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Emotions and Anti-Mining Activism: Exploring Variations in Community-Based Resistance to Extractive Industries in NSW, Australia

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Emotions and Anti-Mining Activism: Exploring Variations in Community-Based Resistance to Extractive Industries in NSW, Australia

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Griffith University

School of Environment and Science

Cities Research Institute

Submitted in fulfilment of the requirements of the degree of:

Doctor of Philosophy

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Abstract

Australia's economy is driven by minerals extraction and the international trade of excess resources. The placement of mining operations near rural communities and natural landscapes triggers emotional responses. These deeply embedded emotions may drive resistance efforts that push back against State approved resource extraction projects, and shape community attitudes towards natural resources and the mining sector.

Emotions may be erased or overlooked during mining approvals processes. Further, it is argued that emotions are also under explored in studies of both environmental activism and the negative impacts of mining. I contribute to this arena of research and present here a project that explored the individual and collective emotional impacts of resource extraction. By doing so, this thesis aligns with calls for a greater understanding of the emotions that operate in response to mining operations.

Specifically, this thesis presents anti mining activists' perceptions of mining operations in New South Wales (NSW), Australia, and how these views steered decision making. This study found that emotional reactions to resource extraction differed greatly depending on the community, place histories, and the position of activists within the resistance space and the community. Thus, the *why* of environmental activism against extractive resource industries is the focus of attention here, not necessarily the *how* of resistance strategy.

The characteristics of two different *effective* activist movements that resisted mining operations are interrogated here. Findings here explore two communities that opposed local mining operations, two communities that emphasised different elements of activist approaches to defend themselves

against a wicked political ecology conundrum and the State; two communities that fought for their treasured places, and won!

Findings herein may be extrapolated to better manage resource operations where communities are exposed to unwanted resource extraction operations, as well as aiding in the creation of more focused and attentive governance that better scopes community impacts of mining. The thesis does this in four ways:

1. Outcomes provide valuable understandings of place and communities that are facing new, or are currently experiencing, unwanted mining operations in their regions. This contribution responds directly to literature that calls for a greater understanding of emotions in relation to mining (Ey et al., 2017; Osborne, 2014; Pini et al., 2010).
2. The thesis contributes toward, and engages with literatures that call for a greater understanding of place attachment and emotions in environmental justice issues (Schlosberg et al., 2018).
3. Findings here call for improvements in natural resource management and extractive resource policy, industry practice, and community consultation.
4. This research contributes directly to knowledges that frame and explore the specific emotional nuances of community, treasured places, and place in relation to mining operations, and natural resource management.

This thesis scrutinises the emotions embedded within a political ecology conundrum. Therefore, political ecology theory, combined with emotional geographies theory and environmental justice theory, were used to delve deeper into the emergent subfield of *emotional political ecology* (Sultana, 2015). This rigorous theoretical frame helped to explore the emotions that emerged from two rural communities that were subject to local threat of unwanted extractive industry operations.

Statement of Originality

This work has not previously been submitted for a degree or diploma in any university. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

Mark Stanton Bailey

August 2020

Acknowledgement of Country

I recognise and pay my respects to the ancestors, elders, and present day communities whose *Country* my case study locations are found on: the *Biripi* and *Worimi* of the *Kattang* language group and the *Bundjalung*. I also acknowledge the *Jagera, Kombumerri, Turrbal, Yugambeh, Yugurabul,* and *Yuggera* on whose *Country* I live and work. I acknowledge these custodians of each *Country* as cultures that have existed since the beginning……they are here, now, and with us all in our cities, towns, and all environments.

I traversed over 6000km of sacred grounds to interview research participants and visit those places to gather the stories of people, to learn, and now share that learning. This research, however, does not specifically address the emotional geographies of the traditional custodians of *Country.* Although, it is abundantly clear in the reported emotional geographies of European Australians that they are both consciously and unconsciously affected by the continued sustainable stewardship of *Country* by the *Biripi*, *Bundjalung,* and *Worimi*.

Despite two centuries of colonial rendering to construct a more European landscape, it is not possible for anyone to divorce *Country* from a narrative that would constitute a complete emotional geography for a place. This is evidenced through cultural activities, land management practices, defence of environment and cultural heritage, and the continued presence of the traditional custodians on each respected *Country*. The original names of places, sacred sites, laws, songs, dances, and stories still exist.

The juxtaposition of the interviewed citizens and agriculturalists is that they share an emotional geography to fight for *their* lands, *their* way of life, and *their* cultures and communities within a system that continues to deprive Aboriginal

peoples of their sovereignty, and a place in *their* place. Aboriginal occupation of these lands, from a time before time, and their relationships to *Country* continues and this needs to be recognised and respected by non indigenous Australians.

I recognise the contributions of Gregory Kitson, a Wakka Wakka person, academic colleague, and my friend, for his contributions towards this Acknowledgement of Country. Gregory's contribution has provided an insight to the lived experiences of colonised Indigenous persons and assists in shaping my understanding of *Country*. I am in deep gratitude also for the yarns and friendship Gregory and I have shared over the years and his assistance in helping me understand the historical and ongoing struggles of Indigenous peoples.

Sovereignty was never ceded at the time of colonial invasion, and remains unceded. These lands always were, and always will be Indigenous lands. By listening to the stories of Indigenous folk, we can learn about and understand the past, and work together to better the lives and harmony of all people in nature, and together create a better future.

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To my supervisory team:

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Dr Catherine Howlett. There from my first day at 'O Week' at the start of my undergraduate, right though to PhD. Your professionalism, advice, support,

and input on the project is now, and always will be, truly appreciated. 'My optimism for the future lies within the transformative power of education', these were your words during my first year of tertiary studies; inspirational, and I have never forgotten them. Thank you.

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Prof. Caryl Bosman. If ever there were to be a calm guru on the path of a research candidate, you would be there with coffee and a smile. You have provided such wonderful expertise and advice not only with the project, but also how to balance work/life demands; which really was exactly what I needed, when I needed it. Truly, I thank you so much for your time, support, and input.

Prof. Jason Byrne. Not just your support and input on the project to thank you for here. You have also provided me spaces to collaborate and engage with other academics at conferences, shaping positively my early candidature and research experiences. This support and career guidance will always be remembered and appreciated. Thank you!

Other academics:

Heartfelt thank you to Prof. Jo Anne Ferreira, Dr Edward Morgan, A./Pro. Cara Beal, Dr Rebecca Duell, and the academic cohort in the Cities Research Institute office. Your input and conversations over the years of candidature were truly helpful and inspirational; at times, perfectly placed when I was stuck on important development of the thesis and the project overall.

Special thanks to Dr Tony Matthews for providing teaching and research opportunities, career support, and professional development. Special thanks to Dr Kimberley Reis for teaching opportunities, research work, and career support. Special thanks to Prof. Kristen Lyons for valuable feedback and encouragement as external assessor for my confirmation of candidature. Special thanks to my conference buddies Dr Lana Hartwig and Dr Anna Leditschke for your company along the way. Special thanks to Gregory Kitson for the yarns and your input on the Indigenous perspectives this project acknowledges.

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To my beloved partner Petrus Brand. This journey was only possible with you standing beside me. You have helped carry this project from its inception right through to completion, so this achievement is as much yours as it is mine. You are my bright light in dark places, my strength, my happiness, and my love. Now, after all the hard work, we are ready for the next phase and onwards to new adventures. Thank you so much!

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List of Acronyms

AGL AGL Energy, an Australian energy provider. Previously: Australian Gas Light Company

CSG Coal Seam Gas

EIA Environmental Impact Assessment

EJ Environmental Justice

EPA Environmental Protection Authority

EPE Emotional Political Ecology

GV Gloucester Valley

LNP Liberal/National Party of New South Wales

LTG Lock the Gate Alliance, also known more simply as Lock the Gate

NEFA North East Forest Alliance

NIMBY Not In My Back Yard

NR Northern Rivers

NSW New South Wales: The State of New South Wales

Qld Queensland: The State of Queensland

SIA Social Impact Assessment

UG Unconventional Gas

Participant Attributes: Gloucester Valley

Interview Number	Pseudonym	Sex	Age Range	Appears in text
GV1	Oliver	M	60's	OliverGV
GV2	Jessica	F	Mid 60s	JessicaGV
GV3	Harvey	M	Early 80s	HarveyGV
GV4	Jerome	M	Late 50s	JeromeGV
GV5	Oswald	M	Late 70s	OswaldGV
GV6 a b	a: Alfred b: Dick	a: M b: M	Both mid 40s	a: AlfredGV b: DickGV
GV7	Laura	F	Early 50s	LauraGV
GV8	Laurel	F	Early 80s	LaurelGV
GV9 a b	a: Clark b: Felicity	a: M b: F	Both late 60s	a: ClarkGV b: FelicityGV
GV10	Victor	M	Mid 50s	VictorGV
GV11	Edward	M	Early 60s	EdwardGV
GV12	Lorraine	F	Late 50s	LorraineGV
GV13 a b	a: William b: Courtney	a: M b: F	Both mid 40s	a: WilliamGV b: CourtneyGV
GV14	Guy	M	Late 50s	GuyGV
GV15	Ronnie	M	Mid 50s	RonnieGV
GV16 a b	a: Carter b: Lois	a: M b: F	Both late 60s	a: CarterGV b: LoisGV
GV17	Jennifer	F	Late 60s	JenniferGV
GV18	Cassandra	F	Mid 60s	CassandraGV
GV19	Sonja	F	Late 30s	SonjaGV
GV20	Rex	M	Mid 70s	RexGV
GV21	Cynthia	F	Mid 60s	CynthiaGV

Participant anonymity and need for a pseudonym, an in text code, and redaction of other 'attributes' such as employment or role with the activist movements this thesis explores will be explained in the methodology section*.

Participant Attributes: Northern Rivers

Interview Number	Pseudonym	Sex	Age Range	Appears in text
NR1	Sharon	F	Mid 40s	SharonNR
NR2	Sigrid	F	Mid 60s	SigridNR
NR3	Arthur	M	Late 70s	ArthurNR
NR4	Linda	F	Mid 50s	LindaNR
NR5	Vera	F	Late 70s	VeraNR
NR6	Bruce	M	Mid 40s	BruceNR
NR7	Ray	M	Late 30s	RayNR
NR8	Clara	F	Early 70s	ClaraNR
NR9	Selina	F	Late 40s	SelinaNR
NR10	Jennie	F	Early 40s	JennieNR
NR11	Emily	F	Early 70s	EmilyNR
NR12	John	M	Mid 30s	JohnNR
NR13	Jim	M	Early 80s	JimNR
NR14	Amaya	F	Late 60s	AmayaNR
NR15	Rhonda	F	Mid 60s	RhondaNR
NR16	Ralph	M	Late 60s	RalphNR
NR17	Kara	F	Late 40s	KaraNR
NR18	Mari	F	Early 70s	MariNR
NR19	Barbara	F	Late 70s	BarbaraNR
NR20	Diana	F	Mid 60s	DianaNR
NR21	Sheira	F	Mid 60s	SheiraNR

* See note on previous page

Chapter One

The Thesis Introduction

&

The Thesis Structure, Theoretical Framework, Research Methodology, The Research Problem, and The Research Foci

Introduction

Importantly, the EJ[1] discourse in Australia was first taken up by Aboriginal communities. Their concerns were not simply based in inequity, but more broadly on threats to land, country, resources and culture, concomitant with developmentalism and environmental degradation.

(Schlosberg et al., 2018: 592)

Vast quantities of mineral and energy resources are required to sustain modern consumption patterns and economies, particularly in highly developed and industrialising countries (Redclift, 2009; Temper et al., 2015; Wu et al., 2019); these resources must be extracted from somewhere. Due to increasing resource consumption, many communities globally find themselves in situations where the impacts of extractive industries good and bad are forced upon them, sometimes with, or sometimes without citizen engagement or involvement (Hilson, 2002; Kennedy et al., 2017; Masterman Smith et al., 2016; Whiteman & Mamen, 2002).

Controversies can arise with the extraction of resources (de Rijke, 2013c; Hodges, 1995; Paragreen & Woodley, 2013; Rickson, 2012). Disputes may result from the types of resource being extracted, as well as the techniques employed to extract the resource from the environment. Further to these controversies, there is continuing debate arising from the persistent use of fossil fuels for energy, rather than concentrating on the advancement of the renewable energy sector (Cotton, 2014).

[1] Environmental Justice—abbreviation in original

This thesis deals primarily with two extractive resources, coal metallurgical and thermal and unconventional gas. A more detailed description of these fossil fuels will be provided in the second literature review, Chapter Three, however it is necessary here to provide a brief definition of each. Thermal coal, also known as brown coal, is fuel mined for the production of energy in Australia (Geoscience Australia, 2019). Differing from thermal coal is metallurgical coal, also known as coking coal, which is high in carbon and low in impurities or other materials and is highly valued as an ingredient in steel production (Geoscience Australia, 2019).

Conventional gas is the methane reserve in subterranean substrates that accumulates into pockets. These pockets are drilled and capped and the methane reserve moves up to well heads under natural pressure (Lock The Gate Alliance, 2019c). *Unconventional* gas, the gas reserves discussed in this thesis, is a methane reserve where the gas is trapped, or locked up, and dispersed *within* subterranean strata layer; usually a coal seam, sandstone, or a sandy layer.

Given the location of unconventional gas reserves, in many locations the gas needs to be stimulated to be released, therefore each substrate where the methane is trapped is hydraulically fractured using large amounts of water under pressure to crack the subterranean layers. A propping agent, such as sand, is suspended in the fracking fluid. When the water is removed the propping agent remains in place holding open the fissures and the gas is then freed from the substrate (Lock The Gate Alliance, 2019c). Note that substrate fracturing is not always necessary to stimulate gas flow in unconventional methane mining, however, for the purpose of this project, this method was necessary in both of my case locations and therefore shall be discussed as necessary for this project.

The unconventional gas industry first emerged in Australia in the 1970s when initial exploration for resources began (Government of NSW, 2014a); the first commercial well was drilled in 1996 (Baker & Slater, 2008). The unconventional gas industry has burgeoned in Australia ever since. In more recent years global commodity markets have developed a favourable option for companies to sell excess reserves, making the unconventional gas industry a viable and attractive global opportunity for minerals and energy companies (Baker & Slater, 2008; Cotton, 2014).

The negative impacts of the unconventional gas industry and the hydraulic fracturing technique required to extract gas reserves cause grievance and loss to affected communities (Davis & Franks, 2011; Paragreen & Woodley, 2013). These impacts trigger some individuals or groups to resist the development of the industry (de Rijke, 2013c; Sherval & Hardiman, 2014; Willow & Wylie, 2014). The resistance to state approved mining projects can be driven by the deeply embedded and emplaced emotions some citizens have for their communities, surrounding environments, and each other. Yet as Bailey & Osborne (2020), Ey et al. (2017), Osborne (2014), and Pini et al. (2010) have argued, these emotional drivers are often overlooked in studies of both environmental activism and the social impacts of mining.

In Australia, the environmental and social movements that have formed in response to coal mining, and more recent emergence against unconventional gas industry, have evolved over time. Beginning as separate resistance movements made up of concerned community members at a local scale, these social movements have more recently grown into networks of resistance such as the Lock The Gate Alliance (Hutton, 2012). The activism against unconventional gas development in different regions has varied, and has resulted in considerably different outcomes (Groundswell Gloucester, 2015c; Hutton, 2012). This kind of social movement forming in repose to resource

development in Australia is not uncommon; so, this case study explores a continuing trend of Australia's history of resource extraction and development, and the protests movements that form to resist them (Chapman, 1992; Hutton & Connors, 1999; Maddison & Scalmer, 2006; Toyne, 1994).

There has already been some geographical work on the topic of exploring past environmental activism (e.g. Burgmann, 2003; González Hidalgo, 2017; Toyne, 1994; Veltmeyer & Bowles, 2014), including studies on the negative impacts of mining that trigger activist strategy (Fielding et al., 2008; Veltmeyer & Bowles, 2014). I contribute to this arena of research and present here a project that explored the individual and collective emotional impacts of procedural and distributive *in*justice relating to resource extraction. mining operations near rural communities. Aligning not only with national research priorities 1, 2, 5, 6, 8, and 9 (Government of Australia, 2015a, see: Appendix A), my thesis also aligns with recent literature that calls for a greater understanding of the emotions that operate in response to mining and resource sectors (see: Ey et al., 2017; Osborne, 2014; Pini et al., 2010), and contributes specifically to this nascent field of knowledge.

The continuing development of the coal industry, the contemporary issue of unconventional gas development, and the activism that has formed in reaction to each industry is the context for this research. The continued approval of new fossil fuel exploration and production projects raises a range of controversial issues (Bailey & Osborne, 2020; Groundswell Gloucester, 2016, 2018a, 2021; Lock The Gate Alliance, 2017a, 2019a, 2019b). These issues relate to industry extraction practices, governance, and the social and environmental impacts of mining. This thesis, therefore, is part of a growing body of work that explores the emotional geographies of resource extraction in rural settings (Bailey & Osborne, 2020; Ey et al., 2017; Osborne, 2014; Pini et al., 2010). This thesis investigates how locals experience the impacts of mining, and some of the ways

in which community based resistance to mining forms and organises in response to place and community contexts.

It is important to clarify early, that this thesis does not weigh activist or anti mining participant perceptions against pro mining interests. This thesis focuses only on the opinions of those people in my case study locations that opposed mining. I did not seek to assess these opinions against the needs of the State and the interests of mining companies; hence, the State and the mining industry were not approached for comment and this is explained in the research approach and methodology sections later. Research that compares pro and anti mining positions already exists (see Delina, 2021; Jolley & Rickards, 2020; Lewin, 2017)

This project is deliberately different, and finds part of its novelty in exploring the *perceptions of activists and anti mining opinion only*, research of this nature does exist already (see Černoch et al., 2019; Ransan Cooper et al., 2018), justifying the anti mining only approach. My thesis novelty is maintained given the comparative nature of the case study design, as well as the case locations and framings I employ. Specifically, I posit that there is reason to question why two different communities, who both claim *effective* activist strategy against the fossil fuels resource industry, emphasised different elements in their resistance campaigns.

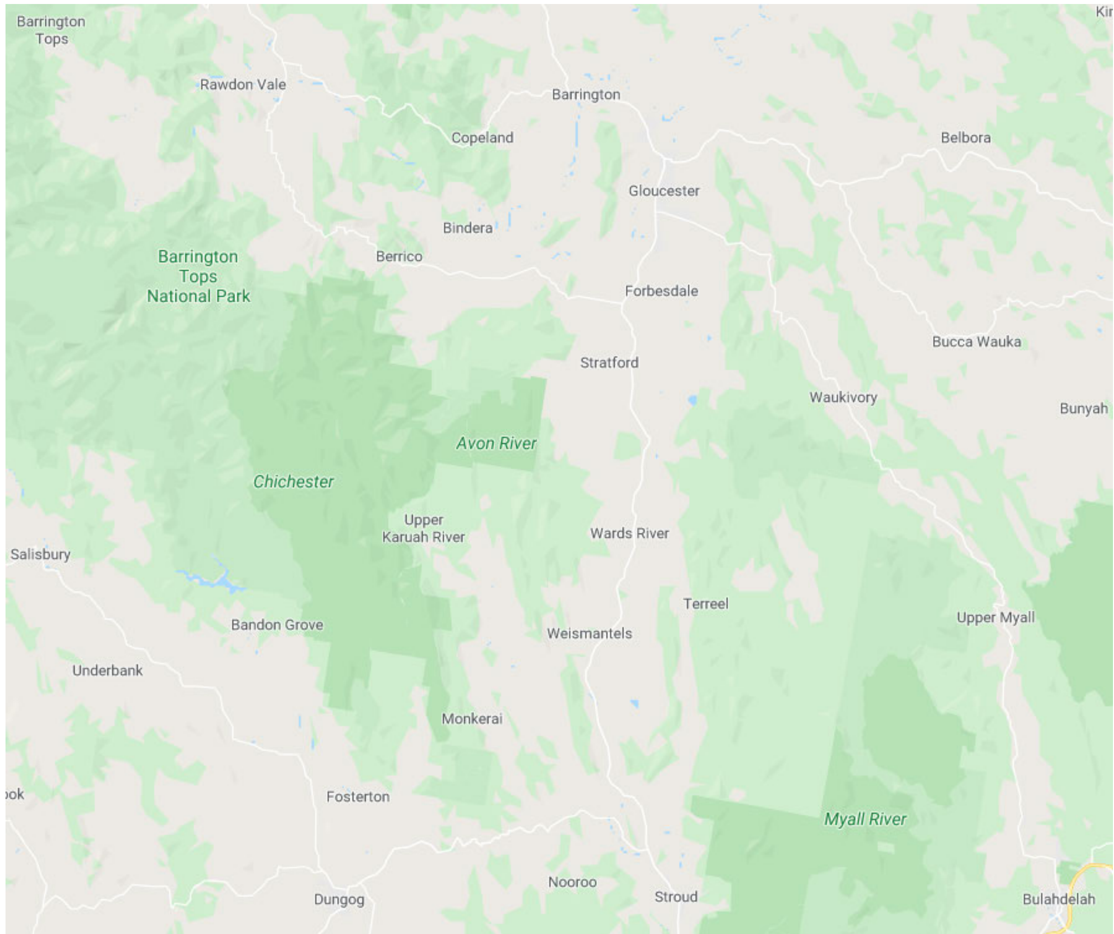
Noting a spatial and governance boundary; these two communities are framed by the same State laws and regulations. The two case locations are The Northern Rivers (NR) Region, far north east NSW, and The Gloucester Valley (GV), just north of Sydney, NSW (see Map 1). Communities in both case study regions have been impacted by the placement of exploratory phase unconventional gas operations; see also maps 2 and 3 on the following pages for more specific detail.

Map 1: New South Wales showing the locations of the NR and GV

Inset: Australia, highlighting the State of New South Wales. Image source: (Google, 2020a, 2020b)

Map 2: A more detailed view of the Northern Rivers Region, detailing the central regional city of Lismore

Image Source: (Google, 2020b)



Map 3: A more detailed view of the Gloucester Valley Region

Image Source: (Google, 2020a)

The phenomenon this project originally sought to explore was the variance in activist strategies within social and environmental campaigns against unconventional gas development in the state of New South Wales. Hence, the first research focus is: *Why have activist movements against the same industry, under similar contexts and legislative structures, executed strategies in different ways*? This first research focus is the primary contribution of this thesis; hence, the whole of Chapter Six is devoted to it.

During the course of candidature, particularly data collection, two additional research foci evolved as is the nature of qualitative research. The second research focus explores power, and the locations that mining decisions are

made, and therefore deals with *the spatiality of power*. The third research focus *engages with the emotions that react to and include emotional political ecology*, addressing the theoretical constructs of the thesis. These later two research foci are additional thesis contributions, and combined they make up Chapter Seven. The thesis structure and detailed chapter descriptions follow.

The Thesis Structure and the Conceptual Framework

One way to think of the role of structure, and signposting, is as a kind of guide that walks readers along a road from what they did know (past knowledge) to what they should know (a knowledge frontier).

(Evans et al., 2011, p. 18, parentheses in original)

The thesis contains eight chapters, some of which consist of multiple parts for ease of reading and for breaks between major themes in the narrative. There is a visual representation of the thesis conceptual framework below (see Figure 1); detailed descriptions of each chapter and what they contribute to the overall thesis will follow. An enlarged version of the framework is included at Appendix B.

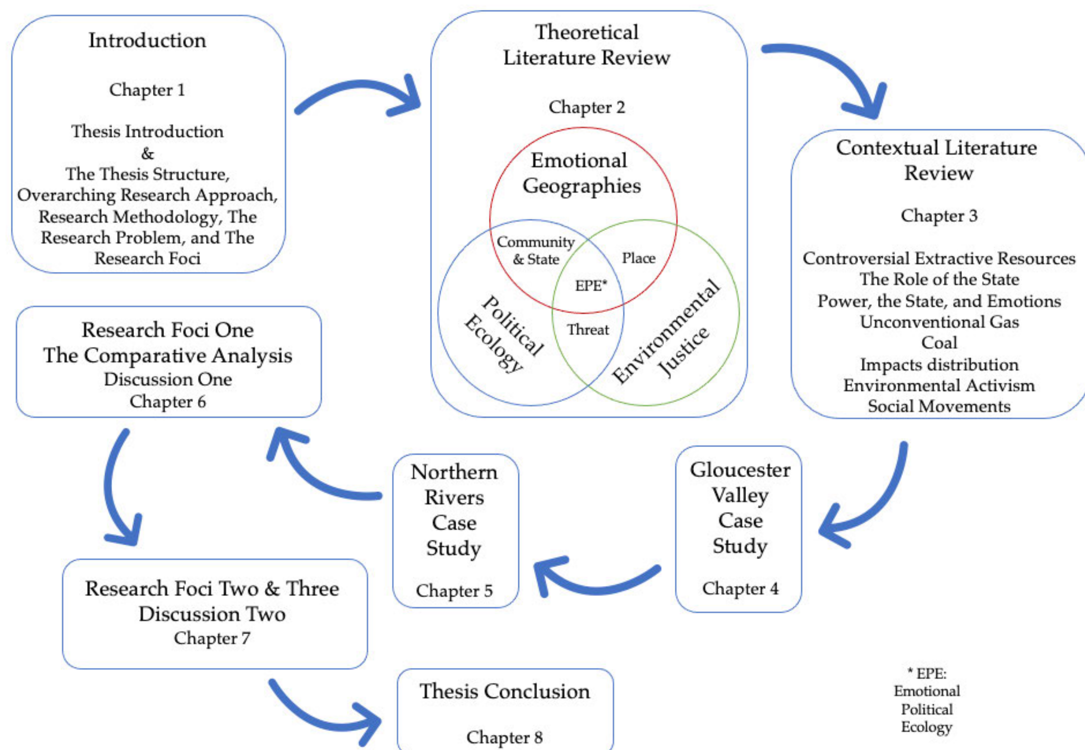


Figure 1: The thesis conceptual framework

Detailed description of the thesis chapters

Chapter One: This chapter describes the thesis structure and conceptual framework (above). The research problem outlined above is explored in greater detail, followed by the methodology, the research approach, and the description of the case study design. The research aims, hereafter the research foci, are reiterated in more detail before the chapter segues to the first literate review.

Chapter Two: Literature Review One: Theoretical Constructs. Here I discuss the three theories selected to explore and understand participant interviews: political ecology, environmental justice, and emotional geographies. The theoretical literature was separated from the general literature review due to word count and to maintain clarity. Chapter Two frames the role of the State and the neoliberal agenda as these underpin the context of the project.

Chapter Three: Literature Review Two: Contextual Literatures. This chapter presents relevant literature, empirical research, and exploration of key themes that relate to this project. Combined, the two literature review chapters inform my research approach and form the analytical framework for interview analysis.

Chapter Four: The Gloucester Valley Case Study. This chapter presents the background and findings of the first case study location. This chapter highlights the shifting emotional geographies of The Gloucester Valley community in response to threat from extractive industries.

Chapter Five: The Northern Rivers Case Study. This chapter presents the background and findings of the second case study location. This chapter highlights the shifting emotional geographies of the Northern Rivers communities that responded to the threat of unconventional gas mining.

Chapter Six: Thesis Discussion One The Comparative Analysis. This chapter concentrates on research focus one, which explores *why* different communities emphasise different activist strategies. Essentially, Chapter Six is the comparative analysis between the two case locations. I contribute to the contemporary understandings of mining and the emotional geographies of communities that shift upon placement of local extractive industries.

Chapter Seven: Thesis Discussion Two. This chapter focuses on research foci two the *spatiality of power*. Chapter seven also offers my contributions to research foci three the role of emotions in three conversations that are already occurring in research theorisation: political ecology, emotional geographies, and environmental justice.

Chapter Eight: The Thesis Conclusion. This chapter summarises the important findings from this research, contextualising them alongside the restrictions and limitations of this work. This chapter also provides descriptions of avenues for continuing research in this field. I close the thesis with a personal reflection of my research experience.

A note on the thesis structure

I am aware that a traditional narrative thesis structure is not strictly followed in this document. Usually, there would be the presentation of a detailed background to the overarching case study, usually in a separate chapter. As this project scrutinises two case locations separately (Chapters Four and Five), and then synthesises these in the main discussions (Chapter Six primarily, and additional thesis contributions in Chapter Seven), the backgrounds to each case are located at the beginning of each case study chapter. Therefore, it was considered that an overarching case study background in this case would be repetitive and unnecessary.

The research methodology is also placed in this first chapter deliberately. During candidature, the project methodology and theoretical framing shifted as is seen so often in social studies and human geography research. The methodology presented here in Chapter One is deliberately placed as it assists in understanding the theoretical and analytical framing of the project, as well as the research approach and design. I acknowledge that the placement of the methodology in the first chapter conflicts with a traditional narrative thesis design; however, I believe each project has nuanced differences, and this placement suits my study well.

The Overarching Research Approach

The Intersection of Environmental Justice, and Emotional Geographies Theory Within a Broad Political Ecology Frame

Whether you can observe a thing or not depends on the theory which you use. It is the theory which decides what can be observed.

Albert Einstein (1926, cited in Heisenberg, 1989, p. 63)

This qualitative project explores the drivers of effective activism and why communities apply activism differently. Because of this, the project must be able to analyse and understand those emotional connections participants have with each other, the environment, and the places that are being impacted (Osborne, 2014). Further, the role of the State[2], state structures, and the role of resource proponents must be considered (The role of the State and the neoliberal agenda will be explored at the beginning of Chapter Two). Essentially, this thesis deals with mining operations that trigger emotions, that in turn lead to place defensive actions; a complex conundrum that requires a flexible yet focused theoretical lens; as represented in Figure 2.

Broadly, this thesis scrutinises a political ecology conundrum. These kinds of problems are known to be immensely complex (Robbins, 2012). To best explore

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[2] State—capital S, I refer to 'the' state, as the sovereignty or government that has the assigned power to govern. Lower case s, state refers to elements of the state that are not 'the' government; e.g. the State government, vs state structures.

the issues this thesis investigates, I draw on the 'long arc of critical human environment scholarship and the theoretical frontiers of political ecology' (Martin et al., 2019, p. 107). This use of political ecology framing is achieved by reviewing the history and contemporary literatures in political ecology theory later in Chapter Two.

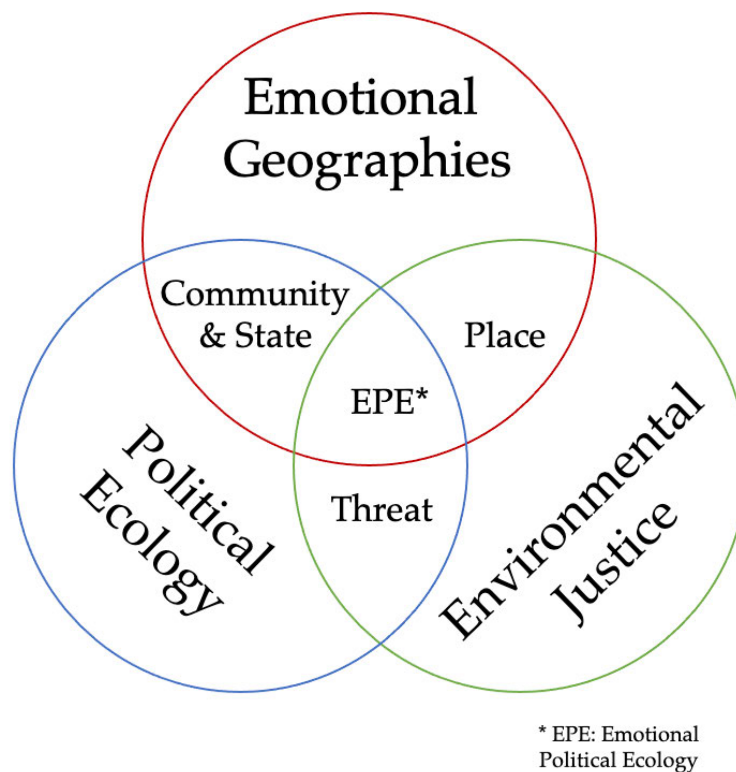

Figure 2: The theoretical frame

Political ecology themes, therefore frame and contextualise the investigation. These theoretical themes are founded on the understanding that environmental and societal conditions are linked, that these links are impacted by political actions, and that injustice and power relationships impact both society and the environment (see Blaikie, 1985; Blaikie & Brookfield, 1987; Greenburg & Park, 1994; Robbins, 2012; Rocheleau, 2008; Zimmerer & Bassett, 2003). Political ecology, initially in part, problematises the research issues by broadly scoping

the wicked problems associated with natural resource management and the mining sector; therefore, political ecology is explored first in the literature review as the tenets there underpin the investigation and forms the broad scaffold for my whole project.

I accept that emotions are the product of interaction with other people, spaces, places, events, and indeed, the self (Bondi et al., 2005). Emotional geographies, therefore, serve this project as an overlapping focused lens in conjunction with this political ecology framing to allow the research to explore a deeper connection or position with the project, the actors, or the setting. Alongside emotional geographies, I employ environmental justice again as an overlapping focused lens to better understand the struggles communities and individuals have with the State, and more generally, the issues inherent to political ecology.

As far as interrogating the conversations I had with participants, this project deals primarily with emotive issues such as the negative impacts experienced by communities dealing with proximal placement of extractive resources industry. Some of these issues are considered wicked problems; problems that are highly complex, uncertain, and risky (Grant Smith & Osborne, 2016; Head, 2008b). The emotions of locals are triggered by the placement of mining operations near established rural communities, a decision made by governments and resource proponents that many participants described as an act of injustice. It is here that environmental justice theory combines with emotional geographies within the broad scaffolding of a political ecology conundrum (see again Figure 2). Environmental justice is used to explore issues of *in*justice, fairness, process, and procedure that closely relate to political ecology and environmental justice theorisation to enable a closer view of the environment, pollution, and detrimental impacts of mining.

Further to the above, decision makers, communities, or indeed researchers, do not always engage with policy and wicked issues in an emotionally free way (Grant Smith & Osborne, 2016). A political ecology framing, with focused exploratory lenses combining emotional geographies and environmental justice, therefore, enables the thesis to interrogate and better understand the links that exist between different actors, the places, and spaces they occupy, the individual and community level reactions to place intrusion and injustice. This framing also allows exploration of the motives and drivers of actor's willingness to behave or react to threat in different ways.

Per Figure Two above, it can be seen in my theoretical frame how the overlapping theories of political ecology, environmental justice, and emotional geographies reveal a central theme of emotional political ecology (EPE). First coined by Sultana (2011; 2015), this burgeoning field of investigation explores specifically the emotional elements of political ecology debates whilst also scoping injustice. The conversations and literatures that emerge in this space 'deepens understandings of the terrain of political transformation' (Doshi, 2017, p. 127).

I explore in more detail the specific emotional political ecology landscape later in Chapter Two, by presenting five key principles of emotional political ecologies that also scope environmental injustice themes. The intersection of emotions, injustice, and political ecologies suit the specific nature of this study well, and this will be explored in later chapters. Then later in Chapter Seven I draw on these tenets and provide my own input to these conversations. The research problem specific to this study will be more deeply explored from a political ecology context in the next section.

The Research Problem

Eclectic uses of the term "political ecology" are introduced and wherein much divergent research is shown to share an intellectual history, a community of practice, and a certain kind of text. Rather than finding a single body of theory, we discover instead a number of independent trains of thought colliding in the field, leading to a remarkable synthesis…

(Robbins, 2012, p. 9)

A political ecology conundrum is essentially a problem that spans political, economic, and social spheres and illustrates how the changes or influence of one sphere has ramifications on the others and also, how changes impact surrounding environments (Robbins, 2012). The linkages between these spheres are underpinned by power relations (Martin et al., 2019). When investigating a political ecology conundrum, the aim is to find outcomes that still meet the needs of the State and the economy, but have fewer negative impacts on society and the environment (Greenburg & Park, 1994; Robbins, 2012; Rocheleau, 2008; Zimmerer & Bassett, 2003).

In part, the State and the private sector's need for resources and financial gains drive the development of the coal and gas industries (de Rijke, 2013a; Kennedy et al., 2017; Sherval & Hardiman, 2014). Known as the resource curse, communities close to known reserves find themselves caught up in debates about land use and the effects of extraction, often without sharing much of the so called benefits these activities produce (de Rijke, 2013a; Sherval & Hardiman, 2014). Communities close to natural resource deposits are vulnerable to the degradation of their local places, communities, and farmlands, due to mining operations (Willow, 2014).

The environmental and social impacts of mining as well as the tactics used by resources companies and the ways government agencies are seen to facilitate resource development at the expense of other interests creates mistrust between citizens and governments, and leaves affected communities grieving a range of losses (de Rijke, 2013a; Sherval & Hardiman, 2014). Scenarios such as these can be broadly defined as political ecology conundrums. This project, however, also focuses attention on elements of environmental justice and emotional geographies within natural resource contexts; hence the development of the theoretical frame illustrated previously. Further, this research delves into the many wicked problems associated with extractive resources particularly coal and unconventional gas mining that align with the Australian national science and research priorities; as seen at Appendix A.

Political ecologies, emotions, and injustice

The impacts of controversial resource industries near residential areas can negatively affect those places that people are connected to, that they are emotionally linked with; those places that in this thesis I term *treasured places*. In turn, these negative impacts result in damage to the social fabric of rural communities (Farrugia et al., 2018). These negative impacts arise due to the known shortfalls of natural resource management processes such as Environmental Impact Assessments, where they do not always scope the negative impacts of mining operations (O'Faircheallaigh, 2010). In these arenas, governance processes do not always equitably address, nor adequately compensate for, the various negative consequences caused by resource extraction (Lockie et al., 2008).

Vulnerable rural communities are said to suffer from the resource curse when mining operations lead to environmental injustice and resource extraction destroys places that were valued by the local communities (Martinez Alier, 2014). The resource curse was evidenced in the rural communities I studied as

discussed in the following chapters. The flash point where affected individuals decided to resist mining operations depended upon both community level impacts and the degree of personal grief/loss an individual had in relation to the destruction of place. The environmental and social activism that emerges from these types of episodes are unique and dependant on the different types of industry, the sites and places that mining operations are established on or proposed for, and the individuals who engage as stakeholders in and around these resource conflicts.

Here, I acknowledge that the primary focus of the study shifted during interview collection, something that happens regularly during qualitative research projects (Creswell & Poth, 2018; Yin, 2011). Originally, this project aimed to investigate and scrutinise the drivers of effective activism strategy, and *how* activism was executed in the two case locations. During the course of candidature, however, the main aim of this study evolved into an investigation of *why* there is a variance between different community strategies when engaging in protest activities.

The deviation away from *how* activism was done to *why* activists decided to engage in particular strategy was also informed by the conversations I had with participants, and representatives of regional Australian activist movements. On this point I have a standing agreement with representatives of the Lock the Gate Alliance[3] that no specific activist strategy will be revealed through this project. Whilst I do frame the types of activism that were happening and are available to activists, these strategies are drawn from the literature, outward facing activist web pages, and media. Sensitive dialogue from participants that did reveal specific approaches of strategy that if made public might damage the activist movements in Australia have been redacted from the data set, and

[3] A community driven activist network that resists the rollout of coal and gas mining in Australia (Lock The Gate Alliance, 2017a)

the interviews have since been destroyed the research agreements and reciprocity is further explained in the methodology section.

I also realised during preliminary conversations with some activist leaders, that the magnitude of networking required for resistance activities that aligned with my case study was immense. Thousands of individuals coalesced to form those spaces of resistance against the State and resource proponents. Each person brought their own individuality to protest actions, or at least a different reason to engage and act something that will be explained in later chapters of this thesis. I soon realised that a much larger project would be needed to complete an exhaustive review of *how* the activism was executed in just one case location, let alone in two. This limitation is further discussed in the relevant reflections section in the last chapter of this thesis, Chapter Eight.

During the interview phase of the study an unexpected theme began to emerge from the data where, without expectation or prompting, interviewees detailed *why* different strategies were emphasised in their case location, and why others were not this happened in both case locations. Interview data clearly indicates that each community held very different emotional geographies, links to place, understandings of community, different interpretations of threat, different histories, different place based actors, and ultimately perspectives on the issues that were deeply oriented to the understandings these people have of the nuances of their communities. These individual geographies were linked to local treasured places and the threats perceived or actual that were created by resources proponents and the State after what was seen by participants to be inadequate and or tokenistic community consultation.

The differing emotional geographies in the two case locations became a focus of the study. The causal mechanisms leading to the need to protest are also explained by issues of environmental justice. To explain, those processes and locations of decision making that obfuscate the individuality of communities

and subject future communities that are located near resources to extractive industry placement. In this ilk, questions relating to potential procedural and distributive *in*justice arise. These kinds of injustice frame and explore distributive and procedural justice, amongst other themes, explored later in Chapter Two. For now, however, 'distributive justice refers to the distribution of burdens and benefits related to environmental interventions. … Procedural injustice is about who is involved and has influence in terms of decision making' (Svarstad & Benjaminsen, 2020, p. 1). My research scopes these justice issues and questions how participants raise these, and including perceptions of the role of the state and resource companies explores then asks whether these elements steered activist strategy, essentially *why* different communities emphasised different resistance strategies.

Given the complexity of the data gathered for this project, the intertwining nuances of emotion, justice, decision making, power, and the overarching need for resources by the State, it was necessary to combine more than one body of theory to fully analyse and explain the nuances in the data. Specifically, those linkages that I discovered between environmental justice and emotional geographies feature here. All of this will be elucidated in the following chapters.

The Research Methodology

In social realism it is quintessential that society is an open system: and not in the milk and water terms of those methods' textbooks warning about the difficulties of controlling for extraneous variables. At best these point to the (insurmountable) problem of introducing extrinsic closure into the social system, or any part of it. What they neglect are the intrinsic sources of openness, which ontologically preclude closure.

(Archer, 1998, p. 190, parentheses in original)

My philosophical orientation

Personally, I believe that a *full* understanding of the world, the universe, or reality as we know it now, essentially exists beyond single scrutiny of an issue, phenomena, or social construct. My view, or indeed interpretation of the world, centres on the understanding that reality cannot just be one person's findings, nor can it be contained to one epistemological standpoint. Places are multi occupied; therefore, understandings of geographical social reality must be multifaceted, or at least one must accept that there might be multiple interpretations.

I acknowledge that for this thesis, the interviewees I engaged for the project are not held in isolation from each other. My participants share places, they converse with each other, the threats and resulting actions are shared experiences. These experiences, however, were delivered to me by individuals and express their personal interpretation of what occurred. All these individual voices coalesce to form a multifaceted understanding of events in an open system. My interpretation of the world, and the interviews related in this research form a set of opinions, which align with the tenets of critical realism.

Critical realism

Critical realism was developed against two pre existing paradigms, 'firstly, against empirical realism (positivism) and transcendental idealism (constructivism), [where] the pursuit of ontology is the attempt to understand and say something about "the things themselves" and not simply about our beliefs, experiences, or our current knowledge and understanding of those things' (ICCR, 2015a, para. 2). Therefore, critical realists tend toward prioritising the world in practice, over any set systems of rule, law, or lore (Huckle, 2019; ICCR, 2015b; Slaymaker, 2017).

