



THE UNIVERSITY OF QUEENSLAND
AUSTRALIA

**The Social Identity Approach to Understanding Stakeholder Conflict in
Environmental and Natural Resources Management**

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Bachelor of Environmental Management (Hons 1)

*A thesis submitted for the degree of Doctor of Philosophy at
The University of Queensland in 2016
School of Geography, Planning and Environmental Management*

Abstract

Conflict between stakeholders about environmental and natural resources management (ENRM) issues is a significant challenge for achieving sustainable outcomes for people and the environment. Although conflict can be a constructive and important part of deliberative processes, ENRM routinely experiences dysfunctional conflict, where people involved focus on their perceived incompatibilities rather than finding solutions for the problem. This form of dysfunctional conflict leads to decision-making stagnation and exacerbation of issues which require timely management. The self-perpetuating nature of conflict means that relationships between people and groups become strained, and the potential for cooperation and compromise is undermined. In ENRM, conflict is addressed, often implicitly, through the practice of stakeholder engagement. Although advancements have been made on stakeholder engagement processes through both research and practice, conflict continues to manifest in ENRM issues.

This thesis investigates ENRM conflict through analysing the contribution of ENRM stakeholder engagement practice to the prevalence of dysfunctional conflict. In order to understand the hidden complexities and drivers of conflict, the social identity approach has been applied as a theoretical lens. The social identity approach is a theoretical perspective from social psychology which explains how people become members of groups, and how groups interact. As such it is well suited to a study of ENRM conflict, where the heart of the conflict is how groups of people – stakeholders – interact with each other.

First, the thesis outlines the theoretical basis for the interest in ENRM conflict, and makes a case for both why stakeholder engagement processes are a critical aspect of conflict which are worthy of investigation, and why the social identity approach is a useful theoretical lens. Following this, a theory building approach to integration of the literature across disciplines is used to present a way of understanding the human dimension of ENRM conflict, and the argument is made for the use of the social identity approach. As a result, a clear distinction is made between ‘stakeholders’ and ‘the citizenry’, where stakeholders are formalised groups with a defined interest, and the citizenry is everyone else. An integrative conceptual model for ENRM conflict is created, and is analysed with the application of the social identity approach.

Next, the thesis examines the processes taken by ENRM practitioners to identify stakeholders, thereby filling a recognised gap in the literature. This is undertaken with the use of semi-structured interviews with experienced ENRM practitioners, analysed qualitatively. As a result, a typology of approaches to identification of stakeholders is presented, and the previously proposed distinction

between stakeholders and the citizenry is shown to be reflective of how practitioners categorise people in the context of ENRM issues.

The thesis then investigates a case study of a large-scale wind energy development proposal in King Island, Tasmania, where the local community experienced dysfunctional conflict despite the project proponent's adoption of what was described as a 'best practice' engagement strategy. In-depth interviews with King Islanders representing a range of perspectives on the proposal were conducted and qualitatively analysed. Based on this research, key factors of the engagement process which exacerbated conflict are discussed with the use of the social identity lens.

Finally, a study of how citizens' attitudes toward ENRM issues are affected by conflict is presented, with the use of an experimental survey conducted with a demographically representative sample of the Australian citizenry, analysed quantitatively. The study shows that ENRM conflict affects the citizenry's attitudes toward land use changes, but the nature of the effect is complex. New insights are presented about the way public opinion, as an approximate average of citizens' attitudes, is affected by ENRM conflict.

The thesis provides new insights into ENRM conflict and stakeholder engagement which are instructive for the scholarship and practice of ENRM. Five key contributions to the literature have been made. The first integrative conceptual model incorporating the social identity approach for understanding ENRM conflict is presented. The social identity approach is demonstrated to be an appropriate lens for understanding ENRM conflict, and the social psychological theory is made accessible in the context of ENRM. A typology of approaches to identification of stakeholders in ENRM, based on insights from the expertise of practitioners, is presented. A thorough evaluation of a case study of conflict provides key aspects of process which contributed to the exacerbation of conflict. An original perspective on ENRM conflict demonstrates that the citizenry's attitudes are influenced by conflict, and shows how this affects public opinion.

Overall, the thesis shows that ENRM conflict needs to be understood in an integrative and interdisciplinary way, and makes original contributions to the knowledge base for this understanding. The complexity of conflict shapes, and is shaped by, the processes of ENRM engagement. Recognition of this interrelationship is critical for making informed decisions in ENRM which contribute to sustainable outcomes for people and the environment.

Declaration by author

This thesis is composed of my original work, and contains no material previously published or written by another person except where due reference has been made in the text. I have clearly stated the contribution by others to jointly-authored works that I have included in my thesis.

I have clearly stated the contribution of others to my thesis as a whole, including statistical assistance, survey design, data analysis, significant technical procedures, professional editorial advice, and any other original research work used or reported in my thesis. The content of my thesis is the result of work I have carried out since the commencement of my research higher degree candidature and does not include a substantial part of work that has been submitted to qualify for the award of any other degree or diploma in any university or other tertiary institution. I have clearly stated which parts of my thesis, if any, have been submitted to qualify for another award.

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Publications during candidature

Peer reviewed papers

Colvin, RM, Witt, GB & Lacey, J 2015, 'Strange bedfellows or an aligning of values? Exploration of stakeholder values in an alliance of concerned citizens against coal seam gas mining', *Land Use Policy*, vol. 42, pp. 392-399.

Colvin, RM, Witt, GB & Lacey, J 2015, 'The social identity approach to understanding socio-political conflict in environmental and natural resources management', *Global Environmental Change*, vol. 34, pp. 237–246.

Colvin, RM, Witt, GB & Lacey, J 2016, 'Approaches to identifying stakeholders in environmental management: Insights from practitioners to go beyond the ‘usual suspects’', *Land Use Policy*, vol. 52, pp. 266–276.

Colvin, RM, Witt, GB & Lacey, J 2016, 'How wind became a four-letter word: Lessons for community engagement from a wind energy conflict in King Island, Australia', *Energy Policy*, vol. 98, pp. 483-494.

Whiley, D, Witt, GB, **Colvin, RM**, Sapiains Arrue, R & Kotir, J *in press*, 'Enhancing critical thinking skills in first year Environmental Management Students: A tale of curriculum design, application and reflection', *Journal of Geography in Higher Education*.

Conference abstracts

Colvin, RM 2013. Viewing stakeholders for who they are: The values and beliefs of farmers and environmentalists allied in opposition to the coal seam gas industry in Australia. Presented at the *19th International Symposium on Society and Resource Management*. Estes Park, Colorado, USA, 4-8 June 2013.

Colvin, RM 2013. The place of beliefs and identity in an alliance of farmers and environmentalists in opposition to coal seam gas mining. Poster presented at the *19th International Interdisciplinary Conference on the Environment*. Portland, Oregon, USA, 14-17 June 2013.

Colvin, RM 2014. Conflict, stakeholders, and identity in environmental and natural resources management. Presented at the *Environment Institute of Australia and New Zealand 2014 Annual Conference*. Hobart, Tasmania, 30-31 October 2014.

Colvin, RM 2016. Navigating social conflict to achieve successful conservation outcomes: Perspectives from social psychology. Presented at the *Society for Conservation Biology 4th Oceania Congress*. Brisbane, Queensland, 4-8 July 2016.

Publications included in this thesis

Colvin, RM, Witt, GB & Lacey, J 2015, 'The social identity approach to understanding socio-political conflict in environmental and natural resources management', *Global Environmental Change*, vol. 34, pp. 237–246. *Cited by 5, Impact factor (5 year) 7.482*. Incorporated as Chapter 2 of the thesis.

Contributor	Statement of contribution
Rebecca Colvin (Candidate)	Conceptual design (80%) Wrote the paper (100%) Edited the paper (40%)
Bradd G. Witt	Conceptual design (10%) Edited the paper (30%)
Justine Lacey	Conceptual design (10%) Edited the paper (30%)

Colvin, RM, Witt, GB & Lacey, J 2016, 'Approaches to identifying stakeholders in environmental management: Insights from practitioners to go beyond the ‘usual suspects’', *Land Use Policy*, vol. 52, pp. 266–276. *Cited by 4, Impact factor (5 year) 3.253*. Incorporated as Chapter 3 of the thesis.

Contributor	Statement of contribution
Rebecca Colvin (Candidate)	Conceptual design (80%) Interview design (100%) Participant recruitment (80%) Data collection (100%) Data analysis (100%) Wrote the paper (100%) Edited the paper (40%)
Bradd G. Witt	Conceptual design (10%) Edited the paper (30%)
Justine Lacey	Conceptual design (10%)

	Edited the paper (30%) Participant recruitment (20%)
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Colvin, RM, Witt, GB & Lacey, J 2016, 'How wind became a four-letter word: Lessons for community engagement from a wind energy conflict in King Island, Australia', *Energy Policy*, vol. 98, pp. 483-494. *Uncited, Impact factor (5 year) 3.701*. Incorporated as Chapter 4 of the thesis.

Contributor	Statement of contribution
Rebecca Colvin (Candidate)	Conceptual design (80%) Interview design (100%) Participant recruitment (100%) Data collection (100%) Data analysis (100%) Wrote the paper (100%) Edited the paper (40%)
Bradd G. Witt	Conceptual design (10%) Edited the paper (30%)
Justine Lacey	Conceptual design (10%) Edited the paper (30%)

Contributions by others to the thesis

Chapter 1

This chapter was written solely by the candidate with editorial assistance from Bradd Witt, Justine Lacey, and Rod McCrea.

Chapter 2

Colvin, RM, Witt, GB & Lacey, J 2015, 'The social identity approach to understanding socio-political conflict in environmental and natural resources management', *Global Environmental Change*, vol. 34, pp. 237–246.

This chapter is comprised of a publication by the candidate which is published in *Global Environmental Change*. The theoretical approach and conceptual model were originally conceived by the candidate. The chapter was solely written by the candidate with editorial support from Bradd Witt and Justine Lacey. The chapter was reviewed by Bruce Taylor and Simone Carr-Cornish of CSIRO.

Chapter 3

Colvin, RM, Witt, GB & Lacey, J 2016, 'Approaches to identifying stakeholders in environmental management: Insights from practitioners to go beyond the ‘usual suspects’', *Land Use Policy*, vol. 52, pp. 266–276.

This chapter is comprised of a publication by the candidate which is published in *Land Use Policy*. The candidate conceived of the study, designed methods and conducted all research and analysis with guidance from Bradd Witt and Justine Lacey. The chapter was solely written by the candidate with editorial support from Bradd Witt and Justine Lacey. The chapter was reviewed by Bruce Taylor of CSIRO.

Chapter 4

Colvin, RM, Witt, GB & Lacey, J XX, 'How wind became a four-letter word: Lessons for community engagement from a wind energy conflict in King Island, Australia', *Energy Policy*, vol. 98, pp. 484-494.

This chapter is comprised of a publication by the candidate which is published in *Energy Policy*. The candidate conceived of the study, designed methods and conducted all research and analysis with guidance from Bradd Witt and Justine Lacey. The chapter was solely written by the candidate with editorial support from Bradd Witt and Justine Lacey. The chapter was reviewed by Nina Hall of CSIRO.

Chapter 5

This chapter is comprised of a manuscript by the candidate in preparation for submission to *Global Environmental Change*. The candidate and Bradd Witt conceived of the study. The study was designed by the candidate with input from Bradd Witt, Justine Lacey, and Rod McCrea. Data were collected by The ORU. Analysis was conducted by the candidate with guidance from Rod McCrea. The chapter was solely written by the candidate with editorial support from Bradd Witt, Justine Lacey, and Rod McCrea.

Chapter 6

This chapter was written solely by the candidate with editorial assistance from Bradd Witt, Justine Lacey, and Rod McCrea.

Statement of parts of the thesis submitted to qualify for the award of another degree

None.

Acknowledgements

It is strange to write acknowledgments for this thesis, as it is the last thing left to write and so, to some extent, indicates the PhD journey is over. I find this sad, as I have had a thoroughly enriching and enjoyable three (and a bit) years. First and foremost, I have my supervisors to thank for this. Bradd, thank you for your unwavering support and friendship, for providing sandwiches on a thousand drafts, and always being available for a whiteboard session or a chat over ‘brown water’. Your undergraduate courses are what initially piqued my interest in this space, so in almost every way I am here thanks to you. You have kept me on track throughout the PhD, and have always had my best interests in mind. Thanks for your humour and kindness, and I look forward to continuing to work together in the future. Thank you Justine for all your encouragement, in the thesis and beyond, and for making me recognise the importance of process (and for helping me to see that, to my surprise, process is actually quite interesting after all). Thanks for always making the time for me despite your busy schedule, and for always having a kind word to say (and for the many belly laughs I’ve had from your emails). I hope this isn’t the last you’ll see of Ol’ Colvy. Rod, thank you for being such a bastion of sensible statistics, I could not have finished the thesis without your guidance. I’ve learned so much from your mentorship on research design and statistical analysis, and it has been such a pleasure and privilege to learn from someone who is so knowledgeable, patient, and kind. Thanks for always taking the time to provide such practical and helpful feedback on drafts, and for all your support (especially over coffee at the ESP).

My most sincere thanks are extended to all the folks who have generously offered their time and insights to contribute to my research. Thanks to the practitioners who shared their perspectives on stakeholder identification for our illuminating discussions. Thanks to the King Island community for welcoming me so warmly, and for sharing experiences during a challenging time. I will always treasure my visit to King Island and I am hopeful to return in the not-too-distant future. I couldn’t have managed the field work without the help of Amanda Sweeney, who was a perfect travel companion and research assistant. Thanks, too, to the 1,200+ anonymous people who completed the online survey and those who indulged me in the (sometimes painful) process of survey pre-testing. Bruce Taylor, Simone Carr-Cornish, and Nina Hall, all of CSIRO, took the time to provide meaningful and constructive feedback on my research – thank you for sharing your expertise to improve the quality of my work.

My thanks to Marc Hockings for support throughout the PhD – for all the opportunities offered to me and the kind, encouraging words I’ve received. I am also thankful for the friendship and guidance of Dona Whiley who has always provided support and laughter. I appreciate very much the folks of GPEM who have been so friendly and made this such a fun place to be – professional

and academic staff alike. I've made great friends here, and I'm fortunate to have studied alongside so many fantastic, up-and-coming researchers. I am thankful for the support of the UQ-CSIRO Integrated Natural Resource Management top-up scholarship which facilitated my research and enhanced, significantly, my PhD, as well as the Australian Postgraduate Award.

I am so fortunate to have had supportive family and friends throughout my studies, who were always interested in and supportive of me and my research. Thank you Norah for being a wonderful mother, for all your support and especially for your cute daily text messages. Thanks Bob, Rob, and Chess for being the best family I could wish for. Thanks Artie and Anna for being munchkins and I hope you appreciate having the greatest auntie in the world. Ziggy joined our family mid-PhD and has been such a ball of joy who always has a wag and a kiss for everyone, and an insatiable appetite for fun. No PhD should be undertaken without a dog (and I feel compelled to thank Ziggy for being such a wonderful creature). I cannot thank enough Jayne McGhie at the UQ Vet Hospital for looking after Ziggy and us when Zig's leg problems started. Our visits to the vet hospital became a mainstay of the PhD experience and it has been such a privilege to get to know Auntie Jayne. I cannot express the depth of my gratitude to Jayne and all the folks at the UQ Vet Hospital who showed so much love and care and compassion and expertise and ingenuity and skill and dedication while fixing Zig's leg. Finally, thanks Glenn for always being there for me. For being silly and loving and supportive and a great dude. I couldn't have finished this without you.

Keywords

Stakeholder analysis; stakeholder engagement; community engagement; public participation; public opinion; governance; social conflict; social acceptance; wind energy; wind farm.

Australian and New Zealand Standard Research Classifications (ANZSRC)

ANZSRC code: 050205, Environmental Management, 75%

ANZSRC code: 160802, Environmental sociology, 15%

ANZSRC code: 170113, Social and Community Psychology, 10%

Fields of Research (FoR) Classification

FoR code: 0502, Environmental Science and Management, 75%

FoR code: 1608, Sociology, 15%

FoR code: 1701, Psychology, 10%

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List of abbreviations

AEC-EP: Agricultural extension/community engagement practitioners

ENRM: Environmental & Natural Resources Management

LUC-EP: Land use change engagement practitioners

Chapter 1: Introduction

1. Introduction

1.1 Rationale

Material change to a landscape raises public interest in the environmental and natural resources management (ENRM) decision-making process. It is the tangible environment to which many people are connected (Greider and Garkovich 1994; Brown and Raymond 2007), particularly for people who have close familiarity with the landscape (Manzo and Devine-Wright 2014). As such, land use changes can be a visceral experience for people, especially when these changes are occurring to a valued landscape (van der Horst 2007). For others, though, a personal connection to a landscape is not necessary, as public interest can be raised due to moral perspectives on how humans ought to relate to and manage the natural environment (Billgren and Holmén 2008). This interest from the public affects land use change decisions, meaning that ENRM does not follow a technocratic decision-making process. Rather, the way in which ENRM decisions are made is socially complex and values-laden, and as such is prone to conflict.

Public interest in land use changes has led to people outside of formal-decision making institutions demanding a voice in the ENRM decision-making process (Dale and Lane 1994; Elliott 2014; Moffat et al. 2015). This shift toward public involvement in ENRM decision-making has become an accepted part of ENRM (Grimble and Wellard 1997; Miller 1999; Reed et al. 2008; Soma and Vatn 2014; Parsons et al. 2014), and mirrors the norms of 'ENRM governance' (Lane et al. 2004; Lockwood et al. 2010). Through incorporation of the public into government decision-making processes, ENRM governance is expected to lead to better decision-outcomes which are more likely to enjoy public support (Williams and Schirmer 2012; Hall et al. 2013; Fischer et al. 2014).

Reflecting the diversity of society, the voices of the public in the ENRM governance represent pluralistic values and argue for a range of land use priorities (Lane 2003; Fraussen and Halpin 2016). This means that disagreement about the best course of action for any given land use change is likely, both between decision-makers and the public, and between different sectors of the public. This disagreement leads to conflict about land use change (Moore 2013). In Australia, land use conflict is social and political rather than armed, though there are exceptions where high-stakes debate leads to intimidation of or harm to others (e.g. Atkin 2013; Dalzell 2016).

Although conflict is not inherently bad (Amason 1996; Opatow and Weiss 2000; Zachrisson and Beland Lindahl 2013), management of the negative consequences of conflict is embedded within ENRM practice, though often implicitly. For example, the pursuit of the 'social licence to operate' (SLO) by energy and primary industries is in efforts to maintain positive public relations, and in so doing avoiding conflict (Lacey and Lamont 2014; Moffat et al. 2015). Environmental impact

assessment (EIA) processes are mandated to improve transparency, fairness of benefits, and public acceptance of major land use changes, thereby avoiding conflict (Elliott 2014). Facilitating community involvement in land use change decision-making, often as part of SLO or EIA processes (Dare et al. 2014), through managed consultative processes aims to increase social acceptance, thereby reducing the potential for conflict (Ford and Williams 2015). Explicit conflict management, meanwhile, tends to occur after the fact of a party making claims of being wronged (O’Leary and Bingham 2003; Moore 2013). Central to these processes for conflict management is the participation of the public in ENRM decision-making.

Despite established processes for conflict management, conflict remains a challenge for achieving sustainable ENRM outcomes (Beierle and Konisky 2000; Yasmi et al. 2006; Redpath et al. 2013), where the needs of people are met without degradation of the natural environment or depletion of natural resources (Fischer et al. 2007; Morton et al. 2009; Dovers 2013; Griggs et al. 2014). Conflict leads to stagnation in the decision-making process, potentially exacerbating ENRM issues requiring timely management (Putnam and Wondolleck 2003; Gritten et al. 2009). ENRM conflict can become self-perpetuating (Asah et al. 2012), which erodes relationships between key parties and limits willingness to compromise (Shmueli et al. 2007). Major global trends and human pressures on resources and the environment - such as climate change, population growth, and biodiversity loss - are expected to increase into the future (Hajkowicz et al. 2012), meaning the challenge posed by ENRM conflict is likely to be enhanced. The pressure of these global trends at the local scale (among other pressures) results in land use change, where one land use is intentionally converted into another type of land use (Williams and Schirmer 2012). For example, policy to address climate change may promote or discourage ‘carbon farming’ (Witt et al. 2011) or the development of renewable energy facilities (Hall et al. 2013). Population growth will necessitate provision of housing, which may require the release of undeveloped land for residences (Sushinsky et al. 2013). International agreements on biodiversity conservation will restrict the options for use of land where a valuable natural environment has been recognised (Iftekhhar et al. 2014).

This means that for ENRM at present and into the future, it is important to understand how conflict management can be improved to better achieve sustainable land use outcomes. As public participation is a critical aspect of conflict management, understanding the human dimension of ENRM conflict is therefore central to identifying ways to mitigate and alleviate land use conflict. This research aims to develop a theoretically-grounded understanding of the human dimension of land use conflict in order to inform ENRM stakeholder engagement practice which contributes to the alleviation of dysfunctional conflict. This thesis takes an interdisciplinary perspective on ENRM conflict. The practice of public participation is examined in terms of its contribution to the problem

of ENRM conflict, within the context of land use change in Australia. In order to develop a nuanced understanding of this human dimension, it was recognised that a theoretical perspective which explains the way groups interact with each other was required. As such, for this thesis the social identity approach – a perspective from social psychology – is adopted as a theoretical tool. The social identity approach is discussed in more detail later in this chapter (section 1.4) and is a major focus of chapter 2.

The rest of this chapter reviews key concepts for understanding the human dimension of ENRM conflict: land use conflict, stakeholders in ENRM, and the social identity approach. This chapter serves as a general review which provides the theoretical context to the thesis, and the themes present here will be extended in later chapters. In chapters 2 through 5, literatures related to each chapter are discussed within the specific context of that chapter. Land use conflict is discussed in terms of the role of social groups, the symbolic meaning of the landscape to these social groups, governance, and a theoretical position on the structure of social conflict. The place of stakeholders in ENRM is examined through first providing a review of the theoretical roots of stakeholder theory in the context of business management, then a discussion of how this has been translated to, and adapted for, ENRM. An overview of the social identity approach is then provided, with an introduction to key concepts related to this theoretical perspective which make a case for its relevance to the thesis, and providing the basis for further analysis using this theoretical perspective in later chapters. An integrative perspective on these concepts is provided, before the specific research aims and research questions are outlined. The methodology adopted to achieve research aims and answer research questions is discussed. Finally, the dissertation structure is outlined.

1.2 Land use conflict

Conflict is the presence of competition between two or more parties, and awareness of the parties of this competition (Boulding, 1962). Some degree of conflict is seen to be an “inevitable part of modern democracy” Bujis and Lawrence (2013, p. 109), and can be functional or dysfunctional (Amason 1996). Functional conflict is expected to “improve decision-making quality” (Amason 1996, p.141) as it is founded on cognitive debate, where exchange between interested parties is focused on achieving an optimal solution for the problem. This presupposes a collaborative inter-party relationship, and a shared will to achieve resolution of the conflict (Beierle and Konisky 2000). Dysfunctional conflict, however, will “jeopardize decision quality” (Amason 1996, p. 129) as debate is focused on perceived incompatibilities between interested parties to the detriment of task-focused discussion and development of solutions. Consequently conflicts become intractable, interparty communication difficulties are exacerbated, mutual trust is lost, polarisation occurs, and

parties become resistant to compromise; characteristics which describe many land use and ENRM conflicts (Kaufman and Smith 1999; Shmueli et al. 2007).

Land use conflicts arise when individuals and groups in society disagree over the right and proper use of a landscape (be it a land- or sea-scape), often preceded by a proposed change (Kaufman and Smith 1999; Anderson et al. 2013; Mannarini et al. 2015). Land use change becomes land use conflict when the individuals or groups concerned become aware of their disagreement with each other. These disagreements may be related to aspects of the land use change such as procedural and distributive fairness and impacts on human values, landscape values, human health and wellbeing, community cohesion, and property rights (Wester-Herber 2004; Schirmer et al. 2008; Williams 2011; Brown 2012; Reeson et al. 2012; Hall et al. 2013; Jacquet and Stedman 2013; Measham et al. 2013; Brown and Raymond 2014; Botterill and Cockfield 2016). Land use conflicts are often dysfunctional, in that they are intractable social dilemmas where resolution considered satisfactory by all interested parties is unlikely (Gray 2004; Lane and Morrison 2006; Elix and Lambert 2007; Brummans et al. 2008). Due to this intractability, land use conflicts are particularly challenging for decision-makers, especially due to the need to understand and, sometimes, negotiate with vocal opponents of a desired change (Jennings and Moore 2000; Lewicki et al. 2003; Gritten et al. 2009; Asah et al. 2012).

1.2.1 Communities and place-protective action

Having a close connection to a landscape through residing nearby is known to enhance interest in land use change (Manzo and Devine-Wright 2014; Mannarini et al. 2015). When neighbouring communities oppose a land use change, their position is often labelled NIMBY (“Not in my back yard!”), indicating resistance to change regardless of the necessity of that change (Kaufman and Smith 1999; van der Horst 2007; Devine-Wright 2009; Brown et al. 2014). For example, the NIMBY attitude is evident when communities oppose local development of a waste management facility, but demand waste management services. The NIMBY concept, however, in the news media and the academic literature, carries a distinctly negative connotation about the motivations of those considered to be NIMBYs (van der Horst 2007; Devine-Wright 2009). NIMBYs are characterised as self-interested and uncaring about issues which may have a more broad social impact beyond the local community. The negative perspective on NIMBY attitudes has been challenged by a number of scholars (e.g. Stern et al. 1993; Goldstein 1999 p. 163; Norton and Hannon 2005; van der Horst 2007; Devine-Wright 2009). Instead, community opposition to a land use change is understood as a form of place-attachment (Devine-Wright 2009). Place-attachment describes the way individuals feel connected to a particular place (natural, modified, human-made, or a combination of all), often leading to a desire to engage in ‘place-protective action’ if they perceive that place to be threatened

(Devine-Wright 2009). Communities are bonded through their shared place, which Harrington et al. (2008, p. 203) define as “geographic locations or physical spaces within particular social, political and naturally defined boundaries...” where “...members represent a geographic area such as a town, shire or region rather than a specific set of interests”. As such, place-protective action is usually a type of collective action, taken by communities local to the land use undergoing material or proposed change.

1.2.2 Interest groups, lobbying and agenda setting

Communities with a local interest in a land use change are not the only people who engage with land use conflicts. Interest groups, often without a geographical connection to the landscape of concern, will mobilise around land use change (Hutton and Connors 1999; Herath 2002; Shmueli and Ben Gal 2005; Holmes 2012; Wheeler et al. 2014; Vromen 2015). Interest groups are formal social organisations which engage in actions in order to pursue achievement of the group’s interests (Fraussen and Halpin 2016). Interest groups may take the form of a range of organisations, such as non-governmental organisations (NGOs), business associations, workers’ unions, lobby groups, political organisations, and think tanks (Kahane et al. 2013; Fraussen and Halpin 2016). ENRM-related interest groups include groups such as the Australian Conservation Foundation (ACF) and the Australian Petroleum Production and Exploration Association (APPEA), which take actions to promote favourable land use outcomes for their interests (APPEA 2013; ACF n.d.).

In addition to direct involvement in a land use conflict, interest groups can indirectly affect land use change through ‘agenda setting’ in the policy environment in which land use change decisions are made (de Bussy and Kelly 2010). Dandy et al. (2013, p.2) describe the purpose of agenda setting as to “...define the problems, options and choices available for discussion, along with the framework of values and practices within which they are discussed”, demonstrating that it is not just the issues for consideration which are shaped, but also the way in which they are addressed. Interest groups with adequate power to influence the political and policy making discourse aim to achieve dominance of their agenda over others’ (Greider and Garkovich 1994; Zammit et al. 2000; Lane 2003; Shmuli and Ben Gal 2003; Howard 2012; Dandy et al. 2013; Fraussen and Halpin 2016). Examples of agendas pursued by Australian ENRM interest groups include structural support from government for agriculture (Dibden et al. 2009), strengthened legislation for environmental protection (Bjørkhaug and Richards 2008), and favourable taxation conditions for the mining industry (Murray and Chesters 2012).

For communities and interest groups engaged in land use conflict, their key aims are to further their superordinate goals. For communities, superordinate goals of land use conflicts may be related to

preserving a way of life or amenity of a valued landscape. For interest groups, superordinate goals related to land use conflict may be achievement of a political win, where favourable resolution of an individual land use conflict is viewed as one part of a broader agenda (Zammit et al. 2000; Lane 2003; Shmuli and Ben Gal 2003; Lane and Morrison 2006; Bjørkhaug and Richards 2008; Dandy et al. 2013). The goals of communities and various interest groups may align or differ based on the nature of the land use change (Lewicki et al. 2003; Wondolleck et al. 2003; Brummans et al. 2008; Anderson et al. 2013). Where there is an alignment of positions, communities will often garner support from interest groups in order to gain power (Reed et al. 2009; Zammit et al. 2000). Similarly, interest groups may seek an alliance with communities in order to gain legitimacy in the land use conflict. When communities and interest groups (or communities and communities; or interest groups and interest groups) unite and mobilise, they form an ‘advocacy coalition’ (Pierce 2016).

1.2.3 The symbolic meaning of the landscape

While communities, interest groups or advocacy coalitions actively opposing land use changes may employ arguments related to the material impacts of the change, the way a land use change modifies the symbolic meaning of the landscape can be a major factor underpinning land use conflict (Lane 2003; Wester-Herber 2004; Anderson et al. 2013; Brown and Raymond 2014). Greider and Garkovich (1994) theorise that landscapes are social constructions which imbue physical attributes of the landscape with symbolic meaning. This meaning is strengthened through social reinforcement, to the point where the landscape itself carries a symbolic identity reflective of the primary land use. For example, an agrarian landscape is not defined by the sum of its geographical features. Rather, it is the use of the land for agricultural activities, and the social rituals which accompany this use, that provide the symbolic meaning of the landscape (Meinig 1979; Williams 2011). For many people, the type of symbolic meaning perceived in a landscape reflects deep-seated values, and therefore is a fundamental part of their worldviews (Greider and Garkovich 1994; Brown 2012).

Kaufman and Smith (1999) argue that claims made by parties in conflicts are often strategic, in that they are shaped in order to garner support for their cause (Asah et al. 2012; Howard 2012) thereby conforming to the mode of discourse most valued in the decision-making context. Reflecting the highly rationalised nature of ENRM in Australia (Higgins and Lockie 2002; Wilson 2004; Dibden et al. 2009; Lockie 2009), impacts of land use changes tend to be framed in measurable terms, such as economic losses or opportunity costs (Cheney et al. 2002; Elix and Lambert 2007; Hall et al. 2013; Hossain et al. 2013; Wheeler et al. 2014). This means that arguments against land use change couched in terms of economic losses may not be resolved through compensation mechanisms if the

underlying driver of conflict is resistance to a change to the symbolic meaning of the landscape. For example, when a party opposing a land use change cites decreased property values, traffic congestion, increased cost of living, and strain on community services (Cheney et al. 2002; Measham et al. 2013), these claims may be rationalised arguments used to support a more pervasive and complicated concern regarding the symbolic meaning of the landscape (Yasmi et al. 2006). Bryan (2008) identified this in a protracted land use conflict between conservation and logging in the United States. When the logging community was presented with a forestry management plan including increased logging yields using selective harvesting alongside habitat conservation, the logging community resisted the plan in part due to the change required in symbolic landscape meaning from a landscape for timber, to a landscape for mixed forest use (Bryan 2008, p. 265).

1.2.4 Governance

The policy process through which negotiations over land use conflict occur is *governance*. Governance is described by Lockie (2009, p. 409) as “any activity concerned with the ‘conduct of conduct’ ... as an arena of social practice in which myriad groups seek to participate.” This paradigm for decision-making intentionally influences processes in order to achieve outcomes which reflect the desires of the public (Parker and Braitwaithe 2003; Dale et al. 2013). Governance, therefore, is the social context within which competing claims by many parties are integrated into the decision-making process (Dorcey 1987). While in the past decision-making was solely the purview of government, governance is the practice of decision-making occurring jointly between government and civil society (Lane et al. 2004). This includes the institutionalisation of interest groups in the decision-making process (Lane 2003) and mandated processes for eliciting the views of communities and the broader public (Taylor 2010). The imperative for governance is based on arguments that this mode of decision-making leads to enhanced outcomes, public acceptance, and civil engagement as instrumental or intrinsic goods (Jennings and Moore 2000; Zammit et al. 2000; Lane et al. 2004; Reed 2008; Gritten et al. 2009; Reed et al. 2009; Lockwood et al. 2010; Taylor 2010; Buijs and Lawrence 2013). However, in addition to the expected benefits of governance, there are critiques about the negative consequences for ENRM decision-making when governance is poorly managed. Poor governance is seen to encourage conflict, rather than cooperation, between parties and interests (Rist et al. 2007; Lockwood and Davidson 2010), which means that short-term ‘wins’ are prioritised ahead of long-term collaboration. Access to decision-makers by interest groups creates opportunities for outcomes which are ‘captured’ by the interests of a group of ‘policy elites’; those who have the skills and resources to dominate the process (Lane et al. 2004). The institutionalisation of interest groups who competitively pursue their own agendas through

governance processes means that there is “insufficient attention to public good outcomes” Lockwood et al. (2010, p. 990).

While the promises of governance include more collaborative relationships, implementation of governance in a legalistic and adversarial social raises challenges for achieving these positive outcomes. Following the shift from government to governance within a pluralistic society where agenda setting by interest groups is the norm, competition and conflict between groups becomes institutionalised. This conflict both shapes the governance context for land use conflicts, and perpetuates conflict through the pluralistic system of decision making favouring competing claims which must vie for political traction and public acceptance (Lane 2003; Druckman et al. 2012; Witt 2012; Liu et al. 2014; Capstick et al. 2015). In addition to furthering parties’ own interests and landscape preferences, agenda setting can be aimed at dividing public opinion in order to increase awareness and generate public interest and support for the issue (Vining and Schroeder 1989; Shmueli 2008; Hubo and Krott 2013). This not only influences public opinion, but also creates the referential boundaries for further discourse, deliberation, action, engagement of other parties, and decision-making in relation to the issue (Howard 2012). As a result, conflict between the parties, and their interests and landscape preferences, becomes entrenched not only in the governance process but also in public discourse, in what Yasmi et al. (2006, p. 544) describe as a *culture of conflict*.

1.2.5 Land use conflicts as ‘conflict episodes’

In seminal research documenting the nature of conflict within organisations, Pondy (1967) describes conflict as a “dynamic process” that cannot be isolated in time or space (p. 299). Broadening the scope of an ‘organisation’ to that of a social system or society, the implications are significant for land use conflicts (Watkin et al. 2012). The social system providing the structure for land use conflict both influences and is influenced by conflict, and subsequent issues are a product of their social history and context. Pondy (1967) describes individual conflicts as *conflict episodes*, emphasising that an issue that may be perceived as being an independent occurrence is rather part of a cyclic social system (Figure 1.1). Pondy’s (1967) model of conflict is considered appropriate for understanding land use conflicts as it is grounded in the organisation context. In this way, conflicts are viewed as being between groups in society, but not necessarily manifesting to armed conflict in the case of civil wars (Yasmi et al. 2006). Additionally, Pondy’s (1967) model focuses on understanding the dynamics of conflict, rather than proposing negotiation or mediation mechanisms (e.g. Pruitt 1988; Pruitt and Camevale 1993; Rubin et al. 1994) or the role of conflict in society (e.g. Coser 1956; Knight 1992). Because of this focus on understanding the conflict system, rather than

solving conflict, Pondy's (1967) model is well suited for use as a tool for understanding land use conflict.

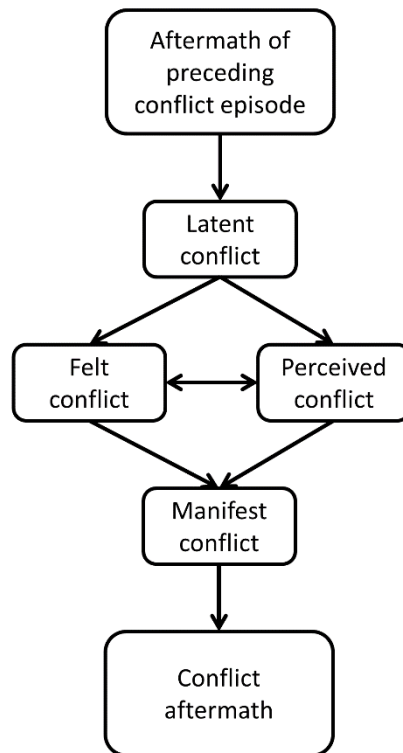


Figure 1.1 Pondy's (1967, p. 306) model of organisational conflict.

Latent conflict is when the basis for an episode of land use conflict is established. Pondy (1967) describes this stage as being generally characterised by resource competition, demand for self-determinism (autonomy), or divergence of values, and adds that conflict potential can be viewed as “the discrepancy between aggregated demands of the competing parties and the available resources” (p. 313). Interested parties are not yet aware of the conflict (Watkin et al. 2012). An example of latent conflict in a land use change is implementation of policy to encourage development of renewable energy technologies which triggers competition for land to be developed for the energy facility siting (Hall et al. 2013). Perceived conflict is a stage in a conflict episode where interested parties become aware of the potential for conflict, and, while not emotionally engaged, comprehend the presence of a challenge to their interests (Pondy 1967). Felt conflict, though similar to perceived conflict as the interested parties are engaging directly with the issue, differs in that the conflict begins to impact on emotions (Pondy 1967). This is translatable to the first stage of an ENRM conflict escalation model presented by Yasmi et al. (2006), *feeling anxiety*, where interested parties begin to experience emotional impacts of the presence of the conflict.

Manifest conflict is the stage of the conflict episode where interested parties pursue behaviour in order to “frustrate the goals of at least some of the other participants” (Pondy 1967, p. 304). Yasmi

et al. (2006) describe a range of forms of conflict which can typify behaviour in a conflict episode at the manifest conflict stage, including: debate and critique (in the private and public forum); lobby and persuasion (directly targeting politicians, bureaucrats, and decision makers); protest and campaigning (attempts to engender public support, gain media attention, demonstrate to opposing parties the extent of disapproval); access restriction (blockading, picketing, eviction, fencing, occupation); court (litigation attempts); intimidation and physical exchange (threats, vandalism, physical violence, police/military involvement), and; nationalisation and internationalisation (progressing to a higher authority, campaigning for diplomatic pressure, triggering international protest). This stage is when conflict is most apparent, and when intervention strategies are often initiated (Pondy 1967).

Conflict aftermath describes the social conditions present following resolution of a conflict episode. Pondy (1967) includes conflict aftermath within the conflict episode as it is this residual impact of conflicts which contributes to the way future conflicts are perceived by interested parties. This means that the “legacy of a conflict” will affect the way future conflicts are interpreted by interested parties, and as a result will shape the manifest conflict phase of future conflict episodes (Pondy 1967, p. 305).

Placing land use conflicts into the context of Pondy’s (1967) model of organisational conflict highlights the imperative conceptual view that conflicts are not isolated events bounded by the emergence of conflict and resolution. Rather, individual conflict episodes are interconnected and each provides the social context within which the next conflict emerges. Following Pondy’s (1967) conflict model, it can be understood that land use conflicts are not discrete events, and that past experiences shape the way interested parties engage with emergent issues. Significantly, as land use conflicts are often dysfunctional, a negative impact on relationships between interested parties (i.e. communities, interest groups, advocacy coalitions) in one conflict episode will negatively affect the way these parties engage with each other in future conflict episodes. This means that managing the relationships between interested parties, and between interested parties and the ENRM governance system, is critical to achieving sustainable land use outcomes. This is the case for both distinct land use conflicts, and for long term prospects for land use sustainability. In ENRM, these parties are considered ‘stakeholders’.

1.3 Stakeholders in Environmental and Natural Resources Management

The term ‘stakeholder’ is used regularly in the ENRM and land use conflict literature, though the meaning of the term is rarely deconstructed and evaluated. In practice, the term stakeholder can refer to communities, interest groups, advocacy coalitions, organisations, social constituencies

(sections of society with a shared characteristic but without formal membership, e.g. women) or individual people (Billgren and Holmén 2008; Reed 2008; Rastogi et al. 2010). The pivotal and highly influential work of Freeman (1984, p. 46) is most commonly cited for the fundamental definition for stakeholder as “any group or individual who can affect or is affected by the achievement of an organisation’s objectives”. The subject of this quote - an organisation – reflects the disciplinary grounding for Freeman’s (1984) work in business management research.

1.3.1 Stakeholder theory

What has since become known as Freeman’s (1984) stakeholder theory proposed a paradigm shift from business responsibility to stockholders (those with a financial interest in the performance of the firm), to responsibility to all stakeholders. This was to adapt the sphere of accountability of business from those who are directly benefitting from the business’ actions, to all of those who can affect, or are affected by the business’ actions (Billgren and Holmén 2008; Laplume et al. 2008; Miles 2012). Stakeholder theory in business research was perceived of as both a strategic and normative imperative; stakeholders could be included in business decision-making either to improve long term outcomes for the business, or because it was seen as the socially responsible thing to do (Freeman 1984; Laplume et al. 2008; Reed 2008).

Theoretical and practical approaches to stakeholders and stakeholder theory, however, are not without their challenges. In particular, the theory has lacked a clear definition of who is a stakeholder, with the term ‘stakeholder’ considered an “essentially contested concept” where there are multiple ways the term is interpreted and, therefore, how stakeholders are identified (Miles 2012; 2015). Due to the conceptualisation in business management research, stakeholder identification has focused on the relationship of individuals and groups in relation to the firm (the business entity), leading to categorisations along the lines of “customers, suppliers, employees, shareholders, and community” (McVea and Freeman 2005, p. 62). This represents a type of measurable-impacts perspective, where the impact of decisions can be traced through measurable (and generally economic) links between the firm’s actions and its stakeholders. As described by McVea and Freeman (2005, p. 60), “stakeholders are treated not as morally important individuals, but as abstractions, characterized by the roles that they play”. This in effect organises the social system around a business decision into categories based on the firm’s relationship with society, i.e. it is firm-centric. Crane and Ruebottom (2011, p. 77) present the argument that the firm-centric structure of stakeholder theory runs “the risk that “stakeholder” will become a meaningless term” as the categories by which stakeholders are organised are superficial outside of the context of the firm. This reflects work by Rowley and Moldoveanu (2003), which proposed that stakeholders should be conceptually organised by pre-existing social groupings, as opposed to their functions in relation to

the firm. Despite these cautions, and through evolving theory and practice (sometimes incorporating these critiques), stakeholder analysis remains prominent in business management, and has become a key element of ENRM governance.

1.3.2 Theory of stakeholder analysis and engagement in ENRM

With the growing impetus for public participation in ENRM governance (Lockwood et al. 2010; Guerrero et al. 2012; Bujis and Lawrence 2013), stakeholder theory was adapted from the business context for application in ENRM (Grimble and Wellard 1997; Billgren and Holmén 2008; Reed 2008). This paralleled the ‘participatory’ turn in ENRM, wherein greater attentiveness was given to the role of the public in decision-making, and recognition that integration of a range of voices in decisions (Ross et al. 2016). This section will address the translation of stakeholder theory from the business management literature to ENRM as this reflects the mode of land use change decision-making. However, it is important to note that there were concurrent developments in terms of participatory decision-making from within the realm of ENRM (Kapoor 1999), particularly in terms of community-led participation such as the Landcare movement (Wilson 2004). The former body of literature has been included for review as it reflects the approach to engagement of the public in decision-making for land use changes. While excellent insights are available in the latter body of literature, these works are outside the scope of the thesis.

In the new decision making arena, stakeholder theory retained the measurable-impacts perspective from business management for stakeholder identification. Within the broad scope of public participation in ENRM, stakeholder theory is operationalised as stakeholder analysis and engagement, where analysis is the process of understanding stakeholders to inform decision-making, and engagement the process of involving stakeholders in decision-making (Reed 2008). Stakeholder analysis is described as a process that (Reed et al. 2009, p. 1393):

- i) defines aspects of a social and natural phenomenon affected by a decision or action;*
- ii) identifies individuals, groups and organisations who are affected by or can affect those parts of the phenomenon (this may include nonhuman and non-living entities and future generations); and*
- iii) prioritises these individuals and groups for involvement in the decision-making process.*

Stakeholder analysis may be conducted solely for the purposes of understanding the social dimension of an ENRM issue. However, stakeholder analysis is usually followed by some form of stakeholder engagement. This may occur specifically with communities or interest groups, or both. Stakeholder engagement is an ongoing process of knowledge exchange between decision-makers and stakeholders about a given project or issue (Reed et al. 2009; Cundy et al. 2013). Throughout

this process, stakeholders participate in a range of activities which aim to elicit stakeholders' views and to encourage dialogue between stakeholders and decision-makers about the project or issue. Activities include participation in committees, responding to surveys and polls, attending discussion forums, writing submissions, and receiving information (Rowe and Frewer 2000; Reed 2008). Based on process design, stakeholders may be 'empowered' where they have control, to some extent, over the decisions being made. In other cases, stakeholder engagement may be tokenistic, where stakeholders' perspectives either are not sought, or are sought but not incorporated into the decision-making process in a meaningful way (Arnstein 1967; Reed et al. 2009).

While stakeholder analysis and engagement and public participation are often used interchangeably, Reed (2008) draws a key distinction between stakeholder analysis and engagement and public participation more broadly. Stakeholder analysis and engagement targets analysis and/or engagement of individuals and groups based on direct relationship to the ENRM issue, while public participation includes all individuals and groups in society regardless of whether they have a direct relationship to the ENRM issue. This is based on Freeman's (1984) definition that stakeholders are considered those who are affected by, or can affect a decision.

For ENRM stakeholder analysis and engagement, a necessary early step is stakeholder identification (Mitchell et al. 1997; Bryson 2004; Prell et al. 2007; Billgren and Holmén 2008; Reed et al. 2009; 2013; Miles 2015). Prell et al. (2009, p. 515), building on Freeman's (1984) initial conceptualisation, describe ENRM stakeholders as "individuals who affect or are affected by certain decisions and actions ... clustered into stakeholder categories according to their similarity in views, position(s) on an issue, and/or how they affect or are affected by the issue". In practice, this leads to ENRM stakeholder identification including interested parties such as communities and interest groups, distinct from the rest of the public, i.e. the 'citizenry' (Figure 1.2) (Kahane et al. 2013; Aanesen et al. 2014; Fischer et al. 2014; North et al. 2014; Soma and Vatn 2014; Uribe et al. 2014). The distinction between stakeholders and the citizenry is based on the argument that stakeholders represent specific interests, while the citizenry serves to represent the 'public good' (Carson 2009; Soma and Vatn 2014).

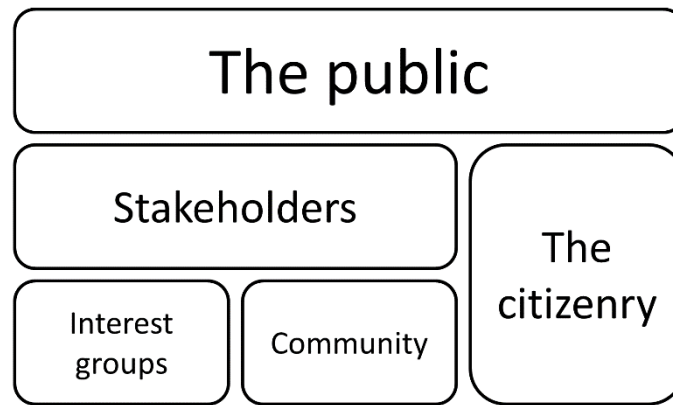


Figure 1.2 A simplification of the constitution of the public, from the perspective of ENRM stakeholder analysis and engagement.

In ENRM, the process of stakeholder identification can be especially challenging as the interconnectedness of natural systems can lead to who is considered a stakeholder including “almost everyone and everything” (Billgren and Holmén 2008, p.553). (Some have proposed the environment itself ought to be considered a stakeholder in such issues (Starik 1995), however this tends to be a minority perspective, with the prevailing approach framing the environment instrumentally in terms of human interests (Phillips and Reichart 2000).) The potential for identification of ENRM stakeholders to include all people creates management challenges for environmental governance (Reed et al. 2009). While public participation broadly includes all individuals and groups in society, following Freeman (1984) ENRM stakeholder analysis and engagement includes only those who are affected by or can affect an ENRM issue (Reed et al. 2009). The ability to affect or be affected by an ENRM issue is also described as those who may have an interest in (Soma and Vatn 2014) or be impacted by an ENRM issue (Fischer et al. 2014). This criterion for identification of stakeholders indicates an instrumental or economic view of ‘affect’, indicating that solely moral impacts - unless the moral impacts are coupled with the power to be able to affect the issue (Grimble and Wellard 1997; Prell et al. 2009) - do not warrant inclusion as a stakeholder, as these concerns are not within the scope of what is considered as being affected.

Reed and colleagues (Reed 2008; Reed et al. 2009) have argued that in ENRM, stakeholders tend to be self-evident, meaning that stakeholders are drawn from, and reflect, pre-existing social structures (e.g. communities, interest groups, advocacy coalitions, organisations, social constituencies or individual people) (Crane and Ruebottom 2011). This leads to a range of types of stakeholders identified for any given ENRM issue. Kahane et al. (2011) outlined several attributes across which stakeholders can differ (Table 1.1); indicating that in addition to differences across the social

structures from which stakeholders are drawn, participation in ENRM decision making can be a central or peripheral element of the stakeholders’ objectives (Rowley and Moldoveanu 2003).

Table 1.1 Key attributes across which stakeholders can differ (Kahane et al. 2013).

Group attribute	Description
Organisational structure	Can exhibit varying degrees of structure, ranging from highly formal (organized around charters, decision procedures, membership rules, enduring and well-defined interests or identities) to informal (organized around loosely-defined or dynamic identities or interests and transient membership).
Profit orientation	Can be non-profit, volunteer and grassroots, all the way through to professional with paid staff and private funding.
Missions	Can be more or less oriented toward political action, lobbying, campaigning, public education, or member services provision.
Institutionalisation	Can be more or less woven into power structures and governance networks.
Spatial reach	Can be local, regional, national or international.
Representation	Can claim to represent their members alone, or to represent others sharing interests/identities with their members, or to represent the interests of populations not well represented in the group itself (as with ‘astroturf’ organizations, which profess to represent a grassroots movement while in fact being centrally orchestrated).
Social niche	Can be the sole or authorized representative for a category of stakeholders, or can exist on a contested or crowded field of potential representatives.
Epistemic authority	Can claim different kinds of epistemic authority—for example, to speak from the perspective of a particular social group, or to speak from expert experience and training that the rest of the public typically lacks.

