



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



R.M. Colvin^{a,*}, G. Bradd Witt^a, Justine Lacey^b

^a School of Geography, Planning and Environmental Management, The University of Queensland. Post: The University of Queensland, St Lucia, 4072, QLD, Australia

^b Commonwealth Scientific & Industrial Research Organisation (CSIRO), Land & Water Flagship, PO Box 883, Kenmore, QLD 4069, Australia

ARTICLE INFO

Article history:

Received 15 January 2015

Received in revised form 11 May 2015

Accepted 24 July 2015

Available online 8 August 2015

Keywords:

Stakeholders

Citizenry

Public

Deliberation

Governance

Disputes

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.

© 2015 Elsevier Ltd. All rights reserved.

1. Introduction

In environmental and natural resources management (ENRM), successful environmental outcomes are recognised as being inextricably linked with social acceptance and engagement (Beeton and Lynch, 2012; Green and Dzidic, 2014; Welp et al., 2006). 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 (Crane and Ruebottom, 2011; Rowley and Moldoveanu, 2003), and while the field of environmental psychology has examined the role of social identity in pro-environmental behaviour, attitudes, and activism (Bliuc et al., 2015; Dono et al., 2010; Mason et al., 2014; Stets and Biga, 2003; Unsworth and Fielding, 2014) 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,

* Corresponding author.

E-mail addresses: r.colvin2@uq.edu.au (R.M. Colvin), bwitt@uq.edu.au (G. B. Witt), justine.lacey@csiro.au (J. Lacey).

stakeholder groups in distinct ENRM conflicts (Bryan, 2008; Lewicki et al., 2003; Lute and Gore, 2014; Wondolleck et al., 2003), 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. 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 (Lane et al., 2004; Lockwood et al., 2010; Jennings and Moore, 2000; Reed, 2008; Zammit et al., 2000). 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 (Lockwood and Davidson, 2010; Carpini et al., 2004). 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 (Lockwood and Davidson, 2010; Howard, 2006).

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 (Kahane et al., 2013; Lane and Morrison, 2006). At times, co-option of the process by special interest groups in pursuit of narrow agendas may occur (Bernauer and Gampfer, 2013; Morrison et al., 2004), 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 (Bernauer and Gampfer, 2013; Hull, 2009);
- 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 (Howard, 2012; McLennan et al., 2014; Shmueli, 2008). 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.

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., 2015).

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 (Aanesen et al., 2014; Brummans et al., 2008; Bryan, 2008; Cárcamo et al., 2014; Fox et al., 2013; Kindermann and Gormally, 2013; Lane, 2003; Lewicki et al., 2003; Moore and Koontz, 2003; Redpath et al., 2013). 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 (Kahane et al., 2013; Lane, 2003). 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). 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 (Aanesen et al., 2014; Rydin and Pennington, 2000), 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.

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.

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).

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.

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.

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.

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 (Fig. 1). This model incorporates the conduct of stakeholders and the citizenry in the

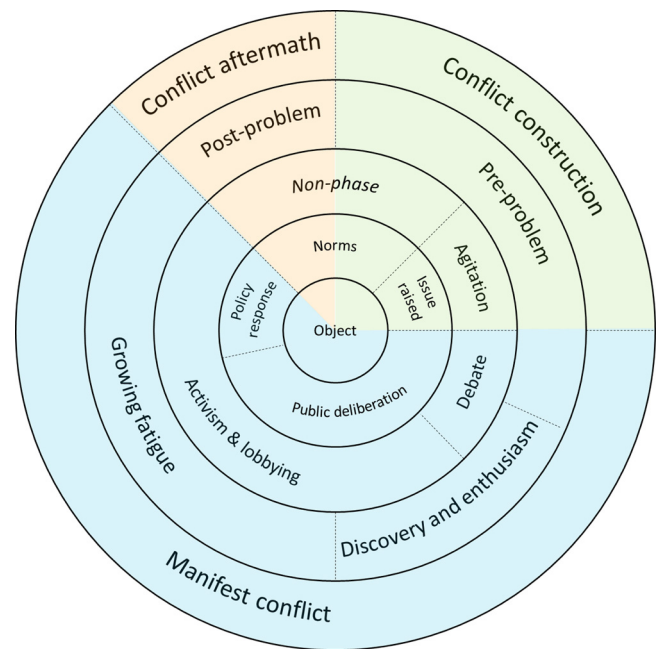


Fig. 1. Conceptual model for the socio-political landscape of ENRM conflicts. The model can be read like a clock face, with a radius extending from the centre of the diagram to the outer edge, identifying the concurrent phases of each of the four elements. The innermost circle represents the object of 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.