Critical realism provides an interpretation or perspective on how something can be understood from multiple perspectives. *Things* can be measured and interpreted; however, different individuals or groups may have a different interpretation of what that *thing* is or represents (Archer, 1998; Huckle, 2019; Slaymaker, 2017). Critical realism then provides an individual the ability to consider why two interpretations or realities can be similar, or opposite. This is especially useful when referring to participant interviews, as critical realism places an emphasis on *the real and the actual*, and may then consider opposing opinions on the same topic (Collier, 1994; Huckle, 2019; Slaymaker, 2017).

Following Hume (ICCR, 2015b), critical realism acknowledges that society and realities usually exist in open systems. In a closed system, research may find that event A precedes event B, and this may be replicable; leading the researcher to conclude that event A causes event B. This kind of result is usually indicative in laboratory settings and other environments where variables can be controlled. In an open system, such as that experienced in general society and the *real world*, causality of one thing before another is not always evident (Huckle, 2019). Event A does not necessarily precede event B in every instance. This is particularly true when investigating human behaviour, as

perception and choice create random chance variables, which cannot be controlled. Given that society is an open system, Archer (1998, p. 190) opines:

> To the realist, the one factor which guarantees that social systems remain open (and even forbids thought experiments about closure) is that they are necessarily peopled. Since realism insists upon a stratified view of the social, like any other realist, then there are properties and power particular to people which include reflexivity towards, and creativity about, any social context which they confront.

A critical realist then, places caution on the use of causal language, and seeks to deeply investigate a given situation, usually in a qualitative approach. The outcomes of the research approach described later in this chapter, and the use of critical realism philosophy, aims to orient the reader toward my framing of data and subsequent interpretations. My use of these approaches and philosophies are inherent to my need to understand multiple accounts of a situation, as described by each of my participants. This approach also gives me insight into an individual's emotional geographies, as it relates to environmental injustices and extractive resources, and how these geographies intertwine with others with similar experiences.

On a final note, critical realism philosophy allows an acceptance that there is an ontological difference between physical and social reality (Archer, 1998), whilst also positioning the perceptions of participants as an expression of their own reality. These understandings enable a synthesis of participant responses in relation to the overall social reality to find common threads or themes in this case, the very real case of varying emotional geographies of people in two locations within NSW.

The research approach

It is important to note that I take an informed position against new extractive fossil fuel projects, and support a transition to renewable energy production

methods. This positionality is based on my environmental science background and education that focused on climate change, carbon reduction strategies, renewable energy options, as well as special topic research and an honours project that focused on the social and environmental impacts of fossil fuel mining operations. Further, I spent my childhood growing up in one of my case locations, so I acknowledge my personal place attachment to the Northern Rivers region. My own emotional attachments and history in place has underpinned and shaped this study, helped me form connections with research participants, and shaped my own reflections on the findings; which are also part of how knowledge is produced in this research (Hubbard et al., 2001). I provide personal reflection on the project at the end of Chapter Eight.

Due to the impacts of the mining industry on my chosen communities, a judicious approach to data collection and to the overall project unfolded in the field. The initial theoretical framing for this project was literature from three fields: political ecology, environmental justice, and social movement theory. Later in the project, the focus of the study shifted from the 'how' of environmental activism, to 'why' as explained in an earlier section.

Due to these shifts, emotional geographies theory was not discovered by me until after the Gloucester participants were interviewed, and prior to the Northern Rivers participants being approached. I was deeply moved by the stories of Gloucester and I discovered that emotional geographies literature better explored and explained the stories from that place. It was at this point the theoretical frame shifted to include emotional geographies, and social movement theory was dropped.

This decision to remove social movement theory was also justified as that literature explored *how* activism forms and sustains over time, and my study was no longer focused on those issues. Given the nature of the research foci the deeply emotional impacts of natural resource extraction on rural

communities and an emergent finding on the spatiality of power emotional geographies theory not only informs the theoretical framework, it also underpins the research approach.

I acknowledged early in the project timeline that within the case study communities, there was a perceived abuse of power from the State and resource proponents, as well as by individuals in positions of power within communities. These realisations emerged during preliminary conversations with research networks, and as a result I created a research approach that aimed to protect participants from further distress. To that end I designed interviews as unstructured and informal chats and requested participants choose a preferred location for the interview.

Askins (2016) iterates that emotions matter in social research, and this cannot simply be limited to research focusing on these emotions in isolation from contextual settings. Further, emotions have implications and bearing on scholars (Bondi, 2005). Researchers should not only explore their emotions and be emotionally present during a qualitative research project, but also focus on how their feelings relate to their subjects and how the researcher's emotions ranged whilst spending time in the field (Bennett, 2009; Bondi, 2005; Holland, 2007).

Given that emotional geographies emphasise the role of place in our emotional and affective experiences, it was thought necessary to interview participants in their local region and spend time in place, rather than conducting interviews remotely. These regions are sites of resistance and rupture, sites of memory and of knowing; place sensitive research on emotional geographies must be attentive to what Anderson and Jones (2009, p. 292) call the 'where of method'. Where 'taking the where of research into account facilitates access to a range of practices and intelligences, social identities and power relations that come together to create social practices' (Anderson & Jones, 2009, p. 292). In my case,

knowledge is co produced between the researcher, the participant, and place, with an interview style emphasising open dialogue, reflection, and introspection. This approach answers previous calls for exploration of emotions in the mining sector (Ey et al., 2017; Osborne, 2014; Pini et al., 2010).

Forty two semi structured, voice recorded interviews were conducted with activists who resisted extractive industry development in the Gloucester Valley and the Northern Rivers regions; twenty one interviews in each case location[4]. Four interviews were discussions between myself and two participants at the same time, bringing the total number of research participants to Forty Six. The semi structure style of interviews comprised of some questions designed to keep participants on topic if necessary, and to prompt reflection on deeper issues that emerged during the research. Participants were asked about their place in the community, attachments to those places, experiences in their own communities with extractive industry, and with activism.

An epistemological stance borrowed from feminist political ecology was used to structure the approach to this project; meaning that care was taken to design interactions with community members in a way that reduces further harm as it was acknowledged early in the project that citizens in both case locations were already traumatised from mining operations. This approach was undertaken in the hopes of ensuring that the interviews did not repeat violence by structuring the terms of the interview in ways insensitive to lived experience or which worked to position the researcher as the authority (Peluso & Watts, 2001; Rocheleau et al., 1996)[5]. The research approach heeds a call from authors that ask for more research that investigates sensitive research approaches (Ey

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[4] Having the same number of interviews in each case location is a co-incidence. Some interviews were in tandem - between the interviewer and two participants at the same time.

[5] Interview approach and the risks to participants were explained before interviews took place. Prior to data collection the project was approved by the Griffith University Ethics Board; approval number 2016/061.

et al., 2017). The research design for my thesis was also explored in a recent paper published in Geoforum co authored between myself and my primary supervisor see Bailey and Osborne (2020).

Interviews were transcribed and coded using NVivo using a mix of deductive and inductive approaches to coding. Interviews were coded to align with the project key themes; screenshots of Nvivo codes and some numerical measures of each has been included as Appendix C. This kind of quantitative measure is not considered primary data, and has not been included here in this section.

Participant recruitment

I was fortunate enough to have two preliminary discussions with members of the Lock the Gate Alliance prior to approaching citizens of the case study areas. These two contacts were very keen to ensure that my research truly was for community benefit and understanding the impacts of mining operations, and not feeding back to mining corporations or government interests. This investigation by Lock the Gate was extensive, and required a number of preliminary discussions, agreements, as well as a formal 'check' that was performed by an academic associated with Lock the Gate, who also works for a NSW regional university. Once my project was cleared to proceed by Lock the Gate I was greatly assisted with my approach to potential participants.

Lock the Gate Alliance introduced me to one representative in each case location, and these two people were not only interviewed hence why they remain unnamed here they were instrumental in assisting with the recruitment of many other research participants. I was provided names, phone numbers, and email addresses of people who have participated in research projects before, or who indicated they would be willing to talk to me after community networks distributed my details and a snapshot explanation of what my research was about. Interest in my project, I think mainly due to the

supporting nature and 'clearance' Lock the Gate provided, was strong in both case locations. Some snowball recruitment became evident as interest in the project grew, and early participants passed on details and discussed my research with their own contacts who later came forward.

A single qualitative case study with an embedded two case design

Qualitative research involves the investigation of humans and their actions in the real world, enabling the researcher to investigate the meanings of the varying realities that exist within, or drive, a real world situation (Creswell, 2014; Yin, 2011). One of the ways that this can be accomplished is via the 'collection, analysis, and interpretation of interviews, participant observation, and document data in order to understand and describe meanings, relationships, and patterns' (Tracy, 2013, p. 36). Further, views and opinions gathered during data collection for qualitative research should be representative of the reality that exists for each participant, irrespective of the opinions of the next participant (Alder & Clark, 2011; Creswell, 2014; Yin, 2011).

This project required an approach that allowed deep exploration of the emotional underpinnings of social movements and environmental activism as legitimate resistance to fossil fuel industries development in NSW. The deep exploratory nature of the research, therefore, suited a single case study approach, which explores a 'phenomenon (the case) in its real world context' (Yin, 2011, p. 17). Use of a single case study, as argued by Yin (2009, p.52), 'is imminently justifiable … where the case represents … a rare or unique circumstance'. Further, a single case study allows contribution to the knowledge surrounding social and political, organisational, and institutional phenomena (Yin, 2009). This thesis explores the foundational emotional geographies of environmental injustice, and resistance expressed as social and environmental activism that resists place based controversial extractive

industry development, and therefore, fulfils Yin’s criteria for a single case study (Yin, 2009, 2011).

To allay any residual criticisms of single case study research, the overarching research model employed an embedded two case design. This approach still allowed deep investigation of a single core case study issue in this instance the overarching question relating to the emotional geographies of environmental activism against unconventional gas extraction in NSW via comparison of two embedded cases. The inclusion of two separate regional areas as the embedded two case design within the overall research case study model allows for triangulation of data the two case locations and the literature to provide rigour to the project design (Flick, 2004).

The two case locations were selected as they presented or controlled for several variables. It was important for the research design to include cases embedded in similar, comparable contexts; legislatively and in terms of the kinds of extractive development proposed. Each community was resisting the development of place based coal seam gas industry although opposing different proponents. Both case locations fall within the State of NSW, and activist groups in each location were largely informed by the same non government organisations.

The research design required some similarity in the type of industry being resisted, to eliminate the possibility of different activism strategies stemming from different sources. Further, the advantage of having the two case locations in the same state also rules out legislative and structural reasons for varied activism.

A note on activist strategy

During early stages of the project set up, I spoke with a representative from the Lock the Gate Alliance a community driven activist network that resists the

rollout of coal and gas mining in Australia (Lock The Gate Alliance, 2017a). This representative related concerns about approaching communities for the purposes of this research. It was explained that there had recently been fake researchers contacting members of communities under threat of gas mining. These "researchers" claimed they wanted to interview people about local activism strategies. These individuals were not researchers at all, rather employees of gas company proponents that then used that information to block activist strategies. Consequently, I was instructed not to interview anyone until a Lock the Gate representative reviewed my project.

After a month long review I was given approval by the Lock the Gate Alliance board to proceed. I then engaged with a preliminary chat (not a recorded interview) with two members of Lock the Gate to get more information on the situation in NSW, and to link with their activist networks. I agreed at those preliminary interviews that no activist strategy would be revealed though the course of this project, this thesis, nor any publication or presentation arising from the study unless it was already revealed on their web pages, in their approved literature, newspapers or online campaigning. This agreement still stands and whilst I may mention the board types of activism that participants engaged in (see Chapter Three), no detail is given regarding strategy nor future campaigning.

Use of long quotes

The design of semi structured interviews was intended to give participants a chance to dialogue or narrate their personal views on topics related to this thesis. At the time of interviews (2016) the contemporary nature of the struggles meant that oral histories were mostly recorded, rather than semi structured interviews. For the most part, I draw on oral history methods to relay these conversations. The use of long quotes preserves the original meaning and eyewitness accounts related to me at interviews. Oral histories often focus on,

as they do in this research, the 'experiences and perspectives of marginalized group members, whose views may otherwise be hidden or written out of formal accounts' (Tracy, 2013, p. 141). The participants I interviewed are commonly silenced by state structures and by proponent driven community consultation as this thesis discusses later. Accordingly, this thesis gives *voice* to the research participants.

Participant anonymity

Some of my research participants discussed how they were victimised and bullied by powerful, pro mining people and groups. Other participants discussed resistance strategies that may be interpreted as being illegal. It was imperative that all participants be given pseudonyms and coded to ensure their anonymity. Each pseudonym is followed by a two letter code to indicate which case location the conversation belongs to. LauraGV for instance, is a woman interviewed in the Gloucester Valley; BruceNR is a man from the Northern Rivers location. All due care has been taken to redact activists' roles, employment descriptions, places of residence other than regional indicators and identifiable information. See tables on pages xvii and xviii for additional information. Whilst the NR and GV codes may seem unnecessary in the separate case chapters, the codes are vital to follow statements emerging from each case location later when the two case studies come together Chapter Six and Chapter Seven the codes are used throughout the whole thesis for continuity.

All participants were provided with an information sheet (attached as: Appendix D), and a consent form (attached as: Appendix E), which together outlined the project, and clearly identified possible risks. Participants were offered a full written transcript of their interview and the right to redact information; some elected not to see their transcript as indicated on their consent form, others did, and a few did in fact redact some statements upon

review. All participants had the opportunity to withdraw their participation from the project up to the thesis submission date; none have.

My use of the terms place and community

When discussing place in this thesis, I caveat that place is not interchangeable with community, my use of the word does not always include elements of community. There is reason for my action here; my decision is based on the language of my participants at interview. I will explain further in the following few paragraphs.

Community perceptions of mining are generally framed, in part, by social constructions of place attachment (Burr, 2003; Devine Wright, 2009), and general public acceptance of controversial facilities. Proposed developments perceived to put at risk core community values, or cause potentially negative impacts, spark conflict and generate place protective actions as a response to possible place disruption (Devine Wright, 2009).

Place protective action often involves social conflict, and may also involve protest action and civil disobedience 'as a genuinely political and democratic practice of contestation' (Celikates, 2014, p. 1). Much of this place based or community conflict is framed by developers as reflecting Not In My Back Yard (NIMBY) attitudes against essential development and not representative of the broader public interest (Wolsink, 2007b). NIMBY attitudes are evident to a limited degree in my research and findings; this is defined more clearly in the next chapter.

The term community can also be vague in its application and value laden as 'it is often a euphemistic term that glosses over the social, economic and cultural differentiation of localities or peoples' in place' (Head, 2008a, p. 441). In the words of Marion Young (1990, p. 300) 'The ideal of community … privileges unity over difference, immediacy over mediation, sympathy over recognition

of the limits of one's understanding of others from their point of view'. A community, therefore, for the purposes of this research, demarcates a group of people located in a specific place. It implies those *places* where individuals form relationships of understanding and mutual recognition of each other within a given spatial boundary. My use of place simply relates to the physical locations of community and to sites of struggle. In summary, I use the word community as a descriptor to frame people and the interactions they have as a rural group, and/or the networks of connection between people in a *place*.

The Research Foci

My investment of time, as an educator, in my judgement, is best served teaching people how to think about the world around them. Teach them how to pose a question. How to judge whether one thing is true versus the other.

Neil deGrasse Tyson (cited in Johnson, 2014, p. 8)

Research focus one

With the revelations of the data gathering stages, and two differing emotional geographies emerging from each case location, the overarching research question addresses the focus of activist activities and *why* each community executed strategies differently. Further, given the differing effective activist strategies that were the focus of each community, I began to ponder whether there were links between these strategies, and the disparate emotional geographies that presented in each case. Given this finding runs through the entire data set, all of Chapter Six is devoted to it, ergo, the first research focus takes the form of a question:

Why have activist movements against controversial extractive industry, under similar contexts and structures, executed strategies in different ways?

Research focus two

During data collection participants discussed (without prompting) physical locations of decision making and power; in some cases, within their communities, and in other cases outside. Participants named *Macquarie Street*, or words describing that place or the people within *it* when referring to

decision making. After noticing those Gloucester Valley specifics, I started exploring the Northern Rivers data; and found that participants spoke a lot about taking a stand and having the power in *their* communities though non violent direct actions.

I decided that there was something specific about participants locating *power* in their accounts, and whilst doing so iterating *specific sites of struggle and resistance* that needed to be explored. Whist very brief in this thesis due to the late stage of this findings, the importance of the discursive locations of power in activist narratives and strategising was an unexpected discovery in the data, and is deeply connected to the emotional geographies of the case sites. I address this directly, and I reiterate briefly, as a research focus in Part One of Chapter Seven, which is:

The spatiality of power.

Research focus three

The third and final focus this thesis will explore is the theoretical framework that coalesced during my candidature. In particular, focus three contributes to the discussion already happening in the literature on 'emotional political ecology' (Sultana, 2015, p. 633).

The aim here is not just to reiterate the various theories used during the candidature. Rather, research focus three explores how the core theoretical standpoints used in this thesis worked together to better understand the cause of the problem, place, emotions, threat, and the nuances of two different communities that resisted the State. Further, I explain, how though my thesis I can contribute new insights and orient current understandings on emotional political ecology to contribute to that nascent field.

The aim in the third research focus is not to pit the theories against each other. Rather, I posit that when the three theories are used in unison, the knowledge each bring to the framework create an enhanced theoretical lens by which to interrogate the data on multiple levels of inquiry. I must make clear too, that political ecology was useful in framing the debate and problematising the cause of the issues inherent to this study; not necessarily used only to interrogate the interviews. The *space between* emotional geographies and environmental justice within the broader political ecology frame features in Part Two of Chapter Seven as research focus three:

Engaging with conversations that lead to and include emotional political ecology; a discussion relating to the theoretical constructs of the thesis.

Chapter Conclusion

In this preliminary chapter, I have outlined and described an introduction to the research project, described the thesis structure and conceptual framework, presented the theoretical framework, the project methodology and approach, as well as framing the research problem. In the next chapter, I will present the literatures that relate to the theoretical framework of the thesis: political ecology, environmental justice, and emotional geographies.

The literature relating to the theoretical framework has been separated from the literatures that address the contextual elements of the project being broadly bracketed into those relating to controversial extractive industries, social movements and environmental activism, place, community, and rurality. Together chapters two and three coalesce to inform the themes and constructs that assist data interrogation, and facilitate an understanding of the nuanced detail of the case study.

Chapter Two

Literature Review One

The Project's Theoretical Framework

Introduction

He who loves practice without theory is like the sailor who boards ship without a rudder and compass and never knows where he may cast[6].

Leonardo da Vinci[7]

As described in the previous chapter, political ecology is used in this thesis to assess and frame the research conundrum. Three significant issues that underpin the emotional political ecology conundrum this research explores were identified: environmental and social injustice, emotional geographies of place, and the differing structures of social movements that occur in spatially separated locations that resist mining operations. Given the complexity of the project, and the focus on the *why* of social activism, I found that the theoretical framework for this project could not draw on political ecology theory alone to interrogate and understand the data.

Along with political ecology understandings, environmental justice theory was applied at the beginning of the project to explore the problem. Later, emotional geographies were used to investigate participants' emotions in relation to place that lead to place protective actions. Emotional geographies allowed for understanding and interpretation of participant relationships with each other, and the relationships those resistance actors have/had with the State and the companies that seek access to resources in their local area. I understand that *emotional political ecologies* have developed as a subfield of study within political ecology: see Sultana (2015), and Doshi (2017). The knowledge already emergent

[6] Pronouns *sic.*

[7] Exact year of quote unknown

in this niche field of study are embedded in this project, and I make a contribution to this space in the final discussion chapter as a finding of the thesis. Even though the intersection of political ecology and emotional geographies has already been made, I still delve further into each in this review to provide an understanding of the histories of each, and how they inform my theoretical frame. See Figure 2 in the previous chapter for a visual representation on how the frame fits together.

This literature review chapter explores the theoretical elements of the research. The following literature review chapter, Chapter 3, then frames the thesis contexts, mining, and activism. Essentially both literature review chapters coalesce to underpin this thesis.

This chapter is divided into four parts. In Part One, I caveat the theoretical frame with the role of the State and the influence of neoliberalism as a political ideology. Included in Part One also is a brief account of the Environmental Impact Assessment process in Australia, paying particular attention to how it is purported to be applied in relation to public participation and citizen engagement in resource negotiations. The State and the political structures of the thesis are discussed first because the role of the State is ubiquitous to the problem and therefore the whole project; essentially, the State, the legislative frameworks, and the decision making processes are fundamental in understanding the research problem, and its possible solutions.

In Part Two I present literature that broadly explores political ecology as a field of knowledge that frames the debates and problems inherent to this thesis. I then turn to an emerging subfield of political ecology; *emotional political ecologies* (Sultana, 2015). In Part Three, I explore the theoretical constructs of environmental justice. Finally, in Part Four, I explore emotional geographies theory.

It is not my intention in this chapter to detail how each theory was engaged with during the timeline of the thesis. The previous chapter (Chapter One) outlined how the theoretical frame was developed. Nor is it my intention to interrogate the intersections of these three theories per se see Part Two of Chapter Seven for this discussion.

A note on power

Power features in this study, and as identified by others, it is a cornerstone for interactions relating to politicised research (see González Hidalgo & Zografos, 2019; Martin et al., 2019; Pacheco Vega, 2015). Given power touches all interactions in my case, I have no specific literature review section that focuses *just* on power. Rather, I allow power to emerge in each theme or topic in the reviews that relate to this study; this then allows power to be discussed later as embodied in contextual relevance to the findings of this thesis, as well as a thread that weaves between the various theories and topics presented in the following chapters.

I found that power stitches together the various elements and parts of this thesis, it is foundational and causal here, therefore, power will emerge in various places through this and the following chapters. It is important, therefore, to provide an overarching definition of power as it is understood in this project. My understanding of power is drawn from geography contexts:

> The ability to achieve certain ends. Strictly speaking, power is an absolute concept but is often treated as a synonym for *influence*: the concept may refer to the relationship between an individual or group and the natural world … but it is more frequently used to characterize inter personal and inter group relationships, including those between STATES. (Johnston, 2000, p. 629. Italics and capitals in original.)

The definition above needs some context to align my research to where power may be engaged. Power, I have found, moves; in Part One of Chapter Seven,

relating to *the spatiality of power* I reflect on how sites of struggle are able to be determined by parties engaged in debates relating to mining decision making. If set by the State, these places of power could be community meetings, parliament, and ministers offices, and other places where decisions are made.

Citizens may choose, however, to engage in the struggle in those places set by the State, or move the location to a place of protest, or locate debates in homes, cafés, and other places where they are out of view from the State. Activists may engage the State in the places of decision making by taking struggles against resource proponents to ministers offices, parliament, and even the courts. Ergo, power in my case is mobile, and not fixed to any given location.

Part One: The Role of the State in Theory

I know reform is never easy, but I know reform is right.

Julia Gillard, in her speech to the US Congress 2011 (MOAD, 2021, para. 7)

Before I delve into the theoretical framings of the thesis, it is important to include a clear definition and scope of the role of the State, the neoliberal agenda, and a concise review of the Environment Impact Assessment tool created by the State to manage mining impacts. The chapter begins with framing the problem and context of the research, and the political ecology conundrum that focuses on the nature of the issues and *why* people are concerned with the placement of resource extraction.

In this chapter I present the role of the State *in theory*, as I explain using published literature what the role of the state *should* be. Later in Chapter Six, I comment on the role of the State *in practice* illustrating a difference between what is promoted as the role of the State, and the reality of what happens in relation to impact assessments, community consultations, and decision making relating to mining operations. This is not a novel finding, and is explained further in Chapter Seven.

State, capital S, in this thesis indicates the sovereignty of the NSW government as an entity with power and influence in resource negotiations. The State includes discourses of sovereignty with reference to both the Federal Government and the Crown. Lower case s, state, in this thesis references the actual land area, or iterations of the state where neither sovereignty nor power of the State is directly implied. Further, the Crown as a term refers to Australia's monarchy, the Queen of England and the Commonwealth, and the Australian Commonwealth acting on behalf of the Crown as the Federal

Government. Noting also that the Crown owns almost all resources beneath the ground in Australia (Howlett et al., 2011) resources that were stolen from Indigenous peoples upon arrival of English colonisers and settlers.

In NSW, the State sets the legislative and legal structures that govern minerals extraction (Connor, 2016), and how people can engage with decision making processes relating to mining (Lockie et al., 2008). Part of this management of resources includes decisions about where extraction takes place, including framing negotiations with citizens and environmental advocates via the Environmental Impact Assessment processes (reviewed below). The State is, therefore, overarching and a powerful entity in minerals development. The actions of the State, the timing of negotiations, and the creation and control of legislation is pivotal to the outcomes experienced by communities, and the impacts on landscapes. Most of the need to extract minerals from landscapes in Australia, however, is based on economic development (O'Faircheallaigh, 2009). The economics of the state of NSW is framed by the neoliberal agenda.

The neoliberal agenda

Mineral's extraction in Australia, as elsewhere, is framed largely by the neoliberal governance agenda (Howlett et al., 2011). Since the 1970s, an agenda to wind back government control of infrastructure and resources was led by powerful lobbying to shape policy (Cahill & Beder, 2005). The restructuring of governance to meet the neoliberal agenda was aimed at freeing up markets, and the self regulation of supply and demand, and pricing of commodities.

Economic reform and subsequent changes in the approach to resources management has moved further toward privatisation of resource extraction (Cahill & Beder, 2005). Whilst the Crown has technical ownership of resources (Howlett et al., 2011) such as coal and gas, resource proponents bid for the rights to extract and disseminate the minerals.

The shift in decision making power and the outcomes promoted through neoliberalism, however, does not find Australian Governments on the periphery of resource decision making. Critiques of neoliberalism argue that the role of the State is more central now than before (Cahill & Beder, 2005), affording the State more power and influence due to economic needs, and we now find the State, still controls the management of resources and indeed many other things outside the scope of this project. This failure to realign the management of minerals as private enterprise and the lack of government rollback results in stakeholders not finding the purported neoliberal goal of market driven equality (Birch, 2015; Brown, 2015; Cahill & Beder, 2005).

Much of the contact that the State has with minerals projects is with resource proponents directly, who in turn are responsible to manage a resource project; the proponent's role is also to engage citizens located near resource proposals. The framing of the assessment processes that proponents use to engage citizens is largely set within the State produced Environmental Impact Assessment processes. The role of the State therefore, remains powerful. Current discourse places the resource proponent as the visible entity, and the decision making relating to mining placement is made by the State, usually in places of parliament both at a State and Federal Government level.

State framing of resource bidding and the links between State sanctioned minerals projects and internal approvals processes sets up a very close relationship between the State and resource proponents; which draws much scrutiny. This relationship will be explored more in Chapter Six and Seven.

Environmental Impact Assessment

Environmental Impact Assessment (EIA) processes are a key element of Australia's environmental management and sustainability structures (Aryal et al., 2020). The main objective from EIA processes is to prevent projects with

significant environmental impacts from proceeding, or to implement mitigation measures to minimise the risks (Aryal et al., 2020; O'Faircheallaigh, 2010). Key steps include 'selection of consultations, report preparation, public participation, report review and approval, and monitoring and evaluations' (Aryal et al., 2020, p. 138).

During the EIA process, public consultation is sought for issues relating to community impacts and surrounding landscapes a processes that is supposed to feed into decision making (Eccleston, 2011). The uptake, however, of public participation is often 'taken for granted, and partly for this reason the underlying rationale for greater public participation is poorly articulated, making it more difficult to determine how to pursue it effectively' (O'Faircheallaigh, 2010, p. 19). The oversights of benefits of public consultation in EIA processes, therefore, are already a finding in critiques of EIA procedures and application.

Additional critiques of EIA include the proponent driven, late stage, State framing of assessment processes. Here, the State sets the checks and balances of projects, mining in this case, from which the State itself will benefit financially. Literatures find that this close placement of the State as decision maker and beneficiary of minerals procurement, creates a conflict of interest (Singh et al., 2019; Wessels, 2013). Further, the processes of consulting citizens about resource projects under EIA scrutiny is usually proponent driven, leading to additional issues relating to the way citizens are engaged. Tokenistic approaches rather than meaningful engagement is an unfortunate outcome, this creates doubt that citizen concerns are fully articulated into final decision making processes (O'Faircheallaigh, 2010).

Social Impact Assessment

Social impact assessment (SIA) is additional too, but may be included in a broader EIA process (Government of NSW, 2017, 2021b). SIA has been included in EIA processes since the early 1970s (Eccleston, 2011). Both State and Federal legislation in NSW includes guidelines that aim to minimise the impacts of resource development on citizens place based near mining operations (Elliott & Thomas, 2009).

Broadly, the core elements of SIA investigation include best practice, public participation, and good governance (Eccleston, 2011). SIA is ultimately a decision making tool that is employed by proponents and or the State to explore the impacts of development both positive and negative, and how to increase positive and mitigate negatives. The process is embedded in EIA to planning and development stages of large scale projects, as well as any project that is considered to likely cause negative impacts (Elliott & Thomas, 2009).

An SIA process should at least include adequate description of the 'terms of reference' which indicate what impacts may be. Additionally, given the scale of some project, both in size and timeline, there is an argument that some projects include a longer term management plan (Howitt, 2001; O'Faircheallaigh, 2010). The plan should include transparent public information and foster engagement to better explore issues, and provide information sharing and feedback mechanisms to affected citizens; and allow the implementation of emerging management strategies for unforeseen circumstances that can and do arise (Government of NSW, 2017, 2021b).

Combined, SIA and EIA processes can create a decision making tool that can 'measure the consequences of specific development activities … significantly improving the quality of project proposals' (Slootweg et al., 2003, p. 56). These tools, however, come with a set of problems that are highlighted above in the EIA section: late stage EIA processes, proponent driven proposals and EIA

mechanisms, State framing of minerals extractions as well as having approvals powers, and tokenistic public participation, the cursory and brief engagement with citizens in many instances indicates that the tools are largely quantitative, and lack qualitative depth and design part of this reasoning stems from SIA sitting peripherally to many EIA processes, when in fact SIA should be incorporated and be a significant element of a complete EIA design (O'Faircheallaigh, 2010).

SIA and EIA processes *may* include an investigation of the emotional impact of mining; however, this does depend on how the tools are managed by the proponent, and what approaches are taken (O’Faircheallaigh, 2010). This thesis contributes to this space. I return to the issues relating to EIA and SIA, emotions, and the State to address these shortfalls amongst other findings emerging from the study in the discussion chapters Six and Seven.

Part Two: Political Ecology

You would have thought that our first priority would be to ask what the ecologists are finding out, because we have to live within the conditions and principles they define. Instead, we've elevated the economy above ecology.

David Suzuki (2008)

Piers Blaikie's early work established a tenet of political ecology thinking: environment and societal conditions are linked, and that these are impacted upon by political actions (see Blaikie, 1985; Blaikie & Brookfield, 1987). Emerging after Blaikie's work, authors illustrate that political ecology literature is useful to explore social and environmental (in)justice, power relationships, and exploration of equitable outcomes that have fewer impacts on the environment (Greenburg & Park, 1994; Robbins, 2012; Rocheleau, 2008; Zimmerer & Bassett, 2003).

Political ecology is broadly understood as being that field of knowledge that links social theories with ecological issues (Blaikie & Brookfield, 1987; Dallman et al., 2013). It is essentially, the study of the linkages between political, economic, and social spheres, and focuses on how a change or influence of one sphere affects the others, and the ramifications these changes have on the environment and people (Robbins, 2012). In addition, political ecology also focuses on understanding the power relations underpinning the linkages between these three spheres: political, economic, and social (Martin et al., 2019). Drawing from all these points, a working definition of political ecology for this study is: a study of the relationships between environment, social, and environmental issues that are politicised to explore their cause, and suggest pathways to better outcomes.

Political ecology literature illustrates, amongst other things, how resource distribution systems are politicised through power relations (Kahn, 2013; Martin et al., 2019; Willow, 2014). Similarly, this study uncovers the power relations between the State, resources companies, activists, and communities. Political ecology theorisation therefore, is best suited to broadly scope the issues inherent in this study. Political ecology frames vary considerably in their application depending on how a particular researcher scopes the concept of power (Khan, 2013). When political ecology conundrums are investigated to reveal *causal* mechanisms of social and environmental injustice, political ecology theorisation provides a broad frame by which to begin an enquiry on the drivers of distributive and procedural injustice (Greenburg & Park, 1994; Robbins, 2012).

Political ecology studies have grown considerably in recent decades (Svarstad & Benjaminsen, 2020) and the links between political ecology and environmental justice studies that will be explored in a later section are considered by some to 'share a history of pluralism and openness to integrating new theoretical insights' (Svarstad & Benjaminsen, 2020, p. 1). I recognise these linkages, and these inform part of my reasoning to combine political ecology and environmental justice theories as the analytical lens for this project; as explored in Chapter One. The overlaps between political ecology and environmental justice already explore, amongst many other things, recognition, procedural, and distributive justice, and how these seem to accompany environmental interventions (Svarstad & Benjaminsen, 2020); see also (Schlosberg, 2003; 2004). In this ilk, for this thesis, I also refer to procedural and distributive *in*justice given the language used by my participants implied that the justice mechanisms discussed here were overlooked or tokenistic.

At the time of data collection, the resources that were being extracted/explored for in the two case locations were metallurgical (coking) coal in the Gloucester

Valley, and unconventional methane gas in both the Gloucester Valley and the Northern Rivers. In an era where environmental climate science has strongly suggested anthropogenic climate change (IPCC, 2007; Warnock, 2015), many Australians are frustrated with the continuing reliance on fossil fuels for energy production (Connor, 2016).

What aggravates many people further, is that Australian Governments approve unconventional gas mining and new thermal coal extraction projects in the face of the emergent renewables sector (Connor, 2016). These decisions are interconnected with economic variance (Connor, 2016), given the State and resource proponents are positively affected, and local communities and environments are negatively affected.

Political ecology and resources

I use Political ecology theorisation in this thesis to frame the debates that are associated with resources distribution and management (Martin et al., 2019; Robbins, 2012), in particular the conflicts and struggles associated with the access and control over natural resources (Blaikie, 1985; Dallman et al., 2013). As introduced in the previous chapter, this thesis explores the placement of unwanted extractive industries near rural communities, and makes contributions to the values of place and place defensive actions by activists. Political ecology, therefore, frames the causal mechanisms of resource procurement, the State, power relations (Martin et al., 2019; Robbins, 2012), and the theory frames the causal mechanisms that trigger reactions to approved mining proposals inherent to this research project; particularly those emotional reactions place based people have when mining threatens treasured places as this thesis discovers.

Policy relating to resources may favour Westernised agendas, and overlook the needs and wants of others; such as Indigenous peoples, recreational users,

home uses, and indeed the intrinsic values of preservation of landscapes (Dallman et al., 2013). State structures may also limit access to resources, therefore, only those users scoped in policy are freely able to utilise natural resources; essentially who designs the structures that determine use of resources, is selective of who can participate. Exploring the sacred attachments to place by Indigenous peoples (Dallman et al., 2013), as well as exploring attachments to place others have, exposes 'the devastating consequence of institutional approaches to land development that favour meanings and practices of the dominant culture and political structure' (Dallman et al., 2013, p. 33).

Political ecology and emotions

To scope political ecology more closely to the contexts of the emotions this project explores, I introduce discussions on emotions that already appear within political ecology theory. This section informs the discussion in Chapter Seven which explores the intersection of political ecology conundrums that lead to environmental injustice and the resulting emotional geographies that are embedded in these struggles.

There is already work that pushes the boundaries of political ecology theorisation into emotional spheres and this space is burgeoning. Work by Sultana (2011) features in the emergence of political ecology and emotional geographers intersections. Sultana's (2011, p. 163) work indicates that …

> … resource access, use, control, ownership and conflict are not only mediated though social relations of power, but also through emotional geographies where gendered subjectivities and embodied emotions constitute how nature society relations are lived and experienced on a daily basis.

Drawing on the above quote, and to contextualise the point for this project, resource access and control are governed not only by State structures, they also

centre on the relationships individuals have with landowners and those that possess resources. These ownership and accessibility issues and themes feed into the political ecology conundrum I explore. Since the early work of Sultana (2011), there has been greater attention of the role of emotions in political ecology research; which will be explored in the following.

Emotional Political Ecology

Sultana's (2011) early work, and later a term she coins in a revised version of her work: 'emotional political ecology' (Sultana, 2015, p. 633), injects emotions into political ecology debates. We find here the emergence of a narrative that interrogates the intersections of political ecology and emotional geography theories that 'deepens understandings of the terrain of political transformation' (Doshi, 2017, p. 127). Also, Doshi (2017, p. 125) continues in this ilk, and offers an orientation to political ecology from a 'feminist, anti racist and postcolonial approach', that also scopes environmental injustice.

To achieve this perspective, and assist in the orientation of political ecology studies that include emotions, Doshi (2017, p. 125) offers five principles that explore 'the body as a material and political site' that in turn orients us to a political ecology that assists in exploring and understanding resource metabolism via embodiment, intersectionality, and postcolonialism. I find these five principles to be particularly useful in exploring emotions and the body as embedded in resource mining struggles, so I include a description of these principles in the following section. In Chapter Seven I link these five principles with the contexts of my thesis and discuss my contribution to the dialogue that exists between emotional geographies, environmental justice, and political ecology intersections.

Five principles of resource metabolism and embodiment

1. Metabolism is embodied politics not just a metaphor (Doshi, 2017, p. 126).

The Marxist metaphor of a city having a metabolism has dominated political ecology discourse (Swyngedouw, 2006). Metabolism has subjectivity and real world practicalities of resource distribution, consumption, waste, and 'meaningful and power laden embodiments' of resource flows that differ between groups (Doshi, 2017, p. 126). It is not good enough to just accept the metabolism metaphor as stated in empirical texts as it obfuscates the reality that some disadvantaged individuals are unable to escape the negative realities of resource distribution and waste (Doshi, 2017), and have no means by which to afford an escape from sites of waste management or disposal. This is drawn from waste in Marx's writings being disposed of and away, where in reality, waste and the impacts of resource procurement and related pollution are real and present; further metabolism circulates not just resources but also money (Swyngedouw, 2006).

To explain further, the marginalised, forgotten, or *others* having an embodiment in or near waste, and having no real means to escape, draws close ties with the tenets of environmental (in)justice that articulate the negative impacts of industry being imposed upon *others*, and those elites drawing on positive financial flows and benefits (Agyeman & Evans, 2004; Byrne & MacCallum, 2013; Schlosberg, 2013). Environmental justice then, assists in the framing of debates in this thesis, and contributes to our understandings of recent research that push the boundaries of political ecology studies to include emotions *in* place as I discuss as a contribution to the theoretical thinking in this space in Part Two of Chapter Seven. Metabolism then, is not just about producing a good, and disposing what is leftover as waste. Rather for this thesis, metabolism is political, it involves bodies, and involves inescapable

realities that are not scoped fully by elites and those not in the margins of intersectionality; individuals that I described earlier as the forgotten, or *others*.

2. Social reproduction matters for urban ecology (Doshi, 2017, p. 126).

The politics of the dominant privileged cisgendered white male 'masculinist production centric' roles of capitalist narratives have overlooked the roles of *others* (Doshi, 2017, p. 126). For this reason, studies in the political ecology arena have mostly until recently ignored the power laden 'fleshy, messy, and indeterminate stuff of everyday life' (Katz, 2001, p. 711). Current power laden roles and processes ignore the non masculine, they are abstracted from place, and overlook the roles of the poor and the consumer (Casolo & Doshi, 2013; Doshi, 2017; Katz, 2001) in my case, rural communities.

Marx comments that reproduction is required to produce a labour force; I concur, however I also acknowledge work by Katz (2001, p. 711) who adds to this by orienting that a labour force is also needed to engage in 'acquisition and distribution of the means of existence, including food, shelter, clothing and health care'. This additional thinking humanises the labour force, giving them needs, wants, and being more than just a part of the means of producing a good. Katz (2001) then, also allows me to embed this labour force, these *others*, *into* resource distribution debates, not just as collateral damage of goods production, or simply subject to the waste's metabolism produces. What this implies for my research is that resources exist in a system of *distribution* by people and labour, whether they benefit, or are subjected to the harms of mining.

3. Multiple, interconnected relations of difference and power shape urban ecologies (Doshi, 2017, p. 126).

Using Sultana's (2011) early work as a starting point, geographers have continued to push the boundaries further by using intersectionality to explore

frameworks that favour some groups over others (Casolo & Doshi, 2013; Doshi, 2017); flagging ongoing power imbalances. The decision maker that has power to approve or deny mining operations is abstracted from places of the study in this case meaning that mining operations are usually decided on in places of government.

This being the case, the community is not looked at as a whole, consequently the marginality and intersectionality of each place the nuanced characteristics of each individual and subsets of community organisation is overlooked. Community impacts of minerals procurement are, therefore, generalised in Environmental Impact Assessment processes (O'Faircheallaigh, 2010), and decision making pathways in contemporary Australian settings a finding of this thesis and again, this will be discussed later in Chapter Seven.

4. Affect and emotion are also material and embodied (Doshi, 2017, p. 126).

Prior to works reviewed here, political ecology studies overlooked emotions (Doshi, 2017). As we have found in the above sections, emotions are being embedded into contemporary political ecologies studies (Doshi, 2017; Nightingale, 2012), particularly the emotional impacts of resource access and distribution (Sultana, 2011, 2015).

The impacts of mining for locals that are place based near mining operations yet have no means to leave the area, experience the negative impacts of mining operations. These impacts may be physical: blasting, vibration, noise, as example; or psychological: grief over lost or damaged landscapes, sadness for scarred or destroyed places that are changing. Mining in these situations, indeed my cases, therefore, is lived and experienced. Consequently, mining is embodied by people who live close to resource operations. Entering the geography discipline is research that explores this suffering over mining impacts (Pini et al., 2010), the experiences of lost or changing landscapes

(Osborne, 2014), and the conflicts associated with resources and resistance campaigns (Bailey & Osborne, 2020).

We are discovering how understanding negative impacts can change the management of resource infrastructures and the flow of resources between the natural environment and society; and how waste as a resource is managed back to nature also known as socio natural flows (Doshi, 2017). This thesis contributes to the conversations around the emotional impacts of resource management, particularly as I explore emotions as steering variables of activism, or the willingness at least of individuals to engage in a particular way in resource struggles as will be discussed in Chapter Six.

5. Bodies are sites for the formation of political subjectivities with sometimes contradictory desires (Doshi, 2017, p. 127).

Of particular alignment with this project, 'alternative arrangements of (non) human natures urban school and community garden, alternative food and non violence movements produce ecologies of care that challenge neoliberal modalities of engaging with self and others' (Doshi, 2017, p. 127, parentheses in original). Here, the focus is on the body as embedded into a place, where decisions made influence how an individual understands political engagement, directly or indirectly, and how emotions influence that knowledge.