While stakeholders can be drawn from a range of social structures and vary across group attributes, there is evidence of repeated inclusion of the ‘usual suspects’ (Reed et al. 2009) in ENRM, described by Kivits (2011, p. 320) as “communities, NGOs, government and the private sector”. These prototypical stakeholder categorisations emerge across ENRM projects and studies as: industry (the private sector, e.g. mining, energy, agriculture, forestry, aquaculture and fisheries, depending on the issue); jurisdictional governments; environmentalists or conservationists (NGOs)

and; community (Carr and Tait 1991; Beedell and Rehman 2000; Kächele and Dabbert 2002; Lane 2003; Lewicki et al. 2003; Moore and Koontz 2003; Wilson 2004; Winter and Lockwood 2005; Walker 2006; Yasmi et al. 2006; Brummans et al. 2008; Bryan 2008; Kash 2008; Rastogi et al. 2010; Treffny and Beilin 2011; Fox et al. 2013; Kindermann and Gormally 2013; Redpath et al. 2013; Silverstri et al. 2013). As a result of the ‘usual suspects’ in ENRM stakeholder engagement being drawn from pre-existing social constituencies, organisations, and institutions, when stakeholders are categorised for engagement in an ENRM issue, the power, privileges, and vulnerabilities inherent in broader society are carried over into, and can influence, stakeholder analysis and engagement (Billgren and Holmén 2008). For example: local communities are most likely to experience direct impacts of a land use change (Parsons et al. 2014); industry has access to the financial resources to shape land use change (Measham and Fleming 2013); government has overriding policy and decision making discretion (Zammit et al. 2000), and; NGOs have access to the citizenry for support (Brown 2012). The expectation for emergence of stakeholders fitting these categories influences management actions (Prell et al. 2009), for example through the structuring of stakeholder protocols, policy planning, and analysis of the potential impacts of change. This creates the functional space specifically for these stakeholders in ENRM governance leading to cyclic re-emergence of the ‘usual suspects’ (Reed et al. 2009). Where these stakeholders have a history of conflict, repeated engagement without adequate efforts for conflict resolution will see exacerbation of the culture of conflict of ENRM (Reed and Curzon 2015).

In influential work on stakeholder analysis, again from business management research, Mitchell, et al. (1997) proposed analysis of stakeholders based on their power, legitimacy, and urgency. Power describes the ability of a group to shape an issue to their own means, and can be in the form of financial resources, control over decision-making, or access to decision-makers and the media (Mitchell et al. 1997; Laplume et al. 2008; Crane and Ruebottom 2011). Legitimacy is a subjective assessment of how genuine is a stakeholder’s interest (for example, legitimacy would differentiate between claims based on impacts on one’s livelihood versus instrumental use of the issue for political manoeuvring) (Mitchell et al. 1997; Crane and Ruebottom 2011). Urgency is similar to legitimacy, but differs in that it incorporates consideration of the timescale of potential impact, delineating between stakeholders with a short term interest compared to a long term interest (Mitchell et al. 1997; Laplume et al. 2008). Rowley and Moldoveanu (2003) explain that urgency can be an antecedent to stakeholder mobilisation, suggesting that engagement with stakeholders viewed as having a sense of urgency may occur in order to avoid escalation of stakeholder opposition to the actions of a firm. Following this, adaptation of the stakeholder organisational framework from Mitchell et al. (1997) from a business management context for use in land use

conflicts, urgency can be captured within consideration of legitimacy, creating a cross-analysis of stakeholders based on their relative power and legitimacy. This reflects the work of Reed et al. (2009), who use an interest-influence (i.e. legitimacy-power) grid to organise stakeholders in natural resource management conflicts.

In the ENRM context, and particularly in the case of land use change, assessment of stakeholders' interests was built on the concept of legitimacy (Reed et al. 2009, p. 1941). In many theoretical and practical applications, stakeholders were categorised along a continuum of low interest to high interest, indicating those with high interest also had high legitimacy. Influence, similarly, is based on the concept of power, and mapped on a continuum of low power to high power. Much like Freeman's (1984, p. 46) original definition, the concepts of power (or influence) and legitimacy (or interest) can be distilled into a structure of understanding stakeholders in terms of their ability to affect, or be affected by a decision. Where identification of stakeholders in land use conflicts based on landscape-relationships has a tendency to yield the usual suspects (Reed et al. 2009), the relative power and legitimacy dynamics will remain consistent across issues. For example, a private company with high profits will always be considered a high power stakeholder, while a local community will always be considered high legitimacy, but often low-power.

Due to the nature of ENRM issues, stakeholders' interests generally are related to landscape and environmental preferences (de Chazal et al. 2008). These preferences can vary widely between individuals, and tend to be strongly held beliefs and deep-seated values reflecting the symbolic meaning of the landscape held by stakeholders (Greider and Garkovich 1994; Meinig 1979; Brown 2012). As such, being a stakeholder may be a distinctly personal experience for stakeholders engaged in ENRM; the stakes held by stakeholders can be of direct importance to their sense of self and perceived place in the world. This is in comparison to the disciplinary grounding of stakeholder theory in business management research (Freeman 1984), where stakeholders are defined based on relationships to a firm of interest. In the traditions of stakeholder theory, stakeholders tend to be categorised into sterile and detached groups such as employees, suppliers, or customers (Reed 2008; Billgren and Holmén 2008). This personal experience of being an ENRM stakeholder means that being a stakeholder may carry strong significance for the individuals involved. A stakeholder who is a member of an environmental NGO may view reinforcement of their environmental rectitude as a core element of their life (e.g. Rowley and Moldoveanu 2003), and as such the classification as, for example, an 'environmentalist' during stakeholder analysis for an ENRM issue connotes significantly more for that person's life than does a classification of 'customer' during stakeholder analysis of a commercial firm. In this way, classification of stakeholders based on their landscape and environmental preferences has the potential to be a deeply personal experience.

Translation of stakeholder theory from business research to ENRM similarly replaced the firm with the landscape or environment as the centre of the network of stakeholders. As stakeholder theory conceptualised the relationships between stakeholders and the firm as a hub with spokes (Freeman 1984), the identified stakeholders were defined based on their relationship to the firm (Figure 1.3). This firm-centric perspective to the classification of stakeholders is matched by the positioning of decision-making power in that power rests with the decision-makers within the firm ‘looking outward’ toward the stakeholders (Crane and Ruebottom 2011; Miles 2015). In ENRM, the affected landscape is the ‘hub’, and decision-making power sits with any one or several of the stakeholders on the spokes depending on the nature of the ENRM issue (Billgren and Holmén 2008). This contrasts subtly but significantly with the application of stakeholder theory in business, as the decision-makers in ENRM sit on the spokes of the relationship ‘looking inward’ toward the landscape and across to the other stakeholders. As a result, while the decisions about a firm are made by the firm and are informed by the perspective of the firm, in ENRM, decisions about a landscape are made by one of several stakeholders, and cannot be informed by the perspectives of the landscape; rather the decision is informed by the perspectives of whichever stakeholder carries the decision-making power.

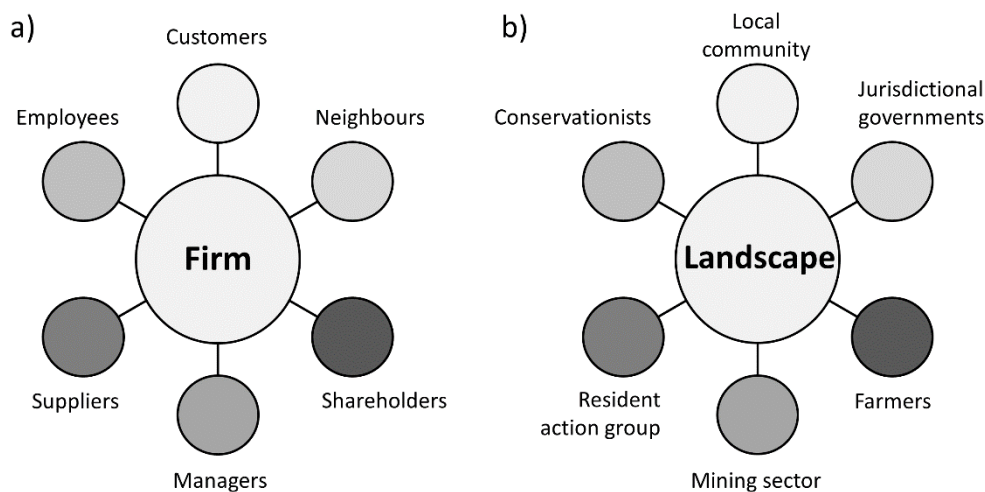


Figure 1.3 The hub and spoke model of the firm and its stakeholders (Freeman 1984). Diagram a) shows a simplified conceptualisation of the relationship between firm and stakeholders, from the business management context. Diagram b) shows how this understanding applies in ENRM, where the firm as the hub is replaced by the landscape (created by the thesis author).

As the symbolic meaning of the landscape can differ significantly between individuals, and stakeholders’ interests reflect their preferences for the environment or landscape (which is in turn informed by the symbolic meaning of the landscape), the way the environment or landscape is perceived by decision-makers is very likely to differ from other stakeholders’ perceptions. This

means that in addition to unequal distribution of power across stakeholders in ENRM, decision-makers' perceptions of the environment or landscape is by default privileged above different perspectives of other stakeholders.

These perspectives on stakeholders in ENRM demonstrate that while stakeholder analysis and engagement practice aims to facilitate public participation in ENRM decision-making, there are some limitations. Process for stakeholder identification lacks certainty, and the term 'stakeholder' is an 'essentially contested concept'. In ENRM the tendency to identify the 'usual suspects' encourages re-emergence of the same stakeholders and the culture of conflict in ENRM. As stakeholders are drawn from pre-existing social structures, the power, privileges, and vulnerabilities from society are carried over into stakeholder engagement. Specifically, the translation of stakeholder theory from business management to ENRM has created a misalignment between the object of engagement and decision-making power. These challenges share the detail of being associated with people, and how people relate to one another when they are categorised as ENRM stakeholders. As such, stakeholders in ENRM can be understood through the social identity approach, where an intergroup perspective emphasises the importance of how people form groups, how these groups are defined by themselves and others, and how the groups interact with each other.

1.4 The social identity approach

The social identity approach is a meta-theoretical perspective on the social psychological processes through which people form, and are categorised into, groups, and how groups interact with each other (Haslam 2000; Hornsey 2008). The approach goes beyond notions of personal identity and describing group membership as it provides an intergroup perspective on how human beings relate to each other through social groups. This makes the social identity approach particularly well suited as a theoretical tool for examining the human dimension of ENRM conflict (Lute and Gore 2014; Fielding and Hornsey 2016). The social identity approach incorporates two social psychological theories: social identity theory and self-categorisation theory (Tajfel and Turner 1979; Hogg and Abrams 1988; Haslam 2000). Social identity theory explains how a person's social identities become a part of their sense of self, and then serve to influence their behaviour and attitudes. This includes their interactions with other groups, especially in settings of conflict (Haslam 2000). Self-categorisation theory describes the process by which an individual adopts a social identity, and how that affects their perceptions of their self and of others in groups (Hogg and Abrams 1988). Taken together, the social identity approach provides a useful way to understand how people engage with each other through acknowledging the importance of social groupings. The approach has been instructive for understanding complex and pressing intergroup conflicts, such as gender and race

relations, conflict and peace studies (e.g. between religious groups), and workplace conflict (Tajfel 1982; Hogg and Abrams 1988; Haslam 2000). There has been some use of the social identity approach in ENRM, though this has not been extensive (Wondolleck et al. 2003; Stoll-Kleemann and Welp 2006; Bryan 2008; Dono et al. 2010; Lute and Gore 2014; Unsworth and Fielding 2014; Mason et al. 2014; Bliuc et al. 2015; Mason et al. 2015; Fielding and Hornsey 2016).

The social identity approach is built around a fundamental distinction between ‘in-groups’ and ‘out-groups’. An in-group is a group with which an individual identifies. Identifying with in-groups is known to improve human wellbeing as group belongingness satisfies a fundamental human need (Greenaway et al. 2016). An individual may identify with many in-groups at the same time, though their salience will differ depending on the social context (Haslam 2000). For example, an individual may identify simultaneously as a mechanic, a parent, a cyclist, and a vegetarian. When at work in a mechanics’ workshop, her identity as a mechanic would be most salient, whereas when she is speaking with the parents of her children’s friends, her identity as a parent would be most salient. In both situations she continues to identify with all four in-groups, but the social context gives salience to the associated identity. Salience of identity matters, because when an identity is made salient it provides norms and behavioural cues for that person (Tajfel and Turner 1979; Haslam 2000). An individual can gain new in-group identities through self-categorising with an identity, and an in-group may become an out-group through de-categorising (no longer identifying with that group) or re-categorising (reconceptualising the in-group identity to mean something different) (Tajfel et al. 1971; Haslam 2000). An out-group is a group with which an individual does not identify. In this way the relationship between an individual and their out-groups is defined in terms of their differences. In many cases, the distinction between in-groups and out-groups is distinct, for example in terms of nationality or gender. This means that a person forms their sense of self not only based on the in-groups with which they identify, but also in terms of distinctiveness from the out-groups with which they do not identify (Haslam 2000).

In-groups and out-groups are significant beyond the contribution they make to people’s senses of self. Favouritism toward in-groups and hostility toward out-groups characterise intra- and inter-group relations as understood by the social identity approach (Hogg and Abrams 1988). A shared in-group identity will see people demonstrating positive attitudes toward other members of the in-group, and values, beliefs, and subjective truths will be shared (Haslam 2000). Out-group hostility occurs through negative actions such as stereotyping, mistrust, scepticism of the validity of arguments, and generally antagonistic attitudes (Hogg and Abrams 1988; Haslam 2000).

In-groups and out-groups do not need to be profound in order to encourage in-group favouritism and out-group hostility. A series of experimental studies demonstrated that in-group favouritism will occur following arbitrary or trivial categorisations given to study participants (Tajfel et al. 1971; Haslam 2000). These *minimal group studies* found that simply creating an in-group and out-group would lead to in-group favouritism. This occurred for participants who were told the groups were based on how many dots participants counted in a picture, or the favoured of two artists (though in reality the groups were random) (Tajfel 1978a), and was even the case when participants were told the group allocations were completely random (Brewer and Silver 1978). The observed in-group favouritism, though, did not emerge in absolute terms independent of the inter-group context, i.e. participants did not simply seek to maximise their own gains. Rather, in-group favouritism occurred relative to the status of out-groups, meaning that participants sought to maximise the amount they gained beyond than gained by the out-group, even if it meant a reduction in absolute gains (Haslam 2000).

Hostility towards out-groups routinely occurs through stereotyping. This is where out-group members are perceived of in terms of their social identities rather than as individual human beings (Haslam 2000). Stereotyping is enhanced when there is both a salient in-group identity and perceived conflict with the out-group. Stereotypes can be framed as positive or negative, though generally all stereotypes have a negative effect on those being stereotyped (Siy and Cheryan 2016). This is because stereotypes lead to de-humanising, which can rationalise harm to others based on the view that the individuals being harmed are little more than their stereotype (Haslam 2000). Ongoing engagement with a stereotyped out-group without inter-personal contact is likely to enhance stereotyped perceptions. This is because interpersonal contact can serve to challenge stereotypes and re-humanise out-group members (Fielding and Hornsey 2016).

In-group dynamics also affect how groups of people make decisions. When a shared in-group identity is made salient, groups will prioritise achieving consensus with the in-group ahead of critical evaluation of non-conforming alternatives. This is associated with a bonded group setting where homogeneity of in-group members is emphasised. In order to maintain concurrence with the in-group, members will seek to reinforce the ideas of others and will be averse to disagreements (Hogg and Abrams 1988). When this occurs within the context of conflict with an out-group, the consensus-seeking effect will be enhanced through inter-group comparisons making pre-existing arguments more extreme (Haslam 2000). Additionally, a range of justifications will be employed to support the argument, though not all will necessarily be representative of genuine views of the group or its members. In-group members, too, will engage in activities which are both (or either) goal orientated (e.g. an activist group pursuing a favourable policy outcome) and identity

reaffirming. In the case of the latter, actions will be taken in order to reinforce the salience of a valued social identity rather than achieve a specific goal, and through so doing the norms of the in-group members will converge. This occurs through ‘practicing’ the social identity, and ongoing negotiation of norms by in-group members (Haslam 2000; Rowley and Moldoveanu 2003; Gray 2004).

The social identity approach has shown that leadership of identity groups will change based on the inter-group context. In a non-conflict situation, the leader of an identity group will reflect a position which could be viewed as the ‘average’ of all group members. The leader therefore has a strong identity ‘fit’ with the range of views within that group. However, when placed in the context of conflict with an out-group, group leadership will change to an extreme position which favours polarisation with the out-group ahead of moderate representation of the in-group (Haslam 2000). This is considered to be a reflection of the need for groups to distinguish themselves from out-groups and to emphasise the way in which the in-group differs from the out-group. As conflict with an out-group will also have likely led to stereotyping of out-group members, this polarisation serves to demonstrate the perceived difference between the ‘good’ characteristics of the in-group and the ‘bad’ characteristics of the out-group.

1.4.1 The social identity approach in ENRM

The social identity approach is the most consistently applied theory for examining intergroup dynamics (Hornsey 2008), and these insights from the approach demonstrate the complexity of the way groups form and interact, and therefore the usefulness of the approach for examining stakeholder conflict and the human dimension of ENRM more broadly. The social identity approach has been applied to stakeholders in the business management context by Rowley and Moldoveanu (2003) and Crane and Ruebottom (2011). Rowley and Moldoveanu (2003) examine what will make stakeholders mobilise around a firm through the social identity approach. They demonstrate natural compatibilities between stakeholder theory and the social identity approach, and argue for the use of social identity as a means to understanding stakeholders’ behaviour. Significantly, the authors use the social identity approach to explain that stakeholders will mobilise not simply in response to a material concern about the firm’s actions, but also in order to reinforce their social identity (e.g. as an activist). Crane and Ruebottom (2011) suggest that stakeholders should be understood in terms of their social identities, rather than their relationships to the firm in order to make stakeholder theory more grounded in the ‘real world’.

In ENRM, the social identity approach has been used to examine attitudes toward a range of ENRM issues, though the use of the approach to examine conflict is a nascent research area with promising

results, though relatively few studies (Fielding and Hornsey 2016). In research on attitudes toward ENRM issues, the social identity approach has provided insights into socio-political divides about perceptions on climate change action, and suggested potential social identity-based strategies for addressing the divide (Unsworth and Fielding 2014; Bliuc et al. 2015). Both studies argue that the divide on climate change action is best viewed as an intergroup conflict due to the politicised nature of the climate debate. Based on this understanding, messaging around climate change can be framed in terms which aim to ameliorate the identity-based divide (Bliuc et al. 2015). For example, in-group messaging can be used to frame climate change action as a positive in-group norm for those groups antagonistic to climate change (Unsworth and Fielding 2014). This reflects findings of Hoffarth and Hodson (2016), who found that among those who opposed policy addressing climate change, opposition was influenced more by dislike for the out-group, i.e. those promoting the policy, rather than the policy itself. Mason et al. (2014) found that social identities are instrumental in shaping attitudes toward the mining industry and that manipulating identity salience would change these attitudes.

The social identity approach has been proposed as a useful tool for understanding conflict discourse in ENRM (Wondolleck et al. 2003; Stoll-Kleemann and Welp 2006). This is based on the argument that conflicting social identities will adopt identity-framing for their arguments to encourage in-group mobilisation and differentiation from the out-group. Social identity based applied research has provided verification of the usefulness of the approach, and insights into ENRM conflict management. Mason et al. (2015) examined a network of coastal management stakeholders, and showed that inattentiveness to the intergroup dimension of ENRM can lead to less than optimal outcomes. In this case, intergroup conflict based on conflicting social identities undermined the potential for the collaboration necessary to achieve successful coastal management outcomes. Conflict between loggers and conservationists was examined through the social identity lens by Bryan (2008). In this case, intergroup conflict characterised an impasse in developing an adequate resolution to this land use conflict. The social identity perspective was able to demonstrate that a critical factor preceding the eventual resolution of the conflict was development of a superordinate identity; an identity shared by those in the previously conflicting groups. Similarly, conflict between hunters and conservationists was found to reflect a social identity-based type of intergroup conflict. These findings were reflected in research by Lute and Gore (2014) on conflict between hunters and conservationists about wolf management. This conflict was characterised by intergroup conflict between a 'conservationist' group and a 'wise use' group. Each promoted different approaches to wolf management, and group relations were characterised by conflict about the points on which the groups differed. However, Lute and Gore's (2014) research showed there were shared

beliefs between the groups which demonstrated the potential for development of a superordinate identity based around wildlife stewardship. These studies demonstrate the applicability of the social identity approach for understanding the subtle intergroup dimension of ENRM conflict.

1.5 Synthesis and research questions

Land use conflict is a significant challenge for the pursuit of sustainability in ENRM, particularly as land use changes will continue into the future. Land use change decision-making occurs through ENRM governance; a system which facilitates participation of the public but also encourages conflict between parties. To manage conflict, ENRM has adopted stakeholder theory from business management, and applied it as the practice of stakeholder analysis and engagement. This form of public participation prioritises individuals and groups from the public who are considered to be affected by, or able to affect, land use change decision-making. This effectively divides the public between the citizenry and stakeholders, and categorises these stakeholders based on their relationship to the landscape in question.

Despite these practices, conflict remains a challenge for ENRM. As this conflict occurs between categorised groups of people, the social identity approach is an appropriate theoretical perspective for interrogating the human dimension of land use conflict. This makes the social identity approach an alternative way to address a long-standing problem for ENRM. The social identity approach examines the process of categorisation into groups, as well as the way groups of people interact with each other once they have formed groups. As such, it provides a lens through which land use conflict can be interrogated in terms of the practice of ENRM stakeholder analysis and engagement, which categorises people into groups, and the dynamics of conflict, which is characterised by conflict between groups of people.

This thesis examines how the practice of stakeholder engagement contributes to the problem of ENRM conflict in the context of land use change in Australia. To do this, the social identity approach is used as a theoretical lens. The research aims to develop a theoretically supported and empirically-grounded understanding of the human dimension of land use conflict in order to inform ENRM stakeholder engagement practice which contributes to the alleviation of dysfunctional conflict.

The aim has been addressed through the following research questions (1-4) and objectives (a-h):

Understanding ENRM conflict as a cycle with a focus on intergroup relationships and identity, through integrating theories

1. How can conflict in ENRM be understood in a way to facilitate understanding and effective management which contributes to de-escalation of dysfunctional conflict?
 - a. Develop an integrative model of ENRM conflict.
 - b. Use the model to analyse ENRM conflict through use of the social identity approach.

Exploring how it is decided who has a voice in ENRM stakeholder engagement, using a study of practitioners' perspectives

2. How do ENRM engagement practitioners understand the essentially contested concept 'stakeholder'?
 - c. Determine who in society ENRM engagement practitioners view as ENRM stakeholders.
 - d. Understand how ENRM engagement practitioners identify these stakeholders.

Examining stakeholder engagement in practice, using an in-depth case study

3. Do aspects of current ENRM stakeholder engagement practice contribute to the exacerbation of conflict?
 - e. Examine a case study of 'best practice' ENRM stakeholder engagement practice which was associated with land use conflict.
 - f. Interrogate the human dimension of this conflict through use of the social identity approach.

Testing the effect of conflict and identity on the citizenry's attitudes, using an experimental survey

4. What impact do conflict and identity have on the way the citizenry engages with land use change?
 - g. Test the relationship between ENRM conflict, identity and the citizenry's attitudes toward land use change.
 - h. Examine the role of social identity in shaping the citizenry's attitudes.

Taken together, addressing these research questions will contribute to the understanding of the human dimension of land use conflict. The research has implications for effective management of conflict, particularly through processes of stakeholder engagement in ENRM. Through adopting the social identity approach, the research will show the extent to which this perspective from social psychology can provide new insights into the perennial challenges of land use conflict.

1.6 Methodological approach

The problem of conflict in ENRM is not confined within disciplinary boundaries (Lang et al. 2012). Environmental management practice is informed by business management theory, and interacts with conflict underpinned by social psychological processes. The aim of this research, and the research questions asked in order to meet the aim, are similarly interdisciplinary. This has necessitated an interdisciplinary methodological framework for the research (Madni 2007). The overarching methodological philosophy underlying the research is constructionism (Babbie 2014). The constructionist perspective seeks a range of perspectives on a complex issue in order to develop a nuanced and well-rounded understanding of its complexities (Moon and Blackman 2014). Selection of research methods was made based on the needs of each research question. As such, the thesis presents a combination of qualitative and quantitative enquiry. Methodological approaches to research questions 2 through 4 were designed based on insights developed through addressing research question 1. Specific methodological choices are explained and justified within each chapter, though an overarching perspective of the thesis methodology is as follows, and as summarised in Table 1.2.

Table 1.2 Summary of methodologies employed in the thesis.

	Research question	Objectives	Methodology	Justification	References
Ch 2	1. How can conflict in ENRM be understood in a way to facilitate understanding and effective management which contributes to de-escalation of dysfunctional conflict?	a. Develop an integrative model of ENRM conflict. b. Use the model to analyse ENRM conflict through use of the social identity approach.	Theory building	Drawing together multiple paradigms to create new understanding.	Gioia and Pitre 1990
Ch 3	2. How do ENRM engagement practitioners understand the essentially contested concept ‘stakeholder’?	c. Determine who in society ENRM engagement practitioners view as ENRM stakeholders. d. Understand how ENRM engagement practitioners identify these stakeholders.	Qualitative; semi-structured interviews; semantic coding	Understanding an essentially contested concept based on experts’ perspectives and experiences.	Braun and Clarke 2006; Bryman 2012; Saldaña 2013; Silverman 2014
Ch 4	3. Do aspects of current ENRM stakeholder engagement practice contribute to the exacerbation of conflict?	e. Examine a case study of ‘best practice’ ENRM stakeholder engagement practice which was associated with land use conflict. f. Interrogate the human dimension of this conflict through use of the social identity approach.	Qualitative; in-depth interviews; thematic coding	Deep understanding of a complex social issue based on perspectives of those with lived experiences; not seeking a single ‘truth’.	Braun and Clarke 2006; Bryman 2012; Babbie 2014; Silverman 2014
Ch 5	4. What impact does conflict and identity have on the way the citizenry engages with land use change?	g. Test the relationship between ENRM conflict, identity, and the citizenry’s attitudes toward land use change. h. Examine the role of social identity in shaping the citizenry’s attitudes.	Quantitative; experimental survey; inferential statistical analysis	Experimental design with demographically representative sample with statistical power to identify small effects and ability to generalise to population.	Schubert and Otten 2002; Bryman 2012; Kahane et al. 2012; Levendusky and Malhorta 2016

To answer research question 1, four distinct theoretical perspectives were reviewed and integrated to create a conceptual model of ENRM conflict. These theoretical perspectives are the key concepts underpinning the thesis, and are: environmental governance (Miller 1999; Beeton et al. 2014); ENRM stakeholder conflict escalation (Yasmi et al. 2006); the environmental issue-attention cycle (Downs 1972), and; organisational conflict (Pondy 1967). This approach was taken based on the need to develop a whole-of-system perspective to the issue (Mitchell et al. 2015) which could then be evaluated in the context of the social identity approach. This evaluation was primarily informed by a key text which outlines theory and application of the social identity approach (Haslam 2000). In this way, a theory building approach was taken which drew together multiple paradigms to create new understandings (Gioia and Pitre 1990).

Research question 2 shifted the focus from theory to practice. A qualitative research design was employed in order to develop an understanding of how ENRM engagement practitioners operationalised the theory of stakeholder engagement and analysis. This addressed a key element of the conceptual model developed in response to research question 1. The interpretivist paradigm guided this research as this perspective seeks to understand the topic of interest through close attentiveness to context and differences in participants' experiences and perspectives (Silverman 2014). Semi-structured interviews were conducted with ENRM engagement practitioners, allowing consistency of question themes while avoiding potentially leading questioning (Bryman 2012). This approach was considered appropriate for this research project, as 'stakeholder' is an essentially contested term (Miles 2012; 2015), and ENRM practitioners work across a range of domains of ENRM. Analysis of the interviews was undertaken using a semantic approach which seeks to make sense of the surface level themes evident in the interviews (Braun and Clarke 2006). Interviews were coded using attribute- and descriptive-coding methods (Saldaña 2013).

Research question 3 involved examining the experiences of stakeholders in a land use conflict, and this was undertaken using a qualitative case study approach. This involved visiting a community which had recently experienced land use conflict, and conducting in-depth interviews with community members about their experiences. Research question 3 addressed an important aspect of the conceptual model developed in response to research question 1. Informed by constructionist epistemology and the interpretivist paradigm, this project sought to understand a range of differing perspectives not in pursuit of a single truth, but in order to develop a well-rounded understanding of the issue (Babbie 2014). In-depth interviews were selected as the research method in order to allow interview participants' experiences to be shared with limited potential of leading questions (Bryman 2012). Thematic analysis of interviews was undertaken to construct a narrative of the conflict experience, as well as to draw out latent themes which underpinned the participants' experiences

and perspectives (Braun and Clarke 2006). In this way, the approach to analysis differed from that of research question 2. Theoretical analysis codes related to the social identity approach were developed from the findings of research question 1, and the social identity literature (Haslam 2000).

A quantitative approach was taken to address research question 4. This was because research question 4 was concerned with those in the public who were not considered stakeholders, i.e. the citizenry. As such, perspectives from a large number of people were sought. Like research questions 2 and 3, research question 4 addressed the final key element of the conceptual model developed in response to question 1. The quantitative approach was informed by experimental social psychological studies (Kahan et al. 2012; Levendusky and Malhorta 2016), and utilised a social identity elicitation tool (Schubert and Otten 2002). The intention was to examine the interplay of land use change framing and public attitudes, reflecting the constructionist epistemology and the interpretivist paradigm (Moon and Blackman 2014). Statistical analyses were undertaken to deductively examine specific hypotheses, and to inductively examine unexpected findings (Bryman 2012).

1.7 Thesis structure

The thesis is organised across six chapters (Figure 1.4), each of which contribute to achieving the overall aims of the research. Chapter 2 presents a conceptual model, all elements of which are then interrogated in chapters 3 through 5. The purpose of chapters 3 through 5 is to gain a useful and deep understanding of each element of the model, guided by associated research questions. These chapters are not intended to definitively answer their associated research questions, rather, the chapters will provide new insights into understanding the complexities of the human dimension of ENRM conflict. Chapters 2 through 4 have been published in peer-reviewed journals, and chapter 5 is in development for publication. As such these chapters include the accepted paper (or final manuscript) along with an additional section which explicitly addresses the research questions and objectives, and explains the place of the research in the broader thesis.

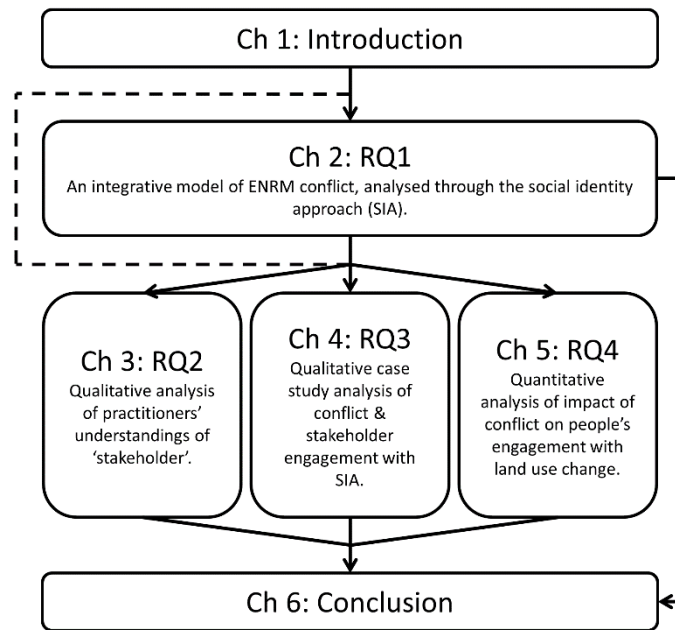


Figure 1.4 The structure of the thesis, emphasising the role of chapter 2 in informing chapters 3 through 5.

Chapter 1 presented the rationale for the research, and an overview of key theoretical concepts which are revisited throughout the following chapters.

Chapter 2 presents the integrative model of ENRM conflict, and examines this model using the social identity approach. This chapter makes an argument for the usefulness of this approach in understanding ENRM conflict, and the insights from this chapter inform chapters 3 through 5.

Chapter 3 analyses how ENRM engagement practitioners understand the term ‘stakeholder’. This chapter focuses on the practical division between stakeholders, community, and the citizenry, and examines how stakeholders are identified by practitioners. Insights for ENRM engagement theory and practice are outlined.

Chapter 4 presents a case study analysis of a wind energy development conflict in King Island, Tasmania. The chapter describes the interplay between stakeholder engagement practice and conflict, and uses the social identity approach to understand the hidden complexities of this study. Significant findings are included for ENRM stakeholder engagement practice.

Chapter 5 analyses the impact of conflict on people’s attitudes toward land use change. As stakeholders were analysed in chapter 4, chapter 5 focuses on the citizenry. Results show the significance of conflict framing in shaping how the citizenry appraises land use change scenarios.

Chapter 6 presents a synthesis of findings and outlines the contribution this thesis makes to the literature. Research questions are revisited, and future research directions are described.

Chapter 2:

The social identity approach to understanding socio-political conflict in environmental and natural resources management

2. The social identity approach to understanding socio-political conflict in environmental and natural resources management

The place of Chapter 2 in the thesis

Chapter 2 aims to address research question 1 through undertaking research objectives a and b.

1. *How can conflict in ENRM be understood in a way to facilitate understanding and effective management which contributes to de-escalation of dysfunctional conflict?*
 - a. *Develop an integrative model of ENRM conflict.*
 - b. *Use the model to analyse ENRM conflict through use of the social identity approach.*

In order to address dysfunctional ENRM conflict, conflict must be understood. This is in terms both of the dynamics of conflict, and the human drivers of conflict. ENRM conflict involves stakeholders, the citizenry, and the governance of decision-making processes, within a *culture of conflict*. In Chapter 2, these elements of ENRM conflict are discussed, integrated into a conceptual model, then analysed using the social identity approach. Development of the conceptual model for ENRM conflict provides a way to understand conflict, and a foundation on which informed conflict management in ENRM can be based. Analysis of the model through application of the social identity approach demonstrates that the approach is a useful and appropriate lens through which the complexities of the human dimension of ENRM conflict can be examined.

Abstract

Insights from the social identity approach can be useful in understanding the drivers of dysfunctional conflict in environmental and natural resources management (ENRM). Such conflicts tend to be shaped by multiple factors including: the governance arrangements that are in place and how deliberations are undertaken; the conduct and interactions of stakeholders and the wider citizenry; and the conflict legacy, which can perpetuate a ‘culture of conflict’ around particular issues. This paper presents an integrative conceptual model of the socio-political landscape of ENRM conflict, which draws these multiple factors together. The social identity approach is then introduced as an appropriate lens through which the drivers of conflict in ENRM can be further interrogated. Key social identity mechanisms are discussed along with their contribution to the proliferation of dysfunctional conflict in ENRM. Based on this analysis, it is found that the social identity approach presents a way to understand the subtle and sometimes invisible social structures which underlie ENRM, and that ENRM issues ought to be viewed as a series of conflict episodes connected across time and contexts by the *conflict legacy*. The conceptual model, and its interpretation through the social identity approach, raises a number of implications for the current theory, practice and institutions involved in the wicked socio-political landscape of ENRM. These implications are examined, followed by a discussion of some opportunities to address the impact of social identity on dysfunctional conflict drawn from empirical Australian and international examples in the literature.

2.1 Introduction

In environmental and natural resources management (ENRM), successful environmental outcomes are recognised as being inextricably linked with social acceptance and engagement (Welp et al. 2006; Beeton and Lynch 2012; Green and Dzidic 2014). Despite this, proposals to a change in land use or policy routinely trigger controversy and social agitation (Yasmi et al. 2006). When this distracts from optimal decision outcomes and focus shifts to the perceived incompatibilities between participants, the issue is considered to be a dysfunctional conflict (Amason 1996). By definition, dysfunctional ENRM conflict becomes focused on the inter-relationships between participants and is often characterised by those participants working against each other as a result of the issue at hand. The social identity approach, from the field of social psychology, is an appropriate lens through which this dysfunctional conflict in ENRM can be examined and understood (Lute and Gore 2014). The social identity approach describes and explains the way groups of people interact with each other, and how an individual may come to be a member of a group. An individual’s social identity is not simply a statement of who they are, but also describes how they perceive their place in social groups, and indicates the social norms to which they are

likely to adhere (Haslam 2000; Unsworth and Fielding 2014). Some scholars have used social identity to understand inter-stakeholder interactions in the business context (Rowley and Moldoveanu 2003; Crane and Ruebottom 2011), and while the field of environmental psychology has examined the role of social identity in pro-environmental behaviour, attitudes, and activism (Stets and Biga 2003; Dono et al. 2010; Mason et al. 2014; Unsworth and Fielding 2014; Bliuc et al. 2015) and place identity (Devine-Wright 2013), its application in understanding stakeholders in ENRM conflicts is relatively rare. Although some scholars have used the social identity approach to describe and understand the changing identities of, and relationships between, stakeholder groups in distinct ENRM conflicts (Lewicki et al. 2003; Wondolleck et al. 2003; Bryan 2008; Lute and Gore 2014), the use of the social identity approach to analyse and understand the broader socio-political context of ENRM conflicts remains unexamined in the literature.

The breadth of the social identity approach examines group norms and relationships between groups, offering implications for deliberations and decision-making, and insights into how people engage with an issue. As such, the application of the social identity approach to ENRM requires an integration of the core elements of conflict in ENRM: governance, stakeholders, the citizenry, and the conflictual social context. This paper presents a brief review of these elements of ENRM conflict, before presenting an integrative conceptual model for ENRM conflict which is based on four key theoretical perspectives. The conceptual model is then evaluated through the social identity lens, and insights and implications of the conceptual model and the social identity approach are discussed. We explore how this integrative social identity approach presents a way to understand the subtle and sometimes invisible social structures which underlie ENRM conflict, and how this approach opens the way for new ideas for adapting current ENRM practices in order to avoid dysfunctional conflict.

2.2 Governance and deliberation

Environmental and natural resources management (ENRM) in Australia, and similarly governed nations, functions within the bounds of the socio-political system of *governance*. Governance is the practice of decision-making occurring jointly between government and civil society through collaborative and deliberative methods (Lane et al. 2004), as distinguished from the traditional top-down style of government decision-making (Lockwood et al. 2010). Through embracing pluralism and integrating a range of values and interests (Lockwood and Davidson 2010), governance is believed to lead to best practice outcomes, public acceptance, civil engagement, democratic expression, and dynamic interaction as both instrumental and intrinsic goods (Jennings and Moore 2000; Zammit et al. 2000; Lane et al. 2004; Reed 2008; Lockwood et al. 2010). Such interactions can represent functional conflict, which enrich and strengthen the democratic process (Amason

1996). Additionally, engaging the public with decision-making is considered a goal for both the process and the outcome of Ecologically Sustainable Development (ESD), which in principle guides policy direction and development in Australia (Zammit et al. 2000). Though the governance process may vary based on the objective, scale or instigator, the core defining trait of governance is normalising the integration of a range of voices in ENRM decision-making (Lockwood et al. 2010).

This transition from government to governance has been complex. While a greater range of non-traditional voices now have access to ENRM decision-making, the vestiges of traditional government processes have led to what has been described as ‘hybrid governance’ (Lockwood and Davidson 2010). In this hybrid governance system, a neoliberal government regime presides over competing non-government parties which represent a plurality of values (oftentimes values incompatible with the neoliberal ethic). In this way, legitimisation of agendas through policy and distribution of funding depends on non-government parties competing for dominance over the political and governance regime (Lockwood and Davidson 2010). The complexity of this ‘hybrid governance’ devolves responsibility for ENRM decisions to non-government parties, while retaining power within the traditional walls of government (Lockie and Higgins 2007).

Deliberation serves as a process by which decision-making occurs in the ENRM governance system. Deliberation can be centred on specific decisions (e.g., the regulatory framework for minerals extraction), or broader policy agendas (e.g., the priority afforded to environmental protection). The rationale for deliberation is built on expectations for constructive and solutions-focused debate and exchange which negotiate the range of values being represented by the parties involved (Carpini et al. 2004; Lockwood and Davidson 2010). However, the relational system within which deliberation occurs has been shown to influence the strategies and conduct of the parties. This, in turn, impacts on the potential for conciliatory outcomes (Howard 2006). In this way, a governance system, such as ‘hybrid governance’ which is predicated on competition between parties and an imbalance in power, may contribute to perpetuating conflict as conflict itself is viewed as the *modus operandi* of the system (Howard 2006; Lockwood and Davidson 2010).

Governance, too, has provided a platform for the institutionalisation of not only civil engagement in decision-making in a general sense but also, more acutely, the embeddedness and professionalisation of particular actors in civil society (Lane and Morrison 2006; Kahane et al. 2013). At times, co-option of the process by special interest groups in pursuit of narrow agendas may occur (Morrison et al. 2004; Bernauer and Gampfer 2013), and there are concerns that deliberative governance creates opportunities for captured outcomes (Lane et al. 2004). This is often due to the concentrated power held within a group of elites who have the skills and resources to dominate the process (Kasperson 2006). This concern is echoed by Lockwood et al. (2010, p.

990) who state that there is evidence of governance processes leading to the “erosion of democratic process, entrenchment of local power elites, problems with accountability and legitimacy, and insufficient attention to public good outcomes”. This similarly provides space for corruption of outcomes through the potential for vested interests to co-opt the governance process to achieve sectoral, or at times personal, gains at the expense of the public interest (e.g., ICAC 2013). These reservations about governance, particularly those outlined by Lockwood et al. (2010), can be attributed to the agenda setting actions of interest groups, which have the potential to:

- commandeer the decision-making space for non-democratic ends by only pursuing the interests they represent, which may be proportionately smaller than the power they wield (Hull, 2009; Bernauer and Gampfer, 2013);
- reinforce the position of particular groups with the power and skills to maintain their position, potentially at the expense of the access of others (Morrison and Lane 2004);
- co-opt deliberative processes for the purposes of policy rent seeking with government (Herath 2002); and
- cause a decentralisation of decision-making accountability from a government entity to a tapestry of civil parties, in effect privatising the process and obscuring the link between deliberations and public good outcomes (Lane 2003).

Within the bounds of governance in a pluralistic society where interest groups pursue agendas through deliberations, conflict becomes institutionalised as these groups broadcast competing claims to vie for political traction and public acceptance (Lane 2003). Agenda setting can be aimed at dividing public opinion in order to increase awareness and generate public interest and support for the issue, thus influencing public opinion and shaping the frames which guide further interactions, discourse, and decision-making in relation to the issue (Shmueli, 2008; Howard, 2012; McLennan et al. 2014). As a result, conflict between the parties, and their interests, becomes entrenched not only in the governance process but also in the public discourse, in what Yasmi et al. (2006, p. 544) describe as a *culture of conflict*. These actors (referred to above as elements of civil society, interest groups, or the public) are collectively considered stakeholders in ENRM decision-making, and this *culture of conflict* provides the context within which these stakeholders interact with each other, and the governance systems through which decisions are made.

2.3 Stakeholders and the citizenry

The term ‘stakeholder’ is used regularly in the ENRM literature, though the meaning and impact of the term itself are rarely deconstructed and evaluated (with some notable exceptions, e.g., Grimble and Wellard 1997; Reed 2008). The pivotal and highly influential business management research by

Freeman (1984, p. 46) is most commonly cited for the fundamental definition of a stakeholder as “any group or individual who can affect or is affected by the achievement of an organisation’s objectives”. In this regard, Freeman’s (1984) stakeholder theory proposed a paradigm shift in the sphere of accountability of business away from a sole focus on those directly benefitting from a business’ actions, to include all of those who can affect, or are affected by the business’ actions.

Stakeholder theory has since been adapted from the business context and applied in ENRM (Grimble and Wellard 1997; Reed 2008). Stakeholders in the ENRM context are organised by groups of like-interest based on the context of the issue (Grimble and Wellard 1997), and tend to be formally affiliated groups with a collective interest (Kahane et al. 2013; Soma and Vatn 2014). Reed (2008) states that much of the stakeholder analysis literature assumes that stakeholders are self-evident groups, which function within the contextual structures of power and legitimacy in society. These groups may be pre-existing, e.g., The Wilderness Society which campaigns on an ongoing basis on conservation issues (Lockwood and Davidson 2010), or may form in response to an emergent issue, e.g., the Lock the Gate Alliance which opposes the coal seam gas industry in Australia (Colvin et al. 2015a).

The literature presents a tendency toward repeated identification of the ‘usual suspects’ (Reed et al. 2009), routinely comprised of “communities, NGOs, government and the private sector” (Kivits 2011; p. 320). This is reflected in ENRM case studies, where these ‘usual suspects’ emerge as: industry (the private sector, e.g. mining, energy, agriculture, forestry, aquaculture and fisheries, depending on the issue); jurisdictional governments; environmentalists/ conservationists (NGOs); and community (Lane 2003; Lewicki et al. 2003; Moore and Koontz 2003; Brummans et al. 2008; Bryan 2008; Fox et al. 2013; Kindermann and Gormally 2013; Redpath et al. 2013; Aanesen et al. 2014; Cárcamo et al. 2014). Kahane et al. (2013) and Soma and Vatn (2014) further distinguish between stakeholders and the citizenry, where the citizenry are considered to be individuals representing the public interest as opposed to the focused interests of stakeholders.

The reflections from the literature, and in particular these distinctions from Kahane et al. (2013) and Soma and Vatn (2014), reveal fundamental implications for the social dimensions of ENRM. Stakeholders are considered to be institutionalised in the governance process, and pursue pre-defined interests in ENRM governance and deliberative processes. While this does not mean the views of stakeholders are illegitimate; it does indicate that stakeholders approach ENRM issues with predetermined values and goals, i.e., agendas (Lane 2003; Kahane et al. 2013). However, the recurrence of the ‘usual suspects’ among the stakeholders creates the need for engagement of the citizenry in order to capture the broader public interest in decision-making (Carson 2009; Kahane et al. 2013). (The direct engagement of citizens, however, can be fraught with challenges such as

overcoming consultation fatigue and finding a well-informed and unbiased section of the citizenry for participation.) Often these stakeholder groups also continue to exist outside of the scope of distinct ENRM issues (Rowley and Moldoveanu 2003). This means that the promotion of stakeholders' agendas does not cease at the boundary of an issue to which they are relevant, but rather the stakeholder group will continue to promote their agenda to the citizenry in order to garner public support for the position the stakeholder group holds in relation to ENRM issues more generally (Stern et al. 1999). For example, Herath (2002) discusses the genesis and ongoing campaigning of the Victorian National Parks Association (VNPA) and the Australian Conservation Foundation (ACF).

The influence of stakeholders on the citizenry both within, and outside, the context of a distinct ENRM issue, can be examined through theoretical approaches to understanding support for social movements. Stern et al. (1999) describe the process by which interest-based organisations are driven by committed members and buoyed by movement supporters. Following definitions from Kahane et al. (2013) and Soma and Vatn (2014), movement supporters in the ENRM governance context are those members of the citizenry who offer latent support for stakeholders' agendas, and who may be recruited into membership to lend support to a stakeholder agenda when an ENRM issue arises. This reflects that just as stakeholder group membership is viewed as a vehicle for voice in ENRM (Rydin and Pennington 2000; Aanesen et al. 2014), the social processes by which stakeholder groups recruit support from the citizenry lead to a funnelling of interests which are likely to conform to the pre-established agendas of the 'usual suspects' (Rowley and Moldoveanu 2003). Carson (2009) argues that citizens can represent the public interest in ENRM issues, however this generally depends on the availability of formal avenues for engaging the citizenry in decision-making. When these avenues are absent, or are just one element of the deliberative space in ENRM (cf. news and social media), it becomes clear that Yasmi et al.'s (2006) *culture of conflict* for stakeholders in ENRM issues cannot be viewed as isolated from the citizenry, who are considered to serve as a proxy for the public interest.

2.4 A conceptual model for the socio-political landscape of ENRM conflict

Appreciating the social and systemic factors which contribute to dysfunctional conflict requires a whole-of-system perspective on ENRM. The brief review of governance and stakeholder literature above highlights four key facets which interact to form the socio-political landscape of ENRM: governance; stakeholders; the citizenry; and, the *culture of conflict* in which they operate. While thorough and insightful application of these theoretical perspectives has contributed to an understanding of the nature of these elements of ENRM, as yet there has been little integration of these theoretical approaches into a framework for understanding the complex and interrelated social

institutions of ENRM. The following section outlines each of the four key facets identified above, before presenting an integrated conceptual model which is then examined through the social identity lens.

2.4.1 Governance

Environmental governance is the institution through which deliberations occur, and decisions are made, in ENRM. Reflecting the complexity of hybrid governance arrangements (Lockwood and Davidson 2010) and multi-party decision making (Lockwood et al. 2010), the governance process integrates both formal and informal—through interest groups and the media—public deliberation into the process of ENRM decision making and policy development. The governance process follows the migration of an ENRM issue from promotion by interest groups, through the media for public deliberation, and into political debate. Following implementation of a decision with ongoing monitoring and evaluation, what was previously viewed as a change becomes a norm of ENRM (Beeton et al. 2014; Miller 1999).

2.4.2 Stakeholders

The conduct of, and mode through which, stakeholders, as formally affiliated groups with a collective interest (Kahane et al. 2013), engage with ENRM issues has been judiciously examined by Yasmi et al. (2006). In their study of stakeholder conflict escalation in NRM, Yasmi et al. (2006) outline the observable stages in stakeholders' behaviour, and present archetypical conflict trajectories for ENRM. This begins with stakeholders feeling anxious and agitated, participating in debate and critique, and then escalates through lobby, protest, blockading, litigation, intimidation, and nationalisation or internationalisation of the issue. Yasmi et al.'s (2006) model also describes how the nature of the interactions between stakeholders can change, for example, when an interaction is instigated by just one of several stakeholder groups (e.g., litigation initiated by one group against another). What is most critical is that the action signals a change in the nature of stakeholder conflict. The model developed by Yasmi et al. (2006) was considered the most appropriate approach for examining the manifestation of conflict in the environmental context as the model is empirically grounded. Yasmi et al. (2006) undertook a review of over one hundred cases of conflict escalation to develop their model. This provides confidence in the claims of Yasmi et al., and offers a platform on which further analyses (i.e. the application of the social identity approach) can be based.

