summary, the appendices entail:

- **Appendix 1: Categories and tools** - Thesis category map is printed, with N-vivo software and instructions included on CD-Rom.
- **Appendix 2: Research** – These documents, relate to the overall research effort including any relevant material from Part 1 of the thesis. Material in this appendix is summarised or presented in the thesis text and on the CD-Rom, rather than being included in this printed document.
- **Appendix 3: Environmental risk studies** – Again, none of this material is printed here. The Appendix on the CD-Rom includes publications, methods and data from the Brisbane City and Queensland statewide benchmarking studies and some other relevant documents that are discussed in Chapter 6.
- **Appendix 4: Comparative case studies** - 34 case studies of LG attempts to deliver environmental outcomes. These comprise the primary data for the discussion of the inside-out research in Chapter 8. All of these documents are included in this printed version, as well as on the CD-Rom. The CD-Rom also includes the N-Vivo database containing the case studies, and the results of the qualitative analysis.

### 1.6 The end of the beginning

This introduction has presented the starting points for this thesis’ analysis of LG capacity to deliver environmental outcomes. It has started a discussion on the importance of LG as an environmental manager in Australia, and has suggested that the study of environmental local governance is underdeveloped. It has introduced the two major studies that are reported on in this thesis, and has defined the concepts of outside-
in, and inside-out approaches to perception and analysis of LG. It noted that this
distinction underpins the two major studies presented in the following chapters. The
story of the research has also been told, highlighting the personal journeys that have
shaped the formal analyses that make up the remainder of this work.

As you read the remainder of the thesis, you may wish to remember that every
environmental issue occurs in a local area. People who live, grow, work, play and die in
every part of Australia care deeply about their local environments, mourn when
environmental values are lost and celebrate when improvements are gained. Local
environmental governance is inherently important to all of us, as it anchors us to our
homes and shapes the perspective from which we view the world. This thesis covers a
powerful, and almost unexplored analytical territory that will enrich Australians if it can
be better understood, and the antinomy of environmental local governance resolved.
1. Introduction

- Research questions
- Principles
- Structure and outline

Part 1: Thesis foundations

2. Introduction to Australian Local Gov’t
   stable features, reforms, regions, analysis

3. Australian LG and the environment
   spheres, finance, planning, management, protection

4. Research processes and methods
   Overview, science, action research, grounded theory, symbolic interactions

Part 2: Methods and findings from two studies

Environmental risk studies

5. Environmental risk study methods
   State and local government issues, benchmarking study overview, sample selection, developing the risk assessment method, assessing other outcomes

6. Environmental risk study findings
   Findings relating to each of the nine elements of the local-state antinomy

Comparative case studies

7. Comparative case study methods
   Defining features, case study components, selecting cases and interviewees, environmental strategists, accountability, accuracy, partnership, coding and categories

8. Comparative case study findings
   Findings relating to each of the nine elements of the local-state antinomy

9. Conclusions
   Reflections on the antinomy, ways to understand LG capacity, Nature of environmental outcomes achieved, Improving LG environmental capacity
Part 1

Thesis Foundations
Chapter 2. An Introduction to Australian Local Government

2.1 Introduction

LG is a fundamental and environmentally significant sphere of government in Australia. While this has been recognised by many authors and agencies, there is little in the academic literature that explores LG environmental capacity both broadly and in depth. Such an exploration must start with an understanding of the institution of LG in Australia. This chapter aims to provide that understanding. It discusses relevant academic texts and government documents that give insight into the features of Australian LG that influence its capacity to deliver beneficial environmental outcomes. It also discusses the absence of universal indicators to report on LG performance of its functions, defined either from the outside-in or the inside-out. This absence is part of the reason for the use of grounded research methods for the thesis, as discussed in Chapter 4.

The chapter starts by discussing the local-state antinomy in Australia. That is that LG is a creature of the SGs, while simultaneously being a creature of local communities and their environments. These contradictory roles are discussed, and a heuristic diagram presented to demonstrate outside-in and inside-out perspectives on LG. This section also explains how the thesis structure enables an exploration of both sides of the local-state antinomy, so that grounded and practical conclusions may be drawn about its impacts. It also defines the analytical category of perspectives on LG issues.

Section 2.3 examines the historical and statutory context of LG in Australia. This includes LG formation by colonial authorities, well before the constitution of the Australian Federation. It also explores LG relations with SGs, its representation by LG Associations (LGAs), the common range of powers and responsibilities held by LGs Australia-wide and the variations in LG roles between states. This section also defines analytical categories for LG roles.

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1 Note that Sections 2.2, 2.3, 2.4, 2.5, and 2.8 expand on my ‘Local Government’ chapter in a refereed book, on *Australian Experiences in Processes and Institutional Arrangements for Resource and Environment*. Many thanks to Land and Water Australia, who funded that project (Dovers and Wild River (eds), forthcoming, 2002).
Section 2.4 introduces the theme of LG reform. It describes the many fundamental changes that have recently occurred in Australian LG, and that have the potential to profoundly influence LG environmental management. In many cases, similar reforms affect LGs in all Australian states, but policy detail and implementation strategies vary markedly between them. National Competition Policy reforms, LG amalgamations and corporatisation are examined as important examples of both the scale of change and the interstate variations in implementation. This section also reports on efforts to define and adopt LG performance indicators.

Section 2.5 is a brief discussion on indigenous local governance. This raises some fascinating, complex and environmentally important issues. For instance, the presence across Australia of 97 LGs with mostly indigenous councillors, servicing largely indigenous communities, clearly shows that LG is the sphere of government that is most accessible to indigenous Australians. Much of Australia’s desert and rangeland areas are managed by aboriginal local authorities. However these issues are worthy of an entire thesis, and other than one case study, indigenous issues have been beyond the scope of this thesis.

An environmentally significant area where ongoing reforms affect LG is in the myriad of regional arrangements across Australia. Section 2.6 describes issues facing LGs in regional arrangements. The section uses Noosa Shire Council, on Queensland’s Sunshine Coast, to demonstrate the inconsistency of regional arrangements facing LGs, and discusses the general implications of these.

As well as making sense of the structures and processes affecting LG operation, this thesis also relies on comparisons of LG characteristics, within and between states for both its sampling and analysis. Section 2.7 develops a typology of Australian LG that is applied throughout the thesis for this purpose. The section reviews the Australian Classification of LGs and remoteness classification, then proposes an alternative typology of more relevance to this research which is then applied throughout the thesis. The section presents a map of the LG types, and statistical analysis of geographic, population and wealth of Australian LGs, along with a map showing the locations of each LG type. It defines analytical categories for the LG types and their defining features, based on that statistical analysis.

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2 T1, on the Mirrar resistance to the Jabiluka mine in the Northern Territory. See Chapters 7 and 8, and Appendix 4.
Section 2.8 gives an overview of academic discourse related to the topic of LG environmental work. This is not intended to be a complete review of all potentially relevant literature. This is partly because this research aims to be highly practical, meaning that government documents were often the most relevant. The scarcity of academic literature related to the thesis’ key research questions also led to the decision to adopt an analytical framework based on grounded theory methods, as is discussed in Chapter 4. That methodology requires the application of techniques to discover analytical categories and relationships, which are then compared with the theories in relevant academic texts. So the academic literature that is cited has a focus on those areas of research that proved particularly valuable to this research during the grounded theory development. The literature that is covered includes relevant, recurring themes from policy and institutional studies.

2.2 Statutory basis of the local-state antinomy

The local-state antinomy has already been briefly introduced. That is, the contradiction between the two compelling principles that:

- Australian local governments are statutory agencies of Australia’s state governments, with no power or authority beyond that which is ascribed to them by the states; and
- Local governments in Australia are independent agencies whose authority and capacity transcends their regulatory powers by nature of their attachment to their local areas.

This thesis is structured around the local-state antinomy because it considers that many problems in intergovernmental relations involving LGs stem from a widespread failure to acknowledge, understand and work sensitively with both sides of the antinomy. The thesis does not attempt to resolve the antinomy, but instead to use it as a analytical construct to discover concepts about LG environmental capacity that make sense on the basis of both the outside-in and inside-out principle. This section presents a model of LG that identifies separations and functional linkages between the inside and outside of Australian spheres of government. It also discusses some insights from academic discourses that assist an understanding of the local-state antinomy.
The outside-in principle has solid legal and practical foundations. Every Australian LG exists as a result of its formal constitution by SG legislation, and will cease to exist if written out of that same legislation. As a common law principle, LG has no formal roles beyond those that are prescribed for it by the SG. LG capacity to fulfil its responsibilities also relies on SGs and the Federal Government (FG), which help to fund LG work and which establish and enforce standards for LG operation. Appeals against LG practices or decisions are decided outside of LGs, by SG judicial systems or ministers. When SGs initiate new roles for LGs they frequently rely on national or international models, rather than on lessons from local areas. And when they evaluate LG efforts, they use criteria deriving from the state or broader spheres. (These issues are dealt with further in Sections 2.3 and 2.4.)

Many analysts of Australia’s public institutions implicitly subscribe to outside-in perspectives on LG. Many authors ignore LG roles completely (see for example Davis et al 1988). Otherwise LG issues are seriously downplayed and seen “as being of little significance” compared with SGs and Federal Governments (FGs) (Aitkin, Jinks and Warhurst 1989. p.54). When LG is mentioned, many scholars respond to its diversity and complexity by providing untested generalisations from limited case studies, or by avoiding serious theoretical debates. Others restrict their theories about LG operation to the scope of State and Federal Government legislation and policies affecting them (Mowbray 1997).

There are equally strong arguments to support the inside-out principle, although these have received less attention. LGs may be constituted by SGs, but they derive their authority and personnel from local settings. The decision makers in LGs are the democratically elected councillors who must live in the local area. Councillors usually perceive themselves as operating at a level between the local community and the LG as a whole, working to lead, inform, and correct (and sometimes ignore) communities. They also represent community needs to, and review the performance of, the remainder of their LG on behalf of local residents (Newnham and Winston 1997). Councillors hold the responsibility for appointing the most senior council staff member (the Chief Executive Officer), who in turn is responsible for appointing other council staff. LGs perform and evaluate their own work with reference to its perception by local residents, rather than its description in SG legislation (see LGAQ 1997a). There are also examples in Australia of SGs meeting powerful local resistance when they have tried to use their statutory powers to dismantle LGs (see Section 2.4). There is substantial anecdotal
evidence that LGs respond most immediately and strongly to local needs and issues, and that SGs do not understand this. It was the recognition of this that led to the adoption of the local-state antinomy as a central conceptual theme for the thesis\(^3\).

Figure 2.1 is a heuristic diagram to help readers to picture the inside-out and outside-in perspectives. The series of circles represent Australia’s spheres of government. The figure takes any local environment or community as its hub, and shows the many layers of public agencies, involved in governing environments, that are encountered looking out from any local perspective, or in from the FG. In addition to the LGs, SGs and the FG, this figure includes spheres for LGAs and for regional organisations. These organisations are discussed further in Sections 2.3 and 2.6.

Figure 2.1 also shows some of the practical linkages between the inside and outside spheres. These include the agencies that are represented across several spheres of government. Such agencies can connect individuals on the inside and outside, and support consistent approaches to policy implementation across the spheres. Regardless of the sphere in which they work, members of the same peak body will have had similar training, be bound by the same professional obligations and may meet regularly for conferences and other in-service information sessions that provide a degree of coherence across the spheres.

\(^3\) Chapter 4 presents original research into this issue.
A range of perspectives on LG issues is evident in Figure 2.1 and it is most logical to introduce these analytical categories here. Table 2.1 defines four different perspectives on LG. Inside perspectives are covered by the LG and other categories. Outside perspectives are covered by the state and federal government category. The mixed category includes those people who demonstrate both inside-out and outside-in...
perspectives. This category is particularly important, since it identifies those people whose perspective could provide them with insights necessary to integrate the two sides of the local-state antinomy. These perspectives are explored further in relation to the antinomy in Section 4.5.

### Table 2.1 Analytical categories for perspectives on LG issues

<table>
<thead>
<tr>
<th>Categories</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perspectives</td>
<td>The point of view or conceptual framework of a person that provides their insight into local environmental issues.</td>
</tr>
<tr>
<td>Local government</td>
<td>Includes those people who have held formal roles in LG, and in no other sphere of government.</td>
</tr>
<tr>
<td>Mixed</td>
<td>People with experience working in LG associations, or have held formal LG roles and worked in at least one other sphere of government. Includes people who have worked in LG and regional, state or federal government.</td>
</tr>
<tr>
<td>State and federal government</td>
<td>People who have worked in state and/or federal governments, but not in local governments.</td>
</tr>
<tr>
<td>Other</td>
<td>People who have not worked in any form of government.</td>
</tr>
</tbody>
</table>

Source: Appendix 1. Thesis category map.

Existing literature in policy studies provides models similar to the outside-in and inside-out analysis. Similar models to the former include top-down or forward-mapping with bottom-up or backward-mapping approximating the inside-out approach (see Elmore 1982; Sabatier 1990; Dahl 1995). According to the literature the approaches similar to the outside-in perspective start with a policy decision by a Commonwealth or SGs, and then consider the consistency of outcomes with policy goals. This approach is recognised for its value in determining the effectiveness of LG delivery of state- or federally-determined environmental initiatives. Outside-in theorists have proposed six variables that they argue are sufficient and generally necessary conditions for effective implementation. These are: clear and consistent objectives; an adequate causal theory; a well structured implementation process; committed and skillful implementing officials; support of interest groups and sovereigns; and relative stability in surrounding socioeconomic conditions (Sabatier 1990). Such issues are dealt with in the outside-in study reported in Chapters 5 and 6.

Approaches similar to inside-out analysis focus on system elements such as implementation structures, described as "clusters of parts of public and private organisations" (Hjern and Porter 1981). This approach is instructive in its primary focus on implementing agencies such as LGs. It also supports recognition of times when
events don’t match statutes, and aims to discover the reasons for this. The main flaw of these equivalents of an inside-out analysis is a lack of a coherent methodological or theoretical framework that can be consistently applied in different circumstances (Sabatier 1990). The comparative case study method that was developed in this research, detailed in Chapters 6 and 7, specifically aim to provide such a framework.

A final point in this discussion of the local-state antinomy is the need to ensure that this analytical framework does not inhibit recognition of processes that integrate effectively between inside-out and outside-in issues. Forces focused inside, outside, and those aiming to integrate across the antinomy are defined in Table 2.2.

Table 2.2 Analytical categories for forces affecting the local-state antinomy

<table>
<thead>
<tr>
<th>Categories</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antinomy forces</strong></td>
<td>The source or target of a shift that stimulates or is caused by any part of an attempt by a LG to deliver an environmental outcome, expressed in terms of the local-state antinomy.</td>
</tr>
<tr>
<td><strong>Inside</strong></td>
<td>A force originating from or focused within the local area, including within the LG.</td>
</tr>
<tr>
<td><strong>Outside</strong></td>
<td>A force originating from or focused outside of the local area, excluding the LG’s particular concerns.</td>
</tr>
<tr>
<td><strong>Integrated</strong></td>
<td>A force that integrates efforts and initiatives within and outside the local government area, and that therefore seeks to provide a practical solution to the local-state antinomy.</td>
</tr>
</tbody>
</table>

Source: Appendix 1. Thesis category map.

The local-state antinomy can readily be observed in many of the relations and conflicts between LGs and SGs, and in the contradictory perceptions held by those agencies of the roles, responsibilities and ideal operation of LGs. The combination of outside-in and inside-out studies presented in this thesis aims to strengthen the bases for mutual understanding between spheres of government, thus reducing conflict arising from the antinomy.

2.3 Local government in statutory and historical context

This section gives a very brief outline of the statutory and historical context of LG in Australia and of the stable features that underpin Australian LG. It also formally defines the analytical categories of perspectives on LG issues and roles within LGs.
Australia’s earliest formal LGs (usually called municipalities) were constituted by the statutory authorities governing the English colonies, in what are now Australia’s state capital cities. Although the eastern seaboard was colonised first, the earliest LGs were established in Western and South Australia in 1838 and 1840. Municipalities were first established for Sydney and Melbourne in 1842 and in Hobart in 1846. From the outset, the LGs were established both in response to the inside-out demand for local democratic representation, and to provide essential services for developing, and often remote parts of Australia, that could not be adequately provided from outside by the central authorities. Australian LGs were modeled on the English equivalents, but the models generally needed significant adjustment to Australian conditions. The early systems for LG were frequently short-lived and problematic due to small populations, large areas, and mismatches between LG powers and resources. Debates about the taxes and charges that would be gathered by each of these first two spheres, and the range of powers undertaken relating to those taxes, have continued since these earliest days of Australian LG (Power, Wettenall & Halligan 1981, pp.7-15).

Permissive systems, where SGs provided powers to enable communities to initiate LG from the inside were established early on in many states. The permissive systems entrenched different funding and service provision arrangements between areas with and without LGs. These systems were particularly problematic in Queensland, where very few LGs had been formed, and then in the 1860’s, petitioners sought to establish three strong regional governments that would have threatened the central SG authority. Such complications and threats lead to compulsory LG gradually being established in each state, although a voluntary system still exists in Australia’s Northern Territory (Power, Wettenall & Halligan 1981, pp.7-15 and Tucker 1981, pp.379-381).

In 1901, the state governments formed a federation to cover the entire country, and Australia’s FG system commenced. Written by the SGs, Australia’s Constitution passes only a discrete set of powers onto the FG, based on the issues that were considered to be of national importance at the time of federation. Given the developing and diverse systems of LG throughout the country, and their ‘minor’ functions, it is unsurprising that no mention of the smallest sphere appears in the Constitution. FG officials and other interested parties have made many attempts to forge direct relationships between the FG and LGs in the ensuing century, but the initiatives have not been successful. Consequently, SGs have always been, and remain, the statutory authority underpinning LG (and FG) affairs (see Australia 1988: Chapman 1997).
Since SGs exert statutory control over LG numbers, powers, resources and other key features, there is great potential for disempowerment of the smallest sphere. SGs can also be disempowered in relation to LG, since they face difficulties in communicating effectively about policy development and implementation with the many and varied LGs in their jurisdictions. The state, regional and national Local Government Associations (LGAs) that have gradually been established in each state provide some solutions to intergovernmental communication and advocacy problems between LG and SG. Elected members of all Australian LGs are represented by the LGAs. However the LGAs have no formal authority over SG dealings with LGs and instead must rely on negotiation and lobbying in their representation of LG issues.

Many LG powers, structures and functions are consistent and distinctive across Australia. An analysis of Australia’s separation of powers sheds some light on this. All LGs lack judicial powers, and rely on state courts for legal rulings. LG legislative functions are undertaken by elected councillors, including a senior councillor (referred to as 'mayor' in this Thesis). Executive powers in LG are overseen by chief executive officers (CEOs - although the title differs between states) appointed by the council. This is the only executive position in many of the smallest LGs, but larger ones employ managers and officers for policy development and a mix of officers and contractors for direct service delivery. These are usually grouped within departments including finance and administration, engineering, planning, environmental health, and many more in larger LGs. Direct contact between individuals in each of the legislative and executive roles is common throughout LG, but in no other tier of government. Table 2.3 formally defines the analytical categories used in this thesis to refer to the different roles within LGs. These include sub-categories for different types of elected officials, managers and officers.
Table 2.3 Analytical categories for LG roles

<table>
<thead>
<tr>
<th>Categories</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Roles</strong></td>
<td>Formal positions held within a LG that influence available options for tackling environmental issues.</td>
</tr>
<tr>
<td><strong>Elected</strong></td>
<td>Local government officials that are elected to legislative roles.</td>
</tr>
<tr>
<td><strong>Mayor</strong></td>
<td>The most senior elected official (also known as President, Chief Minister).</td>
</tr>
<tr>
<td><strong>Councillors</strong></td>
<td>All elected local government officials other than the Mayor.</td>
</tr>
<tr>
<td><strong>Council</strong></td>
<td>The entire group of elected officials in a single local government. The legislative part of the local government.</td>
</tr>
<tr>
<td><strong>Manager</strong></td>
<td>A senior officer, working with executive powers, accountable for delegated responsibilities.</td>
</tr>
<tr>
<td><strong>Chief Executive Officer</strong></td>
<td>The most senior manager in any LG (also known as general manager and town clerk).</td>
</tr>
<tr>
<td><strong>Other manager</strong></td>
<td>Managers other than the Chief Executive Officer.</td>
</tr>
<tr>
<td><strong>Officer</strong></td>
<td>An official working with executive powers, accountable to a manager.</td>
</tr>
<tr>
<td><strong>Environmental</strong></td>
<td>An officer working in any area with direct environmental relevance (including environmental officers, environmental health officers, environmental planners and others).</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>Any officer who is not involved in environmental work.</td>
</tr>
</tbody>
</table>

Source: Appendix 1. Thesis category map.

Many LG managers and officers usually administer several, and sometimes very many, separate statutes, and in associated liaison with relevant state or federal government departments. In contrast, officers and managers in line-departments of the SG or FG will generally only be involved with one or a very small number of strongly related laws. This means that although LGs are not empowered to develop state or federal laws, they are the sphere of government that is most involved in integrating laws during their implementation, and will often be acutely aware of discrepancies or other mismatches between different laws. It is worth noting that Australia’s federal and state constitutions support such discrepancies by allowing for responsibilities to be ‘allocated in appropriate ways’, rather than divided up exactly (Galligan and Fletcher. 1993. p.3).

However the Australian LG Accord, and other agreed protocols between State and LGs, emphasise the need to more clearly define and rationalise LG roles responsibilities (ALGA 1998a, S.3.7).