Just as the impacts of mining are lived and experienced, so too are the experiences of engagement with government and resource proponents or the lack thereof. Therefore, the process of decision making is embodied by those that are subject to the outcomes of mining approvals. These embodied experiences are negatively impacted when inclusion is lacking or tokenistic, as I find in my case, and discuss later in Chapter Six.

Emotional political ecology summary

Literature in political ecology arenas already describes how marginalised people often struggle to defend self, treasured places, cultures, and livelihoods from State interests (Escobar, 2001; González Hidalgo, 2017; Martinez Alier, 2014), demonstrating ongoing power imbalances. The 'power of people to mobilise should not be taken for granted' (González Hidalgo, 2017, p. 54), illustrating that power is not just State oriented. Literature also explains, however, how some communities can mobilise, when others in similar situations can become paralysed or defeated by oppressive State structures (González Hidalgo, 2017). Here, we discover how grassroots activism and community building is shaped by power embedded in 'contextual forces (historical, political, cultural)' (González Hidalgo, 2017, p. 54, parentheses in original).

Returning to an overarching review, feminist and emotional political ecologists have, therefore, already explored spaces of activism as I do in this thesis, and these inspirational authors have begun to demonstrate how emotions and experiences have shaped resistance strategies (Dallman et al., 2013; Nightingale, 2013; Sultana, 2011, 2015). The way these resistance activities are formed in response to context, however, and how these mobilisations evolve between people sharing 'personal, public and private dimensions still needs to be unpacked' (González Hidalgo, 2017, p. 55); see also (Sultana, 2015). This thesis, therefore, explores the influences on activism strategy; in doing so, I pay particular attention to those influences that relate to our understandings of place, and emotions embodied in place (see Chapter Six).

The cited works above on emotional political ecologies are useful in explaining those burgeoning links between emotional geographies, political ecology, and environmental justice framings. I will use these works in Part Two of Chapters Seven in a discussion on the theoretical frame. Given, however, my stage of

development and understandings on the underpinning emotional geographies that intersect with environmental justice to understand political ecology conundrums, I deemed it useful to step further into environmental justice and emotional geographies literature. I use those fields as bolt on lenses to inform and develop an analytical frame for emotional political ecologies in the context of extractive industries, and in doing so contribute to the ongoing development of emotional political ecology as a field of study.

Next, I will present the knowledge on environmental justice theory that further frames the debates and problems this thesis explores. Environmental Justice theory helps to more specifically frame the impacts of unwanted placement of mining operations close to rural communities, it is therefore, better placed next after political ecology framings, and prior to the nuances of emotional geographies.

Part Three: Environmental Justice Theory

The more clearly we can focus our attention on the wonders and realities of the universe, the less taste we will shall have for destruction.

Rachel Carson (1952)[8]

Justice

Before I review environmental justice theory, I must define *justice* in an overarching context. I begin with John Rawls' Theory of Justice (1971), which provides a foundational platform for a vast amount of the scholarship that has emerged since that volume (Farnstein, 2010). To begin with, Rawls illustrated the interconnectedness of justice with the structures of society (Höffe & den Haan, 2013). Further, Rawls indicated that the basic structure of society the network of civic institutions such as the family unit, civil society including individuals in it, as well as legal, political, and economic structures, etcetera (see Rawls, 1971; Höffe & den Hann, 2013, for additional background) regulates the distribution of a good. Those goods were interpreted as 'people's basic rights and liberties, social positions of power and opportunities, economic prospects (especially income and possessions) and the social bases of self respect' (Höffe & den Haan, 2013, p. 37, parentheses in orginal).

What emerges in this project, therefore, is a triangulation between what Rawls and others since have described as injustice of distribution, recognition, and participation (Svarstad & Benjaminsen, 2020), with functionality and capability (reviewed in the political ecology section above),

[8] In a speech when accepting the John Burroughs Medal: an award that recognised Rachel's excellence in nature writing April 1952. Also quoted in (Carson, 1998, p. 94).

illustrating that justice is much more than the distribution of goods at the individual and group level. I recognise that using Rawls as a starting point for a discussion on environmental justice and emotional political ecology here is weakly foundational, in that there are very broad overarching notions, issues, and contexts of justice that have a long standing in our understandings of distribution, recognition, and participation. These foundational understandings are necessary, however, I explore these by using *environmental* justice tenets from here, as they are more contextually relevant to this thesis than just broad notions of justice alone.

Environmental justice

Schlosberg (2007, p. 4) states that environmental justice literature discusses injustice as 'maldistribution the fact that poor communities, indigenous communities, and communities of colour get fewer environmental goods, more environmental bads, and less environmental protection'(*sic*). This is true in many respects, however, in my case study, none of my participants identified as poor, or Indigenous, nor would either of my communities be considered a community of colour. Environmental justice literature also mentions recognition and participation as well as individual and community capabilities, including their functionality and or inclusion, as *axes of difference* in environmental justice discourse (Byrne & MacCallum, 2013; Schlosberg et al., 2018; Wolch et al., 2014).

I do not intend to ignore the origins of environmental justice theorisation. In the following paragraphs I provide an account of the histories and foundations of environmental justice. I do this as I feel it essential that the histories of struggle of people of colour, and the work done in the past to inform us of what environmental justice *is*, should never be erased from environmental justice research and subsequent discussions.

Environmental justice emerged in the late twentieth century through the work of women of colour, particularly the Mothers of East Los Angeles (MELA) and their campaigns against the placement of toxic industries near lower socioeconomic communities, and communities of colour (Pardo, 1990). These movements linked 'environmental injustice with structural racisms and patriarchy, [and] identified environmental racism as the outcome of colonialism and imperialist capitalism' (Platt, 1997, p. 48). These early actions also challenged 'conventional assumptions about the powerlessness of women and static definitions of culture and tradition' (Pardo, 1990, p. 1).

Historically, the focus of environmental justice literature and activism centred on the spatially and socially disproportionate distribution of environmental harms on communities of colour and lower income residents (Byrne et al., 2002). The emphasis of early movements and studies challenged the racist and elitist ways that environmental benefits and harms were distributed among communities, particularly focusing on how industrial waste and environmental impacts were spatially located close to communities of colour in the United States (Pulido et al., 1996). The environmental justice movement 'emphasized social and political power, in addition to class, as explanations of unequal environmental risk' (Byrne et al., 2002, p. 4).

An innovative research project conducted by the United Church of Christ Commission for Real Justice linked the siting and distribution of industrial risks and communities of colour. Their project, 'Toxic Wastes and Race in the United States' (Lee, 1987) found that three out of five African and Hispanic American communities were located within close proximity to hazardous industrial facilities. Later Goldman and Fritton (1994) found that by 1993 the industrial racism issue had increased, and people of colour were forty seven percent more likely to have a hazardous industrial facility in proximity to their community than in 1980.

Given the racial overtone of these findings, the environmental justice movement was inspired by, and later linked with, the longer standing Civil Rights movement in the United States (Agyeman & Evans, 2004; Faber & McCarthy, 2003; Walker, 2012). It was at this point, where the environmental justice paradigm emerged (Taylor, 2000; Walker & Bulkeley, 2006).

Initially, the environmental justice paradigm was aimed at revealing the unequal distribution of the environmental risks of industrialisation in the United States (Byrne et al., 2002; Walker & Bulkeley, 2006; White, 2013). Questions being asked related to the causes of environmental injustice that emerged from capitalism and inequality relating to race and culture (Byrne et al., 2002; Walker, 2012). The findings of early studies were replicated in the decade that followed (see Byrne et al., 2002). The research results emerging from studies mentioned above reiterated and revealed the true nature of environmental racism and controversial industry placement in the United States (Bullard, 1993).

Later, environmental justice scholars and activists argued that all people have the right to live in a clean and healthy environment (Agyeman & Evans, 2004; Schlosberg, 2004). Most environmental justice considerations then discussed issues of equality, class, race, and the positive and negative impacts of development (Schlosberg, 2004; Walker, 2012). The term environmental justice was then used to loosely encompass two main streams; the movement against toxic substances and facilities, and the more traditional movement that focused on environmental racism (Schlosberg, 2007). The environmental justice discourse thusly became an activist standpoint, a field of research, a discussion agenda, a policy trigger, and a political movement (Walker, 2012).

With the spread of globalisation a term offered to the spread of capitalist and imperialist ideology countries from the Global South were increasingly providing raw materials to the Global North. As a result of the associated

negative impacts the environmental justice paradigm expanded well beyond the United States border (Byrne et al., 2002; Walker, 2012).

Works on environmental justice issues in the eighties through to the early new millennium indicated that there was an increasing flow of environmental pollution shifting to developing and Third World countries (Byrne et al., 2002). Of importance was the growing understanding that the Global South had a reduced capacity to respond to environmental justice issues due to their need to engage with developing ideologies, and the structural issues of governments not being able to manage the negative impacts of producing goods for global markets (Robbins, 2012). Further, populations in the Global South have lifestyles that are far more reliant on access to clean, natural environments: particularly nomadic tribes, traditional pastoralists, and other cultures that have a subsistence livelihood. It was also noted that Indigenous people had the most to lose from polluted commons such as land and water; without access, culture and identity were threatened (Anguelovski, 2013).

The environmental racism issue, coupled with legacies and practices of colonialism, exacerbated the exclusion of Indigenous peoples from decision making relating to facility placement within or close to communities, and on traditional and stolen lands (Anguelovski, 2013). This is not to say that we are all not reliant on a clean and healthy environment; far from it. My point here is that communities and indeed Governments in the Global South including those developing countries that produce goods to engage in the global economy do so by sacrificing clean and natural environments and subsistence methods; the Kenyan economics of clearing natural environments to provide grain to the global market, for instance, is a prime example (Robbins, 2012).

The environmental justice movement has since expanded to consider multiple axes of difference e.g. age, gender, disability and diverse localities and occupations from rural farm labourers to urban factory workers (Byrne &

MacCallum, 2013; Byrne et al., 2010). In addition, environmental justice now explores diverse vectors of injustice e.g., from poor policy enforcement to international targeting of vulnerable neighbourhoods these further link environmental justice tenets to the framing of this study.

Environmental justice principles are now featured in research inquiries from many mainstream institutions and feature in policy emerging from most levels of global governance (Walker, 2012; Walker & Bulkeley, 2006). Because of these inquiries, concepts of people, place, discrimination, distribution, and others as described in this review, are now included in political debate, environmental campaigning, and academic research.

There has also been a trend of non government organisations such as Greenpeace, Friends of the Earth, and the Third World Network to name but a few, that shed light on international environmental justice issues (Byrne et al., 2002). These non government organisations illustrate the impacts of development, climate change, resource overexploitation, continuing environmental racism, transport issues, food sovereignty, bio piracy, deforestation, water injustice, and land grabbing, amongst many other issues too numerous to name here. Further, these non government organisations use the contexts of environmental justice, including the histories of emergence of environmental justice understandings, to bring to light the struggles of communities affected by resource maldistribution.

Environmental justice, as a social movement and as a body of research, retains a focus on the disproportionate distribution of the positive and negative impacts of development (Walker, 2012). Recent developments in the field now incorporate the relationships between place and health, the interconnected relationships between environmental justice and decision making processes, as well as the evolution of the environmental justice framework itself (Anguelovski, 2013).

Whilst distribution is often the primary discourse of environmental justice, recognition started to emerge as an element in the early 2000s (Schlosberg, 2007) from an impacted individual or community's need for 'self determination, identity recognition, and democratic participation' (Figueroa, 2004, p. 2). Recognition is a vital element to environmental justice studies (Tesh & Williams, 1996). Recognition in environmental justice requires an understanding that there must be differences amongst individuals regarding the fair treatment and participation in decision making processes (Figueroa, 2004).

A key feature of the push for citizen recognition in environmental justice settings is the need for autonomy and respect (Schlosberg, 2007). Activists demand decision making processes that promote participation, recognition of local knowledge, multi cultural perspectives, diversity, and equity (Schlosberg, 2007). The environmental justice movement has expanded to include understandings of democratic process and the meaningful inclusion of community (Hamilton, 1993; Schlosberg, 2007). For this kind of participatory democracy to work, the emphasis needs to be on realising the benefits of citizen participation and recognition of local opinion and rights (Gould et al., 1996). Recognition and participation can be realised in communities that are able to access early development planning though participatory decision making.

The growing pluralistic understandings of environmental justice allow clearer associations between the different concepts of just and unjust circumstances (Fan, 2016). Environmental justice knowledge provides a pathway into discussion and investigation of an individual's thinking, reasoning, and justification to act in response to threats to the environment and their home (Walker, 2012). This trend of knowledge has been reflected in contemporary environmental justice research.

Policy that scopes environmental justice issues should, therefore, address negative environmental impacts of development (Agyeman & Evans, 2004). Traditionally here, Farber (1988) argued that the main struggle for environmental justice was about preventing ecological inequality in the first place, and not just about redistributing the positive and negative impacts of development. Following this trend then, contemporary policy relating to development should allow for the equal distribution of risk and the positive and negative impacts of development as well as scoping better management and alternatives. This review illustrates how environmental justice theory can be used to explore the legislation that guides extractive resource industries, or at least comment against legislation that does, or does not, support the protection of the environment and the people who live in it. Further, environmental justice theorisation allows investigation of preventative legislation, as well as policy that minimises impacts and facilitates rehabilitation of mine sites.

Environmental justice is, therefore, a concept that is used at the activist level as well as the governance level (Agyeman & Evans, 2004). For the activist it provides a platform for mobilisation and opportunity. While for government, it becomes a preventative principle by which policy may be tailored to avoid disproportionate distribution of impacts of development. For the researcher, environmental justice provides a powerful lens though which to interrogate and understand the issues relating to the positive and negative impacts of global metabolism (Martinez Alier et al., 2016). For the purposes of this research, it allows the framing of processes that govern mineral extraction, the placement of mines, and the engagement of communities.

From the above review, we can see how there is now a truly global movement of environmental justice, with links to traditional and evolving contexts (Byrne et al., 2002; Martinez Alier et al., 2016; Walker, 2012). Contemporary theories

of environmental justice have moved on from distribution as a sole focus (Schlosberg, 2007; White, 2013). Distributive justice is still a central concern, however, the discussion relating to recognition, participation, functionality, and procedure is becoming more prevalent (Byrne & MacCallum, 2013; Schlosberg, 2007; Walker, 2012). Examples relating to the contexts of this project would be the seeming lack of recognition of community and some acknowledgement of the current lack of power many concerned citizens discuss (Agyeman et al., 2016), inclusivity through participation and engagement of non tokenistic community engagement, and the inclusion of local knowledge in decision making (Agyeman et al., 2016). Functional processes that assess the likely impacts of mining operations, and procedural efficacy in the form of impact assessable mining operations being given due consideration in any decision making processes (Agyeman et al., 2016; Schlosberg, 2007).

Environmental justice research is already encompassing multicultural issues, as well as civil rights, LGBTIQ issues, women's rights, sustainability issues, investigations of vulnerable communities (Byrne & MacCallum, 2013). Contemporary environmental justice research now also scopes place attachments (Schlosberg et al., 2018) which allow this thesis to draw upon these contemporary works. Thereby, I will also use environmental justice theory in the later discussion chapters to inform the project of the underlying injustice of resource procurement from Australian rural communities. Within that discussion I will explore how communities react to injustices, and link these environmental (in)justice themes to the field of emotional geographies that are already emerging in emotional political ecology literatures (Doshi, 2017; Sultana, 2015); as discussed earlier in this review and I address this specifically in Part Two of Chapter Seven. I move on now to emotional geographies theory.

Part Four: Emotional Geographies

Clearly, our emotions matter. They affect the way we sense the substance of our past, present, and future; all can seem bright, dull or darkened by our emotional outlook.

Joyce Davidson, Liz Bondi, and Mick Smith (2005, p. 1)

Emotional geographies

Prior to the emergence of emotional geographies, emotions were largely overlooked in geographical research (Anderson & Smith, 2001). Within the texts of emotional geographies, however, we now find a framework through which to explore for this thesis specifically the shifting nature of emotions, embodiment, place, community, reaction to threat, and place defensive actions. I specifically interrogate those emotional geographies that respond to threats to place and community, and which steer decision making, change perceptions of place attachment, and attachments to others.

Emotional geographies allow us to explore 'emotions that people feel for one another and, more extensively, for places, for landscapes, for objects in landscapes and in specific situations' (Pile, 2010, p. 15). Emotions exist and circulate in between bodies, places, and things (Ahmed, 2004a), an argument that articulates emotions as being other than simply internal to the self, moving outwards, and positions emotions as effects, surfaces, and boundaries that move, accumulate, and intensify (see also Ahmed, 2004b).

Emotional geographies articulate the relationships between people and environments (Bondi et al., 2005). There is limited, but developing, literature and research specifically focused on emotional geographies and the mining and resource industries (see Ey, 2018; Ey & Sherval, 2016; Ey et al., 2017;

Osborne, 2014; Pini et al., 2010); discussed further in Chapter Six and Seven. This thesis, therefore, contributes to this space, paying particular attention to the emotional political ecology discussion outlined earlier in this review chapter, where I pay particular attention to place within that discussion.

Emotional geography as a discipline

Emotional geographies is not just a sub discipline of the broader field of human geography (Bondi et al., 2005). Rather, emotional geographies are also a discipline that explores an ideology that emotions exist and indeed are produced by, around, and within spatially defined places. Because of this trend, emotions exist in most geographical research that explores humans and spatial landscapes.

Emotional geographies allow this emotional recognition and as such positions emotions as integral to research, rather than something in need of bracketing out (Osborne, 2014). Emotions then are a part of knowing, a way to knowing, rather than the antithesis of or an obstruction to knowledge relating to place and threat as I explore in this thesis (Osborne, 2014; Sultana, 2015). Essentially, building on the above, emotional geographies create room for reflexive consideration of the emotions that shape the research encounter between researcher and participants, and acknowledges the role of emotion in data analysis and communication.

Exploring emotions

To borrow an oft repeated phrase, 'clearly, our emotions matter' (Bondi et al., 2005, p. 1). Emotions are not always visible and they are difficult to interpret and define. Yet feelings and emotions are there at every moment and all occur in the individual's 'closest of spatial scales' (Davidson & Milligan, 2004, p. 523); where other people, objects, or landscapes may define these places.

Emotions emerge from within or are inspired from external stimuli, and they can range from a sense of peaceful equilibrium, to fear or an adrenaline rush (Davidson & Milligan, 2004; Smith et al., 2012). The emotions that exist in an individual's life are constantly in flux and are moulded by stages of development: childhood to adulthood, maturity, and old age (Bondi et al., 2005; Smith et al., 2012). Further, strong emotions may be triggered by life changing events such as births, deaths or loss, and transitory relationships.

Emotions are instinctive (Holland, 2007; Smith et al., 2012); they are the responses to surroundings, situations, and change. Emotions, however, are widely varied and may be real, manipulated, or a deliberate false portrayal or act. Further, emotions may be uplifting or numbing, heart breaking or elating, and thus they have the power and presence to shape the way a person perceives their life and their place in the world (Bondi et al., 2005).

Emotions may be a production of self or a result of someone or something else. Expressed emotions also give opportunity for others to perceive the state of another individual (Holland, 2007). In addition, emotions are described as embodied experiences. They become 'a moving, feeling complex of sensible feelings, feelings of the lived body, intentional value feelings, and feelings of the self and moral person' (Denzin 1984, cited in Holland, 2007, p. 197). Emotions then, shape the experience of a place, and the place affects our emotions.

Emotions are not only experienced in relationships and through interactions with others, they interplay and form the basis of our unique and personal geographies (Davidson & Milligan, 2004). Emotions are also expressed though relationships, and are a product, a cause, an effect, and affect. Convoluted, however, such is the role of emotions in our everyday lives. In saying so, emotions are constructed, at least in part, socially, and spatially.

Emotions from the periphery, to the core constructs of research

Research in the field of geography has predominantly placed emotions at the periphery of study. Only in the last decade or so, have researchers included emotions and their meanings within geographical research in order to bring new insights (Bondi, 2005; Bondi et al., 2005); this project aims to contribute to this trend.

Historically, emotions have been linked with irrational thinking and behaviour (Holland, 2007). Thus, there has been a disconnection until more recently between emotions and mainstream research. Also, emotions were gendered, and racialised (Mysak, 2010); irrationality, feelings, and emotions assigned to the feminine, and rational, logic, decision making to the masculine. Authors stress that this divide is oppressive (Gerber, 1997; Mysak, 2010).

The divides highlight dualisms of oppression such as 'nature/culture, human/nonhuman, reason/emotion, mind/body, white/black, subjectivity/objectivity, fact/value, male/female, hetero/homosexual, self/other, private/public, and production/reproduction' (Mysak, 2010, p. 32). The divides here highlight the nature of contemporary society, and underscore the different emotions individuals will have based on what intersection of societal structure they are situated. Further these divides imply hierarchical or dominant tiering of subjectivity (Mysak, 2010; Warren, 2000). This devaluing or dividing of emotions is inherently a status quo projection to claim dominance and power, and this threatened position aims to weaken *others* by assigning irrational emotionality to the margins (Mysak, 2010).

Many sociologists, therefore, already begun to discuss emotions as being essential to the quest for new knowledge (Holland, 2007; Mysak, 2010; Warren, 2000). These calls from the margins of geographies ask others to reassess the links between knowledge and emotions, where specifically:

> Sociologists of emotions consider that the study of emotions can transcend the dichotomous ways of thinking that have restricted Western thought since they lie at the juncture of some of these fundamental dualisms mind/body, nature/culture, public/private (Holland, 2007, p. 197).

Further, a 'place must be *felt* to make sense' (Davidson & Milligan, 2004, p. 524). This point informs much of my reason to explore the spaces of my case study in person; that is to interview people *in* their places, as per (Anderson & Jones, 2009) 'where of method' described in Chapter One. Essentially, 'emotions, then, might be seen as a form of connective tissue that links experiential geographies of the human psyche and physique with(in) broader social geographies of place' (Davidson & Milligan, 2004, p. 524). Bennett (2009) concurs, and argues further that emotion should not be considered just an object of study. Rather, emotions need to be considered as the medium that connects the researcher, participants, and the subject (see Bondi, 2005). I reflect on my role as researcher as a contribution in Chapter Eight.

Emotional geographies and power

In the emotional geographies arena, power discussions *can* be emotional, emotional geographies literatures have begun to reclaim emotional roles in research centred on power, mining, and decision making (Ey & Sherval, 2016; Osborne, 2014). Authors posit that emotions are an important factor in the production of knowledge (Holland, 2007), and that emotions, essentially, 'enframe the rational and not vice versa' (Jones, 2005, p. 205). Earlier I discovered iterations of emotional political ecologies where emotions weave into and around power and structure (Sultana, 2015). In this way, emotions contribute an additional level of understanding, analysis, and interpretation in qualitative research (Smith et al., 2012), and I contribute to this dialogue in Part Two of Chapter Seven.

Indeed, engagement with emotions leads the researcher to a number of insights that may bring better understanding to the production of power landscapes that both researchers and participants find themselves (Laliberté & Schurr, 2015). This point is particularly relevant to this thesis as I explore the power relationships that exist between the activist, Government, and resource corporations.

Emotions and place attachment

As emotions are embodied, they are created and expressed in the places our bodies exist; 'individuals express themselves in space through their bodies' (Hubbard, 2005, p. 121). Emotions as a result, are described as being 'intimately tied into place' (Urry, 2005, p. 77), and 'life is inherently spatial, and emotional' (Jones, 2005, p. 205). Understanding emotions, and emotional attachment to places therefore, must encompass the places these attachments form (Hubbard, 2005; Jones, 2005), these might be particular spaces, homes, landscapes, or general community spaces as examples.

Places are not simply geographical landscapes; in emotional geographies place is understood as being location(s) of activity and interactions of goods and services (Urry, 2005). Places can be emotionally pleasurable, and conversely evoke emotional distress, therefore the memories associated with place are 'mapped into our bodies and minds to become a vast store of past geographies which shape who we are' (Jones, 2005, p. 206). Change of place, or threat to place, can alter these emotions previously associated with a landscape, as reviewed later in a separate section on solastalgia (Albrecht, 2004) and psychoterratic geographies (McManus et al., 2014).

Aligned with place and emotions, particularly from a community perspective, Urry (2005, p. 80) offers an analysis of how emotions are experienced in place:

> … objects are highly significant in the nature of place. Various objects constitute the basis of an 'imagined presence', carrying that imagined presence across the members of a local community. Places also carry traces of the memories of different social groups who have live in or passed though that place.

Essentially, Urry (2005) offers a linkage between place and community, and the individuals that occupy it. These individuals are influenced by the place, as well as place histories and the experiences that have happened there (Jones, 2005). This linkage of place and histories to the embodied experiences and emotions that emerge for individuals in communities that face the threat of mining operations forms a pivotal element of this research.

The difficulty in locating emotional terrains emerges with accessibility and inclusivity issues individuals either being included and supported, or isolated and rejected (Parr et al., 2005; Thien, 2005), leading to silo or collective geographies. Those silenced, rejected, or disconnected from others may experience depression and unwellness, whilst those who are connected to others may experience more wellness (Thien, 2005). Emotions then, are not 'placeless', they are 'unavoidably situated' (Parr et al., 2005, p. 88).

We find also, regarding emotions that emerge when treasured places are threatened, that the degree to which individuals are traumatised or impacted by industrial practice or disaster (e.g., chemical use or spill, aquifer contamination, well blow out) 'is far more severe if some kind of toxicity is involved' (Erickson, 2008, p. xii). This allows us to scope and understand emotional reactions of concerned citizens who resist industrial placement in agricultural regions, and rural towns reliant on fair access to clean land and water for a range of uses. We find a link here between emotional geographies and environmental justice studies; industrial practices causing harm can be place based, therefore place and what happens in it, along with the emotions

that happen in place, can be politicised (Mysak, 2010), linking further back to the above review on political ecology. The spaces between the three theories used to frame the debates this thesis explores continue to evolve from earlier reviews on emotional political ecologies.

Emotional attachment to landscapes

There is seldom a consistent cause and effect mechanism available when interpreting emotional reactions (Davidson & Milligan, 2004). This is mainly due to the widely varying emotional connections that individuals have with landscapes, and the shared experiences of groups or communities that may differ to the isolated geographies of others (Parr et al., 2005). As a result, emotions relating to a specific spatial area are not easily identified or defined as each individual may experience a similar emotion in a different way to the next (Smith et al., 2012).

Different landscapes and the emotions they evoke are a way of understanding the 'reflexive and emotional practices of individuals' (Vainikka, 2014, p. 9). This highlights that emotions are fluid, unique, whist also being static, and shared between individuals and places, or just *bodies* of things. There is an interactional quality inherent to emotions that changes with different connections to other individuals and/or different landscapes (Davidson & Milligan, 2004; Vainikka, 2014).

Landscapes and spaces in particular natural environments can create positive experiences (Conradson, 2005; Gesler, 2003), and can be considered therapeutic (Conradson, 2005). These positive emotions assist in the shaping of our *self*. 'The spatial history of our lives reveals much about the ways we identify with space and how we narrate our belonging' (Vainikka, 2015, p. vii). These 'ecologies of space' then form the foundations of experience and emotion (Conradson, 2005, p. 103). Experience of a place shapes an individual's

subjectivity, or indeed their experience of them self in a place, or elsewhere after experiencing a place.

Emotions of belonging

Emotions, landscapes, and community underpin the interconnectedness that links individuals to each other and the places they exist within, which further leads to a sense of belonging (Vainikka, 2014; Wood & Waite, 2011). Whilst this belonging may be different for each individual, it is an attachment that connects the individual to 'the material and social worlds they inhabit and experience. It is about feeling at 'home' and 'secure', but is equally about being recognised and understood' (Wood & Waite, 2011, p. 201). In addition, a 'sense of belonging can be extremely significant to people' (Vainikka, 2014, p. 9).

Wood and Waite (2011, p. 201) posit further, that 'belonging is a dynamic emotional attachment that relates people to the material and social worlds that they inhabit and experience'. Askins (2016) concurs, and used a study of refugee migration to illustrate those emotions relating to belonging create a central element of security or insecurity. In this way, inclusion of emotions in geographical research provides a link between human behaviour and place.

Emotions relating to belonging can be used to resolve conflict between people who inhabit the same space or place. Conversely, belonging may trigger tensions when an individual is excluded or discriminated against (Wood & Waite, 2011). Belonging and place attachments may also inspire place defensive actions by individuals or whole communities, especially when extractive resources companies threaten the local environment as I found with this project and discuss in Chapter Seven.

Collective trauma

In her ethnography, Murrey (2016, p. 224) discovered that over time 'emotional geographies of resistance elucidate long term struggles to survive … including

the accumulation of a collective emotional consciousness grounded in an awareness of historical patterns of injustice'. This further illustrates that community level impacts are experienced as a collective trauma; the 'damage done to the fabric of the larger community that is quite independent of the damage done to individual persons' (Erikson, 2008, p. xii).

In a study, Atari et al. (2010, p. 483) explored emotions and place as reasons to not abandon the 'cultural, social, and economic attachments to the place' that a community calls *home*. In this study, residents in the city of Sarnia Ontario, Canada have been experiencing increased levels of environmental pollution from industry causing significant air pollution; a city that also has a significant number of petrochemical facilities. These industries have earned Sarnia the colloquial term *Chemical Valley* (Jackson, 2011). Further the city was been labelled as an area of concern by the Canadian Federal Government. For a specific focus on this case study location, in particular the perspectives of First Nations peoples, see Jackson (2011).

The official labelling by the government, broadly speaking, did two things; it increased awareness of local residents to the likely short and long term health impacts of living in a polluted environment (Atari et al., 2010). In addition, the label brought with it a stigmatising view from visitors to the area, indicating a collective trauma for the residents of this city, as they were being assessed *with* their surroundings, and that something was wrong.

It was found that residents used their emotions and sensual experiences to create coping strategies that allowed them to continue living in that community. Further, perceptions of government changed after the official labelling as the Government did not implement a clear plan to deal with the pollution issues (Atari et al., 2010). Essentially, the study I describe above, illustrated how emotional geographies not only strengthen a community against a negative impact, and shape behaviour, but also how emotions play

an important role in understanding community motives and actions and how a collective trauma is experienced and dealt with at the community level.

Affective economies

Emotional geographies understand emotions as moving between what can be physically seen and felt, and those elements of emotion that lie beyond the capacity to generalise or place them within spatial boundaries (Ahmed, 2004a, 2004b, 2004c). Emotions in this sense, therefore, are embodied, and they allow a place, or an event to be embodied though the experience we have in a place. Emotions are triggered by events and experiences, and in turn they affect our responses.

Emotions are unique, and for individuals within a community, these emotions are pulled on, pushed, influenced, and altered depending on the interactions with others, and indeed manipulated by threat given the nature of this thesis; given that emotions enable the individual to understand the composition of the world around them (Smith et al., 2012). Emotions, therefore, ebb and flow, flux and stabilise, between individuals and places. There is a circular understanding of the relationship between emotion and space, in that emotions are sometimes only understandable when explored in context with places or spaces (Smith et al., 2012).

Actions or events causing an emotive response, that then shapes feelings or reactions to others or other *things*, is what Ahmed (2004c, p. 44) terms 'affective economies'. Indeed, the events or occurrences to one individual or *place*, may have lasting effect on others. This circulation of feeling and emotions resonates between individuals. Ahmed (2004c) suggests that emotion does not lie in the object or body in isolation from other bodies or objects, rather emotions move between these things as *cause and effect*.

Solastalgia and psychoterratic geographies—geographies of mining

In many places with extractive resource projects in operation, activists are keenly aware of the impacts that are occurring or imminent (Lock The Gate Alliance, 2017a). In the cases where extraction has begun, or is ongoing expressed emotions include anger, regret, and grief (Murrey, 2016), linking the geographies of mining to solastalgia and psychoterratic Geographies. Given the nature of expressed negative emotions, these two themes underpin earlier review of mining and collective trauma.

Embedded within emotional geographies understandings are those emotions and feelings that individuals have with a place in change, or post change. Known now as solastalgia, these emotions link 'ecosystem distress and human distress' (Albrecht, 2004, p. 44). Drawing on foundational work by Leopold (1949) and Mitchell (1946), terms such as 'ecosystem distress syndrome', 'environmental ethics', and 'pathological psychological states' are linked with 'sick landscapes' (Albrecht, 2004, p. 45). All of this contributes towards an understanding between 'human and ecosystem health' and how the state of the land influences the state of the human that is experiencing it particularly for those people who live in or near the affected land (see also, p. McManus et al., 2014).

Solastalgia, essentially, '… the pain or sickness caused by the loss or lack of solace and the sense of isolation connected to the present state of one's home and territory', reflects and interprets the experiences of those individuals whose treasured places are affected by threat (Albrecht, 2004, p. 48):

> Solastalgia … is the pain experienced when there is recognition that the place where one resides and that one loves is under immediate assault (physical desolation). It is manifest in an attack on one's sense of place, in the erosion of the sense of belonging (identity) to a particular place and a feeling of distress (psychological desolation) about its transformation. …

> It is the 'lived experience' of the loss of the present as manifest in a feeling of dislocation; of being undermined by forces that destroy the potential for solace to be derived from the present. In short, solastalgia is a form of homesickness one gets when one is still at 'home' (Albrecht, 2004, p. 48).

Solastalgia can be caused by a range of factors, however, for this project it aligns to those threats and damages caused to landscapes from mining activities. Essentially, solastalgia is experienced by those who have endured environmental degradation (McManus et al., 2014). Here, we find tangible links to the case study given the known impacts of coal and unconventional gas operations alluded to in the introductory chapter of this thesis; explored more in the next chapter.

Browne et al. (2011) discuss solastalgia in terms of the closing of a Nickel Mine in Western Australia. Of particular interest here, is the feelings of local peoples for 'the way it used to be' (Browne et al., 2011, p. 718) when reflecting back to memories of what the region used to look like prior to mining operations of particular mention in the article is a geological feature named Bandalup Hill, which was heavily impacted for the removal of ore deposits. 'In the face of profound environmental change, people can feel great distress and a nostalgia for "the way things were", even though they may still be in the same physical location or home environment' (Browne et al., 2011, p. 718), reflecting back to the work of Albrecht (2004). Of particular interest, Browne et al. (2011) link solastalgia not only to the transformation of landscapes, but also to the loss of people who used to occupy the farmlands sold to the mining company; highlighting that solastalgia can be related to the change of landscapes, and also carry social aspects when communities are altered.

Linked to Solastalgia, McManus et al. (2014) discusses psychoterratic geographies. Topophilia features here, 'the love of particular and peculiar

places' (McManus et al., 2014, p. 59) and 'the affective bond between people and place or setting' (Tuan, 1990, p. 4).

Psychoterratic geographies exist in place prior to and after change. By understanding these pre existing emotional attachments, and including emotions in assessment processes, geographers and decision makers can use understandings of solastalgia and psychoterratic geographies to provide a framework by which to measure, incorporate, and assess emotional attachments to treasured places both before and after change; the uptake of these understandings in research and decision making is burgeoning. Anderson and Smith (2001), and McManus et al. (2014) argue that emotional attachments to place prior to change, and those emotions triggered when change is proposed, are not clearly articulated and incorporated into assessment processes that govern the implementation of a mine site. I concur, and aim to address this issue by contributing to the discussion on emotions in assessment processes later in Chapter Seven.

Chapter Two Conclusion

This chapter has presented the theoretical literature review that underpins the analyses of the research data and assists in the framing of research findings. The State's need for resources, guided by the neoliberal agenda, presents significant issues relating to the placement of mines near communities. Political ecology theory, therefore, provides the broad frame to address the wicked conundrum facing communities in each case study. Indeed, as a sub field of research in the broader political ecology framing, we find work already being done on pushing the boundaries of the discipline to include *others* and the emotions of political ecology conundrums that are being explored in this thesis.

Environmental justice theory frames and explores those issues relating to distribution of positive and negative impacts of mining, the fairness of placement of industry near communities that are *out of the way*, and the engagement of communities though processes that can recognise their struggles, and manage effectively the impacts of mining should it proceed. Environmental justice theory provides a lengthy history of struggle of communities that have been subjected to the harms of industry, and this provides a platform of interrogation to explore the nuances of engagement, abandonment, or disregard to marginalised communities.

Emotional geographies theory delves deeper into the reactions and resonances of citizens who are subject to the damaging effects of mining both to landscapes and communities. Emotional geographies provide understanding and foundation to the reasons why citizens act, and react, to threat of mining at the hands of the State.

The discussion that draws upon this theoretical framing of this project will happen later in Chapters Six, and Seven. Before that, each case study location

will be explored in detail, and next, the contextual literature review will present the background and knowledge we already have of key issues this thesis explores; namely controversial extractive industries, environmental activism, and social movements.

Chapter Three

Literature Review Two

The Thesis Contextual Literature Review

Introduction

I begin this review with an acknowledgement further to the one made at the top of the thesis that the resources and lands that are under scrutiny in this case study are stolen from Indigenous peoples. Sovereignty was never ceded in Australia, and dispossession and removal of Indigenous peoples from their lands has occurred ever since the arrival of European explorers and settlers. Whilst there has been some effort in recent years to close the gaps between Indigenous peoples, coloniser descendants, and other Australians, the country remains one of the many places in the world where the structures of the colonial past endure; particularly in relation to the country's natural resources (Howlett & Lawrence, 2019).

Since European invasion of Country[9], and subsequent colonisation, extractive resource industries coal mining and iron ore as examples have been a pivotal economic pillar for the Australian economy (Maxwell, 2018). Historically, the developmentalist ideology of Australian governments has tended to favour extractive industries, and the nation's history is replete with examples of social and environmental impacts associated with mining (Cheshire et al., 2014; Mancini & Sala, 2018). This thesis explores these mining impacts, in particular the perceptions of citizens who provide their first hand experiences of life under threat of mining proposals, mining operations, and industry expansion as will be explored later in the case study chapters, and disucssed in Chapter Six and Seven

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[9] 'Country is the term often used by Aboriginal peoples to describe the lands, waterways and seas to which they are connected. The term contains complex ideas about law, place, custom, language, spiritual belief, cultural practice, material sustenance, family and identity' (AIATSIS, 2021, para. 4)

Contemporary economic dependence on extractive industries (Connor, 2016; Maxwell, 2018) implies that the Australian economy seems to continue to benefit from royalties gained by the selling of excess resources to overseas markets. This kind of economics not only continues the trend of communities and landscapes being threatened and destroyed by expanding extractive resource projects, but also exposes the glaringly obvious links between controversial extractive industries and government financial gains; 'the economic benefits of mining, however, are not evenly distributed' (Sincovich et al., 2018, p. 19).

Drawing upon descriptions procedural and distributive *in*justice from the previous and introductory chapters, evidence of the close relationship between State and Federal Governments and the extractive resources sector are corroborated by a continuing history of legislative amendments that see political green lights given to controversial extractive resources industry (Connor, 2016). For example, extractive resources industries have had operations approved in areas of cultural significance, high agricultural utility, and biodiversity significance (e.g. The Ranger Uranium project, see Ferguson & Mudd, 2011), and in regions where tourism is important for local economies (e.g., The Abbot Point LNG project, see ABC, 2015).

Impacts of mining on these kinds of treasured places invoke emotions associated with grievance, and loss for concerned citizens (Della Porta & Diani, 2009). Participants in each of my case locations, through discussions at interview, provided their insights on these valuable understandings of emotional impacts and changes to community social fabrics in the face of mining threat. These perceptions of mining and mining impacts add to the milieu of research already happening in the arena that explores mining and emotions (Ey et al., 2017; Osborne, 2014; Pini et al., 2010).

In this chapter, I will explore in detail the contextual elements of the research as described above; problematising the contextual elements of this study. For ease of reading, this chapter is divided into two parts: controversial extractive industries, and then social movements and environmental activism. There are of course additional contextual literatures relevant to this study, however, these emerge organically throughout the two overarching topics presented in this chapter, and throughout the previous chapter. The literature here presents the knowledge that has come before this thesis; assisting me in describing the problem, and to interrogate and interpret the data and frame the discussions that will come in the chapters that follow.

Part One: Controversial Extractive Industries

Anyone who believes in indefinite growth on a physically finite planet is either mad, or an economist.

Sir David Attenborough (2009)

Controversial extractive resources

In Australia, as elsewhere, energy security and minerals trading are driving both large scale mining and reforms to legislation (McManus et al., 2014). As discussed in the previous chapter where the role of the State was defined; government powers that enable changes of legislation to facilitate industry practice continues the trend of communities and landscapes being threatened and destroyed by expanding extractive resource projects (ABC, 2015; Connor, 2016; Ferguson & Mudd, 2011). For this case study, the role of the state and the power it holds, will be focused on the NSW government, and the legislation at the time of writing, that facilitates and guides mining operations.

Controversial extractive resources are, for this study, understood to be those resource developments that cause 'significant economic, social and environmental change' (Davis & Franks, 2011, p. 2). The negative impacts of extractive industry may range from water use and contamination issues, environmental damage, ecosystem disruption and fragmentation. Community level impacts may include the uneven distribution of costs and benefits, loss of community cohesion, psychological impacts, and disruption to the everyday way of life for local and regional populations (Davis & Franks, 2011; de Rijke, 2012, 2013b; Lockie et al., 2009; Willow & Wylie, 2014). Government and industry proponents often overlook or downplay these impacts, and focus

instead on the promise of jobs, development, and related beneficial infrastructure (Bailey & Osborne, 2020).

Controversial extractive industries may have small visible impacts such as shaft mining of coal, or large scale visual impacts such as open cut coal and ore mining (de Rijke, 2012, 2013b; Willow & Wylie, 2014). Regardless of scale, the visible impacts of extractive industries on landscapes cause grievance and, therefore, resistance to resource extraction. In many cases, extractive industries have cumulative, often unseen impacts on surrounding environments and communities; such as family and neighbour disputes, impacts on place attachments, and emotional impacts (Browne et al., 2011; Halvaksz, 2008; McDonald et al., 2012; Perry, 2012). These 'out of the way' impacts are the focus of this study; the research seeks to explore more deeply those community level emotional impacts that are often obfuscated in the mainstream dialogues from mining proponents (Bailey & Osborne, 2020).

The type and magnitude of different industrial impacts upon surrounding systems varies by resource type and context. In general, most controversial extractive industries have experienced social resistance of some kind (Veltmeyer & Bowles, 2014). This kind of activism against the problems identified above relating to controversial extractive industries, is found in both of my case locations. Activism of this nature results from, as it has elsewhere, local and regional impacts relating to controversial resource extraction, but also tokenistic or poor consultation and the marginalisation of local communities (Spink et al., 2010; Wolsink, 2007a, 2007b). Activism is also expressed where fossil fuel industries are developed, where alternative and renewable resources are available; yet remain underexplored (Painuly, 2001).