2.4.3 The citizenry

The citizenry may represent movement supporters (Stern et al. 1999), who offer latent support to a stakeholder group or a particular position on an ENRM issue without becoming directly involved, or they may be individuals who remain unaffiliated and without a pre-defined agenda. Kasperson

(2006) describes non-stakeholders as process spectators, indicating that while members of the citizenry may not be personally involved, perceptions and beliefs of the citizenry can be shaped by an ENRM issue. McLennan et al. (2014) describe the citizenry as an audience, emphasising the role of the media in shaping the citizenry's view on ENRM issues. Accordingly, the relationship of the citizenry with ENRM issues can be understood through Downs' (1972) *issue-attention cycle*, which explores how public interest and enthusiasm may be piqued as an issue emerges, though declines overtime until the issue is no longer considered a problem, regardless of the outcome. The existence of the problem before coming to the attention of the public is the pre-problem stage, and the existence of the problem after the interest of the public has declined is the post-problem stage.

2.4.4 The culture of conflict

The *culture of conflict*, (Yasmi et al. 2006) can be understood using Pondy's (1967) conceptual model of organisational conflict. Conflict is understood to be the presence of competition between two or more parties, and awareness of the parties of this competition (Boulding 1962). From this definition, conflict can take many forms with varying levels of antagonism. Through Pondy's (1967) model, each instance of conflict is considered a conflict episode, rather than a discreet occurrence. The conflict episodes begin with the construction of the conflict (i.e., the right conditions are in place, conflict participants become aware of conflict, then affectively experience the conflict), before the conflict manifests into an identifiable and clear exchange between opponents. Following resolution of the conflict episode, the conflict aftermath is the "legacy of a conflict" (p. 305) which describes how the experiences and perceptions during one episode guide the participants when interpreting future episodes.

2.4.5 The conceptual model

The theoretical bases for these four elements of the ENRM socio-political landscape have been simplified and integrated to present a conceptual model of ENRM conflict (Figure 2.1). This model incorporates the conduct of stakeholders and the citizenry in the governance process, within the *culture of conflict*. The conceptual model can be read as a clock face, with a radius from the centre extending to the outer edge, passing across the concurrent phases of the four elements. The centre circle represents the object of the deliberations—commonly a landscape or policy. Adjacent to the object is ENRM governance, which is surrounded by the stakeholders, then the citizenry, and on the outermost circle, the *culture of conflict*. The relationship and location of these four elements also represents the formalisation of processes (e.g. governance is more formal than the conduct of stakeholders, which in turn is more formal than the conduct of the citizenry, and the *culture of conflict* is again less formal), and the proximity to decision-making power for the object of the conflict. Similarly, proximity to the object of the conflict also represents an increasing ability for

manipulation or management: the governance process may be adapted through policy and/or practice, and stakeholders may to some extent be governed by regulations or process, but there is limited direct management which can be applied to the citizenry or the *culture of conflict*.

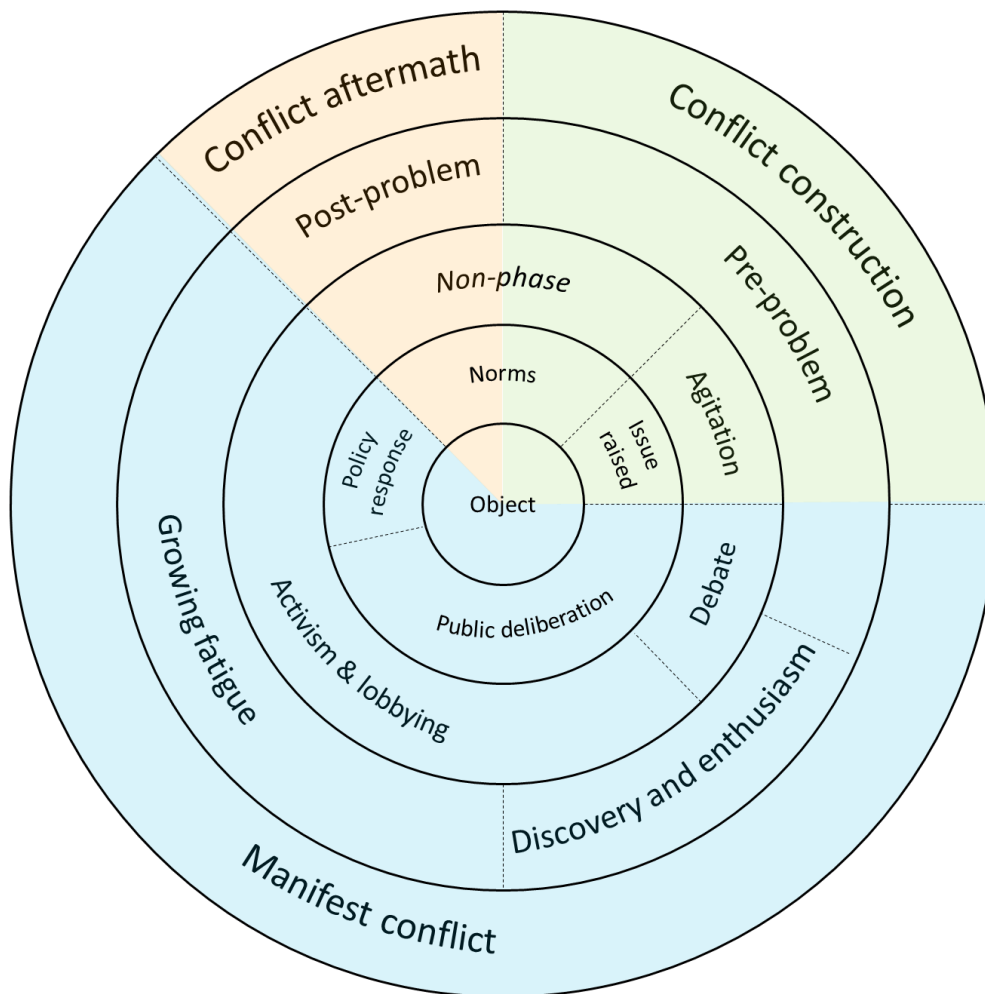


Figure 2.1 Conceptual model for the socio-political landscape of ENRM conflicts. The model can be read like a clock face, with a radius extending from the centre of the diagram to the outer edge, identifying the concurrent phases of each of the four elements. The innermost circle represents the object of the conflict; usually a landscape or policy. The adjacent circle represents ENRM governance processes. Next to ENRM governance are the stakeholders, followed by the citizenry. The outermost circle represents the culture of conflict which divides the model into three key phases.

Based on Pondy's (1967) organisational conflict phases, the *culture of conflict* segments the model into three key sections: conflict construction; manifest conflict; and, conflict aftermath. Just as Pondy (1967) emphasised the recurring nature of organisational conflict, a key relationship evident in this model is the connection between the conflict aftermath of one conflict episode, and the construction of a subsequent conflict episode. However, analysis, media attention, and mediation and resolution efforts are unlikely to be directed toward an ENRM conflict outside of the manifest

conflict phase (McLennan et al. 2014; Yasmi et al. 2006). Through integration of these four theoretical approaches, and in particular through highlighting the place of the conflict construction and conflict aftermath phases, this conceptual model presents a framework for incorporating the residual issues from a past ENRM conflict—the *conflict legacy*—into understandings of emergent issues, and interpreting current conflict episodes as the foundation for future conflict episodes.

2.5 Insights from the social identity approach

Construction of the conceptual model for the socio-political landscape of ENRM conflicts presents a helpful framework for interpreting and understanding the wicked interconnectedness of conflict episodes across time and contexts. However, greater depth of understanding of the subtle social dynamics which drive the *culture of conflict* in ENRM governance across stakeholders and the citizenry can be achieved through applying a social identity lens to the model.

The social identity approach is a “meta-theoretical perspective” (Hornsey 2008; p. 207) which integrates insights from both social identity theory and self-categorisation theory (Mason et al. 2014; Unsworth and Fielding 2014), and is the most widely applied theoretical lens for understanding group dynamics (Hornsey 2008). The social identity approach captures both group behaviour in intergroup contexts, as well as the process by which an individual adopts a group identity and the social factors which are likely to contribute to this occurring (Haslam 2000; Hornsey 2008). As social groupings are fundamental to the socio-political landscape in ENRM governance, the social identity approach provides an appropriate mode of enquiry. While the broad and sometimes colloquial concept of identity has been employed to understand ENRM issues, to date there has been limited research which has used insights from the social identity approach to understand stakeholder processes, particularly in ENRM. There has, however, been some use of the social identity approach in understanding the implications of stakeholder theory in the business context. For example, Crane and Ruebottom (2011) emphasise the place of social identity in shaping the stakeholder groups of which individuals would become members, and argue for further research into the way social identity can influence stakeholder behaviour. Rowley and Moldoveanu (2003) use social identity to examine the social conditions which lead to stakeholders taking action in a business context. Their work indicates that stakeholder groups may undertake actions not just to achieve instrumental aims, but also to affirm their identity as group members. It was also found that stakeholder groups with a history of action are more likely to engage in action in the future. Both studies present nuanced and helpful insights which offer opportunities for application in ENRM.

In ENRM, some scholars have utilised social identity for understanding the social dimension of ENRM conflicts (e.g., Lewicki et al. 2003; Wondolleck et al. 2003; Stoll-Kleemann and Welp

2006; Bryan 2008; Lute and Gore 2014). The use of the social identity approach to understanding socio-political divides related to attitudes toward climate change action in particular, has been demonstrated in more recent years. For example, both Bliuc et al. (2015) and Unsworth and Fielding (2014) adopted the social identity approach to demonstrate potential identity-based solutions for overcoming public resistance to climate change policy. Similarly, Mason et al. (2014) found that a shift in the salience of social identities can lead to differences in attitudes toward the extractive industry, concluding that greater attentiveness to identity processes is needed to understand public perceptions of this industry. These studies demonstrate the usefulness of the social identity approach in understanding ENRM issues, and demonstrate the opportunity for furthering its application to understand the social context and institutions which reinforce traditional stakeholder groupings and inter-relationships across distinct issues and sectors of society.

Although there is widespread use and acceptance of the social identity approach, some critiques do exist, related most specifically to the conceptual areas which have not been captured by the theories. Rubin and Hewstone (2004) address concerns that social identity theory does not incorporate adequate detail about social and systemic contexts, arguing the need for integration of new perspectives on intergroup behaviour into the framework of the social identity approach. Similarly, Hornsey (2008) outlines potential limitations to the social identity approach stemming from a perceived rigidity of theoretical norms, and the potential for reductionist thinking which obscures complexities such as tolerance for differences within groups. However, social identity and self-categorisation research is ongoing in the field of social psychology, and areas where the original theories offered generalisations are being refined (e.g., Grant and Hogg (2012) examine the complexities of social identity in scenarios of uncertainty). Despite these critiques, the social identity approach remains the central theoretical framework through which intergroup relations can be understood and explained (Haslam 2000; Hornsey 2008).

Based on a study of the social identity approach, and the work of Haslam (2000) in particular, several key mechanisms through which intergroup relationships are shaped by social identity processes have been recognised as relevant to the conceptual model of the socio-political landscape of ENRM conflicts. These key mechanisms have been overlaid onto the conceptual model of the socio-political landscape of ENRM conflicts, and are discussed below (Figure 2.2). A fundamental distinction underpinning social identity is that of in-groups and out-groups, whereby a group to which an individual belongs is identified as an in-group and a group to which an individual does not belong is an out-group (Tajfel 1982). Though there may be more than one out-group, and an individual may be a member of several in-groups at any one time, it is the distinction and relationships between in-groups and out-groups which form the core of the social identity approach.

In the following sections, several key mechanisms through which social identity impacts on the socio-political landscape of ENRM will be discussed.

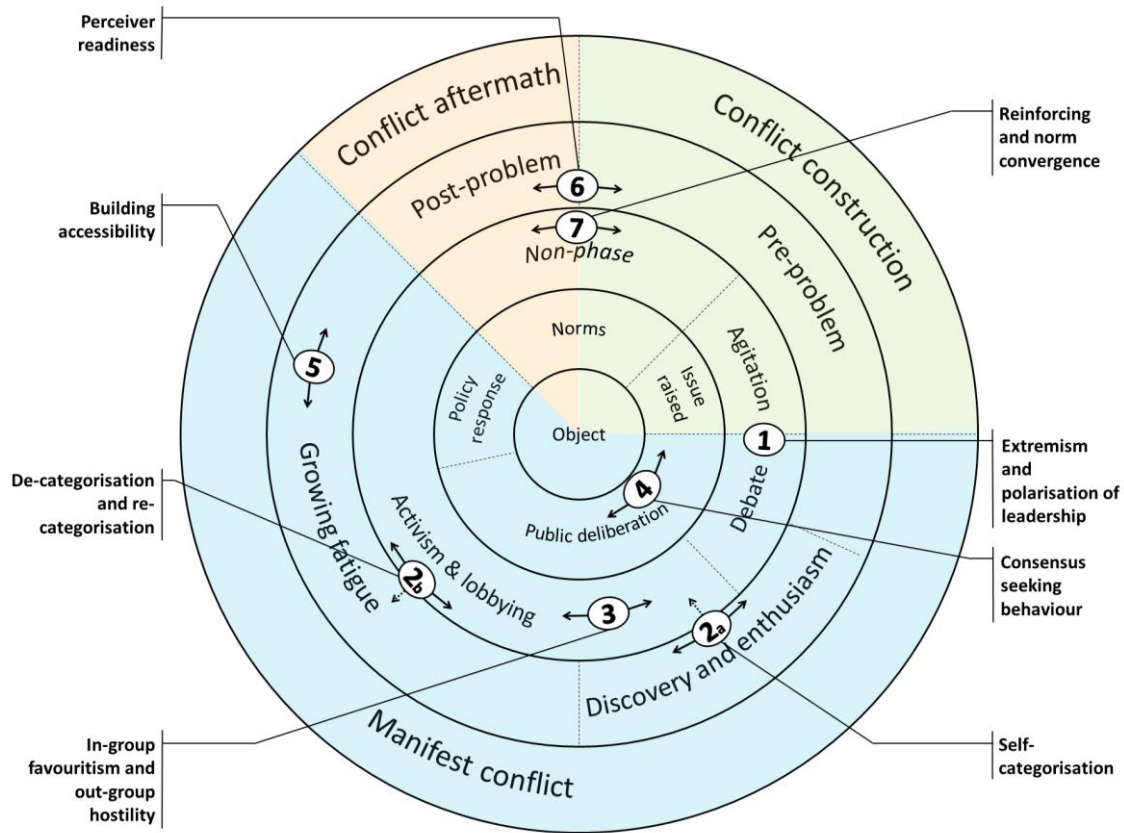


Figure 2.2 The social identity approach applied to the conceptual model for the socio-political landscape of ENRM conflict. Each numbered location represents a key social identity mechanism.

Solid arrows represent extension across the phase. Dashed arrows represent overflow across elements (e.g., from stakeholders to the citizenry).

2.5.1 Extremism and polarisation of leadership

As ENRM conflicts emerge from agitation among stakeholders and enter Yasmi et al.'s (2006) debate and critique phase, they become visible to the citizenry. At this point when a conflict first manifests, leadership in the form of groups or individuals emerge to offer strength to their cause, and to define the aims and agenda of their stakeholder group, and garner support from the citizenry (Rowley and Moldoveanu 2003). Haslam (2000) explains that in a non-conflictual group situation, group leadership represents a prototypical group member, i.e., a moderate position. However, when the group is placed in a conflictual intergroup context, the leadership assumes an extreme position, trading off moderation within the in-group for polarisation with the out-group. In the ENRM *culture of conflict*, when leadership may be interpreted as an individual leader of a group, or a group (e.g., environmental NGO stakeholder group) leading a movement (e.g., environmentally sympathetic members of the citizenry), stakeholder groups are likely to pursue polarised agendas due to the

presumption of conflict. Howard (2012), for example, describes the framing rhetoric adopted by conflicting environmental and farming groups in the context of water policy in New South Wales, Australia. Following the release of water policy directives, the responses from organised groups representing environmental and farming interests were found to be presenting arguments which were incompatible with those of the other interest groups. In this way, the positions adopted by key stakeholder groups represented polarised positions, where there was little potential (or willingness) for negotiation, conciliation, or common ground.

2.5.2 Self-categorisation

As the citizenry becomes aware of emergent ENRM conflicts, the relative standpoints of stakeholder groups present the templates for the citizenry's own positioning. In this way, when a member of the citizenry interprets an emergent issue through observation of the positions of key stakeholder groups, the individual draws on their past experiences with aligning or opposing stakeholder groups, and will likely self-categorise into the group with which they share some identification (Haslam 2000). As such, a social identity with low-salience (or a dormant identity), gains salience and becomes prominent in the individual's identity. In the citizenry, self-categorisation may lead to recruitment into stakeholder groups (e.g., joining a movement, providing financial support, engaging in lobbying, or becoming an activist), or may lead to latent movement support where the individual does not join the stakeholder group, but offers support for that stakeholder's agenda (Stern et al. 1999). For example, Aanesen et al. (2014) suggest that members of the public are likely to join interest groups if they wish to be involved in fishery management deliberations. Following the social identity approach, this would not be a random decision in order to obtain a 'seat at the table', but rather would be a process of self-categorisation into the group which most closely affirms the individual's social identity.

2.5.3 De-categorisation and re-categorisation

Following the process of the citizenry engaging in self-categorisation and either becoming a member of a stakeholder group or offering their latent support for a stakeholder group's agenda, de-categorisation or re-categorisation may occur. At this point, an individual who previously self-categorised into a stakeholder group may de-categorise as their interest in the issue declines (following Downs' (1972) *issue-attention cycle*), and the stakeholder-based identity becomes dormant as other social identities increase in salience (Rowley and Moldoveanu 2003). Re-categorisation can occur when a new or superordinate identity becomes more salient than the initial identification, for example, in cases where stakeholder groups achieve common ground based on a shared place (e.g., Bryan 2008) or in opposition to a common opponent (e.g., Colvin et al. 2015a).

2.5.4 In-group favouritism and out-group hostility

One of the key social observations which drove development of the theory of social identity was favouritism toward in-groups, and hostility toward out-groups (Hogg and Abrams 1988). Once social identities have become salient through self-categorisation, behaviours and attitudes are exhibited which demonstrate positive attitudes toward the in-group, such as sharing and supporting truths, values and beliefs (Haslam 2000). Similarly, negative behaviours and attitudes are demonstrated toward out-groups, where stereotyping leads to de-humanisation, mistrust, scepticism of the validity of arguments, and antagonism (Haslam 2000; Hogg and Abrams 1988). These conditions are conducive to escalation of conflict (Haslam 2000; Mushove and Vogel 2005; Yasmi et al. 2006). Lute and Gore (2014) demonstrate this through their study of conflict between stakeholder groups in relation to the hunting of wolves in the United States, which outlines the incidence of in-group favouritism and out-group hostility.

2.5.5 Consensus seeking behaviour

Consensus seeking behaviour occurs after an in-group has been established. Due to reinforcement of a shared social identity among group members, critical evaluation is traded off in favour of achieving consensus within the group (Haslam 2000; Hogg and Abrams 1988). Where a predefined agenda has been established for a group (e.g., as with stakeholders in ENRM issues), the theoretical basis for consensus seeking behaviour indicates that this may serve as a barrier to full consideration of options which lay outside of a group's pre-established goal or agenda (e.g., Morrison et al. 2004). It has also been found that when in a conflictual context, consensus seeking makes the pre-existing standpoints (e.g., agendas) more extreme, and leads to the appropriation of multiple rationales of support for the position (Haslam 2000). The tendency toward consensus seeking concurrently promotes the avoidance of conflict within the in-group, and perpetuation of conflict with out-groups (Haslam 2000). In a study of social groups engaged with ENRM issues, Compton and Beeton (2012) describe the potential for consensus seeking behaviour at the expense of critical evaluation in groups with strong, bonding ties among members. This is the type of group reflective of a strong, salient social identity (Haslam 2000).

2.5.6 Building accessibility

Building accessibility is the process by which experiences in individuals' life histories shape and reinforce the way future issues will be interpreted. Throughout the process of the citizenry observing inter-stakeholder conflict over an ENRM issue, the prototypical standpoints, values, agendas and conflict between groups become norms (Haslam 2000). Building accessibility constructs the frames of reference for future issues. This effectively iterates and reiterates to observers in the citizenry, latent movement supporters, those who drift in and out of stakeholder

membership, and even the stakeholders themselves, the norms for conduct in relation to ENRM issues and the norms for interaction between stakeholder groups. Kahane et al. (2013) explain that in a conflict episode, the positions of stakeholders can be predicted by other conflict participants based on their past experiences, and this can lead to assumptions about stakeholders' interests and values. Building accessibility is the process of constructing those predictions.

2.5.7 Perceiver readiness

Perceiver readiness follows from accessibility being built, and is the affective interpretive frame through which individuals appraise future issues (Haslam 2000). While building accessibility is a process, perceiver readiness is the state which follows that process. Although the post-problem and pre-problem stage in Downs' (1972) *issue-attention cycle* indicate that the citizenry lacks direct focus on an ENRM issue, accessibility having been constructed in previous conflicts means that the citizenry is now primed to interpret future emergent ENRM issues within the bounds of social interactions that have been established in the past (Haslam 2000). As such, perceiver readiness is the citizenry being primed to draw on the norms and social structures of social identity that have been reinforced in their past experiences. Due to the recurrence of conflict episodes (Pondy 1969), this social identity mechanism is instrumental in steering future conflicts toward re-enacting the social dynamics of historical conflicts. For example, Shmueli et al. (2007) describe how past experiences provide cues for individuals engaging with upcoming issues, particularly in shaping the individuals' interpretive frames. Similarly, Burningham et al. (2014) describe that once a group or community has been labelled as NIMBY, the identity of NIMBY is available for appropriation in future issues as the norms and expectations of this identity have been defined.

2.5.8 Reinforcing and norm convergence

Following the apparent resolution of an ENRM issue, regardless of the outcome in terms of the stakeholders' agendas, stakeholder groups continue to exist. This occurs outside the scope of the model of conflict escalation presented by Yasmi et al. (2006), and as such has been referred to here as the non-phase. During this time, reinforcement of the social identities of individuals who are members of stakeholder groups occurs (Rowley and Moldoveanu 2003), and the group norms, beliefs and values are solidified, thus strengthening the social identity (Gray 2004). Importantly, members are motivated to pursue future actions which reinforce their social identity (Haslam 2000), such as seeking other ENRM issues which are consonant with their group norms in order to partake in future group-based action. Rowley and Moldoveanu (2003, p. 208) describe the reinforcing and norm convergence occurring during the conflict aftermath stage in a stakeholder group as follows: "an individual who feels a strong affiliation with an environmental activist group, such as Greenpeace, will reinforce his or her identity as an environmentally conscious person by repeated

participation in the group's activities. Each activity in which he or she participates (regardless of whether individual or group interests are achieved) will verify his or her association with the group and its particular social identity".

2.6 Implications and opportunities

The construction of a conceptual model of the socio-political landscape of ENRM conflict, and its subsequent analysis through the lens of the social identity approach, makes apparent several key processes which improve understanding of conflict and, more significantly, identify the temporally reinforcing nature of ENRM conflict through the *conflict legacy*. Individually, each social identity mechanism offers a theoretical anchor from which particular facets of ENRM conflict may be examined in order to interrogate the subtle drivers of socio-political conflict. Extending the research in this way is outside of the scope of this paper, though this research direction warrants further exploration. When taken as a whole, the social identity approach to the conceptual model demonstrates how polarised interactions between stakeholder groups conform to, and reinforce, a conflictual template for engagement with ENRM issues. Through ongoing promotion of agendas and reinforcement of norms for engagement with ENRM issues, the conduct of stakeholders can lead to the funnelling of the citizenry into pre-determined and conflictual standpoints. This may limit the potential for open dialogue to identify creative solutions to ENRM challenges as conflict participants are distracted by perceived incompatibilities based upon past experiences. It is important to flag here that as with any generalised process, there will always be exceptions in context, stakeholders and individuals. However, the veracity of the social identity approach is well established and supported by empirical evidence (Haslam 2000; Hogg and Abrams 1988).

The social identity approach to understanding the socio-political landscape of ENRM conflict suggests there may be a certain degree of path dependency in the social institutions of ENRM governance that promote future conflict. However, an understanding of the importance of, and role played by, social identity in ENRM issues may be an important step toward identifying opportunities for alleviating dysfunctional ENRM conflict. For example, in the United States, a seemingly intractable conflict between conservationists and the forestry sector was to some extent overcome by the formation of a new, superordinate identity based on a shared sense of place, and the willingness for cooperation from leadership of previously conflicting groups (Bryan 2008). It is possible that in so doing, while an interest-based conflict may have been traded off, there is the potential for promoting future parochialism. Nevertheless, in this case a complicated and pervasive local conflict achieved some degree of resolution. Similarly, in the context of a conflict between pastoralism and conservation in the United States, significant gains toward resolution were made through mediation among leaders of stakeholder groups which re-humanised the de-humanised out-

group (Moore 2013). Although the conflict was not solved per se, the intergroup relations were improved as a result of the mediative efforts indicating that with the investment of adequate time and resources, the polarisation of leadership may be redirected toward conciliation. This reflects suggestions for overcoming conflict about the controversial practice of wolf hunting in Michigan, United States. In this case, it was recommended that directly countering the negative and simplistic stereotyping of out-groups was a potential pathway to ameliorating dysfunctional conflict (Lute and Gore 2014). Specifically, promotion of a superordinate identity based around stewardship was proposed as a social identity approach to resolving this particular conflict.

The social identity approach can also serve to provide understanding of the reasons for changing relationships between historically conflictual groups in ENRM. In Australia, during a programme of policy development for water quality in the Great Barrier Reef catchment, traditionally oppositional groups formed an alliance when faced with the threat of regulation from above (Taylor 2010). The presence of what could be considered a greater enemy may have provided the impetus for historical differences to be set aside when a new challenge (potential for regulation) reshaped the social context for the groups' interactions.

A similar finding emerged in relation to a citizen movement opposing coal seam gas mining in the eastern states of Australia, where it was found a shared values base underpinned an alliance of farmers and environmentalists—two groups generally expected to be in conflict—in opposition to the perception of a greater foe in the coal seam gas industry (Colvin et al. 2015a). In this case, and in that described by Taylor (2010), the non-traditional alliance of stakeholders may have represented the formation of a superordinate identity which subsumed historical inter-stakeholder conflict. These examples share the attribute of intervention which has, intentionally or unintentionally, broadened the socio-political context within which the *conflict legacy* for these stakeholder groups had been established, causing a reframing of the nature of the relationships. Reflecting on the contexts of both Taylor (2010) and Colvin et al. (2015a), the potential for finding a 'common ground' on which a shared identity can be formed may be limited by the scope of the type of ENRM issue; i.e., the potential for overlap of interests in the socio-ecological dimension of the ENRM issue may logically be viewed as a prerequisite for finding common ground in the socio-political dimension of that issue. In the case of a purely dichotic ENRM issue, common ground as a pathway toward formation of a shared identity may not be possible.

Further, interventions which reframe socio-political contexts and serve as circuit-breakers for the *conflict legacy* may also be employable as strategies for alleviating dysfunctional conflict. For example, framing deliberative groups as 'citizens' rather than as individuals representing disparate interests or stakeholder groups has been promoted as a means for achieving public-good outcomes

(Kahane et al. 2013; Soma and Vatn 2014). Bypassing the inclusion of stakeholders all together through the exclusive use of citizen-based decision-making is viewed by some as a method for overcoming dysfunctional conflict in ENRM issues (Carson 2009).

Collaborative approaches to ENRM governance have also been found to yield successes in overcoming dysfunctional conflict. This approach is founded on construction of groups comprised of representatives of the whole range of sectors and interests relevant to the issue. Water policy in both Australia (Bouilly et al. 2005) and New Zealand (Jenkins and Henley 2013) has been enriched through the adoption of collaborative governance approaches which promote relationship building across historically conflictual socio-political divides. Through these relationships, collaborative governance aims to achieve consensus on the nature of the issue as well as a solution (Margerum 2008). Critical to success in collaborative governance initiatives is the quarantining of participants from the broader socio-political context of the ENRM issue (Bouilly et al. 2005). Through creating a safe space for open exchange of opinions and ideas, a shared understanding of the issue can be promoted and in so doing, negative or simplistic stereotypes of the out-group can be challenged.

When a collaborative process involves construction of solutions-focused groups (e.g., Bouilly et al. 2005; Bryan 2008; Jenkins and Henley 2013), participants have the opportunity to re-categorise their salient identity away from that which carries the *conflict legacy*, and toward a new identity founded on conciliation and collaboration (Bryan 2008). When “opinion shapers” (Bouilly et al. 2005) are included in collaborative governance initiatives, if these individuals serve as leaders of stakeholder groups long-term improvement in inter-stakeholder relations may result from the leader returning to the stakeholder group and redefining group norms, thereby reinforcing norms which are conducive to future collaboration rather than dysfunctional conflict. Additionally, creating a space where interested individuals can have a voice in ENRM decision-making without joining a stakeholder group may avert the individual from funnelling into the pre-established norms and agendas of the ‘usual suspects’. Although a detailed study of the collaborative governance literature is outside of the scope of this study, the social identity approach may serve to provide theoretical validation to successful initiatives in collaborative governance, and may provide guidance for avoiding social identity-based pitfalls in the collaborative governance process. As an example, the social identity approach may be able to identify red flags in collaborative governance initiatives which indicate efforts to achieve consensus are not managing to overcome the *conflict legacy*. However, as with framing deliberative groups as citizens or employing methods of citizen-based decision-making, consensus seeking behaviour within a collaborative governance group may undermine the promise of enhanced decision-making from the deliberative processes. As the process necessitates attentive management to avoid co-option by focused agendas, it is time and

resource intensive and therefore requires political will and funding commitment (Kasperson 2006). Perhaps more importantly though, positive gains in well-managed groups does not preclude the *culture of conflict* from manifesting in informal spaces (e.g., stakeholder groups may campaign using the media, or pursue litigation regardless of the promise of collaborative governance).

Significantly, the institutional processes within which ENRM conflict emerge are not simply organisational practices which can be changed through management intervention, regulation or litigation. These conflictual frames are both cultural and habitual, and changing the *culture of conflict* of ENRM will be a gradual process. The framing from the news media of emergent conflicts as irreconcilable inter-relationship conflicts is well outside of the powers of ENRM to affect as it would require the news media to forgo sensational and incendiary reporting (certainly in Australia this seems unlikely, e.g., McLennan et al. (2014) and Zammit et al. (2000)). However, the promises of participatory planning (e.g., Brown and Raymond 2014) may offer opportunities for ENRM professionals to disrupt the *culture of conflict* by providing accessible, convenient, and enjoyable methods for citizen participation in planning prior to a conflict emerging. Similarly, well-structured and well-resourced collaborative governance initiatives focused on win-win outcomes for traditionally conflictual stakeholder groups may carry conciliatory weight beyond the individual issue by reshaping the nature of intergroup relationships, and redefining the *conflict legacy*. An example of this was the short lived Tasmanian Forests Agreement in Australia which, despite justified critique (see Gale 2013), presented a legal agreement which aimed to pacify the animosity between the forestry industry and conservation interests following decades of antagonism (Warman 2014), though received critique for a lack of inclusiveness of voices of the public and ultimately, due to issues of process, did not address the long-term conflict (Schirmer et al. 2016).

New approaches to sustainable development projects may also provide opportunities for alleviating dysfunctional conflict. Current proposals for land use change, for example the development of renewable energy resources, may trigger dysfunctional conflict due to the *conflict legacy*. However, a restructure of the relationship between proponent and opponent could provide the leverage to allow for critical appraisal of emergent ENRM issues. Morrison et al. (2014) describe a town in regional Australia which successfully opposed the construction of a wind turbine development and subsequently pursued a community-based wind power development of their own implementation. If the social identity based perceptions of the interactions between energy development proponents and local communities impact on the conflictual trajectory of the ENRM issue, then adopting a non-conventional approach to sustainable development may help achieve ESD outcomes with limited dysfunctional conflict. For example, a community tender process reflecting the imperfect but productive sustainable land management grant scheme in the Australian *Caring For Our Country*

programme (Green and Dzidic 2014). Such a process may allow for development of critical infrastructure and environmental protection while bypassing the established institutions which promote dysfunctional conflict. Though at this stage an inchoate concept, the potential warrants further exploration.

2.7 Concluding remarks

This paper has presented a conceptual model which integrates multi-disciplinary theoretical perspectives on key elements of dysfunctional conflict in ENRM—governance, stakeholders, the citizenry, and the *culture of conflict*—and emphasises the importance of the *conflict legacy*. The application of the social identity approach to this conceptual model presents a framework for understanding the social dimensions of ENRM conflict. Through developing this understanding, new and innovative approaches to bypassing dysfunctional and destructive conflict in ENRM may be developed, and new insights into old problems may be gained. In the case that dysfunctional conflict arises despite best efforts to the contrary, a greater understanding of, and appreciation for, the role of social identity in ENRM conflicts will assist practitioners and academics in interpreting the multifaceted nature of ENRM conflict, and predicting future trajectories of conflict in order to manage the impacts of dysfunctional conflict as efficiently as is possible.

The significance of Chapter 2 to the thesis

The conceptual model advances the literature on ENRM conflict significantly, and such has achieved both research objectives a and b, and answered research question 1. This is the first conceptual model which has incorporated: the governance system within which decisions are made, conduct of stakeholders, conduct of the citizenry, and the culture of conflict which shapes the interplay of these elements of the model. Integration of these elements matters because of the demonstrated interactions between elements. For example, any analysis of the citizenry lacking the broader context given in the model will fail to capture the influence of polarised stakeholders in shaping the attitudes of the citizenry. Of importance is the interconnection of ENRM conflict episodes over time. This emphasises that a single land use conflict episode will continue to affect the way stakeholders and the citizenry engage with future land use changes, meaning that poor conflict management in one episode will continue to impact the potential to achieve land use sustainability over time. The use of the social identity approach also creates opportunities for using the model as a predictive heuristic tool when managing real world ENRM conflict. For example to anticipate how a conflict episode is likely to change in the future, or to identify the signs of when a functional ENRM conflict may be shifting toward dysfunctionality. In the case of a land use change conflict episode, the model can be used to identify the types of actions likely to occur at specific stages of the conflict. Additionally, the conflict legacy of past ENRM conflicts may be reviewed in order to determine how a present land use conflict is likely to be affected.

The conceptual model provides a structure for the following chapters of the thesis. In order to further examine the human dimension of ENRM conflict, the three elements of the model which outline different aspects of the human dimension will be interrogated through context appropriate methods. This will be to both verify the model and to explicate the processes through which ENRM conflict occurs.

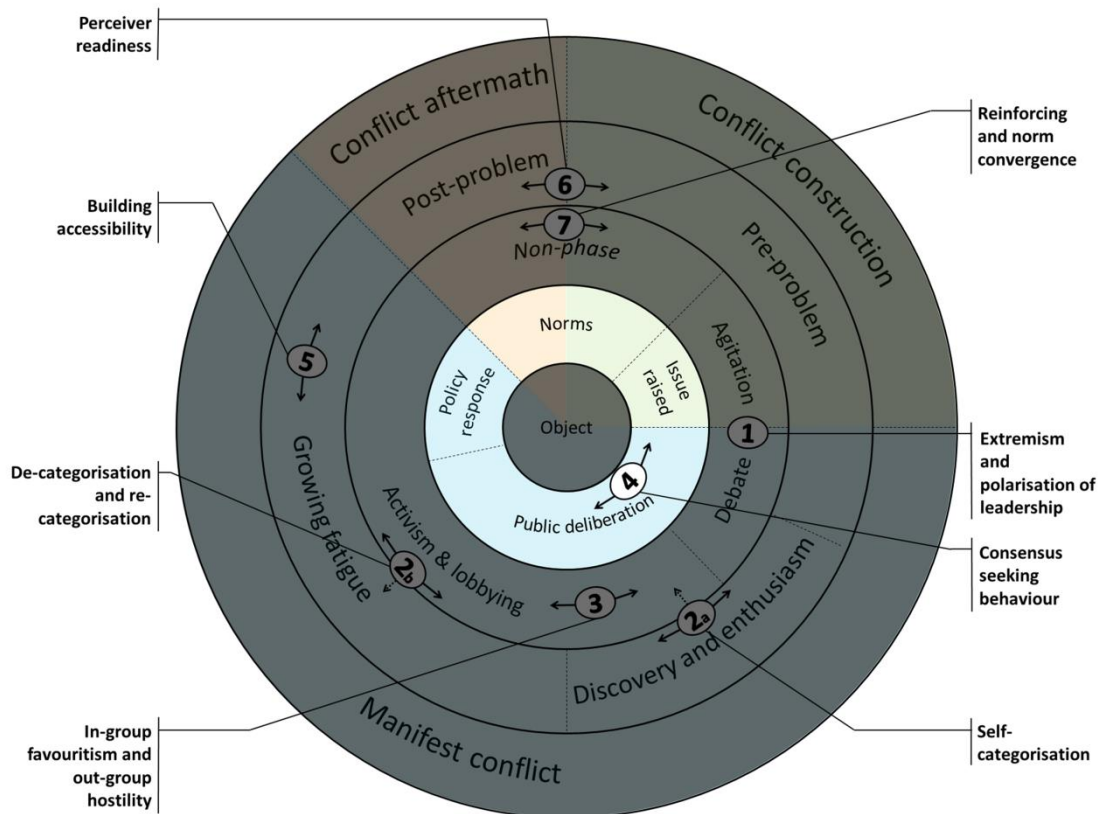


Figure 2.3 Element 1 of the model of ENRM conflict; the governance system where processes of decision-making occur.

The model shows the governance system as being significant in shaping the human dimension of ENRM conflict (Figure 2.3). It is in this space that land use changes can become prominent on the public agenda, and it is actions taken within this space which can resolve or exacerbate conflict. In the conceptual model, the public is divided into stakeholders and the citizenry. This is a significant distinction which separates those who are actively engaged in a land use conflict from those who may be passive observers or completely unengaged. The distinction reflects the argument that the term ‘stakeholder’ is an ‘essentially contested concept’ (Miles 2012; 2015). This highlights limitations in the theoretical basis for understanding ENRM stakeholders which indicates all of the public may be considered stakeholders (Billgren and Holmén 2008). However, in practice those who manage land use conflicts must navigate this distinction routinely as they engage with stakeholders in order to manage potential or realised conflict. Therefore, there is a need to understand the way in which the essentially contested term ‘stakeholder’ is operationalised by ENRM practitioners. This is addressed in chapter 3.

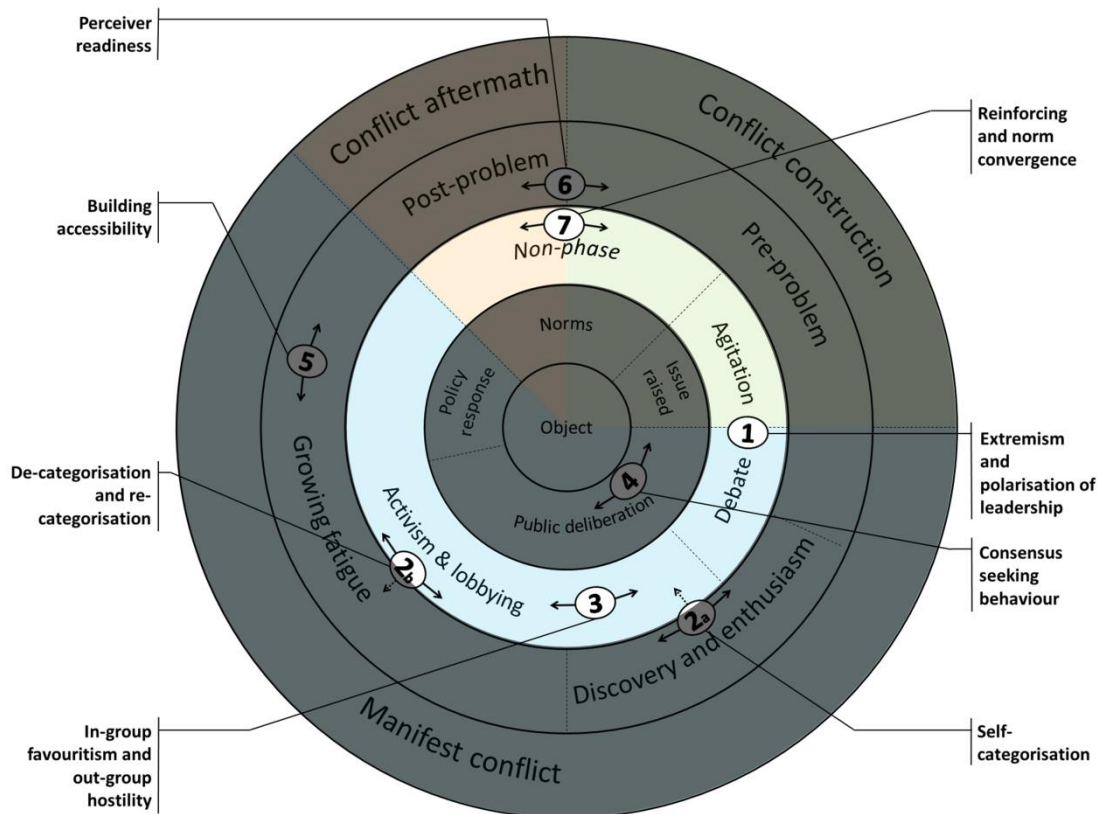


Figure 2.4 Element 2 of the model of ENRM conflict; the stakeholders, those who are directly engaged with the conflict.

Stakeholders, in the conceptual model (Figure 2.4), are understood through use of Yasmi et al.’s (2006) model of stakeholder conflict escalation. The model shows that over time, conflicts will escalate throughout the manifest conflict phase, and this will be reflected in the actions of stakeholders. Stakeholders in ENRM conflict are influenced by the governance system, meaning that is important to understand how the norms of ENRM governance influence the trajectory of conflict via affecting stakeholders’ actions. Therefore, there is a need to examine the impact of ENRM governance actions on stakeholders, and to question whether this may contribute to the exacerbation of conflict. This is addressed in chapter 4.

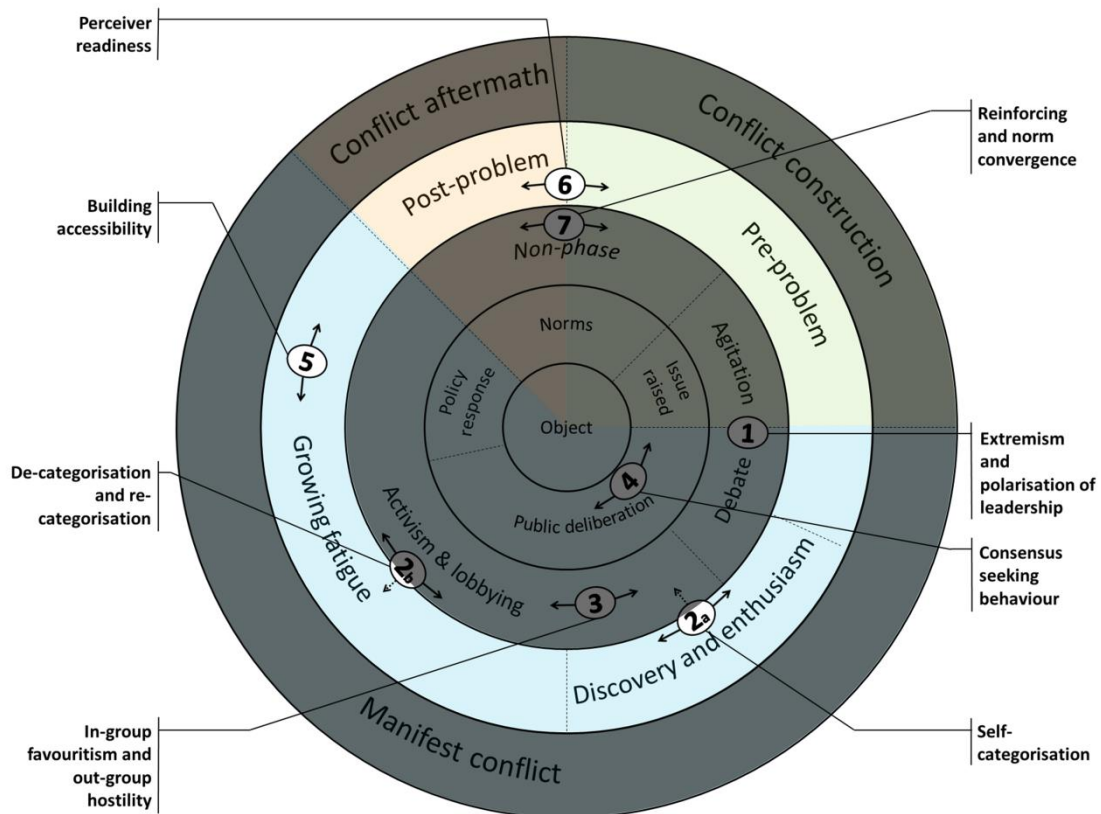


Figure 2.5 Element 3 of the model of ENRM conflict; the citizenry, those who are indirectly engaged with the conflict, but who observe the conflict. .

The model poses the citizenry as an ‘audience’ to ENRM conflict (Figure 2.5). The conceptualisation of the citizenry as an audience to conflict is built on the assumption that any member of the citizenry who mobilises in response to an ENRM conflict becomes a stakeholder by virtue of their mobilisation. Nevertheless, for those who remain unengaged, the aggregate opinion of the citizenry is routinely used as a litmus test for the public acceptability of a land use change (Carson 2009). Public opinion is considered in this way because the citizenry are considered representative of the public interest, without a tendency toward or against specific interests as represented by the stakeholders (Kahane et al. 2013). It is therefore important to understand the impact of the culture of conflict in ENRM on the attitudes of the citizenry; a point which is addressed in chapter 5.

In summary, the conceptual model makes a significant contribution to the field in its own right through integrating significant elements of ENRM conflict, and demonstrating the value of the social identity approach in understanding this conflict. The model also serves to provide a structure for the remainder of the thesis. Chapters 3 through 5 each examine one of the elements of model describing the human dimension of land use conflict.

Chapter 3:

Approaches to identifying stakeholders in environmental management: Insights from practitioners to go beyond the 'usual suspects'

3. Approaches to identifying stakeholders in environmental management: Insights from practitioners to go beyond the ‘usual suspects’

The place of Chapter 3 in the thesis

Chapter 3 aims to address research question 2 through undertaking research objectives c and d.

2. *How do ENRM engagement practitioners understand the essentially contested concept ‘stakeholder’?*
 - c. *Determine who in society ENRM engagement practitioners view as ENRM stakeholders.*
 - d. *Understand how ENRM engagement practitioners identify these stakeholders.*

Chapter 2 identified the governance of decision-making as a critical element of ENRM conflict. This is the space where who gets a say in a land use change is determined, and it is within this space that ENRM practitioners must assess who is considered a ‘stakeholder’ of an ENRM issue. Chapter 3 addresses this critical gap in the literature of who ENRM practitioners consider to be stakeholders, and the means through which these stakeholders are identified. These questions are important as it is this potentially innocuous-seeming distinction, which may not be made explicit, which determines who receives a voice in land use conflicts, who may participate, and who is excluded.

In Chapter 3, interviews with ENRM practitioners are analysed and discussed, and an understanding of how stakeholders are understood and identified is presented. These findings explicate an important practical distinction between ‘stakeholders’ and ‘the citizenry’, and highlight how these distinctions differ between practitioners undertaking engagement for different types of ENRM issues. A typology of approaches to identifying stakeholders is introduced, and the implications of the practice of stakeholder identification are discussed. This demonstrates the importance of understanding tacit processes in a practice which is critical to addressing dysfunctional ENRM conflict.

Abstract

Stakeholder analysis and engagement processes are recognised as essential in environmental and natural resources management (ENRM). Underpinning these processes is the identification of stakeholders, an often tacit process which finds the practitioner responsible for stakeholder analysis or engagement sifting through all of society to determine who is awarded stakeholder status for the given project or issue. While the ENRM literature provides guidance for stakeholder analysis and engagement, there has not been the same level of examination of the practical approaches to – and assumptions underlying – stakeholder identification by practitioners working in the field. This research extends on the ENRM stakeholder analysis and engagement literature by exploring the approaches to identification as used by ENRM practitioners. Semi-structured interviews (n=20) were conducted with ENRM practitioners, leading to the classification of eight approaches to stakeholder identification. These approaches are discussed as the ‘art’ and ‘science’ of stakeholder identification. Practitioners’ conceptualisations of the terms stakeholder, community, and the citizenry are discussed, and differences in understandings of these critical terms are outlined based on the broad domain of ENRM in which the practitioner is operating (land use change versus agricultural extension or community engagement). The social structures of relevance to stakeholder identification (individual, social constituency, group, organisation) are presented, and practitioners’ perspectives on the role of groups are discussed. Through explicating the approaches to identification of stakeholders, this research offers new perspectives on a significant element of ENRM. These insights provide greater clarity on the practices which shape stakeholder analysis and engagement in ENRM, and highlight the importance of acknowledging the privileged position of the practitioner in deciding who is awarded stakeholder status in a project or issue.

3.1 Introduction

Stakeholder engagement is viewed as an essential component of good environmental and natural resource management (ENRM) (Billgren and Holmén 2008; Grimble and Wellard 1997; Reed 2008). Within the broad scope of public participation activities, stakeholder engagement represents a concerted effort to involve the people who have a stake in the outcome of the decision being made (Soma and Vatn 2014). Engaging stakeholders in decision making is expected to yield benefits through incorporating a range of perspectives and fostering social acceptance for the decision outcome (Fischer et al. 2014; Hall et al. 2013). Participation of stakeholders in decision making can also be viewed as a facet of sustainable development (Colvin et al. 2015b; Soma and Vatn 2014) or a hallmark of morally responsible conduct by decision makers (Parsons et al. 2014). In addition to engagement in decision making, analysis of stakeholders contributes to an understanding of the

social dimensions of challenging ENRM issues, often as a precursor to engagement (Billgren and Holmén 2008).

For both analysis and engagement, a necessary early step is identification of who achieves status as a stakeholder (Billgren and Holmén 2008; Bryson 2004; Miles 2015; Mitchell et al. 1997; Prell et al. 2007; Reed et al. 2009; Reed et al. 2013). The literature on identification of ENRM stakeholders has established criteria for selection of stakeholders in pursuit of equitable and socially-representative processes (Billgren and Holmén 2008; Reed et al. 2009). These criteria include classifications such as: who is affected by or can affect an ENRM issue (Billgren and Holmén 2008; Reed et al. 2009), and; who may be interested in (Soma and Vatn 2014) or impacted by an ENRM issue (Fischer et al. 2014). Application of these criteria in ENRM can be especially vexed, as the interconnectedness of natural systems can lead to who is considered a stakeholder including “almost everyone and everything” (Billgren and Holmén 2008, p. 553). This means that for a practitioner undertaking ENRM stakeholder analysis or engagement, in identifying who is affected by, can affect, has an interest in, or may be impacted by the ENRM issue, the practitioner has all of society to sift through in order to determine who achieves stakeholder status for the issue at hand.