LGs are politically complex and distinctive. The issues that matter most to different LGs relate to local features such as population and geographic size, main economic activities, location (for example, remoteness), environmental and other unique features. Active commitment to these issues of local importance tends to be the motivator for

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community members to stand for local elections. This means that elected councillors tend to be committed to positions on key local issues, rather than being attached to any formal political party. It is only in Australia's capital and other large cities that party politics are powerful at the local level (see Chapman 1997). LGA conferences are the LG equivalent of parliament, but they operate very differently. Since highly varied local issues, rather than party politics, are the strong influences in local politics, the voting blocs at the LGA conferences tend to be issue specific, and alliances shift with the issues. The likelihood that LG representatives will agree on many issues, even when they disagree on some, can make for quite congenial relationships across political, geographic and other spectrums, compared to partisan state or federal parliaments.

Some key LG features also vary considerably between states in ways that affect LG generally and environmental capacity in particular. For instance, the democratic election of LG councillors is a key pillar of their legitimate powers for managing local areas. Yet voting in LG elections is not compulsory in Western Australia, South Australia and Tasmania. Voter turnouts in the most recent LG elections were 42%, 40% and 58% respectively in these states (see Table 2.4 for figures and references). Voting is also not compulsory for non-resident ratepayers and rate-paying lessees in New South Wales. Another example of interstate difference lies in the land areas governed by them. LGs govern continuous tracts of land in all Australian states. However in the Northern Territory LGs are constituted mainly for many community centres and the small areas surrounding them. Remote parts of South Australia and New South Wales also lack a specific local sphere of government (see Figure 2.3, discussed later in this chapter).

LG roles vary considerably within and between states, and have also increased over recent decades. General competence powers from each jurisdiction’s LG Act are presented in Table 2.4. Some roles are undertaken as statutory requirements. Others are optional, and undertaken through adoption of local laws, or as voluntary initiatives. Roles that LGs generally take on include:

- public works and services such as road and bridge construction;
- community services such as street lighting, public toilets, car parks and campsites;
- community development;
- public order and safety such as fire prevention, animal protection and beach patrol;
- health services such as immunisation and infectious disease control;
- welfare services including meals-on-wheels, child care and emergency care centres;
- housing and community amenities for people with special needs;
- recreation and cultural facilities including swimming pools, parks, reserves, cultural heritage sites and pathways; and
- trading systems and other involvement in fuel, energy, transport and communications (Power, Wettenall and Halligan 1981; McNeill 1997).

One of the ironies of Australian LG is that the smallest, poorest and most remote LGs tend to fulfil many more roles than their better-resourced counterparts in the larger centres. This is because LGs are often the only government agency represented in many remote communities (other than the police that are also present in many). So LGs in those areas also responsible for supplying housing, power, water, sewage, medical and other services. In doing so, they are likely to deal with over 30 different state or territory-level and FG departments (RAMP 1997).

Australian LG functions are also internationally distinctive for their limitations. For instance the provision of police, school and hospital services that are provided by LGs in other countries such as Britain and the United States are not provided by Australian LGs. This is despite several of these issues having been within the mandate of the earliest LGs (Power, Wettenall & Halligan 1981, pp.7-15).

Finally, it is worth noting that many of the challenges facing LGs are also fairly consistent throughout most of the institutions. Key among these are the chronic resource shortages facing most LGs, and especially the smaller ones. Over 50 per cent of LG funds are gathered through land taxes, or rates (NOLG 1998, 2001). These are notoriously unpopular taxes, and community outrage usually follows any attempt to raise rates, to pay for improved or new services. Rate capping by SGs is also increasingly occurring, has not helped LGs, and has the capacity to cause long-term problems for LG operation (Wensing 1997).

LGs are often also constrained due to inadequate statutory powers, lack of technical expertise or knowledge about problems, and lack of time to adequately address them. LGAs have strong policy platforms of ensuring that new LG requirements are fully funded, but this is rarely achieved, and in many cases, the continual increase in LG roles and responsibilities is placing considerable strain on LGs (ALGA 1998a).

Table 2.4  Local Government Legislation

<table>
<thead>
<tr>
<th>State/Territory Act</th>
<th>Voting obligations</th>
<th>General competence powers</th>
</tr>
</thead>
</table>

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<table>
<thead>
<tr>
<th>Location</th>
<th>Act Title</th>
<th>Voting Requirement</th>
<th>Objects of Act</th>
</tr>
</thead>
<tbody>
<tr>
<td>Queensland</td>
<td>Local Government Act 1993 (QG 1993)</td>
<td>Compulsory</td>
<td>“The objects of this Act include – (a) providing a legal framework for an effective, efficient and accountable system of LG; and (b) recognising a jurisdiction of LG sufficient to allow a LG to take autonomous responsibility for the good rule and government of its area with a minimum of intervention by the State; and (c) providing for community participation in the LG system…” (S. 2)</td>
</tr>
<tr>
<td>Northern Territory</td>
<td>Local Government Act 1993 (NTGa 1993)</td>
<td>Compulsory</td>
<td>S. 120. “A Council in the performance of its function is charged with the peace, order and good government of its Council area and has the control and management of that good government”. (S. 120)</td>
</tr>
<tr>
<td>Western Australia</td>
<td>Local Government Act 1995 (WAG 1995)</td>
<td>Not Compulsory</td>
<td>“The general function of a LG is to provide for the good government of persons in its district…. A liberal approach is to be taken to the construction of the scope of the general function of a LG” (S. 3.1).</td>
</tr>
<tr>
<td>South Australia</td>
<td>Local Government Act 1999 (SAG 1999)</td>
<td>Not Compulsory</td>
<td>“A Council is, under the system of LG established by this Act, established to provide for the government and management of its area at the at the local level, and in particular… e) to manage, develop, protect, restore, enhance and conserve the environment in an ecologically sustainable manner and to improve amenity” (S. 6)</td>
</tr>
</tbody>
</table>
| Victoria | Local Government Act 1989. (VG 1989) | Voting is compulsory for enrolled residents, but not compulsory for non-resident landowners. (S. 40) | “(1) The purposes of a Council are—
   a) to provide for the peace, order and good government of its municipal district; and
   b) to facilitate and encourage appropriate development of its municipal district in the best interests of the community; and
   c) to provide equitable and appropriate services and facilities for the community and to ensure that those services and facilities are managed efficiently and effectively; and
   d) to manage, improve and develop the resources of its district efficiently and effectively.” (S. 6) |
| Tasmania | Local Government Act 1993 (TG 1993a) | Voting is not compulsory. S. 254. (1) Any person is entitled to vote in an election in a municipal area if the person is enrolled on the electoral roll for the House of Assembly in respect of an address within that municipal area. In the 2000 LG elections, an average of 58% of enrolled electors voted (TEC 2000). | (1) “The council of a municipal area has the following functions:
   a) to formulate, implement and monitor policies, plans and programmes for the provision of appropriate services and facilities to meet the present and future needs of the community;
   b) to facilitate and encourage the proper planning and development of the municipal area in the best interests of the community;
   c) to manage, improve and develop efficiently and effectively the resources of the council;
   d) to develop, implement and monitor strategic plans for the development and management of the municipal area;
   e) to provide for the health, safety and welfare of the community;
   f) to represent and promote the interests of the community;
   g) to provide for the peace, order and good government of the municipal area. (S. 20). |
| New South Wales | Local Government Act 1993. (NSWG 1993). | S. 286. Compulsory with exceptions. “Electors on the residential roll must vote at a contested election unless exempt…. Electors on the non-residential roll or the roll of occupiers and ratepaying lessees may vote, but are not required to vote.” | 1) A council has the following charter:
   a) to provide directly or on behalf of other levels of government, after due consultation, adequate, equitable and appropriate services and facilities for the community and to ensure that those services and facilities are managed efficiently and effectively;
   b) to exercise community leadership;
   c) to exercise its functions with due regard for the cultural and linguistic diversity of its community;
   d) to properly manage, develop, protect, restore, enhance and conserve the environment of the area for which it is responsible;
   e) to have regard to the long term and cumulative effects of its decisions.” (S. 6) |

Note: all legislation is described as in force September 2001.
2.4 Local Government Reforms

LGs throughout Australia have been the subject of a major reform process over the last decade. Changes have often been imposed from outside by SGs, frequently with instigation from the FG, but input and even drive from LGs and LGAs has also regularly occurred. This section explores some of the major changes to the institution of Australian LG over the last decades. Although LG environmental work is not discussed here, the section focuses on those issues with environmental implications.

Since 1989, all States have commenced new LG Acts. In comparison with their predecessors, these provide wider general competence powers, set clearer accountability mechanisms, reduce detailed prescriptions, and provide the framework for microeconomic and other reforms (see Table 2.4 above, and Wensing 1997 pp.90-91 for general comments). The changes reflect and encourage a more autonomous, strategic and responsible approach to LG compared to the traditional, relatively rudimentary administration of infrastructure and services. Several of the Acts refer specifically to LG roles in providing for community participation, and for sustainable development of local areas.

LGs throughout Australia are now also required to develop strategic and holistic visions for their local areas through corporate planning processes involving consultation, review and accountability mechanisms. These types of changes have a profound influence on the potential limits of LG roles. There is a common law principle that bodies created by statute can only do those things for which there is expressed or implied legislative authority, or which are reasonably incidental to those acts (Lonie and Bryant. 1989). Modern LG Acts place almost no constraints on the limits of LGs roles, with the constraints tending to come from the inside, in the form of financial limits and political interest.

The National Competition Policy has impacted heavily on LG, since each State has passed legislation ensuring that LGs, along with other public agencies, identify and avoid anti-competitive behaviour (CofA 1996, pp. 36-37). Different States have embarked on the reforms with varying verve. In Victoria for instance, the Kennett Government worked from the outside to establish tough annual targets for proportions of Council expenditure to be subject to compulsory competitive tendering, and most achieved the 1996-97 target of 50 per cent (NOLG 1996-97, pp. 150-153). In contrast,
Queensland took a gradual and consultative approach that considered LG inside-out issues, initially requiring only the 17 largest councils to conduct a public benefit assessment into the possible corporatisation and commercialisation of their significant business activities. Definitions of types of activities that could require such assessments were provided, with transparent and accountable decision-making processes providing the safeguard to ensure that the LGs followed up their assessments with appropriate decisions about whether to proceed with competitive tendering. Most Queensland LGs are required simply to identify activities that compete with the private sector, and then decide whether these should be subject to a Code of Competitive Conduct (QG 1996).

Changes aimed at enhancing the competitive efficiency of LGs have encouraged them to reconsider both the functions they perform and the way they perform them. Many have also divested themselves of some basic operational service delivery. SGs have also provided statutory opportunities for private operators to become certified and compete to perform many traditional LG roles, such as building approval. Debates about the types and importance of values that are saved and lost in these processes are ongoing, and issues such as job opportunities for locals and quality of the work performed are not resolved to the satisfaction of all stakeholders (Phillips 1998). However in Victoria, where the changes have been most extensive, many report an increased flexibility with opportunities to determine and achieve policy outcomes that were previously not even considered. Publications such as *Attending to the Environment: A Manual for Contract Specifications* have been developed by LGs to provide models to help themselves ensure that desired local environmental values are maintained through the competitive tendering process (Osmond and Ray 1996).

The reduction in some direct service delivery by LGs through competitive reforms has not reduced LG roles overall, since this rarely removes LG responsibility for issues, and has also been coupled with increasing roles in other areas. Some, such as the responsibility for issuing environmental licences for over 10,000 potentially polluting activities in Queensland, are essentially new government functions, since before this devolution in 1995 there were no enforceable environmental requirements facing those businesses (Wild River et al. 1998, p.10). Others, such as achieving waste minimisation targets, or effectively managing prescribed wastes, require improvements to the way activities are conducted (NSWSWAC 1997). Many are also entirely voluntary, relying

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4 See Victorian case studies V1, V2, V3, V4, V5, V6, V7, V8.

2. An introduction to Australian local government
on enthusiasm from within council or the community for their initiation and drive. These include efforts towards *Local Agenda 21*, a United Nations initiative aiming to promote ecological sustainability through LG efforts (see Cottern and Hannan 1999). In any case, a key problem for LG remains that their increased roles are rarely supported by sufficient, long-term and reliable funding options that ensure that both old and new roles can be undertaken effectively over time (LGAQ 1997a).

Last century also saw a significant reduction in the number of LGs in Australia, with a particularly sharp decline in the final decade, as shown in Table 2.5. These reforms have stemmed from State, and often also LG, pursuit of goals such as improving economies of scale, achieving transparency, better distributing resources and power, enhancing capacity to deal with modern social issues, and a decrease in geographic barriers due to improved transport infrastructure. Other options for advancing these goals without the financial, personal and practical costs of forced amalgamations have not been tackled with such vigour (Vince 1997: See Sproats 2001 for a detailed discussion of these issues in inner-city and eastern suburbs of Sydney).

**Table 2.5**  
**Australian Local Governments by State, 1910-97**

<table>
<thead>
<tr>
<th></th>
<th>1910</th>
<th>1991</th>
<th>September 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>New South Wales</td>
<td>324</td>
<td>176</td>
<td>173</td>
</tr>
<tr>
<td>Victoria</td>
<td>206</td>
<td>210</td>
<td>79</td>
</tr>
<tr>
<td>Queensland</td>
<td>164</td>
<td>134</td>
<td>125 (31)</td>
</tr>
<tr>
<td>South Australia</td>
<td>175</td>
<td>122</td>
<td>68 (5)</td>
</tr>
<tr>
<td>Western Australia</td>
<td>147</td>
<td>138</td>
<td>142</td>
</tr>
<tr>
<td>Tasmania</td>
<td>51</td>
<td>46</td>
<td>29</td>
</tr>
<tr>
<td>Northern Territory</td>
<td>1</td>
<td>8</td>
<td>7 (61)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1067</td>
<td>826</td>
<td>623 (97)</td>
</tr>
</tbody>
</table>

Note: Aboriginal and Torres Straight Islander Community Councils and other Indigenous local governing bodies are indicated in brackets, only for 2001. (NOLG 2001, p.42; LGANT 1998).

Recent LG amalgamations were most striking and controversial in Victoria, and demand some special attention here, since they provide insights into institutional reform and adaptation that are worthy of particular attention. The reduction from 210 to 79 LGs was forced on Victorian LGs between 1994 and ’95 by the Kennett government. This process involved the dismissal of virtually all democratically-elected councillors, and their replacement for up to two years by appointed Commissioners. The realisation that this move was soon to occur sparked the inception of a new institution, the Victorian
Local Governance Association (VLGA), with a mandate to protect local democracy and progress the cause of responsible LG. Having been sacked, many ex-councillors from all political persuasions joined the VLGA, which also held a great many well-attended public meetings throughout Victoria, on issues of democracy and good governance. Membership has now increased to include many Victorian LGs and some surprising outsiders, including a former New South Wales Minister for LG. In contrast to Kennett's autocratic approach, the intentionally inclusive Bracks government has welcomed VLGA as a valuable partner in the development and delivery of many new programs in Victoria (Hill 1999). Similar inside-out resistance to SG attempts to dismantle LGs also occurred in the Northern Territory when the Northern Territory government sacked the Yulara Council, apparently to enable private, rather than public, sector management of the township (Sherwood 1999).

An increasingly popular approach to improving intergovernmental relations for LG effectiveness, has been the signing of non-statutory agreements such as protocols, across spheres of government. These have sought to clarify roles and responsibilities of all spheres in relation to powers and responsibilities, funding and financial obligations, consultation, policy development, program implementation, and a range of other issues. LGAs have usually signed such agreements on behalf of their member councils. Some, such as the Commonwealth-LG Accord (CofA/ALGA 1995), or the Intergovernmental Agreement on the Environment (HoG 1992), cover general issues in inter-governmental relations. Others, such as the Protocol Establishing Roles and Responsibilities of the State Government and LG in the Queensland System of LG (QG/LGAQ 1997) or The Newcastle Declaration (Pathways 1997) target specific strategies or legislation. The documents certainly highlight key areas of concern for LGs and the other spheres, but by no means guarantee a solution.

Reforms to the transparency and perceived integrity of LG operations have been approached in several ways. Statutory changes for instance have clarified roles within LGs from the outside, placing limits on what powers might be delegated to and beyond CEOs and establishing mechanisms for dealing with conflicts of interest and other problems (LGTCQ 1994; QDLGP 1996 provide examples). LG officials themselves have clearly demonstrated their commitment to such improvements from the inside-out, through such actions as the adoption of 'codes of ethics' to guide responsible local governance (IMM 1995; LGAQ 1997b).
Each State has now also increased LG accountability by embarking on programs to define, measure and report on LG performance. These rarely tackle substantive issues such as the successful completion of construction projects, improvements to effluent emissions from sewage treatment plants or other practical outcomes from LG work. Instead, they are based mostly on micro-economic indicators such as the cost of delivery of various services and the amount of funds received under various schemes (see for example WADLG 1997; NTDHLG 1998). Many other SG statutes implemented by LGs also involve specific reporting and accountability requirements. These include the numbers and timing of decisions made under Planning Acts, and of licences issued under Environmental Protection Acts. Again, these tend to be administrative, rather than substantive. The quality of planning decisions, in relation to their adherence to strategic plans or consideration of environmental constraints, and the effectiveness of environmental protection licenses in reducing pollution for instance, are not part of the reporting processes under the relevant acts.

Later discussions will further develop this distinction between administrative and substantive actions and accountability measures. At this point it is worth formalising these as analytical categories. Table 2.6 provides the definitions. It also introduces two other types of impacts that have not yet been discussed, but which complete this set of analytical categories. These are impacts to relationships and knowledge.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Impact type</strong></td>
<td>The type of change that directly results from any part of an environmental initiative.</td>
</tr>
<tr>
<td>Administrative</td>
<td>An impact based in a document or financial transaction with no direct affect on any environmental values.</td>
</tr>
<tr>
<td>Substantive</td>
<td>A physical or practical impact that changes environmental values.</td>
</tr>
<tr>
<td>Relationships</td>
<td>A shift in the way that individuals, organisations or institutions perceive and treat one another.</td>
</tr>
<tr>
<td>Knowledge</td>
<td>A shift in understanding about environmental issues or values.</td>
</tr>
</tbody>
</table>

Source: Appendix 1: Thesis category map

The FG recently tried to determine whether and how the various SG reporting programs could be made compatible to allow for national comparisons of LG performance. After an extensive analysis it concluded that practical difficulties mean that an outside-in approach is not warranted at this time (NOLG 1996-97, pp. 135-138). Instead, subsequent *Local Government National Reports* simply describe the progress in each
State’s development of performance indicators and report on the distribution of the FG financial assistance grants, as well as presenting basic information on LG populations, land area and total road length (see NOLG. 1999-2000). None of these FG publications consider the possibility that LGs may themselves define indicators that could support outside analysis of LG issues.

While this suite of reforms is clearly substantial, this discussion has essentially provided only a brief overview of some of the major changes and of the continuing lack of universally reported or meaningful measures of LG performance monitoring in any area.

2.5 Indigenous Local Government

It is also useful to take a broader perspective on Australian environmental local governance, which has arguably been present in Australia for tens of thousands of years. Indigenous Australians traditionally arranged themselves into widely recognised, and distinct local authorities that actively and diligently described and maintained environmental and other values throughout the local areas that they were responsible for. The enduring and significant nature of these responsibilities has been demonstrated in numerous texts, and recognised in High Court judgements in recent years (see for example Sproats 2002: Berndt and Berndt 1977: Maddock, K. 1974: Hiatt 1978, High Court of Australia FC96/044 and 88/062). Despite numerous and ongoing attempts by colonists to extract indigenous Australians from their lands, waters and traditions, most remain closely tied to their country, and retain a sense of personal responsibility for land and cultural management there. Australia can rightly be seen to have had two overlapping and often conflicting systems of environmental local authority ever since the commencement of formal LG.

Formal governance by indigenous peoples is currently most dominant at the local level. There is currently only one indigenous Federal Parliamentarian, few in SGs, and about a thousand in LG. Naturally, it is those areas with predominantly indigenous populations that elect predominantly indigenous people to their local councils. But many areas with predominantly indigenous populations still have nearly exclusively non-indigenous councils, as in much of Western Australia and parts of New South Wales. Debate is ongoing about the appropriateness and effectiveness of the indigenous LG systems (Fletcher 1998). There are also several programs, such as the Remote Area Management
Project in the Northern Territory, providing training and other assistance to address the challenges facing indigenous LGs.

NT has by far the most extensive system of indigenous participation in LG. 634 of the 762 Councillors in the NT were Aboriginal in 1998 (LGANT 1998). The NT is also the most unique system of LG in Australia. For instance, it is the only jurisdiction where LG boundaries are not contiguous, and instead often cover little more than the town or community area. It is also only NT LGs that have no planning powers, as is discussed in Section 3.4, below.

There are four legal forms of LG in the Northern Territory. The six Municipal Governments cover each major population centre (Darwin, Alice Springs and others), and are a lot like small city councils in other states. A second type of LG in the NT are the Special Purpose Towns (Jabiru and Nhulunbuy) which service remote mining communities. Although constituted under separate Acts of Parliament, these most closely resemble the Municipal Governments, in the scope of their powers and their predominantly non-indigenous populations.

The 32 Community Governments are a third form of LG constituted under the NT Local Government Act 1993. These have predominantly Aboriginal populations ranging from 155 to nearly 1,500 inhabitants (NTG 2000). The Community Governments are the only government agents in most remote communities. Because of this, Community Governments accept statutory responsibilities for far more roles than LGs elsewhere. In addition to all of the usual LG powers, these Councils are also responsible for functions such as policing, aged care, airstrips, banking, building, dealing with domestic violence, education, post office, tourism, women's centres and many others (RAMP 1997).

Incorporated Associations are the fourth form of LG in the NT, and are constituted under the commonwealth Aboriginal Councils and Associations Act 1976. The Incorporated Associations carry out many of the functions of the Community Councils, but cannot pass by-laws. Their decision-making powers are also more limited, extending only to the Association, and not to the whole community (RAMP 1997).