The global system of trade means that resources are not only sourced from local places for local or *in country* development. The global market now enables large quantities of excesses to be traded and sold to other countries where those

specific resources are already scarce, or unavailable (Mokhatab & Poe, 2012; Pitelis, 2005). People who live near the source of the resource bear the brunt of negative impacts while the positive impacts of extraction such as the use of the resources for development, the financial gains from sale of excess, and the subsequent development of economies are experienced far from the source of extraction (Escobar, 2006; Langton & Mazel, 2012; Lockie et al., 2009; Willow, 2014).

The distributive inequality described above, is a phenomenon known as disproportionate distribution of positive and negative mining impacts (Langton & Mazel, 2012; Willow, 2014). Vulnerability features here. I believe that those communities that have mineral resources located close by are more vulnerable to the negative impacts of mining than a community that is in a place where there are no known deposits of commodifiable resources. These vulnerabilities are linked to 'the resource curse' that was discussed in the literature review, and explains how communities that are closely located near valuable and accessible resources often suffer from adverse externalities of mining (see Biresselioglu et al., 2019; Williams & Le Billon, 2017).

The distributive inequality of mining impacts, positive and negative, again seems to be overshadowed by promises of jobs, local infrastructure, and benefits to local communities that come at the proposal stages of mining operations (Carley et al., 2018; Curran, 2021). History is replete, however, with these promises not being fully realised (Curran, 2021; Lock The Gate Alliance, 2014a, 2017c, 2019a), causing betrayal, mistrust, and objection to mining proposals (Groundswell Gloucester, 2015c, 2018a, 2021; Lock The Gate Alliance, 2017a); as will be discovered in each case location under scrutiny in this study later.

Historically, Australia developed a non diversified economy, meaning the main source of economic development in this country is linked heavily with

the extractive resources and fossil fuel sectors (Maxwell, 2018). Whilst there is a strong agricultural industry, and a robust tourism industry in Australia one which is marketed globally (Valadkhani & O'Mahony, 2018) development of mineral extraction facilities in places of significant tourist value indicates that resources infrastructure and development takes precedence over protecting key tourist areas in Australia. The recent approval for the expansion of the Abbot Point Coal Terminal that sits adjacent to the Great Barrier Reef World Heritage area is a prime example (ABC, 2015; Bell et al., 2014). The 'dredging area for Adani's T0 terminal is approximately 61 hectares of seabed' (Government of Qld., 2015, para. 2). It is noted that this dredging will harm surrounding areas of the Great Barrier Reef Marine Park, including seagrass beds needed for threatened species habitat Dugongs (Bell et al., 2014), and have further effects on the related tourist industry (AMCS, 2016).

These adverse effects of mining operations, are claimed to be adequately reviewed and scrutinised through EIA and related processes (Aryal et al., 2020; Cashmore et al., 2010; O'Faircheallaigh, 2010). These processes, however, are known to have shortfalls (O'Faircheallaigh, 2010). As will be found later in the case study chapters, participants of this study speak often of these shortfalls, as such, this project makes some contributions to the discussion of EIA and related problems, and calls for the review of EIA and associated impact studies.

To address the issues of fossil fuel use for energy production, there has been some progress for renewables in Australia, although generally the sector is lagging at only 24% of total energy produced compared to 76% fossil fuel energy production (Clean Energy Council, 2018)[10]. The under developed nature of the renewable energy sector in Australia seems to be a trend of underutilising 'some of the best renewable energy resources in the world'

[10] At the time of writing.

(Bahadori et al., 2013, p. 582), and this in turn becomes a focus for anti fossil fuel activists and environmental activists.

Energy security, however, is a prominent political issue within government sectors (Chester, 2010). Policy debate on securing Australia's energy futures has favoured a greater reliance on coal and unconventional gas resources. The discourses of different conversations of energy security and how that energy is produced is a key driver of protest motivation (Lock The Gate Alliance, 2017a), as will be explored later.

Seemingly, resulting from political efforts to secure Australia's energy market, the unconventional gas industry has experienced significant growth in the last twenty years due to this increasing need for energy security and the higher international trade prices (de Rijke, 2013b; Paragreen & Woodley, 2013; Sherval & Hardiman, 2014). Given its wide array of unwanted impacts, and in the face of a vastly underexplored renewable energy industry, there has been an increase in environmental and social activism against the unconventional gas industry (Cassell, 2014; Paragreen & Woodley, 2013; Turton, 2015). The coal and unconventional gas industries, as the case study platform, will now be explored in depth.

Power, resources, and emotions

Power dichotomies within structure and agency dialogues can sometimes exclude *others* or *out of the way* rural landholders. This can be in regard to natural resource access by a resource proponent or the State with a disempowered landowner (de Rijke, 2013c), as well as use of resources required for extraction techniques such as the intensive water requirements for the techniques required to recover reserves in the unconventional gas industry (de Rijke, 2013c; Sherval & Hardiman, 2014).

Sultana (2013) articulates power, access, and resource; where water use and associated technologies are often cited as being safe by governments when engaging with community, however, as Sultana (2013) found, discourses of safe water can be misleading, and lead to power imbalances when water is scarce. This understanding is especially pertinent in many contemporary Australian settings as the gas industry is rolled out in regions where new gas reserves are being explored (Lock The Gate Alliance, 2017b). In these places, such as the two case locations I explore, many residents and agriculturalists rely on subterranean water resources, often cited as being subject to contamination from unconventional gas extraction (Groundswell Gloucester, 2014a; Lock The Gate Alliance, 2019a, 2019b, 2019c).

On this margin of power discourse narratives, we find that natural resource struggles that affect everyday lives are played out or negotiated though 'power relations involving bodies, spaces, and environments' (Sultana, 2011, p. 163). These power struggles, and the places they are experienced, are also not static (Tonkiss, 2005). Specifically, of focus here, is the contribution this thesis makes to these spaces of power engagement, although brief, and is presented in Chapter Seven, Part A.

Pini et al. (2010) discuss emotions pre and post closure of the Ravensthorpe Nickel Operations in Western Australia, iterating that intense feelings emerged amongst mine workers and other local citizens when the mine closure was announced. Further, the mining company, BHP Billiton, actively pursued avenues by which to regulate and suppress reactions. The Ravensthorpe study is useful in that it highlights further the emotional links that various stakeholders have with the mining sector. The authors call for 'more politically aware emotional geographies that attend to differentials of power in the processes and practices of affect' (Pini et al., 2010, p. 560), a call echoed by Sultana's (2013) work highlighting the politicisation of natural resources. This

thesis responds to these calls, and others, for additional discussions relating to emotional mining dialogues.

We not only find dialogues on emotions and impacts of industry pre and during mining operations, but also following. In a post mining study, Bennett (2013) discusses the emotions associated with promoting a place post closure of a long running coal facility; the study highlights the emotions that are embroiled in mining operations, and specifically explores the emotions that underpin community resilience and rebuilding after industry moves on. We find in Bennett's text a community learning to love and promote again a once damaged, even hated, place a moving emotional dialogue indicative of what Sara Ahmed describes as an affective economy (Ahmed, 2004a). Bennett's article allows us to understand that the shifting emotional landscapes that are linked to mining operations, treasured places, and others, are far from static. The emotional impacts of mining operations in treasured places also endure long after the mine has closed; and these ongoing problems relating to mine closure, and indeed mining in general, are not the focus of ongoing proposals from governments and insures, and remain underexplored. This thesis addresses these issues, and reflects upon citizen experiences and perceptions of mining, adding to the emerging and ongoing discussions relating to the emotional impacts of mining.

Unconventional gas

In Australia, the unconventional gas industry has experienced significant growth during the past twenty years, even though gas makes up only a small percentage of Australian national energy production. In fact, gas 'is equal to only 0.19% of the annual electricity supply, or 363 gigawatt hours' (McConnell, 2017, para. 5). Regardless of these lower contributions to energy security, government and industry representatives hold the contributions of the gas industry in high regard relating to apparent supply of jobs, economics,

infrastructure benefits, and growth (Curran, 2021). These benefits, as explained earlier, seem to overshadow the negative impacts of mining also articulated earlier (Groundswell Gloucester, 2014a, 2021; Lock The Gate Alliance, 2017c, 2019a). With the known negative impacts of fossil fuel mining being widely argued in public and political spaces, it remains obscure as to why the industry is being continually marketed as a benefit, in the face of pressures to swing to alternative energy resources (Curran, 2021). High international trade prices, perhaps, explain the driving factor for the extensive unconventional gas industry development in Australia (de Rijke, 2013c; Paragreen & Woodley, 2013; Sherval & Hardiman, 2014).

Natural gas also known as methane gas is broadly divided into two categories; conventional and unconventional (Lock The Gate Alliance, 2019c). *Conventional* gas reserves are those gas reserves that accumulate into pockets beneath an impermeable substrate layer; as seen in Figure 3 below where the impermeable layer is shown in light grey. The main difference between conventional and unconventional gas is the substrates from which the reserves are extracted and the different techniques required to recover the gas (Geoscience Australia, 2014; Lock The Gate Alliance, 2019c). *Unconventional* gas is that natural gas which is collected via means where the resource is much harder to gather; i.e., the gas does not accumulate into pockets or reserves as conventional gas does. Unconventional gas is dispersed though a coal seam, a shale layer, or tight sands substrates (Geoscience Australia, 2014). See also Figure 3.

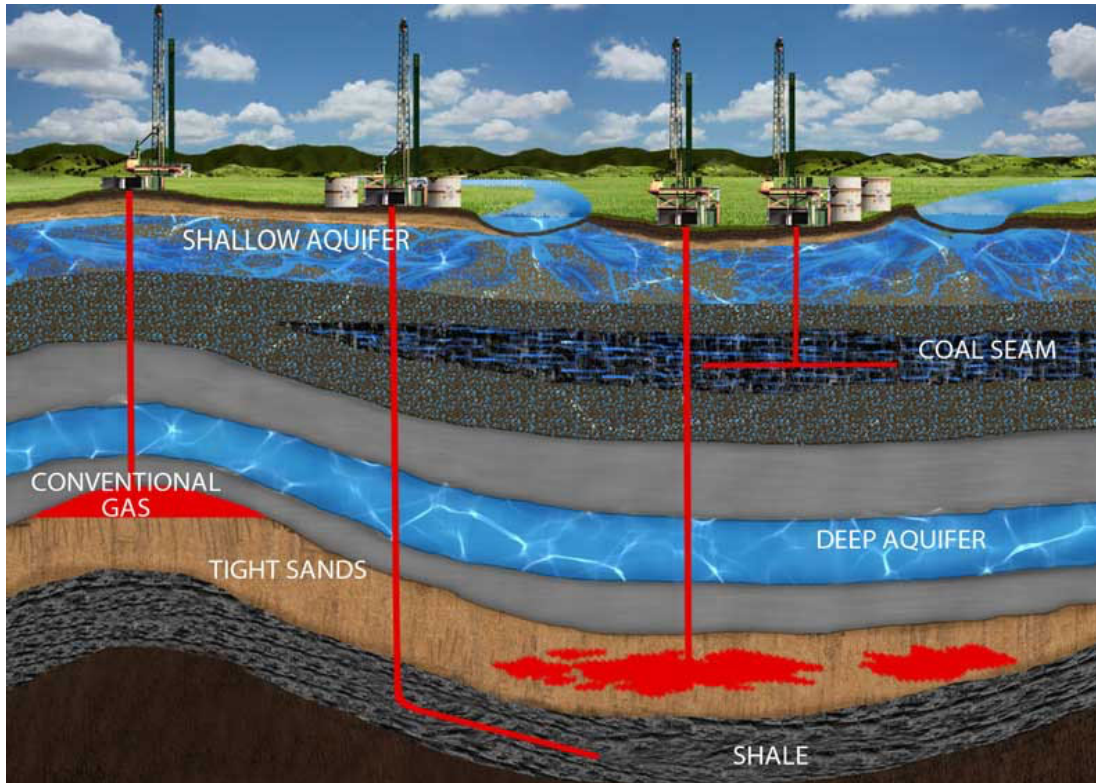


Figure 3: Artists impression showing conventional and various unconventional gas reserves

Image Source: Lock The Gate Alliance (2019c)

Although unconventional gas is divided into the types detailed above, the most commonly used term in the general lexicon is Coal Seam Gas (CSG), as this is the term that most media and non industry entities use to describe unconventional gas in general. This simplifying of terms is actually erroneous as coal seam gas is just that unconventional gas which is obtained directly from a coal seam. Other types of unconventional gas Shale Gas and Tight Gas as examples require similar extraction techniques, however, each kind of gas reserve requires different applications of the extraction technique to encourage gas reserves to migrate towards the well head.

The extraction technique being discussed here is 'known in the industry as *high volume slick water horizontal hydrofracturing*' (Willow & Wylie, 2014, p. 222. Italics in original.); also known as 'hydrological fracturing', or 'fracking' (the latter term used hereafter). Fracking, as it is most commonly termed by activists

and concerned citizens as will be presented in the background chapters in quotes remains one of the most contentious issues regarding unconventional gas extraction from an activism or resistance perspective. This is due to the large volumes of water with added chemicals (see Figure 4), that are pumped into a drilled bore under high pressure; the pressure cracks the substrate layer. A propping agent, such as sand, is suspended in the fracking fluid, when the water is removed the sand remains in place holding open the fissures and the gas then freed from the substrate (Lock The Gate Alliance, 2019c).

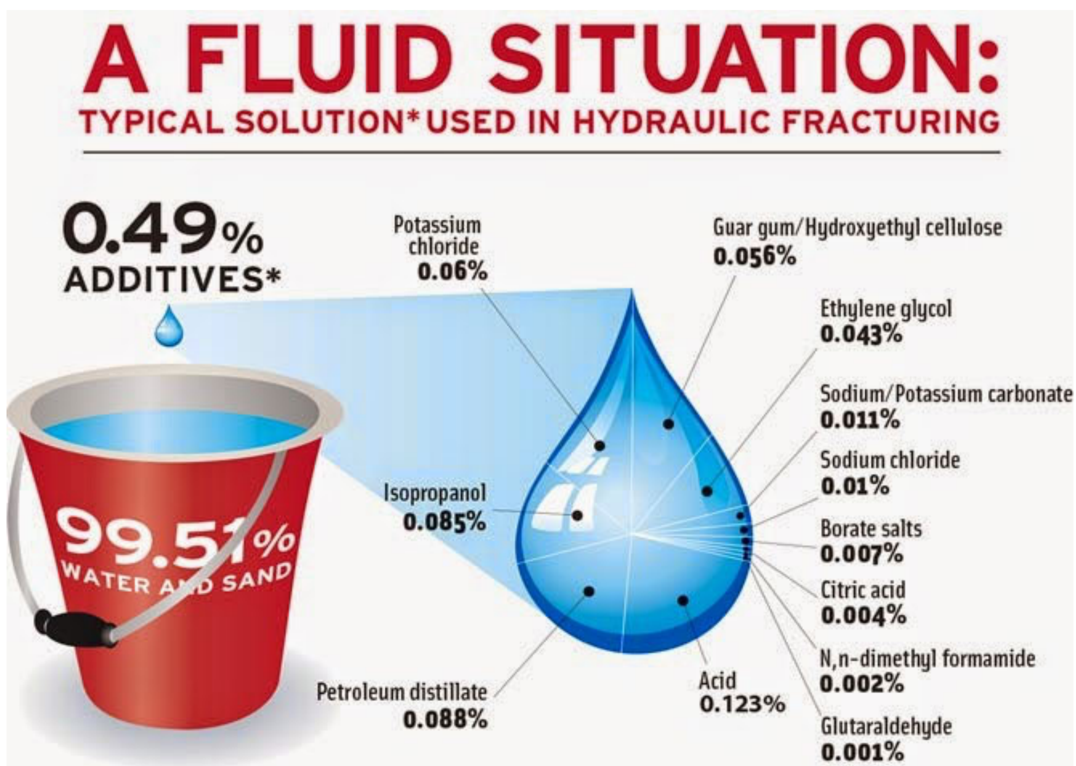


Figure 4: An infographic showing the additives in fracking fluid

Image source: (Lock The Gate Alliance, 2014b)

As mentioned above, most unconventional gas extractions use the fracking method to stimulate flow of locked up methane to the well head, and the bore is drilled through numerous layers of subterranean strata and aquifers (see Figure 5 for an artist's impression). The amount of fracking, however, varies

from substrate to substrate; meaning in one substrate the well might only need to be fracked once or twice over the lifespan of the bore, where in other substrates fracking might be needed many more times to continue the flow of gas reserves (Lock The Gate Alliance, 2019c). Adding to the concerns of water drawdown and use, possibly groundwater contamination, and risks associated with fracking that are widely discussed in community spaces, as this study will reveal in later sections.

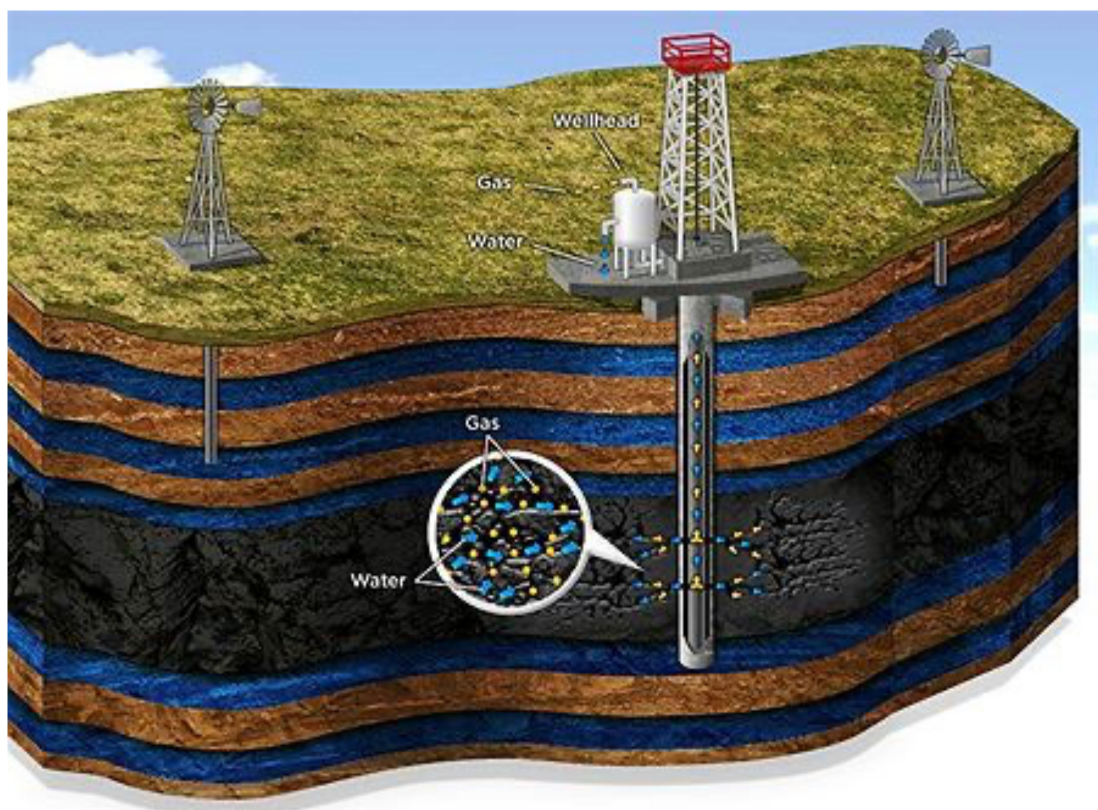


Figure 5: An artist's impression of a typical gas well and the layering of strata, coal seam, and aquifers

Image source: (Lock The Gate Alliance, 2014b)

The location of the substrate being fracked also may vary significantly in depth, usually anywhere between 300m 1000m underground for coal seams, as example (Lock The Gate Alliance, 2019b). Further, numerous gas well heads

interconnected with roads and pipelines, are required to make up a gas field, considerably increasing the amount of water needed, the impacts to landscapes and to farming practices, and community (see Figure 6). Fragmentation of farmland and remnant bush is another primary concern of concerned citizens that push back against the unconventional gas industry (Groundswell Gloucester, 2014a; Lock The Gate Alliance, 2019b).

Figure 6: A Gasfield in Queensland, Australia—note the evaporation pond bottom right

Image source: (Lock The Gate Alliance, 2014b)

Fracking brings with it a number of known hazards (de Rijke, 2013c; Lock The Gate Alliance, 2014a, 2014b, 2019c). Due to the known impacts of fracking, unconventional gas in Canada and the United State of America (e.g., Alberta, Colorado), Europe (e.g., Yorkshire, UK), Asia (e.g., West Bengal, India), and Australia (e.g., South East Queensland) has often divided communities and caused social and environmental harm (de Rijke, 2013c). Common concerns surround toxic chemicals used in fracking operations being discharged into the environment, health impacts, water quality concerns, and air quality around well sites and fracking locations due to fugitive emissions (Willow & Wylie, 2014).

> … unconventional gasfields also involve the industrialisation of entire landscapes (covering considerably larger areas than conventional gasfields). They generally require thousands of wells, vast networks of roads and pipelines, compressor stations, processing plants, wastewater holding dams and treatment plants. The three main types of unconventional gas are coal seam gas (CSG), shale gas and tight gas. CSG is found in coal seams, shale gas is found in shale rocks, whilst tight gas is found in low permeability sandstone rocks (Lock The Gate Alliance, 2017c, para. 4).

As a result, increased activism against the unconventional gas industry has been reported (Cassell, 2014; Paragreen & Woodley, 2013; Turton, 2015).

What are not included in the costs of unconventional gas extraction are the externalities of negative local impacts, both socially and environmentally (Lock The Gate Alliance, 2019c). The type and magnitude of unconventional gas industry impacts upon surrounding eco systems and communities varies with the size and the various stages of development of the project. Reserves are typically found beneath agricultural land, or regions of environmental significance (de Rijke, 2013a; Sherval & Hardiman, 2014), sparking conflicts over land use and resource access.

For this project, coal seam gas cannot be disconnected with the coal industry for two main reasons. You do not get coal seam gas without a coal seam, also, the Gloucester region had coal mines long before coal seam gas was proposed (OliverGV; LauraGV). There was significant social resistance to coal in this region prior to CSG development, and the history of the resistance informed the contemporary push back against coal seam gas as will be explored in Chapter Four.

Coal

With the lengthy history of coal use emerging from the industrial revolution as a source of energy, this thesis does not need a review on exactly what coal *is* and how it is utilised for energy production. For that kind of general understanding of coal use the work has already been repeatedly done (see, p. Miller, 2004, for a comprehensive account). Therefore, coal will only be reviewed here by including Australian contexts only.

Extraction techniques, community impacts, threat to landscapes and the environment, and the struggles that emerge when communities are faced with coal prospects will be described only if they fit the frames of the research. In the context of this project, therefore, contemporary use of Australian coal centres on three main industries: exports, the energy industry for the production of electricity, and the steel industry which requires the use of high grade coking coal as a vital ingredient of high quality steel (Geoscience Australia, 2019).

Coal deposits, also known as coal basins, are found in many Australian regions (see Figure 7). Brown coal is used primarily for energy production, and black coal also known as metallurgic coal is primarily used for steel production (Geoscience Australia, 2019). Further, coal mining in Australia usually happens

via two primary extraction methods: longwall mining, and open cut (NSW Mining, 2013).

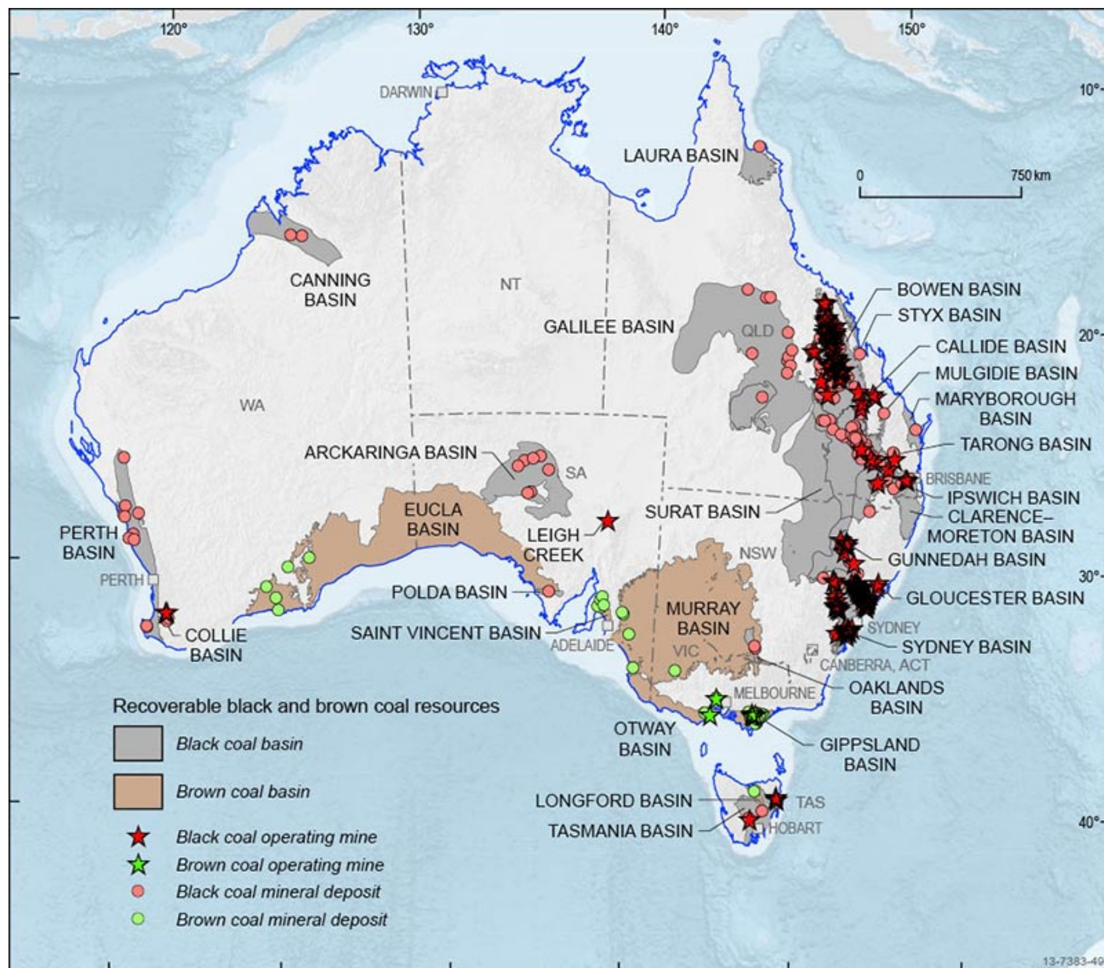


Figure 7: Australia s black and brown coal deposits and operating mines

Image source: (Geoscience Australia, 2019)

Longwall mining involves tunnelling underground to a coal seam, and then, using specialised plant equipment, the coal seam is removed and the void behind is filled in via a controlled cave in (Bain, 2019; Saki, 2016), see Figure 8 and Figure 9. An open cut mine is as the name suggests, an open pit of various sizes where overburden   strata situated over the mineral deposit   is removed and the coal seam exposed. The coal is then blasted to loosen it from the coalface, and then hauled to a stockpile area, see Figure 10. Eighty percent of coal produced in Australia comes from open cut mines (Geoscience Australia, 2019).

Image removed

Figure 8: An underground longwall mine

Image source: (Saki, 2016)

Image removed

Figure 9: A longwall shearer removing a section of the coalface. Note the hydraulic supports above preventing cave-in

Image source: (Bain, 2019)

Image removed

Figure 10: An open cut coal mine in Australia

Image source: (Nogrady, 2019)

The impacts of these two common mining techniques range from diversion of subterranean water flows longwall to dust, noise, air pollution, and loss of agricultural land open cut. The known negative environmental and social impacts of coal mining are well known to concerned citizens and activists (Lock The Gate Alliance, 2019a), and these issues are widely used as reasons to push back against the coal industry, as I will explain in detail later. For this thesis, I will hereafter be concentrating on open cut impacts, as that is the technique employed in one of the case study locations.

Vast quantities of water are required to extract coal from open cut mines. This water use varies from dust suppression, washing of plant equipment, as well as washing the extracted coal after it is mined from the coal face; '250 litres of freshwater are required per tonne of coal produced' (Moon, 2017, para. 7). The

recently approved controversial Carmichael Mine in Qld, Australia, as example, is projected to use 12,000 megalitres per day.

Coal mining, therefore, considerably draws down on local water supply, concerning local citizens, farmers, and environmental groups. Further, given the crossover of land uses in the regions where coal basins lie usually agricultural lands and the wetter, more densely inhabited, Eastern Seaboard impacts of coal mining are well known and spark considerable debate (Lock The Gate Alliance, 2019a); this will be made clear in Chapter Four.

Disproportionate distribution of positive and negative impacts

Generally, there is a disproportionate distribution of positive and negative impacts of mining; coal, gas, or otherwise (Coram et al., 2014; Willow, 2014). Commonly called the resource curse, vulnerable communities that have mineral deposits close to their centres usually have more negative impacts of a mining venture than the positives that are reaped from the mining operation overall. The benefits of mining include State royalties, proponent profit, and the trickle down of income made by the State to infrastructure projects. It is noted, however, that 83% of Australian mining profits go overseas (Lock The Gate Alliance, 2019a). Negatives of mining include the risks to farmland, water, community, and the environment (Lock The Gate Alliance, 2019a). These impacts vary between locations, the type of mineral being extracted, the extraction method, and infrastructure required to process and transport the product.

Generally, open cut coal mining brings to local communities' serious impacts on air quality, waterways, health risks to people and livestock, and contributes considerably to greenhouse gas emissions that affect climate change (see Černoch et al., 2019; Connor, 2016; Lock The Gate Alliance, 2019a). Unconventional gas impacts include, but are not limited to groundwater

contamination and drawdown, land chemical contamination, wastewater issues, fugitive methane gas emissions, increased health risks for people and animals place based near well fields, employment, and economic impacts (see Lock The Gate Alliance, 2019c for a full descriptoin of impacts).

Additional concerns to many Australian citizens are the continuing unabated contributions to global greenhouse emissions that contribute to climate change (Lock The Gate Alliance, 2019a). Further, Australia's Great Barrier Reef has suffered considerable damage due to dredging and creating of coal port shipping harbours (Bell et al., 2014), and the climate change affects that further degrade the reef (Lock The Gate Alliance, 2019a; Wolff et al., 2018).

The selling of excess coal and gas reserves to the international market may be good for the national economy; local communities, however, endure most of the significant negative social and environmental impacts. Combined with the risks to farmland, community, and the environment (Lock The Gate Alliance, 2019a, 2019b, 2019c), what eventuates is that most coal and unconventional gas projects in Australia have experienced resistance of some kind. These social movements will be presented in more detail in the upcoming case study chapters; the literature informing this case study relating to social movements will be explored next.

Part Two: Environmental Activism and Social Movements

We have got some very big problems confronting us and let us not make any mistake about it, human history in the future is fraught with tragedy … It's only through people making a stand against that tragedy and being doggedly optimistic that we are going to win though. If you look at the plight of the human race it could well tip you into despair, so you have to be very strong.

Robert 'Bob' Brown (cited in Norman, 2004, p. 104)

Environmental activism

Contemporary environmental activism as a significant, visible protest, social movement found its genesis in the early 1970s (Bible, 2018; Maddison & Scalmer, 2006). These early campaigns would give rise to the Green[11] political movement, and subsequently the world's first Green political party (Maddison & Scalmer, 2006) known then as the United Tasmania Group, and later the Australian Greens. The Tasmanian Lake Pedder campaign was mobilised to prevent the damming of a lake for use as part of the Tasmanian hydroelectric power network (Maddison & Scalmer, 2006).

Although the activism to save Lake Pedder from flooding was not effective in preventing the scheme from going ahead, what followed was a period of learning and development of activist strategy (Maddison & Scalmer, 2006). This learning is reflected in the words of Robert 'Bob' Brown who was central to the

[11] Green, (capital G) throughout this thesis refers to environmentally aware political party(s), usually the Australian Greens political party or a person associated with the Greens. When I refer to someone as being green (lower case g), this indicates I am referring to someone who is environmentally conscious or is an environmental activist.

Lake Pedder and later Franklin River campaigns, and the eventual leader of the Greens Party of Australia; he said, ‘You don’t give up because you get beaten. We learned a lot form the Lake Pedder campaign which we used next time round’ (Brown, cited in Maddison & Scalmer, 2006, p. 29).

Community resistance to local extractive resource projects, also known as activism or a social movement, is a form of collective behaviour (Della Porta & Diani, 2009; Giugni et al., 2006; Smelser, 1962; Van Stekelenburg & Klandermans, 2009). This is not to say that activism is not an individual endeavour (Ricketts, 2012), indeed much activism seen at a community level stems from the actions of a few individuals as discussed in Chapters Six and Seven. Environmental social movements are driven then, by a combination of individual and collective beliefs, values, and identities (Corry & Reiner, 2021). Indeed, (McGregor, 2015, p. 359) identified environmental movements as ‘a collective expression of citizenship’.

Activism not only stems from direct local and regional industrial impacts, but also from tokenistic or poor consultation and the marginalisation of local communities (Spink et al., 2010; Wolsink, 2007a, 2007b). Activism also emerges where communities close to extraction sites receive little benefit while financial and infrastructure gains are experienced elsewhere, as discussed in the section above. This phenomenon is known as the disproportionate distribution of impacts (Langton, 2010; Willow, 2014), or the *resource curse* (Ivanova & Rolfe, 2011; Prior et al., 2012). Activists similarly mobilise in situations where alternative renewable resources are available but underdeveloped or ignored by the State (Painuly, 2001).

Many activists choose to engage in strategies that resist industrial placement in treasured places because of the links that exist between people and place, other citizens, and the environment. Exploring this motivational trigger is a study by Kearns and Collins (2012, p. 937), who found that ‘emotions can play a

formative role in shaping local understandings and motivating actions'. Positive emotions, especially those that exist between citizens and local familiar environments, influence reactions towards controversial development proposals (Kearns & Collins, 2012; McManus et al., 2014). These trigger emotions, and those emotions that shape the ways citizens resist development is of particular interest for my findings later, in Chapter Seven.

Resources industries bring a set of risks and impacts, though in some cases also bring incredible growth to remote and rural communities (Chapman et al., 2015; Lawrie et al., 2011) that often have few other economic development opportunities. The socio economic changes associated with mining 'boomtowns' are significant and varied (Chapman et al., 2015; Jacquet, 2009; Lawrie et al., 2011; Malin & DeMaster, 2016; Measham & Fleming, 2014); and are inherently plagued with misleading or short term assertions of community growth. Boom and bust scenarios, and negative socio economic and environmental issues, weave together communities and extractive industries resulting in the decline in landscapes damaged by mining activities, and the loss of economic prosperity when mining ends (see Chapman et al., 2015; Lawrie et al., 2011, for a comprehensive review).

The issues embroiled in these difficult relationships are usually exacerbated by 'multi scalar governance arrangements, wrapping together the interests and objectives of the state, private capital, and communities themselves' (Lawrie et al., 2011, p. 140). Given the complexities described above, these relationships can be difficult to understand, both from the citizen and government perspectives, and indeed from the standpoint of researcher. This thesis explores these interconnecting relationships, and discusses later the emotions that are unveiled in communities that are subject to mining operations.

Social movements

I use Ricketts (2012) to describe the different kinds of social activism available as strategies to a campaign: community awareness, networking, internal communications, media, digital activism, political, corporate, direction action, legal, fund raising, research, economic, international. Given this thesis is more aligned with place, and the *why* of activism, it is not necessary at this stage to discuss all the various kinds of activist strategy and how each differ and how each contributes to an overarching campaign; it is enough just to know they exist. In the following, I will cover the fundamentals of a social movement, and explore the reasons why they emerge in the contexts of this study unwanted placement of controversial extractive industry leading to environmental injustice.

For this study, a social movement may be considered as having desired goals, a resource metabolism, and a product (Della Porta & Diani, 2009). Further, a social movement may be based on the collection of ideas and resources, both human and non human (Eyerman & Jamison, 1991). Finally, Klandermans (1997, p. 2), who cites Tarrow (1994, p. 4) opines that social movements are 'collective challenges by people with common purposes and solidarity in sustained interaction with elites, opponents and authorities'.[12] These common purposes can be wide ranging, or specific, as explained in the following.

Social movements concentrate efforts on many issues such as gender matters, equality, human rights, fair trade, and the Third World (Ricketts, 2012). Environmental activism shares many of the characteristics of social movements, however, the focus is centred on issues relating to the natural environment. Increasingly, attention has included animal and ecosystem

[12] Klandermans also iterates that Tarrow's 1994 work builds on the early social movement literature of Charles Tilly.

preservation, pollution, management of the biosphere, and in recent decades issues of climate change (Fielding et al., 2008; Ricketts, 2012).

Existing literature on environmental activism suggests that individuals are motivated to involve themselves in social movements for multiple reasons. Generally, individuals are motivated towards activism when affected by an environmental injustice, social, economic, or environmental impacts, grievance, or loss (Della Porta & Diani, 2009). From the perspective of geographical studies specifically, literature pertaining to environmental activism suggests that these motivational triggers are emergent from emotions associated with the impacts of unwanted industry, infrastructure, or other initiatives in treasured places, as discovered in the previous chapter on emotions in place. This nexus will be discussed later in chapters Six and Seven.

There are different ways of conceptualising what a social movement is. Whilst there are common features of social movements, there is no mutually exclusive understanding (see Buechler, 1995; Cohen, 1985; Giugni et al., 2006; Klandermans, 1991; Klandermans et al., 1988; Lockie, 2004; McClurg Mueller, 1992; Van Stekelenburg & Klandermans, 2009). Social movements, however have been identified as being 'networks of interaction between different actors which may either include formal organisations or not' (Della Porta & Diani, 2009, p. 16).

A social movement can be understood as a collective construction of ideology having a socially constructed opinion (Eyerman & Jamison, 1991). In addition, a social movement may be considered as having desired goals, a resource metabolism, and a product (Della Porta & Diani, 2009). In other words, a social movement may be considered materially motivated and be based on the collection of ideas and resources, both human and non human. Social movement tactics, identity, and culture vary from group to group, and these variables affect and shape the way a movement will approach a problem and

influence decision making (Corry & Reiner, 2021)   decision making will be covered separately in a later subsection.

Social movements consist of a collection of individuals and groups, both formal and informal (Della Porta & Diani, 2009; Della Porta & Tarrow, 2005). Further, social movements are unique in their own right; each movement has its own agenda and goals, and each may express very different characteristics. Consequently, a social movement is a form of collective behaviour, and each must be considered distinctive from the rest.

Social movements usually emerge as a reaction or retaliation to some impact, grievance, or loss (Della Porta & Diani, 2009; Giugni et al., 2006; Smelser, 1962; Van Stekelenburg & Klandermans, 2009). The movement may also be triggered by a negative event or impact on the environment or a non human species. Further, a social movement may act on behalf of a group or community that is unable to act for themselves.

The triggers, events, or impacts that stimulate collective social reactions may be caused by government actions or policy, some kind of development, a company activity, or some other action (Della Porta & Diani, 2009). Impacts in turn cause aggrieved individuals or groups to mobilise resources in order to move as a collective against the cause (Giugni et al., 2006). The use of human and non human resources varies considerably between diffident social movements.

Coalescing the above literature iterations, a working definition of a social movement for this research is, therefore, *a socially connected entity that has goals and seeks to create a change or influence the direction of a problem, grievance, or related policy or governance*. Further, social movements are considered to be a fluid phenomenon, especially in their formation and consolidation phases (Della Porta & Diani, 2009). Conversely, a social movement may 'burn out when organizational identities come to dominate once more, or when 'feeling a part

of it' refers primarily to one's organization and its components, rather than to a broader collective with blurred boundaries' (Della Porta & Diani, 2009, p. 17).

Although the aggregation of collective opinion into mobilised social movements has been occurring throughout history (Della Porta & Diani, 2009; Maddison & Scalmer, 2006; McClurg Mueller, 1992), the *study* of social movements developed in the 1960s and 1970s due to an explosion of social movement activity at that time. Activism for the environment, civil rights, equality, workers' rights, labour rights, and especially anti war protests, brought greater attention to the different types of social movements, and how they are formed. In turn these protests, and the study of them, would then shape the politics of the late twentieth century (Della Porta & Diani, 2009).

Social movements and decision making

This thesis has already presented some content from the literature that explores personal decision making; much of this content relates to emotions, the body, and solastalgia (see previous literature review sections on those themes). This section focuses specifically on social movements and decision making. That being the reasons how and why individuals and collectives make decisions to act in particular ways when involved in social movements. The content in the following is not specifically related to activism, or any movement directly resisting coal or gas mining.

Decision making, and the way individuals form decisions as a group, does play a role in this study, as this thesis specifically explores the emotions that drive decision making, and not really the different kinds of activist strategy; as will be discussed later. A case study by (Zanbar & Ellison, 2019, p. 1645) indicates that 'personal factors (self esteem and mastery) and community factors (years of activity, knowledge of local services, trust in leaders, community commitment, and community belonging)' play a role in the decision to engage

in either of 'two types of community engagement: development and planning, and activism advocacy'. This case study is useful as it highlights parts of conversations with my participants later when they speak of their expertise in a particular field, or their years of participating in past activist movements these will be presented in the case study chapters Four and Five and discussed in Chapter Six.

There has been some attention paid to why activist movements execute strategies in different ways. There is, however, a difficult terrain to acknowledge in this arena, specifically for the kinds of activism this thesis explores, in that 'research is limited in two fundamental ways: scholars have generally not empirically differentiated, first, between the types of activists groups involved, and second, between their tactics' (Eesley et al., 2016, p. 2426). This is, partially, because activist movements are rarely the same due to different communities, values, identities, and cultures that influence how the movement operates, and how this then influences decision making (Corry & Reiner, 2021).

Some work on variance in decision making indicates that decision making and the 'how' of activist strategy are intertwined. As example, a radical social movement that is attempting to influence a corporate organisation, for instance, will vary the type of activism based on how much media attention can be gained (Eesley et al., 2016), and include protest action and boycotts. This is particularly important to note later when exploring a strategy employed by one of the case locations I studied, and I will return to this in Chapter Four and the Discussion chapters.

Research has found that 'in part, ideology can in part drive activist choices [however] activist groups tend to vary systematically in their ideology' (Eesley et al., 2016, p. 2427). Additionally, 'the organisational structure of a social movement affects the tactics it is like to adopt' (Alexis & Rich, 2020, p. 430), and

underpinning this are the kinds of resources available (knowledge, skills, people, tools, and finances; as examples), and how these are distributed amongst members. These variances in ideologies, organisational differences, and resource availabilities contribute to the variance in decision making we find in different activist movements (Alexis & Rich, 2020; Eesley et al., 2016; Ricketts, 2012), and again contributes to the understanding that few, if any, social movements are indeed the same (Della Porta & Diani, 2012).