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 and location 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 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*.

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.

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 (Unsworth and Fielding, 2014; Mason et al., 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 (Hornsey, 2008; Haslam, 2000). 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., Bryan, 2008; Lewicki et al., 2003; Lute and Gore, 2014; Stoll-Kleemann and Welp, 2006; Wondolleck et al., 2003). 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

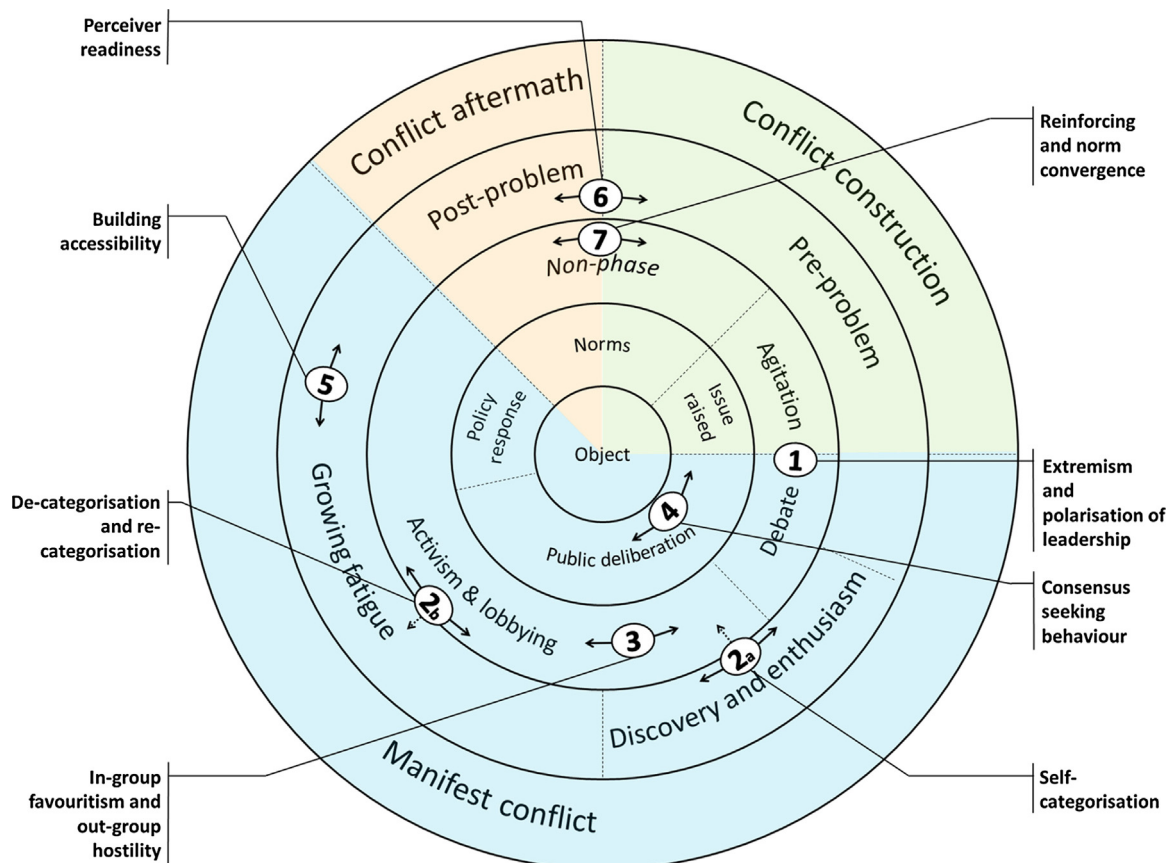


Fig. 2. The social identity approach applied to the conceptual model for the socio-political landscape of ENRM conflict. Each numbered location represents a key social identity mechanism. Solid arrows represent extension across the phase. Dashed arrows represent overflow across elements (e.g., from stakeholders to the citizenry).