Queensland also has separate statutory systems for indigenous Community Councils in remote areas. 11 Aboriginal Councils are constituted under the Community Services (Aborigines) Act 1984 (QG 1984a) and 20 Island local governments are constituted under the Community Services (Torres Strait) Act 1984 (QG 1984b). These councils have jurisdiction over similarly small land areas to the NT Community Councils, and are excised from other LG boundaries. The excisions are predominantly from the two
most northern Queensland Shires of Torres and Cook. In contrast to the Northern Territory, the statutory powers of Aboriginal and Islander Community councils are more limited than those of the remainder of Queensland LGs. For instance, the Community Councils cannot charge rates, and are therefore almost entirely dependent on the State and Federal Governments for revenue.

The remaining States do not have such numerous or formalised systems of indigenous LG, although many have significant indigenous populations and South Australia has some predominantly indigenous LGs. In recent decades, many such LGs have been criticised for failing to provide adequate infrastructure and services to local indigenous communities (Rumley H. 1987). Various attempts have been made to improve processes and outcomes for local service delivery to indigenous communities, and several have, or seem likely, to deliver significant improvements (ALGA 1998b). There is certainly a long way to go however, and many indigenous communities still lack very basic services.

Issues of indigenous LG are significant, complex and sensitive. It is the great regret of the author that there is not the time, space or focus to do justice to these issues, by including any comprehensive discussion on the topics in this thesis. Case Study T1 - Mirrar Say No describes the attempts by the traditional owners of the Jabiluka mine site in the Northern Territory, and is the only focal point in the thesis on indigenous environmental initiatives.

2.6 Local government and regional dissonance

Regional organisations support the cooperation of groups of LGs on issues that are shared across council boundaries. The regional level is also an effective focus for many agencies that work with LGs. The boundaries of Australian regions are far more variable than any other sphere of government. This is partly due to variety in the stimuli for regional cooperation. This section explores regional issues affecting LGs, demonstrating some impacts of regional inconsistency. It proposes the concept of regional dissonance to describe the impact of regional boundaries that have such variety and incongruence that they create barriers to effective, long-term regional partnerships. Voluntary Regional Organisations of Councils (VROCs) are organisations established from the inside by LGs, usually because of a need to lobby the FG or SGs, or because LGs recognise the potential benefits from cooperation on issues such as land use
planning or economic development. VROCs have enjoyed consistent outside-in support and encouragement from LGAs, the FG and SGs since the 1980s. In 1997 there were 52 VROCs. Most had a CEO with a primary employment commitment to another organisation (usually a member LG), and over 80% of the serving members on VROCs were mayors and other councillors (Johnson 1997, RCC 1995). VROCs are typically self-funded by their member councils, but a limited number receive SG or FG grants. VROCs such as the South East Queensland Regional Organisation of Councils (SEQROC) have driven extensive projects such as the SEQ2001 regional planning initiative. Six VROCs recently received funding from the Commonwealth Department of Environment, Sport and Territories and support from ALGA for a Regional Environmental Indicators Project. The project made progress in establishing regional indicators, and ways of linking the needs of different tiers of government, for state of environment reporting (see ALGA 1997 and case study W5 on South West Western Australia).

The VROCs were also a basis for the FG’s mid-1990s establishment of Regional Development Organisations (RDOs) involving LGs and major sectoral groups within their regions. Their programs aim specifically to enhance economic development. Unlike the VROCs the RDOs are funded by the FG and aim to supply infrastructure, improve access to investment finance and develop managerial skills in regional settings. The RDOs were an outside-in approach to developing inside-out economic development and have been criticised by LGs for both their limited, economic focus, and their marginalisation of LG members (Marshall 1997, p.12, Garlick 1997, p.282.). In addition to these differences between the RDOs and VROCs, the two organisations often operate with inconsistent regional boundaries.

Inconsistent boundaries are also a feature of many other organisations working with regions of LGs. This point is demonstrated in Figure 2.2, which takes Noosa Shire as an example of such inconsistencies. The 13 maps in this figure depict the boundaries of many of the regional organisations of which Noosa is a member. The organisations include several FG and SG agencies as well as the various peak bodies that work with LGs as a whole, or with different professions within LGs. No two of the regional boundaries are exactly the same and one organisation even has Noosa in two of its districts (Maps 2.2d and 2.2e).

These regional differences can readily be justified in relation to the issues that are the focus of any of the agencies working outside of LG. For instance, it makes sense for the
Australian Bureau of Statistics to derive census statistics separately for state capital Brisbane, and for the Moreton region surrounding it (Map 2.2a). Similarly, the Regional Development Organisation can readily justify its Sunshine Coast focus, since the economy of that area is distinctively different from that of Brisbane, the Gold Coast, and other surrounding areas (Map 2.2b).

Regional groupings can also derive from the capacity of different LGs to contribute to them. For instance the Sunshine Coast groups of both the Australian Institute of Environmental Health and the Royal Australian Planning Institute are defined by the participation of potential member councils, which in turn relies on the presence of relevant professionals within those councils (Maps 2.2g and 2.2h). In these cases, and a few others, a ‘region’ consists of groups of LGs whose boundaries are not contiguous. This also occurs with the Urban Local Government Association of Queensland (Map 2.2m), which is a group of councils sharing similar interests due to features such as high population density and growth. The inclusion of this grouping as a ‘region’ demonstrates the point that LGs also find it useful to group themselves together on the basis of similar interests rather than shared locations. Beyond the Noosa example, other examples of non-contiguous groupings include links made through the Sister City Relationships – an outside-in initiative supported by the former Local Government Development Program. Meanwhile, the formation of the Council of Capital City Lord Mayors is an inside-out initiative aiming to develop an identity and some strategic directions for a group of geographically dispersed LGs. The eight members share the quite specific common interest of governing the local area that seats the state parliament (see for example CCCLM 1996).
The following maps appear in the printed version of the thesis, but you will have to view them one at a time on this digital version.

<table>
<thead>
<tr>
<th>Noosa Maps</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Moreton Region, Australian Bureau of Statistics</td>
</tr>
<tr>
<td>b) Sunshine Coast Branch, Regional Development Organisation</td>
</tr>
<tr>
<td>c) North and wide Bay Burnett Team, South East Queensland Planning</td>
</tr>
<tr>
<td>d) sunshine Coast district, Queensland Environmental Protection Agency</td>
</tr>
<tr>
<td>e) Wide Bay Burnett Region, Queensland Environmental Protection Agency</td>
</tr>
<tr>
<td>f) South East Queensland Branch, Local Government Managements Association</td>
</tr>
<tr>
<td>g) Sunshine Coast Chapter, Australian Institute of Environmental Health.</td>
</tr>
<tr>
<td>h) Sunshine Coast District, Royal Australian Planning Institute</td>
</tr>
<tr>
<td>i) South East Branch, Local Government Services, State Local Government Department</td>
</tr>
<tr>
<td>j) South East Queensland Regional Organisation of Councils</td>
</tr>
<tr>
<td>k) Northern District, South East Queensland Regional Organisation of Councils</td>
</tr>
<tr>
<td>l) South East District, Local Government Association of Queensland</td>
</tr>
<tr>
<td>m) Urban Local Government Association of Queensland</td>
</tr>
<tr>
<td>n) North East regional Aboriginal language group</td>
</tr>
<tr>
<td>o) South East Queensland bioregion</td>
</tr>
<tr>
<td>p) North East Coast Drainage Division</td>
</tr>
</tbody>
</table>
Noosa Regions:
(b) Sunshine Coast - Regional Development Organisation
Noosa Regions:
(g) Sunshine Coast/Wide Bay Group - AIEH
Noosa Regions:

(o) Bio-diversity areas
2. An introduction to Australian local government
Clearly, each of these ‘regions’ operates from a justifiable individual rationality. However an overall effect is to confound the inside-out development of robust regional identities for LGs. This impact is conceptualised as regional dissonance in this thesis. The lack of coherent, integrated institutions at the regional level in much of Australia also has the potential to restrict the effectiveness of regions as a focus for outside-in SG or FG environmental initiatives. This doesn’t seem to worry the FG particularly though, as its current institutional structure locates its National Office of Local Government within its broader Department of Transport and Regional Services, thus clearly showing a stronger identification with regions than with the LGs within them. In response to these issues, this thesis uses regions as explanatory variables in both its outside-in and inside-out studies, and analyses the impact of regional organisation in LG delivery of environmental and other outcomes. The broader theme of defining groups of LGs on the basis of their shared features is continued in the next section.

2.7 An intergovernmental typology of local governments

Many authors and agencies use typologies of LGs to assist their understanding of LG issues, and to allow comparative analysis of LG workings. The most accessible version of such groupings is in the names of LGs themselves. All Australian LG names include a local identity (for example, Noosa), together with a description of the type of LG (including shires, cities, towns and municipalities and others). However, these types lack consistency both within and across state boundaries. More rigorous classifications use features such as population, area, accessibility and economic activity to group LGs. However the existing typologies have had limited value for this thesis. This is partly because of the large number of categories compared to the samples of LGs that could be included in this study. It is also because the substantive focus of the thesis required a typology that would support analysis of environmental capacity. It proved most useful to develop a new but simple typology with a focus on intergovernmental relations. This section briefly reviews two well-accepted classifications that assisted the development of the intergovernmental typology which it also describes.

The Australian Classification of Local Governments (ACLG) is probably the most widely recognised, modern typology of Australian LGs. The ACLG was first published
in 1994, and includes all of the LGs that receive Financial Assistance Grants annually from the FG via the SGs. Although the ACLG is not used to determine the level of grant, LGs are grouped by ACLG to help compare grant outcomes between similarly classified LGs (NOLG 2001. p.161). ACLG is a three-stage classification in which each LG is first grouped as either urban or rural, then into a subcategory for the type of urban or rural LG, and finally into population sizes. There are 22 categories of LG in the ACLG.

ACLG is one of two main typologies currently used by the National Office of Local Government. The second is published as a series of maps that are shaded to represent relative accessibility and remoteness of LGs, according to road distances from four different categories of service centres (NOLG 2001. Maps). The capital cities are shown as highly accessible on these maps, with regional centres, particularly on the eastern seaboard also relatively accessible. The extensive deserts, and rangelands in central, northern and western Australia are less accessible, with the exception of some major cities and towns.

The intergovernmental typology is simpler, although less rigorously defined than either ACLG or the accessibility and remoteness classification. It consists of only five types, based on LG identity and closeness to SG agencies. These analytical categories are defined in Table 2.7. Table 2.8 shows the ACLG system and compares it to the intergovernmental typology that is used in this thesis.

Table 2.7  Analytical categories for the intergovernmental typology of LG

<table>
<thead>
<tr>
<th>Categories</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intergovernmental typology of LG</strong></td>
<td>A simple classification of Australian LG based on LG identity and closeness to state government agencies.</td>
</tr>
<tr>
<td>Capital city</td>
<td>The built-up area in the city in which state and commonwealth parliaments are based. Includes the LGs governing the central business district and those surrounding areas that do not have their own discrete business centres.</td>
</tr>
<tr>
<td>Capital fringe</td>
<td>Includes LGs in areas surrounding capital cities and are usually areas with their own distinct business centres.</td>
</tr>
<tr>
<td>Other centre</td>
<td>Includes city and town LGs that are widely considered to be major centres for regions or districts. Several regional offices of state government departments are located in each other centre.</td>
</tr>
<tr>
<td>Indigenous</td>
<td>A LG with mostly indigenous councillors, servicing a predominantly indigenous community.</td>
</tr>
<tr>
<td>Other LG</td>
<td>Any LG that is not a capital city, capital fringe, other centre or indigenous LG.</td>
</tr>
</tbody>
</table>

Source: Appendix 1. Thesis category map.
Table 2.8 Australian Classification of LGs and Intergovernmental Typology

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
<th>Identifiers</th>
<th>Category</th>
<th>#</th>
<th>Intergovernmental typology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban (U)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cap/City</td>
</tr>
<tr>
<td>Population more than 20,000</td>
<td>Metropolitan City (D)</td>
<td>Small (S) Medium (M) Large (L) Very Large (V)</td>
<td>Up to 30,000 30,001-70,000 70,001-120,000 &gt;120,001</td>
<td>UCC UDS UD M UDL UDV</td>
<td>21 23 20 11 18 23 19 14 4 9</td>
<td>7 25 - 19 9 - 23 - - -</td>
</tr>
<tr>
<td>Or Population density more than 30 people per sq km</td>
<td>Regional Towns/ City (R)</td>
<td>Small (S) Medium (M) Large (L) Very Large (V)</td>
<td>Up to 30,000 30,001-70,000 70,001-120,000 &gt;120,001</td>
<td>URS UR UMF UFL UFM</td>
<td>95 35 16 10 35</td>
<td>2 2 2 3 32 32 10 14 9 5</td>
</tr>
<tr>
<td>Or 90% Or more of LG population is urban.</td>
<td>Fringe (F) A developing LG on the border of a developed urban centre.</td>
<td>Small (S) Medium (M) Large (L) Very Large (V)</td>
<td>Up to 30,000 30,001-70,000 70,001-120,000 &gt;120,001</td>
<td>UFS UFM UFL UFM</td>
<td>8 16 10 13</td>
<td>- 3 1 1 14 1 9 13</td>
</tr>
<tr>
<td>Rural (R)</td>
<td>Significant Growth (SG) Average annual population growth more than 3%, population more than 5,000 and not remote.</td>
<td>Not applicable</td>
<td></td>
<td></td>
<td></td>
<td>- - - 76</td>
</tr>
<tr>
<td>And Population density less than 30 people per sq km</td>
<td>Agricultural 1 (A)</td>
<td>Small (S) Medium (M) Large (L) Very Large (V)</td>
<td>Up to 2,000 2,001-5,000 5,001-10,000 &gt;10,001</td>
<td>RAS RA M RAL RAL</td>
<td>76 99 72 62 58</td>
<td>- - - 11</td>
</tr>
<tr>
<td>And Less than 90% of LGA population is urban</td>
<td>Remote (T)</td>
<td>Extra Small (X) Small (S) Medium (M) Large (L)</td>
<td>Up to 400 401-1,000 1,001-3000 &gt;3,001-20,000</td>
<td>RTX RTS RTM RTL</td>
<td>46 33 28 12</td>
<td>- - - 11 35</td>
</tr>
<tr>
<td>Totals for Intergovernmental Typology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>729 82 61 87 402 97</td>
</tr>
</tbody>
</table>


Table 2.8 shows a fair degree of congruence between ACLG and the intergovernmental typology, but with some notable exceptions. One is that ACLG includes fewer LGs as capital cities, with only the LG from the central business district of each state capital included in ACLG. The intergovernmental classification instead recognises capitals as all of those that are involved in governing the densely populated areas of capital cities.

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This is to provide parity in comparing LGs in states where one governs the entire capital city (Queensland, Tasmania and the Northern Territory), and the remainder, where very many LGs cover the equivalent metropolitan centre. The fringe LGs in both classifications are also often congruent, but while ACLG fringe LGs may surround any major centre those in the intergovernmental typology surround only the capital cities. The category of other centre in the intergovernmental typology is most closely linked to the ACLG category of regional towns and cities but this type also has much in common with the accessibility and remoteness classification. The ACLG categories use population data to distinguish classes while the intergovernmental typology sees other centres as the places where SGs locate their regional offices, which are often also the most accessible dispersed areas of the states. These were the hardest to identify and classification was based on the author’s observation while travelling through Australia and through contact with SGs and LGs operating in these areas.

An indigenous category is included in the intergovernmental typology but not in ACLG. The definition for this type allows inclusion of the Queensland and South Australian indigenous LGs that are incorporated under separate legislation to that of the remaining LGs in those states. It also includes the predominantly indigenous Northern Territory LGs even when their statutory systems are equivalent to those of non-indigenous communities.

The remaining category of other LGs includes all of the remaining LGs in Australia. This type clearly oversimplifies the diversity of this final, largest group. The main reason for not splitting this group any further lay in the difficulty in finding LGs within it that were attempting to deliver beneficial environmental outcomes. These LGs are also facing many current amalgamations so their structure is also currently becoming more homogenous. This issue is dealt with in depth in Chapter 7, which deals with the sample selection for the inside-out study of LG environmental attempts.

Since this is a new classification, it seemed worthwhile undertaking a brief comparative analysis of LG features using it. Figure 2.3 is a map of Australian LGs, showing the location of each LGs of each type. Some comparative similarities and differences are immediately apparent and include larger geographic sizes of LGs in the more extensive states, and the tight clusters of compact LGs in the capital fringe and capital city categories. Other centres are also often geographically small, especially in coastal areas. Note that while every attempt has been made at an accurate classification, this typology is in draft form only and some LGs may best be included in a different type that the one
on the map. The author accepts full responsibility for this, and further use of this typology beyond this thesis should recognise the possible need to amend some classes.

A quantitative analysis of the typology enables further scrutiny of LG features, and was achieved using statistical analysis of published data on LG populations, expenditure\(^5\), and geographic size. The *Australian Guide to Local Government* (Information Australia 2000) publishes a nearly complete, and fully updated set of these data quarterly. This was the best source of comparative, quantitative data on LG features that might impact on their environmental capacity, and that was gathered for the population of Australian LGs, using a nationally consistent methodology. The Australian National University’s Statistical Consulting Unit\(^6\) assisted this process, suggesting the conversion of the data to a logarithmic scale for analysis, and drawing up graphs allowing four-dimensional analysis of the LG types. Unfortunately, the data were not available for the Queensland and South Australian indigenous LGs, and so the graphs do not show indigenous LGs as a separate type.

Figures 2.4 a-d are the graphical output from this analysis. Each Australian LG appears as a point on each graph. LG types are represented by the letters indicated in the key, to enable comparisons between the types mentioned above. LGs from each state also appear in a different colour, allowing for interstate comparisons of LGs. The two axes of each graph are the final two dimensions, dealing with geographic area, population and expenditure, pairwise in turn. Note that indigenous LGs are not identified in the graphs, since the full data were not available for those LGs. This analysis also suggested analytical categories to succinctly describe the key differences between LGs of different types. These are noted together with definitions for the categories in Table 2.9.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Local government features</strong></td>
<td>Descriptors of LG features for which quantified data are readily available.</td>
</tr>
<tr>
<td>Population</td>
<td>The number of residents in a LG.</td>
</tr>
<tr>
<td>Populous</td>
<td>LGs with a greater-than-median resident population. Includes most of the</td>
</tr>
</tbody>
</table>

\(^5\) Note that the Guide also provides data on total income and rate content as well as expenditure. The distributions of each of these financial measures are relatively similar, so only one was selected for this exercise. Expenditure was chosen since it has the most direct impact on the resources that any LG has available to allocate to environmental and other services.

\(^6\) Thanks specifically to Ross Cunningham and Christine Donnelly.
| **Sparse** | LGs with a less-than-median resident population. Includes most of the indigenous and other LGs. |
| **Area** | The geographic land area covered by a LG. |
| **Extensive** | LGs with a greater-than-median geographic area. Includes most of the other LGs and some of the other centres and capital fringe LGs. |
| **Compact** | LGs with a less-than-median geographic area. Includes most of the capital city and capital fringe LGs and some of the other centres. |
| **Expenditure** | The total amount spent by a LG annually. |
| **Rich** | LGs with greater-than-median annual expenditure. Includes all of the capital city LGs and most of the capital fringe LGs and other centres. |
| **Poor** | LGs with less-than-median annual expenditure. Includes all of the indigenous LGs and most of the other centres. |

**Source:** Appendix 1. Thesis category map.
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**Figure 2.4a**  Local government population by area

Expenditure increasing with extensiveness for capital city and capital fringe LGs.

Population and area inversely related for sparse and extensive other LGs.

Compact and sparse Northern Territory LGs

Population and area increase together for populous and dense capital and capital fringe

Key: C = Capital City  F = Capital Fringe  O = Other Centre  L = Other LG
Source: Information Australia 2000.

**Figure 2.4b**  Local government area by expenditure

Expenditure increasing with extensiveness for capital city and capital fringe LGs.

Extensive and poor other LGs.

Key: C = Capital City  F = Capital Fringe  O = Other Centre  L = Other LG
Source: Information Australia 2000.
2. An introduction to Australian local government

Figure 2.4c  Local government population by expenditure

Higher population and expenditure for capital and capital fringe LGs

Higher expenditure per population for sparse LGs in Western

Expenditure rises with population only for the most extensive LGs.

Key: C = Capital City,  F = Capital Fringe,  O = Other Centre,  L = Other LG
Source: Information Australia 2000.

Figure 2.4d  Local government area by population and expenditure

Lower expenditure per population for sparse LGs in Western

Expenditure rises with population only for the most extensive LGs.

Key: C = Capital City,  F = Capital Fringe,  O = Other Centre,  L = Other LG
Source: Information Australia 2000.
Figure 2.4a shows the relationships between LG area and population. Other LGs in the Northern Territory LGs are the clear outliers here, being the only group that are both sparse and compact. This demonstrates a unique feature of the LG system in the Northern Territory, where rural and remote LGs govern little more than the area of their small towns, rather than the extensive rangelands in between, as with LGs in all other states. Two distinct patterns can be discerned for the remaining LGs. The capital city and capital fringe LGs are mostly found in the lower right hand corner of the graph, indicating that they are both populous and dense, and that among this group, population increases with extensiveness. Other LGs and other centres demonstrate the opposite patterns, being mostly up the top left and centre of the graph, with populations tending to decrease as area increases. This pattern is particularly apparent for the Queensland and Western Australian other LGs, which have very extensive areas and sparse populations compared with the rest of Australia. Queensland also provides the two LGs that are the clearest outliers in terms of population. Brisbane and Gold Coast City Councils have populations well above those of any other Australian LGs.