Decision making in social movements can, therefore, take various forms (Ricketts, 2012). Per the variances described above, these different types of decision making can depend on numerous variables: such as the number of actors, the size of the movement, where and when the social movements forms or finds the main site of activism broadly cast or focused this is discussed above in the general social movement section, particularly the organisational aspects of social movements (Della Porta & Diani, 2009). Worthy of reiteration here, tactics, identity, and culture factor in the formation and actions of social movement decision making (Corry & Reiner, 2021)

I will use Ricketts (2012) in the following paragraphs to describe *some* of the different kinds of community group decision making. These can include: majority voting, weighted voting, affinity groups, or consensus decision making. The type of decision making employed can depend on the kind of community social movement that is formed, and how power is viewed internally. Additionally, decision making is not necessarily static, meaning that different kinds of decision making can be used over time (see Ricketts, 2012 p. 266 270 for a full review of these ideas).

Majority rule voting, and weighted voting may be the more commonly known, and they are somewhat easier to describe. Majority voting is where an idea is disucssed, members vote, and the majority gain the lead on the notion (Ricketts 2012). There may be one or multiple options for members to choose from, they

may select one, or may rank all in their preference. Essentially though, 'majority rules', as the name suggests.

Weighted voting is similar, however, can be more qualitative; a system of voting where members are asked to respond to a proposition, but the voting process may ask members to rank their responses from strongly disagree, disagree, neutral, agree, to strongly agree (as example), or provide some written statement. Ricketts (2012, p. 269) describes this process 'as a voting system, it's a little complex but it can be used to weigh the depth of feeling as well as the sheer numbers of people voting for or against a proposal. This allows a strong objection to count for more than a mild misgiving'.

Consensus decision making, as the name suggests, is a process by which a group discusses a proposal or idea, sometimes multiple, and does not proceed until a clearly defined aim or goal can be articulated (Ricketts, 2012). Problematic in large unorganised groups, or where dissent may emerge and derail or slow the progress of a groups aims. Consensus decision making, whilst challenging, can however, unify or at least make clear the decision for the whole group. Where consensus cannot be researched, affinity groups may be a solution.

Affinity groups may be useful when dissent emerges, and be useful in disarming internal power struggles or where two internal groups (or more) find an impasse on how to proceed (Ricketts, 2012). Affinity groups may also be a deliberate tactic, depending on the size of the social movement, and whether more than one kind of activist strategy is being used (community, political, commercial, etcetera, as described earlier). Affinity groups allow smaller groups to 'split apart from the main group to undertake particular agreed action and carry with them the decision making power over that action' (Ricketts, 2012 p. 269). These smaller groups still contribute to the overall aims of the social movement, however, as example they may focus their attention on

street protests and/or non violent direct action, whilst another group focuses on political lobbying, and/or litigation.

One of the many benefits that comes with affinity group decision making, is that it can assist in the breaking down of very complex social movement objectives. A problem a community faces may be easier to address should the actions be broken down into simpler problems that an autonomous group manages, under the direction of broader social movement networking. It is worth noting clearly here, that 'affinity group processes are very useful for complex direct action … it allows the whole group to decide whether an action will go ahead, then the minute planning is delegated to the affinity group who will carry it out' (Ricketts, 2012, p. 270).

NIMBY

As an additional contribution here, in some way linked to decision making, Not In My Back Yard (NIMBY) literature explores the variance on why some people decide to involve themselves in a social movement, or chose not to do so until they are personally affected by some kind of technology or development (Wolsink, 2007b). There are, however, dismissive, and incorrect uses of the NIMBY label that overlook the various kinds of NIMBY types, of which there are at least four. NIMBY does not necessarily link directly to my thesis discussion; however, I feel it is important to include mention of them in the following section to highlight how governments and industry representatives simplify the terms, and incorrectly use them to undermine some social movements (Diesendorf, 2006).

Inclusion of NIMBY attitudes and the different types of NIMBY activists that are present at controversial extractive industry protests is not within the scope of the project here. I think it useful, however, that some outline to the different

types, and the erroneous use of NIMBY attitudes by governments and resource proponents to undermine activist strategy is important to at least outline here.

The selective, broad, and basic interpretation of collective NIMBY attitudes which expresses conflict surrounding development impacts of local facility siting was described over three decades ago, and again more recently by Wolsink (2007b) as Type One NIMBYism. Most typically and rhetorically, a Type One NIMBY attitude implies that an individual (or collective) may be pro development until such time as the development is proposed for the local area. Historically, this connotation carries the implication that engaging in protest for this purpose is to oppose the project outright for self motivated reasons only (see O'Hare, 1977). This interpretation continues to be common among developers and governance agencies that use the basic or Type One NIMBY label to frame, dismiss, and undermine *all* groups and individuals resistant to, or actively protesting, controversial facilities within place based communities (Wolsink, 2007b). The general use, therefore, of the Type One NIMBY label by pro development government departments uses the selfish connotation to undermine the intention of conflict and to derail protest movement action, discredit resistance groups as illegitimate, and imply that the protest movement moves against the wider public interest (Diesendorf, 2006).

Policy responses that recognise NIMBY action and aim to bypass resistant groups, however, indicate that community activism has become influential in policy debate. To label all conflict and resistance to place based development as Type One NIMBY action, however, lacks explanatory value (Sjöberg & Drottz Sjöberg, 2001). It ignores the complexity of social and environmental activism as described above, which is informed by the other NIMBY types (Wolsink, 2007b).

In Wolsink's (2007b) schema, Type Two NIMBY refers to those resistant to the location of a controversial facility in a local setting, which mirrors type One

NIMBY. Further to this, however, they express concern or resistance to the construction of this development in a neighbouring community, or anywhere for that matter, given the perceived or actual negative social impacts on a place based community or on the local environment. This type of NIMBY reaction is also called NIABY, or Not In Anyone's Backyard. This project recognises, but does not discuss specifically, activists that live outside of the case study areas but travelled to them to resist mining in either the Gloucester Valley and or the Northern Rivers.

Type Three NIMBY refers to individuals who can be pro development but are resistant to the proposed siting location due to lack of community consultation or inadequate planning processes (Wolsink, 2007b). Finally, Type Four NIMBY refers to those who are pro development, however, they are resistant to the kind of technology or proposal, and or the placement of the facility because the technology is deemed unsafe or of high risk (Wolsink, 2007b).

All these types of NIMBYism are not mutually exclusive and can typically be found to exist alongside one another in varying proportions at any one time or place. Wolsink (2007b) found the proportion of each dependent largely on the type of project and technology involved. The exploration of NIMBY in the context of controversial extractive resource industry siting in Australia reveals insight into the motivations of those who participated in environmental activism (Carey, 2012; Hawke, 2014; Herbert, 2014).

Chapter Three Conclusion

This review has covered the empirical understandings available to us for the contexts of this thesis. Issues range from activism and social movements, controversial extractive industries, place, community, and the nuances of industrial impacts on community. In the previous literature review, Chapter Two, the theoretical elements of the study were covered; political ecology conundrums, environmental injustice, and emotional geographies.

Combined the two literature reviews coalesce to frame the debates that were raised in the introductory chapter. These literatures will also prove useful in interrogating the data and explaining the findings that I will present in two discussion chapters later (Chapters Six and Seven).

Before I discuss the findings of the study, I must first present the background and stories of each case location, being the Gloucester Valley, and the Northern Rivers. Each community I discuss faced threat from mining interests, and members from each community interacted with the State and resource proponents. I found two very different narratives in these locations of struggle. I present these stories in the following two chapters.

Chapter Four

The Gloucester Valley Case Study

Introduction

Divide and conquer might have been invented by Niccolo Machiavelli, but it's alive and well in the gas industry! Absolutely!

JeromeGV, at interview (2016)

The purpose of this chapter is to present a case study background and findings of the Gloucester Valley case study. This background chapter does not make overarching thesis conclusions, or address the thesis research foci directly. Rather, this chapter explores the impacts of extractive resource operations in the Gloucester Valley. The interviews of citizens who either reside in the Gloucester Valley, or who live regionally and travelled into Gloucester for interview, are presented here. Some communication of the impacts of threat, the role of the State, police, pro extractive industry citizens, and actions of a resistance group are explored here as findings.

I am unable to present and exhaustive account of the situation that unfolded in the region, as to do so would require a much larger study; implications of this limitation are explored further in the final chapter. Here, the contributions of interviewees who spoke about their community and their experiences with activism and the threat of mining are expressed. The shifting nature of personal and community level emotional geographies that evolved during a time of threat by place based extractive industries are discovered.

I begin with a case study background, followed by a combined results and discussion section that provides a *voice* of the participants. Extensive verbatim interview statements and long quotes are used throughout this chapter. Findings presented here will be discussed in a comparison analysis chapter between the Gloucester Valley and the Northern Rivers in Chapter Six.

The Gloucester Valley Case Study

I have a poem on my fridge which says "what did you do once you knew?". I don't know whether you've heard it, but it's a poem that basically says once you knew that there was climate change, did you fill the streets with protest? Did you do whatever you could? I look at that, and that's how I justify doing what I've been doing. Cause I can look my children in the eye, and my grandchildren, and say "I did everything I could do".

CynthiaGV, at interview (2016).

Indigenous perspectives of the Gloucester Valley case

The region on which I conducted this element of my research are the lands of the Worimi, Gringai, and Biripi peoples of the Kutthung language group (Mid Coast Communities, 2016; Syron & Russell, 2018). 'Aboriginal peoples living in the Hunter Valley were culturally and environmentally rich groups who had lived in the area for thousands of years' (*sic.*) (Blyton et al., 2004, pp. 12 13). The connection to country continues in this place for many Indigenous people, their stories, the names of places, and their culture has endured over two centuries of colonialism.

It is not my intention to hold Indigenous involvements in activism and Indigenous perspectives deliberately separate from the discussion below. A limitation to this study is that I had no ethical clearance to target and engage Indigenous people specifically to seek out their opinions during data collection. I was permitted to see if someone of Indigenous heritage would come forward to liaise with me to provide an Indigenous perspective of their free will, however, none of my 46 participants stated that they identified as Indigenous. Hence, ethics did not scope any allowance to discuss indigeneity and Indigenous perspectives of activism. Therefore, at the time of writing, this has

been identified as a major limitation of the study. This limitation, and my learning from this shortfall in this project, is discussed in Chapter Eight.

Secondary resources point towards some description of Indigenous perspectives in the Gloucester Valley that specifically relate to coal and gas projects at the time of data collection. An Indigenous elder of the Biripi Nation indicated in an interview separate to this thesis, relating to coal mine proposals, that a coal mining company that will be described later did not engage with the Indigenous histories and cultures of the region in their approvals processes (Smith, 2017). This formed part of the argument against the mine later in court hearings; the ruling against the mine proposal, whilst focused on climate change and environmental impacts, included some inclusion of the need to protect Indigenous heritage in the area (Dickie, 2019).

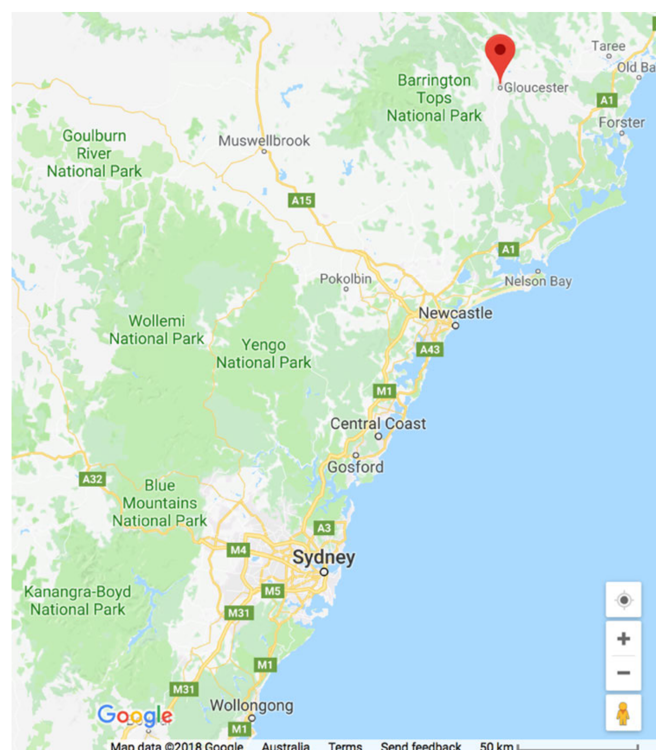
Further, there are considerable sites of significance in the Gloucester Valley (Syron & Russell, 2018). These were under direct threat from mining activities, both coal and gas (Daley, 2014). Indigenous people argued that these sites were not meaningfully considered in the mining impact studies due to the 'inadequate' consultation with Indigenous peoples, and that the impact statement for the mine inadequately surveyed Indigenous perspectives (Smith, 2017). It was also claimed that the mining proposal was misleading, in that 'it somehow conveyed Aboriginal agreement to the … proposal', after Indigenous people claim that their involvement with consultation was not culturally sensitive (Smith, 2017, para. 9).

There is additional thinking in this space regarding discursive framing of Indigenous involvement in mining. This however, is better informed at the top of the Northern Rivers case study chapter due to events that happened there. I will pick up this thread of Indigenous involvement in pro and anti mining activities at the start of the next chapter. In the following I will explore more generally, the histories of the Gloucester Valley case study region, the

contextual backgrounds of mining histories and new mining proposals, and explore the activism against new unconventional gas mining proposals and expanding coal interests.

The Gloucester Valley histories

Colonisation and settlement in the area began when pastoralist and timber getters moved into the region in the 1830s (Aussie Towns, 2020; Lismore Council, 2017). The town of Gloucester, established in 1855, lies in the north eastern quadrant of the NSW State Government Seat of the Upper Hunter, Federal seat of Lyne, and now[13] in the Mid Coast Council region approximately 260km north of Sydney (see Map 4).



Map 4: Gloucester[14] in relation to Newcastle and Sydney

Image source: (Google, 2018)

[13] During data collection, the Gloucester shire council was disbanded by the then Liberal NSW Premier Michael Baird, and the region was amalgamated with four other disbanded councils to form the Mid Coast Council Region.

[14] See Chapter One, page 6, Map 1, for maps showing insets of Gloucester's spatial relationship to the State of NSW and the Australian mainland.

Gloucester soon became a regional trade hub for the district (Aussie Towns, 2020; Lismore Council, 2017). Gloucester has since grown to accommodate several primary industries: agriculture, health services, and retail and trade being the main employers (ABS, 2017). Gloucester and surrounds also have a healthy tourism industry and are a gateway to the Barrington Tops National Park, river recreation areas, bush lands, and numerous accommodation options; combining to contribute $51 million per annum to the local economy (Gloucester Tourism, 2017). Notably, these industries are vulnerable to the impacts of extractive resource development, which was a factor that exacerbated tensions within the community (AlfredGV).

Coal was first mined near Newcastle (see Map 4 above) circa 1790. The first coal export left from Newcastle in 1799 (Government of NSW, 2014b). Coal mining has since underpinned the NSW economy from the early 1800s onwards, indicating that NSW minerals deposits in the region have long been understood.

In the Gloucester Valley specifically, the first coal mining project was announced in the mid 1990s. Proponents initially advertised the project as a *boutique mine*, indicating…

> …it was to have a negligible impact on surrounding residents and a short life of eight years, after which it would be closed and the site rehabilitated. The land was to be returned for farming and it was proposed that the void be used for aquatic recreation (Groundswell Gloucester, 2018b, para. 1).

The mine, now known as the Stratford mine, commenced operations in 1995, however, never operated on the original timeline, and extensions were soon approved (Groundswell Gloucester, 2018b). The mine continues to operate today. A second mine at Duralie, was approved and opened in 2003, only twenty kilometres from the original Stratford mine.

Having two open cut coal mines in close proximity within the Valley created compounded effects of mining impacts. Noise, vibration from blasting, and impacts on water and air quality were soon noticed by local residents (Groundswell Gloucester, 2018b). These impacts were exacerbated by the unique geology of the Valley. '… the Gloucester Valley is unique, especially in its geology and atmospheric situations with dust' (LauraGV). '… this as a semi enclosed valley so the particles and also there are these things called inversion layers which keep the dust sort of hanging around' (ClarkGV).

Both mines soon received numerous approvals for extensions to mining activities in the region. The notification that mining timelines would be extended angered many residents that were not directly befitting from mining operations; and participants explained how extensions contradicted what citizens were initially told about the life of the mining operations[15] (OliverGV; LauraGV). Conversely participants also explained, some other people in the region, particularly those deriving a livelihood from mining work, supported the continuation and expansion of mining. Coal mining therefore, has a history of dividing opinion in the region, and tensions have emerged between community members on both sides of the issue (OliverGV).

Irrespective of a downturn in production at the two existing coalmines, a third mine near Gloucester was proposed in 2012 (Groundswell Gloucester, 2018a). The Rocky Hill Coal Project was proposed to be located just five kilometres from the town centre of Gloucester, and only 500m from the boundary of a residential estate (Groundswell Gloucester, 2015c), increasing the anger and frustration of local citizens. Compounding these tensions and feelings even

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[15] It is unclear, exactly, who 'told' citizens about the initial mining proposal, it is important here to remember that these iterations are the understandings and perceptions of my participants, and whether real or otherwise, their perceptions of the case matter, as these framings steer decision making.

further was the announcement of unconventional gas operations moving into the region.

Unconventional gas, otherwise known in the Gloucester region as coal seam gas (CSG) due to the gas reserves being held in a subterranean coal seam, commenced in 2012 near Gloucester at project known as the Waukivory Pilot (AGL, 2013). This project compounded issues of already approved and proposed coal extraction projects in the Valley. As show in Figure 11, the townships of the Gloucester Valley (light pink areas) were set to be directly impacted by new mining ventures; including the existing Stratford Mine (purple), proposed new Rocky Hill Coal Mine (yellow) and the linked well sites of AGL's unconventional gas project (red dot well heads linked by pipelines and access roads also shown in red). Note, the second open cut coal mine is located just to the south of the boundary of Figure 11 below.

The gas well infrastructure, drilling, and the fracking processes required to extract gas evoked intense contestation in the Gloucester region (Groundswell Gloucester, 2014c, 2015a, 2015c; Watts, 2018). This dispute is in keeping with other contemporary settings in Australia (de Rijke, 2013b) and internationally (see Jaspal & Nerlich, 2013; Schmidt, 2011). In the Gloucester case, gas reserves lie beneath agricultural land, which also contains subterranean aquifers used for drinking water and irrigation; a situation that is reflected in many agricultural areas in Australia (Sraggon & Patterson, 2011).

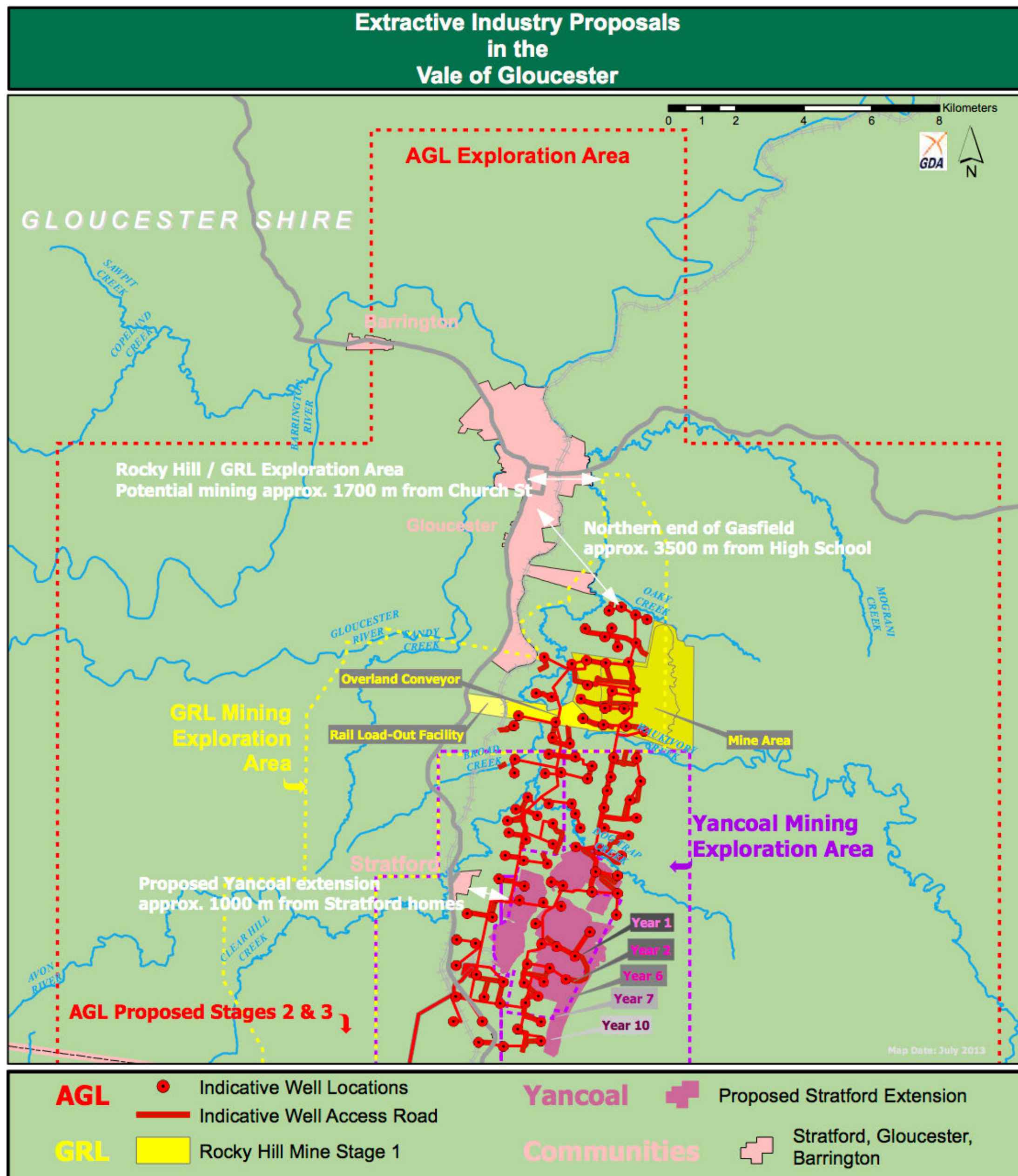

Figure 11: Gloucester extractive resource projects showing approved coal projects (purple) proposed new coal (yellow) and proposed unconventional gas (red) in relation to residential zones (pink)

Image source: (Groundswell Gloucester, 2014b)

The crossover of land uses and the threat to natural water supplies formed a core part of the debate over CSG development and siting in the Gloucester Valley (Groundswell Gloucester, 2015a, 2015c). Further, the potential health impacts of the unconventional gas industry on local populations (Coram et al.,

2014), were known to concerned Gloucester residents (OliverGV; LauraGV), which fuelled resistance.

When the then NSW Government approved AGL's application to construct a 330 gas well project near Gloucester, this action marked the beginning of exploration phase operations. The approval of AGL's ongoing operations in The Valley was carried just weeks prior to the NSW government announcing a 2km exclusion zone for gas wells proximate to residential areas (Watts, 2018). The new legislation, however, detailed that the 2km exclusion zone would only be applicable to *newly proposed* gas fields. Given that the Gloucester gas field had already been approved, the exclusion zone ruling did not apply to AGL's project; although it was only approved two weeks prior to the exclusion rule. This exclusion left residents in the Gloucester suburb of Forbesdale within 500m of the AGL permit. Residents of Gloucester felt as though AGL's approval was pushed through so that the new exclusion rule would not apply. This rushed ruling resulting in many concerned citizens feeling abandoned by state governance processes (OliverGV; LauraGV).

Resistance activities in the Gloucester Valley ranged from small scale visible non violent direct action, to petitions and roadside vigils that brought attention to the gas operations (JeromeGV; LauraGV). Citizens also created a community based activist group named Groundswell Gloucester, which included a number of retired and professional persons with scientific backgrounds, as well as political figures that chose to concentrate their efforts on rebuking scientific reports produced by AGL and the government (LauraGV). The Groundswell Gloucester activists met with ministers and other government staff from various State Departments on a regular basis (JeromeGV; LauraGV).

Residents resisting gas extraction in Gloucester were aware that AGL had a retail arm, meaning that activists were able to use a social media campaign

highlighting the damage the industry was doing to the town, and calling for ALG customers to "unplug from AGL" (see Figure 12).

> … you are picking up on a thread that has emerged a couple of times with people I've spoken to about this region [Gloucester Valley] … and correct me if I'm wrong … but one of the reasons that the activism was effective here was because AGL had a retail arm? (Mark).
>
> Yes! (OswaldGV).
>
> And the target was letting people know that this is what this company was doing in your area, and customers were peeling away (Mark).
>
> Yes, that's a big point (OswaldGV).

Figure 12: Corporate activism campaign image—"Unplug from AGL"

Image source: (Groundswell Gloucester, 2016)[16]

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[16] I cite Groundswell Gloucester as original authors of the Unplug from AGL campaign image. I was provided the image during the timeline of the project; however, I am aware that the image no longer appears on the Groundswell Gloucester web page due to the completion of the campaign.

Citing only financial reasons, in early 2015, AGL withdrew from the project's exploration phase, and relinquished their Petroleum Exploration License (PEL) 285 back to the State Government. Details revealed only in AGL media releases stated that the project in Gloucester had returned 'disappointing gas flow data from the Waukivory Pilot wells and economic modelling of the gas resources' (AGL, 2016, para. 9).

The general position AGL took with unconventional gas operations was that the company had 'taken a strategic decision that exploration and production of natural gas assets will no longer be a core business for the company due to the volatility of commodity prices and long development lead times' (AGL, 2016, para. 1). These decisions resulted in the abandonment of further gas operations with the Gloucester Gas Project, and the commencement of well decommissioning processes.

A note on Rocky Hill

At the time of data collection, the Rocky Hill Coal Mine proposal was ongoing. As described above, the impacts of the Rocky Hill Mine *proposal at the time* are captured in this project. Since data collection finished, the Rocky Hill Mine was disputed in the Courts of NSW. Eventually the mine was refused on the grounds of climate change, community impacts, environmental impacts, and impacts to Indigenous cultural heritage ("Gloucester Resources Limited v Minister for Planning [2019] NSWLEC 7," 2019). As the outcome of the mine falls after data collection, the scope of the project does not include the final ruling on the Mine, however, given that at the time of writing, and indeed any post reading of this thesis, a conclusion to the mine has been reached. I thought it interesting to at least mention the Rocky Hill Mine outcome here.

Emotional Geographies and Mining in the Gloucester Valley

… part of my grief is I just feel a little bit sad that I don't feel that love for this town any more.

LauraGV, during interview (2016).

The Gloucester Valley before coal and gas

The following is a description of findings from interviews gathered in the Gloucester Valley region. It is important to note here and in the following chapter on the Northern Rivers case study later, that the thesis explores activist reasons to conduct certain resistance activities over some other options. The views here therefore are not presented as 'facts' about resource management and mining, however, whether real or perceived, citizen perceptions of mining and the States involvement in deciding how and where mining happens is the core of this investigation. The views of Gloucester participants are presented here, findings will be drawn later in this chapter, and disucssed in Chapters Six and Seven.

Generally, all participants in my study discussed their understandings of the longer history of coal development alongside contemporary unconventional gas development, and how they believed that the former influenced the latter. I cannot, therefore, discuss unconventional gas impacts without considering the impacts of the longer standing coal industry development, and how that has produced the emotional landscapes on which the more recent battle over unconventional gas was fought. The shift from exploring activism relating to unconventional gas, to a more general tone of controversial extractive industries that scopes both unconventional gas *and* coal was explained in the

first chapter; it is the amalgamation of negative coal *and* gas mining impacts in the Gloucester Valley Region that triggered this shift.

Further, JeromeGV explained that the collapse of some former industries, such as timber logging, and a history of unviable small scale dairy farming after federal regulations, also formed part of the terrain for the conflicts some citizens had with mining proponents and the State. These industry changes also set up some of the divides between pro and anti mining sentiment (JeromeGV). The Gloucester region, therefore, is a place where landscapes have been transformed by industries prior to the arrival of coal and gas mining, industries that were unable to deliver sustainable economic outcomes for the community and which caused upheaval both in their rise and in their fall.

Landscapes of extractives

When coal industry projects were announced many locals hoped it would bring much needed job security to the region (OliverGV; JeromeGV). Participants indicated that employment opportunities were part of how the mine sought a social license to operate despite the clear tension between a *boutique* mining project with a limited lifespan (Laura GV, OliverGV), and long term job security.

After numerous extension approvals in the following years, the full Stratford Mine operation was eventually realised by participants; they stated that many citizens soon understood that coal was going to be in the region for a much longer period that initially understood once the second mine was established at Duralie (JeromeGV, LauraGV, OliverGV). To them, expansions meant that the negative impacts of mining operations were creeping toward farming families and small communities like Craven, Stroud, and Wards River; townships south of Gloucester (HarveyGV; JeromeGV).

Participants explained that the increased timeline and significant expansion in coal operations in the Gloucester Valley triggered mistrust between residents and coal operators, and doubt of their claims (OliverGV; LauraGV), as well as between residents and the governments approving the expansions and extensions (LauraGV). Of course, participants articulated an understanding that some residents had good relations with mining operators, including employees and their families (OliverGV; CynthiaGV), and the local businesses which were benefiting from industry (LauraGV). These varying relationships shaped participant understandings of the deepening divides between concerned citizens and pro coal factions (LauraGV, OliverGV), triggering a landscape of shifting emotions that were being experienced in the community. To the people I spoke with for this project, these shifting emotions and divides deeply affected community cohesion within the Valley; these shifting emotional geographies will be explored as a thesis finding in Chapter Six.

When unconventional gas pilot studies were planned for the Gloucester Valley, residents close to the proposed Rocky Hill Coal Mine were informed of the project. This was partly due to the risk of fugitive emissions that can occur when a gas field is built next to an already opened coal seam in a coal mine, as such coal seam gas fields should not be located close together (OliverGV). Participants explained their understanding, that to them, initially, the community largely supported the gas project, as many believed the unconventional gas industry would slow the progression of coal expansion; this is best articulated by JeromeGV: 'AGL allowed people to think that if gas came in, not only would there be jobs in it … if they had a gas field it was going to keep the coal mine away from town, and that's just nonsense'. After residents discovered the nature of gas industry practice and threats to health and environment, for many, the risks were just too great (LauraGV).

Participants believed that when Lucas Molopo a small scale gas company began the gas exploration phase in the region, the company capitalised on pre existing links between the community and resources industries from preceding coal arrangements (JeromeGV, LauraGV, OliverGV). LauraGV a participant closely linked to council explained that these links were especially evident between businesses set to make gains from industry development, influenced by a very pro industry chamber of commerce. Additionally, it was understood by some participants that AGL representatives furthered already established links between some members of the community and the coal industry, and worked very closely with the State Government to move into the area and expand on initial drilling operations (LauraGV; JeromeGV; OliverGV).

Divided community landscapes

Many participants spoke about the approach of resources companies being that of divide and conquer. Participants spoke as though they understood the situation to be some kind of deliberate act by resource proponents and the state to divide the community; as articulated by JeromeGV:

> They [resource proponents] tried very very hard to split the community. They wanted to exacerbate the division as much as possible … any sign of any division, APPEA[17], the industry representative, would play that up to the maximum. They would have dearly loved to have separated us. Divide and conquer might have been invented by Niccolò Machiavelli, but it's alive and well in the gas industry! Absolutely!

Participants spoke of community unrest and pre existing issues between friends, family, and neighbours that were targeted by exploratory CSG industry proponents (OliverGV; AlfredGV; DickGV; LauraGV; JessicaGV;

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[17] 'The Australian Petroleum Production & Exploration Association is the peak national body representing Australia's oil and gas exploration and production industry' (APPEA, 2018, para. 1).

WilliamGV; CourtneyGV; SonjaGV; CynthiaGV). JenniferGV explained that what resulted was a complete breakdown of family and friendship bonds within the town, she clarified and stated 'The gas has divided families, it's divided friends'. AlfredGV added, 'It really showed us the ugliest part of town. The kind I didn't quite realise that existed'. Moreover, there was extensive discussion with many participants and their perceptions of an *us and them* community division; this was a strong theme in participant discussions, as OliverGV states:

> The community was already divided on coal … The coal seam gas is a little bit different because it was new and there was a much wider opposition to coal seam gas than there was to coal in the community generally … they are just blinkered. So, it's quite divided and it's quite difficult, quite difficult.

State legislation and feelings of mistrust and collusion

Participants perceived that the State Government was pro industry, citing cases where legislation was changed to expedite the development of unconventional gas (OliverGV; HarveyGV; JeromeGV; LauraGV). Further, participants were aware of amendments to the NSW Crimes Act 1900 section 201 that could see any activist who trespassed on mine property, or hindered the operations of a mine, face up to seven years jail (Government of NSW, 2018a). The actions of the State Government, and evidence of expedited gas project approvals whilst legislation increased penalties for protest and protective actions whether real or perceived by participants seriously damaged the relationships many concerned citizens had with government, and set up a deep mistrust (LauraGV; LorraineGV; CynthiaGV).

The State legislated two kilometre exclusion zone was also interpreted by participants as a Government acknowledgement of the health impacts associated with unconventional gas industry development (JeromeGV; LauraGV; ClarkGV; CynthiaGV). Participants explained, that to have the AGL

gas project application passed only two weeks prior to the exclusion zone ruling, left many Gloucester citizens feeling abandoned and subject to hazardous impacts of gas mining. These events entrenched further the mistrust and loss of faith participants had with the Government and legislative processes; as articulated by LauraGV, and OliverGV, in separate discussions.

It was not only issues relating to the coal and gas management that sparked tensions, participants spoke about a growing mistrust in process, legislation, and the State Government in general. Some participants spoke of needing to hold government culpable for the impacts of mining approvals, which strongly demonstrated the mistrust and hopelessness many concerned citizens felt with the situation. The helplessness some felt is best articulated by CynthiaGV, here:

> I don't know where to go any more, I don't know where to turn? I fight, I write letters, I ask questions, and that's the only conclusions I've come [to], no one is accountable! Government doesn't make them accountable … We are such second class citizens now.

Many participants expressed that their mistrust in the processes and procedure of CSG operations in the region stemmed from what they saw as collusion between the Industry, the State, and local beneficiaries of resource operations (JeromeGV, LauraGV, OliverGV). These sentiments carry in the following iterations: 'We've got all the documentation about how they all talk to each other, and how they can get around it and change the legislation, I mean it's corruption and collusion' (LauraGV). 'The collusion between the industry and the Government is wicked!' (ClarkGV).

> You can't sit back and watch other people suffer and do nothing. And I've really struggled in this part of the campaign, people who say "oh you know, but we'll get jobs, we're making money". Right, but there are people in Forbesdale losing money off the value of their properties … their lives have been destroyed, but it's OK if someone else is going to

> profit off someone's suffering? This moral corruption, hey, it's pretty fucked up! (SonjaGV).

Emotions relating to State sanctioned policing

Many participants felt very hurt and mistreated by the law enforcement that pushed back against their efforts to protect land and water from the impacts of the CSG industry (JessicaGV; LauraGV; VictorGV; LorraineGV; RonnieGV; JenniferGV; CassandraGV; CynthiaGV). It was also perceived by some that the State was using the police force to protect mining capital at the expense of residents (CassandraGV, CynthiaGV, RonnieGV); the police were used as a means to interrupt resistance activities where they were obstructing or could obstruct the industry (CassandraGV, CynthiaGV). Some believed that police involvement in breaking up resistance activities damaged police/citizen relationships, CynthiaGV describes her feelings on this point here:

> The police go away when the fracking goes away, … this is what's taken away my faith in the police actually. They were there for the mine because they disappeared as soon as the fracking went away.

Other iterations on policing provided by participants here: 'We are really angry because we realised that the government are using the police as a private security force for AGL' (AlfredGV). 'They [The Government] are defending the business to the hilt with the full letter of the law and they change the law it it's not full enough, and they use the police as a backup' (LauraGV). RonnieGV articulated the perceived extent of the collaboration between AGL security forces and police as thus:

> All of a sudden the procession of workers come down [to enter the well site gate] … people went to walk in front of the bus, security come out onto the road, like off their private land, and started throwing people into the ground, ladies, everyone, just throwing them around, treating them like rag dolls. Two minutes after that finished, and the convoy went in, the cops

> all drove back up the road, parked, and booked every protestor who was there that had been involved, and by this point I was pretty cranky. I thought, "this isn't policing" … to me that was Macquarie Street had made a decision, the government had made decisions … the police were part of that decision. They were going to … enforce what they had decided right or wrong, and to not enforce it fairly. It was all about squashing, or quashing the whole movement, trying to scare people.

Note in the previous quote, the participant names Macquarie Street; the street name of the physical location of the NSW Government; this evokes a physical geography in the story telling that emerged from participants. Through my discussions with concerned citizens, numerous times they named places of decision making. This *spatiality of power* became an emerging trend in interviews, and subsequently became a secondary focus of interest this thesis explores; I do so in Part One of Chapter Seven.

Generally, discussions with participants about the situation in the Gloucester Valley coal and gas industry operations highlight the emotive aspects of these conflicts. The injustice of placing numerous coal mines and coal seam gas operations is underscored by LauraGV 'Some people were really really upset about the injustice, the way the Government was treating people, so … it was the injustice of what was happening that really provoked a lot of people to get involved'.

Isolation from the mainstream community

Many participants initially felt isolated from the broader community when coal mining operations were announced; 'I thought I was the only one concerned about coal mining because I was disturbed by noise from the mine … and I really had a sense of isolation' (OliverGV). Participants explained that after a meeting was called by the local environment group, a sense of unity began to emerge amongst those who were willing to speak out about the impacts of mining; OliverGV provides some commentary 'That [meeting] was quite a

good thing for me personally because suddenly I realised I wasn't alone, there were like minded people here in the community who were concerned about this, and it gave me a focus group'. Soon after, it was explained that discussions on the issues increased and attention was given toward informing the community and uniting the lines of resistance. HarveyGV opines:

> Under the leadership, of mainly *name redacted for confidentiality* … a weekend called "Groundswell" was held which brought together like thinking people from all our communities, fairly widely spread … following on from that an organisation called Groundswell Gloucester got formed.

Community responses—activist groups in the Gloucester Valley

A Groundswell Gloucester representative explained the community organisation by detailed that it is made up of concerned citizens whose main objective was to resist coal and gas development in Gloucester, but to also promote and create alternative thinking and development opportunities in the town (LauraGV). Groundswell is made up of many professionals whom have a scientific trade or background: environmental science, hydrogeology, law, psychology, and other professions who were embedded in the group. They, along with farmers, land managers, tradespeople, business owners, teachers, and many other concerned citizens work together to debunk the reports and information being released by gas and coal proponents, and challenged the decisions of Government (see also Groundswell Gloucester, 2021).

HarveyGV explained that in the years since the formation of Groundswell Gloucester, other community groups also formed such as the Knitting Nannas (originally formed in the Northern Rivers); as well as the Gloucester Residents In Partnership (GRIP), a coal and gas resistance movement that focused primarily on industry operations affecting Forbesdale a suburb near Gloucester. Information sharing, and resources such as Gasland a popular movie on the impacts of the unconventional gas industry (see Fox, 2010)

triggered anger and frustration in concerned citizens, and it was explained that this screening was pivotal in the growth of resistance movements in The Valley (LauraGV).

Some participants were particularly concerned with the scenic amenity of the Gloucester Valley:

> When we moved here this area was zoned 7D1 Environmental Protection Scenic, for the scenic value of tourism of the view of The Buckets and The Mograni[18] and the Valley as you saw out the back here … and it was rezoned! (CynthiaGV).

'This is a national significant heritage landscape that never gazetted, because if they gazetted it, it would be an issue, mining out trumps everything anyway' (LauraGV). 'Tourism can't work next to a coal mine' (AlfredGV).

Landscapes of backlash

Due to the divided nature of the community, backlash against resistance activities was widespread and a serious concern to participants and police (LauraGV). Most participants told stories of threats, bullying, and stated that they feared the actions of proponents of industry development such as coal and gas company employees, politicians, members of the local chamber of commerce, and pro extractive industry residents of the Gloucester Valley.

Some participants became quite stressed and emotional during interviews, speaking openly about threats of violence, shaming, bullying, slander, business and character defamation that they had been subjected to. There was even one account of vehicle tampering, which was reported to the police. 'His [a person supporting Groundswell] car was sabotaged! They took the wheel nuts off his car and the wheel came off while he was going along … the police were

[18] Geological features of the Gloucester Valley

involved' (JeromeGV). 'And then there was somebody else had said he was pretty sure somebody had loosened the wheel nuts on his car' (CassandraGV).

> I didn't expect people to be so terrible, and be so vicious. Like I was having the police call me and say "check your car, check your tyres, check your wheel nuts got a full time detective on Facebook, you don't want to know what they are saying, but we are reading what they are saying, we don't like what they are saying" (LauraGV).

The iterations by participants above, are indicative of the threats that were apparent early in this investigation; and will be explored in Chapters Six and Seven. These opinions steered the formation of the research approach and steered my own decision making to only speak with activists as to not flair up tensions between the different 'sides' in Gloucester, as explained in Chapter one.

Gloucester Valley Case Summary and Conclusion

To summarise the participant views above, and the literature supporting the backgrounds of the region, the Gloucester Valley has seen the rise and fall of past industries. To many of my participants in the Gloucester Valley, initially, coal mining presented jobs as a solution to employment issues in the valley. To others, mining is a threat to the livelihoods of citizens, health of people and landscapes, and a threat to other industries in the Valley. This division on coal mining interests in the region presented an already divided community when unconventional gas mining came along.

I posit, that the real and perceived injustice, the divide and conquer approach of resource companies, the actions of the State and the police, perceived collusion between some State factions and resources proponents, and the backlash experienced by anti resource extraction activists, formed a particular kind of emotional geography of activism in Gloucester. For some participants, their places became so exhausting, toxic, dangerous, or alienating, that they contemplated leaving altogether; 'At that point [after 18 months of protesting] we were ready to sell everything and leave, we were absolutely done' (CourtneyGV). 'We're still selling, we're still getting out of here' (WilliamGV). For others, the impacts of mining and being involved in protest actions affected relationships: 'It's exhausting … it hits you really emotionally and it knocked our relationship a little bit as well' (AlfredGV).

I argue that the changing relationships, the loss of trust in institutions, the shifting connections to place, changed how people understood their community, their attachment to it and place within it. CynthiaGV describes: 'A lady of my age that's had so much respect for authority, police, was brought up to respect elders, it's all so changed my complete attitude of humanity'. I

found that these kinds of narratives underscore the shifting relationships with others, treasured places, and the self, in response to extractive resource industry placement. These shifting emotions and links to place is reflected in the words of LauraGV:

> I've had this amazing opportunity to live in *redacted for confidentiality*, and to live in this beautiful town, and part of my grief is I just feel a little bit sad that I don't feel that love for this town any more … because of what's happened in the last twelve to eighteen months, I think. But I guess, … I've been a bit immune to the real life of Gloucester, the underbelly, of the bullying and the "you're not allowed to speak out if it's not what I think". There has always been that, and that's probably part of my grief as well that I've actually realised that all these people have not been living in some ways their own true life and I've been able to do that.