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 (Fig. 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.

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.

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.

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., 2015).

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.

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).

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.

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.

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".

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 funneling 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., 2015). 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. (2015), 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 funneling 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 pacified the animosity between the forestry industry and conservation interests following decades of antagonism (Warman, 2014).

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.

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.

Acknowledgements

We wish to extend our appreciation to Simone Carr-Cornish and Bruce Taylor, both from The Commonwealth Scientific & Industrial Research Organisation (CSIRO), for their constructive and helpful comments on an early draft of this manuscript. We also extend our sincere thanks to the two anonymous reviewers who provided detailed and extremely insightful comments on the manuscript. This paper forms part of a PhD project which is supported by the Australian Postgraduate Award (APA) and the UQ-CSIRO Integrated Natural Resources Management (INRM) top-up scholarship. No APA or INRM funds were used directly in writing this paper.

References

- Aanesen, M., Armstrong, C.W., Bloomfield, H.J., Röckmann, C., 2014. What does stakeholder involvement mean for fisheries management? *Ecol. Soc.* 19 (4), 35. doi:<http://dx.doi.org/10.5751/ES-06947-190435>.
- Amason, A.C., 1996. Distinguishing the effects of functional and dysfunctional conflict on strategic decision making: resolving a paradox for top management teams. *Acad. Manage. J.* 39 (1), 123–148.
- Beeton, R.J.S., Lynch, A.J.J., 2012. Most of nature: a framework to resolve the twin dilemmas of the decline of nature and rural communities. *Environ. Sci. Policy* 23, 45–56.
- Beeton, R.J.S., Witt, G.B., Witt, K., Boonchai, C., 2014. *Environmental Problem Solving: An Adaptive Approach*, Environmental Problem Solving (ENVM7512) Course Reference Book. The University of Queensland, St Lucia, Australia.
- Bernauer, T., Gampfer, R., 2013. Effects of civil society involvement on popular legitimacy of global environmental governance. *Glob. Environ. Change* 23 (2), 439–449.
- Bliuc, A., McGarty, C., Thomas, E.F., Lala, G., Berndsen, M., Misajon, R., 2015. Public division about climate change rooted in conflicting socio-political identities. *Nat. Clim. Change* 5, 226–229.
- Boulding, K., 1962. *Conflict and Defense: A General Theory*. Harper and Row, New York.
- Bouilly, L., McCollum, B., Vanderbyl, T., Claydon, G. (2005) Talking until the talking starts: Resolving conflict through dialogue. Paper presented to The International Conference on Engaging Communities, Brisbane, Australia, 14–17 August.
- Brown, G., Raymond, C.M., 2014. Methods for identifying land use conflict potential using participatory mapping. *Landscape Urban Plan.* 122, 196–208.