Figure 2.4b shows the relationship between LG area and expenditure. Again there are distinctive patterns within and between both LG type and state. The other LGs are shown as both extensive and poor compared to all other types, being clustered in the lower right corner of the graph. It is the Western Australian and Queensland other LGs that make up most of the poorest, most extensive group. Among the capital city and capital fringe LGs clustered on the left of the graph, there is some evidence that expenditure increases with extensiveness. Again, Brisbane City Council is a significant outlier on the graph, being easily the richest LG in Australia.

Figure 2.4c shows LG expenditure by population. This graph shows clearly that LG expenditure increases with population throughout Australia. This shows the impact of the Federal Assistance Grants and other SG and FG funding directed towards LGs, which use population as a key factor to determine funding levels. It also suggests that greater populations can provide a greater rate base. Also note that in this graph an important difference between the Queensland and Western Australian LGs in the poor, sparse group is evident. That is that the sparse other LGs from Queensland tend to be richer than their Western Australian counterparts. Again, Brisbane City Council is the overall outlier, being Australia’s richest, most populous LG.

The strength of the overall relationship in Figure 2.4c provides the opportunity to derive a new, combined variable of expenditure by population, or per capita expenditure,
which can be graphed against LG area. The new information provided by Figure 2.3d is that among the most extensive LGs, per capita richness increases slightly with extensiveness. The exception here is Western Australia, where per capita richness remains fairly consistent regardless of area. Taking this graph together with 2.4b, we can conclude that for the most part, LG richness and population increase together, but that per capita richness is higher for many of the most extensive LGs of each type. Tasmania has the most variation in this graph as it contains the LGs with both the highest and lowest per capita areas, both of which have fairly average areas. This is the only graph where Brisbane City Council is fairly average, since both its per capita expenditure and area are around the median.

The typology is also used in subsequent chapters to explore the degree to which the LGs selected for the thesis research are representative of other LGs that have not been included in the samples. The results of this analysis are presented in Chapters 5 and 7, which present the detailed methodologies for each of the two major studies.

2.8 Analysing Local Government Policy Processes

This section discusses contributions from the academic literature providing theoretical insights into issues described above. Few academic works make serious efforts to answer fundamental questions about the nature, structure or operation of LG and its work. LG roles are often ignored, or seriously downplayed in many texts on Australian governments, political systems and environmental issues. When LG is mentioned, many scholars respond to its diversity and complexity by providing untested generalisations from limited case studies, or by avoiding serious theoretical debates (Mowbray 1997). Others restrict their theories about LG operation to outside-in analysis based on the scope of State and Federal Government legislation and policies affecting them.

Despite the relative scarcity of academic literature on LG, some of the recurring themes from policy and institutional studies literature provide insights into LG environmental capacity. This thesis does not aim to cover all of the detail from relevant academic discourses, since its problem-focused approach and interdisciplinary nature make that beyond the scope of the thesis. Instead, this section discusses the relevant themes and indicates how the thesis addresses the issues raised.

LGs fulfil the accepted definitions of institutions, and that literature therefore provides some insights for this research. Institutions are underlying, durable patterns of rules and
behaviours (Dovers, 2001. P.5). They allow organised and collective efforts toward common concerns and the achievement of social goals (Henningham 1995). Governing institutions, such as LGs and the other spheres, establish and operate particular systems of laws and customs to control and regulate relations between themselves, those that they govern and other institutions. Although they are enduring, institutions also constantly change, and this change is constrained by the patterns of operation that have built up over time. Change is encouraged through processes such as variation and selection, problem solving, contagion and turnover. Patterns such as Lindblom’s ‘science of muddling through’ are certainly features of LG operation. (see Lindblom 1959; Considine 1994, pp. 73-74; Conacher and Conacher 2000. p.101; Gregory 1989). However because land use planning, infrastructure management and other LG roles are directly attached to existing land uses, such models may have even more application than for SG or FG policies which are often abstracted from specific environments.

Some authors have argued that human systems would be more sustainable if they adopted more features of ecosystems. Such ecologically rational institutions would exhibit systems for negative feedback, coordination, robustness and flexibility or resilience (Dryzek 1987). Such institutions are not apparent in Australia, and Dovers argues that institutional responses to environmental problems are constrained by policy adhocery and amnesia. Australia’s institutional arrangements have engendered patterns of unsustainable behaviour that are highly resistant to change. He argues that improved institutional capacity to adapt toward improved environmental performance requires greater persistence, information sensitivity, inclusion, purposefulness, flexibility, policy making and learning towards sustainability. Further, the weakness of Australia’s current institutional arrangements for sustainability are a fundamental constraint that affects LG as much as any other institution or agent (Dovers 1999, p. 89 and 2001).

While this thesis readily accepts that institutional arrangements affecting LG lack sufficient design for sustainability, it does contend that the specific nature and operation of these arrangements is not yet well understood. In particular, the direct connections between LGs and their communities and environments are unique, and potentially important in influencing their capacity to lead shifts towards sustainability. These could make for higher levels of coordination, negative feedback, flexibility and information sensitivity than is found in other spheres of government. However data that are readily available on LG do not support analysis of this, especially not consistently from the inside-out. These issues helped lead to the grounded theory approach to the research,
and the design of novel research methods to support analysis of such issues and relationships.

It is also well accepted that the actors within institutions play important roles in shaping their own operation. Actor networks are an important driver of this, and are described as "the informal and semi-formal linkages between individuals and groups in the same policy system" (Considine 1994, p. 103). Actors involved in LG delivery of beneficial environmental outcomes may be found in any role within a LG. They will certainly also be found in LGAs and SGs, and may also be any other LG stakeholders. Some features of LG could mean that LG actor networks operate differently than in other Australian institutions. The relatively close associations between the legislature and executive roles within LGs, low level of political party affiliations, and strong relationships with local interest groups (all discussed above) could each be influential. These institutional features might increase LG effectiveness in delivering beneficial environmental outcomes by reducing some barriers that are strong within other governing institutions.

This thesis addresses these issues by inducing analytical categories for interviewees perspectives on LG, roles within LGs, and for the different types of LGs. Each such category has been introduced in this chapter, to support their use as explanatory variables for analysing LG roles and effectiveness in delivering beneficial environmental outcomes in the remainder of the thesis.

The possibility that non-democratic actions might be supported by a blurring of barriers within LG institutions also needs to be considered, particularly because there are widespread perceptions that such problems occur often in LG. For instance, fictional LG mayors from Australian popular culture are regularly portrayed as corruptly over-riding executive processes for development approval, as demonstrated recently in the serial Sea Change (Cox and Knight 1998-2000) and movie Muriel’s Wedding (Hogan 1994). This research is more interested in understanding avenues for beneficial environmental outcomes, than on highlighting instances of the negative alternatives (while also aiming not to bias the analysis towards overly positive interpretations). Again, the analytical categories of perspective, role and LG type all aimed to provide a basis for exploring these sensitive issues in context, while preserving anonymity where appropriate.

Processes of policy development and agenda setting are a common topic in academic literature on SGs and FGs. Many theorists emphasise the roles of policy determinants, such as shifts in technology, economics, ideology, and lobbying by stakeholders, on the process of agenda setting (see Howlett and Ramesh 1995; Jenkins 1990). The resulting
models usually fail to incorporate agenda setting in local contexts. For instance, industry peak bodies lobby on behalf of their members in setting SG and FG agendas. But business operators tend to liaise directly with LGs, especially in remote areas. These individual operators may be more significant than their peak bodies in setting policy agendas there, so that these relationships contribute strongly to incremental, rather than ‘rational’ policy implementation (see Lindblom 1959). Similar issues can also lead to differences between the political agendas of individual LGs and their LGAs. This suggests that there may be specific issues driving the policies of individual LGs, that never feature in state-level agenda setting. Sensitivity to local agenda setting processes and contexts is clearly important in studies of LG capacity to deliver beneficial environmental outcomes. The inside-out study that is presented in Chapters 6 and 7 develops a set of *context continuums* in order to record and analyse these types of issues. The continuums record the scale, origins and flexibility of LG attempts to deliver beneficial environmental outcomes, to allow analysis of the influence of these variables. Various authors have considered the question of which range of powers is most appropriate for LG. The argument that political power and policy choices should be devolved as far as is administratively feasible has many supporters. This approach is purported to enhance accountability, by connecting policy making with its implementation and impact (Jones and Stewart 1985). Others argue that it has proven difficult to demonstrate that LG is inherently more accountable than central governments (Boston 1988). The argument that LG should have powers only where the benefits of this exceed all other institutional arrangements has many supporters (Ladd and Doolittle 1982). In practice, this can be hard to determine. These debates also raise the issue of optimal revenue sources for devolved functions. Variations in local need and ability to pay for services, as well as consistency of service delivery with broad policy objectives make this a difficult area (Scott 1988). This again emphasises the need for widely applicable methods and measures for comparing, and potentially improving, the substantive outcomes that are delivered by LGs.

The above discussion raises the possibility that SG policies implemented by LGs may fail to deliver the expected outcomes. Policies can also fail by bringing about a situation with worse problems than those that they originally set out to solve. In cases where state and local priorities differ, both types of policy failure could readily occur. The implementation process could then lead to escalation or displacement of the problem, over-deterrence or unintentional enticements, spillovers, perverse incentives,
An introduction to Australian local government

opportunity costs or other problems (Grabovsky 1995). Lack of funding for environmental mandates is a common and relevant form of policy failure (Cimitile et al. 1997; Weiland 1988). This certainly constrains the effectiveness of LG environmental work. But financial limitations do not always stop LGs from delivering beneficial environmental outcomes, and sometimes other problems, or combinations of constraints feature strongly in LG failure to enhance environmental values. Both the inside-out and outside-in methods developed in this thesis are sensitive to a range of sources of policy failure, aiming to provide insights, and possible policy solutions that go beyond the “begging bowl” approach to addressing LG policy failure (see Bradby and Pearce 1997). Again, the problems stemming from Australia’s inability to consistently analyse the substantive outcomes delivered by LGs from either an outside-in or inside-out perspective are apparent.

A final problem is that policy analysis such as that in the academic literature and in this thesis, is rarely read or acted on by policy makers. Such analyses usually lack the immediate relevance to pressing problems facing those actors. Since few academic papers specifically address LG environmental issues, or do so in a practical way, LG environmental managers are even less likely than many other policy makers to read the academic literature about these issues (Lindblom 1959; May 1992; Mowbray 1997). The thesis has tried to address this problem by focusing from the start on producing research that is directly useful to LG practitioners, and by developing methods to meet this objective. The simple, quick and flexible environmental risk assessment method (Chapter 5) and the stories and graphs from the case studies (Chapter 7) are products of this approach. The ongoing involvement of LG practitioners throughout the research process and the interactive CD-Rom of the thesis and research findings to be provided to all contributors are attempts to enable further use of both the specific findings and the broader analysis.

2.9 Conclusion

LG is a fundamental sphere of government, with a longer history in Australia than any other sphere. The institution has been subject to many changes over recent decades, and there is no indication that these are set to slow down.

Major frontiers of LG include the new work being done, new ways of doing it, and greater accountability mechanisms, combined with greater flexibility. Recent LG
reforms have resulted in fewer, larger LGs, with wider general competence powers and budgets that appear constantly to be more stretched. Yet there are few effective measures of LG service delivery. Those few measures that are collected and reported at the SG level have an administrative focus on financial matters and the timing of decisions. The accepted measures are also each defined from the outside-in. The FG recognises the absence of consistent performance indicators for LGs and reports annually on progress towards such indicators, and on its own progress in delivering funds to LGs, although not on the substantive outcomes resulting from that funding. No inside-out measures have yet been proposed that can measure the substantive outcomes delivered by LGs, although LGs are formally committed to excellence in service delivery through a range of inside-out initiatives.

The various government documents these matters enjoys little support from academic discourses, which tend to ignore, downplay or oversimplify LG issues. Few academic texts focus explicitly on LG, compare these across different contexts, or consider inside-out perspectives in their analysis. This leaves major gaps in existing theories related to LG capacity to deliver environmental or any other types of outcomes. The next chapter extends this discussion on LG generally, into a focus on existing discourses on LG environmental capacity in particular, thus laying the specific groundwork for the original research presented later in the thesis.
Chapter 3. Australian local government and the environment

3.1 Introduction

Every environmental issue is a local environmental issue. Even when those issues also capture the attention of SGs, the FG or regional organisations, the LGs in which they are located always have a profound and enduring interest that is worthy of consideration by all other spheres and stakeholders. This chapter explores LG environmental work in Australia and develops three main themes. The first is that LG is a critically important player in environmental issues within Australia. The second is that despite the major environmental responsibilities of LG, the statutory context for LG decision making and action is limited, often imposing major constraints on LG potential to drive fundamental environmental improvements. Thirdly, few consistent and meaningful indicators about LG environmental work are available, and where indicators exist, they generally consider administrative rather than substantive impacts. The chapter is structured to support the development of these three themes. In addition, much of the discussion within the text is supported by the case studies presented in the inside-out research, and these are referred to in footnotes where relevant.

The chapter starts by presenting perspectives on LG environmental roles and responsibilities originating from international through to local scales. This section locates the origins of and discusses dilemmas associated with many well-known environmental initiatives involving LG. Section 3.3 presents information on LG environmental finance, and compares this to the environmental accounts of the other spheres of government. LGs spend more on the environment than any other sphere of government in Australia, so this section again demonstrates LGs’ environmental significance. Section 3.3 also defines three focal areas of LG environmental work. These analytical categories are then developed in the rest of the chapter and applied throughout the remainder of the thesis. The focus areas are environmental planning (Section 3.4), management (Section 3.5) and protection (Section 3.6). These sections describe the roles and responsibilities of each focus area in different contexts. Formal roles and responsibilities for each focus issue are discussed for different Australian
states. These sections also deal with the local-state antinomy by addressing both inside-out and outside-in perspectives. This chapter continues the thesis’ literature review in setting the broader context for the original research on pollution prevention that is the focus of Chapters 5 and 6, and the case studies addressing each focal area that are presented in Appendix 4 and discussed in Chapters 7 and 8.

3.2 Spheres of understanding

All spheres of government have formally recognised the critical environmental roles played by LG. LGs’ central role in environmental matters are most famously recognised in the international sphere through the United Nation’s Local Agenda 21 (LA21) initiative. This was initiated at the 1992 United Nations conference on environment and development (Rio Earth Summit). Among the conference outcomes was the challenge for LGs to produce a LA21 for their area, that is cognisant of broader environmental priorities. In contemporary Australia, the term LA21 can refer to any integrated, strategic environmental initiative with a local focus. However LA21 is not always the force behind such initiatives.

LA21 has both outside-in and inside-out aspects, and LA21 initiatives have often tried to integrate these. In Australia, and in many other nations, off-the-shelf models for developing LA21 are provided to LGs by the other spheres. These outside-in publications emphasise the need for LGs to work from the inside-out, looking within their local area to identify and develop, manage or preserve the unique environmental values there. For instance, Australia’s LA21 model suggests five action areas, comprising: preparing the ground; building partnerships; determining vision, goals, targets and indicators; creating a local action planning document; and implementing, reporting, monitoring and reviewing (Cotter and Hannon 1999). In this way, LA21 is supposed to “provide a framework for bringing together disparate actions into a coherent strategy which is focused on making the operations of the council and community more sustainable” (Whittaker, 1996. p.15). LA21 models are written to enable practically all of a LGs activities to be incorporated into its LA21. But LG activities can just as easily proceed in the absence of the LA21 framework, and there are also many other frameworks designed to strategically integrate LG work. These include

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1 See for example case studies Q7, Q10, W2, W4, V1.
the corporate plans and other overarching policy documents that LGs in Australia are statutorily required to develop. So why would LGs choose to adopt the LA21 framework?

The LA21 initiative has successfully harnessed LG efforts towards beneficial environmental outcomes in many nations, and by 1996, 1500 LGs in 69 countries were working on LA21s. Australian LGs however have lagged behind other countries in developing LA21s. In 1996, only 16% of Australian LGs were formally committed to LA21 in contrast to over 75% in the United Kingdom. Comparative analysis suggested two key issues might underpin the differences. First, it seemed that LG commitment to LA21 was strongly correlated to outside-in stimuli. SG and FG encouragement and support for LA21 have been relatively weak in much of Australia while the United Kingdom, and other countries with higher uptakes had provided greater outside-in incentives and support. Second, many LGs suggest that the LA21 mandate was too wide-reaching for the set of powers currently held by Australian LGs (Whittaker, 1996).

At the national level several formal statements address that set of environmental roles and powers that are held, or might ideally be held by LG. The most widely recognised FG-initiated statements expressing general environmental roles for LG have been the *Intergovernmental Agreement on the Environment* (IGAE) (HoG 1992) and the *National Strategy for Ecologically Sustainable Development* (ESDSC 1992). The Keating government’s *Commonwealth-Local Government Accord* also addressed environmental matters, but enjoyed limited promotion since it was not supported by the Howard government, elected soon after its acceptance and commencement (Keating and Plumridge 1995). Issue-specific programs such as the *National Greenhouse Strategy* have also specifically addressed LG environmental roles and powers (C of A 1998. Module 3). ALGA has endorsed each of these statements on behalf of all Australian LGs and they are also formally endorsed by the other spheres of government. The structure of Australia’s federal system, in which LG statutory roles are proscribed by the SGs, means that these agreements take the form of principles, rather than enabling legislation or legally binding obligations. So as with LA21, any action to support these principles at a local level is purely voluntary. The FG institutional structure also downplays connections between the outer and inner spheres. There is no federal LG department, with the National Office for LG instead located within the Commonwealth Department of Transport and Regional Services.
National level agreements are consistent in their recognition of LG’s inherent and significant environmental roles and responsibilities within local areas. They also recognise LGs’ interests beyond their local areas through cooperation with other LGs and other spheres. Within these agreements ALGA indicates that LGs undertake to develop policies and manage their environments consistently with many comprehensive principles such as ecologically sustainable development, intergenerational equity, and the precautionary principle, and relevant international agreements. The agreements focus on the need for all spheres to work effectively together, expressing this as a need to divide roles effectively between the spheres, to avoid duplication, and ensure that powers match with responsibilities. But there is a far greater emphasis on LGs acting consistently with broader policy agendas, than on the larger spheres acknowledging local issues. For instance, where the IGAE dedicates 12 sections to the resolution of intergovernmental problems between SGs and the FG, only one section – committing the SGs to consult with LG before delegating responsibilities to them - addresses state-local relations (HoG 1992, S’s2.5.3-2.5.5.4 and S.1.12).

The implicit question of LG capacity to meet its undertakings under these agreements is addressed in ALGA’s National Agenda for Australian LG. This statement has been updated and agreed by LGs at ALGA’s annual conference each year since 1994. The National Agenda reconfirms LG commitment to the various national and international obligations referred to in the other agreements, and the entire document has a proactive and progressive approach to LG roles. But in contrast to the outside-in approach taken in those agreements, the National Agenda’s inside-out perspective is instructive about the constraints facing LG in meeting its obligations. It states for instance that LG “must be an equal partner in the development and implementation of national environment policy. The IGAE offered an important step forward but there has been little progress since in effectively involving LG” (ALGA 2000 S. 8.5). And “in accepting greater devolution of responsibilities for local and regional planning and environmental management (where appropriate in partnership with the community and other spheres of government) LG requires greater financial support from Federal, State and Territory Governments to resource those responsibilities, and particularly to achieve outcomes sought as part of national agendas” (S. 8.4). With the SGs ultimately responsible for establishing LG statutory frameworks these statements demonstrate how LG has proactively negotiated for adequate conditions to enable them to deliver effectively on the strategies of outer spheres of government.

3. Australian local government and the environment
Such conditions are not always provided, either in terms of consultation to ensure adequate legislation or financial means for implementation. A general problem is that even when funds are provided they are not guaranteed for the life of an environmental initiative. The current Howard government’s funding of its Natural Heritage Trust through its part-sale of Telstra is a classic example. An example of statutory gaps is provided by the independent research into LG environmental capacity in Beyond Roads, Rates and Rubbish (Binning, Young and Cripps 1999), Opportunity Denied (Cripps, Binning and Young 1999), and Conservation Hindered (Binning and Young 1999). These reports each have a national focus, and use a state-by-state analysis of LG statutory capacity to conserve native vegetation. These publications highlight some statutory shortfalls to LG nature conservation capacity, including the inability of LGs in many states to raise environmental levies, and statutory constraints to offering rate rebates or to buy and sell land for conservation purposes (Cripps, Binning and Young 1999). The major differences between SGs in allocating environmental roles to LGs make this approach valuable in explaining the context for LG nature conservation in each state. The contrast between the limited statutory powers ascribed to LGs for nature conservation and the sweeping general competency powers suggested in the introductions to LG Acts highlights a major challenge facing LGs. Such gaps between the general responsibilities and the specific powers ascribed to LG by SG are common beyond nature conservation roles.

The problem of regional dissonance, characterised by fluid regional boundaries and initiatives (discussed in Chapter 2) certainly constrains the development of regional perspectives on LG environmental work. This is also coupled with important differences in environmental values and aspirations of different regions across Australia. In this context, Australia’s recent environmental indicators projects have helped to progress understanding of the constraints and opportunities for regional environmental governance. These federally funded initiatives stemming from the state of environment reporting recommendations in the National Strategy for Ecologically Sustainable Development (ESDSC 1992) were funded by the FG environment department - Environment Australia - and coordinated by ALGA. The initiative saw six pilot regions (one from each state) selected and funded to develop regional environmental indicators,
which were then analysed with view to developing nationally consistent environmental indicators appropriate to the needs of local environmental managers.