Additionally, of particular concern to LauraGV was the internal family bullying that was occurring behind closed doors. Laura explained that this was particularly the case for women who married into what she describes as 'pro mining farming families'; some of whom were prevented from being present at activist meetings or showing support to the resistance movement. On this point, LauraGV also stated:

> One [woman who married into a farming family with pro mining interests] in particular … she doesn't respond to emails any more, she's actually withdrawn into herself … she's a shadow of her former self because if she's seen to be talking to us … It's domestic violence actually, it's domestic violence!

I draw on all of the above, and hypothesise that this indicates that the pro gas backlash against the activists was apparent in the community (OliverGV; JeromeGV; LauraGV; AlfredGV; DickGV; LorraineGV; WilliamGV; CourtneyGV; CassandraGV; SonjaGV; CynthiaGV). The very real perceptions of danger, the experienced divisions and hostility within the community shaped the activist tactics used: corporate campaigning with a greater

emphasis on political lobbying and scientific research rather than non violent direct action, which has been prominent in other fights against unconventional gas (LauraGV); this finding will be explored in detail in Chapter Six.

It was explained by two participants that anti mining groups realised that significant mental health impacts were emerging in the community. In a joint interview, these two participants recall what happened when a mental health service visited the community:

> So, the Beyond Blue Bus came to Gloucester, which was incredibly important at that time, as … there was an awful lot of mental illness going on. And so, because they [AGL] weren't allowed to sponsor the bus, they got the Lions club that is full of Advance Gloucester members to host a sausage sizzle out the front of the Beyond Blue bus, and *name redacted* in [the] AGL uniform out the front of the Beyond Blue bus. So, anyone from our side of the fence that went to get help, had to walk through all the haters to get into the bus! (WilliamGV)
>
> There were people that broke down in their cars when they got there. So, they got the courage to go, pulled up, saw these people, and just broke down! I mean I cannot believe how mean that is. Divide and conquer! (CourtneyGV)

I argue that this kind of fracturing, the breaking down of relationships and trust in institutions, the social, physical, mental, and material impacts mining operations have on community members that this chapter has found, are all part of the *negative impacts* of coal and gas operations in the Gloucester Valley. And these impacts elucidate part of the way extractive industries can reconfigure relationships, landscapes, and connections to treasured places.

The findings that have been presented above will be explored and discussed in Chapter Six later. These findings also become useful to discuss the naming of places of decision making that has emerged here, and I do that in Part Two of Chapter Seven. Before those discussion chapter, in the next chapter, I will present the background and findings of the Northern Rivers case study area.

Chapter Five

The Northern Rivers Case Study

Introduction

I was never an activist, and you will hear that a lot probably, I was never involved in much. There were some of us that were, but most of us I don't think were involved in any type of activism [prior to unconventional gas arriving on the Northern Rivers].

BruceNR, at interview (2016).

The purpose of this chapter is to present the case study background and findings that emerged from interviews conducted in the Northern Rivers Region. This chapter will present participant perceptions and reactions towards the unconventional gas industry that explored for reserves in their region. Further, participant opinions of environmental and social injustice, and the findings regarding emotional geographies that unfolded in response to the unwanted placement of the unconventional gas industry will be explored.

The utility of this chapter is to provide a *community voice* on these issues. As a result of my intentions to provide a community voice, I do use extensive verbatim interview participant statements as long quotes. I do this as an approach to explore the data without editing or changing the message participants wanted to deliver; as was explained in the methodology section of the first chapter.

Due to the semi structured interview style employed for this project, participants were allowed to freely communicate their main concerns on the topic of unconventional gas operations in the Northern Rivers and the activism that resulted from that threat. I begin with a background to the Northern Rivers region and then move into findings of the study. The chapter will close with a general discussion on the Northern Rivers case.

The Northern Rivers Case Study

I love the region, I think it's the most fantastic place, it's got great diversity, it's beautiful, it's productive, and it has a sense of itself as a bioregion I think, of growing a sense of itself, and it's fecund, it's just amazing! It's an amazing place.

DianaNR, at interview (2016).

Indigenous perspectives of the Northern Rivers case

The Aboriginal peoples of the Northern Rivers Region are the Bundjalung Nation group (Government of NSW, 2013; Horton, 1996). For tens of thousands of years, Indigenous people have held a deeply connected cultural relationship with the land. These peoples belong to living cultures and an unbroken connection to place in the Northern Rivers Region given that Indigenous cultural practices have survived colonial occupation there; so, the region continues to hold significant Indigenous heritage, cultural connections, and continuing deeply rooted place based values for Australian Indigenous peoples.

To reiterate a paragraph from the previous chapter: It is not my intention to hold these involvements in activism and Indigenous perspectives deliberately separate from this thesis. A reminder, that a limitation to this study is that I have no ethical clearance to target and engage Indigenous people specifically to seek out their opinions during data collection. Hence, ethics did not scope any allowance to discuss indigeneity, Indigenous perspectives of activism, and as such, at the time of writing, this has been identified as a major limitation of the study. This limitation, and my learning from this shortfall in this project, is discussed in Chapter Eight.

There is a documented division in the interests of Indigenous participation in unconventional gas in the Northern Rivers. Notwithstanding likely interests and active participation elsewhere, however relating to this case study region, there was an interest from the New South Wales Aboriginal Land Council to actively own unconventional gas licenses and explore these resources regionally. It is reported that the aim of these ventures was 'to secure future economic sustainability for the land rights Network and Aboriginal peoples in NSW' (Howlett & Hartwig, 2017, p. 330).

There was also, considerable Indigenous involvement in the protest movements *against* unconventional gas in the Northern Rivers. There was Indigenous engagement and involvement in street marches and a strong presence of Indigenous people and elders at camps and protest locations (Deem, 2016). And the general rejection of gas mining placement on Country in the Northern Rivers is described to be influential and engaging relating to the protection of Country and community from Indigenous peoples (Deem, 2016). In this perspective, it is articulated, that the struggles and protests against unconventional gas in the region united the community, including the Indigenous communities with townspeople, farmers, and activists (Deem, 2016; Kia & Ricketts, 2018).

Given the participation of Indigenous peoples in activism against the gas industry in the Northern Rivers, the NSW Aboriginal Land Council's ambitions to own and participate in gas mining in the region was met with considerable condemnation (Howlett & Hartwig, 2017). This division is evidenced in later sections relating to a more general community level discussion. An elder, who cannot be named in this thesis for ethical reasons, indicated that the NSW Aboriginal Land Council's decision to support the gas industry was to oppose the opinions of the majority of Indigenous elders from regional tribes (Bruin, 2014)

Divisions of opinion in the Northern Rivers does reflect some of the divisions found in the Gloucester Case study generally. The divisions of Indigenous opinions specifically in the Gloucester Valley, however, are not as clearly articulated as those relating to a discourse of Indigenous participation in mining or protest found in the Northern Rivers; in the Gloucester Valley, there was more of an articulation of a less divided anti mining Indigenous positionality (see Daley, 2014; Dickie, 2019; Smith, 2017).

Per stated ethical clearance restrictions, it is not necessarily the focus of this thesis to interrogate the pro mining interests of the NSW Aboriginal Land Council in the Northern Rivers. Nor am I able to delve into and interrogate the anti mining positions of Indigenous people in this case. I am missing these important voices on these matters from my interviews, as identified as a limitation to the study.

The dialogue here, however, is indicative of the 'discursive framings' of Indigenous perspectives in the right to pursue financial gain from minerals extraction. Importantly, there is a need to at least iterate that there is a framing from non indigenous perceptions that erroneously assume all Indigenous peoples and groups as pro conservation, pro environment, and anti mining given overtones or perceived understandings of Indigenous people's connections to Country. For a full account of these 'discursive framings' specifically articulated to the perspectives of unconventional gas mining in the Northern Rivers, see Howlett and Hartwig (2017).

The Northern Rivers prior to the arrival of Unconventional Gas

Colonial occupation and settlement began in the Northern Rivers Region (hereafter, Northern Rivers) in the early 1800s, See Map 5. Timber cutters cleared the lush forests due to an abundance of prized Red Cedar trees, after which the land was opened to pasture (Lismore and Nimbin Tourism, 2019b;

Lismore Council, 2017). Pastoralists gained licenses from the State to run sheep and cattle stations on large areas of now termed Crown land; particularly in the Richmond Valley region and what is now known as the Lismore Local Government Area (Lismore Council, 2017).

Image removed

Map 5: Northern Rivers Region, New South Wales

Image Source: (Regional Development Australia, 2019b)

Dairy farmers moved in and regional towns and communities flourished in the decades following as pioneering families trailed the dairy industry; these communities primarily provided support services to the agricultural and industry activities in the region at the time (Lismore and Nimbin Tourism, 2019b; Lismore Council, 2017). The colonial settler history has resulted in entrenched farming cultures in the area, and deeply rooted place attachments for descendent families as well as newer arrivals that have moved to the region

in the decades since (Lismore Council, 2017); these place attachments will be described in more detail and explored later in this chapter.

High rainfall averages in the region combined with the temperate climatic conditions usually present in the Northern Rivers, and the abundant flows of surface water hence the regional name gives rise to large areas of natural significance and agricultural abundance (Lismore and Nimbin Tourism, 2019a). National parks and remnant bushlands extend in swathes through the region. The Nightcap Range National Park, as example, is world heritage listed and draws significant tourism income to the region, and is also a place of important remnant biodiversity (Government of NSW, 2021a).

Also, given the abundant water reserves both on the surface and in subterranean aquifers, farmlands are high yield, fecund areas of agricultural significance (DianaNR). The Northern Rivers dairy industry continues to be one of Australia's leading providers, and remains today a privately Australian owned dairy co operation (see Norco Co operative Limited, 2019). Health care, retail trade, Education, Tourism, Construction, Manufacturing, Agriculture and Forestry, are all industries that feature in contemporary economics of the Northern Rivers region (see Regional Development Australia, 2019 for a full description).

There have been some historical mining activities in the Northern Rivers: gold mining of coastal dune sands 'between 1870 and 1935 … [particularly] around Jerusalem Creek', south of Byron Bay (McQueen, 2020, p. 113). This 'sand mining' of coastal dunes for gold, from about 1870 was largely over within thirty years, however, there was a larger scale interest in some of the other heavy metals found regionally zircon, platinum, and tin. Zircon Rutile Ltd conducted pond and dredge mining for these heavy metals from 1935 until criticism of environmental damaged halted production in the 1950s. Rehabilitation processes were proposed; however, little was done until the

1960s where some dune restoration was conducted (Kemp, 2011). Later, in the discussion chapter, I reflect on these historical mining operations, and how citizens interviewed in the Northern Rivers, make no mention of them. The only 'mining' activity that seemed to register in the conversations I had with activists for my project centred on the histories of logging, which I will cover in a section below.

Landscapes with a history of environmental and social activism

The citizens of the Northern Rivers boast a considerable history regarding environmental and social justice campaigning to protect the diversity, communities, and unique farming opportunities in the region (Bible, 2018; Turvey, 2006). Beginning with the Terania Creek Blockades in the late seventies a campaign that resisted old growth forest logging in the region the Blockades resulted in a win for activists. These early campaigns educated already socially and environmentally aware citizens about successful resistance and protest strategy (Bible, 2018; RhondaNR). Emerging after the Terania Creek Blockades was the formation of the North East Forest Alliance (NEFA), which continues today to influence the protection of natural spaces in the Northern Rivers and further afield (NEFA, 2018).

Many other environmental campaigns that were fought in the region included a 12 year campaign successfully ending in 1995 that opposed dam construction on the Wilsons River. There was also successful resistance to the construction of a Club Med in the Byron Shire, first in 1996, and again in 2003. For a full account of the extensive activism in the region, see Deem (2016). Given the extensive experience of resistance to development and unwanted logging practices that developed over time, activists from the Northern Rivers have been known to travel both nationally and internationally to educate and inform other protest actions about successful strategy (RhondaNR; RalphNR; DianaNR).

Unconventional gas and fractured landscapes

Unconventional gas exploration began in the region in 2005 after a location near Casino was to be developed into a gas fired power station (Deem, 2016). Gas proponent, Dart Energy, held an interest in the region with Petroleum Exploration License (PEL) 445 (Deem, 2016; Gasfield Free Northern Rivers, 2018a). The PEL was formerly held by Arrow Energy, which drilled 15 wells in the Northern Rivers from 2010. Later, when reserves were confirmed to be of profitable measure, Arrow sold the licence to Dart Energy, which also holds unconventional gas interests in China and the United Kingdom (Gasfield Free Northern Rivers, 2018a).

The main gas proponent in the region, however, was Metgasco, which had been exploring the Northern Rivers for unconventional gas since 2007 (Gasfield Free Northern Rivers, 2018a); holding PEL's 16, 16FO, 13, and 426 (see pink areas in Figure 13 on the following page). From 2007 until 2012, Metgasco had drilled approximately 50 exploration wells in the Northern Rivers with focused drilling operations at Casino and Grafton, with a proposed gas field to be developed between Casino and Kyogle in PEL 16FO (PEL locations and holders are also detailed in Figure 13). It was an early 2010 well drilled in the Keerrong Valley that spurred initial resistance to the industry (Deem, 2016; Gasfield Free Northern Rivers, 2018a).

Citizens were aware that the fracking process employed to extract gas reserves from subterranean coal seams[19] brings with it a number of known threats to rural communities (Deem, 2016; Gasfield Free Northern Rivers, 2018a). In the Northern Rivers case, salt and chemical backflow water was either left in evaporation ponds (now banned in NSW), or taken for disposal in ways set out

[19] See the second literature review, Chapter 3, for a detailed explanation of the fracking process.

in the licences granted by the State (Gasfield Free Northern Rivers, 2018a) conditions that were often breached by resource proponents (Deem, 2016).

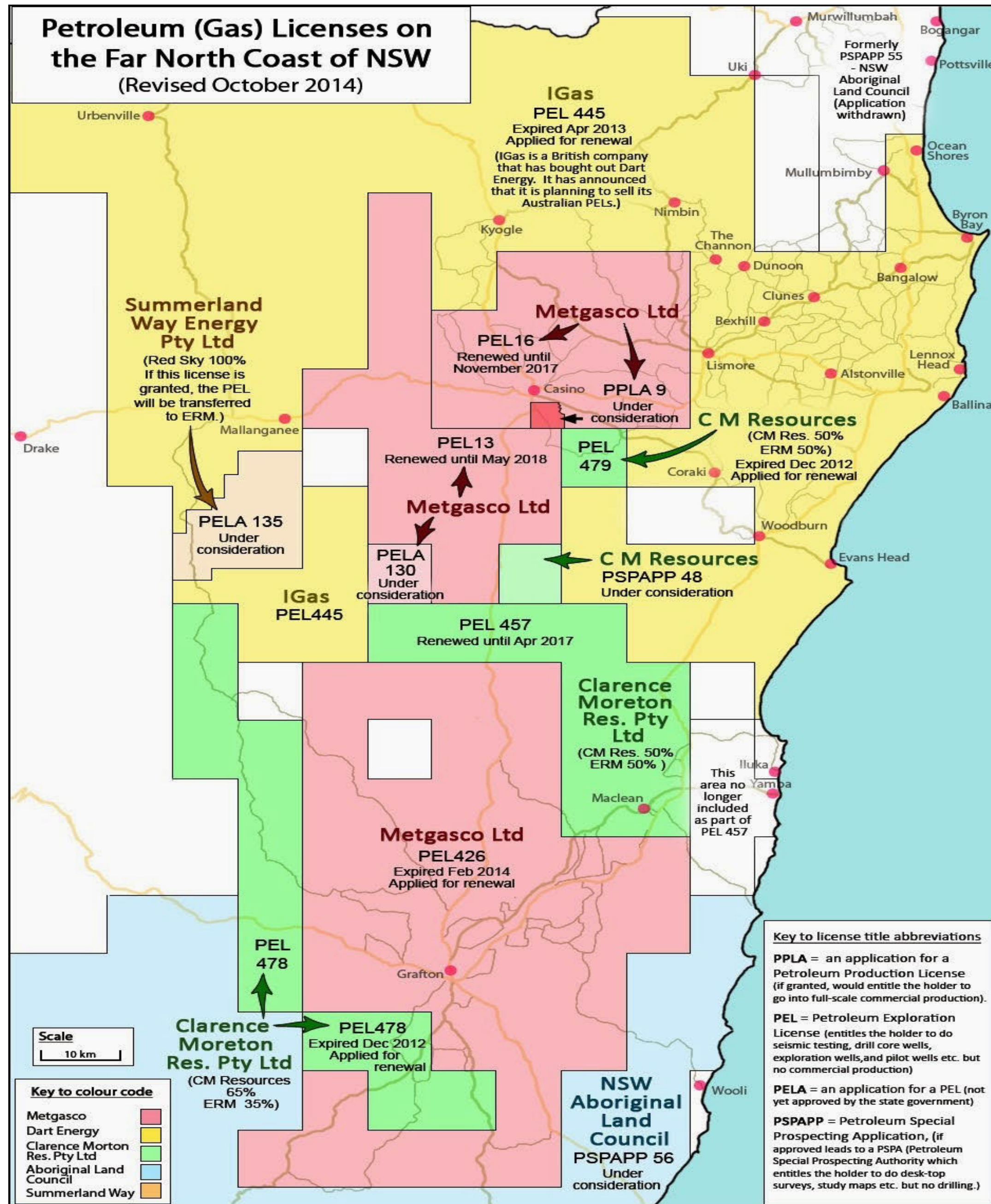

Figure 13: PEL coverages in the Northern Rivers. Colour key indicates which proponent owned what PEL

Image source: (Lock The Gate Alliance, 2014a)

The resistance stemming from citizens of the Northern Rivers toward gas industry proponents, pro gas government departments and officials, and pro industry local council members was significant (RalphNR; DianaNR). Activism ranged from large visible marches and non violent direct action, to government lobbying, and media campaigns (RalphNR), delivering a vehement message to the gas industry that coal seam gas was not welcome in the region (RalphNR; DianaNR). The activism lasted a number of years and culminated with the Bentley Blockade, where upwards of 8000 people were willing to block drilling equipment from entering a proposed well site (RalphNR). The Bentley Blockade was, however, just one part of a much larger activist movement in the Northern Rivers (Deem, 2016; RalphNR; DianaNR). An abridged timeline of activist's efforts is outlined later in this chapter.

By May 2014, the NSW Minister for Resources, Anthony Roberts, announced that Metgasco's exploration license was suspended details provided later. After this announcement, Metgasco abandoned exploration operations, and the Bentley Protest Camp was dismantled.

At the time of writing, gas operations have ceased in the Northern Rivers (RalphNR). In the months after the Ministers decision, Metgasco sued the NSW Government over the claim that community consultation was less than what was stated as a minimum requirement in the legislation. Metgasco won the case and were compensated $21 million by the NSW State Government (Deem, 2016). To date, no remuneration has been mentioned for communities in the Northern Rivers for impacts associated with the exploration phases of unconventional gas in the region, and no legacy fund was left by Metgasco or any other gas proponent at the time of writing. Further, no participants discussed compensatory measures during data collection.

Emotional Geographies and Mining in the Northern Rivers

I actually really don't like talking about Bentley very much because people sort of discount it and they say "well the Northern Rivers is always Green", which is absolutely bullshit, it's a deeply conservative region.

DianaNR, at interview (2016)

Diverse landscapes

Generally, conversations with participants revealed there is much diversity in the types of communities that are located within the Northern Rivers. To explain, there is a recognisable history of liberal thinking and activism against unwanted industry in the region, this sometimes leads people to think 'you're all hippies … you're so different, and it's just not true. I mean Lismore's a profoundly conservative area' (RalphNR); Casino is also 'incredibly conservative and Kyogle is considered to be conservative' (BruceNR). What these opinions may indicate here is that the Northern Rivers hippie, environmentally conscious, socially aware demographics, and spaces, were dispersed throughout the region; rather than the assumption that the regions entire populations being mostly green or politically Green as per common assumption (LindaNR; BruceNR; RalphNR; DianaNR ShieraNR).

Given the differing community types ranging from very place based green alternative lifestyles of Nimbin versus the more conservative farming community of Casino, as examples divisions in attitudes about the environmental and social well being were discussed by participants. BruceNR iterated this best:

> There were people in Lismore and people in Kyogle that didn't want to have anything to do with Casino, and it's been like that historically. The people in Casino are thought of as being different to the people in Lismore who are more of a progressive type, Kyogle ones less progressive, more conservative, but very rural with quite a tree change group that's moved there. Casino has remained and probably still is, a much more conservative small town where everyone votes for the Nationals.

Community response upon discovering gas operations

Participants spoke of reactions relating to the gas threat, that for them, were deeply intertwined with place and treasured spaces. SharonNR tells of her dismay and grief relating to the threat of gas operations:

> I really felt personally affronted like I was about to be poisoned by this negligence of letting coal seam gas into our region. Like I really felt this is the air and the water, and I thought this can't be happening, they wouldn't do this to us. And then I went, fuck! They would! Like [says name], wake up! … I'm sort of a rose coloured glasses, give everyone the benefit of the doubt, the world is a good place, and I just faced like in the history of humanity there have been ruthless massacres, like humans have, and are currently, and will continue for some time yet, absolutely abuse each other through negligence, through aggression, through individuals. But it's not about individuals, it's whole races and cultures of people. We've been fucking each other over the whole time, and to face the terror of that is 'and now it's my turn?' And now it's my turn to be fucked over by some heartless government who thinks that everything that I've done to get myself here, to invest in having a beautiful, pure place to grow my kids up in nature, to eat organic food, to being threatened personally. Like I just I really felt terror! So, when terror came up for me, I met it, you know, from the meeting of that terror and then the terrible grief, like *crying* the terrible grief …

The threat of contaminated water and land were real for my participants, and some citizens were shocked to discover that drilling had been occurring

without their knowledge. One participant indicated that she woke one morning and looked over to her neighbour's property, there was a…

> … rig which we could see from our front veranda … we didn't know what it was … the people who were living literally about fifty meters from the drill rig didn't know what was going on either. They went over and asked the workers 'what are you doing' … then we found out it was the gas (AmayaNR).

Some activists in the Norther Rivers conducted considerable background research on fracking and the issues that come with it…

> … and then there is research in the United States if you look closely enough even though it doesn't make it to the mainstream media, there are professors and various people who have done a lot of research, and ones that were involved in the industry beforehand, gives you a lot of information on sketchiness of the drilling process and of making sure that the wells are isolated from the surrounding aquifers, the whole process of drilling the well, putting in those sleeves of steel and cement, sketchy in many ways in that the science is fairly sketchy. Put on top of that the fact that you're working with random men that may be having a good day or a bad day, they're working in very randomised geology, so their procedures done exactly right might work one way in a certain type, they might even have experience in certain types of geology, like in Australia, a lot of our drillers that went up to Queensland were coming from the hard rock territory of Western New South Wales, they were hard rock drillers, they didn't have the feel or the knowledge about geology and slap bang straight into the Eastern States where they were drilling and this is coming from people in the industry, this isn't coming from something that I've read, this is coming from the people who actually work on the drill sites, talking about the lack of knowledge So all of those things combined are what myself and a lot of other people here really got involved in the opposition and decided that it wasn't for here in the Northern Rivers (BruceNR).

Further, some local citizens knew that not all flow back water was being retrieved from the wells; evidence that was gathered by exploring gas

operations overseas particularly the United States examples igniting suspicion for many concerned people that land and water was being contaminated (SharonNR; RhondaNR; KaraNR; RalphNR; DianaNR). Some concerned locals were also aware of the possibility of fugitive emissions from well sites (JohnNR), meaning some citizens knew that methane gas was being leeched from around wellheads, and from pasture where fugitive emissions moved upward from the coal seam due to the apparent uncontrolled variables of the fracking process, rather than toward the drilled bore.

> I felt outrage that this could happen to a community. I sort of didn't know much yet about the real extent of the impacts in terms of health impacts of it, I was mostly concerned about the water, and I guess the fugitive emissions aspect the methane pouring into the atmosphere. It seemed so wrong on lots of levels and it got more and more wrong the more I've learned about it. But at the time I was just thinking about, you know, we've got flourishing tourism and agriculture industries here, this could wreck that, and it just seems really unfair and undemocratic that one industry could come and wreck things for a lot of other people (JohnNR).

Divided and united communities within the Northern Rivers

According to participants, the different communities such as Lismore, Kyogle, and Casino detailed earlier in this chapter led to some differences in opinion about the gas, and division in the more conservative towns in the region, especially in Casino (KaraNR). It was at Casino where the then Deputy Mayor Stuart George, who advocated for the development of the gas industry, was also the son of the then and incumbent State Member for Lismore, Thomas George Australian Nationals Party (KaraNR). According to DianaNR 'That council [Richmond Valley Council] was very pro the industry, and the general manager and the mayor were very united'. In some other cases, land owners and citizens thought the region did not know how to manage a threat such as

imposing extractive industries, or were worried about what others would think if they resisted. On this point, BruceNR told me the following:

> A lot of people would tell you, "I don't want it, but what can you do, there's nothing you can do about it", or "you're very brave to be out there having people know that you oppose it, aren't you scared of what will happen to you or what people will do to you?" So, there was a lot of that. However, in Nimbin, which is an area where a lot of environmentalists are, and have been for their whole lives, didn't have that fear. You know, they're like "we don't care", they're a more conservative type of people and "we don't care what they think of us anyway".

Most participants in the Northern Rivers study, however, spoke about how the threat of extractive industries united communities and mentioned the history of activism as a pre curser to that trend in coming together to resist the industry:

> When suddenly we were faced with this threat of this strange thing called coal seam gas, it really really galvanised the community. I mean because this this area here traditionally has been one of activism, when you go back to the Aquarius Festival and things like that, and Save the Rainforest, so there were born and bred … people here were from that era, who'd come here and stayed and raised their own families and, so there was that underlying activism mentality here … I wouldn't have missed any of it, it was all such an adventure, so much camaraderie, it was amazing! (VeraNR).

The activism to protect landscapes and communities

The following is a non exhaustive but indicative of the extent of activism timeline of some of the actions that moved against the unconventional gas industry in the Northern Rivers. I believe this account is important to this thesis as it gives traction to the magnitude of community led, planned, and orchestrated efforts against the unconventional gas industry in that region. Participants in the Northern Rivers were very keen to discuss the efforts to

resist unconventional gas, and focused much of their interview time on discussing these activities. Participant views expressed in the Northern Rivers are different to participant discussions of the Gloucester Valley cohort who concentrated their time at interview on discussing the impacts of industry and backlash of conducing activism, threat to community, health, farmland, and wellbeing. These differences are core to the main thesis findings, amongst others, and will be explored and discussed in the comparison analysis in Chapter Six

Community groups

After a few months of raising awareness in the region, concerned citizens arranged for the screening of Gasland at regional theatre, a documentary that explores the impacts of unconventional gas industry development in the United States (see Fox, 2010). The screening of the film, as well as significant efforts by alerted citizens, brought some greater attention of the negative impacts of the unconventional gas industry to the regions populations (BruceNR; RalphNR; DianaNR). This may indicate that some communities were aware of the impacts of gas mining early in the industries placement in the region, and some citizens were aware of the damage and harm associated with it.

Later in 2010, more anti gas community groups emerged such as the Coal Seam Gas Free Northern Rivers, and the Lock the Gate Alliance (LTGA). The former being a regional group, and the latter being an overarching group that became a 'national grassroots organisation … who are concerned about unsafe coal and gas mining' (Lock The Gate Alliance, 2017a, para. 1), distributing information, support, and education about the impacts of coal and gas industry development. The tiering of these networked groups, and ones like them, regionally, and nationally, continues to gain momentum, even at the time of

writing some years later, the LTGA now has 'over 120,000 supporters and more than 450 local groups' (Lock The Gate Alliance, 2017a, para. 4).

Engaging local governments in activism

Seemingly, by the end of 2010, enough community pressure was ignited to influence the Lismore Council to unanimously declare a moratorium on unconventional gas industry activities (Deem, 2016). Momentum of community resistance continued to build in 2011; three thousand people marched in the streets of Murwillumbah and was one of the first large visible protest marches in the region that directly responded to unconventional gas. Not only did this event significantly indicate that many people in the Northern Rivers were opposed to unconventional gas, according to my participants, it triggered a feeling of togetherness and unity amongst concerned citizens (MariNR).

Shortly after a National Day of Action, protest marches continued to occur in Lismore 1500 people, Kyogle 750 people, and again in Murwillumbah 500 people (Deem, 2016). Further, governmental actions resulted with Lismore council reversing their approval for seismic assessment in the Rock Valley. Eventually the Kyogle council also imposed their own moratorium on unconventional gas industry activities on council owned lands (Deem, 2016).

Eventually, the NSW State Government moratorium on new unconventional gas industry projects was extended until April 2012, however, pre existing projects in exploratory phase were allowed to proceed; this resulted in growing visible Non Violent Direct Action (NVDA) protests in the Northern Rivers where Metgasco was continuing operations, and will be explored next.

Growing NVDA

A 10 day blockade was held at Kerry, Queensland (about two hours' drive north of Kyogle across the NSW/Qld border). I am aware that this event falls

outside of my study area, however some concerned Northern Rivers citizens travelled to this protest bringing stories of what happened there back to the Northern Rivers; so, it is important and relevant in the Northern Rivers case study.

It was stated by participants that around one hundred police attended the Kerry rally, apparently accusing activists of fear mongering. As a result, tensions between concerned citizens and activists, and the police force emerged (Deem, 2016). Fifteen activists expressing non violent direct action tactics were arrested at the Kerry protest. Participants labelled the action of police 'heavy handed' and was seen by some as a move that demonstrated the State's abuse of power to use police forces as a means to facilitate gas industry development (LindaNR; VeraNR; RayNR; MariNR).

The Kerry protests were quickly followed by 700 people attending a meeting in Lismore, that resulted in the formation of an alliance between anti unconventional gas groups eventually to be known as Gasfield Free Northern Rivers (GFNR). This move networked groups and unified the resistance to the industry (Deem, 2016).

> The aim of the Gasfield Free Northern Rivers movement is to protect the biodiversity, water resources, agricultural lands and sustainable industries of the Northern Rivers, and the livelihoods and wellbeing of the people who live here, from the impacts of coal seam gas (CSG) and other forms of unconventional gas mining (Gasfield Free Northern Rivers, 2017, Para. 1).

Non Violent Direct Action training was set up at various locations throughout the Northern Rivers, teaching citizens how to appropriately behave at protest sites, and how to liaise and communicate with police (Deem, 2016; NR20F60). These events, and ones like them, became spaces where knowledge from past

activism could be passed on to newcomers engaging in contemporary resistance strategy in the region (RalphNR; DianaNR).

A community declaration of solidarity

In April 2012, people of The Channon declared themselves coal seam gas free. Residents read a pledge at an arranged day of unity on the community oval, and signed declarations from each street were passed to the Hon. Jenny Dowell OAM, the Lismore Mayor at that time. This event was the culmination of many months of community level activism, information meetings, activist strategy discussions[20], and workshops. The message was clear, the 'residents of The Channon Keerrong have reached a majority decision to close their roads and valleys to CSG' (Gasfield Free Northern Rivers, 2018b, para. 1).

Increasing visibility of NVDA

From mid 2012 protest numbers grew again, 8000 people attended a rally in Sydney and 7000 attended a rally in Lismore (Deem, 2016). The numbers attending these rallies indicated that sentiment against the gas industry in the Norther Rivers growing. Additionally, participants stated that with growing numbers, activists continued to find safety in numbers, and safer spaces to be seen engaging in visible activism (BruceNR).

During the 2012 local government elections, the Lismore council added a community poll relating to unconventional gas to the local ballot paper. The result showed that 87.2% of eligible voters in the council area were against coal seam gas development; again, indicating that community sentiment was against the gas industry. SheiraNR shared the following opinion on the poll:

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[20] Specifics of activist strategy has been redacted from this thesis to comply with a request from activist leaders, and to build research reciprocity and trust between my studied communities and academic activists such as myself.

> I think the fact that we then had our poll for eighty seven percent … the fact that it came out eight seven percent was fantastic … we were the only LGA to do that poll in conjunction with the two thousand and twelve … local government election. "Do you support coal seam gas exploration and extraction in our local government area?", and eighty seven percent said no!

Late 2012, the Lock the Gate Alliance launched a national week of action that saw thousands of people march at rallies around Australia. This day included concerts and other visible protest actions that welcomed inclusivity and unity (Deem, 2016; Gasfield Free Northern Rivers, 2018a). By December of 2012 there were 70 declared Gasfield Free Communities in the Northern Rivers alone; approximately 12,000 people were polled throughout the Northern Rivers region and across the region, through various polling, 96% of respondents voted *no* to coal seam gas operations (Deem, 2016).

Also during 2012, it was reported that Metgasco were found to be liable for a number of breaches, including the dumping of wastewater into the Casino water sewage treatment plant (Deem, 2016; Gasfield Free Northern Rivers, 2018a). Once these breaches became public knowledge through media and reporting, they ignited significant concerns from local and regional citizens, and opposition numbers quickly grew. Metgasco soon suspended drilling operations and this was linked to place based pressure against the industry (Deem, 2016).

Throughout 2013, resistance strategy again increased momentum (Deem, 2016). Blockades and vigils were held at Doubtful Creek and Glenugie where police handling of these events ignited claims from protestors that police were being heavy handed (SheiraNR); especially events at Glenugie protests where riot police were called in from Sydney.

Activist views of State sanctioned policing

It became apparent during discussions with participants, that not all sentiment towards police and police efforts were negative. Many citizens interviewed in the Northern Rivers believed that *local* police were in a difficult position, and police from *elsewhere* behaved differently; flagging a range of opinions in activist spaces about policing, as stated in the following:

> Look, there are a lot of different views. The hardcore activist and what you might call the anarchists or those who have moved to this area to escape law and order and authority would have no trust in the police and think they are the scum of the Earth, no doubt about that. Then the more moderates or the everyday folk that would have turned up there, would think the police were just doing their job and in a tough situation and didn't want to be there doing that. You know, there were definitely police that were a bit dodgy and cozy with the industry and cozy with the ruling class of Casino, the ones who you know, the political people who were chaperoning in the industry. And then there would have been the police that were farmers, and lived in the area and had family and the last thing they wanted to see was gas here (RayNR).

Other participants sympathised with police, indicating that there was an understanding that the police were there to 'do a job', regardless of personal opinion. These understandings are reflected in the following narrative provided by RalphNR, who also articulates a first hand perspective of police positionality and how police attitudes were seemingly understood by activists:

> They [the local police] were in a terrible position. I mean I actually had spoken to the local area commander, cause being on [job description redacted for confidentiality] we'd get to meet occasionally in various forums. And he said to me almost immediately "I'm totally opposed to this, I've got my own rural land holding out there, the last thing I want is bloody gas wells all over it". And I said "yeah, well you and the rest of the community from what I can see, we will be going hard". He

said “yeah, I can see that”. And so, I think there was a very strong feeling in the amongst the *local* police that this wasn't police work. This demanded a political solution, and you can see their point very clearly, they didn't want to be locking horns with their community on something which they essentially didn't agree with. So that was very significant, and I mean we'd been talking to police for two years before Bentley, and … two weeks before the Monday that the police were supposed to come in [to break up the protest camp], there were about ten of us who were invited to a meeting in the police station in their operations room. … there was no one below the rank of Chief Inspector, and there were two assistant commissioners and the assistant commissioner in charge for the whole area from Lismore to the [Queensland] border. We had cups of tea and sandwiches and he said “well look I'm sure you know when we're coming in” and I said “yes, we do, oh yeah”. And he said “we've got real concerns about the possibility of violence, we've had a couple of reports of people wanting to buy shanghaies and catapults and so on”, and we were sort of “yes, that's always possible, but we have been working extremely hard to” and I mean twice a day we put up the non violence message to our meetings, every day we were there at Bentley. And we said “look, if there is any form of violence, can you please give us first opportunity to deal with it cause we believe we can deal with it, we have people who have been trained specifically in dealing with these situations, and we would like to deal with it”, and he said “yeah, okay you can do that, we will give you time to do that, but if there is anything like a significant threat to my people, we will have our full riot gear on and we will stop it”. I said “well that's fine, we understand that, but we would just like that opportunity to deal with it ourselves”. And we talked about other things like where people were actually locked into positions and so on that they would be allowed to have support person with them, they said “yeah well that's fine, we're not there to torture people”. And overall it was just a real sense that we were able to communicate, there wasn't a sense that you were all filthy extremists and probably communists or anarchists, or whatever the label .

A seemingly balanced opinion of police and police attitudes was not consistent between participants that came forward for this study; flagging inconsistencies

between activists' perceptions about the role of police. Some of this difference seemed to emerge directly from what participants observed and described about police actions at some of the protest events. Riot police handling of non violent direct action at Glenugie, as example, seemed to influence participant opinions of policing, and this carried as a negative view of police involvement, yet still contained some understanding of how police are shaped by their own experiences. This point is best articulated again by RalphNR here:

> … [at] Grafton, we also had the Public Order and Riot Squad that came up from Sydney [essentially, not local police]. And look, I mean these people deal with the absolute horror show of policing, they're the ones that you know, they've seen the worst, they're the ones that have dragged bodies out of horror shows and so on. And I don't think they have a whole lot of patience for *laughs* the sort of situation that had been created at Glenugie, and so they went for it! I don't think they were *terribly* excessive but they were certainly excessive. I mean they were going to come up for the Bentley business, and I definitely got the sense that the public order and riot squad commander was there, and my sense was he wasn't exactly wholly supportive of the attitude that the assistant commissioner for the area was displaying. I think he was much more of an idea of well, we're going to kick their arses and get it over with! (RalphNR).

Implications of police management of activist spaces, as well as general attitudes towards police presence and policing generally are raised many times by participants, as will be presented in the following sections. Policing therefore is not disucssed specifically as a separate section in the discussion chapters, however, the thread of participant attitudes towards police, the implications of these attitudes in steering activist decision making, and what this means to the study will be a thread that continues through the remainder of this thesis.

The Bentley Blockade

In early 2014, activists discovered that Metgasco announced a drilling operation on farmland near Bentley, between Lismore and Casino, that was particularly close to a local waterway (Deem, 2016; Gasfield Free Northern Rivers, 2018a). Soon after that announcement the activism in the region focused on a blockade at the proposed Metgasco drilling site in Bentley. Preparations for the Bentley Blockades began in January of 2014 with a 24/7 vigil site set up on the proposed private land well site where 40 protestors denied Metgasco consultants' access (Deem, 2016).

By February 2014, fundraising events are taking place for the Bentley Blockade. By April same year, a campsite has been set up on neighbouring property to the proposed well site by this time the gate to the site was also well guarded by activists. Participants stated the importance of a carnival atmosphere that was created at the Bentley Blockade campsite that epitomised community spirit, unity, and resilience (RhondaNR; DianaNR). At the peak of activism at the Bentley Site, it was stated that upwards of 7000 people were expected to attend any call out from site organisers that drilling equipment was on the way. SharonNR recalls the vibe of the Bentley Blockade, and specifically speaks of inclusivity and the importance of being united as a community:

> That was the beauty of Bentley, it was a little bit like West End or like Nimbin[21], was that there was this overall quality there was that everyone was included. And even though there was politics within that, and some people thought some people shouldn't be included, even *that* was included. Like there was overall space for everybody to bring their bit.

During the later stages of this protest movement, police massed 700 officers in the Lismore region in the lead up to State officials planning to break up the

[21] West End (an inner Brisbane suburb), and Nimbin (a town in the Northern Rivers) are both colloquially known as progressive places in thought, politics, and lifestyle.

Bentley camp and blockade (Deem, 2016). RalphNR details in the following conversations with police leading up to the main staging of the blockades where up to 8000 people were present, or at least able to be present at a calls notice; RalphNR's main concern was the safety of all people, police, and activists, however interestingly, he seemed to use knowledge of the NSW occupational health and safety laws to the advantage of protest action:

> One of the things that I felt was really quite significant was the health and safety director for the whole of New South Wales [police force], came out to Bentley about a month before it was called off, and I took him through everything. I copped a huge amount of flack for it. But I showed him exactly what the dragons looked like, how deep the poles were in the ground, where all the guy wires were, what this abandoned car body really was, and the huge concrete water trough that people would get into and what would be required to get people out of there. And took him down to the camp, and he had a bit of a poke around the camp and for the anti authority brigade who we had untold numbers of, this was complete treason! But I mean as this bloke said to me, "people think it's the criminal laws in New South Wales which are draconian", and I said "I don't, I'm from [occupation redacted for anonymity], I've seen what the occupational and safety laws are like, you will be facing a three million dollar fine if you put your people in an unsafe workplace". And he said "that's absolutely correct", and I said "well that's your call". Cause it's extremely powerful legislation, I mean we'd been told exactly what we were up for as [job redacted], because essentially, we were ultimately responsible for the working conditions of the [workplace redacted] staff. So and that made a lot of sense to me when the final document [that detailed the police operation to break up the protest camp] was passed to the Minister which said "we can expect it's going to cost ten million dollars in the first week, and there will be significant injuries and probably fatalities, some of which might be police". And maybe it's my imagination but I couldn't help thinking that the workplace and safety people would have had a bit of input on that whole issue!

In May of 2014, the NSW minister for resources suspended the PEL for Metgasco 'on the grounds that it did not fulfil a condition of its exploration license, namely to undertake genuine and effective consultation with the community as required' (Government of NSW, 2014c, p. 1). Participants iterated that this decision was considered a win for activists, and the Bentley camp was dismantled without police intervention (BruceNR, DianaNR, RalphNR). Shortly after, the campaign against unconventional gas in the Northern Rivers ended, yet the movement there sparked a now nationally recognised continuing resistance campaign against coal and gas mining; spearheaded by the Lock the Gate Alliance (Lock The Gate Alliance, 2014a, 2017a, 2019a, 2019c).

Networking, spaces of activism, and camaraderie.

The accounts of activism in the Northern Rivers described above, presents a particular set of findings that are important to the later discussion chapters. My participants regularly described reasons why they thought activism was so prevalent and effective there, these iterations are important to frame the perspectives of activism for the discussion later; as described in the following:

> In this place, in this region, we have many people here who've protested over the years for different environmental and social causes. And then you add up how many hours each of them had spent in their twenty or thirty years of their protesting career, we have millions of hours of protesting experience in this region! *Millions of hours* of protesting experience! And that millions of hours includes an understanding of you know, if you talk to the veterans, it's an understanding of the imagery and it's a commitment a dedication to peaceful protest, and to creative protest, like a lot of it here [in the Northern Rivers] is about that to be fun! (SharonNR).

Importantly here, SharonNR is drawing her attention to the histories of place, and the histories of extensive activism that has taken place in the Northern

Rivers (Bible, 2018; Kia & Ricketts, 2018). linking with this, is the sense of belonging and camaraderie found in activist spaces in the Northern Rivers, as articulated by VeraNR:

> So, over a period of time, we were all going down two or three times a week to Glenugie, and that's when I slept in a tent for the very first time in my life *laughs* but I mean I wouldn't have missed any of it, it was all such an adventure, so much camaraderie, it was amazing!