When turning to society to select stakeholders for analysis or engagement, ENRM practitioners must navigate through the complexities of society to identify which social structures (e.g. individual people, social categories and constituencies, informal or formal groups, organisations) are emphasised or backgrounded in the search for those who are awarded stakeholder status. The ENRM stakeholder analysis and engagement literature has indicated that: stakeholders tend to be viewed as self-evident (Prell et al. 2007; Reed et al. 2009); there is repeated identification of the ‘usual suspects’ (Reed 2008), and; organised groups tend to be drawn on as stakeholders in ENRM (Billgren and Holmén 2008). Following this, it becomes evident that where in society ENRM practitioners look to identify stakeholders can influence who is awarded stakeholder status for a given issue.

This research examines the process of ENRM stakeholder identification through analysis of interviews with ENRM engagement practitioners based in Australasia, who discuss their practice in Australasia and other Western democracies. This approach has been adopted to extend the ENRM stakeholder analysis and engagement literature through drawing on the experiences of those who are actively responsible for identification of ENRM stakeholders. Through this study, insights into the explicit and tacit approaches used for identification of ENRM stakeholders are presented, and ENRM practitioners’ perspectives on the social structures of relevance when identifying stakeholders are outlined.

3.2 Defining stakeholders

Reed (2008) has distinguished between public participation as a broad movement toward involvement of civil society in decision making, and stakeholder engagement as a focused process involving those who are affected by, or can affect, a decision. Where public participation may attempt to engage all of society in efforts to achieve directly-democratic outcomes (e.g. Carson 2009), stakeholder engagement necessitates analysis of the social dimension of a given ENRM issue to create an issue-specific strategy for engagement (Billgren and Holmén 2008). The distinction between public participation and stakeholder engagement is increasingly reflected in the academic literature where stakeholders represent entities which are clearly differentiated from the citizenry or general public (Aanesen et al. 2014; Colvin et al. 2015b; Fischer et al. 2014; Kahane et al. 2013; Soma and Vatn 2014). This is based on the expectation that stakeholders represent sectorial or focused interests, while the citizenry serves to represent the ‘public good’ (Carson 2009; Colvin et al. 2015b; Soma and Vatn 2014). Stakeholders, then, tend to be defined as formally-affiliated groups with a collective interest and shared preferences for the ENRM issue in question (Kahane et al. 2013; Soma and Vatn 2014; Colvin et al. 2015b).

Defining stakeholders as being representative of specific interests, in contrast to the citizenry who may be seen to represent the public good, highlights a distinction between the operational (strategic) definition of ‘stakeholder’ with the theoretical (normative) definition of ‘stakeholder’. In an evaluation of the definition of ‘stakeholder’ in the business management context, Miles (2015) outlined different conceptualisations of ‘stakeholder’ built around this distinction. While the normative definition of stakeholder may include any and all people who have some degree of interest (including moral interests) in an issue, a strategic definition of stakeholder captures only those stakeholders whose engagement can be viewed as a pragmatic requirement for successful outcomes (Miles 2015, pp. 13-14). Especially in ENRM where the interconnectedness of ecological and social systems is well understood, the normative definition of stakeholder creates the potential for a broad selection of people to be considered stakeholders in any given ENRM issue (Billgren and Holmén 2008). A shift from normative selection of stakeholders to strategic selection of stakeholders is therefore based on the evaluation of the practitioner(s) responsible for the identification of stakeholders (Miles 2015). Who counts as an ENRM stakeholder in analysis and engagement becomes not just a question of who has a stake, but who has a stake as recognised by those responsible for the stakeholder identification process. Drawing again from Miles (2015), those who are afforded stakeholder status can be seen to be those who from a normative perspective have a stake in the ENRM issue, and whose stake is recognised by the practitioner undertaking stakeholder identification. In this way, while in ENRM everyone may theoretically be a stakeholder

in a given issue, it is only those who are recognised through the processes of stakeholder identification who are afforded stakeholder status.

3.3 The ‘usual suspects’ in ENRM stakeholder engagement

While stakeholders can be drawn from a range of social structures and vary according to group attributes, there is evidence of repeated inclusion of the ‘usual suspects’ (Reed et al. 2009) in ENRM, described by Kivits (2011, p. 320) as “communities, NGOs, government and the private sector”. These prototypical stakeholder categorisations emerge across ENRM projects and studies as: industry (the private sector, e.g. mining, energy, agriculture, forestry, aquaculture and fisheries, depending on the issue); jurisdictional governments; environmentalists or conservationists (NGOs) and; community (e.g., Kindermann and Gormally 2013; Silverstri et al. 2013; Treffny and Beilin 2011; Brummans et al. 2008; Yasmi et al. 2006; Winter and Lockwood 2005; Lane 2003; Moore and Koontz 2003).

An expectation for emergence of stakeholders fitting these categories can influence management actions (Prell et al. 2009). If a suite of stakeholders is expected to be present in an ENRM issue, the practitioner responsible for managing the analysis and engagement process may unintentionally exclude unconventional stakeholders as a result of planning primarily for the ‘usual suspects’. This may be through cognitive (facilitators or managers predominantly perceiving the ‘usual suspects’) or institutional (mandated processes, implemented practices, protocols, and policies directed toward the ‘usual suspects’) blind spots during analysis and engagement. Similarly, repeated engagement with the ‘usual suspects’ may contribute to the professionalisation of stakeholders, where for these professionalised stakeholders, participation and engagement can be viewed as an extension of lobbying (Lane and Morrison 2006). In turn, this may contribute to the reason that some individuals with an interest in an ENRM issue may perceive that the most effective vehicle for obtaining a voice in decision making is through membership of a group (Aanesen et al. 2014; Rydin and Pennington 2000), reinforcing the divide between stakeholders and the citizenry (Colvin et al. 2015b).

To summarise, in ENRM those who are afforded stakeholder status tend to be viewed as groups with a collective interest, and are considered distinct from the citizenry which can be seen to represent the public good. The literature indicates a tendency for engagement with stakeholders fitting the prototypes of the ‘usual suspects’, which may contribute to the professionalisation of some stakeholders with the engagement process viewed as an extension of lobbying. Each of these aspects of stakeholder analysis and engagement can be influenced, reinforced, or subverted by the process of stakeholder identification. For example, a practitioner may preference engagement with

“grass-roots” social groups ahead of for-profit businesses, or may seek out key influencing individuals to represent social constituencies rather than representatives of organised groups (Buchy and Hoverman 2000). While the importance of process is emphasised in the ENRM stakeholder analysis and engagement literature (e.g. Reed et al. 2009), there is currently little discussion or evaluation of the practical approaches to identification of stakeholders, and the potential implications of identification on ENRM stakeholder analysis and engagement more generally.

3.4 Methods

The purpose of this study was to determine how stakeholders are identified in ENRM, how stakeholders are defined in relation to the rest of society, and the social structures of relevance to ENRM practitioners during identification. This study utilised a qualitative research design which involved conducting semi-structured interviews with ENRM practitioners who had direct experience identifying and engaging with stakeholders. Participants included professionals and academics with direct experience in facilitating projects which involved stakeholder engagement. Participants were sought to represent a broad spread of experiences across stakeholder engagement in ENRM. The sampling procedure involved initially recruiting participants from known networks, followed by snowball sampling, during which time participants were invited to participate based on their relevant expertise to the research question. Twenty participants (n=20) were interviewed, after which in-depth thematic, descriptive and content analyses were conducted on the interview transcripts (Saldaña 2013; Silverman 2014). Due to the varying conceptualisations in the literature of the term ‘stakeholder’ (Kahane et al. 2013), and the range of contexts for application of stakeholder engagement in ENRM (e.g. extension, community engagement, environmental and social impact assessments for development, land use change, policy evaluation and implementation), a semi-structured approach to the interviews was taken. This was to achieve some level of consistency across interviews, but to allow for tailoring of the lines of questioning, and deviation from the pre-determined questions, in order to adapt to the information provided by participants during the interviews (Bryman 2012). The semi-structured interview approach was also adopted to allow participants’ views on stakeholders and identification processes to emerge with limited probing or potentially leading questioning. It was expected this would lead to interview content which was directly grounded in the participants’ experiences, and not solely for response to an interview question. These methodological choices reflect the interpretivist paradigm through which the research was completed; a perspective which seeks to understand the research interest through attentiveness to the context of the research and participants’ experiences, and entails close engagement with a small number of participants (Moon and Blackman 2014).

Where participants discussed topics of interest without the need for a question to be asked directly, this was considered to satisfy the requirement for a topic-specific question to be asked. The interview guide included six questions followed by an open question for the participant to include any further points which they felt were of relevance and had not been discussed. While the phrasing and order of the questions was responsive to the participant, the questions explored:

- the participants' experience in the field, and the types of ENRM issues in which they have undertaken stakeholder engagement;
- the general process followed for stakeholder engagement;
- how stakeholders are identified and the social structures of relevance to identification;
- how these skills were learned by the participant and any tools used;
- the importance of relationships between stakeholders, and;
- whether conflict is an expected phenomenon when undertaking stakeholder engagement.

Recruitment of interview participants was firstly purposive in nature, followed by snowballing. Initial recruitment of participants followed attendance at a practitioner-focused conference, and through professional networks of the authors. Snowball sampling benefitted from the goodwill and volunteerism of participants to assist with further recruitment for the research through their own professional networks.

All interviews were recorded, transcribed, and imported into NVivo 10 for analysis. From November 2014 to February 2015, 20 participants were interviewed, with interviews averaging a duration of 46 minutes (87 minutes longest; 21 minutes shortest). Interviews were coded using attribute- and descriptive-coding methods (Saldaña 2013). Interpretation of themes and analysis of findings was conducted through collation of all statements relating to key topics ('queries' on 'nodes' in NVivo), and sense-making of the themes present within those topics.

3.4.1 Participant domain groups

Participants were categorised into two domain groups (10 participants in each). These groups were based on the types of issues predominantly discussed by participants, and were land use change engagement practitioners (LUC-EP) and agricultural extension/community engagement practitioners (AEC-EP). The domain groups were constructed based on the overarching nature of engagement undertaken. LUC-EP participants undertook engagement in contexts of changes to a landscape or policy with a direct impact on the meaning or potential use of a landscape, often in an adversarial social environment (e.g., resumption of land for transport infrastructure development). AEC-EP participants undertook engagement in the context of incremental changes (e.g., promotion of pro-environmental attitudes and behaviours toward local environmental features), and often were

seeking engagement with people who would derive some mutual benefit from the project or issue (e.g., promotion of sustainable agriculture practices).

3.5 Results

The results are presented in thematic sections. First, descriptive information *About the participants* is presented. This is followed by the findings related to the key research question: *How stakeholders are identified*. Next, the participants' views on who counts as a stakeholder are presented: *Who are the stakeholders?* This leads to insights on *The role of groups* in ENRM engagement.

3.5.1 About the participants

Between the 20 participants is at least 300 collective years of experience in ENRM engagement (1-5 years: 3; 6-15 years: 5; 16-25 years: 4; 25+ years: 8). Ten participants were classified as being in the land use change engagement practitioner domain (LUC-EP), and ten in the agricultural extension/community engagement practitioner domain (AEC-EP). Substantive ENRM issues as well as sectorial areas where the practitioners have worked included water use and allocations policy change (2), general environmental management (9), transport and infrastructure development (4), agricultural extension (3), and energy development (2). Participants represented four sectors: government (state or local) (6); academia (5); NGO (6), and; the private sector (3). Ten of the participants' experiences were predominantly in the South-east Queensland area, a further 8 participants' experiences predominantly were in Australia more generally, while two participants reported on experiences both in Australasia and in other Western democracies. While the ENRM issues, sectors and regions were categorised based on the predominant issues of discussion, it is important to note that several participants spanned these attributes in one or several positions in their professional capacities.

The participants gained their experience and skills in engagement in a variety of ways. Twelve of the 20 participants cited learning through experience on the job (six from each domain group), and five of the twenty cited general intuition and interpersonal skills (1 LUC-EP and 4 AEC-EP). Eight out of 20 had undertaken university studies (undergraduate, postgraduate, or both: PR & Communications: 2/20, one from each domain; NRM: 6/20, 2 LUC-EP and 4 AEC-EP) and six out of 20 had conducted their own research, via the university sector, into engagement practices (5 LUC-EP and 1 AEC-EP). Three of the twenty participants had undertaken IAP2 (2015) professional training (1 LUC-EP and 2 AEC-EP). Of the participants who used specific tools or literature to guide engagement processes (6/20), the following were described: in-house engagement frameworks (4/20; all LUC-EP); academic literature (2/20; both LUC-EP), and; IAP2 tools (1/20; LUC-EP).

3.5.2 How stakeholders are identified

The approaches to stakeholder identification reported by the participants were classified across eight categories. These approaches, outlined below, were used by some in isolation, and by others in combination.

3.5.2.1 Geographical footprint

The geographical footprint approach to identification of stakeholders was presented by 11 of the 20 participants (5 LUC-EP and 6 AEC-EP). Based on the geographical scope of a given project or issue, this approach to stakeholder identification follows by constructing a footprint of project impact. Within that footprint, all individuals are considered to be stakeholders.

"Through GIS you'd pick out your area of interest, get all the [residential addresses] out of that, send a list to council and they would send you who you should be talking to." - P06 (LUC-EP)

The geographical footprint approach can also be applied in terms of a community. Where a project is considered to be specific to a local community, the extent of the community is considered the boundary of the project or issue footprint.

"Our big thing is trying to engage the local community, so the people that live I guess within that area or who might use the locations." - P10 (AEC-EP)

3.5.2.2 Interests

The interests approach to identification of stakeholders is based on an understanding of the socio-ecological context of a given ENRM issue, and assumptions about the interests triggered by the issue (e.g. financial, lifestyle, sense of place, moral). An analysis of expected and potential interests is conducted to identify relevant stakeholders. This was presented by 9 LUC-EP participants and 1 AEC-EP participant. This approach may occur through a formalised stakeholder or risk analysis process. Alternatively, the interests approach may be more informal; a practice of brainstorming potential interests which may be triggered by the issue.

"If you looked at the stakeholder interests, and you could certainly align stakeholders with those various interests, they're the people that you need to make certain are aware of what's being done in areas that directly affects their interests." - P12 (LUC-EP)

Following the analysis of potential interests in the issue or project, stakeholders may be sought out to represent those interests in the engagement process.

"In the [stakeholder engagement phase of project] we were asked as soon as we turned up if we knew anybody who had an interest in the environmental issues of the area because they hadn't managed to find anyone to represent those interests." - P08 (LUC-EP)

3.5.2.3 Influence

The influence approach was presented by just two participants (one from each domain group). Similar to the interests approach, the influence approach to stakeholder engagement involves analysis or brainstorming of all who may be able to influence the issue or project.

"It is a really important thing to work out who the people are that influence that issue, whatever that issue is, and it depends but politicians, the media are to me, maybe indirect stakeholders but they're important because they can influence people, the direct stakeholders' attitudes." - P20 (AEC-EP)

3.5.2.4 Intuition

The use of intuition for identification of stakeholders was presented both explicitly and implicitly by four participants (two from each domain group). This represents both the use of tacit skills and understanding of the social dimension of ENRM issues, as well as a response to a lack of a definitive structure or process for identification.

"That's just really how I've figured it out, rather than someone telling me how to do it." - P17 (AEC-EP)

3.5.2.5 Key informants and snowballing

The key informants and snowballing approach to identification of stakeholders was presented by 14/20 participants, and was the most consistently presented method (8 LUC-EP and 6 AEC-EP). The use of key informants could occur at the outset of an engagement project, particularly where there was a localised scope to the issue, to inform subsequent processes of stakeholder analysis and engagement. This approach when used at the outset of the identification process could bypass top-down style identification of stakeholders all together, but this requires some degree of cohesive social network within which stakeholders can identify other stakeholders.

"Key community leaders, I guess you'd call them, or people you know of who are influential in one way, shape or form in their neighbourhood. So you'd obviously use them as a sounding board, use their network connections, obviously with their permission, and help to get involved more, stretch your wings through that community." - P19 (AEC-EP)

Snowballing as an iterative approach throughout the process also could be used to identify stakeholders through established networks. In this way, each stakeholder encountered can serve as an informant for identifying other stakeholders in the project or issue.

"It's often good to have a bit of a snowball technique so you make sure that you follow different suggestions that people have." - P01 (LUC-EP)

3.5.2.6 Past experiences

As with the use of intuition, reflection by the participants on their past experiences was presented as an approach to the identification of stakeholders. Past experiences were presented by 7 of the 20 participants (3 LUC-EP and 4 AEC-EP). This could be through a general strengthening of the participants' skills and understanding over the time of their professional career.

"I know if I give a junior the job of doing a stakeholder group list, they're not going to go as wide as I will, and they'll miss some of the nuances because they haven't got that experience. So I think it's a factor of being more experienced, understanding who's involved in your projects and then being able to do it quicker, faster, more informed." - P11 (LUC-EP)

Alternatively, past experiences could exert a more direct influence on the identification of stakeholders, with past issues used like a template for identification of stakeholders in emergent issues, or past experiences with stakeholder groups used as a prompt for relevant groups for engagement in a current issue.

"There's a bit of here's-one-we-prepared-earlier." - P06 (LUC-EP)

3.5.2.7 Stakeholder self-selection

Half of the participants (4 LUC-EP and 6 AEC-EP) indicated that stakeholders can self-select for engagement in projects or issues of concern. In this way, stakeholder self-selection is not so much an approach to identification as a phenomenon.

"I didn't select stakeholders, they selected me." - P18 (AEC-EP)

For the AEC-EP participants, the self-selection of stakeholders tended to be through individuals or groups choosing to engage with an established project or programme. Generally, this had some form of benefit for the participant which led to the desire to be engaged.

"People who were interested could approach and develop a relationship or find out what was going on and we could proceed or not." - P20 (AEC-EP)

For the LUC-EP participants, self-selected stakeholders did so in a less collegial manner.

"Opposers can be relatively easy to find because they write letters to the editor, and instigate legal actions. And tend to get known." - P01 (LUC-EP)

3.5.2.8 Use of the media

The use of the media as an approach to identification of stakeholders was presented by five of the 20 participants, four of which were LUC-EP participants, and the one AEC-EP participant discussed use of the media in the context of an LUC type-issue. The use of the media approach involved looking to the traditional news media, general online searching for statements or evidence of interested parties, and the use of social media. This may relate specifically to the project or issue of concern, or may be media research conducted on similar issues which could inform the engagement process at hand.

"We do a media screening, you know for other projects that have been in the area." - P14 (LUC-EP)

3.5.3 Who are the stakeholders?

The question of who counts as a stakeholder and what defines a stakeholder was discussed by all participants. Differences emerged in the themes presented by LUC-EP and AEC-EP participants, and as such the domain groups' responses are outlined separately.

3.5.3.1 Land use change engagement practitioners (LUC-EP)

Stakeholders (LUC-EP)

For those LUC-EP participants, all ten stated that having an interest in the issue is a requirement for being considered a stakeholder. This was communicated explicitly as having an 'interest', or implicitly through being impacted by the project or issue.

"Stakeholders I would normally take as being people who are seen as representing a particular interest." - P12 (LUC-EP)

Two LUC-EP participants explicitly added that all people conceivably could be considered stakeholders. However, in practice the scope must be limited to those with recognised tangible interests in the given issue. This indicates that while the concept of stakeholder, philosophically, is viewed by some as being all inclusive, in practice the scope requires limitation by the recognition of tangible interests by the practitioner.

All LUC-EP participants illustrated their discussions of who is considered a stakeholder, or provided examples of issues they've worked on, with a tendency to list organised groups or social constituencies. These included those considered to be the ENRM 'usual suspects': environmental

interest groups; the private sector/industry; the agriculture sector and farmers; government and politicians, and; community.

Community (LUC-EP)

The concept of community was presented by all LUC-EP participants, and all presented a shared understanding that communities are in some way geographically scoped. A complex relationship between the notions of community and stakeholder was evident. Community was considered to be a special type of stakeholder, and communities were considered to be stakeholders when the community could be seen to have an interest in the issue. Individuals from a community could serve to represent the community as a stakeholder, or a range of stakeholder interest representatives - drawn from the community - could be considered representative of the community.

“So I would see stakeholder as anyone with some sort of stake, or claim, in a development. And that would include community members of course because they’re going to see it, hear it, maybe benefit from it, maybe work there, so all the local community would be there, but that would be a sub-category of stakeholders.” - P01 (LUC-EP)

Stakeholders were seen to intersect with community where an individual was both considered to be ‘part of’ a community, and associated with a specific interest. Community groups were raised in the context of community, by some participants as being representative of the community, and by others as being potentially representative of only specific interests within the community. Indigenous peoples and Traditional Owners were presented by some participants as being a type of community, and by others as a type of interest group.

The citizenry (LUC-EP)

‘Community’ was seen to be a special type of stakeholder - a group of people within a shared geographical boundary upon which a project or issue would impact - though not defined by any specific interest aside from that which is by virtue of the location of the community and the issue. In contrast, those LUC-EP participants who discussed the general public or citizenry (5/10), indicated that the citizenry is seen to be ‘everyone else’: those without a clear interest, and not considered part of an impacted community. However, one LUC-EP participant highlighted the potential for the citizenry to be recruited into special interests.

"You might regard them as latent or potential stakeholders, in that pretty much anyone’s a latent stakeholder, and when people seek to recruit them to their interests, they actually overcome their latency by basically trying to pull out a potential, real, or imagined outcome for them. Yeah, pretty much everyone’s a potential stakeholder." - P04 (LUC-EP)

3.5.3.2 Agricultural extension/community engagement practitioners (AEC-EP)

Stakeholders (AEC-EP)

While LUC-EP participants presented community as being a special type of stakeholder, AEC-EP participants presented stakeholders as being entities within the community. All ten AEC-EP participants indicated that a stakeholder is anyone with an interest, with no limits on whom that may include. When being described in terms of how stakeholders are identified and engaged with, stakeholders were bounded by the relevant community and organised based on pre-existing social groupings or constituencies.

"Trying to identify the stakeholder groups, just anyone, everyone in the community, try to get them involved. So that was basically just starting with schools, identifying church groups, I found a local [recreational vehicle] club there, just starting to map everybody out ... we have church groups, we have various community groups, neighbourhood watch groups ... the [cultural] groups, the [religious women's association], a really wide range of groups." - P03 (AEC-EP)

These pre-existing social groupings or constituencies within communities which were seen as the stakeholders tended to be based around interests, generally not specific to the ENRM issue of concern. Once parts of the community were viewed as stakeholders, they were considered distinct from the rest of the community. All AEC-EP participants illustrated their discussion about stakeholders by providing example stakeholders drawn from their experiences. These examples were individuals, social constituencies, groups, or organisations, and included: landholders; government departments; community-based environmental groups, and; prominent individuals in the community.

Community (AEC-EP)

The concept of community was presented by all AEC-EP participants as the geographically-defined context within which they would conduct engagement. Of the ten AEC-EP participants, six explicitly outlined community as being distinct from the concept of a stakeholder. The other four AEC-EP participants did not make this point explicitly, but discussed community within the context of community being the social context from which stakeholders are drawn.

"Community to me is just the broad group out there, and they can be local or regional or state-wide or something like that, so you can stratify it that way, and within that is your potential people who could be stakeholders or who could be influenced by the decision." - P15 (AEC-EP)

Within communities, the pre-existing social groups and constituencies can be viewed as stakeholders, just as are organised groups (e.g. community-based environmental management groups).

"There are some informal groups, but they may not realise they're in the informal group, that's a mental compartmentalisation that we might do to actually change our engagement strategy with people depending on what we have arbitrarily, whether arbitrarily on values or whether it's on land management practices, put them into that group." - P09 (AEC-EP)

Unlike the LUC-EP participants, there was no distinction made by the AEC-EP participants between community and the citizenry. As the AEC-EP participants presented the community as the broad context within which stakeholders exist given a locally bounded issue, a distinction between the community and the citizenry did not emerge.

3.5.3.3 Social structures of stakeholders: LUC-EP and AEC-EP

The social structures of relevance to the participants included individuals, social constituencies, groups, and organisations (Table 3.1). Individuals tended to be those with relatively high access to power or influence. The term 'social constituencies' refers to sections of society, and is used to stratify and make sense of the complexities of social interactions. These are categories in society, but do not in themselves necessitate a formal group. Groups were generally formalised, in that the members were involved through virtue of their desire for some degree of recognised affiliation. Organisations were formalised, and the membership of organisations are those who are remunerated for their involvement. In contrast to groups who may be viewed as being comprised of people-as-themselves, organisations can be understood to be constituted of people-representing-organisation. The LUC-EP participants more consistently listed social constituencies and groups as opposed to individuals and organisations as being the relevant social structures of stakeholders. AEC-EP participants consistently included social constituencies, groups, and organisations, more so than individuals.

Table 3.1 The social structures of relevance in stakeholder identification as reported by participants, with illustrative examples from interviews.

	LUC-EP		AEC-EP	
	Number	Examples	Number	Examples
Individuals	7	Politicians; outspoken people	6	Politicians; individuals running news media; community leaders; outspoken people
Social constituencies	10	Indigenous people; conservationists; retirees; young people; farmers	10	Cultural groups; landholders; socio-economic groups; farmers
Groups	10	Community groups; environmental groups; transport advocacy groups; church groups; rate payers' associations	10	Community-based environmental groups; activist groups; primary production groups
Organisations	7	Governments; industry; NGOs	10	Governments; industry; research organisations

3.5.4 The role of groups

In discussing stakeholders and identification, some participants also provided insights into the reasons and processes associated with people forming and joining groups. Six of the 20 participants (4 LUC-EP and 2 AEC-EP) indicated that groups are used as a way to achieve a stronger voice when pursuing a particular agenda or interest, and four presented groups as a way to improve skills and resources for achieving objectives (1 LUC-EP and 3 AEC-EP). There was also discussion of the potential for groups to be a pathway into involvement in stakeholder processes (1 LUC-EP and 2 AEC-EP).

"They were trying to do something about it, it seems more likely you'd be able to do something about it [as a group] than on your own." - P08 (LUC-EP)

For those who discussed the formation of groups, two LUC-EP participants indicated that one highly passionate person can rally support around them to form a group. Similarly, a small number of individuals may meet informally around a shared interest, and subsequently form a group (1 LUC-EP and 1 AEC-EP). Five of the 20 participants (3 LUC-EP and 2 AEC-EP) indicated that becoming a group member offers opportunities for personal enrichment of those people, through building friendships and providing a sense of purpose. Two LUC-EP participants also indicated that groups will attempt to recruit more members to their groups in order to add strength to their cause.

All (20/20) participants indicated that conflict between groups is a factor in their engagement processes. Specifically, 5 participants (3 LUC-EP and 2 AEC-EP) presented the form of conflict explicitly as being an 'us versus them' style conflict. Six participants (3 LUC-EP and 3 AEC-EP) indicated that within groups there is evidence of conforming and consensus seeking (leading to polarisation and/or extremism of views), and 5 (3 LUC-EP and 2 AEC-EP) explicitly presented stereotyping by one group of others.

"Getting all the people of one point of mind into a room and getting them to gallop towards the extreme of their own views." - P07 (LUC-EP)

Extending on this, two participants (one from each domain group) described the tendency of groups to be defensive of their reputation when stereotyped negatively by others. Some participants further elaborated on the role of stakeholder groups by discussing the ongoing presence of the groups in terms of advocacy (campaigning and/or lobbying) (6 LUC-EP and 4 AEC-EP) outside of the formal engagement processes. Two participants (one from each domain group) also indicated a degree of institutionalisation of environmental groups into the decision making space of ENRM, this may be viewed as an extension of lobbying actions.

3.6 Discussion

3.6.1 How stakeholders are identified

This study examined ENRM practitioners' approaches to identification of stakeholders, their conceptualisations of stakeholders, and the social structures of relevance to ENRM practitioners during identification. Key insights into the practical approaches to stakeholder identification by ENRM practitioners emerged as well as some distinctions between perceptions about stakeholders from different domains of ENRM. The methods and approaches to identification of stakeholders by ENRM practitioners were classified into eight categories: geographical footprint; interests; influence; intuition; key informants and snowballing; past experiences; stakeholder self-selection, and; use of the media (Table 3.2). These eight approaches to stakeholder identification can be understood through grouping based on like processes. *Seeking* approaches to stakeholder identification see the practitioner looking outwards into society to find stakeholders. These approaches include the use of key informants and snowballing and the use of the media. *Creating* approaches to stakeholder identification involve the practitioner looking toward the landscape of relevance and the project or issue to construct templates for stakeholder identification. Geographical footprint, interests, and influence are all *creating* approaches to stakeholder identification.

Where *seeking* and *creating* approaches may follow explicit processes and be perceived of as a 'science' for stakeholder identification, the use of intuition and past experiences as tacit skills for

guiding stakeholder identification may be viewed as the complementary ‘art’ – or in some cases the sole driver of identification without any accompaniment by a ‘science’. Just as Lacey et al. (2015) argued that science-based decision making is underpinned by the values and beliefs of those making decisions, the ‘art’ of stakeholder identification represents the idiosyncrasies unique to each individual practitioner which guide the application and interpretation of the ‘science’ of stakeholder identification. To elaborate, intuition as an ‘art’ of stakeholder identification may be the gut feelings which inform the interests approach or define the stakeholder boundary in the geographical footprint approach. Past experiences may serve to expedite identification processes, through familiarity with likely stakeholders, though if used as a prescriptive heuristic for understanding future issues, past experiences also may direct practitioners toward the repeated identification of the ‘usual suspects’ (Billgren, and Holmén 2008; Prell et al. 2009; Reed 2008). This may lead to use of the *ex-ante* approach for stakeholder identification as discussed by Reed and Curzon (2015), where lists of likely stakeholder categories are used as a template for stakeholder identification.

Stakeholder self-selection by definition arises outside of the practitioners’ direct efforts for identification. As such, this may be viewed as a phenomenon, rather than as a ‘science’ or ‘art’ of stakeholder identification, however those who attempt to self-select must do so in a way that they are recognised by the practitioner responsible for identification of stakeholders as having stakeholder status, i.e. presenting as having attributes which would trigger the practitioner to award stakeholder status if the would-be stakeholders were not attempting self-selection. This has been recognised by the ELD Initiative (2015) and Reed et al. (2009) as a means for stakeholders to become involved ENRM processes (particularly when in response to an advertised process), and Martin and Rice (2015) utilised stakeholder self-selection to decide who had stakeholder status in their analysis of written submissions to a government review of renewable energy policy. Self-selecting stakeholders are presenting themselves to the practitioner for potential elevation to stakeholder status, replacing the need for the practitioner to use their ‘art’ or ‘science’ of identification.

Table 3.2 The ‘art’ and ‘science’ of stakeholder identification by ENRM practitioners.

Approach to stakeholder identification		Description	
Science	<i>Seeking</i>	Key informants & snowballing	Utilise knowledge and networks of stakeholders.
		Use of media	Use of a range of media to find evidence of stakeholders.
	<i>Creating</i>	Geographical footprint	Determine geographical scope of issue as stakeholder catchment.
Interests		Analysis of interests triggered by issue to identify corresponding stakeholders.	
Influence		Analysis of those with power to influence issue and other stakeholders.	
Art		Intuition	The use of tacit skills and understanding to identify stakeholders.
		Past experiences	Reflection on past experiences to inform identification of stakeholders.
Phenomenon		Stakeholder self-selection	Stakeholders approach practitioner for engagement in issue.

The *creating* and *seeking* approaches to stakeholder identification, which can be underpinned and informed by intuition and past experiences, and complemented by stakeholder self-selection, present an overview of the different approaches at work in the ENRM field. The distinction between *creating* and *seeking* approaches reflects the divide between bottom-up and top-down approaches discussed by Prell et al. (2009). Prell and colleagues argue that *creating*, or top-down style, approaches mean that the expectations, beliefs, and past experiences of practitioners can influence the range of stakeholders identified. This also implies that the understanding of the landscape and project or issue held by the practitioner (and presumably informed by the practitioner’s organisation) may be privileged over other understandings of the landscape and project or issue, which are held by other people or groups (Lacey et al. 2015; Prell et al. 2009). These understandings will invariably inform the types of interests, form of influence, and the boundaries to a geographical footprint considered reasonable and of relevance when conducting stakeholder identification. For those with differing perspectives on the landscape or issue, a top-down approach to stakeholder identification may lead to challenges for ENRM such as disenfranchisement (e.g. Witt 2013), potentially leading to a reluctance toward future participation. Following the benefits of a bottom-up approach to identification of ENRM stakeholders, the use of the key informants and snowballing approach is prevalent in the ENRM literature as it is considered a means to avoid

identifying a non-representative contingent of stakeholders (Couix and Gonzalo-Turpin 2015; Rizzo et al. 2015; Stanghellini 2010).

The *seeking* approaches, however, are not free of potential pitfalls, as these approaches may direct practitioners toward pre-existing social structures within society, and may as a result lead the practitioner into pre-existing social tensions and divides which can undermine efforts for cooperative and solutions-focused stakeholder engagement processes (Colvin et al. 2015b; Dougill et al. 2006). Where the use of the media serves as a *seeking* approach to stakeholder identification, the practitioner is at risk of receiving a narrow perspective on potential stakeholders due to the tendency of the news media to overemphasise conflict and oversimplify contexts to adhere to ‘standards’ of sensational reporting (Lankester et al. 2015) and to reproduce interest groups’ agendas rather than conduct informative and objective journalism (Corbett 2015). There is also the risk of identifying the ‘usual suspects’, or those stakeholders who have become professional participants – agenda driven social entities making use of engagement processes as an extension of lobbying. Reed and Curson (2015) promote the use of the media (and other secondary data sources) in combination with key informants and snowballing to address this risk, an approach adopted by Bryson (2004), Mason et al. (2015), and Steinhäuser et al. (2015). Additionally, a reliance on the *seeking* past experiences approach to stakeholder identification means that upon a practitioner leaving an organisation, the organisation will lose not just the skills of the practitioner, but the entire process for stakeholder identification.

Among the LUC-EP participants, given that nine of ten reported the use of the *creating* interests approach and eight of ten reported the use of the *seeking* key informants and snowballing approach, it is likely that a combination of approaches is being used to find a balance between the strengths and pitfalls of *seeking* and *creating*. (It is less appropriate to speculate in regard to the AEC-EP participants due to the more widely spread and less internally-consistently reported approaches.) Forrester et al. (2015) promote a mix of top-down and bottom-up approaches to knowledge generation in participatory processes; a mix of *seeking* and *creating* approaches would reflect this in the process of stakeholder identification. Pairing the expertise of the practitioner with direct input from stakeholders in an iterative stakeholder identification process further reflects the shift in some sectors of ENRM toward collaborative processes, such as participatory modelling – a bottom-up process where stakeholders are engaged throughout the process to develop a shared understanding of the ‘problem’ (Allen et al. 2001; Prell et al. 2007), with additional long-term outcomes such as trust-building and conflict resolution (Hahn et al. 2006; Pahl-Wostl and Hare 2004; Reed et al. 2013; Richardson and Andersen 1995). In participatory modelling and other collaborative approaches (Colvin et al. 2015b) where input from stakeholders is sought throughout the process,

successful outcomes are predicated on identification of the ‘right’ stakeholders (Prell et al. 2007; Reed et al. 2013). According to Prell et al. (2007, p. 268), this requires “a rigorous and sensitive approach to stakeholder identification and selection”, necessitating a diligent and conscientious practitioner.

In cases where stakeholder analysis or engagement may yield less than desirable outcomes (e.g. seemingly insurmountable conflict or an incomplete contingent of stakeholders), practitioners may benefit from reflecting on their practice of stakeholder identification. Following Lacey et al.’s (2015) recommendations for researcher self-awareness of factors which may steer them toward specific outcomes at the expense of others, practitioner self-reflection may bring to light potentially unidentified biases which limit the effectiveness of their approaches to stakeholder identification through shaping where they look in society, and to whom they award stakeholder status.

3.6.2 Who are the stakeholders?

The analysis of participants’ perspectives revealed a difference in the two domain groups on who is viewed as a stakeholder, particularly regarding community. Where the LUC-EP participants indicated community is a special type of stakeholder among many others, the AEC-EP participants saw community as the social milieu within which stakeholders reside (Figure 3.1). Additionally, the LUC-EP participants distinguished the citizenry, while the AEC-EP participants did not. This may reflect the differences in scale of engagement. The LUC-EP participants saw the concerns of community as a stakeholder as being specifically place-based in comparison to the interest-based concerns of other stakeholders. Through this concern for place (e.g. Devine-Wright 2009), community was viewed as being a special type of stakeholder. This differs from the AEC-EP participants who saw sectors within community as being the stakeholders. Community groups may span this divide, representing an intersection of specific interests with place-based concerns. To AEC-EP participants, the place-based concerns of community would therefore not be attached to a specific stakeholder, but would be expected to be somewhat consistent across all stakeholders.

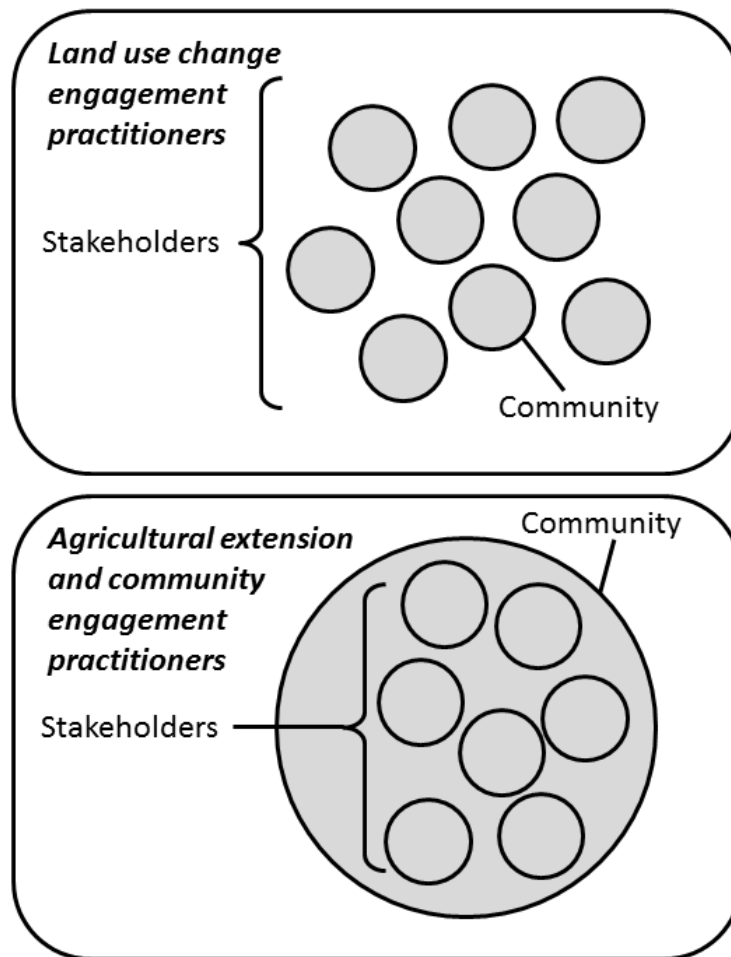


Figure 3.1 The different perceptions of community: LUC-EP participants viewed community as being one of many stakeholders; AEC-EP participants viewed community as the social context from which stakeholders are drawn.

The differences in understandings of terms as ubiquitous as stakeholder and community may contribute to misunderstandings and differing expectations about the role of ENRM engagement (Kahane et al. 2013; Miles 2012). For example, an individual who has experienced agricultural extension and community engagement may have an implicit expectation that stakeholder engagement will involve social entities only within their community (e.g. Parsons et al. 2014). However, if a land use change project is proposed and engagement follows, the same individual may be agitated when ‘outsiders’ (e.g. interest groups) are considered to be stakeholders, too. Misalignments of understandings and expectations such as this have the potential to undermine trust in ENRM engagement programmes, an attribute which is considered necessary for successful outcomes (Hall et al. 2013).

The theoretical distinction between normative and strategic stakeholder identification emerged through participants’ discussions of who they view as having stakeholder status. The sentiment that any and all people may be stakeholders was present, though stakeholders were more readily and

consistently described as defined social entities with a specific interest in the project or issue. Especially in ENRM where the interconnectedness of ecological and social systems is well understood, the claim that all people may be stakeholders can be argued based on diffuse impacts of localised projects or issues, or through a moral claim on the state of the environment or governance of society (Billgren, and Holmén 2008). However, the need for parsimony in, and resolution of, stakeholder analysis and engagement processes necessitates elevation of some potential stakeholders to stakeholder status by practitioners (Miles 2015). It is the achievement of stakeholder status which elevates an individual, social constituency, group, or organisation from being part of the citizenry to being a stakeholder. As stakeholders are defined by possessing an interest in the project or issue, or holding a place-based concern, elevation from the citizenry into stakeholder status can occur through recruitment by interests e.g. joining a group or being perceived of as one who possesses specific interests, or through proximity, which is by virtue of residing in some form or other near to the geographical footprint of the project or issue (Figure 3.2).

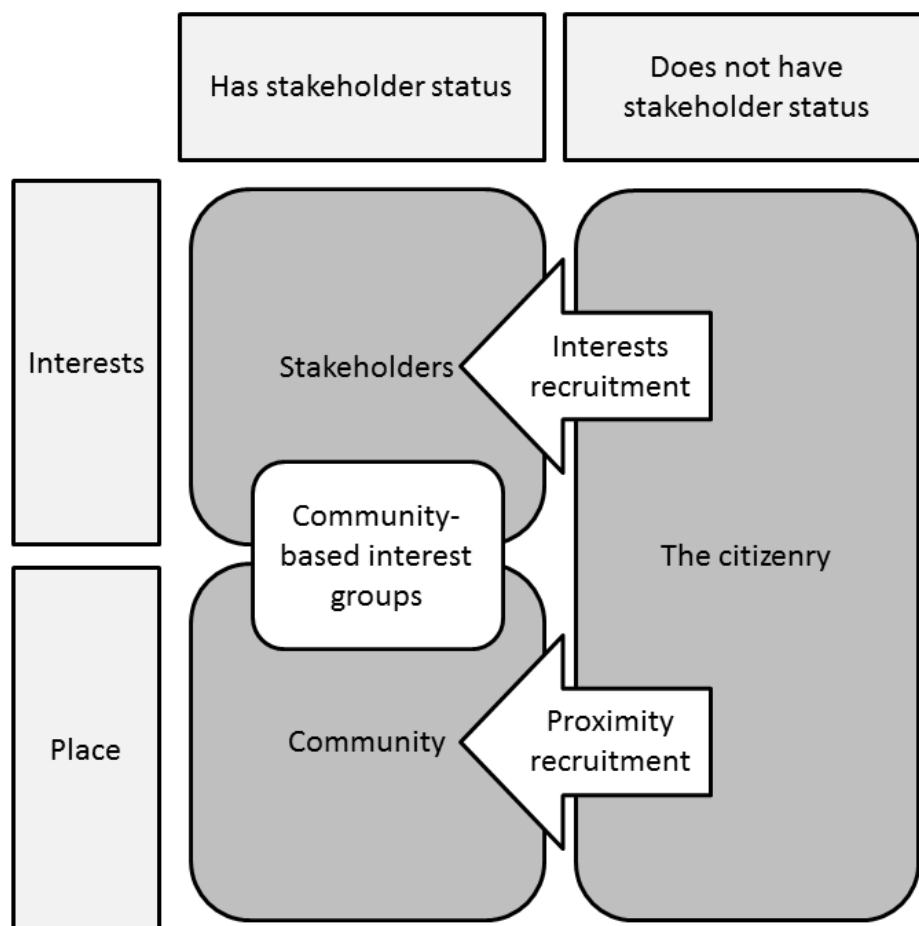


Figure 3.2 An illustration of stakeholder status across stakeholders, the community, and the citizenry. Members of the citizenry achieve stakeholder status through interests recruitment into stakeholder groups, or through proximity recruitment, by residing in a locale considered within the geographical footprint of the project or issue.

Stakeholder status matters, because while any social entity may perceive of itself as a stakeholder, it is recognition by the practitioner of that social entity's stakeholder status which provides the opportunity to be engaged. This is the privileged position held by ENRM engagement practitioners (Lacey et al. 2015): while approaches to stakeholder identification in ENRM can capture all social entities as prospective stakeholders, the evaluation by the practitioner of who achieves stakeholder status defines the contingent of those who are included in subsequent stakeholder analysis or engagement. Several participants identified the role of groups in strengthening the voice of comparatively powerless stakeholders or providing a vehicle for participation in engagement (e.g. Mihaylov and Perkins 2014), indicating that group membership may be viewed as a direct and accessible way for members of the citizenry to achieve stakeholder status. Given that participants less readily presented individuals as potential stakeholders compared to groupings of people (social constituencies, groups, and organisations), it may be the case that the citizenry looks to groups as a way to be engaged, and practitioners too look to groups for whom to engage.

3.6.3 Limitations of the study and future opportunities

As the number of participants in this study presents a relatively small sample (though not dissimilar to other qualitative studies of ENRM practice based in Australia, e.g. Morrison et al. 2015), further verification of these findings is necessary before any definitive generalisations are applied to the field of ENRM. As this study adopted a qualitative research design in order to develop a 'ground-up' understanding of the practical approaches to ENRM stakeholder identification, there are opportunities for future research to build on these findings by examining the incidence of these approaches across a larger group of ENRM practitioners. Further, a study of the uptake of approaches to stakeholder identification and categorisation not found in this study (e.g. ENRM stakeholder segmentations based on land-use preferences (Brown et al. 2015), human values (Colvin et al. 2015a), or social identity (Colvin et al. 2015b; Crane and Ruebottom 2011; Rowley and Moldoveanu 2003); and the application of social network analysis (Prell et al. 2009)) may contribute to ongoing developments across ENRM stakeholder engagement in both academia and practice. Additionally, extending on these findings through analysis of the merits and pitfalls of various combinations of ENRM stakeholder identification approaches (e.g. a suite of approaches across the *art* and *science*) can contribute to explication of best practice ENRM stakeholder identification which is cognisant of stakeholder status and the complex understandings of terms such as 'stakeholder' and 'community'.

3.7 Concluding remarks

Approaches to identification of stakeholders in ENRM is an under-studied but important phase in engagement processes. This study has revealed that approaches to identification can find

practitioners *creating* or *seeking* their contingent of stakeholders, processes which may be informed by intuition and past experiences. The ‘science’ and ‘art’ of stakeholder identification can also be complemented by stakeholders self-selecting for participation, a phenomenon which may reflect professionalisation of some ENRM stakeholders. With more research on the approaches to stakeholder identification, the ‘science’ may be made more robust and transparent, and the ‘art’ may be made more available for interrogation and evaluation. Such explicit discussion of approaches to stakeholder identification can assist practitioners by facilitating professional self-reflection to avoid blind spots in stakeholder identification and subsequent analysis and engagement.

Evidence of different definitions of stakeholder and community among the participants may reflect broader inconsistency in ENRM of the use and understanding of these terms critical to ENRM stakeholder analysis and engagement. This inconsistency has the potential to contribute to misunderstandings about the scope of engagement, which may undermine trust in the field from those who may be variously described as stakeholders, the community, or the citizenry. Stakeholder status as a concept can help to alleviate misunderstandings by describing the recognition of a stake by the practitioner responsible for stakeholder identification, as opposed to the potential for any self-proclaimed social entity to assert their stake in a given issue. The use of the term stakeholder status additionally emphasises the privileged perceptions of the person or organisation responsible for identification – when this responsibility rests with a self-reflective practitioner, it may serve as a reminder that who is a stakeholder and who is not is a question of perspective.

There was broad agreement among the participants that those with stakeholder status usually are some form of group. This reflects the potential for groups to be seen as the pathway toward achieving stakeholder status, especially for those members of the citizenry who wish to further specific interests through participation in ENRM engagement. Relating to incidences of stakeholder professionalisation, when specific groups are drawn on repeatedly for participation in ENRM engagement processes, and when these same groups are seen by the citizenry as the vehicle for participation, some specific interests and norms of engagement may be amplified at the expense of others.

These insights into stakeholder identification can help ENRM practitioners and academics to reflect on their own identification processes, ideally leading to enhanced practices and improved outcomes for ENRM. Clarification of ubiquitous but fuzzy terms can improve communication across domains in the broader ENRM field, and can offer greater clarity to those who may at some point find themselves in the exigent position of achieving stakeholder status.

The significance of Chapter 3 to the thesis

The research has addressed both research objectives for research question two. Through creating a framework for how stakeholders are identified, this significant gap in the literature has been addressed. The research has offered a way for understanding how sectors of society – stakeholders, community, and the citizenry – are conceptualised by ENRM practitioners. Additionally, the research has emphasised the importance of recognising the power of being in the privileged position of an ENRM engagement practitioner. This requires academics and practitioners to adopt rigorous approaches to identification of stakeholders, and to reflect on who they consider to be a stakeholder.

‘Stakeholder’ was found to be a complicated term, with dual meanings. The colloquial meaning of stakeholder was considered to be anyone with some form of interest in an ENRM issue. However, in practice, ‘stakeholder’ more accurately characterised formalised groups with some sort of shared interest. For ENRM practitioners working on large-scale contentious issues, stakeholders were considered in direct contrast to the citizenry, who were considered to be the ‘everyone else’, representing the general public without specific interests in the issue, reflecting recent ENRM stakeholder engagement literature. Community was considered to represent something different by practitioners undertaking engagement on large-scale and controversial land use change issues, while to practitioners conducting engagement for smaller-scale and less contentious matters, community was considered the social context from which stakeholders were drawn.

The finding that stakeholders are considered to be formalised groups with specific interests is important, as it demonstrates the potential for professionalisation of stakeholders, and their institutionalisation in ENRM decision-making processes. These aspects of ENRM are conducive to the culture of conflict, and highlight challenges with the status quo of the way stakeholders are engaged for managing decision-making about environmental issues. Accordingly, the research found that conflict between stakeholders is a challenge for effective stakeholder engagement, and therefore for effective decision-making. This stresses the need to critically evaluate how stakeholder engagement in practice addresses conflict, and to find means for alleviating dysfunctional conflict.

Chapter 4:

How wind became a four-letter word: Lessons for
community engagement from a wind energy conflict
in King Island, Australia

4. How wind became a four-letter word: Lessons for community engagement from a wind energy conflict in King Island, Australia

The place of Chapter 4 in the thesis

Chapter 4 aims to address research question 3 through undertaking research objectives e and f.