The regional environmental indicators project was a major attempt to design substantive environmental indicators for LGs from the inside-out. The final report confirmed the absence of universal, reliable, high-quality or readily available environmental data currently monitored at the local level (Alexandra, Higgins and White 1998p. 46). But it was optimistic that national indicators could be developed. It suggested that they might “be arranged in ‘suites’ calculated to appeal to community groups and potential data users who may have no history of monitoring involvement but who may find this form of presentation attractive for commercial, management, educational or aesthetic reasons” (p. 57). This vision for integrated inside-out and outside-in environmental information generation and knowledge management is laudable, but effective implementation of the ideas remains elusive, and some challenges in maintaining momentum are already apparent3. The report also noted plethora of environmental management strategies and plans affecting regions is noted in the final report from this process, with 18 identified for Gippsland in Victoria, and 54 for South West Western Australia, excluding LG plans and policies (pp. 22-24). In light of such challenges, the Environmental Indicators for national state of the environment reporting: local and community uses observes that indicators and monitoring processes and the resulting data must be sufficiently robust to survive institutional transitions (p. 18).

LG perspectives on LG environmental roles have been voiced in many recent publications, forums and arrangements in Australia. Several of these are linked to Environ Australia, which identifies as a “national association of people working in LG management and local sustainability” (Osmond and Ray 1996. Inside cover). Based in Melbourne, and formerly named the Municipal Conservation Association, Environ Australia faces challenges in achieving prominence and relevance to LGs outside of Victoria and to LG elected officials who are more closely linked to the LGAs. However Environ Australia has been the prominent LG environmental organisation recognised by outside agencies such as Environment Australia, successfully tendering for many of their major contracts targeting LG. These have included CouncilNet, Australia’s first LG electronic environmental information service and many of the LA21 contracts, 3 See case study W5 on the South West Western Australian experience.

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including running training programs and developing off-the-shelf models (Cotter and Hannon. 1999). The association’s approach is proactive, positive and opportunistic about LG officers and managers’ potential to achieve beneficial environmental outcomes, even in times of major structural reforms, resource shortages and dubious political will (see for example Osmond and Ray 1996: Williams 1989).

National representation and articulation of LG environmental issues has also been provided by the network of Environmental Resource Officers (EROs) which is funded by Environment Australia but located in each LGA throughout Australia. The exception was the National ERO position, which was based at Environs Australia until 2000, when lobbying by ALGA and within Environment Australia saw the position relocated to ALGA’s Canberra office. The external funding of the ERO positions has ensured that even the most poorly-resourced LGAs have maintained a full-time environmental position for about a decade. Several of the EROs have stayed in those positions for many years, and have become highly knowledgeable and influential in LG environmental issues throughout their states. These positions are certainly an example of effective integration of inside-out and outside-in perspectives on LG environmental issues that have assisted LG environmental efforts.

Closer in from these national representatives of LG environmental issues are the individual perspectives of LG officers, managers, councillors, and the community activists who work with them. In discussing environmental challenges and successes, they typically express sentiments such as hope, passion and pragmatism, linking these to the enduring nature of their continual connection to their local places. This thesis works to discover theories about to better explain this perspective, but this section closes with some pertinent quotes from inside LG and local environments. The CEO of the City of Fremantle articulates the never-ending challenges that face successful environmental managers in LG.

“with popularity comes pressure: more people, more cars more construction, more pollution, more competition for resources and with all this comes more chance of stuffing up all the good things that made you popular in the first place. That, in a nutshell, is the challenge of sustainability” (Glickman 1996, p. 27).

A local environmental activist expresses a more defensive stance against the sources of these types of challenges.

“I consider that most people are at a turning point. Support for land care is very high. People are taking pride in where they live, not seeing it as ‘cheap land’. Government and developers
are having increasing difficulty in justifying ‘progress’ that doesn’t match the expectations of society’ (Bradby 1988. p.103).

Such grounded expectations are rarely explored, and are perhaps not even understood by other spheres of government. But these stories often also look outwards to the responsibilities of other spheres, and “touch on the opportunities that a respectful, person-centred approach can offer in the fields of education, health and the delivery of public-services generally” (Sirolli. 1995. p.xv). Some LG spokespeople go even further, and Mayor Breda Cass of Ireland’s City of South Dublin received deafening applause from about a thousand (mostly) LG participants at the *Pathways to Sustainability* conference plenary session when she stated:

“from my point of view the problem is that at its centre, the state is hollow. It has to dip into LG’s bucket to show that it is relevant. So its really in competition with us. We are the ones who are really delivering, and we have to make sure that our own voices are heard” (Cass. 1997. Unpublished).

This section has presented perspectives on LG environmental roles and responsibilities at all scales from international to local, each clearly indicating the significance of those roles. This is also clearly apparent when government financing of environmental issues is considered, as in the next section.

### 3.3 Financing, framing and focusing

The fiscal imbalance between spheres of Australian governments is well known. LG income and expenditure is far less than that of the SGs, which in turn is far less than that of the FG. Recent research has shown that despite this overall financial inequity, LG spends substantially more on the environment than either the FG or SGs both in proportional and absolute terms (Trewin 2000). However Australian LG roles and therefore the scope of this thesis extend beyond the analytical categories of environmental protection and natural resource management that are used in that analysis. Because of that, this section both presents published information about LG environmental spending, and also proposes the simple alternative framework of environmental planning, management and protection as three focal areas of LG environmental work that are applied in the rest of the thesis.

Note that data from two financial years are reported together in this section, because the necessary information was not available for a single financial year. 1998-99
figures were available for LG and FG environmental data, but not for general government expenditure, or for SG environmental expenditure. The total and comparative expenditure for those has little variation between subsequent years, so the overall patterns discussed here hold, even though the exact figures must be considered indicative only.

Figure 3.1a shows total government expenditure for each sphere. Figure 3.1b shows the total environmental expenditure by each sphere of government in Australia. The graphs clearly shows that the total budget of each sphere of government is inversely related to its overall contribution to environmental expenditure. LG has by far the smallest proportion of the national budget, with only 4.5 per cent of government expenditure. Yet it contributes about 53 per cent of environmental expenditure. In contrast, the FG has over 56 per cent of the total budget but contributes only 10 per cent of government environmental expenditure in Australia. The state governments overall and environmental budgets lie in between these two extremes.

Several points need to be made about the environmental expenditure data presented here. First, there are many difficulties in accounting accurately for the amounts spent on the environment by each sphere of government. General issues such as accounting for private and public costs and benefits, built and natural capital assets and economic and non-economic values are challenges for LG environmental accounting as much as for any other sphere of government or other agency (Miley and Read 2000). In addition, considerable amounts are transferred between the spheres, so that spending by one sphere is income for another, but does not translate into substantive beneficial environmental outcomes until it is spent again by that second sphere. For example in 1998-99 the FG and SGs paid $175 million in grants to LG for environment related activities. In the same year, LGs paid $146 million back to the FG and SGs as fees for environment related activities. This meant that LG’s had repaid 83% of the environmental revenue they received from the other spheres (Trewin 2000. p.11). Such transfers also entail significant administrative costs, so the net value to LG of environmental finance from the other spheres was most likely less than the $29 million suggested by these figures.
Figure 3.1a  Total government expenditure by sphere

![Graph showing total government expenditure by sphere]

**Notes:**
- LG has 4.5% of total government expenditure.
- SG has 38.7% of total government expenditure.
- FG has 56.8% of total government expenditure.

Figure 3.1b  Government environment expenditure by sphere

![Graph showing government environment expenditure by sphere]

**Notes:**
- LG contributes 53% of government environment expenditure.
- SG contributes 37% of total government environment expenditure.
- FG contributes 10% of environment expenditure.
- Environment is 27% of LG’s total expenditure.
- Environment is 2% of SG’s total expenditure.
- Environment is 0.4% of FG’s total expenditure.

**Sources:**

The FG environmental data were calculated as the expenditure of the several FG agencies with primary environmental responsibilities. The major environmental department is Environment Australia (EA) with the Department of Agriculture,
Forestry, Fisheries – Australia (AFFA) also involved in environmental work. Many other smaller government bodies and statutory authorities with specific environmental responsibilities are funded through the accounts of these departments. For instance the National Greenhouse Office, Australian Heritage Commission, Great Barrier Reef Marine Park Authority and Parks Australia and Wildlife Australia are all funded through EA and are all included in the environmental expenditure estimate in Figure 3.1 (C of A 1999). The Natural Heritage Trust (NHT), which was set up using money from the part-sale of Telstra provides the major new environmental budget initiated by the Howard FG. NHT funding is distributed by both EA and AFFA. The FG calculates its own environmental expenditure as the summation of EA’s annual expenditure and AFFA’s NHT expenditure was also included in the estimate of FG environmental expenditure, consistent with the FG’s own calculations of its environmental accounts. In 1998-99 the total of this expenditure was just over $650 million (C of A 1999. p.8).

The best available estimate of SG environmental expenditure was from the recent Australian Bureau of Statistics publication *Australia’s environment: issues and trends: 2001*. This compiled the expenditure by the key environmental and natural resource management departments in each state. Some departments with environmental responsibilities were omitted from this ABS estimate, but this is largely balanced by the inclusion of some departments that also undertake work that is less closely linked to the environment (Trewin 2001. p.16).

In 2000 the Australian Bureau of Statistics published summaries of LG environmental expenditures and revenues for the first time. This was in response to requests by LGs, LGAs and others for national information on LG environmental finance. The framework used to gather and present the data included two main types of expenditure considered to have an impact on the environment. These were *environmental protection* and *natural resource management*. These two broad categories were also used relatively consistently in the estimates for the other spheres. However the categories exclude some important areas of government work with important environmental implications and in which LGs play a major role. Most importantly, strategic land-use planning is not included in the estimates. Yet land-use planning is a key environmental work area for LGs in all states, regardless of the extent of LG statutory capacity in this area (see Section 3.4 below). In addition, many SGs combine their LG and planning portfolios into the same department, so there are strong functional links between LGs and planning throughout Australia. Waste reuse and
recycling are also increasing environmental responsibility areas for Australian LGs and were not explicitly included in the categories.

Figure 3.2 shows the categories of environmental work that are considered to be part of environmental protection and natural resource management in the Australian estimates of LG environmental expenditure. It also shows how these fit into an alternative, simple analytical framework for describing the focus areas of LG environmental work. This framework comprises environmental planning, management and protection. The apparent overlap between environmental planning and management is a result of some of the United Nations categories including both types of work (United Nations categories from Trewin 2000 and 2001). The proposed categories appear to be mutually exclusive in practice, despite the apparent overlap here. The three proposed analytical categories are defined in Table 3.1.

**Figure 3.2 Analytical categories for LG environmental work**

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<thead>
<tr>
<th>United Nations Classification</th>
<th>Thesis categories of LG environmental work</th>
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<td>Environmental Protection</td>
<td>Environmental Protection</td>
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<td>Waste-water management</td>
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<td>Waste management <strong>and recycling</strong></td>
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<td>Protection of soil and ground-water</td>
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<td>Ambient air and climate protection</td>
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<td>Other environmental protection</td>
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<td>Natural Resource Management</td>
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<td>Protection of cultural heritage</td>
<td>Environmental Planning</td>
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<td>Protection of biodiversity and landscape</td>
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<td>Strategic land use planning</td>
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<td>Land management and development</td>
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<td>Inland water use and management</td>
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<td>Other resource management</td>
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Table 3.1 Analytical categories for environmental planning, management and protection

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<th>Category</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>LG environmental focus areas</td>
<td>Discrete areas of LG environmental work, based on the purpose of the activity.</td>
</tr>
<tr>
<td>Environmental planning</td>
<td>Any activity that establishes the future land-uses for an area. Includes strategic land-use planning, development control, development assessment, environmental impact assessment and infrastructure design.</td>
</tr>
<tr>
<td>Environmental management</td>
<td>Any activity contributing to the day-to-day use or maintenance of environmental values. Includes retaining and supporting biodiversity, building and operating basic infrastructure.</td>
</tr>
<tr>
<td>Environmental protection</td>
<td>Any activity dealing with the unwanted by-products of environmental management activities. Includes all pollution prevention, waste management and recycling activities.</td>
</tr>
</tbody>
</table>

Source: Appendix 1. Thesis analytical categories

The next three sections discuss Australian LG capacity in each of the three proposed categories of environmental planning, management and protection. Each section locates its discussion at the interface between LG and the SG, and summarises LG statutory roles and responsibilities for different states and other contexts.

3.4 Environmental planning

Environmental planning is a key aspect of government environmental work since it determines long-term land uses, and thus defines which environmental values are eroded, protected or developed over time. Many enduring environmental problems are the result of poor planning decisions in the past, while sound environmental planning can provide for effective environmental management over the long-term. This section considers the problems, potential and processes of environmental planning by Australian LG.

Environmental planning is inherently integrated. Features such as the locations of different types of buildings, widths of roads and the layout of developments affect the ecology, community livability, economic potential and many other environmental values of an area. Similarly, the physical layout of surrounding areas also impact on each locale, creating further connections. Problems associated with poor environmental planning that fails to take account of this have long been recognised in Australia. For instance, in 1900 an outbreak of plague in Sydney’s oldest suburbs led to demands for
better environmental planning. According to a contemporary commentator, Sydney’s “hilly contours, its narrow streets, its huddled plan, the comparative inaccessibility of its harbour front, the want of adequate means of communication and of transportation between its outlying boundaries on the north, south, west and east” were choking a potentially great city (Fitzgerald 1908 in Spearritt and Demarco 1988, p. 4). Even today, Sydney’s LGs rarely manage to think and act strategically in their land use planning (Sproats 2001, p. 5).

At its best, environmental planning is a purposeful and strategic activity for ensuring that desired values are retained and developed. Many recent initiatives from a variety of origins have aimed to broaden the conceptual scope of planning in Australia so that environmental values that were previously not considered can instead be nurtured. For instance, a Brisbane resident whose home was in the path of a proposed freeway became creatively involved in the broader issues of environmental planning, helped stop the freeway, and has become a leading advocate of traffic-calming in its broadest sense. On the basis of lessons from inside his local area, Engwicht now argues that urban planning throughout Australia needs to support the quality of life of residents, through designs that maximise exchange between people and minimise travel (1989 and 1992). The relationships between Australian land-use systems, car-dependence and resulting poor community livability and high fuel-energy use have also been tackled by a range of academics (Newman and Kenworthy 1989).

Strategic environmental planning processes are enacted in SG and territory legislation and have several consistent elements Australia-wide. They include:

- a strategic plan, establishing patterns for development and retention of desired values,
- a planning scheme, including a record of actual land uses, indicating land ownership and activities that may or may not be carried out on specific land parcels, and conditions governing such activities,
- processes for referring development applications to interested agencies,
- development control options with potential to restrict certain activities, in order to protect other desired values,
- systems for affecting land use changes, which recognise strategic planning goals and provide for review, appeal and enforcement of decisions, and
- public input to the planning process, including consultation on strategic plans, public access to information on planning schemes, and opportunities to object to
land use changes (for detailed discussions on land use and environmental planning in Australian contexts see Conacher and Conacher 2000, Bruce 1988 and Sulman 1921).

The LA21 initiative discussed earlier is one of many from the outer spheres of government, aiming to encourage LGs to consider broad and inter-related issues in the full range of their planning exercises. Other national programs that have encouraged the clear expression of such environmental goals throughout all elements of the planning process include Local Approvals Review Planning (LARP) and Integrated Local Area Planning (ILAP). These initiatives involving all spheres of government have sought to increase the strategic nature of planning to achieve goals such as balancing different objectives, maximising resource efficiency, and recognising the growing responsibilities of LG (Sansom 1993, pp.5-6).

LA21, LARP and ILAP are part of a national shift that is increasing LG roles and responsibilities in strategic environmental planning. The shift is formalised in Australia’s planning laws, which have been substantially amended or entirely replaced by most state and territory governments over the last 10 years. The changes have extended the roles of LGs and of integrated strategic planning, supported by increased formal processes for community input into plan development. But while these changes have the potential to increase community knowledge about planning issues, and possibly to improve relationships involved in planning, they do not ensure that planning processes result in substantive environmental improvements. Current planning laws are listed in Table 3.2, along with summary information about appeal provisions and the responsibility for developing strategic plans.
<table>
<thead>
<tr>
<th>State/Territory, Act</th>
<th>Appeals</th>
<th>Strategic Plans</th>
</tr>
</thead>
</table>
| **Queensland**  
*Integrated Planning Act 1997 (QG 1997)* | Planning and Environment Court (Chapter 4) | Developed by LG, but consistent with State Planning Policies (Chapter 2, part 1) |
| **Northern Territory**  
| **Western Australia**  
*Town Planning and Development Act 1928 (WAG 1928)* | “Appeals may be made to the Minister or to the Appeal Tribunal, but the commencement of an appeal to one extinguishes any right of appeal to the other” (S. 39. See also S. 8A) | Town planning schemes may be prepared by the SG or LG. LG planning schemes can refer to any land within or adjacent to their area. In developing planning schemes, LGs must consult public authorities and people that are likely to be affected by it. The Minister is responsible for approving planning schemes. (S. 6) (See also WAPC 1997.) |
| **South Australia**  
*South Australian Development Act 1993 (SAG 1993a)* | The Environment, Resources and Development Court (S. 86). | The Minister is responsible for The Planning Strategy: Development Plans are the responsibility of the Minister, but LGs can initiate amendments (S. 25). |
| **Victoria**  
*Planning and Environment Act 1987 (VG 1987)* | S. 39. Victorian Civil and Administrative Tribunal | S. 7. Planning schemes must include and separately specify state standard provisions and local provisions. If there appears to be an inconsistency between different provisions of a planning scheme, it must be read as far as practical to resolve the inconsistency. “The state standard provisions prevail over the local provisions, and a specific control over land prevails over a municipal strategic statement or any strategic plan, policy statement, code or guideline in the planning scheme” (S7.4bii). Planning schemes are structured in accordance with the Planning and Environment (Planning Schemes) Act 1996. |
| **Tasmania**  
*Land Use Planning and Approvals Act 1993 (TG 1993)* | S. 61.1. Appeals to Appeal Tribunal. | LG (councils) are planning authorities. Planning authorities may initiate the preparation of a draft planning schemes, or be directed to do so by the Planning Commission, with the approval of the Minister. Such a direction may require a LG to prepare a draft planning scheme jointly with one or more LGs if the Commission considers that this would promote a regional approach to planning (S. 22). Draft planning schemes must be approved by the Minister before coming into operation (S. 29). |
| **New South Wales**  
*Environmental Planning and Assessment Act 1979, as amended by Environmental Planning and Assessment Amendment Act 1999 (NSWG 1999)* | Appeals and enforcement matters to Land and Environment Court. (Division 8 and others.) | Part 3, Divisions 1–4 deal with environmental plans, which may be initiated and developed at the state, regional or local level. State Planning Policies are approved by the Governor, Regional Environmental Plans by the Minister, and Local Environmental Plans by the Director-General. Where there are inconsistencies between any of these plans, the most recent plan prevails, but state or regional plans prevail if they expressly say so (S. 36). |
| **Australian Capital Territory**  
*Land (Planning and Environment) Act 1991 (ACTG 1991)* | The Territory Government is the LG. | The Territory Government has the full flexibility to implement, amend or replace the Act. |

Note: all legislation is presented as in force September 2001.
The issues of appeals and the responsibility for developing strategic plans are highlighted in Table 3.2 because they are areas where LGs identify central inherent roles for themselves from inside of local areas, whether or not these have been statutorily provided from outside. LG views on the *Northern Territory Planning Act 1999* and its predecessor *The Planning Act 1993* provide a pertinent example since under the 1993 Act LG had very limited statutory involvement in environmental planning. The Territory Government had responsibility for planning schemes and development assessment and the processes had very limited requirements for consultation with LG and no requirements to incorporate LG views into decisions (see James. 1998). It was standard practice for LGs to know little about major developments that were planned and approved for their areas, yet to then be responsible for installing and maintaining the infrastructure required to support them, even if it had been so poorly planned for local conditions as to be unworkable4.

In addition, appeals by developers who had had applications rejected were decided by the typically pro-development Planning Ministers, who nearly always decided them in favour of the developers. The 1998 Mayor (President) of Litchfield Shire (now an independent member of the new Northern Territory Labour government) summed up the issue as follows.

“The main constraint is definitely having no planning controls. We just don't have planning power. There definitely are bad planning decisions made and we just have to wear them. To me that’s wrong … and a bit hypocritical. To have a say in your own community you must have control of planning. Or you are really just a façade as a Council.” (Wood. 1998. Unpublished).

The new *Northern Territory Planning Act 1999* has not fully addressed LG concerns. It directs appeals to the Land and Mining Tribunal, but only marginally increased LG powers in environmental planning. Meanwhile, the former Country Liberal Party government continued to encourage developments of dubious sustainability, consistent for instance, with a projected population of over a million people for the Darwin region within a century. Such initiatives largely ignored the many important ecological and geological constraints to development that already face the population of fewer than 100,000 (see Blandy and Forbes. 1998).

4 See case studies T2, T4 and T5.
In most other jurisdictions, LGs have formal responsibilities in strategic planning that run parallel to those of the SG. However in each case, the SG legislation establishes the state-level plans as prevailing over local strategic plans in the case of inconsistencies (Table 3.2). These state-level plans can be problematic for LGs since they nearly always apply to regional, rather than local areas, and can impose institutional relationships that don’t make sense to LGs, even when they make environmental sense\(^5\). It must be noted though that regional strategic plans do not necessarily drive development as has been the case in the Northern Territory. SG strategic planning documents are sometimes conservation-oriented and this can help LGs to balance local development interests with broader sustainability objectives\(^6\).

While strategic planning processes promote desired environmental values in particular places, development control plans (DCPs) focus on restricting specified land use changes. LGs in most jurisdictions have the statutory capacity to propose DCPs, and there are many Australian examples of sustainability objectives being achieved through these mechanisms\(^7\). But the processes are fairly arduous and time-consuming, involving community consultation, public notification of the proposed plans and final approval by SGs. And developers have frequently demonstrated considerable creativity in getting around the restrictions in DCPs so that they can proceed with their intended developments.