A sense of duty, or responsibility can drive activist decision making (Alexis & Rich, 2020; Corry & Riener, 2021; Ricketts, 2012). Participants spoke of their frustration with Government approvals, but usually, the decisions to engage with activism stemmed from participant feelings of wanting to do the right thing. DianaNR explains her views on this point here:

> When people look back on their involvement in a social movement, they generally regard it as the most alive and vital experience of their lives. And there's a huge amount of plusses from being involved in a social movement, and it's important to remember what those plusses are and not to get bogged down in reflecting on the glass half empty, because the plusses are incredible camaraderie, incredible generosity, and altruism is liberated in social movements, and yeah so, you know, those stories of sad stories, will ramify through a system and cascade through a system. And so, systems are sensitive to initial conditions, it's part of the nature of complex systems, the sensitivity to initial conditions, so we have to be really careful what stories we generate and share through the system.

Particularly of note in the Northern Rivers, was the diversity of the different types of activist campaigning (see Ricketts, 2012). RalphNR articulates:

> Yeah, I mean you know, we ran a corporate campaign, we ran a community campaign, we ran a legal campaign, we ran a media campaign, and we ran a non violent direct action campaign, and all those elements contributed. And we were in different ways I mean I think the community campaign was by far the most important.

The Northern Rivers Case Study Summary and Conclusion

I found that in the Northern Rivers the place histories and the actors in place with lengthy histories of activism, managed to create networks and spaces of activism that drew together anti mining sentiment and focused actions against the industry and the State. Citizens who were at early environmental movement activities in the Northern Rivers such as the Aquarius Festival and the Terania Creek Blockades described at the top of this chapter were still embedded in the places of struggle described throughout this chapter. It would seem then, that local citizens, with lengthy experience of the histories of the Northern Rivers, were able to capitalise on past social and environmental activism.

A unique finding lies in the debunked notion that the Northern Rivers is sometimes considered a largely progressive environmentally and socially conscious region (DianaNR). Through my interviews, participants informed me that there are known pockets of progressive communities there, and there is a general *feeling* of environmental and socially conscious community. Other places there such as Kyogle, Casino, and more out of town (from Lismore) communities can be more akin to the rural farming communities found elsewhere in Australia.

For activism of the scale described above to take not only a hold in the region, but be met with a smaller scale of backlash compared to other rural regions like the Gloucester Valley case location is a striking and significant finding. I posit that in the Northern Rivers, the overarching refusal of many citizens, once on board with regional activism (active or supportive), to reject State government decisions to embed unconventional gas in the region oriented the

general community toward siding with activists. The seemingly less frequency and severity[22] of backlash indicates that those citizens that were indifferent or not concerned with the industry, were not siding with the *jobs blackmail* rhetoric described in the Gloucester Valley case, nor did divide and conquer feature in the discussions I had with my Northern Rivers participants.

What was described by my Northern Rivers participants   which also emerged in the Gloucester Valley interviews   is participants feeling of betrayal by the State in failing to protect communities and the environment. Different to the Gloucester Valley case, however, is what emerges from the histories of activism in the Northern Rivers region. In the Northern Rivers, there a very different configuring of community and very different landscapes of emotional geography compared to the Gloucester Valley case.

In the next chapter, I will bring the findings of both case locations together in a comparative analysis that will better interrogate the differences in each case, and ultimately explore the first research foci *why have activist movements against controversial extractive industries, under similar contexts and structures, executed strategies in different ways?* From there, the findings of Chapter Six will inform additional research discussions in Chapter Seven where I present the interrogation of the second and third research foci.

[22] This assumption is based on the participant views given to me for this study, and may or may not be an accurate representation of activism backlash. What is important, is that participants made decisions based on their perceptions of backlash, and other factors, real or otherwise.

Chapter Six

Research Focus: One

Why have activist movements against controversial extractive industries, under similar contexts and structures, executed strategies in different ways?

Introduction

And we all cut out teeth on that [early campaigning at Terania Creek] just learning to never give up, but also learning how to take joy in what you are doing because it's so demoralising and so depressing and you are constantly reading about environmental issues, [it] can grind you down. So, we had to learn how to be joyful amidst it.

RhondaNR, at interview (2016)

The aim of this chapter is to compare and contrast the findings from the two case locations. This chapter is the primary contribution this thesis makes. This comparative analysis interrogates the first research focus: *Why have activist movements against controversial extractive industries, under similar contexts and structures, executed strategies in different ways?* My aim in this chapter is to link conclusions and findings between each case location to explore variance in the emotional drivers of decision making, and explore the reasons *why* two communities engaged in different kinds of strategy to protect their treasured places.

Prior to the discussion on activism approaches in each case location, there is a brief section that outlines the role of the State and citizen perceptions of accessibility to decision making and governance structures. I include this discussion on the State and structures here as it links both sets of interviews where citizens in both locations discussed general feelings of mistrust and a sense of abandonment by the State. This is opposed to these views being separate in each case location, as there are a lot of overlaps and I thought it best to have this section at the top of this chapter rather than in each case chapter.

It is not my aim to fully explore and interrogate structures of parliament and accessibility of citizens to decision making spaces and processes. Rather, my

aim here is to explore and understand the *perceptions* of structure and agency that stemmed from my data, and from my participants' thoughts and attitudes toward the role of the State. This thesis is not necessarily one that explores the role of the State, rather it explores participants' feelings and perceptions on this issue. These perceptions, in my opinion, shaped peoples understanding and trust of political processes and failures in those arenas, and set up attitudes around accessibility to decision making procedures and other mechanisms inherent to the approvals processes of mining operations. This is a key point to acknowledge at this turning point in the thesis. The following discussion is based on participant perceptions, as what someone 'thinks', real or perceived, drives their decision making.

This chapter is divided into two parts. Part One will present participant opinions and perceptions of the role of the State and the decision making processes that come together to approve mining operations. In Part Two, I break the comparative analysis into four overarching *elements* that capture the variance from each case location. These thematic elements relate to: place histories, general community attitudes to mining and activism, place based actors with histories of strategy, and pre existing emotional impacts of place based mining, or lack thereof.

My use of the emotional political ecology of *place* here is deliberate and links back to my judicious use of *community* as explained in Chapter Three. To reiterate, for this thesis place is used when describing those *spaces* participants embodied their emotions as activists, the threatened, those that struggled against the State. Community is used to describe the networks of people, the linkages between individuals, the *social fabric* that exists *in* a place. Per explanation in Chapter Three, I do not use these terms as interchangeable, so they must be used and understood as different elements to the study.

The elements that are discussed in the following sections are similar in that they each focus on histories of a place, however, there are key differences in each that focuses on a specific detail that is important to highlight here. The first element explores place in a general way, the second focuses in on *citizen attitudes* towards place based mining, the third focuses in on *activists* in place with experience in activist movements, and the fourth specifically focuses in on place *histories of mining*. Each element therefore, has a particular nuanced detail, making each unique, however, when combined all contribute to a better understanding of place and community in relation to the case study foci; in particular, those understandings of places that are under perceived threat from mining activities.

To clarify a point, even though activists in each community concentrated attention on particular resistance actions, this does not mean those actions were used exclusively from other strategies. To explain, Ricketts (2012) catalogues the various types of activist strategies and techniques: community awareness, networking, internal communications, media, digital activism, political, corporate, direct action, legal, fund raising, research, economic, and international activism. From discussions I had with participants in both locations, all the above strategies were engaged in the Gloucester Valley *and* the Northern Rivers[23] to some extent. Each community, however, focused attention on strategies listed here and this is the core investigation in this chapter; the varied *emphasis* of strategy in each location.

Generally, this chapter will interweave a community voice through the use of long quotes, as discussed in Chapter One. To reiterate, this method provides a voice to some individuals and groups in rural communities who can be

[23] International activism emerges from the eventual expansion of the Knitting Nannas initially from the Northern Rivers, whose strategy and ethos spread throughout Australia, and internationally to the United Kingdom and the United States of America (LindaNR).

overlooked by mainstream discourse, voices that I find can be overlooked or silenced within the structures of struggle against the State. The long quotes here contain valuable information and insights to the discussions and should not be considered secondary information, rather they should be read in detail to understand participant opinions. I offer explanation and guidance through my narrative, and more focused explanation of long quotes when necessary.

There may be some additional or new material here that is presented for the first time, that was not originally presented in the case study chapters. I do this deliberately to avoid additional repetition of some content, also, this new content is best presented here as it is used as direct comparisons between the two case study locations. I will also caveat that in Part Two, the order of the elements that influenced activist strategy is not an indicator of their importance or level of influence. The elements are inherently interrelated and vary in each community. Essentially, each element contributes towards my understanding of why activism was different in each case location.

Chapter Six: Part One

Structure and Agency—the Role of the State in Practice

Through the discussions with my participants, I discovered that many believed that the structures of decision making about mining near rural communities seem to be premised on a legislative system at least in NSW that bares a very abstract relationship to place, and erases the complexities and differences of specific places; it seemed that citizens considered resource decision making to be like a *one size fits all* approach. It could be said then, that activists and other concerned citizens local to mining operations, consider the project specific investigation of mining assessment is left largely to the Environmental Impact Assessment process. Research tells us that these EIA processes contain numerous barriers to effective 'case by case' management and meaningful engagement of citizens to express concerns (O'Faircheallaigh, 2010); see also Chapter Two.

In my case locations, participants provided some description of community engagement, however, research participants informed me that engagement was usually driven by the representatives of government or resource proponents (JeromeGV, LauraGV, OliverGV). Whilst some community input was scoped in each location through these EIA processes, most participants informed me they felt the meetings were tokenistic, overly structured, late, and controlled. As described in the following quotes:

> … we had that meeting at Lismore Hall … it was a mid week meeting, it was only a couple of days' notice, and I think they did that on purpose (ArthurNR).
>
> You may have heard of the city hall meeting where the minister came to tell Lismore about gas … and he basically said

> "I'm here to listen to you, but let me tell you this, you are getting gas" (RalphNR).
>
> … the council then organised a more formal meeting at which the proponents were invited to speak. The audience could come but they couldn't ask questions, they weren't allowed to interrupt, they could just sit and observe and blah blah blah (OliverGV).

The above quotes indicate that participants believed that the proponent and the government were driving short timelines and structured community consultation, reducing the scope and benefit of public participation in EIA processes; a regular critique of EIA shortfalls (O'Faircheallaigh, 2010). It would seem that participants understood the shortfalls of EIA processes, and as a result they knew they were being side lined and were left with feelings of abandonment with regards to the real and present threats they were experiencing (BruceNR; RhondaNR; DianaNR; LauraGV; EdwardGV). These feelings of proponent driven consultation is reflected in the following iteration from EdwardGV:

> AGL were very aggressive, we had a public meeting here and I counted eighteen coppers[24], somebody said there was twenty two … We had the local bloke [local police officer] standing around looking very nervous we had some *riot squad* guys here, tactical response! … and we had superintendents, really heavy duty. Now for a country town like Gloucester, I take that as a gross insult. I mean it really was a gross insult. There was just no need for that. And every meeting that AGL has been at, there has been a police presence. Even when they announced they were pulling out; the local copper was standing at the back.

The decisions to proceed with mining operations in each location, therefore, seemed to be based on what was perceived by participants as EIA processes

[24] 'Coppers', also 'cop' singular, and 'cops' plural: colloquial Australian terms for the police.

that were proponent driven, started after the announcement of a project, and on short time frames. My point is reflected in the overarching case study findings that link participant iterations of processes of decision making being tokenistic and deliberately exclusive of meaningful public engagement; including the order in which decisions and consultation happened in my case locations. Further, participants experience with their views of the presence of excessive police at community consultations foreshadowed the oppression and aggressive handling of resistance activities that were to come afterwards; as reflected in EdwardGV's quote earlier.

Participant perceptions above link to theoretical understandings: the structures of governance surrounding mining projects, therefore, seem to be organised in a way that is not responsive to places, communities, nor individuals (O'Faircheallaigh, 2010). And, resource policies and decisions relating to the approvals of mining projects are determined by Federal and State tiers of Government (Connor, 2016), that again, seem to have little to no connection to places of minerals extraction. My study and findings, therefore, support the argument that resource and mining decisions are, therefore, made *away* from where the harm is happening, which links to the second research focus discussed in Part One of the next chapter.

I argue then, that the *EIA processes* are set by the State which is set to gain financially from resource extraction seem to be highly prescribed and overtly generalised by being abstracted from places of extraction. My argument here is based on the first hand experiences of my participants, who believed that resource decisions have were made prior to project announcements, included late stage EIA processes that were proponent driven, and on short timelines. They also allowed me to understand that community consultation processes were tokenistic and controlled. All of these understandings are supported by past literature and case studies on social movement decision making (see

Alexis & Rich, 2020; Corry & Reiner, 2021; Eesley, et al., 2016; Ricketts, 2012; Zanbar & Ellison, 2019).

The result in each case location was mistrust in State and Federal governance structures as described through participant references below and is underscored by the drop in support of political parties that have had strong histories of holding seats of parliament for each case location (LauraGV; DianaNR). For example, the 2015 NSW election results for the Gloucester region saw a 15% swing away from the Nationals party, although they were still able to hold onto power in that electorate, this is much higher than the general state wide swing away of 9% (Minchin, 2015); I will discuss this further in the following section. Many of my participants, however, shared their views of perceived government collusion, which I find underpinned sentiment to engage in resistance strategies in both case locations. I present these sentiments in the next section.

Perceived collusion and loss of faith in the political system

The legislation governing the unconventional gas industry particularly the Petroleum Onshore Act 1994 (NSW) allowed for exploration wells to be drilled close to rural communities and in environmentally and agriculturally significant areas; as I have explained in case study chapters Four and Five. During the course of struggles for people in my case locations, I was informed that that many concerned citizens and activists familiarised themselves with legislation that governed resource extraction.

During the timeline of these struggles, then NSW Premier Michael 'Mike' Baird, introduced amendments to the Crimes Act 1900 (Government of NSW, 2018b) to include *"gas"* into the description of a mine site, and increased possible jail time for those found interfering with the operation of a mine including trespassing to seven years (see section 201 of the Act, Government

of NSW, 2018a). I argue then, that the Acts that frame minerals extraction, including the Crimes Act 1900, and amendments to them, facilitated the rollout of exploration phase drilling, whilst at the same time making it difficult, or at least overtly risky, for concerned citizens to protest against unwanted mining projects.

Participants informed me that they believed that the actions of the State restricting the ability to protest, and increasing fines and imprisonment periods, continued to fracture relations between concerned citizens and the State in both case locations (RhondaNR; DianaNR; LauraGV; OliverGV). It was perceived by some, that State legislation did little to protect communities against close placement of the unconventional gas industry. Citizens also described their mistrust in decision making, as it was known that financial benefits from resource sales to international markets brought to the State via tax revenue. These understandings set up a perceived collusion between the State and resources companies; also leading to a community level perception of procedural and distributive injustice (LindaNR; LauraGV; ClarkGV).

The situation regarding changes to laws to prevent activism left a participant to reflect and iterate: 'At Terania Creek … there were no trespass laws … we could just go anywhere, stop anything, there was nothing they could do about it … just like the protest laws are being tightened, so it's getting harder and harder' (RhondaNR). The participant told me that 'there were no trespass laws', and it is important to note that there may or may not have been laws regarding trespass at the Terania Creek protests I do not attempt to present participant iterations as facts however, regardless, the participants perception is that there were none, and this now influences RhondaNR's understanding of *contemporary* trespass laws. What is interesting here, regardless, is that based on Rhonda's iterations of 'it's getting harder and

harder', there is a perceived shift in governance of trespassing laws since the early 1970s and now.

Participants indicated that there was increasing awareness of what they termed '*the revolving door*' (Carter & Morgan, 2018; LauraGV) that they believe exists between the Government and resources industries. That analogy, and other sentiment about the distaste with official behaviour featured during discussions, further underscoring the emotions that stirred amongst my participants when they believed collusive behaviour was subjecting them to unnecessary harms: KaraNR talks of the 'revolving door' between government and resource industries here:

> When you see the revolving door, how many Liberal Nationals are now on cushy jobs, and there was something on Facebook last night, I think four Liberals who got voted out at the last election, have now been given cushy jobs in some industry.

Further, here, EmilyNR talks about specific politicians that have links with industry. Underscoring the point that concerned citizens were aware of the movement of politicians into the fossil fuels industries:

> You only have to look at Ian MacDonald, who's he working for now? the fossil fuel industry! I think its petroleum I can't remember their acronym, but he's gone to work for a major major fossil fuel lobbying board. He's on the board now! This is Ian MacDonald, who had been chair of the National Party, but you just have to look at who the National Party people have supported, and oh I'm trying to think of John's name, he was the previous chair of the National Party. He is Barnaby's[25] mentor, and helped him move into the New England seat, he's on a *gas* board but he also advised and was to consider to buying property. So, the property he bought nobody could understand why he was interested in buying in that scrubby area, well that scrubby area sits over a PEL. So right next to a PEL, not necessarily right on top of it, but it joins it. Now if

[25] Barnaby Joyce—at the time of data collection, Barnaby Joyce was the leader of the federal Nationals Party.

> your property that you purchase in scrubby land joins a PEL, chances are that PEL's going to be expanded. So, it's just things like this that are just you know! Ian MacDonald, the legislation says you can't go to work for a lobbyist for eighteen months, well he was twelve months or thirteen months or something like that, he didn't do his full term. In Canada, it's three years! And the US has that revolving door, so it's things like that, you know!?

A NSW state election resulted in Thomas George, a conservative Liberal National Party (LNP) member a party known to look favourably on resources sectors and the continuation of fossil fuel energies elected into the NSW State Seat for Lismore. When Mr George supported gas exploration in the region, what emerged from this was a perceived collusion between *State* Government and resources proponents to advance the development of the unconventional gas industry in the state of New South Wales, in particular, in the Northern Rivers (MacKenzie, 2015). This election outcome kindled significant community suspicion and damaging citizen relationships with the State. On this, KaraNR and RalphNR had the following to contribute:

> Yeah, and why aren't they saying “no” [to mining proposals], it's the same with how many perks they [politicians] get still, after they've stepped down from the[ir] position, it's a load of crap and … people are getting more and more aware of it. And that's the other funny side to the story, cause in Casino, that's where Metgasco's head office was, and when Metgasco was in town the then deputy Mayor, Stuart George [son of the above mentioned State Government member for the region], got offered a job with Metgasco as their front salesman! And he’s such I don’t know if I can say it on there *points at interview voice recorder* (KaraNR). You can if you want, you can say whatever you want (Mark). He’s such a dick! … and we were all like “conflict of interest?!”, how the hell does it happen? And I was furious, and I was at council going “how can deputy mayor be deputy mayor and he's working for Metgasco?” So luckily, he had to step down from deputy mayor and I would have taken it further if council hadn't have taken him out, I was going to take it further, I don't know where it would have

> gone. His dad is in politics, his dad is the State Member! (KaraNR).

> … and Metgasco did the classic thing, they employed the local members son as their major representative in the local area, cause he's a 'good bloke'. Buys everybody beers, and they took dozens and dozens of leaders out to lunch and fill them with grog and food and so forth, and bought their way in. So that was their idea of how they got the community on side (RalphNR).

In relation to the conflict of interests outlined above, research participants were expressive of their thoughts on the way economics seemed to be influencing decision making for the mining industry (see Chen & Randall, 2013; Marcos Martinez et al., 2019, for related discussions). Indicating flaws in the system, and the undermining in their opinions of democracy, I draw on two participants that articulate this point:

> My personal view is we have corporate rule, and we have money rule. It's still the moneyed elite that control and influence outcomes and have the loudest voice, money still speaks! And in all of this I and unfortunately you say it glibly, follow the money! … . Like the police, they are doing their job because who pays their wages, they've got a mortgage they've got family, follow the money, they will answer "I do my job" and I rattle the cages in my job and I push the boundaries but at the end of the day I'm getting paid and there's a line that you go to, to only do so much. And you admire those people that quit their jobs, speak out, whistle blowers' etcetera, and throw away that money for integrity and principle and risk all that. But you've got to be in a pretty privileged situation to be able to do that (RayNR).

> But I've no doubt that our system is broken and a lot of it is to do with money and invested interest. And until we take that out of it, we have a less than perfect system, and really a corrupted system, but the saying goes, you know, "democracy is shit but it's the best thing we've got", and in one sense that's true. It's the best we've got at the moment. And what I hope to do is hopefully tack around the edges or work in small local

> ways to maybe get some small incremental outcomes as we go (RayNR).

Given the community feelings demonstrated above, and combined with decision making structures and processes that I argue are abstracted from place given the locations of decision making (Macquarie Street in Sydney in this case), it is important to recognise that both communities then sought to reinject their own voices into the decision making pathways of both cases. They did this differently, however, both broadly designed as resistance or social movements, and achieving a similar outcome. The Northern Rivers and the Gloucester Valley cases described herein both interrupted the rollout of fossil fuels industries in their home locations by slowing down the decision making processes and forcing decision makers to listen to community concerns; as described in the previous case study chapters. I posit, that much of this activism was triggered not only by known threats and harms caused by the mining industries under scrutiny here, but also fuelled by the mistrust and loss of faith in political processes as described above.

People in the Northern Rivers, however, constructed activist strategies *in* their community, through protests, community building, and drawing decision makers to them. In the Gloucester Valley they achieved a voice in the decision making processes by locating themselves in places of decision making *outside* of community locations.[26] Essentially, both communities positioned their voices/struggles in different places, but both achieved similar results. The following four elements are those that broadly encapsulate the variance of strategy in each case location, and how each community managed to be recognised in decision making processes of the State.

[26] A reminder that my discussion here relates to the *emphasis* of activism, noting that all other kinds of activism were happening at the same time to varying degrees. NVDA for example was happening within the Gloucester Valley, however the focus of attention by many was to take the struggle to the places of decision-making, as will be outlined further in the next chapter.

Chapter Six: Part Two

Activist Strategy, Variance, Place, and Emotions

Introduction

During discussions with participants, the Northern Rivers is *generally* described as being strongly socially and environmentally oriented, united, progressive, and engaged (DianaNR) a notion that received some rebuttal from my research participants, which will be explored later. Participants did voice, however, that *activists* and concerned anti mining folk in the Northern Rivers were strongly networked, informed, willing to act, and aware of social structures that provided support to activists (RalphNR; DianaNR).

Conversely, the Gloucester Valley was *generally* described as divided, influenced by State and proponent actors, conservative, and insular (OliverGV; JeromeGV; LauraGV). Outside of the general commentary of the overall community, however, activists there described their own networks as supportive, informed, and effective (OliverGV; LauraGV).

It is my understanding that activists in both locations were generally satisfied with the strategies they chose, and thought them effective. In comparing them I am not arguing for one approach over any others, but rather drawing attention to the factors that influenced activists' choices of tactics. Essentially, my aim is not to overly generalise, judge, or impugn activism decisions in either case location.

I discovered, in the Gloucester Valley, the emphasis of *particular kinds* of strategy were very different to those activities that were *emphasised* in the

Northern Rivers. It is this finding of *activism variance* that becomes the key point of discussion for this Chapter, and informs the first research focus. As previously mentioned earlier in this chapter, the variance this thesis uncovers can be expressed through four interrelated elements that relate to place, histories, and the emotional geographies found in each location. The elements discussed below also contribute to better understandings of place. I comment further on my contribution toward place understandings in Part Two of Chapter Seven.

Element one: place histories

My discussions with participants indicate that there is a considerably greater history of place based environmental and social activism in the Northern Rivers compared to the Gloucester Valley. This finding of variance in the *histories of activism* in each case location should not obfuscate the understanding that social and environmental activism had occurred to *some* degree in the Gloucester Valley in the past (OliverGV; HarveyGV; LauraGV). Participants in the Northern Rivers, however, spoke of the extensive social and environmental activism histories there (RalphNR; DianaNR.)

The activist histories of the Northern Rivers include large scale events such as the Aquarius Festival and the Terania Creek Blockades.[27] From these early events other movements found a niche in the region and it was explained to me that due to those earlier action, activists had witnessed the 'power of the people' (RhondaNR). There is a misconception, however, that the Northern Rivers is overall progressive. To reiterate from the case study chapter, this claim was largely refuted throughout my interviews, with DianaNR providing a concise summary:

[27] See Chapter Five, the Northern Rivers case study for a full review.

> People … say "well the Northern Rivers is always green" which is absolutely bullshit! It's a deeply conservative region. It has had … National Parties[28] [in] the State Government by massive majorities from time immemorial. It might have a few little pockets of green which Mullumbimby, Nimbin, and The Channon are some.

My understanding here, is that the histories of activism has not turned the whole of the Northern Rivers Region environmentally and socially aware and politically progressive. Many of my participants described the region as unremarkably typical of many others in conservative rural NSW locations. It would seem that the history of activism, however, steered by individuals with activism histories became the baseline of resistance that encouraged others to get involved. ClaraNR speaks about these histories here, as well as the 'bank of knowledge' that remained in the area since:

> The difference [in the Northern Rivers] is that we had the huge knowledge bank, because you know, we had Save Terania, [name redacted] had been involved in the North East Forest Alliance, and my role in that was giving workshops and so on. But NEFA[29] was a long turn, that ran many many campaigns and saved many forests in the area. So, we had this huge bank of knowledge … we trained activists! So, activists from all different campaigns would come and we'd have up to a hundred people for five days. We'd train them in various skills in running campaigns … and we had public speakers … people had been training themselves for a very long time. So, we had this incredible base of knowledge, and that was the difference. … there's this incredible build up of knowledge and an incredible capacity for strategising was the big difference of this campaign, our people already knew a whole lot of things.

Participants described The Gloucester Valley as being a largely conservative blue collar farming district (LauraGV; OliverGV), in many ways, similar to

[28] 'The party's basic philosophy is conservative' (The Nationals, 2019, para. 5).

[29] North East Forest Alliance

parts of the Northern Rivers (DianaNR). Some participants indicated that the general population in the Gloucester Valley can be 'insular' meaning that some sections of the population resist outside commentary, creating an echo chamber where individuals discuss jobs and employment without the correct or complete information (JeromeGV, LauraGV). On the account of these dialogues, I assume that participants perceived those large sections of the Gloucester Valley community believed what they were told by resource proponents and the Government (LauraGV; OliverGV; JeromeGV); setting up divisions in the town.

I argue then, that place histories factored greatly into the decision making of activist leaders in both locations. In the Northern Rivers, it would seem that strategists capitalised on the *green* histories of the place (RhondaNR; RalphNR; DianaNR), the Aquarius Festival, the Terania Creek Blockades, and the histories since, replete with environmental and social campaigning (RhondaNR; DianaNR). Whilst it has been articulated that these green histories are in pockets of the Northern Rivers, and the region therefore is not wholly progressive, those histories of greens movements for the protection of the environment and society remain in place by those that were there at the time, and still reside in the region some of whom I had the pleasure of interviewing for this project.

I surmise that the stories that are still told about those past campaigns in the Northern Rivers, those histories of place, became part of the foundational scaffolds of narratives between citizens of concerned communities *in* newly threatened places, and new contemporary activist movements were borne from discussions on activist histories. I also posit that because some people who were at the early activist movements still lived locally, and other activists with knowledge of *how* to build strategies had moved into the region, the narrative

of contemporary activism, then, seemed to be carried on a message of *it is ok to protest here, we have done this before, we can do it again*.

In the Gloucester Valley, I was informed that strategists were aware that to some of the community 'mining meant jobs, and that large scale visible activism whilst it did happen to some degree would have less traction than it did in the Northern Rivers' (JeromeGV). This lack of traction can be explained by further comparison of the two case locations.

In the Northern Rivers, historically, there has been some historical mining activities: as described in Chapter Five; to recap, gold, sand, and some coal operations from the mid 19 century to the early 20 century (Kemp, 2011; McQueen, 2020). Interestingly though, none of my research participants in the Northern Rivers spoke of this mining history. I assume that if my participants did not speak of these historical mining histories, then these mining operations did not steer activist decision making to a large degree, at least in my case. I do not refer here to the logging activities that were spoken about by participants, this is covered in more detail in Chapter Five in the Northern Rivers case study background chapter, and this did steer activist decision making, mainly because there were people involved in the anti logging campaigns that were present at contemporary mining protest activities against the gas industry.

To protest contemporary mining in the Northern Rivers, therefore, meant that participants were not necessarily putting at risk an existing industry that employed locals. Drilling in the region for Gas reserves was a new enterprise, and requires specialised training, my point is that participants were aware that employees for gas exploration sites were brought in from elsewhere (RonnieGV).

In the Gloucester Valley, however, coal mining had a twenty year history, employing enough of the local population to have that industry as part of the community economics and landscapes. It was already embedded *in place*. To

protest mining (coal or gas, it did not matter) in the Gloucester Valley, therefore, was seen by some to put jobs current and prospective (promised by government and proponents to sell new mining operation to the community) at risk. In the Gloucester Valley, I was informed, that coal in particular is an industry that regardless of the percentages of input to local employment and economics was 'part of the way of life' there (OliverGV).

To further support comparison on the *reasons* visible activism had more traction in the Northern Rivers than the Gloucester valley, I must explore backlash to activism as a measure of acceptance of resistance activities. I do this in the next element.

Element two: general community attitudes towards activism

In the Northern Rivers, activism histories had preconditioned the communities there for ongoing and contemporary social and environmental movements (RhondaNR; RalphNR). Lengthy histories beginning with the Terania Creek blockades (Bible, 2018) sparked numerous other place based campaigns to protect the region, and became a thread in the community weaving through places and spaces, as described from participants in the following:

> … in Australia we sit on the back of the similar movements that were happening here in the seventies, like everything, you know its our activism especially in the Northern Rivers is in the context of the history of the activism in this area. And what's been laid in the foundations and the knowledge base as well, it's already here (SharonNR).

In the above, SharonNR draws upon her own understanding that social movements have been a feature of environmental activism in the past, drawing particular attention to the Northern Rivers as a defining contextual history of the region (Bible, 2018). These histories of activism are also reflected by RhondaNR and MariNR in the following:

> … I think it's the same thing just got bigger [referring to the environmental movement at Terania Creek, and contemporary activism]. And a lot of it is hereditary too, because a lot of people who were at Terania Creek had kids who imbibed all this stuff like our kids [did], and just fought for it and feel really proud of what their parents did. So, you read a lot of stuff now with young people who say "I was bought up as a hippie and it was all very embarrassing eating all those mung beans". But they still have the values so they often come back to the area and fight on another issue like the gas or something else because they feel the values were there to start with, even if they didn't like the way their parents dressed *laughs* (RhondaNR).

> Well, we are the rainbow region, and we have a history from the Aquarius Festival, from people coming here for that culture, and living their dream in that culture. And I think that made it, that gave us the bones for our activism (MariNR).

On the points raised by participants above, Rickets (2012, p. 48) discusses activist histories in his volume, and iterates that in line with 'acquiring campaign experience' from a mature campaign or in context with the Northern Rivers case here, acquiring the lived experience of those people who have been placed based in the region for decades since the early NEFA campaigns leads to a collective 'knowledge base … [that] may exceed the corporate knowledge or institutional memory of the other stakeholders in government, authorities or corporations' (Rickets, 2012, p. 48). Experienced activists may understand that the structures of activism may indeed be very similar across campaigns, and indeed over time, so they capitalise on the histories of activism. I believe this learning was particularly influential in the Northern Rivers campaigning against unconventional gas development.

Representative of general community acceptance of activism, backlash was present in the Northern Rivers, but not severe as that which was experienced in the Gloucester Valley. Northern Rivers commentary on backlash is summarised in the following quotes:

> I mean at Bentley, it was on that main road, and the hoons going past late at night they'd all yell out “get a fucken’ job”, and I thought, I bet *you* haven't got a fucken’ job (RhondaNR).

> Some of the people from Keerrong had actually booked into that hotel, I think there were a couple of families with their children, they were all evicted because they all had these “don't frack with me” t shirts and “say no to coal seam gas” I mean they weren't holding up signs or anything they just had it on their t shirts, they had booked in for two nights but they were escorted out (VeraNR).

> Lismore itself was good, but as soon as we went to places where it [gas well drilling] was happening, so around Casino, Grafton had a little bit of trouble, yeah we had a lot of abuse in Casino, but it took us two years and this is the thing … after two years we stopped getting abuse and people were on our side (LindaNR).

> And I copped quite a bit cause being a one of the spokes people for the movement, it was my name that was in the paper, I ended up as the *role redacted* for the whole region. So, whenever a press release went out my name's on it or in it somewhere (BruceNR).

> Yeah, there were people who like when the Bentley Blockade was on, there were people who came out and harassed people, there were you know, while there were lots of toots of support you can tell the difference between a toot of support from people driving past on that road, and that *makes a long horn sound* you know, like a “fuck you” kind of toot. But obviously there are people who are going to do that stuff (DianaNR).

The stories told of backlash in the Gloucester Valley, however, were very different to those shared in the Northern Rivers. There was visible activism happening in the Gloucester Valley to some degree. There was a monthly march down the main street to garner attention to the resistance of coal and gas (Groundswell Gloucester, 2016, 2018a, 2021), while the Knitting Nanas had weekly sit ins at a location on the main street and elsewhere (as explained by

one of the Knitting Nannas, CassandraGV, at interview). It was expressed to me, however, that due to there being an embedded percentage of the regional population already employed in the mining sector prior to activism against coal and gas although only 4% (ABS, 2017) backlash toward the protestors was severe (LauraGV). In fact, it was the backlash that participants in the Gloucester Valley spoke about that turned this project from a *how* of effective activism, to a *why do communities do things differently*'; this point has already been revealed in the introduction of this thesis.

Note, *all* of my participants in the Gloucester Valley discussed backlash to some degree; *some* of which are provided in the following pages. I acknowledge that the following accounts from my participants are long, however, their words explain in many more ways, and far better than I could summarise or paraphrase, the reasons for not engaging in public actions and instead seeking alternative fora for activism. As a result, I feel that the following quotes are vital iterations of the emotional costs and indeed the perceived risks of visual activism in Gloucester, and each quote should be considered and understood as primary information that underpins the discussion that comes later. I am aware that some of these quotes appeared in earlier chapters; they are repeated here for emphasis, to give a strong voice to affected citizens, and to bring to the discussion chapter citizen opinions which are the core data this thesis examines:

> … she was driving home one night, and the car went something went wrong with the wheels of the car, and so she called the NRMA and when they came out, they said "we're not going to touch this, this looks like skulduggery" or words to that effect. So, they got the police out and they said "yeah, somebody has been tampering here". They could tell because everything was dirty and rusty but the bit that somebody had been tampering with had all been wiped clean, so somebody had loosened done something, I don't know loosened the wheel nuts. And then there was somebody else had said he

> was pretty sure somebody had loosened the wheel nuts on his car, this is somebody completely different (CassandraGV).

> There was a young man who wanted to support us, and he said, "I'm going to get together a bunch of people and we are going to have a concert". A fund raising concert. And we sort of tap danced around that a bit and said "well unless we control it, we can't really endorse it, but if you want to do fund raising and give us the money it will be welcome". And he did that, and he copped an enormous amount of stick for it. His car was sabotaged! They took the wheel nuts off his car and the wheel come off while he was going along … the police were involved, and the police came around and said to some of the key people including [says a name], "while feeling is running this high be very careful about things like that". … and they said "if you park your car on the street, check your car before you start it up". Seriously, this is true! (JeromeGV).

Both of the above quotes are integrations of vehicle tampering. Activists I spoke with believed these to be as a direct result of their resistance to mining in the region. Whether real or perceived, this legitimised fear associated with backlash, and I believe influenced the way these activists chose to engage with public activism, as will be described later. In the next quote Ronnie GV speaks of heavy handling of protestors by AGL security:

> … security come out onto the road, like off their private land, and started throwing people into the ground, ladies, everyone, just throwing them around, treating them like rag dolls … in the end four of them grabbed me and threw me into the ground and all of that sort of stuff. Lock the Gate representative jumped the gate at that time as well, came in and told them to stop, they were assaulting me. They then crash tackled him he ended up with blood pouring out of his head. … This is what the company played on, that they could keep a lot of people quiet purely for fear of being bullied by other members of the community. So that I'm sure that there was a hell of a lot of people against the gas, but who couldn't come out (RonnieGV).

> There was an incident, the protestors camp here in Gloucester, some young people with cameras purporting to be students doing research, filmed people at the camp, all quite relaxed, and two days later it was all over the Daily Telegraph[30]! They … sold the thing to the Daily Telegraph and you know, they took the Telly approach and it upset a lot of people (GuyGV).

In the above, GuyGV speaks of a breach of trust. In the following, SonjaGV speaks of the hate she experienced in the town after her involvement in activism. SonjaGV also iterates her understanding of how protesting can influence a persons reputation in the region:

> Yeah, copped a lot of hate. Hate was real man! I'm truly frightened of Rocky Hill[31], like, I'm frightened about it cause it's, you know, another year more of personalised hate, it's really fuckin' hard. … it shocked me that a little town like this can have such entrenched bullying. … I don't know if I can do the hate again, I really, yeah. It's intense, it's just intense *laughs*, it shouldn't be like that, you know. We don't get invited to parties any more, not that I want to go to parties, because every time you go out someone always corners you and abuses you. … I've lost it at some of my friends, because you know, fence sitter friends, "why can't you [protest]? I know you support us, why can't you stand up?" And a lot of them have been really honest and said "it comes down to my reputation, I don't want people to think badly of me". And it's like "woah, just rip up the fuckin' town in the process because you're worried about what people are going to think about you? You're not thinking about your kids and what kind of future you're going to leave them, you're worried about your own reputation?" It's pathetic! (SonjaGV).

Threats to protesters were made, iterations of police involvement indicate the severity of some cases. Interactions between pro and anti mining citizens were public displays in some cases; others were plights from members of

[30] An Australian Newscorp online and print News Publication (Newscorp Australia, 2019)

[31] Noting that this interview was conducted after AGL's withdrawal, however, some time before the Rocky Hill campaign ended.

conservative farming families who were against mining in the region, who felt powerless to act. In the following LauraGV speaks of her concerns on these issues:

> Like having the police call me and say "check your car, check your tyres, check your wheel nuts, got a full time detective on Facebook, you don't want to know what they are saying, but we are reading what they are saying, we don't like what they are saying" … I got a phone call after talking on the radio that "I shouldn't have done that", and "who was I to talk about the Chamber of Commerce". And I was having a cup of coffee with this particular person and when I got down there [a local café] I just got slammed and "we're not having coffee with you", and it got really hostile and angry in the coffee shop and the person that owned the coffee shop said to me afterwards "are you ok, that was terrible", and I was stunned and it was like this vitriolic "who do you think you are, how dare you think you can stop AGL, you weren't born here and just because", you know, "who do you think you are", and "if you write anything in the paper you have to put it through us". And I was like "what has gone wrong with you people? Like, how's it got to this? You are being so vindictive, like, can we talk about this?" "No!" and "you are nothing" and *this was the head of the Chamber of Commerce* *laughs*. And even the people that were running the coffee shop were like "that was appalling". … It was pointed out to me by a lady who rang me up in tears, and she was fourth generation farming family, and was saying "please don't stop talking about it, please keep doing what you are doing, I'm looking at losing my farm, and blah blah blah", and I said to her "look you know, I can't you are the local people, you've all got to start speaking out", and she said to me "you don't understand" and this is what lodges in my head, she said "the bullies in the CWA[32], are the same bullies from year ten at high school". I didn't get it at first and I said "what do you mean?" She was like in her sixties, and she said "the same people that keep me in my place in year ten are the same people running the CWA". … but I guess, to be really

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[32] The Country Women's Association of Australia. The 'CWAA advances the rights and equity of women, families and communities in Australia through advocacy and empowerment, especially for those living in regional, rural and remote Australia' (CWAA, 2017, para. 1). Colloquially pronounced as an abbreviation, using one A—CWA

honest, it's a bit naive as well that that doesn't go on all the time, but I've been a bit immune to the real life of Gloucester, the underbelly of the bullying … but the last two years I didn't expect people to be so terrible, and be so vicious.

Participants shared their experiences of what it was like to be in the visible protests in the street. Some activists were filmed, and later targeted, as described in the quotes below. These iterations are useful later to understand why some activists could not, or eventually stopped, participating in visible activism. The following articulate these concerns:

> … we had the marches through town too, every month we would have a walk through town, and again you'd walk through and some people would hurl abuse at you, and when the nanas are sitting in the meeting place, people would walk drive past and call us names, and it's was a difficult time, it was! But I think you have to stand up for what you think is right … And we had people come along and they would tip all these prawn shells all over the place, and we got called I mean, I was called a "fucking greenie" something or other, you know, actually in the club here, and it got very nasty on occasion (JenniferGV).

> … but that video[33] was seen and people in the town who were the haters, "oh she's a teacher in Gloucester, I'm going to report her to the education department" … so they were targeting people. And they were saying, "if you recognise people here that have business make sure you don't go to them". … so they were effectively saying anyone you recognise having business, make sure you protest against them or but worse was not stopping your business it was actually trying to bring their business down … Someone [states a name] got such a wrap over the knuckles that she quit her job, she just finished up early from her term because they pushed her with the education department! (AlfredGV).

[33] Video footage from AGL security camera sources showing protestors getting frustrated with security staff.

> She got hhh this woman rang her up and tore shreds off her. And said this is about her boss she said "I only work in the shop", She said "I'm coming in there, you can get rid of my lay by in the shop, I am going to tell everyone that I know never to shop in your shop again". And like full on! so aggressive with her. Because her boss had the [anti gas sign in the shop window] She was a mess this lady, from this happening to her. So that's the sort of thing that happens. So, shop keepers won't put signs in the window (JessicaGV).

When a national mental health organisation learned of the issues in the town, they sent a mobile unit to offer support. Two participants explained how pro mining interests set up a barrier between this service and citizens who needed assistance; in the quote following, these same participants articulate how they were targeted and followed when driving home, indicating how it was an attempt to intimidate them:

> So, the Beyond Blue bus was coming to Gloucester. So AGL heard that Beyond Blue was coming to Gloucester so they said, "oh, well we will promote that for you". So, they put out on their letter head that Beyond Blue was coming to Gloucester. So, we all went "why is AGL sponsoring the Beyond Blue bus? Why would that happen?" So, Groundswell got on to Beyond Blue, Beyond Blue went "Nu Hup! they are not sponsoring this, this has nothing to do with them, no, we are completely independent" told AGL to pull their heads in. So, the Beyond Blue bus came to Gloucester which was incredibly important at that time, as you say, there was an awful lot of mental illness going on. And so, because they weren't allowed to sponsor the bus, they got the Lions Club[34], which is full of Advance Gloucester members, to host a sausage sizzle out the front of the Beyond Blue bus, and [AGL employee, name redacted] in her AGL uniform out the front of the Beyond Blue bus So anyone from our side of the fence that went to get help had to walk through all the haters to get into the bus! (WilliamGV).

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[34] 'Lions Clubs International is the largest service club organization in the world (*sic.*)' … 'we are best known for saving sight, but we also feed the hungry, aid seniors and the disabled, care for the environment and so much more. Lions are a global service network of volunteers that make a difference in their local communities' (Lions Clubs International, ND, paras 1 & 3).