- Brummins, B., Putnam, L., Gray, B., Hanke, R., Lewicki, R., Weithoff, C., 2008. Making sense of intractable multiparty conflict: A study of framing in four environmental disputes. *Commun. Monogr.* 75 (1), 25–51.
- Bryan, T.A., 2008. *Aligning Identity: Social Identity and Changing Context in Community-based Environmental Conflict*. Ph.D. Thesis. The University of Michigan.
- Burningham, K., Barnett, J., Walker, G., 2014. An array of deficits: unpacking NIMBY discourses in wind energy developers' conceptualizations of their local opponents. *Soc. Nat. Res.* 28 (3), 246–260.
- Cárcamo, P.F., Garay-Flühmann, R., Squeo, F.A., Gaymer, C.F., 2014. Using stakeholders' perspective of ecosystem services and biodiversity features to plan a marine protected area. *Environ. Sci. Policy* 40, 116–131.
- Carpini, D., Cook, M.X., Jacobs, L.R., 2004. Public deliberations, discursive participation and citizen engagement: a review of the empirical literature. *Annu. Rev. Pol. Sci.* 7 (1), 315–344.
- Carson, L., 2009. Deliberative public participation and hexachlorobenzene stockpiles. *J. Environ. Manage.* 90, 1636–1643.
- Colvin, R.M., Witt, G.B., 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* 42, 392–399.
- Compton, E., Beeton, R.J.S., 2012. An accidental outcome: social capital and its implications for landcare and the status quo. *J. Rural Stud.* 28 (2), 149–160.
- Crane, A., Ruebottom, T., 2011. Stakeholder theory and social identity: rethinking stakeholder identification. *J. Bus. Ethics* 102, 77–87.
- Devine-Wright, P., 2013. Think global, act local? The relevance of place attachments and place identities in a climate changed world. *Glob. Environ. Change* 23 (1), 61–69.
- Dono, J., Webb, J., Richardson, B., 2010. The relationship between environmental activism, pro-environmental behaviour and social identity. *J. Environ. Psychol.* 30, 178–186.
- Downs, A. (1972) Up and down with ecology—the issue-attention cycle'. *Public Interest* 28., 38–50.
- Fox, E., Poncelet, E., Connor, D., Vasques, J., Ugoretz, J., McCreary, S., Monie, D., Harty, M., Gleason, M., 2013. Adapting stakeholder processes to region-specific challenges in marine protected area network planning. *Ocean Coastal Manage.* 74, 24–33.
- Freeman, R.E., 1984. *Strategic Management: A Stakeholder Approach*. Pitman, Boston, MA.
- Gale, F. (2013) Tasmanian Forests Agreement: deeply flawed, worth backing. The Conversation, viewed 19 August 2013, <https://theconversation.com/tasmanian-forests-agreement-deeply-flawed-worth-backing-14035>.
- Grant, F., Hogg, M.A., 2012. Self-uncertainty, social identity prominence and group identification. *J. Exp. Soc. Psychol.* 48, 538–542.
- Gray, B., 2004. Strong opposition: frame-based resistance to collaboration. *J. Commun. Appl. Soc. Psychol.* 14, 166–176.
- Green, M., Dzidic, P., 2014. Social science and socialising: adopting causal layered analysis to reveal multi-stakeholder perceptions of natural resource management in Australia. *J. Environ. Plan. Manage.* 57 (12), 1782–1801.
- Grimble, R., Wellard, K., 1997. Stakeholder methodologies in natural resource management: a review of principles, contexts, experiences and opportunities. *Agric. Syst.* 55 (2), 173–193.
- Haslam, S.A., 2000. *Psychology in Organizations: The Social Identity Approach*. Sage, Thousand Oaks, CA.
- Herath, G., 2002. The economics and politics of wilderness conservation in Australia. *Soc. Nat. Res.* 15 (2), 147–159.
- Hogg, M.A., Abrams, D., 1988. *Social Identifications: A Social Psychology of Intergroup Relations and Group Processes*. Routledge, London; New York.