Environmental impact assessments (EIAs) are another statutory mechanism for restricting unsustainable developments. Australia has EIA legislation at the FG level, and within each state and territory jurisdiction. In most states this is linked to the planning legislation, which prescribes classes of developments that automatically require an EIA, or require one when certain developments are proposed for sensitive areas. It is widely recognised however that EIAs do not ensure that environmentally sound decisions are made, but just that decision-makers are aware of environmental issues (see Harding 1998. pp.134-145; Conacher and Conacher 2000. Ch.11; Harvey 1998).

Although they were not included in the table above, the accountability requirements that are now built into most Australian planning laws also deserve some comment. Many SGs have responded to developer demands for planning certainty by

\(^5\) See case studies W5 and V8.
\(^6\) See case studies Q2 and W6.
\(^7\) See case studies Q4 and Q11.
clarifying planning referral processes and tightening up the timeframes within which planning decisions need to be made. The *Queensland Integrated Planning Act 1997* for instance establishes a comprehensive Integrated Development Assessment System for this purpose, also requiring most planning decisions to be completed within specified time frames, depending on the complexity of the decisions (Chapter 3). LG success in achieving these processes and timeframes must also be regularly reported to the SG, and this is considered to be a key measure of implementation effectiveness. However the reporting clearly has an administrative rather than a substantive focus, as no mention is made of the quality of planning decisions or of their effective consideration and accommodation of environmental values.

In summary, environmental planning is a key issue underpinning LG capacity to deliver beneficial environmental outcomes. Statutory changes over recent years have increased LG planning roles and responsibilities, but state-level jurisdictions have retained much of the final decision making about particular developments. And while modern laws have increased accountability in planning, the main mechanisms for this focus on administrative indicators rather than substantive impacts, with some mechanisms to increase knowledge and improve community relationship by way of planning processes.

### 3.5 Environmental Management

There is an appealing logic to the view that environmental management is the core of LG environmental business in the long-term. After all, effective planning processes should result in environments that need day-to-day management rather than repeated planning, and state-of-the art environmental protection systems should reduce waste and pollution problems so that they are largely addressed during activities, rather than as an add-on. This section focuses on LG environmental management, specifically on what is managed and the strategies that have been required of, or adopted recently by Australian LGs to increase both effectiveness and efficiency in that management.

LGs and their advocates identify a broad range of inherent environmental management roles for LGs. These include:

- biodiversity and native ecosystem conservation,
- parks and open space,
- weed and feral animal control,
• fire, flood and other disaster risks,
• transport and service corridors,
• energy management,
• environmental and visual amenity,
• physical, natural resources,
• avenues for community involvement, and
• environmental legislation and policy (see LGTCQ 1989; Brown 1997; Berwick and Thorman 1999; Williams 1989; Osmond and Ray 1996).

At present a strong focus on making environmental management more efficient, effective, integrated, and strategic is common within and beyond LG. The adoption of competitive reforms and the development of integrated environmental management systems are two approaches that have strongly influenced Australian LGs towards these goals in recent years that are discussed further now.

The requirement by the FG and SGs for LGs to take on National Competition Policy reforms was mentioned briefly in Chapter 2. The advent of competitive tendering of LG services has required LGs across Australia to reconsider what they do, why and how they do it and whether their efficiency and cost-effectiveness could be improved. But environmental management poses special problems for competitive reforms. For instance, environmental values such as ecosystem health and biodiversity are unique, constantly changing and often subjective or difficult to measure, making it hard to establish performance indicators for contractors (Couston, 1995). Secondly, the environmental management operations of many LGs are often so small as to lack the economies of scale needed to affect substantial savings (LGAG 1997c). Third, while nothing in the National Competition Policy reforms directly discourages environmental sustainability, this is not a focus of the initiative, and can readily be lost in its economic focus. For instance private operators working for a profit can be contracted to protect the environment during their operations but will not necessarily work in the public interest in this way unless required to do so.

One example of these issues being addressed from inside LG is Attending to the environment: a manual for contract specifications, which was written LG officers and published by Environs Australia. The manual includes a model environmental code, intended to be applied to all tendering conducted by a council, regardless of whether it has obvious environmental impacts. The manual presents an extensive environmental
specifications checklist that LGs are encouraged to work through to ensure that all potential environmental management issues are included in contracts. Finally, it includes several model contracts that clearly define environmentally responsible behaviour for contractors (Osmond and Ray 1996). Such initiatives take up the challenge of improving efficiency of service delivery while also trying to ensure excellence in environmental management. The immediate impacts of these initiatives are the administrative contracts, but if these are successful, substantive beneficial environmental outcomes will follow.

Initiatives in environmental management systems (EMSs) focus on the effectiveness and integration of environmental management more than its efficiency. These have gained momentum since EMS certification became available with the publication of *ISO14001: 1996 – Environmental management systems – specifications with guidance for use* (Standards Australia). The formal EMS process includes initiatives such as the development of environmental policies and their endorsement by top management, auditing and tracking the organisation’s activities to ensure sound environmental management, ensuring ongoing training and awareness of environmental issues, monitoring and documenting progress and reviewing environmental management outcomes (Standards Australia 1996).

There is no statutory requirement for LGs or any other organisations to strive for ISO14001 certification, or to go through this comprehensive and time-consuming process. For LGs, there is also unlikely to be any competitive advantage in undertaking ISO14001 certification, since there is no evidence that people or businesses will opt to locate themselves in a specific LG on the basis of its EMS certification. Despite this, several proactive LGs have embarked on ISO14001 processes and a few have completed their certification. ALGA is supporting this development with its ISO14001 guide to assist LGs through the meticulous process. The ALGA model argues that benefits for LGs include achieving more structured approaches to managing and delivering on environmental policies, defining tasks and responsibilities, helping to achieve beneficial environmental outcomes, greater operational control and potential efficiencies through forward planning and budgeting. ALGA suggests that an EMS can also improve relations with regulatory authorities, local communities, staff and other agencies (Sheldon (ed.) 1996). Note though that the intensive reporting processes for these EMS’ are largely administrative, focusing on the operation rather than the environmental outcomes of the systems that they put in place.
A noteworthy pattern in these examples is that LG environmental management initiatives extend well beyond their statutory responsibilities. These statutory responsibilities are spelt out in a plethora of Acts in each state. In 1989 the Local Government Training Council of Queensland discussed LG environmental management responsibilities deriving from 21 SG and FG statutes, but many more could be identified for each jurisdiction. Additional non-statutory, or optional roles are promoted by publications such as the *National local government biodiversity strategy* (Berwick and Thorman. 1999), *Protecting local heritage places* (AHC. 1998), *Choosing and using environmental indicators* (Heath. 1999) and *Turning the tide: integrated local area management for Australia's coastal zone* (Brown. 1994). Such publications identify a range of issues as central to improving LG environmental management. Their impacts might be administrative, substantive or involve shifts in either knowledge or relationships. They include:

- awareness, training and education,
- LG resourcing,
- regional partnerships and planning,
- legislative frameworks, and
- information and monitoring (Berwick and Thorman. 1999. pp. 3-4).

### 3.6 Environmental protection

Environmental protection includes both waste management and pollution prevention activities. Links between these activities have increased in recent years, as contemporary environmental protection legislation has highlighted the risk of pollution from traditional landfills. LGs long-standing role in waste collection and disposal has also been extended into comprehensive recycling and waste avoidance measures, a shift that has strong community support. LG formal roles as pollution prevention regulators are also increasing, although there is considerable variation in these roles between states. FG targets for competitive reforms, waste avoidance and pollution prevention have driven many these changes from the outside, while diminishing availability of landfill sites and increased understanding of waste issues have led LGs to reconsider their waste systems from within.

Traditional approaches to waste management by LGs involved unsorted waste collection and disposal of mixed wastes to landfill sites, which were usually simply...
holes in the ground. Over time, the availability of areas for such holes has reduced, especially in cities where land is most costly and where most waste is generated. Scientific knowledge about groundwater and other pollution risks from landfills has also increased, and SGs and the FG have encouraged LG understanding of these issues while pollution prevention laws have increased LG liability for any pollution incidents. Such statutory shifts have some origins in Australia’s *National Strategy for Ecologically Sustainable Development* which inspired more holistic and integrated environmental protection legislation in many state (ESDSC 1992).

Australia’s *National waste minimisation and recycling strategy* (CEPA 1992) was also highly influential in shifting waste management thinking and practices in Australia. The strategy identified a hierarchy of waste management priorities (the waste hierarchy) which in order of importance are waste:

- avoidance,
- reduction,
- reuse,
- recycling/reclamation,
- treatment, and
- disposal.

The other main influence on LGs of this strategy was its adoption of a national target of a 50% reduction of waste to landfill by the year 2000. The strategy did not clearly state a baseline for this reduction, and most states adopted 1994 as the base year in establishing their targets since this was when the SG responses were formalised. SGs typically adopted these targets into their statutory framework for waste management, and passed on the responsibility for the waste reduction to LGs (Healey. 1996. pp.28-30). This courageously substantive goal has been achieved by some LGs with many other rising to the challenge⁸, but the overall failure to achieve the target is most likely behind the lack of statewide and national reporting of outcomes.

New waste management and pollution prevention laws have also increased the focus on the disposal of hazardous wastes. These have link to the National Pollutant Inventory, which indicates the relative toxicity of various wastes and sets thresholds for reporting and managing these. Wastes listed on the Inventory are commonly identified as ‘regulated wastes’ in SG environmental protection legislation, and the movement of

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⁸ See case studies Q9 and W2.
large quantities is controlled by ‘waste tracking systems’, while their disposal in approved waste facilities is required.

LGs have traditionally contracted out many waste management roles, especially kerbside waste pickups and other waste transport. But the combined changes to regulated waste management, waste reduction targets, waste tracking systems, and competitive reforms have brought in new opportunities and incentives for LGs to increase the roles of private operators in waste management. LGs now increasingly contract private companies to design, build, own and operate many waste systems.

However the development of waste management as a viable competitive industry is still hampered by many factors including:

- very low profit margins and unstable markets for recyclable or reusable waste (waste after all, is rubbish),
- refusal by many waste producers to pay adequately for waste disposal, which is exacerbated in this large country, by the ready availability of spaces for illegal waste dumping,
- challenges of ensuring that waste producers sort wastes to avoid contamination, which is difficult since it involves time and effort by waste producers, for no direct benefit, while failure to sort is often undetectable during waste pickups, and
- the cost, effort and inherent difficulties of complying with justifiably strict pollution prevention requirements for regulated wastes.

In Victoria, the Kennet SG which had amalgamated LGs and brought in compulsory competitive tendering, assisted LG transitions to better waste management with a new statutory authority called Ecorecycle Victoria. Ecorecycle is funded through a compulsory levy on landfill wastes in Victoria, and assists Victorian LGs in achieving waste reduction targets. The information, training and off-the-shelf models provided by Ecorecycle extend the waste hierarchy through their strategic focus on buying recycled products. With this approach, LG’s use their buying-power to support businesses that use recycled materials in their products. In doing so, they aim to create markets for recycled products, deliver viable recycling systems, create jobs and economic

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9 See case studies Q9, W2.
development opportunities through new markets and encourage manufacturers to use recycled materials (Chaplin and Kenny 2000). A feature of LG waste management roles is that it both regulates waste activities of its contractors and local businesses and has its own waste activities regulated by SG. This dual role also occurs in pollution prevention activities. LGs in all states face environmental protection requirements in relation to their sewage treatment plants, landfills and other operations. In many states they also regulate pollution. Sometimes the pollution prevention roles devolved to LGs are restricted to supposedly ‘minor’ issues such as noise pollution and litter management. Noise problems however generate many community complaints that can be highly intransigent, and both of these issues are costly for LGs.

Table 3.3 lists Australia’s current SG environmental protection legislation and indicates the delegations and devolutions to LGs that have occurred under these acts. Some jurisdictions, such as the Northern Territory, South and Western Australia prescribe very limited regulatory roles for LGs. In others, such as Queensland, Tasmania and New South Wales, LGs act more as partners to the SG regulatory authorities. LG regulatory roles are greatest in Queensland, where LGs are responsible for the administration and enforcement of over 10,000 environmental authorities, which is more than three times the number issued by the SG. Queensland environmental protection arrangements are the focus of Chapters 5 and 6.  

10 See case studies V3, V4.
11 See also case studies Q1, Q3, Q5 and Q8.
### Table 3.3 Environmental Protection Legislation in Australia

<table>
<thead>
<tr>
<th>State/Territory, Act</th>
<th>Devolution/ Delegation to LG</th>
<th>Flexibility</th>
</tr>
</thead>
</table>
| **Queensland**  
Environmental Protection Act 1994 | Specified environmentally relevant activities are devolved or delegated to LGs (S. 196, 197.) | Licence conditions, enforcement policies and all other administration and action is determined by the administering authority. In the case of devolved activities, this is the LG (S. 196). LGs are subject to environmental licensing of their own activities and must comply with licence conditions and other requirements. |
| **Northern Territory**  
Waste Management and Pollution Control Act 1998 | None. LG officers could receive delegations from the CEO of the administering agency (S. 70.) | LGs are subject to environmental licensing of their own activities and must comply with licence conditions and other requirements. |
| **Western Australia**  
Environmental Protection Act 1985 | None. LG officers could receive delegations from the CEO of the Environmental Protection Authority under Ss. 24 and 25, or under S. 87 be appointed as authorised persons. | Since there is no specified role in administering the Act, there is no flexibility. Any potential delegations or appointments would be limited to the specified terms and conditions, for instance under S. 87. LGs are subject to environmental licensing of their own activities and must comply with licence conditions and other requirements. |
| **South Australia**  
Environmental Protection Act 1993 (SAG 1993b) | Environmental Protection Authority has 6 members, one with LG experience, and chosen by the LG Association of South Australia. (S. 12) | The Environmental Protection Authority is required to consult with LG in performing its functions (S. 13.2.b). LGs could receive delegations under S. 115. LGs are subject to environmental licensing of their own activities and must comply with licence conditions and other requirements. |
| **Victoria**  
Environment Protection Act 1970 | Permits for septic systems (S. 53M). LGs may be declared to be a waste management regions (S. 50E). Enforcement of noise pollution provisions from residential premises. (S. 48A) | The Act enables the establishment of regional waste management groups with significant LG involvement and flexibility (for example S. 50H). LGs are subject to environmental licensing of their own activities and must comply with licence conditions and other requirements. |
| **Tasmania**  
Environmental Management and Pollution Control Act 1994 | Councils can appoint LG officers to be council officers under the Act (S. 21). They can then issue environmental protection notices for Level 1 activities, and undertake relevant enforcement actions. (S. 44.2) | LGs have the flexibility of SG officers, for the enforcement of Level 1 activities, and any other delegations (S. 92). In accordance with the provisions of the Local Government Act 1993, a council may impose fees in relation to any function or service carried out by the council under this Act, (S. 103, commenced 14 July 2000). These powers are linked to the Land Use Planning and Approvals Act. LGs are subject to environmental licensing of their own activities and must comply with licence conditions and other requirements. |
| **New South Wales**  
Pollution Control Act 1970. As amended by various acts, including the Pollution Control Amendment (Load-Based Licensing) Act 1997. | LGs are the appropriate regulatory authorities for most non-scheduled activities in their local areas (S. 6). The Minister can direct LGs to refer licensing functions back to the Environmental Protection Authority (S. 318). | LGs have considerable flexibility for enforcement in relation to non-scheduled activities. For instance, they can order pollution clean-ups by owners or occupiers of property (S. 91), either orally or in writing (S. 93). The can also direct people carrying out potentially polluting actions to take a range of actions to prevent pollution (S. 96). LGs are subject to environmental licensing of their own activities and must comply with licence conditions and other requirements. |
| **Australian Capital Territory**  
Environmental Protection Act 1997 | The Territory Government is the LG. | The Territory Government has the full flexibility to implement, amend or replace the Act. |

Note: all legislation is presented as in force September 2001.
LG performance in pollution prevention impacts are measured using administrative indicators, while steps are also being taken to provide knowledge-based outcomes. For instance in Queensland, LGs must report annually on the administrative matters of the number of environmental authorities they issue and enforcement actions they undertake. Community knowledge is promoted through public notification of licence applications and the maintenance of public records of licence conditions including allowable pollution emissions (QG 1994. Ss.42, 213, 214, 217). Substantive outcomes are not specifically reported in any formal requirements.

3.7 Conclusion

LGs are highly significant in planning, managing and protecting Australia’s environment. Although LGs have less than 5% of Australia’s total government budget, their environmental expenditure is over 50% of the total. LGs important environmental roles are recognised by all spheres of government, and these have been formalised at international, national, state and local levels. Environmental roles differ between states and environmental initiatives originate from both inside and outside of LG. This chapter has described LGs statutory context for delivering beneficial environmental outcomes, suggesting that SG laws impose limitations as well as opportunities for LG environmental capacity. It has also argued that administrative impacts receive more attention than substantive outcomes in reports of LG environmental performance, especially in the reporting systems imposed by SGs.

The next chapter describes the methods used in the thesis to gather original data on the substantive outcomes achieved by LGs in environmental planning, management and protection.
3. Australian local government and the environment
Chapter 4. Research processes and methods

4.1 Introduction

Previous chapters have introduced substantive issues about Australian LG and the context within which it performs its environmental functions. They have also discussed the local-state antinomy, arguing that LG’s simultaneous but contradictory SG and locally-derived authority and interests impact on its environmental and other work. This chapter gives an overview of the methods used in the overall thesis to discover and explore that antinomy and other grounded theories about LG capacity to deliver beneficial environmental outcomes. The chapter starts with an overview of the methodological and theoretical bases for the thesis research as a whole. Section 4.2 also introduces the remaining sections on scientific inquiry, grounded theory, action research and the other methodological approaches that are used throughout the thesis.

Note that Section 4.5 presents the methods that were used to identify the antinomy of LG, and that the section also includes the results of the original research undertaken using those methods. Although it is unusual to present findings in a methods chapter, this is done because it is the simplest and most logical location for that work.

4.2 Methods overview

Several methods were integrated to explore this complex research topic. This did not occur in a simple sequence, but through an action learning process involving many separate, smaller but interconnected projects. Figure 4.1 summarises the overall research process. This diagram identifies eight empirical projects stemming from the major thesis questions, and leading into the final synthesis. It also shows the sequencing of the projects, and their relationship to one another and to the local-state antinomy.

The projects’ engagement with the local-state antinomy is shown through their horizontal arrangement. The Queensland benchmarking study on the far right of the diagram was a predominantly outside-in study that measured the environmental and other outcomes from LG and SG implementation of the Queensland Environmental Protection Act 1994. The three projects on the left of the figure involved case study research and primarily explored inside-out perspectives on LG environmental issues.
The remaining four projects involved varying degrees of integration between inside-out and outside-in perspectives.

Projects are arranged vertically according to when they were undertaken. The timeline on the right hand side gives more detail about the timing of this sequence. Some projects were undertaken simultaneously while others flowed directly into one another. All of this provided many opportunities for the learning from early projects to feed into subsequent ones. The arrows in the diagram show the strongest linkages between separate projects.

These flows and sequences also depict the action research cycles that were involved in this research. Action research is a method and approach to learning where a researcher is directly involved in a change process involving cycles of planning, action, observation and reflection that each build on previous cycles (Zuber-Skerritt. 1991. pp. 11-14). Action research is discussed further in Section 4.6 below, but at this stage it is worth noting that each of the component projects involved all four stages and the thesis process as a whole also followed the action research cycle. Figure 4.1 uses coloured text to show which of the individual projects primarily assisted the planning, action, observation and reflection stages of the overall thesis.

Figure 4.2 lists the methods used in this thesis research and the relationships between them. As with the previous figure, this has the predominantly inside-out analysis on the left and outside-in analysis on the right. The shaded rows show the research methods that were used in specific projects, rather than applied across the thesis as a whole. Many of these were also indicated in Figure 4.1. For the sake of brevity, the case study and comparative analysis that was undertaken together is referred to as ‘case study’ work in the text, and ‘environmental risk assessment’ refers to both that research and the gap analysis that was used with it. The surrounding rows in Figure 4.2 show the broader methodologies that flow through the whole thesis and tie these other methods together. Such a conscious use of multiple, complimentary methods to investigate a complex problem has been suggested by theorists from various environmental and social disciplines and is termed methodological pluralism (Caldwell. 1988: Norgaard. 1989).
4. Research processes and methods

Figure 4.1 Action research cycles

Reflection

Planning

Action

Observation

Reflection

Thesis questions
- How can LG capacity be understood?
- What environmental outcomes are being achieved?
- How can LG capacity be enhanced?

BCC benchmarking study
- Risk assessment
- Gap analysis

Pilot interviews
- Symbolic interactions
- Case studies
- Comparisons

Case study research
- Case study interviews

Case study write-up, analysis
- Case study write-up
- Comparative analysis

ANU risk and waste studies (3)
- Risk and waste assessment
- Simple gap analysis

ANU implementation
- Ongoing risk assessment and risk reduction activities

BCC follow-up
- Ongoing risk assessments by BCC

ANU risk and waste studies (3)
- Risk and waste assessment
- Simple gap analysis

BCC benchmarking study
- Risk assessment
- Gap analysis

Queensland benchmarking study
- Risk assessment
- Gap analysis

Ongoing risk assessment and risk reduction activities

Queensland benchmarking study
- Risk assessment
- Gap analysis

Ongoing risk assessments by BCC

Thesis synthesis
- LG capacity can be understood through the antinomy of LG
- Many outcomes being achieved – constraints and opportunities
- Understanding, respect, support, recognition, reward

Key

Action research cycle.

Subsequent cycle initiated by previous cycle.