3. *Do aspects of current ENRM stakeholder engagement practice contribute to the exacerbation of conflict?*
 - e. *Examine a case study of 'best practice' ENRM stakeholder engagement practice which was associated with land use conflict.*
 - f. *Interrogate the human dimension of this conflict through use of the social identity approach.*

Chapter 2 identified that the conduct of, and relationships between, stakeholders is an important part of ENRM conflict. This is where stakeholders engage with decision-makers and each other, and where long-term relationships are strengthened or undermined. Chapter 3 found that stakeholders are considered distinct from the citizenry, and that for large-scale land use conflicts, community is considered a special type of stakeholder among interest groups and the usual suspects. These findings show that the conduct of stakeholders can be considered both a product of the *culture of conflict* in ENRM, and a cause for it. Critical to how this occurs is the process of ENRM engagement. Chapter 4 presents an in-depth examination of a case study of land use change, and how the engagement processes interacted with stakeholders to drive dysfunctional ENRM conflict.

The Chapter 4 case study is a large-scale wind energy development proposal in King Island, Tasmania (Australia) which did not proceed to implementation. In this case, engagement was undertaken with the local community as a special type of stakeholder. In-depth interviews were conducted with members of the King Island community to understand a local perspective on the engagement process and subsequent social conflict. These interviews were analysed in the context of best practice community engagement standards, and understood using the social identity approach. The findings are instructive for engagement practice, and the use of the social identity approach uncovers subtle but important social dynamics which were a product of key engagement activities and the overall engagement strategy. This demonstrates the need for critical awareness of how engagement processes may contribute to the exacerbation, rather than alleviation, of dysfunctional conflict. Full results of the interviews in King Island can be accessed in a report, available in Appendix F.

Abstract

Wind is recognised as a key source of renewable energy. Despite broad public support for the sector, wind energy proposals have routinely triggered social conflict and localised opposition. To promote social acceptance and avoid conflict, the wind energy sector undertakes community engagement. This paper interrogates the community engagement undertaken in King Island (Tasmania, Australia) for a large scale wind energy development proposal which did not proceed to implementation due to external economic factors. Despite the proponent's adoption of what was described as a 'best practice' community engagement strategy, the proposal caused significant social conflict for the community. In-depth interviews (n = 30) were conducted with members of the King Island community and were qualitatively analysed through the social identity lens. Five key drivers of the local conflict were identified: problematic pre-feasibility engagement; the lack of a third-party facilitator of the community consultative committee; holding a vote which polarised the community; the lack of a clear place in the engagement process for local opposition, and; the significance of local context. These findings are instructive for improving community engagement practice for wind energy and other energy generation and land use change sectors.

4.1 Introduction

Wind energy generation can be a politicised and complex issue with consequences ranging from local to global scales (Hindmarsh 2014; Howard 2015; Juerges and Newig 2015). At the local level, a stakeholder's perspective will dictate whether landscape and social impacts of proposed wind energy developments are considered beneficial or burdensome (Botterill and Cockfield 2016). Globally, the agenda for action to address climate change (e.g. Althor et al. 2016) promotes investments in wind and other renewable energy sources (Batel et al. 2013; Curran 2012; Deng et al. 2015; Jami and Walsh 2014; Juerges and Newig 2015; Hindmarsh 2010; Lema and Lema 2013; Wilson and Dyke 2016). In Australia, the wind energy industry has the broad 'in principle' support of the public (Hobman and Ashworth 2013), though large-scale, commercially owned wind energy projects have been often accompanied by conflict (Botterill and Cockfield 2016; Hall and Jeanneret 2015; Hindmarsh 2010; Hindmarsh 2014; Wilson and Dyke 2016). While social conflict over land use change can contribute to improved outcomes through exploration of a range of perspectives and options, the introduction of wind energy is routinely characterised as dysfunctional conflict, which is where a satisfactory resolution is unlikely and long-term relationships are damaged (Amason 1996; Colvin et al. 2015b). In wind energy issues in Australia, conflict tends to manifest around localised opposition (e.g. Alberts 2007; Burningham et al. 2014; Anderson 2013; Kermagoret et al. 2016; Ogilvie and Roots 2015), often motivated by concerns about health impacts, changes to the landscape, impacts on wildlife, loss of amenity, reduced property values, distributive and procedural

fairness issues, and social disharmony (Botterill and Cockfield 2016; Fast et al. 2016; Gross 2007; Groth and Vogt 2014b; Hall et al. 2013; Hindmarsh 2010; Howard 2015; Jami and Walsh 2014).

In efforts to avoid dysfunctional conflict and local opposition, proponents of wind energy projects commit time and resources to undertaking community engagement as part of their planning processes (Bell et al. 2005; Fast et al. 2016; Howard 2015; Jami and Walsh 2014; Soma and Haggett 2015). This is in response to communities and other social actors demanding involvement in decisions which affect them (Moffat et al. 2015; Quick and Feldman 2011; Ross et al. 2016), and as a result of broader shifts toward participatory processes as a norm of land use change decision-making (Colvin et al. 2016a; Reed 2008; Dale and Lane 1994). Additionally, community engagement is a mandated requirement of environmental and social impact assessments for wind energy development proposals (Hindmarsh 2010). To the wind industry, community engagement can be viewed as a vehicle through which to obtain a social licence to operate (SLO); an indicator of community acceptance which can change over the course of a project (Clean Energy Council 2013; Corvellec 2007; Hall 2014; Hall and Jeanneret 2015). However, Hindmarsh (2010) argues that the traditional approach to community engagement for wind energy developments in Australia has been inadequate, and as a result has contributed to the exacerbation of conflict. This inadequacy is attributed to the use of a passive approach to community engagement, where the proponent “provides no guarantee to affected communities of any decision-making power” (Hindmarsh 2010, p. 543). Reflecting the lower levels of the ‘Spectrum of Public Participation’ (Clean Energy Council 2013; Hindmarsh 2010; IAP2 2015), this approach to community engagement limits community involvement to being ‘informed’ by proponents, or providing information to proponents for possible, but not guaranteed, incorporation into decisions.

In contrast, a collaborative and participatory approach to community engagement is expected to yield better outcomes for both communities and wind energy development proponents (Hall and Jeanneret 2015; Hindmarsh 2010). This approach reflects the higher levels of the ‘Spectrum of Public Participation’, and is an active and transparent relationship between communities and wind energy proponents which facilitates empowerment of the community to influence decision-making (Hindmarsh 2010). Attributes of this higher-level of community involvement which differ from the traditional approach to community engagement include:

- engaging community early in the proposal (Anderson 2013; Bell et al. 2005; Corscadden et al. 2012; Fast et al. 2016; Groth and Vogt 2014a; Hall et al. 2013; Hall et al. 2015; Hindmarsh 2010; Hindmarsh and Matthews 2008; Jami and Walsh 2014);

- genuinely incorporating community input into project planning and design (Hindmarsh 2010; Hindmarsh and Matthews 2008; Jami and Walsh 2012);
- building and maintaining trust between proponent and community (Alberts 2007; Hall et al. 2015);
- exceeding minimum (mandated or legislated) requirements (Anderson 2013; Fast et al. 2016; Hall and Jeanneret 2015; Howard 2015; Soma and Haggett 2015);
- establishing community consultative committees (Fast et al. 2016; Howard 2015);
- forming a long-term commitment to and relationship with the community (Anderson 2013; Fast et al. 2016; Hindmarsh and Matthews 2008; Jami and Walsh 2014; McLaren Loring 2007);
- embedding staff locally to develop long-term relationships (Hall et al. 2015; McLaren Loring 2007), and;
- avoiding incendiary settings, such as town-hall meetings which can descend into a “shouting match” (Hall et al. 2015, p. 306).

Higher-level (IAP2 style) approaches to community engagement have been recognised by scholars as critical for positive relationships between communities and wind energy developments (Hindmarsh 2010), and community engagement guidelines developed with the wind energy industry reflect this approach as ‘best practice’ (Clean Energy Council 2013). Nevertheless, conflict accompanies many new wind energy proposals, causing social disharmony in the candidate host communities (Botterill and Cockfield 2015; Hindmarsh 2010; Hindmarsh 2014).

This paper presents an examination of a wind energy proposal which, despite the proponent’s claim to have adopted a ‘best practice’ approach to community engagement (Hydro Tasmania 2013c, p. 16), caused significant social disharmony during the time of the proposal in 2012 - 2014 in the community of King Island, Australia (Hindmarsh 2014; The Australian 2013). The aim of this research is to interrogate the King Island experience to identify aspects of process and/or exogenous factors that contributed to the dysfunctional local conflict despite the approach to community engagement adopted by the proponent, and from this to inform theory and practice for community engagement.

This paper first presents a background to the King Island experience and then a description of the qualitative interview and analysis methods. An overview of the phases and events of the conflict at King Island is presented, followed by a discussion of the key findings about the conflict in King Island. Finally, concluding remarks are offered.

4.2 Background to King Island and the TasWind proposal

King Island is located at the meeting of the Bass Strait and the Southern Ocean, half way between mainland Australia and the southern island state of Tasmania, which is its jurisdictional state (Figure 4.1). King Island lies in the path of strong winds; the ‘Roaring 40s’ (Khamis, 2007). The Island is approximately 1,100 km² (Coates 2014; Jones 2014); 64 km at its longest point and 27 km at its widest (Khamis, 2007). The resident population in 2013 was 1,605 (Australian Bureau of Statistics 2014), with a long-term and steady trend of population decline (Jones 2014). The local economy is driven by primary production, with dairy, beef, kelp, and other speciality products as key export commodities (Jones 2014), though there is a growing tourism sector in the Island (Coates 2014).

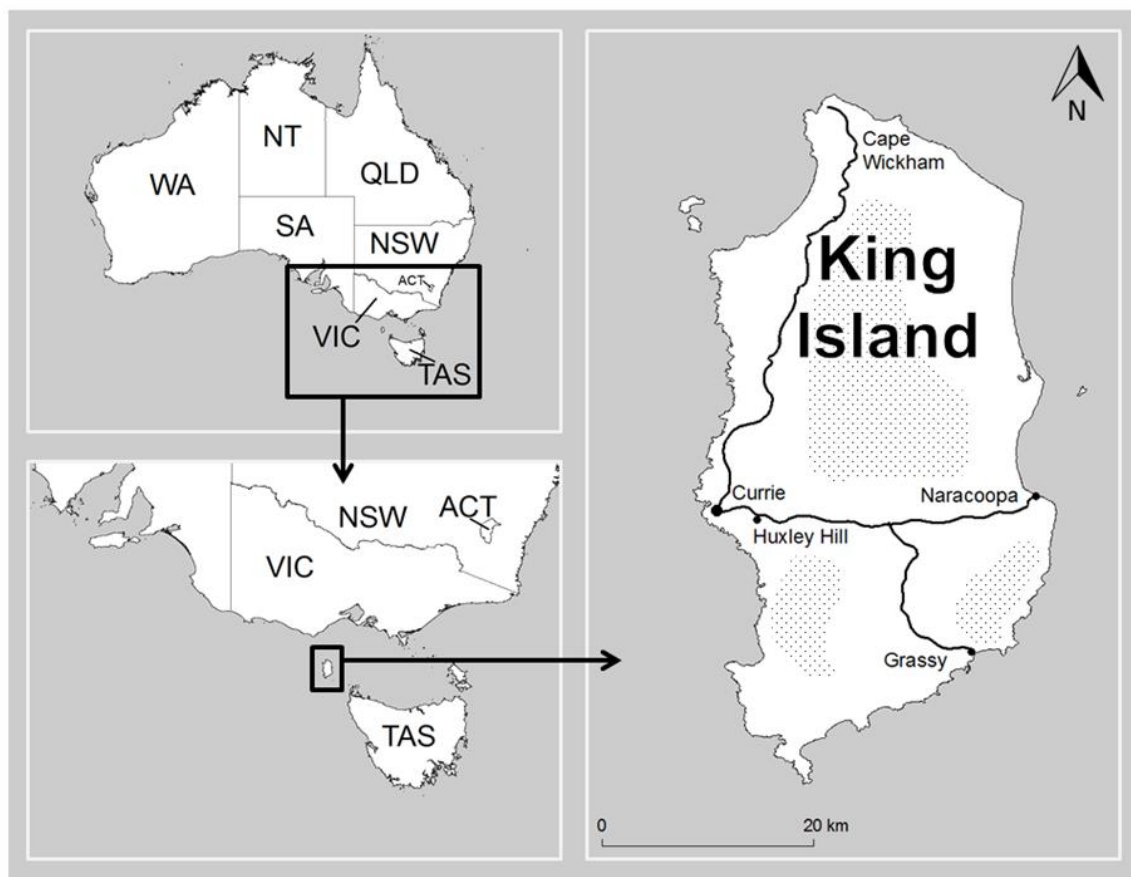


Figure 4.1 Location of King Island. The main town (Currie), other settlements (Grassy and Naracoopa), features (Cape Wickham and the 5 pre-existing wind turbines at Huxley Hill), and major roads are marked. Shading indicates an approximate representation of the TasWind areas of interest (Hydro Tasmania 2013a). Map generated using ESRI ArcGIS (ESRI 2011).

Stabilisation of the King Island population and the related goal of economic sustainability are key challenges for the community (Coates 2014; Jones 2014). This follows closure of a scheelite mine for tungsten in the Island in the 1990s (Suárez Sánchez et al. 2015), and the more recent closure of

the King Island abattoir in 2012 (Jones 2014). Both significantly dimmed the economic outlook for the community. Additional perennial challenges include the high cost of living, freight, and travel, and limited telecommunications (Coates 2014; Jones 2014). Despite the challenges of population decline and disruption to its traditional industries, King Island is buoyed by a strong sense of community, place, and identity (i.e. King Islanders identify as King Islanders, not Tasmanians or Australians), and pride in the Island's clean air and rugged and agrarian landscape. The laid-back and open community-centric local culture is highly valued by King Islanders. For a detailed perspective on local culture, past change, and future prospects of King Island see Coates (2014) and Jones (2014).

It was in this context of an uncertain future for the local economy and highly valued and cohesive community that a proposal for a large scale wind energy development was announced by Hydro Tasmania (a Tasmanian state owned corporation which produces energy from renewable sources, predominantly hydro and wind). The \$2 billion 'TasWind' proposal outlined plans for a 600 megawatt wind turbine development in King Island to produce energy for export to mainland Australia via a proposed undersea cable (Hydro Tasmania 2014). The TasWind proposal included an estimated 200 turbines at 150 metres in height (Butera 2014; Ogilvie 2013), with a combined footprint expected to cover 20% of the Island's area (The Australian 2013). As the proposal was to generate energy for export to the Australian mainland, the TasWind proposal was to be independent of the five wind turbines (of approximately 50 metres in height) already established on a prominent ridgeline at Huxley Hill near King Island's main township of Currie (see Figure 4.1).

The community engagement undertaken by Hydro Tasmania, the proponents of the TasWind proposal, appeared to reflect a higher-level approach to community engagement. Although limited documentation about the community engagement strategy is publically available, materials produced by Hydro Tasmania (2013c) during the time of the TasWind proposal describe intentions to undertake an "intensive" (p. 27), "innovative" (p. 66), and "open and transparent" (p. 16) community engagement strategy which would reflect "best practice" (p. 16). Through this process the community would be afforded influence over decisions, as the project would "not proceed to development without the ongoing support of the King Island community" (Hydro Tasmania 2013c, p. 15). The community engagement strategy involved a range of specific engagement activities during the early stages of the TasWind proposal, commitments to ongoing community engagement throughout the entirety of the proposal, and the requirement of community support before proceeding to each stage of the proposal process (Hydro Tasmania 2012; Hydro Tasmania 2013a; Hydro Tasmania 2013c) (Figure 4.2).

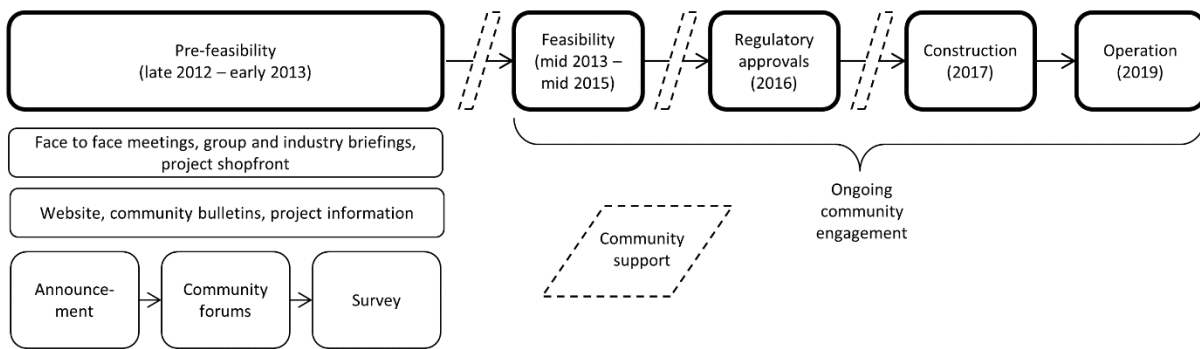


Figure 4.2 An overview of the planned TasWind process including key early community engagement activities and the requirement for community support between phases (content from: Hydro Tasmania 2012; Hydro Tasmania 2013a).

Hydro Tasmania announced the proposal at the pre-feasibility stage, when there was no certainty about the viability of the project, and took early steps to engage the King Island community in the decision-making process (Hydro Tasmania 2014). A range of meetings and information sessions were held throughout the deliberation period, local representatives of Hydro Tasmania were based in the Island, a community consultative committee (the TasWind Consultative Committee, or TWCC) was established and a community vote was held on whether or not to proceed to the feasibility stage (Hydro Tasmania 2013b; Hydro Tasmania 2013c). These actions reflect, at least superficially, adherence to a higher-level, or ‘best practice’, community engagement strategy where the community is engaged early, there are a range of opportunities for dialogue and collaboration, and the community is given decision-making power over the future of the proposal. In spite of this, the King Island experience was one of conflict, with strain on interpersonal relationships, damage to local institutions, the formation of a local opposition group (the No TasWind Farm Group, or NTWFG), legal actions (taken by the NTWFG against the proponent), and the eventual decision by Hydro Tasmania in October 2014 to not proceed with the proposal due to economic factors (Hydro Tasmania 2014). As engagement strategies which reflect higher-level community engagement are expected to reduce conflict (Colvin et al. 2016a; Hindmarsh 2010; Reed and Curzon 2015), the question is raised as to what happened in King Island to lead to these outcomes, and what can be learned from the King Island experience to improve the practice of community engagement for wind energy and other sectors.

4.3 Methods

This research project was aimed at understanding why the King Island experience was characterised by dysfunctional social conflict, despite the proponent’s adoption of what was claimed to be a ‘best practice’ community engagement strategy. The aim for this research was therefore two-fold. First, to develop a locally situated and in-depth understanding of the TasWind community engagement

process. Second, based on this understanding, to examine the hidden complexities and subtle drivers of the conflict in order to learn from the King Island experience about the successes and pitfalls of community engagement in land use change decision-making.

To achieve this locally situated and in-depth understanding of the King Island experience, a qualitative research design was adopted. This involved visiting King Island in March-April 2015, during which time in-depth interviews were conducted with 30 individuals from the King Island community (n = 30). As a local perspective on the proposal was sought, external stakeholders (e.g. company and interest group representatives) were not interviewed. While immersion in the King Island community contributed to a deep understanding of the local context, only formal interview content was analysed.

A constructionist epistemology guided the research, in that the differing perceptions of the King Island experience were sought (e.g. Juerges and Newig 2015). This was not for critique, but in order to develop a nuanced, balanced, and well-rounded understanding of the issue (Moon and Blackman 2014). The theoretical lens through which the research was conducted was the social identity approach. The social identity approach emphasises the importance of group membership and the way groups interact in shaping relationships, thereby affecting the outcome of processes which are driven by intergroup interactions (Colvin et al. 2015b; Fielding and Hornsey 2016; Haslam 2000). The approach incorporates themes such as: group formation; stigma; stereotyping; conforming to identity norms; consensus-seeking behaviour; intergroup power differences; polarisation and extremism; communication, and; intergroup deliberation (Bliuc et al. 2015; Colvin et al. 2015b; Crane and Ruebottom 2011; Fielding and Hornsey 2016; Haslam 2000; Hornsey 2008; Mason et al. 2015; Rowley and Moldoveanu 2003; Unsworth and Fielding 2014). A central tenet of the social identity approach is the distinction between in-groups and out-groups. An in-group is a group to which an individual belongs, while an out-group is a group to which the individual does not belong (Colvin et al. 2015b; Fielding and Hornsey 2016). The social identity approach as a theoretical lens for qualitative research has been found to be particularly suited to research projects with an interest in understanding social context and complexities (Jackson and Sherriff 2013). The explicit decision (see Braun and Clarke 2006) to adopt the social identity approach as a theoretical lens informed interview development, analysis and coding, and interpretation.

4.3.1 Interview development

In-depth interviews were developed around key topics, with few specific questions. This was to allow for a conversational structure to the interviews, and to have the flexibility to pursue unexpected themes as they arose (Bryman 2012). This approach was also adopted to allow the interview participants to discuss their perceptions and experiences with limited questioning (which

could potentially be leading), in order to gain rich and authentic insights. Probing questions, responsive to the participants' answers, were used to guide the interview and exhaust complex topics. All interviews were conducted by the same researcher, were recorded using a handheld note-taker device, stored on password-protected hard drives, and later transcribed verbatim. Sixteen participants were interviewed individually, and fourteen participants were interviewed in pairs (seven paired interviews). The five topics which were consistent for all interviews were:

- About the participant and King Island.
- What happened during the time of the TasWind proposal?
- Who was involved in discussions about the TasWind proposal?
- How was the participant personally engaged with the TasWind proposal?
- What has happened after the TasWind proposal?

4.3.2 Participant recruitment

Interview participants were members of the King Island community, and represented a broad range of perspectives on the proposal (from strong support to strong opposition, and including ambivalence, uncertainty, and indifference). Recruitment of participants occurred through making contact with key informants, followed by snowballing. Key informants were identified initially through the news media coverage of the TasWind proposal, and further individuals were contacted based on inclusion in local directories. Information about the research project was shared with local institutions and all interested individuals, with the invitation to circulate with any King Islanders who would be interested in participating or knowing more about the research. Not all people contacted were interested or willing to participate. Of those who were interested in the research, a great deal of goodwill and openness facilitated significant snowballing recruitment of additional participants. This benefitted from King Islanders identifying others who would have interesting perspectives to contribute to the research. Of note is that King Islanders across all stances on the TasWind proposal were eager to assist with recruiting a broad spectrum of views for participation in the research project. As the issue was divisive, and not all King Islanders were engaged to the same degree, care was taken to seek out a range of people to represent different levels of engagement and different stances on the proposal. To protect the anonymity of participants from a small community, demographic-type information is not presented and direct quotations have not been included (Jones 2014).

4.3.3 Analysis and coding

Interviews were coded using thematic analysis (Braun and Clarke 2006). Codes were based on insights while conducting interviews and throughout the data analysis process, and on the theory of

the social identity approach. Theoretical analysis codes related to the social identity approach were developed from the literature, in particular Colvin et al. (2015b) and Haslam (2000), and extended with Hogg and Abrams (1988) and Turner (1982). The codebook for analysis was developed prior to commencing analysis, based on the literature, reflections on fieldwork experiences, interview content, and research notes. The codebook was an active tool, and was routinely updated throughout the data analysis process as codes were added, edited, or reorganised. The codebook was developed, and all coding undertaken by, the first author in consultation with the co-authors of this study. All analysis was undertaken using NVivo 10 (Bazeley and Jackson 2013; QSR International 2012).

4.3.4 Interpretation

Sense-making of the coded interviews into a narrative of the King Island experience was conducted through gathering all interview content related to each theme ('queries' on 'nodes' in NVivo 10), and synthesising all perspectives from participants into a multifaceted recount of the King Island experience. The social identity approach informed the way in which the interviews were interpreted and analysed. For example, polarisation was seen to be a product of the interaction between the issue, i.e. TasWind, and social psychological intergroup processes, rather than simply an observed phenomenon. Emphasis was on identifying sequences or causal links between discreet events, or between and within phases of the TasWind proposal. An example of this is associating the closure of the abattoir with the way in which the King Island community appraised the merits and risks of the TasWind proposal. An overview of the TasWind community engagement process and key findings related to the hidden complexities and subtle drivers of conflict in the King Island experience were then drawn from the sense-making process based on the significance of these issues in the interviews (e.g. consistently reported across participants, highly controversial across participants, or emphasised by participants as a major factor in the King Island experience).

4.4 Results and discussion

Results and discussion are integrated in this section, presented as findings which will first cover a chronological understanding of the TasWind conflict from the local perspective, followed by key factors which have been identified as drivers of the conflict in King Island. A complete treatment of the complexity of the King Island experience cannot be provided in this paper. As such, the findings present those issues which are considered the most significant lessons for community engagement.

4.4.1 Understanding the TasWind proposal conflict in King Island

Viewed as an episode of local conflict, the TasWind proposal can be understood as series of phases which are punctuated by specific events, as described by the King Island community (Figure 4.3). This section presents a very brief overview of key phases and events of the King Island conflict in

order to situate the key findings of the research. This understanding was developed through analysis of interviews, and can be viewed as a local perspective of the events of the TasWind proposal in contrast with the stated community engagement plan (see Figure 4.2). Further detail is provided in the following section where lessons for community engagement are discussed.

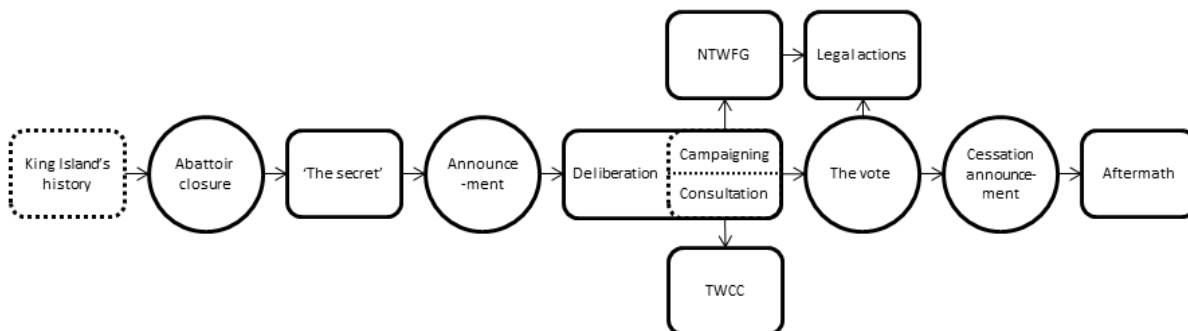


Figure 4.3 The phases and events of the TasWind proposal. Phases are rectangular, events are circles. NTWFG: No TasWind Farm Group. TWCC: TasWind Consultative Committee.

King Island’s history provides the context within which the proposal was understood. Long term population decline and economic downturn present challenges for King Island. The branding of King Island’s eponymous cheese fostered a ‘clean and green’ place identity, which has encouraged growth in the tourism sector, and the in-migration of new residents, especially ‘tree-changers’.

The abattoir closure in September 2012, though not part of the TasWind proposal, was presented by most participants as the first key event relevant to understanding the TasWind proposal. Resulting employment and economic losses made the King Island community feel vulnerable, and gave a sense of urgency to the need to find a solution to the gap in the local industry and economy. There was a widely held perception that closure of the abattoir caused the belief that ‘something’ was needed in order to secure King Island’s future.

Following closure of the abattoir, rumours about a \$2 billion project in King Island’s future started to circulate throughout the community and became a prominent topic of discussion. This phase is the time of ‘the secret’. Speculation in lieu of knowledge caused apprehension and aversion to change, with ‘the secret’ known to some in Council but not revealed to the community.

In November 2012, a community meeting was held to announce the TasWind proposal, jointly between the King Island Council and Hydro Tasmania. Much of the detail provided in the announcement was conceptual, rather than specific, likely due to the proposal being in the pre-feasibility stage.

Following the announcement, the TasWind proposal shifted into the deliberation phase. This phase was characterised by conflict within the King Island community, and involved a range of meetings and information exchange which were both community-driven and proponent-driven. Two major elements of this phase include the formal consultation program, facilitated by Hydro Tasmania, and the non-facilitated formation and mobilisation of a local opposition group.

The formal consultation program included establishment by Hydro Tasmania of the TasWind Consultative Committee (TWCC). The TWCC comprised of 17 King Islanders, and functioned independently from Hydro Tasmania. The aim was to serve as a neutral intermediary group between Hydro Tasmania and the King Island community. There were mixed perceptions about the TWCC, variously including that it was ‘pro-wind’ and ‘anti-wind’, and a range of views about the efficacy of the TWCC.

At the same time as the formal consultation program, a non-facilitated local opposition group, the No TasWind Farm Group (NTWFG) formed and mobilised against the proposal. The NTWFG brought speakers to King Island, engaged with the national media, conducted an election-style campaign in relation to the community vote (outlined below), and initiated legal actions against Hydro Tasmania. These activities all occurred outside of the formal channels for community engagement.

The vote which was held in June 2013 by Hydro Tasmania to gauge community support for the proposal proceeding to the feasibility stage was a major event during the time of the TasWind proposal, and was a significant cause for campaigning by the NTWFG, and wider contention. There were 878 votes cast by the community. A Hydro Tasmania representative stated 60% was the benchmark for the vote, however the results were returned at 58.7% in favour. Hydro Tasmania took this as adequate, and proceeded with the feasibility study. Some viewed this unfavourably; the NTWFG in particular felt that the vote had categorically failed.

Following the vote, the NTWFG commenced legal actions against Hydro Tasmania. The legal actions were based on the argument that Hydro Tasmania had broken their commitments to the community by proceeding with the feasibility study having not met the 60% level of support, and as such Hydro Tasmania did not obtain a ‘social licence’ to proceed with the feasibility study. Although the legal actions commenced, they were not resolved in Court.

While the legal actions were underway, in late October 2014 Hydro Tasmania announced that the TasWind proposal would cease. Exogenous economic factors solely were described as the cause; social conflict and the NTWFG’s legal actions were not acknowledged. The cessation announcement was delivered in a statement from Hobart-based upper-management of Hydro

Tasmania, and disseminated through the news media and social media. Reactions in the community were mixed.

In the aftermath since the cessation announcement (interviews were conducted around 5 months following the cessation announcement), many say King Island is returning to what they view as ‘normal’. King Island still needs to overcome the same challenges as before the TasWind proposal, but now with a more fatigued community. Some say the Island is ‘re-merging’, while others feel that below the surface there are irreparable social divides which will endure with the current generation of King Islanders. TasWind - and wind energy development in King Island more generally - has become a taboo.

4.4.2 Factors driving dysfunctional conflict in King Island during the community engagement process

4.4.2.1 Pre-feasibility engagement was problematic

The TasWind proposal was announced at the pre-feasibility stage. As such, much of the detail provided in the announcement was reported to be conceptual, rather than specific. Details including the conditions under which the proposal would proceed through feasibility and to development, the siting of turbines, the nature of landholder agreements, and hosting payments were reported to be not specified with certainty at the announcement, due to the intention to develop these details through consultation with the community. While this early engagement at the pre-feasibility stage adheres to recommendations for higher-level community engagement, there were aspects of this early engagement which were problematic.

Announcing at a stage when specific details were undefined caused a lack of certainty about the scope of the proposal (e.g. scale and extent of impact, timeframe, financials, fairness), leading to anxiety in the community. This was true both at the time of, and immediately after, the announcement of the proposal and persisted throughout the following deliberation phase. In the absence of knowledge about the impacts of the proposal on individuals, speculation led to circulation of misinformation and rumours in the community. At the announcement and pre-feasibility stage, Hydro Tasmania representatives were unable to answer some specific questions. The perceived lack of answers was not viewed favourably by some who felt that this represented unpreparedness and a lack of professionalism. Others felt that this indicated that Hydro Tasmania had believed the community would ‘passively accept’ the proposal, so had not gone to the efforts to be prepared to answer questions.

These issues were compounded by ‘the secret’, which had made many people anxious about an unknown future change (speculation on possible projects at this time included: another abattoir, an

immigration or refugee centre, offshore wave energy development, a prison farm, nuclear waste storage, a sand mine, an intelligence/spy facility, and gas drilling). Some members of the community were described as being primed by ‘the secret’ to automatically oppose whatever was announced, while others were disappointed at the time of the announcement to learn that the secret proposal was not their preferred speculative project. Because the announcement was made jointly by Hydro Tasmania and the King Island Council in a ‘town hall’ style forum, it was perceived that the Council had already promised community support for the project. This style of forum is considered a risk for successful community engagement, as it can allow dominance of only the loudest voices and encourage conflict (Hall et al. 2015). This, in combination with ‘the secret’ being linked to the Council, led to a view that the entire project was a *fait accompli* and community consultation was tokenistic at best. The view held by some of Hydro Tasmania as a powerful out-group, in the sense of the social identity approach, caused cynicism about the motives behind TasWind, and beliefs that any benefits for Hydro Tasmania must necessitate losses for King Islanders (Fielding and Hornsey 2016; Haslam 2000). Combined with ‘the secret’, this immediately perceived power imbalance and view of Hydro Tasmania as an out-group operating within the space of King Island meant that efforts for building the trust critical to successful community engagement started on the back foot.

Engagement from pre-feasibility about whether to proceed to a feasibility stage meant that there were different perspectives about the purpose of Hydro Tasmania’s engagement. Those who were cynical about the motives behind the TasWind proposal felt that the question of proceeding to feasibility was a *red herring*, and felt that if the community consented to the feasibility study then it would be taken as attainment of the ‘social licence to operate’ for project development (despite Hydro Tasmania’s statements to the contrary). Additionally, framing the discussion around whether the proposal should proceed to feasibility to some extent facilitated those who intended to delegitimise opposition. This occurred because the opposition view that consenting to feasibility would mean consent to development (or that opposing feasibility was the first necessary step in opposing the project in its entirety) was challenged by the argument that opposing a feasibility study was in effect opposing information. This caused debate in the community where different issues were being argued (e.g. ‘yes to a feasibility study’ versus ‘no to project’), and these misaligned perspectives about the TasWind proposal amplified tensions in the community. In controversial environmental management issues, positions or stances (e.g. support or opposition) can become their own social identities, and this can serve to escalate conflict and lessen the prospect for a conciliatory outcome (Fielding and Hornsey 2016). In the King Island experience, the misaligned perspectives (‘yes to a feasibility study’ and ‘no to project’) not only served to confound

debate and undermine the potential for a common ground for dialogue, but also provided the architecture for position-based identities which facilitate exacerbation of intergroup conflict.

With hindsight, some King Islanders felt that Hydro Tasmania should have completed the feasibility study without announcing the proposal or engaging with the community, as this would have avoided unnecessary anxiety in the community and would have allowed for consideration of a completed proposal. This runs contrary to other research indicating that communities value early engagement (e.g. Soma and Haggett 2015), emphasising the importance of pairing early engagement with sound process to avoid early misinformation (e.g. ‘the secret’) and misaligned perspectives on the purpose for engagement.

4.4.2.2 The community committee lacked a third-party facilitator

Establishment of a consultative committee (TasWind Consultative Committee, TWCC) was another way in which the TasWind proposal incorporated recommendations for higher-level community engagement (Clean Energy Council 2013; Howard 2015; Jami and Walsh 2014). The TWCC was established by Hydro Tasmania to serve as an intermediary group between Hydro Tasmania and the King Island community. The TWCC was comprised of 17 people from the King Island community, and members were recruited through response to a call for Expressions of Interest for participation following announcement of the proposal. A chairperson, deputy and secretary for the committee were elected from among the committee members at the first meeting of the TWCC. The TWCC undertook a range of activities, primarily including (but among others): organising community meetings to identify community questions; research on community questions (independent of information provided by Hydro Tasmania), and; dissemination of findings to the community.

Perceptions about the neutrality of the committee to the TasWind proposal were mixed. There was a range of views, including that the TWCC was primarily comprised of anti-wind people, and that the TWCC was primarily comprised of pro-wind people. There were others who felt that pro-wind people were sought by Hydro Tasmania for participation with some token anti-wind people included to give the impression of balance. Other people felt that the TWCC was ‘hijacked’ by anti-wind interests, and that the committee presented biased information to the community.

These perceptions of a lack of neutrality in the TWCC contributed to the divide in the community during the time of the TasWind proposal, and this was particularly related to disputes about contested information. For example, perceptions that the TWCC was split between pro-wind and anti-wind people led some to view the messaging from the TWCC as mixed and therefore not authoritative. The perceived pro-/anti-wind split was also the cause for some people to believe that the TWCC was ineffective in achieving its aims. This view was attributed to the view that

information from the TWCC was not communicated effectively to the community, i.e. the lack of consensus within the group meant that messaging from the TWCC to the community was unclear.

Of note is that the chairperson, deputy chairperson, and secretary of the TWCC were from the King Island community. While the mixed opinions about the neutrality or otherwise of the TWCC indicate that whether or not the TWCC had a bias for or against the TasWind proposal is a matter of perspective, the lack of a facilitator independent of King Island and Hydro Tasmania may have contributed to the various and sometimes unfavourable views of the TWCC, and indeed this was considered by some in the community to be the case. This point is not to imply that the TWCC leaders lacked objectivity, rather, the perception of the potential for bias served to undermine the efficacy of the committee. Information communicated by a perceived out-group is likely to be dismissed due to identity-based distrust of the out-group (Fielding and Hornsey 2016; Haslam 2000). In the King Island experience, allowing the TWCC to be perceived as biased, regardless of the actual value of the TWCC's work, meant that information disseminated by the TWCC was treated with suspicion and uncertainty.

The importance of a third-party facilitator in wind energy community engagement has been emphasised by Fast et al. (2016), Hindmarsh and Matthews (2008) and Howard (2015). There are risks that third-party facilitators will undermine or slow the engagement process. For example, it takes time to develop trusting relationships, and the presence of a third-party facilitator may contribute to intergroup tensions depending on how the facilitator integrates into the local context (Moore 2013). While establishment of community committees has been argued as a way to overcome or bypass conflict and improve democratic outcomes (Fast et al. 2016; Howard 2015), in the King Island experience the decision to not lead the TWCC with a third-party facilitator contributed to the perceptions that the TWCC was biased or ineffective. This undermined the opportunity for positive outcomes through establishment of a consultative committee, and contributed to the escalation of local conflict. The risk, however, had a third-party facilitator been involved is that the facilitator may have been considered part of the out-group

4.4.2.3 A vote seemed democratic, but it polarised the community

As a way to measure the King Island community's support for the TasWind proposal proceeding to the feasibility stage, a community vote was held. It was reported that the vote was not initially part of the TasWind engagement plan (though a community survey was to be held to gauge community views on the proposal), and that the use of this technique for measuring community support was pursued primarily by the TWCC. The vote was to be overseen by Australia's federal agency responsible for managing elections (Australian Electoral Commission, AEC), with eligibility for voting based on the electoral roll. This arrangement was controversial, as it was reported that newer

residents who were not yet registered were ineligible to vote. The NTFWG and TWCC both argued in favour of extending the list of eligible voters to include newer residents, and an alternative arrangement was made to allow all King Island rent-payers or rate-payers to vote via the King Island Council. However, as this was no longer adhering to the AEC's rules, the AEC withdrew from administering the vote and an external polling organisation was engaged by Hydro Tasmania.

Despite this adjustment to address the voiced community concerns, many people were still dissatisfied with the rules for eligibility. It was reported that the rate-payer or rent-payer criterion meant that short term residents were able to vote, including transient workers who permanently left the Island shortly after the vote was held. There was also the perception that the extended rules allowed people who were not King Island residents, but were landowners, to temporarily move to King Island (or undertake paperwork to this effect, e.g. changing formal place of residence details) to become eligible, vote, then leave the Island again. To some people, the role of the NTFWG and the TWCC in extending the eligibility rules led to the view that the vote was illegitimate, and that it was allowing people who were not part of the King Island community to influence the outcome of the vote. Hydro Tasmania was seen to 'bend over backwards' to accommodate demands from the NTFWG and the TWCC, though this was viewed as a factor which led to the reliability of the vote being undermined through renegotiation of the rules throughout the process.

In addition to issues with perceived legitimacy, the vote was viewed as a major factor which exacerbated the conflict in the King Island community. Conflict exacerbation was experienced because the dichotomous nature of a vote led to election style campaigning, attributed especially to the NTFWG who were promoting a 'no' vote to the King Island community. The NTFWG viewed their campaigning as necessary action to gain a voice ahead of the vote, however, the campaigning was seen to shift the conflict about the TasWind proposal from being between the NTFWG and Hydro Tasmania to being between the 'yes camp' and the 'no camp' (the label 'no camp' was used interchangeably with the NTFWG) in the King Island community. In this way, the vote promoted an intergroup, 'us versus them', frame of the conflict within the community.

The dichotomous nature of a vote also led to polarisation of the community. In holding a vote, it meant that all community members were expected to commit to either a yes vote or a no vote. This expectation had the effect of closing down debate as any opinions in the 'grey area' had the caveat that when it came to the time to vote, the decision would have to go one way or the other. In effect, this meant that all King Islanders would be required to cast their vote and adopt a position-based identity. From the social identity perspective, holding a vote may be viewed as a process which forces position-based identification on those who vote. Position-based identification emphasises polarisation and in a conflictual context can cause extremism of views on the issue, particularly

through encouraging in-group insularity which can lead to conforming to identity norms, and stereotyping of others around their position-based identity (Colvin et al. 2015b; Fielding and Hornsey 2016). Stereotyping places an emphasis on the division between the in-group and out-group which encourages group members to conform to their position-based identity norms (Bliuc et al. 2015; Fielding and Hornsey 2016; Mason 2015). This can see groups deprioritising critical evaluation of a range of perspectives, as they seek consensus for group unity (Colvin et al. 2015b), thereby serving to ossify the position-based identity groups into polarised and extreme stances (Haslam 2000).

Prior to the vote, speculation about others' voting intentions, pressure on people to disclose their voting intentions, and attempts by some people to influence how others would vote further divided the community. Having the responsibility given to the community via a vote for the decision on whether or not to proceed to the feasibility stage meant that debates about the TasWind proposal became decidedly personal. The personal nature of the debate influenced what was described as a lower than expected participation rate (some stated that around half of the population voted, though the number of total eligible voters is not known). While apathy (or passive acceptance) may have been seen as an explanation for this, some people suggested significant levels of boycotting due to both perceptions of illegitimacy and an unwillingness of people to commit themselves to a yes or no vote. The self-protective action of avoiding the stigma of a position-based identity through abstinence from voting was viewed as a safer option amid the social conflict.

One of the most controversial aspects of the vote was described by the participants as the measure of majority community support. Local Hydro Tasmania representatives had indicated that a majority was sought, however during a public meeting, where a visiting (non-local) Hydro Tasmania representative was speaking, a community member asked for specification of what constituted a majority. At this point, the representative was described as making an 'off the cuff' response, and said that 60% would be considered a majority. The perceived spontaneity of the statement demonstrated to some that the community had little power over the process through which their consent for the TasWind proposal was being assessed. This spontaneity was also seen to demonstrate to some people that the local Hydro Tasmania representatives were not those who held the decision-making power with regards to the TasWind proposal.

The result of the vote was 58.7% in favour of the TasWind proposal proceeding to the feasibility stage. With 878 votes cast by the community (EMRS 2013), the difference between 58.7% and 60% was the equivalent of around 12 individual votes. This outcome was viewed by some people as being short of the 60% benchmark, but close enough, and still demonstrative of majority community support for the proposal. However, others viewed it as categorically failing to meet the

60% benchmark, and therefore as evidence that the community did not express a level of support adequate for progression through to the feasibility stage. The way in which the result of the vote was framed (i.e. as ‘close enough with a majority’ or ‘failed, due to not achieving 60%’) caused controversy about the outcome, and was reported to have fuelled further social conflict within the King Island community. The decision by Hydro Tasmania to proceed with the feasibility study meant that these different framings of the vote outcome were not just differences in interpretation, but became major differences in opinion with regards to the legitimacy of the TasWind proposal and trustworthiness of Hydro Tasmania. This decision was also the cause for the NTWFG to initiate legal actions against Hydro Tasmania (which were not resolved in court).

Voting (or local referenda) has been identified as a potential means for improving local empowerment in wind energy decision-making (Fast et al. 2016; Jami and Walsh 2014; Simcock 2014). However, there has been little examination in the literature of the outcomes and value of a community vote. This is likely due to the relative rarity of community votes on wind energy projects (Jeong et al. 2012). Hall and Jeanneret (2015), suggest that asking for explicit approval from a community is daunting to industry. In a Swiss study, it was found that a community vote had little effect on the social acceptability of wind energy proposals (Walter 2014). Jeong et al. (2012) and Simcock (2014) discuss positive outcomes following a community vote, though this was in a community-owned wind energy development, unlike the TasWind situation of a government-owned corporate and external proponent. A vote may appear to be a familiar and democratic method through which community perspectives can be shared. However, as higher-level approaches to community engagement promote ‘consensus-building’, where knowledge is exchanged and shared understandings are created (Clean Energy Council 2013; Hindmarsh 2010; IAP2 2015), the divisiveness of the vote indicates that this approach may not be considered to adhere to expectations of higher-level community engagement. Bell et al. (2005) caution that a vote may lead to politicisation of a wind energy development, and this was the case for the King Island experience. A vote which appeared to be a democratic way to measure community support instead caused agitation about process and voter eligibility, which undermined the legitimacy of the vote. The dichotomous nature polarised the community as the vote closed down debate and triggered election-style campaigning within King Island. The decision to proceed with the feasibility study despite not achieving the stated outcome of the vote served as proof to some that the engagement process was disingenuous, and provided another point of intractability within the community.

4.4.2.4 Opposition had no ‘place’ in the process, so operated outside facilitated channels

During the deliberation phase and in addition to, and separate from, the Hydro Tasmania-led community engagement processes, a group of concerned community members formed the No

TasWind Farm Group (NTWFG) to oppose the TasWind proposal. It was reported that at the time of the announcement, some King Islanders felt anxious about the nature of the proposal, so an unofficial meeting was held which led to the formation of the NTWFG. Concerns predominantly included views (among others) that the proposal would: industrialise the agrarian landscape, impact negatively on human health and wellbeing, undermine community cohesion, and impact negatively on wildlife (especially migratory birds). These concerns are not dissimilar to issues raised by other wind energy development opponents (e.g. Anderson 2013; Botterill and Cockfield 2016; Fast et al. 2016; Hindmarsh and Matthews 2008; Ogilvie and Roots 2016; Wheeler 2016). However, the NTWFG were broadly accepting of and positive about the pre-existing wind energy development in King Island at Huxley Hill due to the local benefits from the energy generated and the relatively small scale of the turbines (see Figure 4.1).

For those who were members of the NTWFG, it was reported that their motives for group formation included that they felt a group was necessary in order to effectively counter the power and resources of Hydro Tasmania. Additionally, some felt that a formal group was necessary in order to demonstrate to Hydro Tasmania that they were committed in their opposition and that their concerns should be taken seriously. Group formation also provided social identity based challenges and benefits for group members. Identification with a controversial group is known to precede stigma against group members (Haslam 2000), though in-group bonding also provides emotional support for members and motivation to pursue the group's aims. Both outcomes of group formation were reported to have been the case for NTWFG members.

The NTWFG drew on experiences from other places to inform their approach to opposing the TasWind proposal. For example, community opposition to expansion of the coal seam gas industry in other parts of Australia (e.g. Colvin et al. 2015a; Lacey and Lamont 2014) was used as an analogy to the NTWFG perspective and experience with TasWind in King Island. This fits with a social identity approach model of referent informational influence, where an identity group will draw from the experiences of others with a shared identity. While they have no direct personal connection, the shared identity (e.g. local land use change opposition group) allows for learning from experiences and conformance to norms of the shared identity (Hogg and Abrams 1988; Turner 1982 and e.g. Burningham et al. 2014).

Formation of the NTWFG reflects a perceived intergroup power imbalance between Hydro Tasmania and the King Island community, an issue flagged by Devine-Wright (2014) as critical in many wind energy development conflicts. The NTWFG viewed the power dynamic as a large corporate proponent disingenuously using community engagement processes in order to obtain a social licence to operate. This view reflects Hindmarsh's (2010) critique of institutions of

community engagement for wind energy in Australia, which argues practices are more aimed at persuasion, rather than dialogue. To the NTWFG, formation as a group and subsequent campaigning and other activities were seen as necessary in order to counter this power imbalance. However, to much of the rest of the King Island community, the actions taken by the NTWFG were viewed as creating a new power imbalance; that of between the NTWFG and ‘everyone else’. This was due to the amplification of the NTWFG voice through forming a group and taking strategic action to oppose the TasWind proposal. Others felt that the NTWFG perspective crowded out the voices of others in the King Island community who were not as resolute in their view of the TasWind proposal.

Outside of the TWCC, the NTWFG was the only community-based group to form in relation to the TasWind proposal. There were reports of an informal ‘yes camp’, which tended to be a nebulous group of the vocal supporters of the TasWind proposal. Based on reports, the ‘yes camp’ was a label applied to known supporters of the proposal who were engaged in the TasWind process, not a grouping adopted formally (or informally). The difference between the levels of engagement with the ‘yes camp’ and the NTWFG reflects a lack of space provided in the community engagement process for strong opposition. Jami and Walsh (2014) indicate that facilitating opposition voices is important in community engagement for wind energy developments. Hindmarsh (2010), similarly, argues that a lack of attentiveness to the concerns of local community-based opposition groups is a significant limitation of community engagement for wind energy development. In the King Island experience, those who joined the NTWFG did not feel that the extent of their opposition to the proposal was given a ‘place’ in the deliberative process. The lack of a place for the NTWFG view meant that the NTWFG operated outside of the formalised and facilitated community engagement processes; undertaking actions which were seen by many to have exacerbated the local conflict (e.g. election-style campaigning ahead of the vote, engaging with the national news media, bringing to King Island controversial speakers, and undertaking legal actions against Hydro Tasmania). It is important to note that it is possible and likely the NTWFG would have mobilised regardless of the community engagement strategy, due to their view that the scale of the TasWind proposal made it fundamentally incompatible with King Island (e.g. Devine-Wright 2014; Fast et al. 2016).

The operation of the NTWFG outside of the facilitated community engagement meant that those with the NTWFG perspective of TasWind were informed by different information and perspectives compared to those who were engaged in the process. Mobilised groups with a strong social identity will seek authoritative sources which reflect the group norms and understandings (Haslam 2000). When these sources are not shared with out-groups, different truths will serve to entrench conflict and undermine the potential for common ground (Fielding and Hornsey 2016). For example, the

NTWFG coordinated with broader groups and networks promoting an anti-wind agenda and invited at least one speaker associated with this network to King Island (see, e.g., Ogilvie and Rootes 2015). Locally, heightened tensions and controversy followed the speakers' visits to King Island.