- Hornsey, M.J., 2008. Social identity theory and self categorization theory: a historical review. *Soc. Personality Psychol. Compass* 2 (1), 204–222.
- Howard, J., 2006. Using game theory to explain the behaviour of participants involved in a regional governance process. *Rural Soc.* 16 (3), 254–270.
- Howard, J., 2012. Extremes in justice: How arguments are framed by conservation and farmer groups when attempting to influence water policy. In: Grove, J.R., Rutherford, I.D. (Eds.), *Proceedings of the 6th Australian Stream Management Conference, Managing for Extremes*, Canberra, Australia, pp. 1–9.
- Hull, R.B., 2009. Environmental Pluralism. In: Callicott, J.B., Frodeman, R. (Eds.), *Encyclopedia of Environmental Ethics and Philosophy*, vol. 1. Macmillan Reference USA, Detroit, pp. 383–387.
- ICAC (Independent Commission Against Corruption) (2013) *Reducing the opportunities and incentives for corruption in the state's management of coal resources*. ICAC Report, October 2013. Independent Commission Against Corruption, Sydney, New South Wales.
- Jenkins, B., Henley, G., 2013. Collaborative management: Community engagement process as the decision making process. Paper presented to The Environment Institute of Australia and New Zealand (EIANZ) Annual Conference, Melbourne, Australia, 23–24 October.
- Jennings, S., Moore, S., 2000. The rhetoric behind regionalization in Australian rural resource management: myth, reality and moving forward. *J. Environ. Policy Plan.* 2 (3), 177–191.
- Kahane, D., Lopston, K., Herriman, J., Hardy, M., 2013. Stakeholder and citizen roles in public deliberation. *J. Public Deliberation* 9 (2) Article 2.
- Kasperson, R.E., 2006. Rerouting the stakeholder express. *Glob. Environ. Change* 16 (4), 320–322.
- Kindermann, G., Gormally, M.J., 2013. Stakeholder perceptions of recreational and management impacts on protected coastal dune systems: a comparison of three European countries. *Land Use Policy* 31, 472–485.
- Kivits, R.A., 2011. Three component stakeholder analysis. *Int. J. Multiple Res. Approaches* 5 (3), 318–333.
- Lane, M.B., Morrison, T.H., 2006. Public interest or private agenda? A mediation on the role of NGOs in environmental policy and management in Australia. *J. Rural Stud.* 22, 232–242.
- Lane, M.B., 2003. Decentralization or privatization of environmental governance? Forest conflict and bioregional assessment in Australia. *J. Rural Stud.* 19, 283–294.
- Lane, M.B., McDonald, G.T., Morrison, T.H., 2004. Decentralisation and environmental management in Australia: A comment on the prescriptions of The Wentworth Group. *Aust. Geogr. Stud.* 42 (1), 103–115.
- Lewicki, R.J., Gray, B., Elliott, M. (Eds.) (2003) *Making Sense of Intractable Environmental Conflicts: Concepts and Cases*. Island Press, Washington, D.C.
- Lockie, S., Higgins, V., 2007. Roll-out neoliberalism and hybrid practices of regulation in Australian agri-environmental governance. *J. Rural Stud.* 23 (1), 1–11.
- Lockwood, M., Davidson, J., 2010. Environmental governance and the hybrid regime of Australian natural resource management. *Geoforum* 41 (3), 388–398.
- Lockwood, M., Davidson, J., Curtis, A., Stratford, E., Griffith, R., 2010. Governance principles for natural resource management. *Soc. Nat. Res.* 23 (10), 986–1001.
- Lute, M.L., Gore, M.L., 2014. Stewardship as a path to cooperation? Exploring the role of identity in intergroup conflict among Michigan wolf stakeholders. *Hum. Dimensions Wildl.* 19 (3), 267–279.
- Margerum, R.D., 2008. A typology of collaboration efforts in environmental management. *Environ. Manage.* 41, 487–500.
- Mason, C.M., Paxton, G., Parsons, R., Parr, J.M., Moffat, K., 2014. For the benefit of Australians: exploring national expectations of the mining industry. *Res. Policy* 41, 1–8.
- McLennan, C.J., Becken, S., Moyle, B.D., 2014. Framing in a contested space: media reporting on tourism and mining in Australia. *Curr. Issues Tourism* 1. doi:http://dx.doi.org/10.1080/13683500.2014.946893.
- Miller, A., 1999. *Environmental Problem Solving: Psychosocial Barriers to Adaptive Change*. Springer, New York.
- Moore, L., 2013. *Common Ground on Hostile Turf: Stories from an Environmental Mediator*. Island Press, Washington, D.C.
- Moore, E.A., Koontz, T.M., 2003. Research note a typology of collaborative watershed groups: citizen-based, agency-based, and mixed partnerships. *Soc. Nat. Res.* 16 (5), 451–460.