Subsequent cycle independent but connected to previous cycle.
The remaining sections are structured around the elements of Figure 4.2, working from the bottom to the top. Section 4.3 discusses scientific methods as a general basis for the thesis’ research. Section 4.4 discusses grounded theory methods, which also run through the entire research effort. Section 4.5 presents the grounded theory work that led to the adoption of the local-state antinomy as a central thesis focus. This original research also drew on ideas about the symbolic interactions that occur between individuals and institutions. Section 4.6 introduces action research methods as a third general method underpinning the whole research effort. Section 4.7 briefly introduces the remaining methods used in each of the component projects, focusing on how these work together to provide insights into the local-state antinomy, and its capacity to deliver beneficial environmental outcomes. These are only described briefly here since they are presented in detail in Chapters 5 and 7. Finally, the chapter discusses the strategies adopted for pulling the separate projects and theoretical contributions together through synthesis, analysis and reporting of findings.
4.3 Scientific inquiry

Previous chapters have made the point that there are major shortfalls in current knowledge about Australian LG and its environmental work. Most of the literature that is available on this topic is from government sources, rather than from academic texts. Neither of these bodies of literature have used formal scientific inquiry to investigate Australian LG and its environmental work as an integrated research topic. Certainly, none have attempted a comprehensive analysis that integrates inside-out and outside-in perspectives. The paucity of existing, rigorously derived scientific knowledge about LG environmental work brings about a need to consider the scientific underpinnings of this research, and how it proposes to produce good scientific findings. This section briefly reviews some of the fundamentals of scientific inquiry, focusing on the development and use of analytical categories and theories for progressing understanding of phenomena such as the environmental outcomes delivered by Australian LG.

Debates from the philosophy of science have not fully resolved the exact nature or purpose of science, but there are strong recurring themes. Scientific inquiry essentially aims to increase human understanding of the universe, making it intelligible by describing, defining, and predicting phenomena. Much science has an underlying theory of truth, intending for scientific study to bring humans closer to a real understanding of the universe. It is widely considered that current scientific knowledge is closer to the truth than in the past. Science involves the systematic study of people and their environments, to produce general theories and laws from reproducible observations and measurements of events and parameters. Scientific inquiry progresses through the development of disciplines, each of which form and reform various demarcated bodies of knowledge into coherent theories which are published in the scientific literature (Bullock, Stallybrass et al. 1988; Kincaid 1996).

These disciplines and the scientific literature are sources of analytical categories and theories to explain phenomena, and it is important for scientists to refer to and build on this literature so that knowledge can develop coherently. This thesis fits into social and environmental science disciplines generally, the policy, policy implementation and environmental risk sciences in particular. However the literature from these disciplines has gaps in its existing analytical categories for explaining LG and its environmental work. When theories fail to adequately explain observed phenomena in this way there is a need to apply scientific methods to induce new categories and novel theories.
Induction is the creative process of inferring general conclusions from discrete facts. Inductive processes are distinguished from the converse activity of deduction, which is the logical process of reasoning specific conclusions from general tenets. Induction is the main process used in empirical studies, which are based on observations rather than on prior theories. This thesis makes extensive use of inductive processes and they deserve some special comment.

Two forms of induction have been identified, and both are used in this thesis. In enumerative induction, statistical generalisations are developed from sampled cases chosen to represent their populations. Good scientific theories can only result from enumerative induction when the selected categories are meaningful in explaining the broader phenomena being studied. Chapters 5 and 6 use enumerative induction to discover relationships between environmental protection efforts and outcomes. Analytic induction seeks to develop universal statements containing the essential features of phenomena or the causes of social occurrences. The terms and definitions for the analytical categories that have already been presented in this thesis are the results of analytic induction. Good analytically induced categories need to be meaningful, mutually exclusive and complete. As with enumerative induction, categories are meaningful when they help explain the broader phenomenon being studied. When categories are mutually exclusive no example fits into more than one category. Categories are complete when all examples fit into a category (Manning, 1987. pp.457-60: Bailey and Morgan. 1966. pp.67-68). Analytic induction is the most fundamental scientific method applied in the research and findings presented in Chapters 7 and 8, and the methods have aimed to achieve these essential criteria for good categories.

The creative strength of induction is constrained by inherent challenges that need to be understood and managed if sound analytical categories are to be induced. Most centrally, inductive generalisations cannot be proven, and will be falsified by any contrary observation. When falsification occurs, categories and theories need to be amended to make their generalisations more accurate. This thesis addresses this by highlighting areas where contrary observations have led to the amendment of categories and theories or have been addressed in some other way.

Many of the categories developed in this thesis also contain subcategories or variables that describe different types or levels of the phenomena being described. When the differences involve no ranking or ordering these are categorical variables.
Most of the categories that have been defined so far are this type\(^1\). Others have a natural order although no absolute zero value and are called ordinal variables. None of this type of category have been introduced yet, but the case studies discussed in Chapters 7 and 8 contain ordinal variables for the scale, flexibility and origins of environmental initiatives and for their ecological, social and economic outcomes. When the subcategories display both a natural order and a zero value they are ratio variables. The environmental risk ratings and gap analyses for responses to initiatives are presented as ratio variables.

This brings up another important difference between these categories and variables since some quantify parts of phenomena while others describe them qualitatively. Many scientists, and especially those outside of the social sciences consider quantitative data to be more rigorous, accurate or systematic than qualitative data. Even in the social sciences, many theorists work hard to quantify their qualitative data for ease of analysis or clarity of findings (see Manning. 1987: Strauss and Corbin. 1990. Ch2: Babbie. 1989. Ch.13). This thesis does not aim solely for quantitative data or analysis, or consider that it is more valuable than qualitative analysis. Consequently the approach taken here is to quantify and statistically analyse the ratio variables since to do so is logical, practical and meaningful. Published ratio data for LG population, expenditure and area have already been graphed to show patterns in the categorical variable of LG type. The ordinal variables in the case studies are presented visually throughout appendix four and analysed qualitatively in Chapter 8. Categorical variables are only quantified to expose patterns between variables, while qualitative analysis is used to develop explanations and find meaning in the data. As a result, the outside-in study is predominantly quantitative and the inside-out study mainly qualitative but both studies use and present both types of data and analysis.

There are also well-recognised distinctions between explanatory and response variables. The former are variables relating to the context of phenomena that influence how they change or how change affects them. Examples within this study include the LG types, and the perspectives and roles of individuals working on local environmental issues. Response variables describe the changes that occur and are influenced by explanatory variables. Examples include the types and effectiveness of environmental outcomes that result from LG efforts.

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\(^1\) The broad categories have appeared as the shaded top lines of tables, while the categorical variables have appeared
Another distinction of significance to both the environmental and social sciences is between reductionist and holistic approaches to scientific inquiry. The approaches described above have reductionist features they focus on breaking phenomena down into their component parts by defining and comparing analytical categories. Critiques of reductionism argue that complex, whole, and especially living systems are greater than the sums of their parts, and cannot be fully understood through studies that attempt to break them down into those parts for analysis. In contrast, holistic approaches consider whole systems in context of their environments (Quine. 1961: Bullock, Stallybrass and Trombley. 1988. pp.390, 731). This thesis accepts the holistic critique of reductionist analysis in general, and recognises that there may be gaps in the findings or flaws in the emphasis given to different points of the analysis because of the essentially reductionist approach that has been taken to a holistic problem. But it considers that this approach was needed since this field of study lacks sound analytical categories and other knowledge needed to map out and explore issues that have not yet been rigorously explained. Moreover, this research is problem-centred, practitioner-oriented, cross-disciplinary, methodologically varied and organised to expose the learning process, each of which are features of a holistic research process (Zuber-Skerritt. 1991. p.130: Miller and Parlett. 1974. pp.iii-iii).

Further, the synthesis in Chapter 9 attempts a holistic summary that aims to move beyond the reductionist approach taken up to that point. That synthesis also employs deductive logic in articulating theories to explain the relationships between the induced categories. In a scientific sense, Chapter 9 shifts the thesis from description to prediction by suggesting options for addressing the local-state antinomy and improving LG capacity to deliver beneficial environmental outcomes. Policy recommendations such as these are always predictions, even though their architects rarely acknowledge them as such (Dovers and Mobbs 1997).

This section has described how this thesis engages with scientific inquiry. The next section deals with a particular methodology that has underpinned theory development throughout all of the thesis research.
4.4 Grounded theory methods

Theories are generalised statements that explain phenomena and are central products of scientific inquiry. Grounded theory methods systematically generate theory from data that itself is systematically generated by social science research (Glaser 1978). This section describes grounded theory methods and explains how they have been employed in this thesis.

Many social and other scientists undertake their work through the deductive processes of exploring, testing and trying to prove or disprove existing theories obtained from the academic literature. As their name suggests, grounded theory methods instead start with an area of study and allow the issues relevant to that study to emerge empirically through inductive processes. Existing academic literature is considered a minor input to grounded theory development, compared with direct observation. However grounded theorists do recommend the use of existing literature to stimulate sensitivity to analytical categories, as a secondary source of data, to stimulate questions, direct theoretical sampling and as a supplementary validation (Strauss and Corbin. 1990. p.35: Strauss 1987). Several analytical categories have already been presented in this text at the point when the academic literature relevant to them was discussed. However in most cases the terms arose through the application of grounded theory methods rather than having been adopted from the literature.

Research towards grounded theory starts by gathering data about the phenomena being studied. This is usually done through basic social science methods such as participant observation and interviews. Grounded theorists then use a series of techniques to identify, define and describe concepts and categories that are implicit in the data. The techniques involve asking and answering questions and making comparisons between observations. In this way, grounded theorists develop theoretical sensitivity by “taking apart an observation, a sentence, a paragraph and giving each discrete incident, idea or event, a name, something that stands for or represents a phenomenon” (Strauss and Corbin. 1990. p.63: Spradley 1980). The techniques aim to first discover, or induce categories by identifying phenomena and grouping concepts that seem to relate to the

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2 Citations were used to indicate those terms deriving from the academic literature. Sometimes the terms used in naming analytical categories will be familiar although their definitions are specific to this work. If they do not include citations, their definitions arose from the grounded theory methods. Examples are the categories of inherent and residual environmental risk that are introduced and discussed in chapter four.
same phenomena. Techniques to achieve this include the full transcription and analysis of initial field notes\(^3\) (also using interview techniques, as in Kvale 1996). Next, researchers name broader categories, ideally in ways that are consistent with the terminology of the phenomena or appealing to participants in it. They also describe define and develop categories in terms of their properties and dimensions. Beyond that, grounded theory research moves to develop models describing the processes underlying the phenomena, iterating between inductive and deductive processes (Strauss and Corbin 1990).

Although the terminology differs, good grounded theories are judged similarly to good analytically induced theories. In grounded theory literature, completeness is referred to by the fit of the theory to the data. Grounded theories are also judged by their generality in applying to any relevant phenomena, which is similar to the mutually exclusive matching of data to categories discussed earlier. When the theories are meaningful, they are said to work in explaining what happened, predicting what will happen and interpreting what is happening in an area of inquiry. Other characteristics that appear in only some of the texts include modifiability to subsequent observations and control with regard to action toward phenomenon (Strauss and Corbin. 1990. pp. 23-24: Glaser. 1978. pp. 4-6).

Each of these criteria made grounded theory methods appealing as the underlying methodology for this research. But three other features made this the most appropriate method. First, the nature of the topic, and specifically the scarcity of previous broadly-based research in this area suggested a need to apply empirical methods to induce new theories. Grounded theory methods provide a systematic and effective approach in such circumstances. In addition, writers on the method claim that grounded theories are interesting and valuable to their subjects, who are also likely to remember and use them. This suggested that the use of grounded theory methods would help achieve the central research principle of producing findings that were directly valuable to LG environmental managers. Third, the best grounded theories are the product of creative, as well as analytical input from the researcher. This researcher enjoys creative processes, and the prospect of doing creative research was appealing.

Grounded theorists identify several criteria for assessing the empirical grounding of studies undertaken using these methods. These have provided guidance during the

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\(^3\) In this thesis, a key interview from each state was fully transcribed and analysed.

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development of the thesis. Table 4.1 lists the criteria and states how the thesis went about trying to achieve them.

Table 4.1  Addressing criteria for empirical grounding of the thesis study

<table>
<thead>
<tr>
<th>Criteria</th>
<th>How the thesis addresses the criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are concepts and categories generated?</td>
<td>The local-state antinomy is a core concept that was obtained through grounded theory work (as discussed in Section 4.5 below). The full list of analytical categories is in Appendix 1 and every attempt was made to use each category consistently throughout the thesis.</td>
</tr>
<tr>
<td>Are the concepts systematically related?</td>
<td>Broad categories and their related categorical variables are presented together. The environmental risk assessments and case studies each present groups of categories such as ‘environmental risk areas’, ‘responses to initiatives’, ‘context continuums’, ‘environmental outcomes’ and others. These are each defined, and also linked together in visual and theoretical ways.</td>
</tr>
<tr>
<td>Are the broader conditions that affect the phenomenon under study built into its explanation?</td>
<td>Not only are the contexts and broader conditions described and presented in each study, but these also form part of the theoretical data. Discussions in chapter 5 provide this detail for the risk assessments while the stories, context continuums and categories for role, perspective, LG type and environmental focus area perform this function for the case studies.</td>
</tr>
<tr>
<td>Has process been taken into account?</td>
<td>The environmental risk assessments measured past and current environmental risk, and the extensions also use the method to set future environmental goals. The graphs for ecological, economic and social outcomes indicate changes before, during and after environmental attempts.</td>
</tr>
<tr>
<td>Do the theoretical findings seem significant and to what extent?</td>
<td>The discovery, articulation and exploration of the local-state antinomy has some significance for intergovernmental relations, although its impact is yet to be determined. Significant findings were demonstrated statistically in the environmental risk studies and environmental improvements have also resulted from the application of the risk assessment method in various contexts. Significance of the findings from the case study analysis are yet to be demonstrated.</td>
</tr>
</tbody>
</table>


A feature of this written thesis is that the categories that were produced are generally presented in their final form. The reader is not meticulously led through the developmental stages for each category, although some of the key concepts and

4. Research processes and methods
categories receive this special attention. Categories whose development is specifically discussed include elements of the local-state antinomy (below), inherent and residual environmental risk (Chapter 5) and each of the case study components (Chapter 7). The development of other categories is not discussed in detail for the purpose of thesis brevity. For the remaining categories, most were drafted during the thesis planning stages (see Figure 4.1), early on in the research process. Later research stages refined them, put them to use in the action stages of extensive data gathering, and finalised them during the observation processes, where different projects were written up and presented to appropriate audiences. Each of these stages and processes gave ample opportunity to ensure that the categories fitted the data and worked in explaining phenomena to practitioners and academic audiences.

Finally, the increasing importance of qualitative data analysis software in grounded theory studies, and its use in this thesis deserves attention. Qualitative data analysis software has been developed to assist the exhaustive processes of comparing observations and developing, fitting and refitting categories and theories to the data, that are required in grounded theory and other social science research methods. Several software programs have been developed over the past decade or so, and contemporary programs such as N-Vivo\textsuperscript{4} allow researchers to code data using draft analytical categories, and then explore and refine those categories. When data is extensive or complicated (as is the case here), these programs are very useful, since they allow speedy retrieval of all data relating to a specific category, and comparative analysis of those categories. Some authors identify risks associated with the use of such software. Over-use of the software without thoughtful consideration of the broader empirical methods can lead to neglect of those aspects of the methods that are poorly supported by the software, and this might lead to homogeneity in qualitative research and analysis (Lonkila. 1995: Coffey and Atkinson. 1996).

This thesis research has tried to avoid this problem by focusing primarily on the empirical methods, and drawing on the qualitative data analysis software for three discrete analytical tasks. The first is for inducing the local-state antinomy, as is discussed in the next section. The second is the exploration of SG and LG perceptions of the Queensland Environmental Protection Act 1994 and its implementation. The third is the comparative analysis of the goals, processes outcomes, drivers and constraints in

\textsuperscript{4} Developed by Qualitative Solutions and Research, Bundoora Victoria, Australia.
the case studies. In each case, the primary analytical categories had already been induced by analytic induction and grounded theory methods and N-Vivo was used to explore the variety of experiences expressed in the data. In this way, the software itself has not driven the data gathering or analysis process, but has assisted it where that seemed appropriate.

4.5 The antinomy of local government as symbolic interaction

This section presents methods and findings together, that led to the identification of the local-state antinomy, and its adoption as the central theme of the thesis. Findings are presented with the methods for simplicity, and because it is the most logical location for them.

Grounded theory methods allow the selective incorporation of existing theories and methods when empirical data suggest that they have relevance to a study. Symbolic interactionism is “the study of human beings interacting symbolically with one another and with themselves and in the process of that symbolic interaction making decisions and directing their streams of action” (Charon. 1992. p.147). This section outlines the key concepts from symbolic interactionism, describes how these ideas were applied to this thesis and in doing so explains the emergence of the concept of the local-state antinomy. This leads to the identification of elements of the local-state antinomy, which are later used as the structure for discussions of the findings from the inside-out and outside-in thesis studies.

Symbolic interactionism was suggested by G.H. Mead to explain key differences between humans and other animals (Strauss. 1964). Four main ideas summarise the whole perspective. First, symbolic interactionism focuses on the social interactions between people, rather than on the people themselves. Second, human action is caused both by social interactions and interactions within individuals who act according to how they define situations. Third, although past experiences and definitions of situations influence present interactions, people act in the present, primarily motivated by current circumstances. Fourth, people play active roles in freely defining the world in which we take action, assess our actions and those of others and redirect ourselves accordingly (Charon 1992. pp.23-24). Hence, humans interact with their own symbolic
interpretations of situations and other people, rather than directly with those other people. A symbol in this sense is defined as a stimulus that has learned meaning and value for people and the response to a symbol is in terms of its meaning and value rather than in terms of its physical stimulation of the sense organs” (Rose. 1962).

The concept of perspective is central to symbolic interactionism. For symbolic interactionists, perspectives are the conceptual frameworks held by individuals that shape all of their interactions. Perspectives are a guide to stimulus, and are distinguished from attitudes, which are responses to stimulus. Perspectives act like filters, sensitising individuals to parts of physical realities, desensitising them to others and helping individuals to make sense of the physical reality to which there is sensitisation (Charon. 1992. p.3).

Perspectives were of interest to this study even prior to its commencement. The author’s formal role before starting this thesis research involved mediating between SG and LG practitioners about their different roles and processes for implementing and complying with SG legislation. It was primarily her frustration with the apparent inability of both groups to understand one another’s most basic needs and issues that defined this research topic. Symbolic interactionism suggested a framework for some research that could be done within the context of the broader study and would explore these different perspectives on LG capacity to deliver beneficial environmental outcomes. Ideas from symbolic interactionism led to the development of a set of four questions that could be asked of people with apparently different perspectives on LG environmental work, to try to understand the specific issues to which LG and SG area sensitised and desensitised5. The questions were:

- What does SG not understand about LG;
- What does SG understand about LG;
- What does LG not understand about SG;
- What does LG understand about LG;

These questions gave respondents an opportunity to describe the issues to which they are sensitised, and those that they consider the other sphere of government to be desensitised to. The questions would establish the common understandings between the spheres of government when people from both spheres identified common issues that

5 These four questions were first suggested by Dr. Helen Ross, a thesis supervisor.

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they understood about one another. But more interestingly, the questions about what was not understood could expose intergovernmental interactions that are based on unshared symbols and that therefore fail to recognise important features or needs of the other sphere. Problems in symbolic interactions would be most strongly suggested when a highlighted issue for one sphere did not even feature in the understandings of the other sphere.

This strategy had appealing simplicity for understanding the different perspectives held by people who had worked only in LG or only in SG. But the results might be confounded by any interviewee with experience working in both spheres of government. The categories and analysis of perspectives needed to recognise that experience in both spheres could change an individual’s perspective on both spheres. Hence, the category of a mixed perspective was induced, and defined so that it included all of the people who demonstrated sensitivity to the intergovernmental knowledge and knowledge gaps of both spheres. The definition of a mixed perspective also had to be meaningful, complete, mutually exclusive and based entirely on the explanatory variable of peoples’ experience working in different roles, rather than on the response variable of their resultant understanding of SG and LG. The final definition for the mixed perspective is “people with experience working in LG associations, or who have held formal LG roles and worked in at least one other sphere of government. Includes people who have worked in LG and regional, state or federal government”6. Note that in this definition, experience working in a LGA includes experience as either an elected and appointed LGA official. This is because their responses to the questions suggested that either role involves such significant intergovernmental communication and negotiation that all LGA officials become sensitised to both LG and SG perspectives. However people’s sensitivity to the other sphere did not appear to develop if they shifted between elected and appointed roles within LG, or worked for several LGs within one or several several states.

The results of this research strongly suggested that SG and LGs interact across the spheres on the basis of unshared symbols. Table 4.2 presents the results of the questions about LG and SG understandings about one another, identifying these as elements of the local-state antinomy. Each of these elements is explored in detail in the discussions on the thesis findings in Chapters 6, 8 and 9.

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6 This definition is presented along with definitions of the other perspectives in Table 2.1 above.

4. Research processes and methods
Because the research is essentially focused on LG, the responses are grouped according to symbolic interactions of most significance to LGs. The column, headed *LG understandings (things that SGs don’t understand)* summarises the things that people with LG and mixed perspectives identified as not being understood by SG, and which also were not identified as things that were understood from SG perspectives. The most commonly identified issues are at the top and the least common ones at the bottom. In most cases, related shared and SG understandings were also identified by interviewees. The row-headings summarise the overall issue being considered from each perspective. The numbers of responses in each cell, from each perspective is also included.

There are clear and strong patterns in the understandings that were revealed through these questions. Importantly, LG, SG and mixed perspectives effectively accounted for the variation in these responses. There were no observable patterns in the responses from individuals representing different states, types of LGs, roles within LG or SG, years of work experience or engagement with different environmental focus areas. This strongly suggests that the a LG perspective is a strong unifying concept in explaining LGs own capacity, and its actions in relation to other spheres of government and other agencies. This is a significant finding because many writers on the subject of LG argue that the high level of diversity between LGs makes it at best problematic and at worst meaningless to attempt to develop an understanding of LG as a whole (see Mowbray 1997).