With the NTWFG operating outside of the formal space for community engagement, there were few opportunities for NTWFG and others in the community to exchange views outside of high-tension settings such as community meetings. As a result, stereotyping of out-group members and suspicion about out-group members' motives was promoted due to the lack of a shared space for deliberation. NTWFG's literature regarding potential impacts of the TasWind proposal was disseminated throughout their membership and the broader King Island community, often with claims at odds with information coming from Hydro Tasmania and the TWCC. These actions outside of any place within the community engagement process were viewed by the NTWFG as a necessary means to balance power with Hydro Tasmania, but nonetheless were considered to have contributed to contested information, confusion, and the exacerbation of local conflict.

4.4.2.5 Local context is a critical factor, and the conflict legacy remains in King Island

The local context into which the TasWind proposal was announced was critical to the response from the community to the proposal. The abattoir closure, while independent of the TasWind proposal, was consistently presented as the start of the TasWind story. The closure of the abattoir increased the stress and vulnerability of the King Island community (e.g. Oncescu 2015). When the TasWind proposal was announced within the same year, this vulnerability led to the framing of the TasWind proposal both as a potential 'life-raft' for the local economy, and as an attempt by a large corporate entity to capitalise on the Island's misfortune. During the deliberation phase, commitments by Hydro Tasmania to make financial contributions to redevelopment of a local abattoir and expansion of the local port were seen by some as being a responsible gesture to the community, while others viewed this as akin to bribery. Hydro Tasmania also became the naming rights sponsor of the local marathon the 'Imperial 20', leading to the marathon being renamed to the 'Hydro Tasmania Imperial 20'. For those who were opposed to the TasWind proposal, this was seen to be insensitive, and made the TasWind conflict present at an otherwise unrelated important community event. This experience is not unique to the King Island experience; while Soma and Haggett (2015) and Devine-Wright (2011) found that proponent funding of local projects can be viewed as appropriate and responsible, Fast et al. (2016) and Cass et al. (2010) encountered the view among opponents of such actions as being a 'bribe'.

Latent social cleavages became toxic during the time of the TasWind proposal. It is known from the social identity approach that pre-existing social identities will be drawn on in situations when they become meaningful for intergroup relations (Colvin et al. 2015b; Haslam 2000). Those who

opposed the proposal, particularly NTWFG members, were routinely categorised as the ‘blow-ins’ (i.e. residents who had just recently ‘blown in’ to King Island). Prior to the TasWind proposal this term had been used more playfully to describe newcomers. In the TasWind context, ‘blow-ins’ became a pejorative term which carried the connotation that newcomers did not understand King Island the way the ‘true King Islanders’ did. The ‘blow-ins’ label was embraced and redefined by some to mean those who appreciated King Island so much they chose to move there, in distinction from the people with more extensive family histories in the Island. When redefining a stigmatised social identity, if the identity (e.g. ‘blow-in’) is viewed as fixed, creatively changing the connotations of the identity can serve as a means to destigmatise and emphasise positive attributes of the stereotype. Although there was acknowledgement that these stereotypes were inaccurate (e.g. some newcomers were open to the proposal, and some long-term Islanders opposed the proposal), the toxic nature of these stereotypes contributed to division in the community and disguised the complexity of people and opinions from both sides.

Consideration of the local context should not be limited to what came before the TasWind proposal. The events during the time of the proposal influenced nominations for, and who was elected during, the local Council election; for which voting closed the day following the TasWind cessation announcement. In its aftermath, discussion of the TasWind proposal became a local taboo, and this tension carried over to discussion of wind energy more broadly. Some feel that in the aftermath of the TasWind proposal, King Island is a less desirable place for future investment more broadly, and the TasWind proposal has affected local attitudes to local golf-tourism developments. Local institutions were damaged, and interpersonal relationships broken or strained. Effects on the community continue, and while some feel that the relationships are mending, others describe a more subtle and long-term erosion of community cohesion and trust. The ongoing effects may be related to the lack of a formal closure activity for King Island, a factor which was identified by some as conspicuously absent (while the announcement was made at a town hall meeting with involvement of the King Island Council, the cessation announcement was made via an online Hydro Tasmania media release and disseminated through the news media, social media, and social networks). The social identity approach indicates that for the long-term, the community may require reemphasis on a superordinate identity, as King Islanders, which embraces the diversity of views on the TasWind proposal (Colvin et al. 2015b; Fielding and Hornsey 2016; Haslam 2000).

These findings emphasise the need for an understanding of the local context into which wind energy developments, and other land use changes, are proposed (Paveglio et al. 2016; Soma and Haggett 2015). This is both in order to understand how local context and idiosyncrasies will affect the community response to a proposal, and to understand how the *conflict legacy* of such a proposal

will affect the community in the longer term (Colvin et al. 2015b; Paveglio et al. 2016).

Additionally, Hall and Jeanneret (2015) recommend consideration of how the *conflict legacy* of a single issue can affect perceptions of the entire industry. A shift from a project-centric view of community as the project's context to a *community view of the project* as part of the local history is necessary to situate proposals within their local context and reality.

4.5 Conclusions and policy implications

The King Island experience of the TasWind proposal was complex, and this paper cannot claim to present a complete discussion of the multifaceted nature of the local conflict and community engagement process. Nevertheless, the five key findings have significant implications for community engagement in wind energy developments and other land use changes. In particular, these findings are instructive for methodological consideration when designing specific engagement actions. We feel these findings also demonstrate the potential for a local-based perspective to inform evaluation of community engagement, and to provide insight into the level across the spectrum of public participation to which an engagement strategy adheres.

The complications relating to the announcement of the proposal at the pre-feasibility stage emphasise the importance of sound process to manage confounding elements and misaligned perceptions. A community-based consultative committee appeared to have its efficacy undermined due to perceptions about potential bias, which may have been avoided if a third-party facilitator led the committee. A community vote which appeared to be a democratic technique served to further polarise the community, and nuances of process were described as undermining the legitimacy of the vote. An apparent lack of a formal space for the local opposition in decision-making meant that the local opposition group acted outside of the facilitated community engagement process, and this contributed to conflict escalation. An understanding of the local context was found to be critical not just to inform how the proposal would be received, but to appreciate the longer-term impacts of the *conflict legacy*. Achieving this necessitates prioritising a community-centric view of the project ahead of a project-centric view of the community.

These insights were found through use of the social identity approach as a theoretical lens, demonstrating the value of this approach to understanding the complexities of social conflict about environmental and natural resources management issues. These findings can inform future strategies for community engagement processes with the aim of achieving outcomes which are satisfactory both to the proponents of sustainable developments, and to local communities.

The significance of Chapter 4 to the thesis

Chapter 4 answered research question three and found that, yes, aspects of current ENRM stakeholder engagement practice do contribute to the exacerbation of conflict. This was found through examining a case study of community participation which was promoted as ‘best practice’, and through use of the social identity approach as a tool for understanding. Through examining the engagement process from the perspectives of the people who were the subjects of engagement, the engagement process could be understood in terms of its impacts, rather than the intentions behind the engagement strategy. The social identity approach provided a theoretical frame for analysis which focused on how the engagement process and social psychological processes interacted to affect local conflict. This demonstrated the usefulness of the social identity approach for understanding complex social issues.

Five key aspects of process which contributed to exacerbation of dysfunctional conflict were identified. These were:

- inadequate process around early (pre-feasibility) engagement,
- the lack of a third-party facilitator for the community consultative committee,
- the use of a community vote, and the decision to proceed with the proposal despite the vote not achieving its stated benchmark for success,
- a lack of a place in the engagement process for people who felt strongly opposed to the proposal, and
- the need to consider local context, both in terms of how this will affect the process, and how the process will shape the local context into the future.

The reason the community engagement in King Island caused exacerbation of dysfunctional conflict was considered to be an interaction between engagement processes and social psychological processes. For example, it was evident that the community vote contributed to local conflict, but it was an examination of the impacts of the vote using the social identity approach which revealed this was a result of intergroup relationships, polarisation, and forced identification with position-based identity groups.

The findings of this chapter are of high relevance to ENRM engagement practitioners, beyond the context of wind energy development. Insights into these specific aspects of engagement are instructive for practitioners developing community engagement strategies. The value of the social identity approach demonstrates that practitioners with an understanding of the social psychological drivers of conflict will be better equipped to anticipate and avoid processes which may exacerbate dysfunctional conflict.

Chapter 5:

The effect of conflict framing on public perceptions of conflict and support for land use change

5. Conflict in hypothetical news headlines moderates public opinion about land use changes: Supplementary materials

The place of Chapter 5 in the thesis

Chapter 5 aims to address research question 4 through undertaking research objectives g and h.

4. *What impact do conflict and identity have on the way the citizenry engages with land use change?*
 - g. *Test the relationship between ENRM conflict, identity and the citizenry's attitudes toward land use change.*
 - h. *Examine the role of social identity in shaping the citizenry's attitudes.*

Chapter 2 proposed that, when considering ENRM conflict, stakeholders and the citizenry should be considered as separate parts of society. This distinction was reflected in chapter 3, where interviews with practitioners explained that stakeholders and the citizenry are viewed differently in the context of large-scale, contentious land use change issues. The citizenry, then, engages differently with ENRM conflict when compared to stakeholders. Rather than being central to the *culture of conflict*, the citizenry are observers. However, the attitudes of the citizenry, collectively, are considered to be public opinion, which can influence the outcomes of ENRM conflict. Chapter 5 presents a study of how conflict and the usual suspects affect the citizenry's attitudes toward ENRM issues.

The research presented in chapter 5 is based on an experimental survey which was conducted with a large, demographically representative, sample of the Australian population. The survey manipulated the level of conflict framing of twelve land use change scenarios, presenting three conditions of: no conflict; conflict present, and; conflict between the usual suspects present. Between these conditions, comparisons were made between levels of support and opposition, and perception of conflict associated with the land use change. The findings present an understanding of how the citizenry responds to conflict and the usual suspects in ENRM, and have implications for understanding public opinion on contentious ENRM issues. The study shows that there is a complicated interrelationship between conflict, stakeholders, and the citizenry, as was proposed in Chapter 2.

Abstract

Decision-makers use public opinion as an indicator of social acceptance for land use changes. However, public opinion is informed by the media which tends to “frame” issues of public interest in terms of social conflict rather than the substantive details of the issue. Previous research about the influence of conflict on public opinion about politics has yielded contradictory results about the effect of this “conflict framing”. Some studies have shown that conflict framing polarises public opinion while others have found it moderates public opinion. As such, there is no clear understanding of how conflict framing may affect public opinion about the social acceptance of land use changes. In order to address this contradiction in the context of land use change, an experimental survey was conducted with a representative sample of the Australian population ($n = 1,147$). Fictional land use change headlines were manipulated to represent three levels of conflict framing (no conflict; conflict; conflict between identified parties). These fictional headlines were used to measure participants’ levels of support or opposition for the land use change scenarios, and how much conflict they felt was associated with each scenario. In this study, heightened conflict framing led to moderation of public opinion, i.e. the strength of support or opposition for land use changes became weaker with increased conflict framing. The level of conflict participants felt would be caused by each scenario was the most significant predictor of public opinion. There were some small but inconsistent effects of identification with the land use change sectors. Opposition to land use change was predicted by participants perceiving strong conflict associated with the scenario, while support was predicted by perceptions of low conflict. Importantly, the findings show that social conflict can shape public opinion on land use change. As a consequence, public opinion cannot be assumed to be a reliable indicator of genuine social acceptance of land use change in cases where conflict or controversy is pronounced in the media. This raises the need for attentiveness to disentangling the influence of conflict framing from the substantive issues of land use change.

5.1 Introduction

Favourable public opinion is generally considered a necessary prerequisite to achieve policy or political outcomes (Brulle et al. 2012; Zhang and Moffat 2015), particularly as citizens’ perspectives are expected to be incorporated into decision-making (Carpini et al. 2004; Carson 2009; Hartz-Karp et al. 2010; Soma et al. 2016). Public opinion influences decision-makers by demonstrating whether a proposed land use change is considered socially acceptable (Capstick et al. 2015; Druckman et al. 2012; Dunlap 1991; Liu et al. 2014), and can be the cause for significant alteration, including rejection, of proposed land use changes (Lyytimäki and Peltonen 2016). There are legitimate critiques about the limitations of considering the citizenry to be a homogeneous entity

(Lester 2016). Despite this, public opinion is routinely assessed by polling, where the citizenry's sentiment is reported in terms of percent in support for or opposition to a proposal or policy (Boulus and Dowding 2014; Brulle et al. 2012; Capstick et al. 2015; Dunlap 1991).

Public opinion is informed by the news media (Andsager 2000; Boulus and Dowding 2014; Corbett 2015; Lester 2016; Lyytimäki and Peltonen 2016; Neresini and Lorenzet 2016). This is the arena where emergent issues are defined, and understandings of issues are shaped (Boulus and Dowding 2014). The media, however, is not a perfect vehicle for provision of balanced information. In order to encourage audience interest in issues being reported, the media routinely emphasises conflict at the expense of communicating substantive details (Boykoff and Boykoff 2007; Schuck et al. 2016). This practice is “conflict framing”, and is where a conceptual “frame” is placed around the conflict associated with an issue (Brummans et al. 2008). The media then focuses on what is within the “frame”, as a result emphasising conflict and influencing public opinion in such a way that the public's understanding of the issue is shaped by the perception of associated conflict. As an example, a hypothetical news media headline about land use change without conflict framing may be *Protected area proposed next to mineral rich lands*, while viewing the issue through a conflict frame would see the headline as *Miners fight environmentalists' proposal for a protected area next to mineral rich lands*.

Conflict framing by the media generally emphasises interpersonal or intergroup conflict through the use of exemplification (Corbett 2015; Iyengar et al. 2012; Lankester et al. 2015; Levendusky and Malhotra 2016). Exemplification is the use of anecdotes to represent an issue as being polarised between extreme people and groups as opposed to outlining moderate positions and complexity (Levendusky and Malhotra 2016). The media is also known to, at times, display a preference for or against some agendas (Boulus and Dowding 2014) and in this “post-truth” era to increasingly prioritise appeals to emotion ahead of reporting facts (Higgins 2016; Suiter 2016).

Given the role of public opinion in informing land use change decisions, and the fact that public opinion is shaped by the media which routinely adopts conflict framing in reporting, it is important to determine how this conflict framing may affect public opinion on land use change.

5.2 The effect of conflict framing: Polarisation or moderation

While the effect of conflict framing has been studied by political scientists in terms of effects on perceptions of political parties and partisan policy issues, there has been little attention in the environment domain. In the land use change context, some research with US university student samples has provided insight into the effect of conflict framing on attitudes toward land use change (Schroeder 1981; Vining and Schroeder 1989). These studies found that depending on how issues of

resource scarcity and competition were framed, the level of importance participants placed on different land use types changed. For example, Vining and Schroeder (1989) found that when urban nature was framed as being scarce, participants' perceptions of the importance of urban nature increased, while the importance of economic development land uses decreased. Additionally, participants reported higher levels of anger in contexts of conflict. The focus of these studies was the effect of land use goal conflict (e.g. urban nature versus residential development) and scarcity, rather than conflict framing as is being examined in the present study. However, the research discussed above shows that the framing of land use change issues is a salient factor affecting attitudes toward land use changes, at least among US university students.

The political science literature has examined the effect of conflict framing on public opinion on party politics. In this political context, research has shown that conflict framing polarises public opinion when the opinion is about groups (e.g. rival political parties) (Forgette and Morris 2006; Fowler and Gollust 2015; Iyengar et al. 2012; Levendusky and Malhotra 2016; Schuck et al. 2016), though other evidence indicates public opinion about actual policy issues is moderated by conflict framing (Levendusky and Malhotra 2016).

The argument that conflict framing polarises public opinion is based on evidence that shows people with strong political identities respond to conflict by increasing the strength of their identification with their political group and strengthening the vehemence of their dislike for the opposing group. This identity-based perspective of intergroup polarisation is considered by some to be a measure of ideological polarisation (Iyengar et al. 2012), suggesting that policy attitudes would similarly be polarised (e.g. Hoffarth and Hodson 2016).

In contrast, the perspective that sees conflict framing moderate public opinion claims that reports of polarisation about specific issues leads to people making their opinions less extreme on those issues as a way of distancing themselves from the perceived incivility of polarisation (Levendusky and Malhotra 2016). Taken together, these findings from the political science literature indicate that conflict framing may either polarise or moderate public opinion about land use changes depending on whether identity with land use change groups is a salient driver of citizens' attitudes.

The social groups people identify with is known to be predictive of attitudes, especially about politicised issues (Colvin et al. 2015). Climate change is an example of this. Evidence from the fields of environmental and social psychology has shown that the identity groups to which people belong is more important in shaping attitudes toward climate change than receiving information about climate change or interpreting data (Bliuc et al. 2015; Kahan et al. 2012). For example, Unsworth and Fielding (2014) found that raising the salience of political identities for those with a

“right-wing” political ideology led to lower support for government policies to address climate change compared to people with a similar ideology whose political identities were not made salient. Research by Hoffarth and Hodson (2016) found that for people with the same “right-wing” aligned political ideology, a key barrier to support for policies to address climate change was not the policy itself, but instead was the perception that environmentalists, as an identity group advocating for the policy approach, were a threat to the values of “right-wing” aligned people. These research findings highlight the importance of identity in shaping public opinion on climate change.

Climate change, however, differs from land use changes in that climate change is a highly politicised monolithic issue which is routinely debated in the public discourse and has implications for all people across local to international scales (Bakaki and Bernauer 2017; Gillard 2016; Kemp 2017; Mildenerger et al. 2016). In contrast, land use changes are often distinct and localised issues, such as the conversion of undeveloped land to farmland, and while many land use changes become politicised, land use changes generally do not affect all people. Rather, the localised nature of land use change means that only select members of the citizenry will have a specific interest in land use change issues (Colvin et al. 2016a). Unless, that is, the land use change is viewed as one part of broader competing agendas, such as the tension between the agendas of nature conservation and economic development (Coulthard et al. 2011; Kasser et al. 2007; Manfredo et al. 2016). Evidence shows that identity is a significant factor shaping attitudes toward land use change at the local scale. For example, identity groups form around local issues and these identity groups then influence the way the land use change is perceived (Bryan 2008; Colvin et al. 2016b; Mason et al. 2015). However, it is not known if the citizenry more broadly, and therefore public opinion on land use change, is similarly affected by identity as in the case of climate change and politics.

In summary, the literature on the effect of conflict framing suggests two possible but mutually exclusive effects on public opinion about land use change. The first is that identity is important to the citizenry when interpreting land use change issues, and that as a result in cases of conflict framing this identity salience leads to polarisation of public opinion. The second is that identity is not important to the citizenry when interpreting land use change issues, and that as a result in cases of conflict framing the outcome is moderation of public opinion.

This study, therefore, investigates the role of conflict framing and identity on public opinion about land use changes. More specifically, this study examines whether conflict framing and identity have polarising, moderating, or no effects on public opinion about land use changes. The hypotheses for this study are (Figure 5.1):

H₀: Conflict framing, regardless of the role of identity, has no effect on public opinion about land use change. *That is, average support or opposition for a proposed land use change neither increases nor decreases with conflict framing.*

H₁: Identity is an important driver of public opinion on land use change, and conflict framing has a **polarising** effect on public opinion about land use change. *That is, average support for or opposition to a proposed land use change is expected to increase with conflict framing.*

H₂: Identity is not an important driver of public opinion on land use change, and conflict framing has a **moderating** effect on public opinion about land use change. *That is, average support for or opposition to a proposed land use change is expected to decrease with conflict framing.*

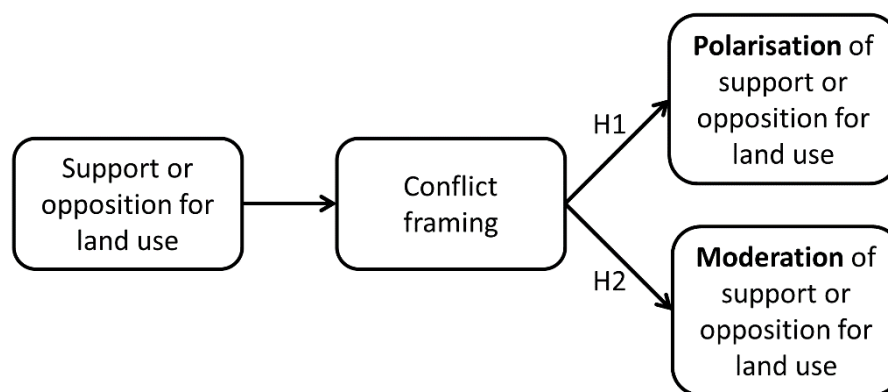


Figure 5.1 Research hypotheses, informed by the polarisation literature.

This research speaks to an important need to understand the relationship between conflict framing in the media and public opinion as a proxy for the social acceptability of land use changes

5.3 Methods

5.3.1 Overview

The study collected data on public opinion (levels of support or opposition) about twelve fictitious land use change proposals from a large, demographically representative sample of the Australian public (n = 1,147). The twelve land use change proposals were across mining, conservation, farming, and fishing. All scenarios were presented in three conditions: no conflict (neutral description), some conflict (conflict framing), and high conflict (conflict framing including the identity of the groups engaged in the conflict). Each participant was randomly allocated to one of the three conditions. To each land use change scenario, participants responded with how much they would support or oppose the land use change proposal (scale of -10 to 10), and how much conflict they felt was associated with the proposal (scale of 0 to 10). The level of identification with the

relevant land use change sectors (miners, environmentalists, farmers, fishers) and the four major Australian political parties (Liberal Party, Labor Party, The Greens, The Nationals) was also measured using a pictorial identity elicitation tool (Schubert and Otten 2002) to assess whether identification with groups would predict polarisation (Iyengar et al. 2012). A measure of decision-making style was included to account for different ways of processing information (Chaiken 1980; Hogg and Vaughan 2010; Petty and Cacioppo 1986), along with general demographic questions (following McCrea et al. 2015). The study design allowed us to examine whether an increase in the level of conflict framing caused polarisation or moderation of public opinion on the proposed land use change scenarios.

5.3.2 Survey instrument

The effect of conflict framing on public opinion was examined through development of an experimental survey. The survey instrument was designed to elicit a range of responses to twelve hypothetical land use change scenarios. The scenarios were brief descriptions simulating a ‘headline’ in the news media. These scenarios included key land use change sectors which are dominant in public debates about land use in Australia (including use of marine environments). To differentiate between ‘some conflict’ and ‘high conflict’ conditions, relevant identities associated with the land use sectors were incorporated: those groups who routinely are engaged in land use change issues, known as the “usual suspects” (Colvin et al. 2016a; Reed et al. 2009). The usual suspects in this study were identified as: mining, farming, conservation, fishing. The inclusion of these usual suspects’ identities was to test if participants who shared a salient identity with one of the usual suspects would be prompted to respond to the fictional headline in a polarised manner. This also served to imitate the practice of ‘exemplification’ (focusing on the extreme *who*, rather than the *what*) in the media.

The twelve scenarios posed each land use as encroaching on, but not displacing, each other land use. The framing of these scenarios was manipulated across three conditions (Table 5.1).

Participants were randomly assigned to one of these three conditions.

- Condition 1 (no conflict) presented the scenarios as a land use project in neutral terms.
- Condition 2 (some conflict) added that the land use project had some degree of conflict.
- Condition 3 (high conflict) included usual suspects’ identities as being the parties in conflict about the land use project.

Phrasing of the scenarios followed a consistent format within each condition. In conditions 2 and 3, terms describing conflict were equally distributed across the land use sectors. The conflict terms

were checked against the Macquarie dictionary and thesaurus (Macquarie Dictionary Online 2016) to avoid use of terms which may infer different meanings across the scenarios.

Participants were told that each scenario was ‘a new proposal or project as reported in the media’. This was to encourage participants to consider the scenarios as ‘real world’ issues, rather than as hypotheticals. At completion of the survey, participants were advised that the scenarios had been created solely for the purposes of the study, and were not real land use change projects. For each scenario, participants were asked to consider the project in the scenario, i.e. the new land use which was encroaching on the pre-existing land use. First, participants’ support or opposition was measured to assess support or opposition for the new land use. This was measured on a 21-point scale with the following values labelled: -10 ‘very strong support’; -1 ‘very mild support’, 0 ‘no stance’, 1 ‘very mild oppose’, 10 ‘very strong oppose’. Participants did not view numbered values; only descriptive labels were included on the scale. The participants’ perceptions of social conflict associated with the project was measured for each scenario. This was recorded on a 10-point scale with ‘No conflict’ at one end (value 1) and ‘Very strong conflict’ at the opposite end (value 10). The following descriptive labels were included on the conflict perception scale: 1 ‘e.g. no signs of displeasure’; 2 ‘e.g. some people are upset, some petitions’; 6 ‘e.g. some people are angry; some protesting; some campaigning’; 10 ‘e.g. some people are **very** angry; much protesting; much campaigning; legal actions’. The survey instrument is reproduced as administered to participants in Appendix G. The ordering of scenarios was randomised.

Table 5.1 Land use change scenario phrasing across the three experimental conditions. Arrow symbol (→) read as ‘encroaching on’.

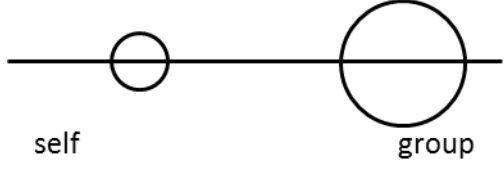
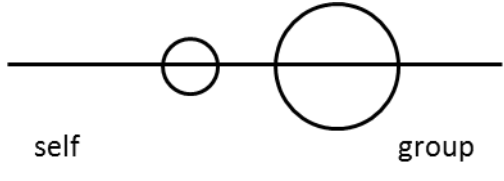
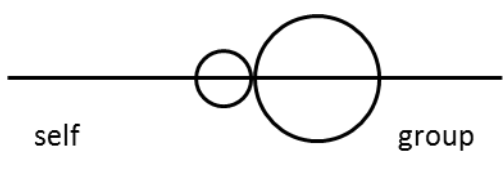
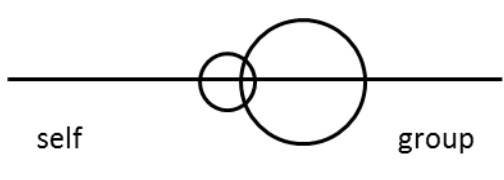
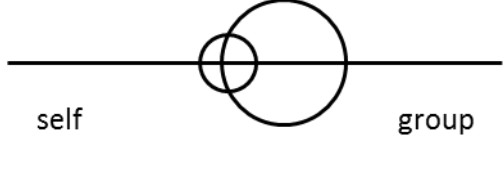
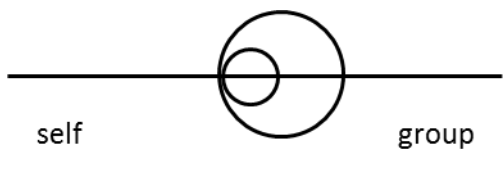
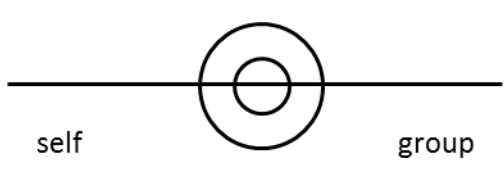
Land use change scenario	Condition 1 (Project only)	Condition 2 (Project + conflict)	Condition 3 (Project + conflict + identities)
1. Mine → farmland	New mine proposed near farmland	Hostility over new mine proposed near farmland	Farmers clash with miners over new mine proposed near farmland
2. Conservation area → farmland	New nature conservation area to be established adjacent to farmland	Conflict about new nature conservation area to be established adjacent to farmland	Farmers battle environmentalists over new nature conservation area to be established adjacent to farmland
3. Fishing zone → farmland	Fishing zone proposed for river next to farmland	Friction as fishing zone proposed for river next to farmland	Farmers fight fishers over fishing zone proposed for river next to farmland
4. Farmland → mining region	New farmland area established near mining region	Dissent about new farmland established near mining region	Miners in conflict with farmers over establishment of new farmland near mining region
5. Protected area → mineral rich lands	Protected area proposed next to mineral rich lands	Friction over protected area proposed next to mineral rich lands	Miners fight environmentalists’ proposal for a protected area next to mineral rich lands
6. Fishing area → mining zone	Fishing area to be established next to mining zone	Conflict about fishing area to be established next to mining zone	Miners battle fishers over establishment of fishing area next to mining zone
7. Farming zone → nature conservation area	New farming zone to be established near nature conservation area	Feud over new farming zone to be established near nature conservation area	Environmentalists in feud with farmers over proposal of new farming zone near nature conservation area
8. Mine → nature reserve	Mine proposed near nature reserve	Confrontation as mine proposed near nature reserve	Environmentalists quarrel with miners about mine proposed near

nature reserve

9. Fishing zone → marine protected area	New fishing zone proposed next to marine protected area	Hostility as new fishing zone proposed next to marine protected area	Environmentalists clash with fishers over new fishing zone proposed next to marine protected area
10. F Farmlands → fishing areas	New farmlands proposed near river with fishing areas	Confrontation about new farmlands proposed near river with fishing areas	Fishers quarrel with farmers about proposal for new farmlands near river with fishing areas
11. Mine → fishing zone	New mine proposed next to fishing zone	Feud over new mine proposed next to fishing zone	Fishers in feud with miners over new mine proposed next to fishing zone
12. Marine protected area → fishing zone	Marine protected area to be created next to fishing zone	Dissent about marine protected area to be created next to fishing zone	Fishers in conflict with environmentalists over marine protected area to be created next to fishing zone

Following appraisal of the scenarios, participants' self-identification with the land use sector groups was measured. This was to assess whether identification with land use sectors would be associated with polarised attitudes toward associated land use changes, and whether this would be affected by conflict framing manipulated across the experimental conditions. The overlap of self, ingroup, and outgroup (OSIO) tool created by Schubert and Otten (2002) was used. This is a pictorial survey tool which presents participants with an identity group name, in response to which they report how close they feel they are to that group (additional parts of the OSIO tool, related to how close groups are considered to be to each other, were not used). This method has been reviewed favourably by Haslam (2000) and Ashmore et al. (Ashmore et al. 2004), and was used by (among others) Leach et al. (2008) to assess self-identification with nationalities. Written descriptions of the relationships represented in the tool were added to improve clarity of this part of the survey (**Error! Reference source not found.**). Participants responded to the OSIO tool for each of the identities associated with the four land use change sectors (miners, farmers, environmentalists, fishers) plus the four major Australian political parties (Liberal Party, The Nationals, Labor Party, The Greens). Identification with political parties was included in addition to the usual suspects of land use change to test whether political identification was also predictive of public opinion, as in the case of climate change (McCrea et al. 2015; Unsworth and Fielding 2014).

Table 5.2 Pictorial measures of the overlap of self, in-group, and out-group (OSIO) tool (Schubert and Otten 2002), with added descriptions of relationships as presented to participants.

OSIO instrument diagram	Explanation to participants
	<p>Relationship “A” shows a person who views their relationship with the group as very distant, where the person is not included in the group and there is a big difference between the person and the group.</p>
	<p>Relationship “B” shows a person who views their relationship with the group as distant, where the person is not included in the group and there is a difference between the person and the group, though not as much of a difference as there is with relationship “A”.</p>
	<p>Relationship “C” shows a person who views their relationship with the group as being separate, but not as distant as relationships “A” and “B”. In Relationship “C”, while the person is not included in the group, the person would not see a big difference between their self and the group.</p>
	<p>Relationship “D” shows a person who views their relationship with the group as close, where the person is partly included in the group, but there are still some points of difference between the person and the group.</p>
	<p>Relationship “E” shows a person who views their relationship with the group as close, where the person is partly included in the group, and more than in relationship “D”, but there are still some minor points of difference between the person and the group.</p>
	<p>Relationship “F” shows a person who views their relationship with the group as very close, seeing their self as completely included in the group, but there are some minor ways in which their sense of self is not the same as their sense of the group.</p>
	<p>Relationship “G” shows a person who views their relationship with the group as very close, seeing their self as completely included in the group, and their sense of self is much the same as their sense of the group.</p>

Participants' decision-making style was measured to assess any influence on scenario measures for support or opposition, or conflict perception. For example, participants with a tendency to trust their gut instinct ahead of seeking more information may be more likely to report a stronger support or opposition or higher perception of conflict (i.e. have a stronger opinion based on their 'gut instinct' when detailed information is not available). This distinction reflects the two pathways through which people respond to messaging, according to the elaboration likelihood model and the heuristic-systematic model (Chaiken 1980; Hogg and Vaughan 2010; Petty and Cacioppo 1986). As such, this measure was included in order to be able to control for differences in results which were due to participants' decision-making style, which would potentially disguise the effects of conflict framing and identity. Participants' decision-making style was measured through participants self-reporting on how they form an opinion on an unfamiliar issue. An 11-point scale was presented to participants, with the following values labelled: 0 'I know I can always trust my gut-instinct when I take a stance on the issue'; 10 'I always seek as much information as I can before I take a stance on the issue'. Numbered values were not included, participants viewed only the descriptive labels.

Demographic type data was collected following McCrea et al. (2015). These included: gender; age; highest level of education completed; income (annual household); state of residence; urban-rural classification (capital city, regional city, regional town, rural property).

The survey was pre-tested twice; initially through one-on-one sessions where the pre-test participant discussed their understanding of the questions while completing a paper version of the survey. This led to significant rephrasing of instructions and questions. The second pre-testing was conducted online and distributed to an undergraduate cohort of students, highlighting important survey design considerations which were incorporated in the final survey.

The finalised survey was administered through a web browser interface by an external research organisation to an online research panel in April 2016. This allowed for a high number of responses ($n = 1,258$) to be gathered in a short amount of time, and while the participants necessarily are those who were self-motivated to become part of an online research panel, this approach allowed us to obtain a sample which is demographically representative of the Australian citizenry (following Kahan et al. 2012). Ethics approval for the research was attained (UQ GPEM number 20160304).

5.3.3 Data analysis

Survey data were analysed using the statistical software R (R Core Team 2015). Data were cleaned to remove responses where a participant indicated the same support or opposition response for seven or more scenarios in sequence, as these responses were considered to be invalid. This removed 111 respondents from the sample.

To address the hypotheses, analyses were conducted to examine the interactions between: conflict framing (i.e. the conditions); participants' identification with the usual suspects; participants' perception of conflict for each land use change scenario; participants' reported support or opposition for the land use change scenarios, and; other attributes such as demographics and decision-making style. Key analytical steps were as follows:

1. Descriptive statistics were conducted *to describe the sample*, and compare the sample demographics with the Australian national population and between conditions.
2. Factor analysis was conducted *to identify factors* among the land use change scenarios based on levels of support and opposition, and to organise data for subsequent analyses.
3. ANOVA (two-way) was conducted to determine whether public opinion was polarised or moderated by conflict framing.
4. ANCOVA was undertaken to examine the *drivers of conflict framing* (conditions) on levels of support and opposition for land use changes.

Descriptive statistics were conducted to summarise the sample in terms of demographics, decision-style, and identification with land use sector groups. ANOVA and chi-squared analyses were used to compare these data with Australian national data, and between sub-samples assigned to each condition to assess for discrepancies. Multiple regression analyses were conducted predicting levels of identification with the land use change usual suspects and political groups based on demographic variables (age, level of education attained, income, gender, location). This was to assess whether identification with these groups was associated with other differences in the participants.

Manipulation checks, using ANOVA, were also conducted to verify whether conflict framing affected support or opposition, conflict perception, decision-making style, and identification with the usual suspects and political parties.

Similarities between land use scenarios in terms of support and opposition were analysed through performing exploratory factor analysis using the maximum likelihood fitting method across all conditions, with Varimax rotation and a factor loadings cutoff of 0.4. Factor analysis identifies similarities between questions or variables, based on patterns in responses from participants (Henson and Roberts 2006). Factor analysis was conducted for all participants (i.e. across all three conditions) on their reported support or opposition for each land use change scenario. The resulting factors underpin the subsequent analyses.

Whether conflict framing led to polarisation or moderation was analysed by following the approach used by Levendusky and Malhotra (2016). This involved transforming all support and opposition values across all factors to absolute values. In this way, rather than being a measure of the strength

of support or opposition, this transformed variable was a measure of the strength of opinion, regardless of whether the opinion was in support of or opposition to the land use change. In this transformed data, a low value indicated mild support or opposition and a high value indicated strong support or opposition, regardless of whether this was in support or opposition of the land use change. These transformed data were analysed for differences using a two-way ANOVA design which used the factors as control ‘blocks’ to examine differences between conditions. This test partially addressed the hypotheses, though did not examine the role of identity.

To examine underlying drivers of the observed effect of conflict framing (conditions) on support or opposition for land use changes, ANCOVA was conducted. The ANCOVA model was conducted for each factor with levels of identification with the factor’s associated usual suspect (i.e. land use changes to mining were analysed with the strength of identification with miners). The model incorporated support or opposition as the dependent variable with conflict framing (conditions) as a categorical predictor, three covariate predictors (conflict perception, identification with the usual suspects, decision-making style), as well as interactions between conflict framings and the covariates.

5.4 Results

The results showed that increased conflict framing led to moderation of public opinion toward land use change, and that identity is not an important factor influencing public opinion (the collective attitudes of the citizenry) about land use change. The most significant driver of levels of support for and opposition to land use change is the level of conflict perceived to be associated with the land use change. These findings are outlined in below, and detail on the results can be found in Appendix H.

5.4.1 Sample summary

A total of 1,258 participants completed the survey of which 1,147 provided valid responses and were included in the analysis. The mean age was 46 years, and 51% were female. Demographics of the sample reflected national patterns, however the survey sample contained more people with high levels of educational attainment compared to the Australian population. In the sample, there were fewer people with an annual household income of greater than \$150,000, although, 14% of participants chose to not declare their income.

The majority of participants described their approach to decision-making as being closer to a ‘seek more information’ style as than a ‘trusting gut instinct’ style (mean = 6.39 (± 0.14); difference from neutral value of 5 = $p < 0.001$).

Participants' levels of identification with the usual suspects and political parties were measured. For all identities, the majority of participants identified as being not similar to the group identity. Farmers was the land use change sector identity with which participant identification was highest, while Miners was the lowest. For the political parties all were rated lower than all the land use change identities aside from Miners, and there were no significant differences between levels of identification between The Labor Party, The Liberal Party and The Greens. The Nationals, however, was lower than the three other political parties.

Participants were randomly allocated to one of the three conditions (condition 1 (no conflict) $n = 389$; condition 2 (some conflict) $n = 380$; condition 3 (high conflict) $n = 378$). All demographics, decision style, and strength of identifications did not differ significantly between each condition, reflecting the random allocation of participants to each condition.

Manipulation checks (ANOVA) were performed to assess the effect of conflict framing (conditions) on conflict perception, identification with the usual suspects, decision-making style, and levels of support or opposition. Conflict framing (conditions) was found to affect conflict perception ($p = 0.02$) and support or opposition ($p < 0.001$). Refer to Appendix H for a more detailed description of the sample.

5.4.2 Factors: organising scenarios based on similarities in responses to land use change scenarios

Factor analysis was conducted on the level of support or opposition for all scenarios of land use change. A four-factor solution was selected as the best option following the Kaiser's (1960) criterion that all retained factor eigenvalues are > 1 (Girden and Kabacoff 2010), and supported by the scree test (Yong and Pearce 2013). This explained 52% of variation in the data. Bartlett's sphericity test was found to be significant ($p < 0.001$) and the Kaiser-Meyer-Olkin's (KMO) sampling adequacy test returned 0.085, above the cut off of 0.5 (Yong and Pearce 2013). These findings support the use of the exploratory factor analysis, and indicate the factors are a meaningful reduction of the data from the twelve land use scenarios to four land use factors.

Scenarios were grouped into factors based on overall best fit. Rather than omitting from analysis the scenarios with loadings on multiple factors (scenarios 3 and 9), these scenarios were grouped into factors which minimised the standard deviation of within-factor loadings and supported the theoretical logic (this method was used due to similar loadings across factors and as an alternative to dropping factors as only 12 items are included in the analysis (Costello and Osborne 2005)).

Factors showed a clear pattern of grouping the scenarios based on the major land use sectors (mining, nature conservation, and food (farming and fishing)) (**Table 5.3**). All three scenarios

where mining was the proposed new land use were grouped in factor 1, all three conservation scenarios under factor 2, and factors 3 and 4 had a mix of the food production scenarios (farming and fishing). Factor 3 included the food scenarios only when not encroaching on land associated with mining. Factor 4 included the food scenarios which were encroaching on land associated with mining.

Table 5.3 Factor loadings (greater than 0.4) for stance on each statement.

	Factor 1	Factor 2	Factor 3	Factor 4
s1: Mine -> farmland	0.76			
s8: Mine -> nature reserve	0.75			
s11: Mine -> Fishing zone	0.79			
s2: Nature conservation area -> farmland		0.69		
s5: Protected area -> mineral rich lands		0.54		
s12: Marine protected area -> fishing zone		0.59		
s7: Farming zone -> nature conservation area			0.71	
s10: Farmlands -> fishing areas			0.58	
s3: Fishing zone -> farmland		0.41	0.41	
s9: Fishing zone -> marine protected area	0.44		0.43	
s4: Farmland area -> mining region				0.65
s6: Fishing area -> mining zone				0.62

Note: Scenarios 3 and 9 loaded on multiple factors, but were included in the factors which minimised inter-factor variance. Loadings on the non-inclusive factors for scenarios 3 and 9 are shown in greyscale.

5.4.3 Effect of conflict framing: polarising or moderating

A two-way ANOVA was performed on the transformed data which provided a measure of the extremity of opinion, regardless of whether the opinion was in support for or opposition to the proposed land use changes, following the technique used by Levendusky and Malhotra (2016). The ANOVA showed that conflict framing moderated public opinion ($p < 0.001$), such that the strength of opinion was greatest in the no conflict condition, and lower with the addition of conflict framing (Figure 5.2). This was consistent across all factors, however in the case of factor 2 (conservation) and factor 4 (food near mining), there was no significant difference between the extremity of opinion in the some conflict and high conflict conditions, as was observed for factors 1 (mining) and 3 (food not near mining).

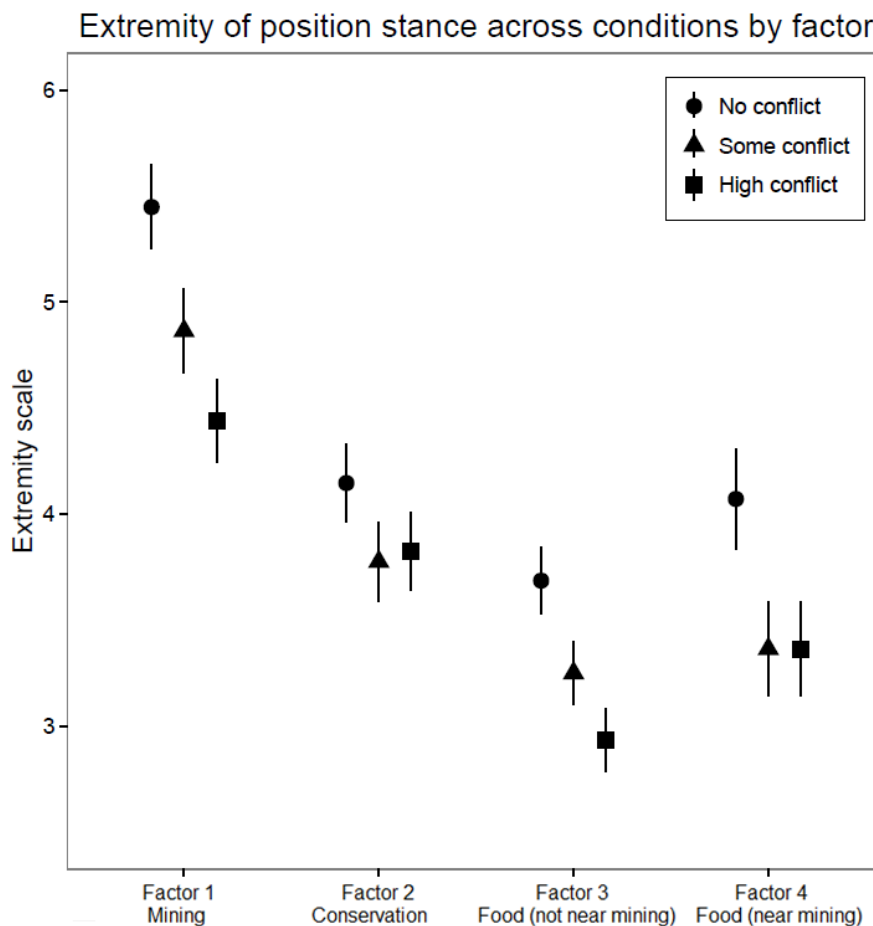


Figure 5.2 Extremity of opinion, regardless of whether it is support or opposition, across factors. No stance = 0; very strong stance = 10. Y axis shows only a portion of the range of possible y values.

These results show that in this study, conflict framing has a moderating, not polarising, effect on the strength of support or opposition for land uses. As such, the null hypothesis and hypothesis 1 are both rejected and hypothesis 2 is accepted.

5.4.4 Drivers of the moderation effect of conflict framing on support and opposition for land use changes

To examine the drivers of this moderating effect of conflict framing on public opinion, ANCOVA was performed which identified participants' perception of conflict (i.e. the strength of conflict participants felt was associated with each scenario, as distinct from conflict framing which was manipulated across the experimental conditions) as the most significant predictor of levels of support or opposition to the land use changes (**Error! Reference source not found.**; full ANCOVA results are in Appendix H). Both conflict framing (conditions) and conflict perception consistently showed significant main effects on levels of support or opposition.

Table 5.4 Effect sizes (η^2) and significance of main effects and interaction effects of ANCOVA predicting support or opposition to land use changes (position stance) across all factors.

Variable	Factor 1	Factor 2	Factor 3		Factor 4	
	(mining) Miners	(conservation) Environmentalists	(food not near mining) Farmers	(food not near mining) Fishers	(food near mining) Farmers	(food near mining) Fishers
Condition	.0613***	.0186***	.0044***	.0044***	.0027**	.0027**
Control variables						
Perceived conflict	.2766***	.2333***	.3166***	.3180***	.3563***	.3565***
Identification	.0204***	.0113***	.0039***	.0005	.0000	.0000
Decision style	.0009*	.0002	.0005	.0005	.0007	.0007
Interactions						
Conflict framing x perceived conflict	.0108***	.0049***	.0204***	.0209***	.0205***	.0203***
Conflict framing x Identification	.0025**	.0007	.0010*	.0007	.0000	.0016
Conflict framing x decision style	.0003	.0014*	.0010*	.0010*	.0011	.0010

*Note: Identification is with the usual suspect associated with the encroaching land use for each factor (listed in column heading). Asterisks indicate a statistically significant main or interaction effect: *** $p < 0.001$; ** $p < 0.01$, * $p < 0.05$.*

The strength of conflict perceived to be associated with each land use change was consistently a significant predictor of whether participants supported or opposed the land use change scenarios. A high level of perceived conflict was associated with stronger opposition while a low level of perceived conflict was associated with stronger support. The effect size of conflict perception, across all factors, showed that this predictive relationship explained between 23.3% and 35.6% of the variation in the data, and was the most significant predictor in the ANCOVA model.

Significant but small interaction effects were consistently found between conflict framing and perceived conflict (Figure 5.3). The linear relationship between conflict perception and support or opposition was weakened by conflict framing (i.e. the gradient of the linear model was most steep with low conflict framing). This shows that the effect of conflict perception as a predictor for support or opposition for land use change is weakened by conflict framing. This is to be expected, as the experimentally manipulated conflict framing would make it less feasible for strong supporters to perceive low conflict associated with an issue where the presence of conflict was included in the fictional headline. As a result, the linear relationship between perceived conflict and support or opposition is weakened by increased conflict framing.

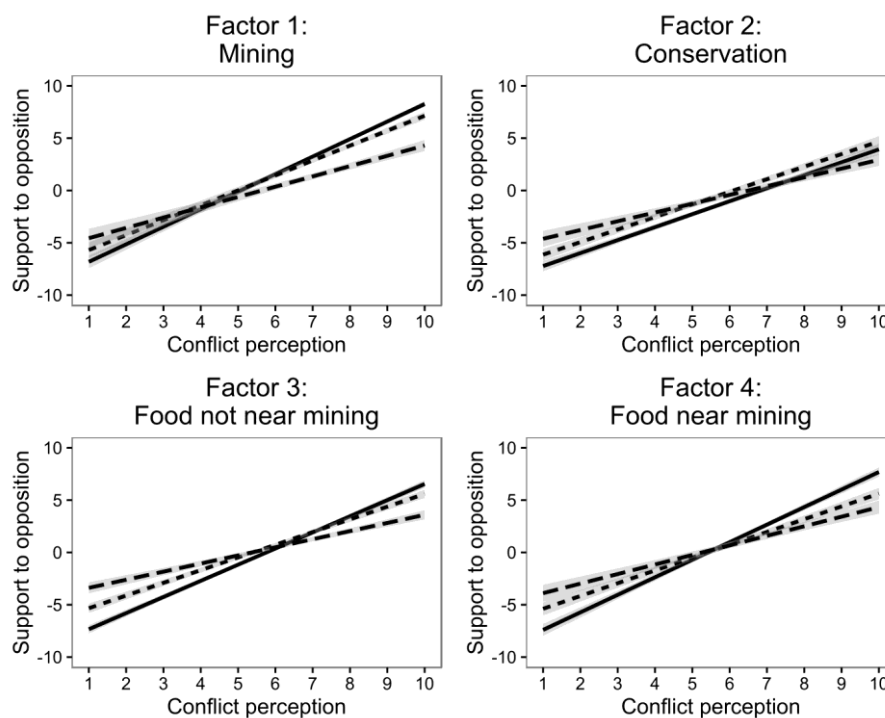


Figure 5.3 Interaction plots showing the main and interaction effects of conflict perception and conflict framing (conditions) on support or opposition (support or opposition) for land use changes across all four factors. Plots generated using regression models. Shaded areas indicate 95% confidence interval.

Identification with the usual suspects had a significant main effect for factors 1 (mining) and 2 (conservation), and factor 3 (food not near mining) with farmers. The correlation between identification and support or opposition was negative, meaning that as strength of identification with the usual suspects increased, support or opposition tended toward support and away from opposition. However, the effect size of identification with the usual suspects was small, explaining between 0% and 2% of total variation in the data. This supports the decision to reject hypothesis 1 and accept hypothesis 2.

Decision-making style had a significant main effect only for factor 1 (mining). Stronger opposition to mining was predicted by a decision-making style which aligned with seeking more information, while stronger support for mining was predicted by a decision-making style which reported to depend more on trusting gut instinct. However, the effect size was small, explaining less than 0.1% of the variation in the data.

Some significant interactions were found between conflict framing (conditions) with identification and decision-making style, though these were not consistent across all factors (Table 5.4 and see Appendix H).