- Morrison, T.H., Lane, M.B., 2004. The Rise and Rise of Environmental NGOs: Unforeseen risks to democratic environmental governance in Australia. Paper presented to the Australasian Political Studies Association Conference, University of Adelaide, 29 September–1 October.
- Morrison, T.H., Lane, M.B., Hibbard, M., 2014. Planning, governance and rural futures in Australia and the USA: revisiting the case for rural regional planning. *J. Environ. Plan. Manage.* 58 (9), 1601–1616. doi:http://dx.doi.org/10.1080/09640568.2014.940514.
- Morrison, T.H., McDonald, G.T., Lane, M.B., 2004. Integrating natural resource management for better environmental outcomes. *Aust. Geogr.* 35 (3), 243–258.
- Mushove, P., Vogel, C., 2005. Heads or tails? Stakeholder analysis as a tool for conservation area management. *Glob. Environ. Change* 15 (3), 184–198.
- Pondy, L.R., 1967. Organizational conflict: concepts and models. *Adm. Sci. Quarterly* 12 (2), 296–320.
- Redpath, S.M., Young, J., Evely, A., Adams, W.M., Sutherland, W.J., Whitehouse, A., Amar, A., Lambert, R.A., Linnell, J.D.C., Watt, A., Gutierrez, R.J., 2013. Understanding and managing conservation conflicts. *Trends Ecol. Evol.* 28 (2), 100–109.
- Reed, M., 2008. Stakeholder participation for environmental management: a literature review. *Biol. Conserv.* 141, 2417–2431.
- Reed, M., Graves, A., Dandy, N., Posthumus, H., Hubacek, K., Morris, J., Prell, C., Quinn, C., Stringer, L., 2009. Who's in and why? A typology of stakeholder analysis methods for natural resource management. *J. Environ. Manage.* 90, 1933–1949.
- Rowley, T.J., Moldoveanu, M., 2003. When will stakeholder groups act? An interest- and identity-based model of stakeholder group mobilization. *Acad. Manage. J.* 28 (2), 204–219.
- Rubin, M., Hewstone, M., 2004. Social identity, system justification, and social dominance: Commentary on Reicher, Jost et al., and Sidanius et al. *Pol. Psychol.* 25 (6), 823–844.
- Rydin, Y., Pennington, M., 2000. Public participation and local environmental planning: The collective action problem and the potential of social capital. *Local Environ.* 5 (2), 153–169.
- Shmueli, D.F., 2008. Framing in geographical analysis of environmental conflicts: theory, methodology and three case studies. *Geoforum* 39, 2048–2061.
- Shmueli, D.F., Elliott, M., Kaufman, S., 2007. Frame changes and the management of intractable conflicts. *Conflict Resol. Quarterly* 24 (2), 207–218.
- Soma, K., Vatn, A., 2014. Representing the common goods—Stakeholders vs citizens. *Land Use Policy* 41, 325–333.
- Stern, P., Dietz, T., Abel, T., Guagnano, G., Kalof, L., 1999. A value-belief-norm theory of support for social movements: The case of environmentalism. *Research in Human Ecology* 6 (2), 81–97.
- Stets, J., Biga, C., 2003. Bringing identity theory into environmental sociology. *Sociol. Theory* 21 (4), 398–423.
- Stoll-Kleemann, S., Welp, W. (Eds.) 2006. *Stakeholder Dialogues in Natural Resource Management: Theory and Practice*. Springer, New York; Berlin.
- Tajfel, H., 1982. *Social Identity and Intergroup Relations*. Cambridge University Press, Cambridge, UK.
- Taylor, B.M., 2010. Between argument and coercion: Social coordination in rural environmental governance. *J. Rural Stud.* 26, 383–393.
- Unsworth, K.L., Fielding, K.S., 2014. It's political: How the salience of one's political identity changes climate change beliefs and policy support. *Glob. Environ. Change* 27, 131–137.
- Warman, R. (2014) *End of Tasmania's forest peace deal heralds more uncertainty*. The Conversation, viewed 7th January 2015, <http://theconversation.com/end-of-tasmanias-forest-peace-deal-heralds-more-uncertainty-31010>.
- Welp, M., de la Vega-Leinert, A., Stoll-Kleemann, S., Jaeger, C.C., 2006. Science-based stakeholder dialogues: theories and tools. *Glob. Environ. Change* 16 (2), 170–181.
- Wondolleck, J.M., Gray, B., Bryan, T.A., 2003. Us versus Them: how identities and characterizations influence conflict. *Environ. Practice* 5, 207–213.
- Yasmi, Y., Schanz, H., Salim, A., 2006. Manifestation of conflict escalation in natural resource management. *Environ. Sci. Policy* 9, 538–546.
- Zammit, C., Cockfield, G., Funnell, S., 2000. An outcomes-based framework for evaluating natural resources management policies and programs. Project report (Project No. USQ3), Social and Institutional Research program, Land and Water Australia, Canberra.