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7 In addition, a table of the same name in Appendix 2 presents the full quotations together with the originating perspective of all responses incorporated in this table.
Table 4.2  
Elements of the antinomy of local government

<table>
<thead>
<tr>
<th>Local government responsiveness to the community</th>
<th>Shared understandings</th>
<th>State government understandings (things that local governments don’t understand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LG is directly and immediately responsive to community demands. SG policies are a lower priority.</td>
<td>LG has detailed knowledge of local issues and SG has some technical knowledge and broad information that LG lacks. SG has slower bureaucratic processes than LG.</td>
<td>LG is sometimes unaware of or unresponsive to important, large-scale issues.</td>
</tr>
<tr>
<td>[7:4:1]</td>
<td>[0:1:0]</td>
<td>[0:0:1]</td>
</tr>
<tr>
<td>Resource shortages</td>
<td>LGs are critically short of resources to attend to core business of meeting community demands. If SGs want their priorities attended to, then new resources must be provided.</td>
<td>LG continually demands resources.</td>
</tr>
<tr>
<td>[6:2:0]</td>
<td>[1:4:1]</td>
<td>[0:0:1]</td>
</tr>
<tr>
<td>The potential for state/local government partnerships</td>
<td>LG offers SG opportunities such as the connection to people in the community and the ability to be involved at the coal face.</td>
<td>Both spheres respect their different roles. There are effective informal partnerships between individuals, but poor relations between the spheres.</td>
</tr>
<tr>
<td>[2:4:2]</td>
<td>[5:2:2]</td>
<td>[2:2:1]</td>
</tr>
<tr>
<td>Efficiency and effectiveness of service delivery</td>
<td>LG is very efficient, effective and flexible in service delivery. LG is relatively unburdened by bureaucracy and set up for action. The political feedback loop is tight if services fail. Its better to get a response slightly wrong than not to take action.</td>
<td>LG does a good job of service delivery with limited resources. LG can deliver on some policies that the SG is incapable of achieving on its own.</td>
</tr>
<tr>
<td>[6:1:0]</td>
<td>[2:4:0]</td>
<td>[3:0:0]</td>
</tr>
<tr>
<td>Local government leads the community</td>
<td>LG has influence in the local area, and can harness community and business support for initiatives. But it won’t use this to progress SG priorities when LG has been left out of the policy process.</td>
<td>There is a need to advocate and lobby within and between all spheres.</td>
</tr>
<tr>
<td>[4:3:1]</td>
<td>[0:1:1]</td>
<td>[1:1:0]</td>
</tr>
<tr>
<td>The politics of local and state government institutions</td>
<td>The stimulus for LG political issues comes from the local area and doesn’t follow neat party lines. The complex politics between professions in LG are also affected by SG legislation.</td>
<td>Both spheres know that LG can cause political hassles for SG if pushed too far. So SG understands the costs of excluding LG from policy processes, if not the benefits of their inclusion.</td>
</tr>
<tr>
<td>[2:1:1]</td>
<td>[0:4:1]</td>
<td>[0:1:1]</td>
</tr>
<tr>
<td>The diversity between local governments</td>
<td>LGs in different places, of different sizes and resource-bases are very different. Understanding one LG does not give an understanding of LG generally.</td>
<td>SG officials understand the LGs they work closely with, and LG officials understand the SG departments they work closely with. Some of them understand that their knowledge is limited.</td>
</tr>
<tr>
<td>[2:1:0]</td>
<td>[1:1:0]</td>
<td>[0:1:0]</td>
</tr>
<tr>
<td>The knowledge base of both spheres of government</td>
<td>LG is on everyone’s mailing list and has a great general knowledge. SG is as out of touch with community and industry as it is with LG.</td>
<td>SG has some technical information and expertise that LG lacks. It plays an important role setting broad policy directions for LG.</td>
</tr>
<tr>
<td>[2:1:1]</td>
<td>[1:1:0]</td>
<td>[0:1:0]</td>
</tr>
<tr>
<td>The integration of policy that occurs in local government</td>
<td>LGs integrate SG policy. Departments only deal with single portfolios, whereas LGs deal with a whole suite of legislation and departments. SG doesn’t understand the need to make its own policies consistent.</td>
<td>-</td>
</tr>
<tr>
<td>[2:0:0]</td>
<td>[0:0:0]</td>
<td>[0:0:0]</td>
</tr>
</tbody>
</table>

The bracketed numbers indicate how many responses were received from each perspective in each cell in the following order (LG:mixed:SG). The centre row includes responses to both of the questions about things that LGs and SGs understand about one another. 6 LG, 3 SG and 9 mixed perspectives are included.

4. Research processes and methods
The concept of the local-state antinomy is a theory generalising from these individual responses. It is based on an observed consistent contradiction between the unshared LG and SG understandings. One feature that is common to across the things that LG understands about itself but that SG doesn’t understand is LG’s perception of itself as a creature of local communities and places. Meanwhile, SG clearly understands LG as a creature of the state. Neither sphere understands the other’s perspective on the origins and focus of LG authority, although people with mixed perspectives are aware of both points of view. The local-state antinomy formalises the observation of the contradictory nature of each sphere’s perceptions of the another. As well as suggesting the local-state antinomy, the issues listed on the left column of Table 4.2 also provides nine substantive issues that are picked up in both inside-out and outside-in studies in later chapters.

4.6 Action research processes and products

Action research, and the action research cycles that make up this thesis project were mentioned briefly above. So far, the chapter has briefly covered the repeating cycles of planning, action, observation and reflection that characterise action research processes. This section expands on those early references in detailing how action research methods also run across the entire thesis project.

Figure 4.1 indicated four stages in every action research cycle and these require some discussion. The plan is generally considered to be the first stage. This stage looks forward to action in a flexible way that can cope with necessary changes. The action is deliberate, controlled, aim-oriented, and reflects on the plan for its rationale. The observation stage involves documenting the action process, including intended and unintended impacts, the constraints on action and how these affected the process. Reflection looks back over the learning that occurred in each stage (Zuber-Skerritt. 1991. p.111). Such reflection is clearly a useful input into any subsequent, related project and its benefits are maximised when reflective researchers stay involved.

The repeating cycles in an action research project is just one of its defining features. Other defining features are effectively summarised in the CRASP model. According to this, action research is:

- Critical (and self-critical) collaborative enquiry by
Reflective practitioners being
Accountable and making the results of their enquiry public,
Self-evaluating their practice and engaged in

The CRASP model emphasises the practical and collaborative aspect of action research. Action researchers follow the premise that research is most useful and accessible when collaboration occurs between scientists and practitioners. This notion is taken a step further in conceptions of the “personal scientist” and the “reflective practitioner”, which recognise that people in both roles can be most effective when they also draw from the others’ role (Kelly. 1955 and Schon. 1983 respectively). These principles are reflected in the products as well as the processes of action research. Action research’s founder Kurt Lewin argued that “there is nothing so practical as a good theory” (in Marrow. 1969. p.xi). As with grounded theory methods, this was appealing, since the thesis aimed to be of direct value to environmental management practitioners. It also helped to provide a conceptual link between this researcher’s prior work and this thesis. That link is formalised in Figure 4.1 through the labeling of the research questions as ‘reflection’, recognising that the questions emerged from the end of a previous cycle in which this researcher was a practitioner.

The CRASP model also describes the public accountability of action research. Involvement in these processes requires the scientist-researcher to maintain an ongoing commitment and engagement with subjects, clients and projects. Action researchers present their results to their practitioner audiences, and adapt their projects according to the responses they receive. This accountability and ongoing contact has been achieved for each of the separate research projects, since written reports and/or presentations were provided to practitioners involved in each project. These appear in the final column of Table 4.3 below. In addition, the entire thesis will be provided to all contributing practitioners, thus initiating a new cycle.

The focus of Table 4.3 is on the products of each stage of the action research cycles presented in this thesis. As with the overall thesis process in Figure 4.1, this starts each project or cycle with reflection, indicating the specific learning from previous projects that was built into subsequent ones.

4. Research processes and methods
<table>
<thead>
<tr>
<th>Project/ Cycle</th>
<th>Reflection</th>
<th>Planning</th>
<th>Action</th>
<th>Observation</th>
<th>Reflection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Thesis questions</strong> <em>(integrated, reflection)</em></td>
<td>• How can LG capacity be understood?</td>
<td>• Consider inside-out, outside-in and integrated perspectives.</td>
<td>• Start outside-in and inside-out research.</td>
<td>• There is much that SG and LG does not understand about the other sphere.</td>
<td>• Need to discover ways to learn and communicate across the antinomy.</td>
</tr>
<tr>
<td></td>
<td>• What environmental outcomes are being achieved?</td>
<td>• Focus broadly and in-depth.</td>
<td>• Follow-up interest generated by research.</td>
<td>• Particularly that LG responds to local issues.</td>
<td>• <strong>Introductory seminar.</strong></td>
</tr>
<tr>
<td></td>
<td>• How can LG capacity be enhanced?</td>
<td>• Research principles</td>
<td>• Interviews and projects.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BCC benchmarking study</strong> <em>(integrated, planning)</em></td>
<td>• Accountability to local operators.</td>
<td>• Review implementation strategy.</td>
<td>• 194 site inspections and interviews.</td>
<td>• Analysis showed significant risk reductions.</td>
<td>• Published BCC benchmarking study and presented findings to inspectors.</td>
</tr>
<tr>
<td></td>
<td>• Need to know environmental and other outcomes from BCC implementing EPA.</td>
<td>• Design study to assess outcomes from efforts.</td>
<td>• Cross-check risk ratings with inspectors.</td>
<td>• Unequal compliance.</td>
<td>• Extension projects within BCC and across Queensland.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Sample selection.</td>
<td>• Industry-specific version of CERAM.</td>
<td>• Varying responses to legislation.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Queensland benchmarking study</strong> <em>(outside-in, action)</em></td>
<td>• SG need to find out and report on outcomes from Queensland Environmental Protection Act.</td>
<td>• Negotiate scope with SG dept.</td>
<td>• Environmental risk assessment.</td>
<td>• 41% environmental risk reduction across Queensland.</td>
<td>• Need to address problems or the best practice operators are disadvantaged.</td>
</tr>
<tr>
<td></td>
<td>• Need to know environmental and other outcomes from BCC implementing EPA.</td>
<td>• Environmental and other outcomes for environmentally relevant activities across Queensland.</td>
<td>• Gap analysis of operator responses.</td>
<td>• Overall satisfaction with implementation but some problems.</td>
<td>• Published Queensland study.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Develop generic version of CERAM.</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BCC follow-up</strong> <em>(integrated, observation)</em></td>
<td>• BCC also needs to assess its own compliance and move towards best practice.</td>
<td>• Train BCC inspectors in using CERAM.</td>
<td>• Apply CERAM for BCC activities.</td>
<td>• CERAM works across BCC activities and is useful for identifying priorities.</td>
<td>• There is value in extending the use of CERAM to other LGs and keeping it consistent.</td>
</tr>
<tr>
<td></td>
<td>• CERAM promising.</td>
<td>• Establish ongoing partnership with ANU for CERAM</td>
<td>• Review results.</td>
<td>• Presentations and training course.</td>
<td>• Three annual environmental risk assessments with presentations.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Develop process to address community responses.</td>
<td></td>
<td>• Campus-wide support for pollution</td>
</tr>
<tr>
<td><strong>ANU risk and waste studies</strong> <em>(integrated, action)</em></td>
<td>• ANU aims to achieve best practice environmental management.</td>
<td>• CERAM developed by this researcher and available for use on campus.</td>
<td>• Site inspections annually to determine environmental risk and waste issues.</td>
<td>• Many low-level inherent risks.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Need to comply with ACT Environmental</td>
<td>• Establish ongoing partnership</td>
<td></td>
<td>• Stormwater pollution issues never previously addressed.</td>
<td></td>
</tr>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

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5 CERAM – Comparative Environmental Risk Assessment Method. To be discussed further in chapter four.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• ANU aims to achieve best practice environmental management.</td>
<td>• Reduce likelihood of pollution through education.</td>
<td>• Stormwater pollution issues never previously addressed but mostly simple and cost-effective to fix.</td>
<td></td>
</tr>
<tr>
<td>• CERAM risk reports have identified priorities.</td>
<td>• Reduce consequences of pollution through infrastructure.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Drain stenciling, brochure, poster, training sessions to educate about stormwater issues.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Sediment traps in key areas.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pilot Interviews</strong> (inside-out, planning)</td>
<td></td>
<td>• Thesis mid-term seminar.</td>
<td></td>
</tr>
<tr>
<td>• Different perspectives on and roles within LG associated with different views on environmental capacity.</td>
<td>• Interview people from different roles and perspectives within LG.</td>
<td>• Seeking examples of LG environmental attempts in different contexts.</td>
<td></td>
</tr>
<tr>
<td>• Need methods to find out what matters to LG.</td>
<td>• Iterative interviews and analysis to discover categories.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Case study research</strong> (inside-out, action)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Seeking examples of LG attempts to deliver beneficial environmental outcomes in different contexts.</td>
<td>• Interview people from different roles and perspectives within LG.</td>
<td>Many stories of LG attempts to deliver beneficial environmental outcomes.</td>
<td></td>
</tr>
<tr>
<td>• Environmental strategist role especially important.</td>
<td>• Iterative interviews and analysis to discover categories.</td>
<td>Variation between stories described by analytical categories</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Case study write-up</strong> (inside-out, observation)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Case studies need to be accessible, include technical detail, interesting and analytical.</td>
<td>• Design four-page design with stories, pictures, analytical categories.</td>
<td>• Analytical categories fit and work.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Write up all case studies in consistent format.</td>
<td>• Presentations at Northern Territory environment department and Busselton Shire</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Liaise with LG practitioners to finalise cases.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Thesis synthesis</strong> (integrated, reflection)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Need to integrate the outside-in and inside-out studies.</td>
<td>• Use N-Vivo for case study analysis.</td>
<td>• 34 case studies with approval to publish.</td>
<td></td>
</tr>
<tr>
<td>• Outside-in studies can also be case studies.</td>
<td>• Seek ways to communicate across antinomy.</td>
<td>• Most co-authored by LG environment practitioners.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Write, redraft and finalise thesis.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Address antinomy and seek ways through it.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Still need to ensure that findings are academically sound and accessible to practitioners.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• PhD Thesis and interactive CD-Rom.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Copies to be made for contributors.</td>
<td></td>
</tr>
</tbody>
</table>

It is worth noting that one of the techniques used to engage the interest of subjects and clients was the use of photographic images of the environmental issues investigated in the thesis. Although photographs are not necessarily unbiased images of
events and places, they are certainly accessible and inviting to wide audiences (Berger 1972). Every attempt was made to ensure that the photographs used in the case studies and risk assessments simply added to a reader’s ability to conceptualise the environmental issues presented in the work. In this sense, the photographs were used to assist the action research process, but were not used as a specific research tool, or aid to analysis (see Wagner 1979).

4.7 Contrasts and commonalities

This chapter now moves away from the methodological and theoretical underpinnings of the entire thesis to briefly outline the methods that applied only to parts of the overall project. However the goal here is still to show how these are tied together towards common research goals. This section briefly contrasts key elements of the environmental risk assessment and comparative case study analysis. Next, it discusses the links between them and shows how the different approaches are made to work together.

The two major studies that make up this thesis have so far been contrasted in relation to their outside-in and inside-out approaches or their use of risk assessment or case study methods. Of course, each of these studies also made use of other methods such as gap analysis and comparative analysis. These details are discussed in Chapters 5 and 7. But there are also further differences between the two major studies that have not yet received explicit attention. These differences are summarised in Table 4.4. The italicised last dot-point in each cell also indicates the areas within each study where these differences are less pronounced. These last points show some of the overlaps between the studies that also help to tie them together within the overall thesis.

The separate projects also have other linkages. Firstly, as was stated above, each of the analytical categories that are developed in the thesis are used consistently throughout it. So categories for perspective, role, LG type, and the environmental focus area of environmental protection are all used consistently in both the risk assessments and case studies. Secondly, as was also mentioned, nine substantive issues that have already emerged about the local-state antinomy are explored in both studies, and in the thesis synthesis.
Table 4.4  Contrasting the environmental risk assessment and case study analysis

<table>
<thead>
<tr>
<th>Addressing the antinomy</th>
<th>Environmental risk assessment</th>
<th>Case study analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outside-in</strong></td>
<td>• Primary analytical categories derived from SG legislation (Environmental Protection Act), and implementation strategies.</td>
<td>• Primary analytical categories established through grounded theory methods, aiming to find elements that are present in every attempt to deliver an environmental outcome.</td>
</tr>
<tr>
<td></td>
<td>• Substantive details discussed in interviews are consistent across local government areas.</td>
<td>• Substantive issues discussed in interviews were specific to each individual local government and attempt.</td>
</tr>
<tr>
<td></td>
<td>• But open-ended questions also sought responses to the legislation from LG perspectives.</td>
<td>• But some of the individual case studies present outside-in environmental initiatives.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Research ownership</th>
<th>Consultancy</th>
<th>Independent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Clients defined research goals and approved strategies and processes.</td>
<td>• Researcher defines research goals, strategies and processes with reference to the research itself.</td>
</tr>
<tr>
<td></td>
<td>• Researcher tendered for the work, aiming for sound methods that meet client’s needs.</td>
<td>• Researcher or their institution funds the work, aiming for academic publications.</td>
</tr>
<tr>
<td></td>
<td>• Findings ‘owned’ by client. May be withheld from the public arena or further publication.</td>
<td>• Findings ‘owned’ by the researcher and published in academic literature.</td>
</tr>
<tr>
<td></td>
<td>• Research findings put to immediate use by client agencies.</td>
<td>• Research potentially lacks direct practical application.</td>
</tr>
<tr>
<td></td>
<td>• But contracts allowed further publication of these research findings in consultation with funding agencies</td>
<td>• But interviewees not the researcher defined the case study topics and focus.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Perspectives and Roles</th>
<th>Other, LG and SG perspectives</th>
<th>Predominantly LG perspectives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Most interviews conducted with business operators (‘other’ perspective). Specific questions for LG and SG authorised persons implementing the legislation.</td>
<td>• Most interviewees had a LG perspective. Some had ‘mixed’ and ‘other’ perspectives and one was SG. LG input always sought, even if interviewee was not LG.</td>
</tr>
<tr>
<td></td>
<td>• Local government interviewees all held environmental health officers roles.</td>
<td>• Each role within local government represented among the informants (elected representatives, managers, officers).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data type</th>
<th>Quantitative</th>
<th>Qualitative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Variables are expressed in numeric terms wherever meaningful and practical.</td>
<td>• Variables are described, compared and grouped into categories according to similar characteristics</td>
</tr>
<tr>
<td></td>
<td>• But analytical categories were initially developed using policies, legislation and interview data. The scales are ordinal, using comparisons rather than absolute values.</td>
<td>• But graphs of ecological, economic and social outcomes, and context continuums use ordinal scales.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Analytical methods</th>
<th>Statistical techniques</th>
<th>Qualitative data analysis techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Statistical analysis is used to determine significant differences between sets of variables.</td>
<td>• Qualitative data analysis software used to find patterns of drivers, constraints, and outcomes and relate these to the contexts in which they occur.</td>
</tr>
<tr>
<td></td>
<td>• But logic and knowledge of industry and pollution issues were used to identify groupings of activities by 'sector' and so on.</td>
<td>• But schematic representations were used to describe several variables.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sampling Strategies</th>
<th>Stratified random sampling</th>
<th>Informant-driven sampling</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Explanatory variables about local governments used to support random selection of local governments for inclusion in the study.</td>
<td>• Only local governments undertaking environmental initiatives were included as case studies. These were identified through interviews and other means.</td>
</tr>
<tr>
<td></td>
<td>• All of the LGs taking part in the studies were attempting to deliver beneficial environmental outcomes – even if this was only because SG legislation required them to.</td>
<td>• In some cases it was an individual within the LG, rather than the LG as a whole that was making the attempt to deliver an environmental outcome.</td>
</tr>
</tbody>
</table>
A third major linkage is achieved by using both methods to describe and analyse the implementation of the Queensland *Environmental Protection Act 1994*. Case study Q1 is on Queensland LG implementation of that Act, so this case study has much the same scope as the Queensland benchmarking study – the most outside-in of all of the thesis projects. Case study Q3 covers Brisbane City Council’s implementation of that Act, which was the project in which the environmental risk assessment method was first developed. Case studies Q5 and Q8 deal with environmental protection act implementation by two ‘other’ LGs. Case study A1 on the Australian National University’s environmental management efforts is another element of the broader environmental risk study that is also presented in case study format. This intentional overlapping of the methods aimed to give readers insight into the effectiveness of the translation of complex, in-depth problems into simplified summaries in the shorter case studies. Every one of the case studies is necessarily a simplification of equally complex issues, yet the case study method appears sufficiently robust and flexible to adequately summarise key elements of any LG environmental attempt.

### 4.8 Conclusions

Many research methods are used in the eight individual projects that are grouped into the two major studies make up this overall thesis. Some methods underpin the entire research effort, and they include scientific methods generally, grounded theory methods and action research. The local-state antinomy is a concept underpinning the whole thesis, and it was developed partly through insights from symbolic interactionism. The various research methods and topics are also tied together by presenting aspects of the risk assessments as case studies using the standard format. This plurality of research methods work together to in discovering, exploring and explaining the local-state antinomy in Australia, and through it, LG capacity to deliver beneficial environmental outcomes.

This chapter concludes part one of the thesis. Next, the thesis shifts its focus to detailed descriptions and presentations of the thesis’ original research and its results.