In summary, the main effects of conflict framing, identification and decision-making style were small, while the main effect of conflict perception was large. These results show that the level of perceived conflict associated with a land use change is the main predictor of levels of support or opposition for that land use change, though this predictive relationship is weakened by conflict framing (conditions). Conflict framing also has a main effect which moderates support or opposition. Thus conflict framing has small direct and interaction effects on public opinion. Identification with the usual suspects and decision-making style can, in some instances, predict support or opposition, though the effect is small and not consistent for all factors.

Additional analyses on the effect of conflict framing (conditions) on both support or opposition and conflict perception are included in Appendix H.

5.4.5 The effect of conflict framing on perceived conflict

Curiously, the manipulations to the level of conflict framing did not yield consistent corresponding changes to the level of perceived conflict reported by participants. It was expected that as the level of conflict framing was increased, the level of conflict perceived to be associated with each land use change too would increase. This was the case for the conservation and food factors (though factor 4 (food near mining) was variable), however the relationship between increased conflict framing and strength of conflict perceived to be associated with land use change was inverse for the mining factor (Figure 5.4). In the case of land use change to mining, highest perceived conflict was felt in

the condition with no conflict framing, and perceived conflict decreased with increased conflict framing.

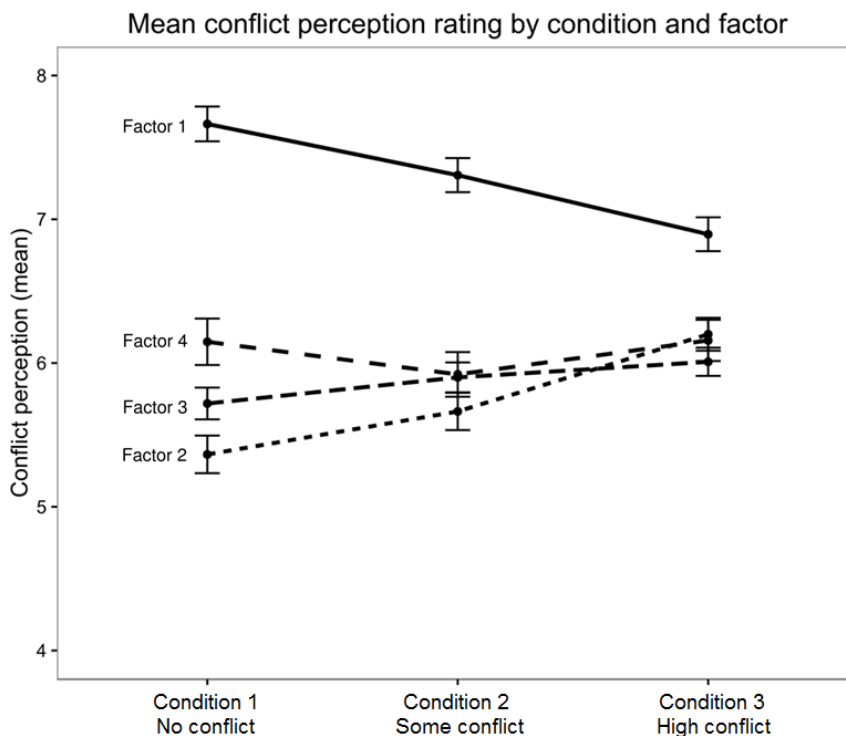


Figure 5.4 Mean conflict perception ratings for each scenario between conditions, sorted by factor. The conflict perception scale ranged from 1 (no conflict) to 10 (very strong conflict). Y axis shows only a portion of the range of possible y values.

5.4.6 Insights into general public opinion on land use changes

The results also provided insight into general public opinion on land use changes to different land use types (Figure 5.5). Using the no conflict condition results as a baseline, this study found that conservation as a new land use received the most support, while mining as a new land use received the most opposition. The food factors were closer to neutral. As a result of the moderating effect of conflict framing, as conflict framing increased, the overall support for conservation was reduced closer to neutral levels, as was the overall opposition to mining. While in the no conflict framing condition ANOVA showed there were clear differences between the mean rating of support or opposition (all factors significantly different at $\alpha = 0.001$), by the high conflict framing condition (conflict between identified parties) these differences were significantly reduced (only one factor, conservation, remained significantly different from all other factors at $\alpha = 0.001$).

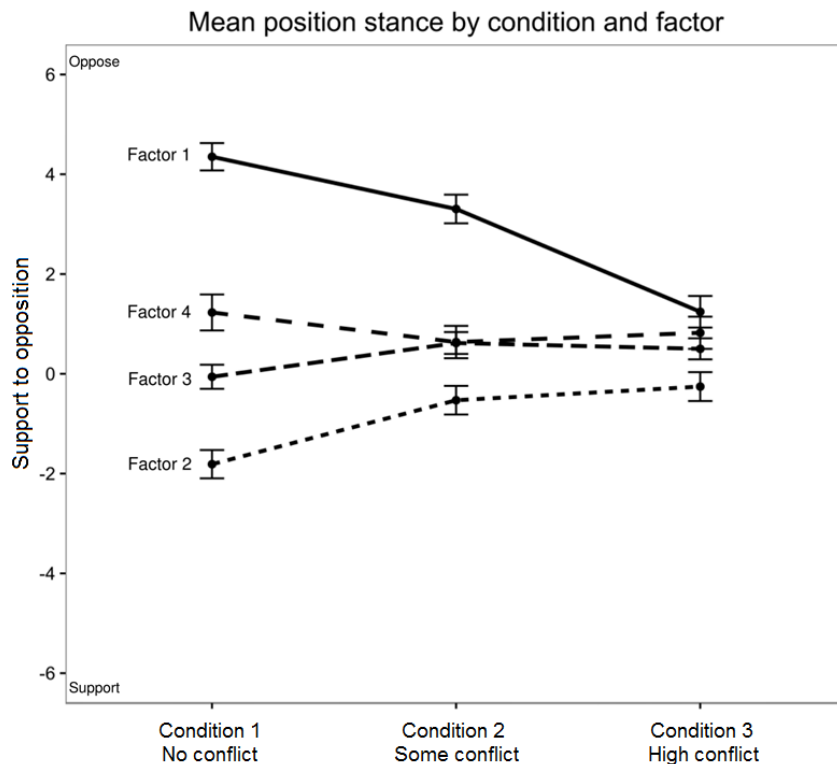


Figure 5.5 Mean support or opposition for each scenario across conditions, by factor. The support or opposition scale ranged from -10 (very strong support) to 10 (very strong oppose). Y axis shows only a portion of the range of possible y values.

5.5 Discussion

The study in this chapter examined whether conflict framing and identity affected public opinion on land use changes, and sought to answer whether conflict framing caused polarisation or moderation of the citizenry's attitudes. The results support the second hypothesis (H_2); identity is not a salient factor influencing public opinion, and conflict framing moderates the views of the citizenry. This key finding, and other results, are discussed in this section.

The political polarisation literature indicated that members of the citizenry may themselves become polarised (Iyengar et al. 2012), or more moderate (Levendusky and Malhotra 2016), when encountering a polarised issue. This research found that conflict framing did not lead to polarisation of the citizenry, even when the strength of identification with the usual suspects was incorporated into the analysis. Rather, increasing conflict framing affected public opinion by moderating opinion toward 'no stance'. This reflects the findings of Levendusky and Malhotra (2016) but is at odds with those of Iyengar et al. (2012). According to the results, identification with key land use sector identity groups is not a key driver of public opinion. This shows that unlike politics and controversial environmental issues such as climate change, land use changes are not politicised to the point where identity-based dislike for opposing groups promotes polarised attitudes toward the

actual land use change issues. This is a positive finding for those who work in the management of land use change.

The fact that the moderation effect continues from the some conflict condition (2) to the high conflict condition (3) shows that including the identities of the land use change usual suspects enhanced the effect of conflict framing. This means that although strength of identification with land use sector groups was not a significant factor influencing public opinion, including the identities of key groups involved in conflict makes the effect of the conflict greater than when the conflict is described without including identities. Priming participants with the identities of the usual suspects was likely to have contributed to the moderation effect by increasing anger with those considered responsible for the conflict (Levendusky and Malhotra 2016; Vining and Schroeder 1989) or triggering negative associations with those identity groups (e.g. Hoffarth and Hodson 2016; Iyengar et al. 2012).

Significantly for decision-makers, the present research shows that in issues which are presented by the media as being high in conflict and controversy, a simplistic measure of public opinion, such as opinion polling, cannot be considered an accurate indicator of the genuine social acceptance of land use changes. To demonstrate, a land use change proposal to conservation which enjoyed support when it was not conflict framed had significantly lower levels of support when it was conflict framed. Meanwhile, a land use proposal to mining which was largely opposed when it was not conflict framed had lower levels of opposition when it was. This raises the importance of the need for awareness of the messaging around land use changes to consider how public opinion may be – intentionally or unintentionally – manipulated.

The perceived level of conflict associated with each land use change was the main driver of whether the land use change was supported or opposed, with higher levels of perceived conflict predicting higher levels of opposition. In the cases of mining and conservation where the most pronounced results were observed, conflict framing served to influence the perception of conflict associated with the land use changes, which in turn led to effects on the levels of support or opposition (Figure 5.6).

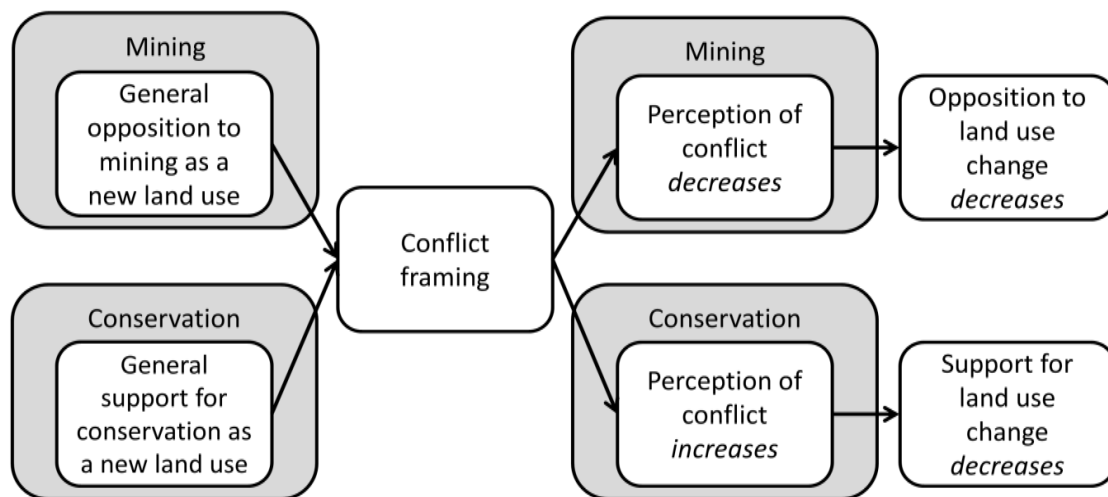


Figure 5.6 The effect of conflict framing and conflict perception on levels of support and opposition for conservation and mining.

The finding that conflict framing, via conflict perception, affects public opinion on land use change has significant implications. If decision-makers take public opinion into account when deliberating on a land use change, opponents of conservation and proponents of mining have the ability to manipulate social conflict as a way to promote their desired land use change outcome. Opponents of a land use change to conservation could potentially promote social conflict in order to shift public opinion away from support for the land use change. Similarly, proponents of a land use change to mining could use social conflict to shift public opinion toward support for a land use change to mining. If powerful land use changes stakeholders, such as proponents or advocates, are found to manipulate public opinion on land use change through affecting social conflict in this way, it will be critical for decision-makers to understand the impact of social conflict. In particular, decision-makers will need to be aware of the potential for situations of disingenuous social conflict which reflect manipulative politicking rather than real social attitudes and concerns. These findings emphasise the importance of a responsible approach to engaging with social conflict and public opinion associated with land use change.

Whether a land use change was supported or opposed had a strong relationship with conflict perception, and this association was most significant in condition 1 (no conflict). It was found that low perceptions of conflict predicted stronger levels of support for a land use change, while high perceptions of conflict predicted stronger levels of opposition for the land use change. This is a significant finding because it shows that there is a mismatch between supporters' and opponents' perceptions about the social acceptability of a land use, as indicated by their perceptions of social conflict. This result can be understood as reflecting the false consensus effect, where people have a tendency to overestimate how many others share their view (Mannarini et al. 2015). In the context

of this study, the false consensus effect affects perceptions of those who support a land use change by making them expect that the vast majority of the citizenry will have a similar perspective, so the land use change will proceed with little controversy. The false consensus effect affects opponents' perceptions similarly in that opponents will expect many others will share their view, indicating to the opponents that social conflict would be associated with implementation of the land use change. In the case of this instance of the false consensus effect being reflected by those in positions of power (e.g. government departments, resource companies, environmental non-governmental organisations), the mismatch between conflict perceptions highlights an important consideration for decision-makers. If proponents envisage low conflict on an issue which stirs significant opposition within the citizenry, then expectations about public opinion – and planning based around these expectations – are likely to be inaccurate.

Unexpectedly, conflict perception did not increase uniformly with increased conflict framing. As the experimental design increased the level of conflict framing from condition 1, no conflict, through to condition 3, high conflict, it was expected that conflict perception would follow suit. The conservation factor reflected the expectation and the food factors were more variable showing some deviations from the expectation, but overall an increase in conflict perception from condition 1 to condition 3 (even if only marginal for factor 4 (food near mining)). However, the expectation for increasing conflict perception as conflict framing was increased was not reflected by the mining factor. Instead, the mining factor showed the opposite trend. Conflict perception was highest in the no conflict condition and decreased through condition 2 (some conflict) to its lowest value in condition 3 (high conflict). Compared to the other land uses, mining (factor 1) had the overall highest conflict perception, indicating the citizenry's view that a land use change to mining is inherently accompanied by high conflict. Conflict framing, in the case of mining, served to lower perceptions of conflict. Controversy about mining is not uncommon in the public discourse (Boulus and Dowding 2014; Zhang and Moffat 2015), and conflict, generally, is known to be overstated by powerful stakeholders and the news media (Campbell and Veríssimo 2015; Schuck et al. 2016). This means that for development of a new mine, it is likely that the citizenry will reflect on past knowledge of, and familiarity with, similar conflicts (e.g. Owens 1985) to identify the land use change as being high in conflict. However, conflict framing from the media will then cause the citizenry to become cynical about the 'true' level of conflict, leading to the citizenry adjusting their views and lowering their perception of conflict associated with the issue.

This study adopted vague phrasing which provided little insight into the nature of the land use change: mines may have been for thermal coal or rare earth elements; fishing zones may have been recreational or commercial. Despite this, across all scenarios and conditions, the greatest proportion

of participants who selected 'no stance' was 37% (scenario 3, condition 3). This shows that some in the citizenry will develop opinions based on minimal information, such as would be read in a headline from the news media, and this brief evaluation of information contributes to the formation of public opinion.

5.6 Implications and conclusions

This study found that conflict framing moderates public opinion about land use change issues, and identity was not a key driver of public opinion. Specifically, conflict framing lowered general opposition to mining, and lowered general support for conservation. Support and opposition are predicted by levels of perceived conflict, however, the effect of conflict framing on conflict perception, too, is variable.

The study design used three independent sub-samples to test the experimental conditions (i.e. each participant was assigned to one condition only for the entirety of the study). Further research is required to examine the effect of conflict framing in terms of how an individual's stated support or opposition on land use change issues is affected by conflict framing (i.e. administering all conditions to each participant, and examining change). This would provide insight into the types of people who are likely to be those affected most by conflict framing. Additionally, future research may be focused just on mining and conservation, as these were the land uses which showed most clearly the impacts of conflict framing, or may extend to other more polarised environmental issues such as climate change. It is possible that the present study was insufficient in making land use change identities salient enough to be a driver of public opinion. Further research is encouraged which challenges the finding about the role of identity, for example through priming identity before evaluating the effects of conflict framing on public opinion.

These findings are significant for the management of land use changes. It is important to incorporate the citizenry's voices into decision making, however, as the citizenry are informed about land use change by the news media, conflict framing shifts public opinion away from the social preferences that would be reported in a more neutral context. This means that for decision-makers, expectations about the nature of public opinion based solely on expected support or opposition for land uses need to be modified to incorporate the influence of conflict. Additionally, polling or surveys of the citizenry which may be expected to provide authoritative insight into public opinion ought to be interpreted with awareness of the role of conflict in land use change decision-making. Based on this understanding of the effect of conflict framing, decision-makers can monitor the discourse in the news media to more accurately anticipate the vicissitudes of public opinion on land use change.

The significance of Chapter 5 to the thesis

The research has answered research question four, and found that conflict framing affects public opinion by moderating the attitudes of the citizenry. Both research objectives were met. The relationship between ENRM conflict, identity, and the citizenry's attitudes toward land use changes was found to be complex. Whether the citizenry identified with one of the usual suspects was not a significant predictor of support or opposition to an associated land use change, though there were some inconsistent, very small effects which were tempered by conflict framing. This suggests that the role of social identity may be significant less salient in terms of how the citizenry engages with ENRM issues, compared to stakeholders (as discussed in Chapter 4).

The main effect shaping levels of support or opposition to land use change was conflict perception. High perceived conflict was associated with strong opposition, while low perceived conflict was associated with strong support. However, conflict framing tempered this relationship. This saw support for conservation in a non-conflict framed condition shift closer to opposition in the conflict framed conditions, and opposition to mining in a non-conflict framed condition shift closer to support in the conflict framed conditions. Of interest is that for mining, increasing the conflict framing lead to the citizenry reporting lower levels of perceived conflict. This indicates the citizenry may be fatigued by conflict between the usual suspects on an issue such as mining, which is considered to be very contentious.

Social identity was not found to be a significant variable affecting levels of support or opposition to land use change, though it may be that the nature of the scenarios and the identity measurement were not sufficient to elicit an identity-driven response. In Chapter 4, position-based identities ("yes camp" and "no camp") and locally relevant identities ("blow-ins" and "real King Islanders") were the influential identities. These identities were meaningful to the people involved, and relevant to the issue at hand. While the results of the study in chapter 5 indicate that prior identification with the usual suspects does not directly shape levels of support and opposition to land use change, it may be that a real-world experience with ENRM conflict (e.g. through viewing the conflict in the news media and social media, reflecting, and discussing) is needed to elicit this response, rather than an experimental survey. Assuming the experiment yielded results reflective of the (lack of a) role of the social identity approach in the way the citizenry engages with ENRM, the results indicate that social identity is not a key driver shaping attitudes toward land use changes. Nevertheless, the research has shown a significant relationship between the *culture of conflict*, the usual suspects, and the citizenry's attitudes toward ENRM conflict.

The findings of this chapter emphasise the claims made in chapter 2; that ENRM conflict ought to be viewed as an interconnected system between conflict, stakeholders, the citizenry, and governance. This chapter has shown that the *culture of conflict* in ENRM affects the attitudes of the citizenry, particularly through the anti-cue effect, where public opinion shifts away from strong position stances when conflict is present. Including the usual suspects in conflict framing was seen to enhance the level of perceived conflict (in all land uses except for mining), reflecting that repeated engagement of the usual suspects contributes to dysfunctional ENRM conflict.

Chapter 6: Conclusions

6. Chapter 6: Conclusions

This chapter brings together the major contributions of this thesis and summarises how the research questions and overall aims of the thesis were addressed. Naturally, there are limitations to all research and these are also explicitly addressed in this concluding chapter. The body of work, drawing on various lines of investigation from developing a conceptual model through to empirical qualitative and quantitative research has answered several questions. However, as is often the case, the research suggests avenues for future productive research to improve engagement and alleviating dysfunctional conflict land use change and ENRM more broadly. The chapter therefore concludes with consideration for further research.

6.1 Main findings

This thesis examined the how the practice of stakeholder engagement contributes to the problem of ENRM conflict. The research was situated in the context of land use change in Australia, and used the social identity approach as a theoretical lens for the research. The thesis makes a significant contribution to the understanding of the human dimension of ENRM through taking an interdisciplinary, integrative, and multiple methods, approach to the enquiry. As a result, new ways of understanding theory have been developed, and recommendations for improving practice have been made. Key outcomes for each research question are provided below.

Research question 1

How can conflict in ENRM be understood in a way to facilitate understanding and effective management which contributes to de-escalation of dysfunctional conflict?

The first research question directed research toward developing new ways to understand ENRM conflict as a cycle, with a focus on intergroup relationships and identity, in order to improve management and de-escalate dysfunctional conflict (Chapter 2, published in *Global Environmental Change*). Although conflict is recognised as a major challenge for ENRM, there had not been an integrative model which outlined the relationships between decision-making processes, stakeholders, and the citizenry. Research question 1 addressed this gap through integrating theories across a range of disciplines into a conceptual model of ENRM conflict. The nuances of conflict – the role of intergroup relationships and identity – were examined through applying theoretical insights from the social identity approach to the model.

Key outcome 1: The first integrative model of ENRM conflict has been developed, incorporating perspectives from a range of disciplines. Significantly, viewing conflicts as episodes within a conflict cycle highlights the importance of the *legacy of conflict* in how people engage with ENRM

conflict. This provides a new framework for viewing ENRM conflict which emphasises interconnections between conflict episodes.

Key outcome 2: The social identity approach was used as a way to understand the social dynamics driving the *culture of conflict* in ENRM. The fit of the theoretical approach demonstrated the value of the social identity approach to understanding ENRM conflict. Through applying the approach to the conceptual model, the research offers guidance to practitioners and academics for incorporating these insights into their research and practice related to ENRM issues.

Key outcome 3: Based on what the social identity approach reveals about ENRM conflict, potential strategies for alleviating dysfunctional conflict have been proposed. These include adopting collaborative approaches to decision-making in ENRM, and seeking to develop overarching (superordinate) identities which provide a common ground for conciliation between stakeholders found to be in conflict with one another.

Research question 2

How do ENRM engagement practitioners understand the essentially contested concept 'stakeholder'?

Research question 2 sought to address a gap in the stakeholder analysis and engagement literature about the approaches taken to identify stakeholders (Chapter 3, published in *Land Use Policy*). The participation of stakeholders is accepted as critical for effective ENRM practice, and there is thorough guidance on processes for analysis and engagement. However, the literature did not provide specification on the approaches taken to identify stakeholders. Through answering research question 2, this gap in the literature was addressed. To do so, interviews were conducted with ENRM engagement practitioners, and their approaches to identification of stakeholders were categorised into a typology.

Key outcome 1: Identification of ENRM stakeholders was found to be conducted through eight key approaches. These approaches were categorised as the *art* and *science* of stakeholder identification, reflecting the level of intuition or formal process underlying the approaches.

Key outcome 2: Practitioners' understandings of 'stakeholder' reflect an essentially contested concept, as the term carried two similar, but distinct, meanings. Stakeholder status, a concept drawn from the business management literature, was proposed to address this disparity in ENRM engagement.

Key outcome 3: The research emphasised the privileged position of the ENRM engagement researcher or practitioner in determining who is considered a stakeholder, and therefore who has a voice in ENRM issues. This demonstrates the importance of explicating how stakeholders are identified.

Key outcome 4: Differences in the way stakeholders, community, and the citizenry were conceptualised by practitioners from different domains of ENRM were identified. These differences were discussed, and clarification was offered as to which of the ENRM contexts these different understandings apply.

Research question 3

Do aspects of current ENRM stakeholder engagement practice contribute to the exacerbation of conflict?

The third research question necessitated an in-depth study of inter-stakeholder relationships in an episode of ENRM conflict (Chapter 4, published in *Energy Policy*). Through doing this, the contribution of ENRM engagement practice to conflict was examined, and the social identity approach was applied as a means for understanding the underlying drivers of the conflict. This offered a locally-situated understanding of the ENRM conflict, and provided insights into the way ENRM engagement practices, which were expected to alleviate conflict, instead contributed to the exacerbation of conflict. Interviews were conducted with members of the King Island community in order to understand their perspectives on the social conflict experienced during the time of a large-scale wind energy proposal.

Key outcome 1: Specific aspects of ENRM engagement process which contributed to the exacerbation of conflict were identified. These included: problems with pre-feasibility engagement; the lack of a third-party facilitator for the community consultative committee; the use of a community vote; not providing a space in the engagement process for strong opposition, and; the interaction of local context and ENRM engagement process.

Key outcome 2: The discussion of identified problems in the King Island study provides direction for improvement to the practice of ENRM engagement in order to alleviate dysfunctional conflict.

Key outcome 3: The social identity approach was found to be a valuable tool for understanding why these aspects of process contributed to exacerbation of conflict. This was demonstrated through application of theoretical insights from the social identity approach to local events as described by interview participants.

Research question 4

What impact do conflict and identity have on the way the citizenry engages with land use change?

The final research question shifted focus from formalised processes of ENRM engagement to citizens' attitudes toward ENRM (Chapter 5). The research for this final data chapter explored whether the *culture of conflict* and the identities of the usual suspects affected the way the citizenry engages with ENRM issues, using examples of land use change. Public opinion – an estimate of the average of citizens' attitudes – is considered important for determining the social acceptability of land use change. However, it is not known whether the *culture of conflict* of ENRM affects the attitudes of the citizenry toward land use change. Research question 4 sought to address this gap in the literature, and did so through the use of an experimental survey, which manipulated the degree of conflict framing associated with land use change issues, conducted with a demographically representative sample of the Australian population.

Key outcome 1: The *culture of conflict* was found to affect the citizenry's attitudes toward land use changes, though the nature of the effect was complex.

Key outcome 2: In situations of low conflict, public opinion generally opposes new mines. However, when the *culture of conflict* in ENRM is emphasised, public opinion shifts toward support. Conversely, in situations of low conflict, public opinion generally supports new conservation areas. However, when the *culture of conflict* in ENRM is emphasised, public opinion shifts toward opposition.

Key outcome 3: The strength of citizens' identification with the usual suspects did not predict levels of support or opposition for land use change, except for some very small, inconsistent, effects. Conflict framing, however, moderated this effect, meaning that the predictive relationship between identification and support for land use change weakened with increasing conflict framing.

Key outcome 4: Heightened conflict framing generally increased the level of conflict that people perceived would be associated with a proposed land use change. However, heightened conflict framing decreased the level of conflict that was anticipated in land use change where mining was proposed near other land uses.

6.2 Challenges and limitations

Challenges were encountered during the process of completing this thesis, meaning that there are some limitations to the applicability of the results. Efforts were taken to address the challenges in order to robustly examine the human dimension of ENRM conflict. Nevertheless, the following challenges should be noted.

The many disciplines and associated bodies of literature that are relevant to ENRM, conflict, and stakeholder engagement meant exhaustion of all theoretical avenues associated with the research was not possible. The social identity approach was adopted at the outset of the thesis as a highly relevant theoretical perspective through which the research could be conducted. However, it is recognised that other theoretical perspectives exist which may provide helpful insights into ENRM conflict. The context of ENRM conflict was examined from the perspective of ENRM literatures, though additional bodies of research would likely provide further insights into ENRM conflict (e.g. peace and conflict studies, political science, and negotiation). As such, the findings of the thesis, and Chapter 2 in particular, ought to be considered within this context; key literatures were selected, but not all potentially relevant disciplines were reviewed.

While the study of ENRM practitioners (Chapter 3) adopted sound interview and analysis methods, the sample size of the interviews cannot be considered representative of all ENRM engagement practitioners in Australia (or more broadly). The research was undertaken to scope the approaches to identification of stakeholders. As such, the interviews were qualitative, and were not undertaken with an *a priori* typology of identification approaches to be verified. Interpretation of the results should recognise that this was a qualitative research project aimed at addressing a gap in the literature, and that the results are instructive for understanding identification approaches, but are not suitable for generalisation to all ENRM engagement practitioners.

Reflecting these limitations to generalisability, the case study of conflict in King Island (Chapter 4) is limited in its generalisability to other wind energy, or land use change, conflicts. Case studies are accepted as appropriate means to understand a single phenomenon in-depth, but have been criticised for limitations to the generalisability of the findings to other cases. The focus on ENRM engagement practice and the use of the social identity approach address this concern. While the specific experiences in King Island cannot be generalised, the insights into practice based on the social identity approach are instructive for other cases. This is because the theories of the social identity approach are well-developed in the field of social psychology, and have been found to apply across a range of contexts and settings. These aspects of the research undertaken in King Island address the issue with generalisability and allow the results to be applicable to ENRM practice beyond the King Island experience.

Examination of the attitudes of the citizenry toward land use change (Chapter 5) adopted quantitative research methods in order to appropriately address the large scale (i.e. the citizenry of Australia) of this research interest. While this was a methodologically sound approach, the results provide insight into what is occurring with citizens' attitudes toward land use change, but not why these changes are occurring. The conclusions describe what was observed, but questions remain as

to what is driving these phenomena. It is possible that through the use of quantitative research methods, uncontrolled-for confounding variables influenced the results. Though methodological (e.g. inclusion of a question about decision-making style) and analytical (checking experimental manipulation and regressions on all demographic variables) precautions were taken to address this, the possibility cannot be discounted. Additionally, the research utilised scenarios of land use change to examine how public opinion was affected. It would be of interest to explore whether these findings apply to other ENRM issues (e.g. other resources and land uses, and policy regime change), though this question was not addressed by the thesis.

6.3 Major contributions

Through this examination of the contribution of ENRM stakeholder engagement to dysfunctional conflict, the thesis has made five key contributions to the field.

Contribution 1: An integrative conceptual model has been created to show the interactions between governance, stakeholders, the citizenry, and the *culture of conflict* within which ENRM operates. This is the first integrative model which unifies these essential aspects of ENRM, and provides a thorough and theoretically-sound tool for researchers and practitioners to understand the complexity of ENRM conflict.

Contribution 2: The thesis has demonstrated the value of the social identity approach for understanding ENRM conflict. Particularly through application of the social identity lens to the conceptual model, these theoretical perspectives from social psychology have been made accessible to the wide audience of ENRM.

Contribution 3: A typology of approaches for identification of stakeholders in ENRM has been devised based on research drawing from the expertise of ENRM practitioners. This advances the literature and offers a tool for critical evaluation of the appropriateness of identification methods in ENRM engagement.

Contribution 4: ENRM engagement strategies, considered to reflect ‘best practice’ were evaluated to demonstrate how these practices can contribute to the exacerbation of conflict. Specific engagement activities were examined using the social identity approach, and based on this examination future strategies for ENRM engagement can be adjusted to avoid these pitfalls.

Contribution 5: The research has demonstrated that the *culture of conflict* in ENRM affects public opinion, and that the effect is subject to the level of conflict associated with the project. This is instructive for decision-makers who seek to understand public opinion in order to gauge the social acceptability of land use changes.

6.4 Future research

This thesis has advanced the understanding of the human dimension of ENRM conflict by focusing specifically on the interface between ENRM decision-making and different sectors of the public. The human pressures on the environment are expected to increase into the future, and, accordingly, conflict will continue to be a challenge for ENRM. As such, scholarship on conflict needs to gain prominence in ENRM in order to identify strategies for alleviating dysfunctional conflict to promote outcomes which are good for both the environment and society. A theoretical understanding of conflict, e.g. through the social identity approach, needs to be embedded with the development of ENRM engagement practice in order to promote conciliatory outcomes and avoid incendiary missteps when engaging stakeholders and community. An interdisciplinary approach to ENRM conflict, such as this, would allow for a theoretical foundation of several decades of social psychological research to underpin the practice of ENRM engagement which is so critical to achieving environmental sustainability and social harmony. The extension of insights from the social identity approach to ENRM is needed in order to harness these valuable perspectives from social psychology in efforts to achieve sustainable outcomes for people and the environment. The thesis, however, has found that these efforts should be directed toward research with stakeholders and community, rather than the citizenry.

Scholarship on stakeholder identification requires extension through verification of the results of Chapter 3 using a larger sample size, e.g. through converting the typology of approaches to stakeholder identification into a quantitative survey instrument. Similarly, the findings of the King Island case study (Chapter 4) can be used as a comparative study to evaluate other land use conflicts where similar engagement strategies have been adopted. Certainly, public or community votes about land use changes require scholarly attention, particularly given recent calls for this technique to be used as a way of empowering stakeholders, communities, and the citizenry.

The results of the research into citizens' attitudes toward land use change have raised several questions which future research ought to address, two of which are most critical. First, further research needs to be conducted to examine *how* conflict framing affects citizens' attitudes toward land use change. This could be undertaken through an experimental study which manipulates conflict framing and records how this affects participants' attitudes, i.e. focusing on the change within a person's attitudes rather than the differences between samples. Second, research is needed to understand why increasing levels of conflict framing lead to lowered levels of perceived conflict for land use changes to mining. These enquiries should consider the potential of fatigue in the citizenry of hearing about the "same" land use conflicts repeatedly.

6.5 Concluding remarks

This research sought to examine how ENRM conflict is affected by the practice of stakeholder engagement, and used the social identity approach as a theoretical lens to achieve this. The research has emphasised the inherent complexity in the way people interact with the environment – and with each other about the environment. ENRM engagement practice is the way these complex interactions are managed, and the outcomes of this practice influence decisions about the environment. To make good ENRM decisions, a nuanced understanding of the way practice affects people, and vice versa, is necessary. Human beings are complicated creatures, and any efforts to address dysfunctional ENRM conflict must recognise and embrace this.

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Appendix A: Hyperlinks to published articles included in the thesis

Colvin, RM, Witt, GB & Lacey, J 2015, 'The social identity approach to understanding socio-political conflict in environmental and natural resources management', *Global Environmental Change*, vol. 34, pp. 237–246.

<http://www.sciencedirect.com/science/article/pii/S0959378015300182>

Colvin, RM, Witt, GB & Lacey, J 2016, 'Approaches to identifying stakeholders in environmental management: Insights from practitioners to go beyond the ‘usual suspects’', *Land Use Policy*, vol. 52, pp. 266–276.

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Colvin, RM, Witt, GB & Lacey, J 2016, 'How wind became a four-letter word: Lessons for community engagement from a wind energy conflict in King Island, Australia', *Energy Policy*, vol. 98, pp. 483-494.

<http://www.sciencedirect.com/science/article/pii/S0301421516304888>

Appendix B: Interview guide with practitioners (chapter 3)

Participant Information Sheet

Project title: Green and Gold: Understanding Conflict and Competition between Mining, Agriculture and Other Land Use Interests in Resource Landscapes

I am conducting research on the social and systemic impacts of stakeholder engagement in environmental and natural resources management (ENRM). As part of this research, I am interested in how ENRM practitioners undertake stakeholder engagement. The purpose is to assess whether the academic literature reflects current stakeholder engagement practice in the ENRM field.

I seek your participation in a 20-30 minute interview where we will discuss how you undertake stakeholder engagement in the ENRM field. The interview may be conducted in person or over telephone or Skype at a time and location of convenience to you. I wish to record the interview to help maintain accuracy of my analysis. The recording, and all associated written materials, will be kept strictly confidential and secure. The interview is in no way intended to scrutinise the views or actions of anyone whether or not they are an interview participant.

As an interview participant, your anonymity will be protected throughout all stages of the research project. Any publications (including a thesis) which follow the interviewing will include no mention of you by name or organisation, or any other details which could lead to a breach of confidentiality. In the lead up to, or during, the interview you have the right of withdrawal without prejudice. This means you can choose to cancel a scheduled interview, or end an interview in progress if you wish, without question or judgement.

This study adheres to the Guidelines of the ethical review process of The University of Queensland. Whilst you are free to discuss your participation in this study with the researcher, Rebecca Colvin, if you would like to speak to an officer of the University not involved in the study, you may contact Associate Professor Annie Ross, the approving Ethics Officer on 07 3365 1450 (Mon, Wed, Fri) or 07 3346 1646 (Tues, Thurs); or annie.ross@uq.edu.au.

I, Rebecca Colvin, am the principal investigator, and will be conducting interviews for this research project. I am a PhD Candidate with the School of Geography, Planning, and Environmental Management at the University of Queensland. I can be contacted by telephone on 0405 708 553 or email at r.colvin2@uq.edu.au. I very much appreciate your consideration for volunteering your time to participate in the interview. I hope that the interview will be an enjoyable experience, and I will conduct the interview with respect, honesty, and confidentiality.

Participant Consent Form

Project title: Green and Gold: Understanding Conflict and Competition between Mining, Agriculture and Other Land Use Interests in Resource Landscapes

Principal researcher: Rebecca Colvin, PhD Candidate, The School of Geography, Planning, and Environmental Management, The University of Queensland.

I have read the participant information sheet and I hereby consent to be interviewed as part of this research project:

- I have been given clear information, both written and verbal, about the study, and understand what is required of me.
- I understand that my participation is voluntary. I may refuse to answer any question and I remain free to withdraw from the study at any time without explanation.
- I am aware that the interview in which I participate will be audio recorded and transcribed.
- I understand that all information from the interview will be remain confidential to the researcher and that all information will be securely stored with all identifying information removed and stored separately and securely.
- I understand that none of the information that I provide will be described or portrayed in any way that will be identify me in any report on the study.
- I understand that the findings of this research project will be submitted for publication with assurances for my confidentiality to be strictly maintained.
- I am aware that I may ask any further questions about the research at any time.
- I understand that participation is voluntary; I will not be paid or reimbursed for my participation in the interview.

I hereby agree to be involved in the above research project as a participant. I have read the research information sheet pertaining to this research project and understand the nature of the research and my role in it.

Participant name:

Participant signature: Date:

Interview Guide

1. Can you describe your professional experience with undertaking stakeholder engagement in ENRM?
 - Sector
 - Length of experience in the field
2. What are the types of ENRM issues where you have undertaken stakeholder engagement?
 - Context
3. Describe the process of engaging with stakeholders?
 - Is there a guide you follow? E.g. toolkit, policy, reference manual, theory, etc.
 - How did you learn this?
4. How do you identify stakeholders? E.g. pre-existing groups, power, preferences etc.
 - How did you learn this?
 - Is there a difference between stakeholders and community/locals/citizens?
5. Are relationships between stakeholders important (or just between individual stakeholders and the ENRM issue/project/policy)?
6. When undertaking stakeholder engagement, do you anticipate conflict?
7. Any other remarks?

Appendix C: Codebook for analysis of practitioners interviews (chapter 3)

Participant attributes

Code name	Description
Domain	The domain of ENRM in which the practitioner works, e.g. community engagement, agricultural extension, land use change
Industry	Government, transport, energy etc.
Location (primary)	Primary geographic location in which the practitioner works (or has worked)
Years experience	Number of years of experience in ENRM engagement

Definitions

Code name	Description
Community is...	Defining 'community'
Stakeholders are...	Defining 'stakeholders'
Public or citizenry is...	Defining 'public' or 'citizenry'

Engagement process

Code name	Description
Challenges and barriers	Challenges and barriers to 'good' engagement
Curveballs	Unexpected events which can derail engagement
Magic ingredient	An important element of engagement which determines whether or not it is successful/effective
Process - broad	General description of the engagement process, excluding identification of stakeholders
Reasons or value	Reasons for or value of engagement, i.e. explanation of the benefits of doing engagement
Tools	Specific tools used for engagement, e.g. IAP2, frameworks, documents

External factors

Code name	Description
Government and accountability	The importance of accountability of government in engagement (niche code)
Landscape values	The relevance of how the landscape is valued in terms of how stakeholders engage with environmental issues
Place	The importance of place, i.e. sense of place or place attachment in how stakeholders engage with environmental issues

Stakeholders in engagement

Code name	Description
Group memberships	The role of group memberships in shaping how stakeholders engage with environmental issues, e.g. do stakeholders form groups or seek groups to join when intending to engage
Historical linking	The importance of past experiences of engagement, or relationships between ‘distinct’ issues over time, and how this affects engagement
Professionalisation	Stakeholders becoming professionalised, e.g. engaging with issues for reasons of high-level agendas or becoming institutionalised in decision-making
Relationships and conflict	Relevance of relationships between stakeholders and conflict, and how it affects engagement
Skills learned	Whether stakeholders learn skills through engagement with environmental issues
Social identity processes	Specific mention of events or processes which reflect social identity mechanisms, e.g. consensus-seeking behaviour, stigma, stereotyping

Stakeholder identification

Code name	Description
Social structures	The social structures of relevance to identification of stakeholders, e.g. individuals, groups, organisations
Usual suspects	Discussion of the ‘usual suspects’, e.g. farmers, miners, environmentalists, fishers...
Usual suspects concept	Explicit discussion of the concept of the ‘usual suspects’
Identification	Parent code: approaches to identification of stakeholders
Footprint, catchment	Use of a footprint or ‘catchment’ area of an issue to define stakeholders as those who are within the area
Influence	Analysis of who has the potential to influence outcomes of an issue as way to identify stakeholders
Interests	Analysis of relevant interests associated with an issue as a way to identify stakeholders
Intuition	Use of professional intuition to identify stakeholders related to an issue
Past experiences	Reflecting on past experiences conducting engagement as guide for identification of stakeholders
SH self select	Stakeholders make themselves known in engagement processes
Snowball, key informants	Use of snowballing and speaking with key informants to identify stakeholders
Use of media	Use of the media (news media and beyond) to identify relevant stakeholders, e.g. reading articles, online searching

Appendix D: Interview guide with King Island community (chapter 4)

Participant information sheet

Lessons from the TasWind proposal in King Island

Information about this research project

My name is Bec Colvin, I am a PhD student from the University of Queensland. From the 15th March – 1st April 2015, I will be in King Island intending to conduct interviews with King Islanders about experiences during and after the proposal for the TasWind development. I am not affiliated with Hydro Tasmania; the aim of my research is to see if there are lessons for the improvement of how decisions about changes to land uses are made.

I seek your voluntary participation in a 60-90 minute interview where we would discuss your experiences related to the TasWind proposal. The interview will follow a general structure, though will be conversational in nature, and will be conducted at a time and location of convenience and comfort to you. The topics for discussion are:

- About you and King Island
- What happened during the time of the TasWind proposal?
- Who was involved in discussions about the TasWind proposal?
- How were you engaged with the TasWind proposal?
- What has happened after the TasWind proposal?

I wish to record and transcribe the interview to help maintain accuracy in understanding your experiences. The recording, and all associated written materials, will be kept strictly confidential and secure. The interview is in no way intended to scrutinise the views or actions of anyone whether or not they are an interview participant. It is not the aim of the research to affect or promote any particular choices or outcomes for the King Island community.

As an interview participant, your anonymity will be protected throughout all stages of the research project. Any publications (including a thesis) which follow the interview will include no mention of you by name, or any other details which could lead to a breach of confidentiality. If a situation arises in which maintaining confidentiality is in competition with research outcomes, maintaining your confidentiality will be given priority. I hope the findings of the interview will be of interest, and wish to share the output of the research project with you if you would like to receive it. I will be accompanied by a research assistant, Amanda, who may be present for the interview, or will wait separately nearby, based on your comfort and preference.

Participation is entirely voluntary. In the lead up to, or during, the interview you have the right of withdrawal without prejudice. This means you can choose to cancel a scheduled interview, or end an interview in progress if you wish, without question or judgement.

This study adheres to the Guidelines of the ethical review process of The University of Queensland (approval number 20130054). Whilst you are free to discuss your participation in this study with the researcher, Rebecca Colvin, if you would like to speak to an officer of the University not involved in the study, you may contact Associate Professor Annie Ross, the approving Ethics Officer on 07 3365 1450 (Mon, Wed, Fri) or 07 3346 1646 (Tues, Thurs); or at annie.ross@uq.edu.au.

I, Rebecca (Bec) Colvin, am the principal investigator, and will be conducting interviews for this research project. I am a PhD Candidate with the School of Geography, Planning, and Environmental Management at the University of Queensland. My PhD research is concerned with how decisions are made about land uses, with a particular focus on seeking ways to improve positive outcomes through understanding better the impact of land use decision making on people, groups, and communities.

I can be contacted by telephone on 0405 708 553 or email at r.colvin2@uq.edu.au. I very much appreciate your consideration for volunteering your time to participate an interview with me. Please feel free to distribute my contact details and/or information about this research project to your family, friends, neighbours, and colleagues if you feel they may be interested in participating. I hope that the interview will be an enjoyable experience, and I will conduct the interview with respect, honesty, and confidentiality.

Participant consent form

Lessons from the TasWind proposal in King Island

Participant consent form

Principal researcher: Rebecca (Bec) Colvin, PhD Candidate, The School of Geography, Planning, and Environmental Management, The University of Queensland.

I have read the participant information sheet and I hereby consent to be interviewed as part of this research project:

- I have been given clear information, both written and verbal, about the study, and understand what is requested of me.
- I understand that my participation is voluntary. I may refuse to answer any question and I remain free to withdraw from the study at any time without explanation.
- I am aware that the interview in which I participate will be audio recorded and transcribed.
- I understand that all information from the interview will be remain confidential to the researcher and that all information will be securely stored with all potentially identifying information removed.
- I understand that none of the information that I provide will be described or portrayed in any way that will be identify me in any report on the study.
- I understand that the findings of this research project will be submitted for publication with assurances for my confidentiality to be strictly maintained.
- I am aware that I may ask any further questions about the research at any time.
- I understand that participation is voluntary; I will not be paid or reimbursed for my participation in the interview.

I hereby agree to be involved in the above research project as a participant. I have read the research information sheet pertaining to this research project and understand the nature of the research and my role in it.

Participant name:

Participant signature: Date:

Interview guide

Introductory comments before recording

- Anonymity – data storage and management
 - note taker, saved onto secure hard drive, no identifying details on the recording aside from date and time. Schedule of interviews retained separately, not to ever be matched, in a secure file.
- Purpose of research, aims, expected outcomes.
- Interested in learning from feelings, opinions, and experiences, no right or wrong answers.
- Welcome to interrupt, ask for clarification, criticize line of questioning, refuse to answer, end interview at any point.
- Expected duration of 60-90 minutes, so at some points we may move along to adhere to time requirements. But will take time to answer any questions for the participant.
- Consent form.
- Start recording.

Topic 1: About you and King Island

1. Residency in King Island
 - a. Full-time, part-time, seasonal
 - b. Family & personal history in King Island
 - c. Township
2. Lifestyle
 - a. Occupation and industry
 - b. Voluntary organisations
 - c. Activities
3. What makes King Island special

Topic 2: What happened during the time of the TasWind proposal?

1. TasWind was:
 - a. Technical (economic, infrastructure) or social?
 - b. Isolated, or involving other aspects of life on KI?
 - c. Led by Hydro Tasmania or the King Island community?
2. The community ballot
3. Legal proceedings
4. Facebook group

5. News media + outside KI influences

Topic 3: Who was involved in discussions about the TasWind proposal?

1. How did interested people organise around TasWind?
 - a. Individuals, social constituencies, formal groups, organisations
 - b. Pre-existing or newly formed groups
 - c. Local to KI or non-local
2. What were the relationships of these people?
 - a. To TasWind (stance on TasWind)
 - b. With Hydro Tasmania
 - c. With each other
 - d. Expected or conventional relationships?
3. Were there “leaders” of particular stances on TasWind?
 - a. Groups leading stances, individuals leading groups, etc.
 - b. What type of stance did they take?
 - c. Were they extreme, moderate, deliberative, provocative, conciliatory?
 - d. What impact did they have on community and discussions?
 - e. When in the process did they become ‘leaders’?
 - f. Were they pre-established as community leaders?
 - g. Local to KI or non-local?

Topic 4: How were you engaged with the TasWind proposal?

1. How heard about TasWind?
 - a. Technical detail or social groups/ networks
 - i. Newsletter, media release, contact from HT
2. Pre-TasWind experiences: affect expectations, behaviour, attitudes?
 - a. Own experience
 - b. Others’ experiences
 - c. Observations of media
3. How involved, where discussed, what activities?
 - a. Participant or observer
 - b. TasWind Consultative Committee (TWCC)
 - c. Community or industry groups
 - d. Social media
 - e. News media

4. Overall experience?
5. Was/is participant a member of:
 - a. Any discussed groups?
 - b. Any other groups not previously mentioned? (esp. social constituencies)
6. How important is this group membership to the participant's life?
7. What makes the participant a member of this group?
8. If explaining to an outsider their position on TasWind, would listing group membership be helpful?
9. Did being a group member help the participant to make sense of TasWind and develop a stance?
10. Did any group memberships change during or as a result of TasWind?
 - a. New group memberships?

Topic 5: What has happened after the TasWind proposal?

1. Now that the project has been shelved, is the community the same as it was before the proposal?
 - a. Relationships between groups and individuals
 - b. Individuals' attitudes and behaviours
2. If another change to the landscape at KI was proposed, would there be the same tensions between those who oppose and those who support?
3. Has TasWind affected how the participant would feel about other proposals for energy development outside of KI?
4. What should be the role of the local community in deciding on proposals?
5. What has been the overall impact of TasWind on King Island?
 - a. If some less favourable elements, what could have improved this?

Closing comments

- Additional points the participant wishes to make.
- Any remarks the participant wishes to clarify.
- Questions for the interviewer about interview, project, etc.
- Interested in helping find other people to participate?

Appendix E: Codebook for analysis of King Island interviews (chapter 4)

Events and phases

Code name	Description	Notes
Abattoir closure	Discussion of the closure of the abattoir in KI in 2012	Event
The secret	Discussion about the time period which preceded announcement of the proposal, where there were rumours about a secret project	Phase
Announcement	Discussion about the announcement about the project, between council and Hydro Tasmania	Event
TWCC	Discussion about the Tas Wind Consultative Committee	Phase
TWCC – economic review	As a sub-set of TWCC, discussion about the economic reviews for the TasWind project	Event
Campaigning	Discussion about local campaigning by groups in KI regarding the project	Phase
Ballot – lead up and vote	Discussion about the lead up to the ballot held on KI, excluding time following the vote	Phase -> event
Ballot – results	Discussion about the announcement of the vote result, and the response to the vote	Event -> phase
Legal actions	Discussion about the litigation between No TasWind Farm Group and TasWind	Phase
End announcement	Discussion about the announcement by Hydro Tasmania that the project would not proceed	Event
Aftermath	Discussion about any events, phases, or processes following the end announcement	Phase
Aftermath – Council elections	As a sub-set of Aftermath, discussion about the council elections which were held shortly following the End announcement	Phase -> Event
Definitions		
Event	An occurrence at a specific and definable time	
Phase	A non-formal series of occurrences of a similar nature	

About the TasWind proposal

Code name	Description
Themes	
Birds	Impacts of turbines on birds
Tourism	Impacts of turbines on tourism
Golf	Impacts of turbines on future golf industry development
Health	Impacts of turbines on health
Amenity	Impacts of turbines on amenity: visual, noise
Climate change	Impact of turbines on climate change
Politics	Role of politics in the project
Economic viability	The economic viability of the project
Bigger picture (project)	The KI project as the first stage of larger scale project
TasWind	About TasWind, Hydro Tasmania – as organisations
Foreign investment	Foreign investment as factor of project

Procedural justice	The fairness of the processes established for decision-making
Distributive justice	The fairness of the benefits and burdens being distributed in KI and outside
Trust	Trust between people and between people and TasWind
Power	The role of (social) power in the project
Community self-determination	The role of the KI community in deciding their own future
The cloud	The potential for the project to facilitate “cloud” server based at KI
Economic benefits	Economic benefits which would follow the project
Jobs	The impact of the project on jobs
Feasibility study as Trojan horse	The feasibility study was not to be trusted – KI would not be given final say
Metaphor	
Factory	Wind farms are factories
Stone age technology	Turbines are stone age technology
David v. Goliath	Two opponents engaging in the context of a major power imbalance
Life raft	The project was a life raft for KI in dire need
Triumph over adversity	Winning despite bad odds
Advantage of vulnerability	Advantage being taken when KI is vulnerable (in dire straits)
Outsider corruption	Outsiders who don’t understand local customs are forcing their will on KI
Generational fairness	The impact on future generations

Results/ outcomes/ impacts of KI TasWind proposal

Code name	Description
Outcomes – Personal	Including impacts on person, relationships, contentedness etc. All outcomes/ impacts/ results centred on personal experience
Outcomes – Others	Including those for “Outcomes – Personal” but when described about another person’s experience. Distinct from “Outcomes – KI community” in that these are specific to an individual’s experience
Outcomes – KI community	About impacts/ results/ outcomes/ benefits/ losses to the community as a whole.
Outcomes – Global	Impacts outside of KI. Global may be Tasmania, Australia, or true global. This is broader than KI (considered local).

Media and social media

Code name	Description
Social media	General discussion about Facebook, and other social media not related to specific groups
FB - The Debate	Discussion about the Facebook group “The Debate”
FB - Other	Discussion about other Facebook groups
News media	General discussion about news media, not specific to any source
News – Non-KI	Discussion about news media not including KI Courier
News – KI local	About the KI Courier

Sequencing and causality

Code name	Description
Sequence	Participant describes a sequence of (events), suggesting a relationship (rather than just chronology)
Causal	Participant explicitly states causality between (events)
** Use memo to summarise key sequence causal relationships, with coding to participant context, and coding to causality node	

King Island identity (place definition)

Code name	Description
KI as industry	KI is fundamentally about the industry: dairy, beef, kelp...
KI as sanctuary	KI is fundamentally a special place to exist in peace
KI as tourism	KI is a unique tourism destination
KI as KI	KI “just is”
Why KI is special	The reasons why participants appreciate KI
KI’s troubles	What the participants view as the challenges facing KI
KI’s future	What the participants see as being the future(s) for KI
Relationship to KI	The participants’ perspectives of KI in relation to their senses of self

Participants: classifications

Code name	Description
Stance	As classification
Support – strong	
Support – mild	
Oppose – strong	
Oppose – mild	
Ambivalent	

Unsure	
Not stated	
Conditional	
KI location	As classification
Currie	
Naracoopa	
Grassy	
Other	
Duration of KI residence	As classification
KI status	As classification
Real King Islander	
Blow-in	
Occupation(s)	As classification

Theoretical codes: Social identity approach

Code name	Description
Intergroup	
In-group favouritism	The in-group is seen favourably, viewed in best light, is justifiable, positive.
Out-group hostility	The out-group is treated with hostility
Out-group cynicism	The out-group is viewed cynically, not trusted, scheming, negative.
Polarisation	Due to conflict, the group stances become polarised.
In-group homogeneity	The in-group is described as being homogeneous
In-group heterogeneity	The in-group is described as being heterogeneous
Out-group heterogeneity	The out-group is described as being heterogeneous
Distinctiveness	Seeing “others” as fundamentally different
Stereotyping	Out-group members are stereotyped as homogenous, interchangeable.
Interpersonal is intergroup	Interactions which are interpersonal are viewed as being representative of intergroup interactions
Intragroup	
Group formation	Discussion about formation of groups
Collective action	Purposeful action undertaken by group members representing group
Consensus seeking	Within the in-group, there are attempts to reach consensus at the expense of identifying alternatives.
Extremism	As a result of group membership (social identification), beliefs become more extreme.
Social comparison	Validating and reinforcing beliefs through mixing with others of same persuasion (Hogg and Abrams 1988, p. 98)
Shared social reality	Specific cognitions which are shared by multiple individuals as virtue of (or cause for) group membership
Cohesiveness in adversity	Groups in adversity formed greater cohesiveness (i.e. when stigmatised) (Hogg and Abrams 1988, p. 104)
Norm deviance	While being a group member, presenting behaviours or beliefs deviant from norms
Perception of self and group	

Self-categorisation	Individual comes to view self as part of the group (and group as part of the self).
RII (Referent informational influence)	Learning norms, beliefs from distant others with a shared identity
Positive re-evaluation	Presenting a positive re-interpretation of a negative stereotype
Group defensiveness	Defending stance is defending group
Personalisation	Conflict is deeply personal
Stigmatised	Perception of self being stigmatised as a result of group membership
Ideology	
Leaders are idols	Group leaders are seen as idols, who are exemplars of the group identity
Referent power	Seeking authoritative figureheads which are representative of the social identity to support stance
Legacy	
Legacy – direct local	The role of past conflicts from personal experience in KI
Legacy – direct non-local	The role of past conflicts from personal experience outside of KI
Legacy – IRR	The role of past conflicts from identity without personal experience

Appendix F: Extended results of King Island interviews (chapter 4)

Extended results are presented in a descriptive report, available at the following link:

http://espace.library.uq.edu.au/view/UQ:404281/UQ404281_OA.pdf

Appendix G: Survey for citizenry (chapter 5)

Participant information and consent

About the survey

The aim of this survey is to learn about people's perceptions of land use projects as presented in the media. This survey is part of a PhD being undertaken with The University of Queensland. There are no commercial interests associated with the research. Participation in this research will not provide any direct benefit to participants. The survey is estimated to take around 15-20 minutes to complete.

Your confidentiality and use of the information gathered

All responses provided will be treated confidentially, and data will be stored and managed securely. No individual persons will be identified, and no attempt will be made to identify any individual persons based on the responses. In the future, the research results may be published, in which case the data will be presented with no identifiable information about the participants. You may withdraw from the research at any time and without prejudice, in which case the information you have provided will be omitted from the research.

Contact details and ethical review

If you would like to know more information about the research project or information being collected, you may contact: the principal investigator, Rebecca Colvin at r.colvin2@uq.edu.au or on 0405 708 553; or the project supervisor, Dr Bradd Witt at bwitt@uq.edu.au or on 07 3365 6005.

This study adheres to the Guidelines of the ethical review process of The University of Queensland. Whilst you are free to discuss your participation in this study with project staff (contactable on 0405 708 553; or r.colvin2@uq.edu.au), if you would like to speak to an officer of the University not involved in the study, you may contact Dr Paul Dargusch, the Ethics Officer, on 07 3365 1594; or p.dargusch@uq.edu.au.

Your informed consent to participate

By completing this survey you offer your informed consent to your non-identifiable responses being used for the purposes of completion of a research thesis and publication of the results. Please check 'yes' below to proceed.

Survey instrument

Part 1

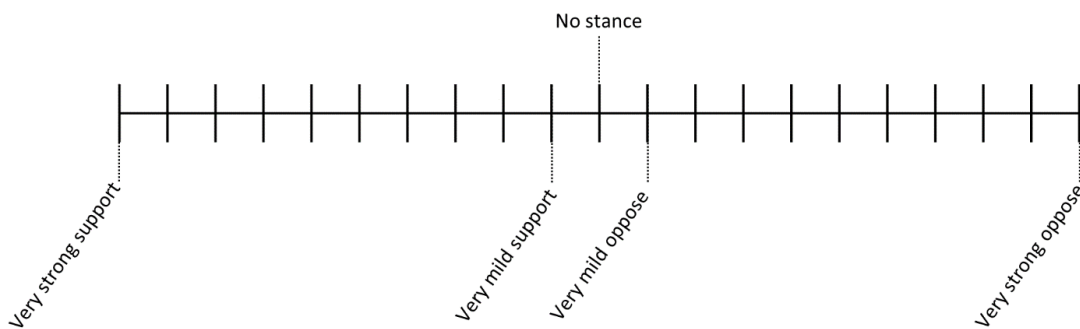
The 12 statements presented below each describe a new proposal or project as reported in the media. Please read the statement carefully, then answer the two corresponding questions for the underlined proposal or project.

Statement:

[Statement appears here with proposal or project underlined]

Question 1:

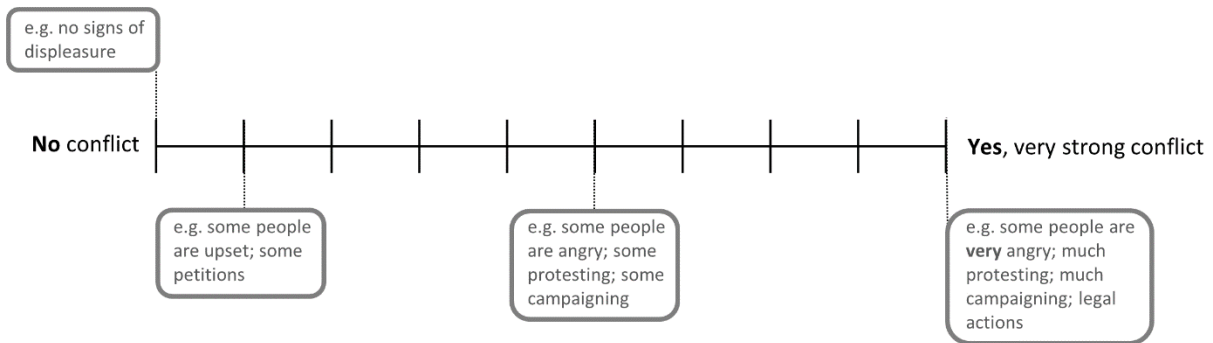
Consider how likely you would be to **support or oppose** the proposal or project mentioned in this statement. Report your support or opposition for the proposal or project on the scale below.



Question 2:

CONDITION 1: Do you feel this proposal or project is likely to **cause social conflict**? If yes, how much social conflict? Report your perception of social conflict about the proposal or project on the scale below.

CONDITIONS 2 + 3: What level of **social conflict** do you feel this proposal or project is likely to cause? Report your perception of social conflict about the proposal or project on the scale below.



Part 2

The diagram below shows different relationships between a person (“self”, smaller circle) and a group (“group”, larger circle). Each of the different relationships is labelled with a letter from A through to G.

Below the diagram, there are eight groups listed. Think about your relationship with each of the groups. Looking at the different relationships in the diagram, indicate which of the relationships (A through to G) in the diagram best represents your (“self”) relationship with each group (“group”).

You may list the same letter for multiple groups. Additional information describing the relationships in the diagram is included below the groups.

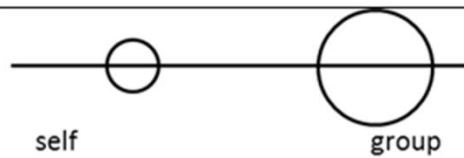
Example

If one of the groups was ‘Vegetarians’, a person who is not vegetarian, but feels that there is little difference between their self and vegetarians would likely allocate relationship “C”.

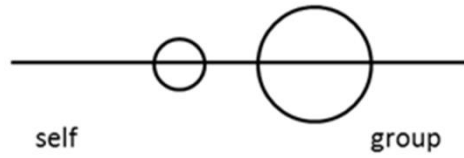
If one of the groups was ‘Motorcyclists’, a person who feels that they in some ways consider their self a motorcyclist, but feel there are still some differences between motorcyclists as a group and their self, would likely allocate relationship “E”.

OSIO instrument diagram

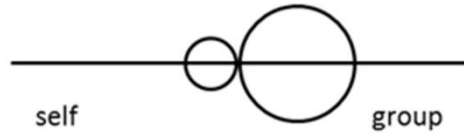
Explanation to participants



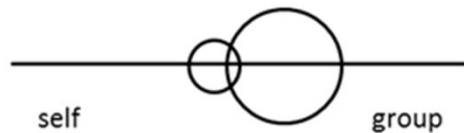
Relationship "A" shows a person who views their relationship with the group as very distant, where the person is not included in the group and there is a big difference between the person and the group.



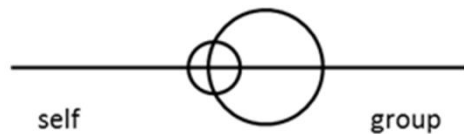
Relationship "B" shows a person who views their relationship with the group as distant, where the person is not included in the group and there is a difference between the person and the group, though not as much of a difference as there is with relationship "A".



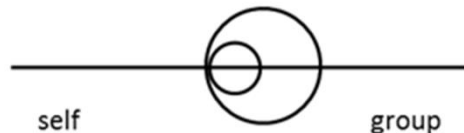
Relationship "C" shows a person who views their relationship with the group as being separate, but not as distant as relationships "A" and "B". In Relationship "C", while the person is not included in the group, the person would not see a big difference between their self and the group.



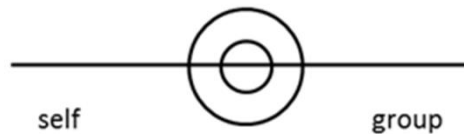
Relationship "D" shows a person who views their relationship with the group as close, where the person is partly included in the group, but there are still some points of difference between the person and the group.



Relationship "E" shows a person who views their relationship with the group as close, where the person is partly included in the group, and more than in relationship "D", but there are still some minor points of difference between the person and the group.



Relationship "F" shows a person who views their relationship with the group as very close, seeing their self as completely included in the group, but there are some minor ways in which their sense of self is not the same as their sense of the group.



Relationship "G" shows a person who views their relationship with the group as very close, seeing their self as completely included in the group, and their sense of self is much the same as their sense of the group.

- *Farmers*
- *Miners*
- *Environmentalists*
- *Fishers*

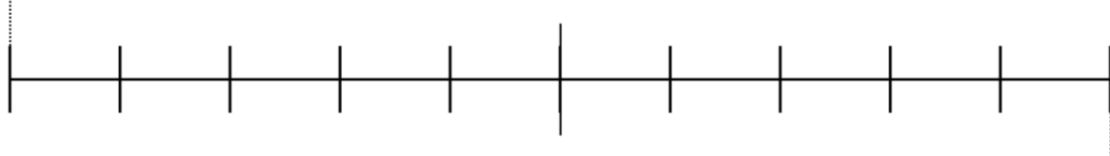
- *Liberal Party*
- *The Nationals*
- *Labor Party*
- *The Greens*

Part 3

Please read the statement below, and select the place on the scale which best describes you.

When I encounter an unfamiliar issue:

I know I can always trust my gut-instinct
when I take a stance on the issue.



I always seek as much
information as I can before I take
a stance on the issue.

Part 4

Please answer the following questions about you.

*What is your **age**? Enter a whole number below.*

*What is your **gender**?*

- Female
- Male
- Trans*
- _____
- Prefer to not respond

*What is the **highest level of education** you have completed?*

- Did not complete high school
- Completed high school
- Completed trade/vocational qualification
- Completed undergraduate degree
- Completed postgraduate qualification

*What is your **annual household income in Australian dollars, before tax**?*

- Less than \$30,000
- \$30,000 to \$59,999
- \$60,000 to \$89,999
- \$90,000 to \$119,999
- \$120,000 to \$149,999
- More than \$150,000
- Prefer not to respond

*What is your **primary location** of residence?*

- Capital city
- Regional city
- Rural town
- Rural property

End statement and thanks

Thank you very much for your cooperation. Your time and effort are greatly appreciated.

Please note that the statements included in the survey were created for the purposes of this study, and are not real statements from the media.

If you wish to know more about the research, you may contact Rebecca Colvin at r.colvin2@uq.edu.au.

Appendix H: Extended results of citizenry data analysis (chapter 5)

H.1 Sample summary

H.1.1 Demographics

Demographic data of the survey participants reflected national patterns (Table H.1), particularly for age, gender, and location. The survey sample contained more people with high levels of educational attainment compared to the Australian population. There were fewer people with an annual household income of greater than \$150,000, although, 14% of participants chose to not declare their income.

Table H.1 Summary of demographics of sample, with comparison to Australian national data.

Demographic summary	Study (%)	Australia (%)
Age		
Mean age (of 18+)	46 years	47 years
Gender		
Female	51.1	50.2
Male	48.7	49.7
Other	0.2	N/A
Education		
Did not complete high school	6	25
Completed high school	21	17
Completed trade/vocational qualification	27	32
Completed undergrad degree	28	17
Completed postgraduate degree	18	9
Income (annual household)		
Less than \$30,000	13	16
\$30,000 to \$59,000	24	24
\$60,000 to \$89,000	18	14
\$90,000 to \$119,000	14	16
\$120,000 to \$149,000	10	10
More than \$150,000	8	20
Not disclosed	14	N/A
Location		
Capital city resident	63	67
NSW	32	32
Vic	25	25
Qld	20	20
SA	9	7
WA	9	11
Tas	3	2
NT	0.2	1
ACT	2	2

Note: Sources for national data: Age (Australian Bureau of Statistics, 2014); Gender (Australian Bureau of Statistics, 2016); Education (Australian Bureau of Statistics, 2015a); Income (Australian Bureau of Statistics, 2015b); Location (Australian Bureau of Statistics, 2016). All values other than age are percentages.

H.1.2 Decision-making style

The majority of participants described their approach to decision-making as being closer to a ‘seek more information’ style as than a ‘trusting gut instinct’ style (Figure H.1). There was a tendency for older ($p < 0.001$) and more educated ($p < 0.001$) participants to be more likely to adopt a ‘seek more information’ style, though the effect was very small (R^2 values respectively: 0.008; 0.031). The mean rating across all participants for decision-making style was 6.39 (± 0.14). This is significantly different from a neutral value of 5 ($p < 0.001$), and is in the direction of ‘seek more information’. However, there was a considerable spread of decision-making styles ($SD = 2.36$).

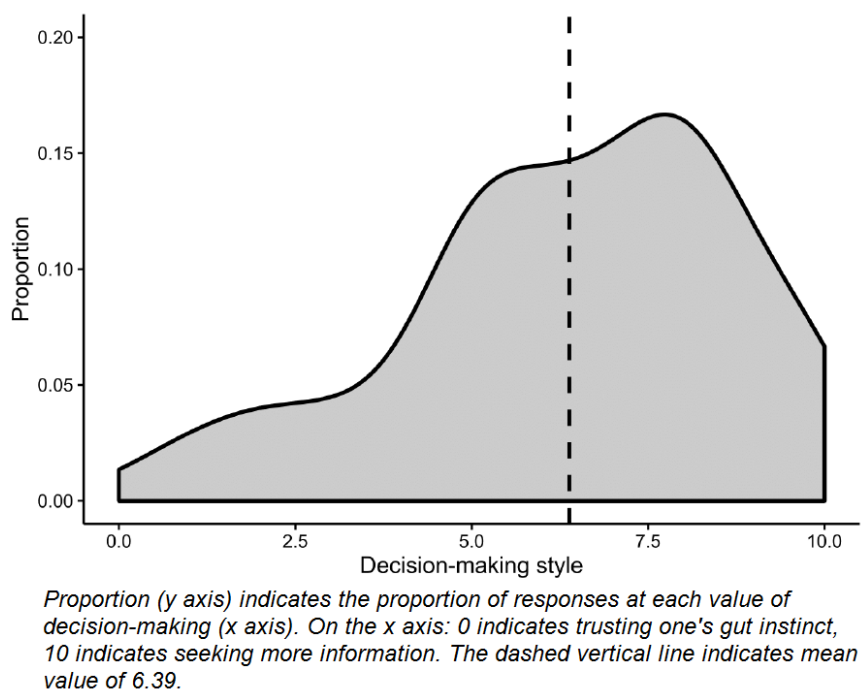


Figure H.1 Self-reported decision-making style of all participants.

H.1.3 Identities

Participants’ levels of identification with the usual suspects and political parties were measured. For all identities, the majority of participants identified as being not similar to the group (i.e. relationships A, B, and C in Table 5.2 in Chapter 5, shown in Figure H.2 below as values 1, 2, and 3). No identities showed signs of a bimodal distribution. The mean level of identification was significantly different between all four land use sector identities, though among the political identities only ‘The Nationals’ differed from (i.e. was lower than) the rest (Figure H.2; Table H.2).

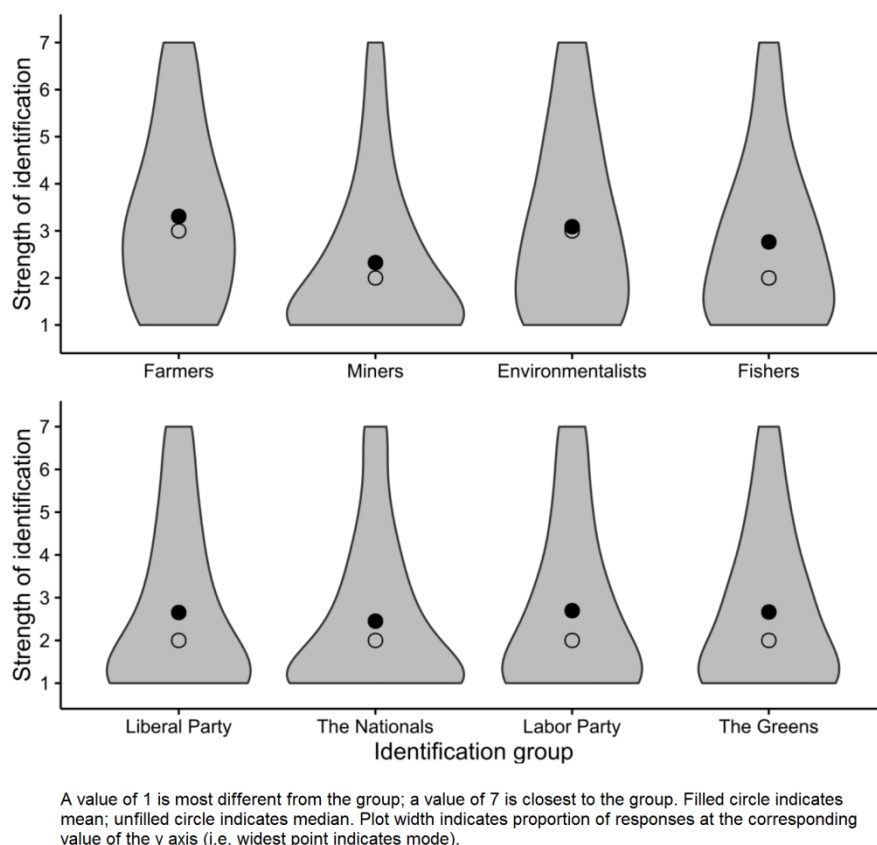


Figure H.2 Levels of identification with land use sectors and political parties.

The highest rated identity was ‘farmers’, and this was the only identity where the greatest number of participants did not select the lowest identification option (i.e. the mode was 3 for farmers, but 1 for all other identities). Of all the identities (both land use and political), ‘miners’ was the lowest rated, though all other land use identities were rated higher than all the political identities. Although identification with these groups was not strong, multiple regression showed some demographic attributes were associated with these identifications (Table H.3).

Table H.2 Mean identification with land use sectors and political parties.

Land use sector	Mean identification	Political parties	Mean identification
Farmers	3.31 ^a	Liberal Party	2.65 ^a
Miners	2.33 ^b	The Nationals	2.45 ^b
Environmentalists	3.01 ^c	Labor Party	2.70 ^a
Fishers	2.77 ^d	The Greens	2.67 ^a

Note: Superscript letters indicate statistically similar group means when the letters are the same (separately within land use sectors and political parties, i.e. within columns) at $\alpha < 0.01$.

Table H.3 Trends in demographic variables associated with levels of identification with the land use and political identities.

Identity	Age	Education	Income	Gender	Location
Farmers	Older 0.006**	-	-	More male <0.001***	More rural <0.001***
Miners	Younger 0.005 **	-	-	More male <0.001***	-
Environmentalists	-	More educated <0.001***	-	-	-
Fishers	-	-	More income 0.032*	More male <0.001***	More rural 0.043*
Liberal Party	Older 0.006**	-	-	More male <0.001***	More rural <0.001***
The Nationals	Younger 0.033*	-	-	More male 0.003**	More rural 0.018*
Labor Party	-	-	-	-	-
The Greens	Younger <0.001***	More educated 0.006**	-	-	-

*Note: Statistically significant relationships are shown, and the direction of the variable associated with stronger identification is explained (e.g. older, younger) followed by the p-value. Asterisks indicate level of statistical significance: *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$.*

H.1.4 Conditions

Participants were randomly allocated to one of the three conditions (condition 1 (no conflict) $n = 389$; condition 2 (some conflict) $n = 380$; condition 3 (high conflict) $n = 378$). All demographics, decision style, and strength of identifications did not differ significantly between each condition, reflecting the random allocation to each condition (Table H.4).

Table H.4 Tests for differences between conditions across demographic, decision style, and identification variables.

Variable	Test	p-value
Age	ANOVA	0.141
Gender	Pearson's chi-squared	0.784
Education	Pearson's chi-squared	0.188
Income	Pearson's chi-squared	0.419
Location	Pearson's chi-squared	
Capital city resident		0.994
States		0.795
Decision style	ANOVA	0.731
Identification	ANOVA	
Farmers		0.478
Miners		0.393
Environmentalists		0.487
Fishers		0.748
Liberal party		0.685
The Nationals		0.663
Labor Party		0.758
The Greens		0.343

Note: This tested for differences in the sub-samples randomly assigned to each condition. P-values for all variables are greater than 0.05, indicating no significant differences between conditions.

H.1.5 Manipulation checks

Manipulation checks (ANOVA) were conducted to assess the effect of conflict framing (conditions) on conflict perception, identification with the usual suspects, decision-making style, and levels of support or opposition. Conflict framing (conditions) was found to affect conflict perception ($p = 0.02$) and position stance ($p < 0.001$) (Table H.5). As may be expected, perceived conflict increased with conflict framing, however, the relationship between conflict framing and position stance was less clear (i.e. not linear).

Table H.5 Manipulation checks: the effect of condition (conflict framing) on each variable.

Variable	Condition 2			Effect size
	Condition 1 No conflict Mean	Some conflict Mean	Condition 3 High conflict Mean	
Position stance	0.82	1.01	0.55	.0014***
Perceived conflict	6.19	6.20	6.30	.0006*
Decision-making style	6.39	6.45	6.31	.0005
Identification				
Farmers	3.28	3.40	3.25	.0013
Miners	2.37	2.38	2.23	.0016
Environmentalists	3.04	3.18	3.05	.0013
Fishers	2.76	2.82	2.72	.0005

*Note: Asterisks on means indicate if the mean position value is significantly different from zero: *** $p < 0.001$; ** $p < 0.01$, * $p < 0.05$.*

H.2 Support and opposition for each land use factor and effect of conflict framing

ANOVA and Welch's t-tests were conducted to evaluate differences *in levels of support and opposition* for land use changes between conditions. This was performed using ANOVA followed by Welch's t-tests. These tests provided measures of support and opposition for each factor within each condition.

The level of support or opposition for land uses was examined through analysing differences between factors (ANOVA; Table H.6). In all conditions, mining as the proposed land use (factor 1) was the most strongly opposed, and conservation as a new land use (factor 2) was the most strongly supported. Food (farming and fishing) was in between mining and conservation in terms of support and opposition, although when fishing or farming was proposed near mining opposition was stronger than other scenarios involving new food production. All factors were significantly different from each other in condition 1 (no conflict), however, there were fewer significant differences between factors in conditions 2 (some conflict) and 3 (high conflict).

Table H.6 Mean stance (from -10 very strong support to 10 very strong opposition) for each factor in each condition.

Factor	Condition 1 No conflict		Condition 2 Some conflict		Condition 3 High conflict	
	Mean	SD	Mean	SD	Mean	SD
All factors	0.82	5.40	1.01	4.89	0.55	4.80
Factor 1: Mining	4.35**** ^z	4.80	3.30**** ^z	4.94	1.24**** ^z	5.43
Factor 2: Conservation	-1.80**** ^y	4.94	-0.53**** ^y	4.93	-0.26 ^y	4.96
Factor 3: Food not near mining	-0.06 ^x	4.86	0.62**** ^x	4.36	0.50**** ^x	4.17
Factor 4: Food near mining	1.23**** ^w	5.16	0.63**** ^x	4.55	0.82**** ^{z,x}	4.52

*Note: Positive values indicate overall opposition, negative values indicate overall support. A value of zero is neutral. Asterisks on factor means indicate if the mean position stance is significantly different from zero: *** $p < 0.001$; ** $p < 0.01$, * $p < 0.05$. Superscript letters on factor means indicate whether position stance means differed between factors within conditions ($\alpha = 0.01$; compared within each column).*

Scenario comparisons are shown in Table H.7.

Table H.7 Mean stance for each statement in each condition.

Statement	Condition 1 No conflict	Condition 2 Some conflict	Condition 3 High conflict
Factor 1: Mining	4.35****^z	3.3****^z	1.24****^z
s1: Mine -> farmland	4.28**** ^a	3.05**** ^b	1.10**** ^c
s8: Mine -> nature reserve	4.51**** ^a	3.58**** ^a	1.32**** ^b
s11: Mine -> Fishing zone	4.26**** ^a	3.28**** ^b	1.31**** ^c
Factor 2: Conservation	-1.8****^y	-0.53****^y	-0.26^y
s2: Nature conservation area -> farmland	-2.81**** ^a	-1.31**** ^b	-0.69**** ^b
s5: Protected area -> mineral rich lands	-1.35**** ^a	-0.17 ^b	0.40 ^b
s12: Marine protected area -> fishing zone	-1.27**** ^a	-0.11 ^{b,c}	-0.47 ^{a,c}
Factor 3: Food not near mining	-0.06^x	0.62****^x	0.5****^x
s3: Fishing zone -> farmland	-0.94**** ^a	0.02 ^b	0.16 ^b
s7: Farming zone -> nature conservation area	-0.19 ^a	0.75**** ^b	0.70**** ^b
s9: Fishing zone -> marine protected area	1.69**** ^a	1.57**** ^a	0.72**** ^b
s10: Farmlands -> fishing areas	-0.79**** ^a	0.14 ^b	0.43**** ^b
Factor 4: Food near mining	1.23****^w	0.63****^x	0.82****^{z,x}
s4: Farmland area -> mining region	0.53**** ^a	0.31 ^a	0.67**** ^a
s6: Fishing area -> mining zone	1.93**** ^a	0.96**** ^b	0.98**** ^b

*Note: Positive values indicate overall opposition, negative values indicate overall support. A value of zero is neutral. Asterisks on scenario means and factor means indicate if the mean position stance is significantly different from zero: *** $p < 0.001$; ** $p < 0.01$, * $P < 0.05$. Superscript letters on scenario means indicate whether mean position stances between conditions are significantly different ($\alpha = 0.01$; compared within each row). Superscript letters on factor means indicate whether position stance means differed between factors within conditions ($\alpha = 0.01$; compared within each column).*

From condition 1 (no conflict) through condition 2 (some conflict) and to condition 3 (high conflict) for the mining factor, there was a decline in the strength of opposition. For the conservation factor, there was an overall decline in support. The food factors were more variable, though both coalesced around the no stance value of 0 (Figure 4 in the main document).

H.3 Perception of conflict for each land use factor, and the effect of conflict framing

ANOVA and Welch’s t-tests were conducted to evaluate differences in *levels of conflict perception* for land use changes between conditions. This was performed using ANOVA followed by Welch’s t-tests. These tests provided measures of conflict perception for each factor within each condition.

The manipulation check showed that conflict framing and perceived conflict were related. To further investigate this relationship, mean conflict perceptions were compared between the four land use factors, within each conflict framing condition. In all conditions, mining as a new land use (factor 1) was considered likely to cause the highest level of social conflict. Conservation (factor 2) was considered likely to cause the lowest level of social conflict. Food (fishing and farming) factors were expected to be between mining (factor 1) and conservation (factor 2).

All factor means were significantly different from zero (Table H.8). In condition 3 (high conflict), factors 2 (conservation), 3 (food not near mining), and 4 (food near mining) means were closer than in conditions 1 and 2.

Table H.8 Mean conflict perception for each factor in each condition (higher values indicate higher level of perceived conflict).

Factors	Condition 1 No conflict		Condition 2 Some conflict		Condition 3 High conflict	
	Mean	SD	Mean	SD	Mean	SD
All factors	6.19	2.39	6.20	2.22	6.30	2.01
Factor 1: Mining	7.66 ^z	2.11	7.31 ^z	2.04	6.90 ^z	2.02
Factor 2: Conservation	5.36 ^y	2.28	5.66 ^y	2.23	6.20 ^y	1.97
Factor 3: Food not near mining	5.72 ^x	2.23	5.9 ^x	2.07	6.00 ^x	1.94
Factor 4: Food near mining	6.14 ^w	2.30	5.92 ^x	2.18	6.16 ^{y,x}	2.01

Note: All conflict perception factor means were significantly different from zero at $\alpha = 0.001$. Superscript letters on factor means indicate whether conflict perceptions means differed between factors within conditions ($\alpha = 0.05$; compared within each column).

Scenario comparisons are shown in Table H.9.

Table H.9 Mean conflict perception for each scenario in each condition.

Scenario	Condition 1 No conflict	Condition 2 Some conflict	Condition 3 High conflict
Factor 1: Mining	7.66^z	7.31^z	6.9^z
s1: Mine -> farmland	7.61 ^a	7.23 ^b	6.96 ^b
s8: Mine -> nature reserve	7.86 ^a	7.51 ^b	7.1 ^c
s11: Mine -> Fishing zone	7.51 ^a	7.18 ^b	6.63 ^c
Factor 2: Conservation	5.36^y	5.66^y	6.2^y
s2: Nature conservation area -> farmland	4.68 ^a	5.08 ^b	5.94 ^c
s5: Protected area -> mineral rich lands	5.75 ^a	5.89 ^a	6.56 ^b
s12: Marine protected area -> fishing zone	5.66 ^a	6.01 ^b	6.09 ^b
Factor 3: Food not near mining	5.72^x	5.9^x	6.0^x
s3: Fishing zone -> farmland	5.19 ^a	5.48 ^b	5.8 ^c
s7: Farming zone -> nature conservation area	5.72 ^a	6.03 ^b	6.21 ^b
s9: Fishing zone -> marine protected area	6.67 ^a	6.47 ^a	6.43 ^a
s10: Farmlands -> fishing areas	5.29 ^a	5.61 ^b	5.6 ^b
Factor 4: Food near mining	6.14^w	5.92^x	6.16^{y,x}
s4: Farmland area -> mining region	5.9 ^{a,b}	5.73 ^b	6.17 ^a
s6: Fishing area -> mining zone	6.39 ^a	6.11 ^a	6.14 ^a

Note: All conflict perception means were significantly different from zero at $\alpha = 0.001$. Superscript letters on scenario means indicate within each land use change scenario whether mean conflict perceptions between conditions are significantly different ($\alpha = 0.05$). Superscript letters on factor means indicate whether conflict perceptions means differed between factors within conditions.

For factor 1 (mining), conflict perceptions decreased from condition 1 (no conflict) through condition 2 (some conflict) and to condition 3 (high conflict). For factor 2 (conservation), an opposite trend was observed. Factors 3 and 4 (food) were more variable, though by condition 3 (high conflict) both factors coalesced at a point approximately midway between the factors' means in condition 1 (no conflict) (Figure 3 in Chapter 5).

These results show that conflict framing affects conflict perception, but variably. Under a no-conflict condition, land use change to mining was considered to be likely to cause much stronger conflict than any of the other land uses. With increasing levels of conflict framing, the conflict perception around mining as a new land use dropped, while for conservation and food not near mining, conflict perception increased. In contrast, levels of conflict perception associated with land use changes to food near mining showed no clear trend with increasing conflict perception. Generally speaking, perceived conflict in each land use factor converged toward more common levels of perceived conflict in condition 3. Thus the relationship between perceived conflict and conflict framing can be considered to explain the moderating effect of conflict framing on position stance.

H.4 Analysing for potentially confounding demographic effects

As the sample demographics were found to differ from the Australian population in terms of both educational attainment and household income, multiple regression was conducted to assess whether these demographic variables may have influenced the results. In the case of both support or opposition (education $p = 0.55$; income $p = 0.69$) and perception of conflict (education $p = 0.06$; income $p = 0.14$), the effect was found to be not significant. However, education was border line significant (at $\alpha = 0.05$) as predictor for conflict perception.

H.5 ANCOVA summary tables

ANCOVA summary tables for each factor are presented in this section (Tables H10-H15), extending on the results presented in Section 5.4.4 of Chapter 5.

Table H.10 ANCOVA summary tables for Factor 1. Asterisks indicate significance of the main or interaction effect: *** $p < 0.001$; ** $p < 0.01$, * $p < 0.05$.

		Df	Sum Sq	Mean Sq	F value	Pr(>F)	sig	eta-sq
Factor 1	condition	2	5731	2866	167.621	< 2e-16	***	0.0613
	id_miner	1	1903	1903	111.298	< 2e-16	***	0.0204
	conflict	1	25845	25845	1511.845	< 2e-16	***	0.2766
	decision	1	81	81	4.715	0.030	*	0.0009
	condition:id_miner	2	234	117	6.847	0.001	**	0.0025
	condition:conflict	2	1008	504	29.473	0.000	***	0.0108
	condition:decision	2	29	14	0.845	0.430		0.0003
	Residuals	3429	58619	17				
	Total	3440	93450					

Table H.11 ANCOVA summary tables for Factor 2. Asterisks indicate significance of the main or interaction effect: *** $p < 0.001$; ** $p < 0.01$, * $p < 0.05$.

		Df	Sum Sq	Mean Sq	F value	Pr(>F)	sig	eta-sq
Factor 2	condition	2	1595	797	43.791	< 2e-16	***	0.0186
	id_environmentalist	1	966	966	53.032	0.000	***	0.0113
	conflict	1	19973	19973	1096.859	< 2e-16	***	0.2333
	decision	1	15	15	0.839	0.360		0.0002
	condition:id_environmentalist	2	62	31	1.691	0.185		0.0007
	condition:conflict	2	421	210	11.546	0.000	***	0.0049
	condition:decision	2	123	62	3.381	0.034	*	0.0014
	Residuals	3429	62441	18				
	Total	3440	85596					

Table H.12 ANCOVA summary tables for Factor 3 with farmer identity. Asterisks indicate significance of the main or interaction effect: *** p < 0.001; ** p < 0.01, * p < 0.05.

		Df	Sum Sq	Mean Sq	F value	Pr(>F)	sig	eta-sq
Factor 3	condition	2	404	202	15.343	0.000	***	0.0044
	id_farmer	1	360	360	27.309	0.000	***	0.0039
	conflict	1	29243	29243	2220.814	< 2e-16	***	0.3166
	decision	1	46	46	3.5	0.061	.	0.0005
	condition:id_farmer	2	89	44	3.361	0.035	*	0.0010
	condition:conflict	2	1888	944	71.697	< 2e-16	***	0.0204
	condition:decision	2	93	47	3.537	0.029	*	0.0010
	Residuals	4576	60255	13				
	Total	4587	92378					

Table H.13 ANCOVA summary tables for Factor 3 with fisher identity. Asterisks indicate significance of the main or interaction effect: *** $p < 0.001$; ** $p < 0.01$, * $p < 0.05$.

		Df	Sum Sq	Mean Sq	F value	Pr(>F)	sig	eta-sq
Factor 3	condition	2	404	202	15.302	0.000	***	0.0044
	id_fisher	1	50	50	3.781	0.052	.	0.0005
	conflict	1	29375	29375	2224.988	< 2e-16	***	0.3180
	decision	1	48	48	3.629	0.057	.	0.0005
	condition:id_fisher	2	67	34	2.544	0.079	.	0.0007
	condition:conflict	2	1930	965	73.107	< 2e-16	***	0.0209
	condition:decision	2	89	45	3.377	0.034	*	0.0010
	Residuals	4576	60414	13				
	Total	4587	92377					

Table H.14 ANCOVA summary tables for Factor 4 with farmer identity. Asterisks indicate significance of the main or interaction effect: *** p < 0.001; ** p < 0.01, * p < 0.05.

		Df	Sum Sq	Mean Sq	F value	Pr(>F)	sig	eta-sq
Factor 4	condition	2	142	71	5.062	0.006	**	0.0027
	id_farmer	1	1	1	0.047	0.828		0.0000
	conflict	1	18425	18425	1314.528	<2e-16	***	0.3563
	decision	1	35	35	2.463	0.117		0.0007
	condition:id_farmer	2	2	1	0.078	0.925		0.0000
	condition:conflict	2	1060	530	37.814	<2e-16	***	0.0205
	condition:decision	2	55	27	1.945	0.143		0.0011
	Residuals	2282	31985	14				
	Total	2293	51705					

Table H.15 ANCOVA summary tables for Factor 4 with fisher identity. Asterisks indicate significance of the main or interaction effect: *** $p < 0.001$; ** $p < 0.01$, * $p < 0.05$.

		Df	Sum Sq	Mean Sq	F value	Pr(>F)	sig	eta-sq
Factor 4	condition	2	142	71	5.074	0.006	**	0.0027
	id_fisher	1	2	2	0.145	0.703		0.0000
	conflict	1	18430	18430	1318.003	< 2e-16	***	0.3565
	decision	1	36	36	2.551	0.110		0.0007
	condition:id_fisher	2	82	41	2.944	0.053	.	0.0016
	condition:conflict	2	1049	524	37.5	< 2e-16	***	0.0203
	condition:decision	2	53	27	1.91	0.148		0.0010
	Residuals	2282	31910	14				
	Total	2293	51704					

H.6 Interaction plots for conflict framing (conditions) with identification and decision-making style

Interaction plots for conflict framing (conditions) with identification (Figure H.3) and with decision-making style (Figure H.4) for each factor are presented in this section (Figures H.3 and H.4), extending on the results presented in Section 5.4.4 of Chapter 5

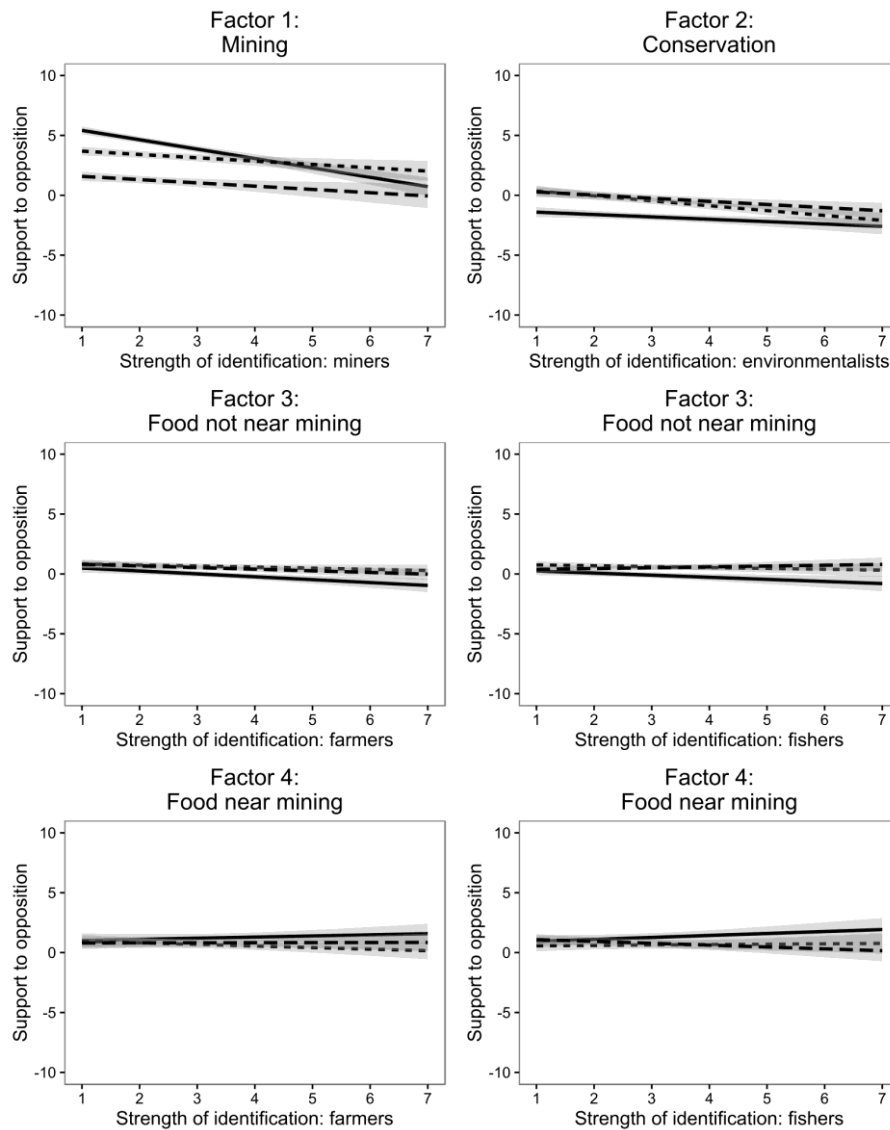


Figure H.3 Interaction plots showing the main and interaction effects of identification with the usual suspects and conflict framing (conditions) on support or opposition (position stance) for land use changes across all four factors. Plots generated using regression models. Shaded areas indicate 95% confidence interval.

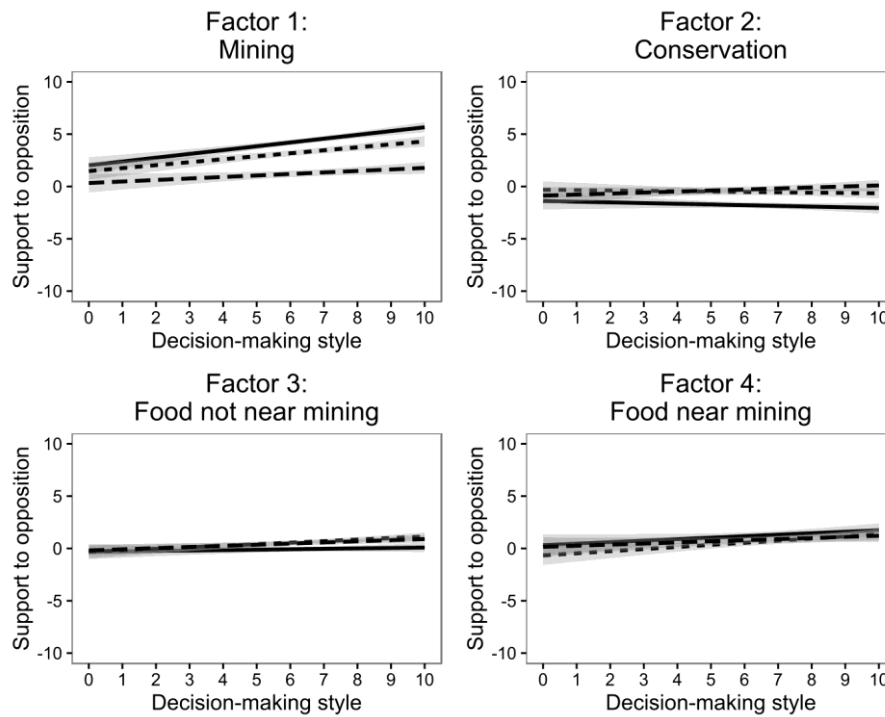


Figure H.4 Interaction plots showing the main and interaction effects of decision-making style and conflict framing (conditions) on support or opposition (position stance) for land use changes across all four factors. Plots generated using regression models. Shaded areas indicate 95% confidence interval.

H.7 Effect of decision-making style on strength of support or opposition

In addition to examining the hypotheses and underlying drivers of conflict framing, the relationship between decision-making style and strength of opinion (rather than levels of support or opposition) was analysed. This was conducted through using the transformed support or opposition results (absolute values). For each participant, the mean strength of opinion across all land use change scenarios was examined against decision-making style through conducting ANCOVA across all participants, incorporating condition as the categorical predictor variable. Conflict framing (conditions) was incorporated into this analysis because each condition had differing levels of information provided, which may have affected those with a ‘seek more information’ decision-making style more than those with a ‘trust gut instinct’ style.

The relationship between self-reported decision-making style and the strength of support or opposition (i.e. how strong was their opinion, regardless of whether it was support or opposition) indicated that those who ‘seek more information’ were more likely to have a stronger opinion (across all scenarios and conditions) than those who reported a ‘gut instinct’ decision-making style. However, the effect was also small ($p < 0.001$, R^2 0.05; Figure H.5) compared to perceived conflict

and the ANCOVA showed no interactive effect between conflict framing (conditions) and decision-making style.

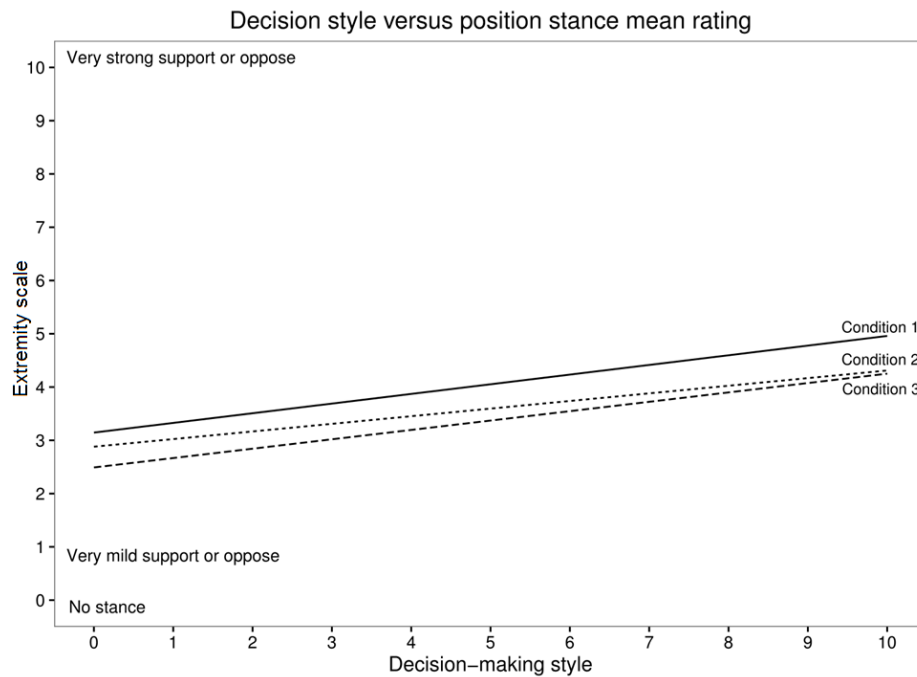


Figure H.5 Interaction plot showing no interaction between conflict framing (conditions) and decision-making style in affecting the strength of support or opposition.

This finding is contrary to expectations, as the scenarios are brief and fictitious, and as such any participant who uses a ‘seek more information’ approach should not have a strong opinion without being given further detail.