> There were people that broke down in their cars when they got there. They got the courage to go, pulled up, saw these people, and just broke down! I mean I cannot believe how *mean* that is (CourtneyGV).

> So, we're driving up the hill and I said "we're being followed" so I sped up, and they sped up, I said "yeah, no, we're being followed" so we went straight past [their house]. All the way to Barrington … I sped up over the hill and quickly turned around so they didn't see me, and then as I come back, we stood there and waved at them as they drove past again, and they were looking up at us, and it's like what the? they didn't *do* anything (WilliamGV). It was just intimidation (CourtneyGV). And we weren't the only ones, there was quite a few people commenting on being followed (WilliamGV).

One participant, LorraineGV, spoke of how her pro mining neighbour used gunshot fire to intimidate and terrorise her in her own home:

> Well see I bought my property off one of the local families who've got gas wells on their property, who are vocally supportive of it. Now the old guy, the father, haven't heard from him in donkeys' years but the son, he was about eighteen when I bought the place, and he didn't like the idea of me having some of his inheritance or something, he's a real nut job. So, he would do things, he's been doing this for twenty years shoot into my property! Ten o'clock at night, Saturday night, eight shots fired so loud I couldn't even get a direction! This was six months after I moved in. And he shot a rabbit under my clothes line which is four meters from my house! And I'm home alone at ten o'clock at night, I'm on the floor absolutely terrified I could barely speak on the phone to get the police because somebody was shooting at my house! (LorraineGV).

As a result of the backlash described above many concerned citizens did not want to be seen resisting the mining sector; this was a repetitive finding during discussions with my Gloucester Valley participants. Some even described the backlash as calculated: best described here by two participants in a joint interview:

> There were a lot of people who had trouble getting up the guts to come to a walk … we would meet at the park, walk up the street, and go back to the park. People were carrying signs, it was most effective when it was a completely silent walk, because then the heckling wouldn't work because we were walking completely silent. There were a lot of people that weren't able to come because they couldn't, and there were some people who I had heard about that were born here in Gloucester and they came along and they brought caps and dark glasses and jackets, and they were so afraid of being seen, said something about being ostracised, about some antisocial behaviour, and we were joking at first, but they were shaking and they had to leave early, they just couldn't do it. And I was thinking that must just go back through the childhood about being hassled in the playground and you're being told that they can't have a voice, and can't do things unless we let you, and it must have brought to the surface a lot of hidden grief and hidden fears that these people couldn't do it. And it was like, it's a simple walk down the street, that's all it was, that's all we asked them to do, walk down the street hold a sign! And it was hard, and it was even hard for us because you would be so prepared, kinda like you would be a bit tense and a bit frightened about what people were going to say (AlfredGV).

> I was there the first morning, we did a lock on, that sort of hit me about twelve months ago and I just collapsed into a wall because I realised I hadn't really processed it, and what I'd witnessed and stuff was just so against my belief system that it, it you know, it still gets to me. I think we live in a democracy where you are able to express and there are guidelines to how behave and you are treated in a certain situation and I just watched that all just pissed up against the wall basically. So, it did, it took me a while, months on, and I just kind of went I can't be involved anymore. I went to the second last walk or whatever, and I went "I'm not doing it", and I actually was just at the farmers market, and I was just shaking! It took me all my effort just to stay there whilst the walk went on around me. I was quite amazed at how it did affect me (DickGV).

It is my understanding that the backlash experienced by many of the participants in the Gloucester Valley was deeply emotional, and changed the

way they connected with others in the town and to their connections with place. The point here is underscored in the following, where participants openly discuss their shifting emotions that describe an evolving grief, one that both loved and hated a place and other people in it.

> Oh my god I hate this town now … I hate this town now, I kept going "I hate it!!" I love some new people but I hate the rest of the people that are in it, and that was just a shock, a shock to our system because we thought "this is great, we are going to live here forever …". Cause we've realised we were grieving; we hadn't realised that we were grieving for the loss of the Gloucester we thought we knew. And the town we bought into monetarily as well as emotionally … the love of the town had gone, and we might have to sell up and move! … It's just vitriolic, and it just completely just got us depressed, we had to go and get some counselling late last year which took some six months which was really good. As we didn't realise we were just in a heap, we had fallen in a heap, [says partners name] particularly he just wanted to shut down, didn't want to engage with anybody or anything, where as I was still trying to get involved with promoting what we were doing with the actions and going to the walks and, yeah just um, participating where I can. Where I felt safe! But every time I was [out and about], I felt exposed. Like every time you walked on the street you felt as though you were in the firing line, and there were people standing on the street muttering things and calling things out to you as you walked past and as you did stuff. People that owned businesses, and you know, you go "don't you realise that these people shop in your business, or they used to! and now they don't!" It really did change how we felt about the town, and still does (AlfredGV). Cause now we're quite jaded (DickGV). All the things we loved about the place sort of paled (AlfredGV). I mean things are better clearly now that AGL have said they are leaving, but I guess we're still in the process of going "are we staying or are we going?" I mean, tending more to we want to stay, but I guess we lost the, you know, the innocence and joy of moving to a new place (DickGV).

Another participant here speaks of her disappointment and betrayal that by standing up for her community, she was issued police charges that she deemed to be an act of intimidation:

> I'm classed now as a criminal. You know, I couldn't believe it when they gave me the court notice and I said "what have I done?" I said "I did what you told me to do, the bus couldn't go any further so I stood there and when they finished the scuffle I moved, what did I do wrong?" They wanted to intimidate me, they wanted to intimidate a mother! What sort of man does that? Not a man I want in government! I've lived with men all my life and never been intimidated, always been told "you do what you can do", you know, in years gone by women were not told that, but I grew up with men that told me, you know, "you can do what you want, be successful as you want, as well educated as you want", never intimidated, frightened, always protected. And the law enforcement that should protect me more than anyone, intimidated me. The government who should be there to protect me, intimidated me. Like I said, I'm disgusted (CynthiaGV).

The grief and disappointment described above is not an isolated participant emotion, it is carried though other voices from the Gloucester Valley, as well as the expression of other deeply emotional reactions including fear that influence changes in relationships between citizens; as shown in the following:

> … part of my grief is I just feel a little bit sad … that I don't feel that love for this town any more (LauraGV).

> … it means, basically, that you've got to be prepared to sacrifice friendships. I'm a god parent to one of the people in town's sons here, and I no longer associate with 'em, unfortunately, because of this … I've taught his sons, I coached his daughter … and he [the father] can barely contain himself when he is talking to me, barely! You can see the anger! "We've got to have jobs, we've got to have jobs", and there is refusal to talk about anything else! (EdwardGV).

> Yeah, copped a lot of hate. Hate was real man! I'm truly frightened of Rocky Hill, like, I'm frightened about it cause it's

> another years more personalised hate, it's really fuckin' hard! (SonjaGV).

I came to the conclusion after these Gloucester interviews, that interactions between pro and anti mining citizens in the Valley were shaping the perceptions of participants of place, and others, and this steered activist strategy given many felt threatened or at risk should they be seen resisting mining operations. Discussions with participants also suggested that the threats to individuals and groups led Groundswell Gloucester, and others, to focus on legal, corporate, and scientific activism that was essentially displaced from the local community and engaged with in places elsewhere this point features as an unexpected finding for this case study, and will be discussed at length in the next chapter as *spatial geographies of power*. I also believe activist decision making relates to the backlash from pro mining locals, and builds on the element of place based histories already discussed.

To summarise this second element: It is my understanding that in the Northern Rivers region there was *some* backlash against activism (DianaNR), however, other citizens were generally accepting of activist strategies used, including the prominent, visible, non violent direct action against unconventional gas (RalphNR; RhondaNR; DianaNR). In the Gloucester Valley, however, the activists there were met with *considerable* backlash from other people; intimidation, threats, and bullying were commonly described across *all* of my discussions with participants in the Gloucester Valley case study set.

From participants, it was described to me that the mining histories of the Gloucester Valley meant that those activists who had some experience, or were willing to ignite interest, were victimised, abused, defamed, bullied, assaulted, and generally were targeted by pro mining factions of the community (AlfredGV; LauraGV). I found that due to the backlash that were underpinned by the histories of place, and the experience of activists in the Gloucester Valley,

activities that could create the most impact was the focus of activist strategies; strategies that placed many activists away from the community in the places of parliament and decision making. For those activists that chose to engage in visible activism, they were subjected to vilification, abuse, and bullying.

In the Northern Rivers, however, activists found that large scale activism was met with some backlash (DianaNR), however, participants indicated that negative response was more manageable compared to the Gloucester Valley case. Therefore, in the Northern Rivers, NVDA and community actions became the emphasis of action there as I believe activists felt they had safety in numbers, as well as safe spaces and networks to support the community. In the Gloucester Valley, due to significant threats as outlined above and in Chapter Five, many participants steered away from NVDA and community activism, and focused instead on political, corporate, and legal strategies. Whilst there were still safe spaces and networks to support activists in the Gloucester Valley, visible activism occurring in the local area itself was, I believe, hampered by a pre conditioned community that was oriented already to extractive industries.

Element three: place-based actors

In the first element above, I discussed *place history*, and touched on the histories of actors that were place based in each community. Here, I develop further on place elements, and I will discuss place based actors and explain their roles in steering activism. In short, I believe that both communities have some actors in each place that have histories with environmental and social campaigning; based on conversations that I had with my participants in both locations. The Northern Rivers, however, given the place histories discussed above and extensive campaigning, had many more individuals with varying experiences and a wealth of expertise in generating social interest in a campaign and how to execute stages of strategy.

What is new to the discussion here is in the Gloucester Valley, the activists I spoke to there had relocated to the region from Sydney and other places to escape urban life and/or to move to a rural idyll. Many of these new locals stated that were professionals from a range of industries: lawyer, doctor, environmental scientist, blue collar farmer, politically oriented individuals, amongst many other industries and professions that were mentioned. From the discussions I had with some of my participants, and realising their professional backgrounds, I concluded that the activists in the Gloucester Valley were able to look at media releases, scientific documents, proponent reports, and Environmental Impact Statements, and assess professionally the context of such documents against their own data and investigations.

Using scientific geological data gathered from a range of source, LauraGV explained that, Groundswell Gloucester representatives eventually proved to an AGL CEO that the geology was not right for unconventional gas extraction in the region by rectifying a mistake made by initial exploratory phase assessment (see Groundswell Gloucester, 2014a). The document explains that initially the exploratory drilling company Lucas Molopo believed the valley to be a rift valley leaving the coal seam intact, therefore, making the gas reserves accessible and an attractive prospect. Groundswell Gloucester representatives, however, looked further into the geography of the region, proving otherwise. OswaldGV draws on the discrepancies between what was the reported geology, and what does exist in the Valley, adding some personal commentary on his opinions of industry understandings of the subsurface terrain in the region:

> Lucas got out, AGL got in, they were inept! They didn't understand the geology, they could have gone and got the definitive study on the area in nineteen ninety nine. I have a copy of that you can look at that later. The problems of the area’s geology were known, they [AGL] didn't know it. They came in with about the knowledge of a junior high school

> student. I can even recall their geologist referring to the area as a rift valley! It's not a rift valley, it's a folded valley with volcanic action. That's how raw they were! So, then they started to find the problems of the complex geology, that they would need three or four gas extraction points where they would normally only need one because of fractured geology, they can [only] extract over limited areas. And they started to find out that the gas would escape and move and migrate. And then the public opposition started as they started to move into people's properties. Anyway, to cut a long story short, eventually Andrew Vesey I think sent out from the States to head AGL, he was a fair bit smarter, he got AGL out … initially some of the anti gas people were very critical of him … that's not my opinion of him. My opinion of him was he was better informed and a bit more principled than what had been happening, and he was certainly smart enough to see that there was a lot of opposition. They were going to be discredited as a local gas company. Bear in mind [AGL is] not from China or India or somewhere sending it off shore. They've got to then handle the whole gas business here. He [Vesey] could see the damage that was going to happen, he could see the damage locally, and he could see that it was bad for business interests, and I think he had a sense of moral responsibility, and I think that's part of the reason that he took them [AGL] out.

Even with evidence I had access to the geological study OswaldGV showed me and the Groundswell Gloucester publication mentioned earlier indicated to me that the initial geological assessment from AGL seemed to be incorrect, and AGL may have also miscalculated other variables: well site flood risk, fracking fluid management, toxic sulphate reducing bacteria risk, air quality, and many other things (see again Groundswell Gloucester, 2014a, for specific scientific details)[35]. Participants explained that with this apparent incorrect information, they were still met with what they described as 'continuing power

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[35] In the quote, OswaldGV refers to a 1999 geological survey, then after the interview he showed me his copy and I discovered it to be a 1991 publication from the Geological Survey of NSW Department of Mineral Resources, see Roberts et al. (1991).

game struggles from Ministers and decision makers' (LauraGV). These power struggles seemed to fuel Gloucester Valley activist decisions to continue with political and corporate activism; highlighting why various actions were taken, as described by LauraGV below.

Before I present the quote below that illustrates the locations of power that the community activists knew about. I will draw attention to how LauraGV uses terms such as 'government lies' implying her deep mistrust in State structures and officials. Further, LauraGV specifically names 'Macquarie Street' as a place of decision making, and the AGL CEO's office as a place to negotiate information (the spatiality of power emerging in this discussion will be explored in more detail in the next chapter as Research Focus Two). Additionally, here, LauraGV also locates the *emotions of injustice* (see Schlosberg et al., 2018) in the placement of mining operations near communities which again re emerges later in the next chapter. Note, footnotes and square brackets here guide meaning and nuanced detail.

> We [Groundswell Gloucester activists] will go to the Advance Gloucester[36] meetings and Jock Laurie, the [then[37]] New South Wales Land and Water Commissioner, and I will say his name and his title, and he would stand there and spout AGL and Government lies! We would be going "hang on a minute that's not correct, this is the correct thing!" You've got David Gillespie, he's a nice enough bloke, we met with him over the AGL stuff, and he said "now look ladies", and showed us a map that was the Camden map of the Camden Cake Diagram[38], and we said to him "David with all due respect [The Gloucester Valley] looks nothing like that, *this* is what this

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[36] Advance Gloucester is a community organisation that aims to improve and promote the town. I was informed by my research participants that the majority of the members of Advance Gloucester are pro-mining individuals, business owners set to benefit from mining operations, and members of the local Chamber of Commerce (OliverGV; LauraGV).

[37] At the time of data collection—mid 2016.

[38] A term used to describe a layering of subterranean strata indicating rock and coal seams. The term indicates that the layers are not fractured, indicating optimal coal seam structure for gas extraction—see the stylised artists impression of a typical gas well, Figure 5, on page 102.

Valley looks like[39], plus three to four thousand old coal exploration bore holes that can erupt at any given time, which they have done in the past". And he just looked at us and said "well I don't know what you are talking about" we said "well if you are going to be a part of any decision making, especially as the water trigger[40] applies here, you need to know this stuff, you need to know that this is not going to be a goer, we've met with Andy Vecey, it's not a goer because scientifically they can't get the gas out, that's it, full stop". And he just went "oh well, um, well thank you for that information", and never got back to us. We met with Anthony Roberts[41] several times, gave him exactly the same stuff, and they still carried on with this game[42]. And that's what's really pushed me into doing the political stuff, they are pathetic down there in Macquarie Street[43], they all know that they are lying, they all know that the geography was never going to work, they all had the science from the work that Groundswell had done[44], exposing the risks, exposing the truth, and then the ESG[45] report, and the flooding reports, they all had that. But as soon as Andy Vecey hit the scene, Peter Martin from the Southern Highlands they are fighting a big coal mine down there rang me up he's an ex CEO of Rothschild's Bank, and he said to me "if you want some really strong advice, he's [Vecey] a new CEO, new kid on the block, get yourself in there". So, I emailed Andy Vecey! I rang the [AGL] company secretary, and said "I'd like to speak with Andrew Vecey" he said "I'll give you his email", and I emailed him and within five minutes he emailed me back, and he was in America, and it was midnight, "yes [says her name] would love to meet up". So, we went down there [AGL offices] with our team, with Phillip Pells, do you know Phillip Pells the

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[39] Rift valley rock strata with volcanic action as described by OswaldGV earlier.

[40] 'Water resources are a matter of environmental significance, in relation to coal seam gas and large coal mining development—usually referred to as the 'water trigger' under the *Environmental Protection and Biodiversity Conservation Act 1999* EPBC Act' (Government of Australia, 2020, para. 1. Italics in original).

[41] The then NSW Minister for Resources and Energy, and at the time of writing the incumbent NSW Minister for Counter Terrorism and Corrections.

[42] Implying that the Government knew that the coal seam was not right for the Gloucester Valley region, but regardless, kept pushing for the gas project to continue.

[43] The physical street address of the NSW State Government; also invoking a spatial geography.

[44] (Groundswell Gloucester, 2014a, 2015a).

[45] Environmental, Social, and Corporate Governance Report (Groundswell Gloucester, 2015b).

hydro geologist? We took him [Pells] with us and we just laid it all out and said "look, if you want the information, we will give it to you, we will give you everything". And he [Vecey] just sat there and he said "I need to look at all of this, and there will be a big clean out". Which he did! And then he shut down the gas division. And then I rang him up two months later and said "we have more information for you on drawdowns that the government is lying about, we have the information through our water experts". We went there [to AGL offices], gave it to him, and that was when we knew things were over. Well, we did kind of know before that because you could see he [Vecey] was furious, and walking into this mess. But I said to him "the tragedy of all of this is that you have got a community now driven apart, you've got people not trusting government at all because they [the Government] are basically stupid!" And I don't use that word lightly, I never call people stupid but the stupidity of the Government Departments and how they have dealt with all of this, and the lies and the cover ups, we've got all the documentation [says a man's name] has got so much stuff. But they [the Government] are still at it, the same people are sending stuff out through emails from the Department of Resources and Energy, the same people, the same compliance officer that we had to deal with that was appalling, the same deputy of the Department who is appalling, some of the meetings that we've had, unbelievable what's been said to us. So, you know, there is this whole layer of complexity of feelings for people because you've got the antagonism here from people who don't know any better. You've got the antagonism from people here that just want to make a dollar and don't give a *stuff* about the environment, or health, or long term consequences. And you've got those people here that are behaving the same way because they don't know how else to behave and if they step out of line they get caned by these same people. And then you've got people who have always been Liberal voters and have been shocked by all of this that don't believe in Government any more. There have been mental health concerns, people hospitalised! The Daily Telegraph[46] turned up and interviewed some absolutely gorgeous people that are part of Groundswell that are, you know, these are people that have moved from Sydney, conservative people that are now completely the opposite,

[46] An Australian Newscorp online and print News Publication (Newscorp Australia, 2019).

> who got *trashed* through the Daily Telegraph because their naivety to trust these reporters. It was really sad! And one of them ended up in hospital for three days with an anxiety related depression and amnesia attack. So, I mean there it is! Just soooo complex! So, people feel there's no one they can trust anymore and they certainly can't trust Government any more, and that wounds people, because they think that they are safe and tidy in Australia.

Much of the above quote supports findings this thesis discovers about the Gloucester Valley; the activists there had experience and information available to them that contradicted the publications coming from government and industry, and therefore some activists in the Valley, therefore, focused their attention on political campaigning. The experiences of place based actors that then steered decision making here in element three underscore the primary foci this thesis presents, and these findings will be discussed more in later sections. For now, I segue to the Northern Rivers discussions I had with participants there, to continue the discussion here on Element Three.

In the Northern Rivers, participants explained that whilst there were still political, corporate, and scientific strategies happening to some degree, the primary focus was community networking, large scale visible protesting, and non violent direct action (RalphNR; DianaNR). Also articulated in my discussions, the activists in the Northern Rivers had many years of experience campaigning locally, federally, and internationally, summarised here by SharonNR:

> Look at it this way, if you think of how many people are here who've protested over the years for different environmental and social causes, and then you added up how many hours each of them had spent in their twenty or thirty years of their protesting career, we have millions of hours of protesting experience in this region. Millions of hours of protesting experience! And that millions of hours, includes an understanding of … the imagery … it's a commitment, a

> dedication to peaceful protest and to creative protest, like a lot of it here is about that to be fun!

Emerging in this third element (place based actors), we can see how the experiences of people in place, resulting from others that have different past experiences citizens with histories of activism, or others with histories in science or government for instance has shaped the dialogues and actions of individuals in the different communities. We discover here, how different people in a place, who have been shaped by place histories, may then in turn shape activism or at least locate themselves in places where they feel they can have the most effect.

Experiences of place based actors also relates to backlash; in the Northern Rivers, whilst it was explained to me that there was some manageable backlash, organisers with activism experience soon created community networks that fostered safe spaces to participate in protest actions. In the Gloucester Valley, however, it would seem that backlash was severe, targeted, and raised genuine concerns for the safety of anti mining protestors, and organisers there still created some safer places to be involved, but these were out of the way, in homes and cafes, and focused on strategies that were not always visible from other community members.

Based on participant views, I posit for my case study at least, that actors who knew their community and demographics in the Northern Rivers understood the histories of place, and knew that NVDA and visible community protests and community building would have traction with the rest of the communities there, and therefore focused attention on those activities. In a similar way, but with different emphasis, actors in the Gloucester Valley who understood the community and the divided nature of mining histories, centred on having some visible activism for those that felt comfortable doing so, but also created places

where concerned citizens could gather and the strategies that became the focus were those that could be managed from homes, offices, or other meeting places.

As a result of the above findings, I find here how activists in the Gloucester Valley placed themselves in meetings with the CEO of AGL as well as people in political structures and focused attention on activism that aligns with corporate, political, and social media campaigning. In the Northern Rivers, activists took to the streets for large scale NVDA and protest movements, set up large scale blockades on drilling sites, and whilst doing so, created community networks that galvanised the movement there.

I found in my case, therefore, that based on the discussions I had with my participants, it would seem that their local places and the connections they have with place and others in them, shapes an individual's perceptions and understandings of their local spaces and environments. In this ilk then, I could also suggest that in my case study at least, place has shaped the perceptions and understandings of the threat to community that mining presented when resource operations began. Individuals that participated in my study seem to have been influenced by place, then in turn shape the activist actions in those places. I suggest then, that place, and understandings of place histories may scope and frame the people and actors within it and vice versa. It seems then, that place shapes or at least orients actors within it to those strategies that they believe are more likely to have the greatest traction or resistance against threat.

Element four: pre-existing impacts of regional mining

This element is closely linked to the first element of place histories. Element four, however, focuses specifically on *histories of mining and resources*. In this section I also explore the iterations of mining in place leading to backlash from the second element. Generally, findings here reveal that Gloucester Valley communities have had considerable impacts and influence from the coal

industry prior to the arrival of unconventional gas and new coal proposals (OliverGV; JeromeGV; LauraGV). There has been some influence of resource operations in the Northern Rivers logging, sand mining, as examples (Kemp, 2011; McQueen, 2020) however, participants there did not discuss natural resource operations as having the same influence on *contemporary* community attitudes towards long running mining operations.

All participants in the Gloucester Valley were asked to comment on their efforts to block unconventional gas in the region, however, most instead focused their stories on coal *and* gas impacts on self and the community. I found, therefore, that the two industries in the Gloucester Valley case are fused in their nuances when concerned citizens talk of threat, place protective actions, and how the mining industry has shaped the Gloucester community in recent decades. Through participant discussions, I learned that in the Gloucester Valley there was more than one mining threat, and this doubling up of threat seemed to increase the overall impacts the community was experiencing, and was expecting to increase with the announcement of new gas resource projects, and the Rocky Hill Coal Mine. The milieu of threat there and the discussions that arose from this amalgamation of mining operations and the tiering of priorities for concerned citizens is highlighted in the following quote from OliverGV:

> So, the focus primarily [early stages of activism] I guess was on coal. And as I said, methane gas was just jiggering along in the background and we didn't really understand it. And over a period of time and then the little company that came in to develop the resource sold it [the PEL] to AGL! … that's when it sort of elevated to a bigger plain, because AGL wasn't this dinky little company. AGL was a big retailer of energy and a venerable hundred year old company listed on the stock exchange. And then of course we started to learn more, we saw that it [unconventional gas] had been extensively developed in Queensland. And then information from the United States and that Gasland film came out and all of that. So, alarm bells started to ring and we had a number of public meetings

> hardly had any traction going really against the gas because there were still the people who … compared [it] to coal, "it's not too bad" and really most people and even my view was always I didn't have a scientific background, I couldn't say whether it was a good or a bad thing. But it wasn't up to this community to prove that it was *safe!* Or to prove it *wasn't* safe! It was up to the proponent and the Government to prove to this community to prove that it *was* safe, and if they couldn't do that, why risk farmland and water? It was just a no brainer to use an American saying. They *still* don't know, they never could! That was my position! So, we were all trying to be painted as a bunch of rat bags, but we weren't [I think the participant means here 'they were trying to paint us as rat bags, but we weren't']. Most of us simply had the cautious approach, we don't know what's going on here, we know about coal, we can see the impacts of coal, there's a big history of coal, but this is a new industry and you can't just come in here and take over and say "all right boys, don't worry, trust us we're a big AGL venerated company". So that was our position … you have to look at coal and coal seam gas together … you can't separate it.

The above quote also draws us to an important factor that seemed to steer activism in Gloucester, which was the longer history of coal in the region compared to the relatively new threat of gas mining. Participants explained to me that when the gas was announced, they were aware that links between the coal industry and pro mining citizens and businesses in the town made it difficult for people to protest; essentially, I understood it to be the case that these pre existing links to industry laid the groundwork for division in the community there (OliverGV; JeromeGV; LauraGV). My first research participant in the Gloucester Valley indicated strongly that an understanding of the community and the histories of mining and how that has shaped community attitudes is important when navigating the Gloucester Valley case study, OliverGV continues:

> It is certainly true that the community is divided, and you have to look at the community. The community is really the old

long term residents that are conservative just as an aside here, Gloucester is less than three hours from Sydney, it is one hour from Newcastle, it is on the coastal plain. I have never been to a more conservative place in Australia! I am *shocked* at how conservative it is here. There are people here who have never been to Sydney! And when you ask them why, "why would I go to Sydney? why would I need to go to Sydney" I mean it is so surprisingly insular. I'd expect to find that attitude out in the middle of the Northern Territory, not on the coastal plain of New South Wales. It is a surprisingly conservative community. … What we had from about the mid nineties is people like me, tree changers, educated people with a bit of money, a *laughs* broader view of the world, coming here because of what this [place] had to offer. Beautiful rural environment, it's a beautiful valley. You know, The Buckets[47] here, a nice community, there is a good art scene, there is a lot of really attractive things; so those people came in. In addition, there are people … here who are concerned about the environment, but they are sort of in the minority compared to [these] vast old timers [who] saw the timber industry fold, the dairying folded when there was all that rationalisation of the dairy industry so they have lost two of their fundamental industries here. So, they are very anti progress, anti Green, they blame the Greens for all of this. Anti non conservative government, and there was that backwardness. So, when Stratford [coal mine] opened, of course it's twenty kilometres away from here, most of them thought, "oh good, that'll bring some economic benefit to the town and we don't have to worry about it because it's not in our backyard". There were certainly local people who gained employment in the coal mines there's no doubt about that, but I think there are also people who came from the Hunter Valley and other places to get jobs here, but it did create economic benefit. But the negative of course is all the people who live in proximity of the mine down there, they were just left to hang out. And some of the most I know from knowing their personalities some of the most vocal proponents of the mine, and opponents of BGSPA[48], if the mine was in their [referring to the pro mining faction of the

[47] A geological feature of the Gloucester Valley easily seen from the town.

[48] Barrington, Gloucester, Stroud, Preservation Alliance. An early activist movement that was resisting coal development in the region prior to the formation of Groundswell Gloucester (HarveyGV)

> community] backyard, you'd hear them screaming all the way to Macquarie street! [It is] a big NIMBY issue there. But they dress it up in jobs. And as soon as people talk about jobs in a community like this, you know, you can't it's a bit like going to war, when the drums of war beat, and the trumpets sound, the voice of reason can't be heard in the community. Well it's a bit like that when you talk about jobs in a small rural community like that

In the above, OliverGV points towards to very important factors on Gloucester histories. Two of the primary industries of the region have failed, placing more emphasis on what is left tourism and agriculture, and mining; the latter having considerable impacts on the first two setting up conflicts between those that are in the mining sector, and those who are not. Further, OliverGV highlights the issue of blame, where pro industry citizens are claimed to blame environmentalists and the Greens for the shifts in industries in the region leading to loss of jobs; again, setting up division.

Emerging from this quote above, and others following, is that the already divided community at the onset of gas mining proposals meant concerned citizens needed to navigate resistance activities in a deeply divided place; steering activist strategy. In the following quotes, which I acknowledge are lengthy and numerous, very important issues are disucssed that all centre on various issues in the region that led to considerable division between sections of the community; as such I believe it useful to consider all of these opinions that underpin later discussion, and I introduce the various issues participants explore here:

On employment and discussing tensions between mining jobs and other industries:

> Yeah, so everything was pitched against the people who had the most to lose. Which was the people who lived in town. And of course, the other side [pro mining faction] knew that it was a divisive thing cause there were people who are or who were

> gainfully employed through the extractive industries and the promise of more coal mines and bigger coal mines meant in their minds … money! And they were promised a lot of blue sky things from the Gas [industry] as well. In the end that was the outrageous thing that they themselves AGL themselves admitted that there would only be *twelve* people long term employed. But that got buried and it got deleted off their website cause everyone was saying "oh it's jobs for Gloucester, unless you have this, this coal seam gas, Gloucester will go in a hole". And people kept saying "Gloucester is dying, Gloucester is" all the business, the business chamber was sprouting that Gloucester is dying. But the guy who owns the pub that you were talking about before, he was the one "oh without this we're going to go under". And he even as late as last year would take a photograph up the main street at four thirty, on a Thursday or Friday when all the cafe's shut at four o'clock, so before the crowds come in for the weekend, and he said, "so much for tourism saving in this town". And he works he owns a pub! And he has a hotel! And he's putting stuff on Facebook against tourism, and having a go at what the people were saying, that tourism is a strong industry, and if you have a strong sustainable industry it will help the town. So, there were so many people like him actively working against it and trying to pull us down every minute (AlfredGV).

On other industry failures, government and industry promises of widespread employment in mining, and a perception that industry representatives were deliberately trying to entrench divisions in the town:

> The way the dairy industry was basically made uneconomic in this valley, except for a few exceptions, was blamed on them, big business and government. … so, the background of that is that they see mining as being the saviour. They see the young people can't find jobs here, not that this is a particularly high unemployment area, but it is an issue. And the young people go away … for higher education and all of this kind of thing. And they want to see more local jobs. And the miners, whatever they are mining, always tell that story. It's all about jobs. "We're [the mining industry] going to come here we're going to provide jobs". And they bought it! … That essentially now set up the divide when it came to coal, they thought this

will be ok because it wasn't too close to town. Some local business got work out of it, some local people worked in it, not a lot, but some. And they were promised by AGL that there would be lots of local jobs and lots of local business, and we kept trying to say to them, "this is a lie! There will be hundreds of people employed doing the construction phase? Most of them will be imported, technical experts, that do drilling, that do pipe welding". You know, "how many people in Gloucester have got a high pressure pipe welding certificate, put your hand up?" There aren't any! … It's ten times harder to beat coal [compared to unconventional gas] because they have been doing it for decades! They [coal mines] are part of the furniture, part of the background. It's not something new that's just come in that people are thinking about, they have stopped thinking about it, they have turned off from it. It's a fixed part of life. It's part of the establishment. … and I believe that one of the games that was played behind the scenes was that AGL allowed people to think that if gas came in, not only would there be jobs in it, which there wasn't going to be, but because of the favour that they had from the State Government that it was going to be favoured over coal, so if they had a gas field it was going to keep the coal mine away from town. And that's just nonsense. But it's very easy for people like this land and water commissioner and a few others, to get in people's ear, and have these sorts of chats. They are particularly chosen for wearing the right clothes, speaking with the right accent, having the right background, that they can do that. They tried very very hard to split the [Gloucester Valley] community. They wanted to exacerbate the division as much as possible, and you will see through a lot of PR stuff, any time particularly on the Northern Rivers campaigned where the farmers and the younger activists were co operating, if there was any sign of any division between them, and likewise here, any sign of any division, APEA, the industry representative, would play that up to the maximum. They would have dearly loved to have separated us. Divide and conquer might have been invented by Niccolò Machiavelli, but its alive and well in the gas industry! Absolutely! (JeromeGV).

On industry setting up advantageous agreements with some business and community members:

> And basically, because this has been an age old procedure when you move in, you would vantage some people, you would set up contracts, you get either by basically agreeable business arrangements you get people who are on side! And that's a good thing. you create support in the community and those people are expected to support you and speak out for you. But basically, it's very small percentage of the total population (OswaldGV).

On the government and some community structures being pro mining, and apparently deliberately dividing the community:

> Now this community was railroaded a fair bit by the extractive industries but particularly AGL and I should have brought a pamphlet with me for the last election … yeah the last State election, David Gillespie, and in that is a photograph of a group of people with their hands in the air, and they are the people that are pro, very much pro gas pro coal, and there is another gentleman and they are members of Advance Gloucester, members of the Business Chamber and sitting to one side of the group is a chap in his work clothes and he works for AGL. Ian Shaw, you will probably pick the name up in conversation, and he was a direct conduit into the community in terms of driving a wedge of hatred (EdwardGV).

What the above quotes here, and the quotes in the Gloucester Valley case chapter may indicate, is that it seems anti industry activists perceived the division on resource mining in the Gloucester Valley to be stemming from pre existing links with coal in the region, and later by gas resource proponents. In the Gloucester Valley then, there is not only a history of mining in the region, my participants believe this mining activity has led to a history of division in the town. It seems that pro and anti mining sentiment has existed alongside mining activities for two decades prior to the announcement of unconventional gas. I conclude then, that these histories of mining and division seem to have impacted the way activists could resist new threat when it arrived that of unconventional gas.

Conversely, in the Northern Rivers, there was history of successes with anti resources campaigning, particularly the protection of forests against logging (see Chapter Five; see also Bible, 2018). When gas was announced for the Northern Rivers region, there was already a history of resistance there, and it would seem that these different histories provided a foundation for the unconventional gas campaign, and these histories then influenced how new activism was executed when Unconventional gas mining was announced for the region.

The different histories of mining, and the different histories of struggle and debate that exist in each case location seem to indicate that it is harder to resist new mining in places that already have mining operations. The Gloucester Valley has a longer history of mining, and mining discourse, where the Northern Rivers has some history with mining at a smaller scale, and history of resisting resource operations the NEFA campaigns to protect the regions forests, as example. Further, in the Northern Rivers there is sustained an embedded pocket or thread in that region of pro environment sentiment.

As a result of mining histories and divided sentiment in the Gloucester Valley, divide and conquer techniques seem to have had greater traction there, and that those participants believe were capitalised on by pre existing relationships between mining enterprise and local citizens. In the Northern Rivers, mining and industry have less traction as an employer there, so participants indicated that citizens there were more easily convinced that they could survive without new mining enterprise, where in the Gloucester Valley, many saw the abandonment of mining as loss of jobs, making anti mining sentiment there more difficult to express.

I find then, given this case study, the histories of mining and the acceptance and division of people toward mining in the Gloucester Valley is why decision makers there located the sites of struggle outside of community, or in homes

and café's away from locals and businesses that were pro mining. Whereas in the Northern Rivers, activists employed place based community networking and NVDA as there was much less attraction to mining enterprise there by the general population; people did not think they were losing jobs if the gas was stopped.

Chapter Six Conclusion

I close the discussion on the first research foci with a quote from a Northern Rivers participant who was heavily involved with activist strategies both there, and in other parts of the country. During interview, I noted that this participant had knowledge of activist strategy in different communities, so I asked, '… the way it [activism] unfolded down there [Gloucester Valley] and the way it unfolded up here [Northern Rivers] are two completely different volumes of an activist handbook. Do you have any idea really why it unfolded so differently?'

> Look, I don't have informed opinions, I know my assumption or my take on it was that it was a very different community. You could say it [Gloucester Valley] was a more conservative community, or it's more divided in the extremes potentially, or there's a smaller element of the radicals or the activists or those that are prepared to rock the boat. It's got a way smaller population, it's got an established history of mining in the area, so that brings employment and jobs, etcetera. [Compared to Metgasco] AGL was a different company with a different operation and strategy, they were much slicker in their operations, they are more powerful and established. I think at the end of the day, to me, there wasn't a critical mass of those activists that we saw up here [Northern Rivers], the corporate knowledge, the leftover knowledge from Terania Creek, the leftover element from the Aquarius Festival and the hippie Nimbin movement which was an affront to established authority and a 'fuck you' to society, essentially. There was a huge Indigenous element up here which brought that whole connection to country and the sacred to it which I think was powerful. And I think that's what differentiated it (RayNR).

Whilst I disagree that corporate campaigning was missing from the activist strategy in the Gloucester Valley the unplug from AGL campaign for instance, as mentioned in the Gloucester Valley case study chapter, was very

successful this quote here does align with many of the assumptions and findings I have found from my dataset; contextualised in this chapter as elements that steered strategy in each case location.

I find, therefore, that place histories matter, place attachments matter, the networks of social fabric that form those connections *between* activists inform collective understandings of threat. Through these spaces of activism, and discussions presented to me by participants, *in the places under threat*, I learned that all of these geographical place understandings influence decision making; as spaces affect and influence individuals and groups (Tonkiss, 2005).

Activist researchers recommend that a range of activities be invested in (Ricketts, 2012), as just one strategy alone may not be as successful (Ricketts, 2012; RalphNR). We find in the case study comparison presented above, that the kind of community, the histories of that community, and the acceptance of activism within the community, matter (RalphNR; DianaNR; JeromeGV; LauraGV), and the activist strategies put forward as suggestions to resist mining operations may or may not be engaged with as a result. It was evidenced via discussions and information I was presented, that decisions to engage or not engage in various activist strategy, did seem to pivot on place histories, and contemporary place discussions and events.

To conclude this chapter, I found that activism strategies seemed to be steered from place histories, place based actors, participant experience with activism prior to new threat, and pre existing mining influence. Ultimately, I believe emerging from this case, an understanding of the histories of place, the histories of actors, the histories that people, indeed communities, engage with *in* their treasured places, all seemed to steer decision making, and ultimately what kinds of activism participants considered to be most effective in each place.

Chapter Seven

Research Focus: Two

The Spatiality of Power

&

Research Focus: Three

Emotions in Relation to Place, Environmental Justice, and Political Ecology Conundrums

Introduction

The power of the establishment is actually what we're fighting, not so much the resource extraction companies because they are doing what they are allowed to do. It is the establishment that has been infiltrated, the bureaucracy that has been infiltrated … this insidious kind of infiltration and the revolving door where they [government ministers] then go and work for the mining companies … they [government officials and resource proponents] all talk to each other [about] how they can get around it and change the legislation. I mean it's corruption and collusion … I think eventually someone is going to write a book on this whole thing.

LauraGV, at interview (2016).

This chapter informs the exploration of the second and third research foci. Part One of this chapter will briefly present in the second project finding on *the spatiality of power*. Here I comment further on places were activists chose to engage with the State, police, and resource proponents. The ensuing discussion in Part One explores how the re/placement of sites of struggles seemed to have been shaped by the emotional geographies of resource conflict. This finding came late in the study, hence its brevity here. Future research pathways have been identified, and these are disucssed in Chapter Eight.

Part Two of this chapter relates to the theoretical constructs of this thesis. There, I will be engaging with conversations that lead to and include *emotional political ecologies*; a discussion relating to the theoretical constructs of the thesis. I will discuss the intersections of the three theories used for the theoretical framework. I will also make a brief contribution to conversations already happening in those three research arenas; particularly the burgeoning field of emotional political ecology.

Chapter Seven—Part One

Research Focus Two

The Spatiality of Power

Part One: Introduction

The values communities place at the centre of their transition planning processes may reveal much, not only about existing injustices and existing power structures, but also about how they wish things would be, and how things may be.

Dr Natalie Osborne (2014, p. 347)

In this section I present how participants offered insights into their chosen sites of struggle. The first part of this chapter primarily deals with two constructs, power, and place. Essentially, here, I specifically discuss power struggles in *chosen* places. I am aware that Part One of this chapter is brief, however, I still believe these spatial geographies of power findings are important, even though the realisation of this finding came very late in the data analysis and final stages of this project. Due to the brevity here, I do draw out additional research pathways on this finding later in Chapter Eight.

The spaces of struggle I discuss in the first part of this chapter are not necessarily aligned with physical borders, regional or township spatial mapping boundaries as examples; even though I do limit the project to the NSW State political boundary for reasons relating to State based legislation (see again the Methodology described in Chapter One). Rather, spatial power geographies here are location(s) or indeed space(s) where the State exerts influence through legislation; such as mine sites protected by legislation, and also the buildings where government decision making is made, as examples. Further, spatial geographies of power in the contexts of my case study relate to how activists seem to discursively frame sites of power, how they conceptualise it for themselves in ways that become protective, strategic, and in some cases overtly confronting.

The Spatiality of Power

Other than my own framing of the project to be within the State of NSW, the other physical features that set the spatiality of this project were drawn from participants at interview; these being their terms, Sydney, Northern Rivers Region and The Gloucester Valley; including townships and local names for places in these broader contexts, such as Lismore, The Channon, Nimbin, Duralie, Waukivory, The Buckets, as examples (all of these places are named by participants in the case study chapters). Other features that provide the settings for resource struggles are those places of decision making and/or struggle in the governance of natural resource extraction that participants named: AGL offices, Metgasco premises, mine sites or at least the boundaries of, in particular access gates to said sites government buildings state and local, as well as community streets, public spaces, homes, kitchen tables, cafés, community halls, and other locales where discussion happens, and decisions are made.

I acknowledge that participant engagement with protest actions in Sydney may link to the distance from each case location. The Northern Rivers is ~700km further north from Sydney than Gloucester; the difference equates to about a two hour drive to Sydney from Gloucester, and a 7 hour drive to Sydney from the Northern Rivers. I must acknowledge that some participants in the Northern Rivers may have been restricted on time or resources/funds to make that journey to be at Macquarie Street. This means that Gloucester activists had an easier commute to Sydney to engage politicians and decision makers than those in the Northern Rivers, which may account for some variance in the way activists in each location engaged with the State.

Conversely, I must, however, also note that *some* of the Northern Rivers participants were highly mobile. They did travel to other locations regionally, and in some cases, some significant travel was disclosed to me at interview. Further, the Northern Rivers campaign was largely supported by the Lock the Gate Alliance, a networked resistance group that did travel to Sydney on occasion to protest at parliament. The following discussion takes into account these considerations, and is based on the discussions I had with participants.

With the above stated, however, I found that the spatial geographies inherent to my study *moved*; they merged and divided, they were transient and have various scalar and temporal parameters. It is this movement and placement of struggle, debate, and power in decision making and influence that participants had on processes that I focus on in this section. In this study, sites of power were multiple and were shifting. The various *elements* of power described here and in previous chapters are, however, linked, as they are *engaged*, they are *entangled* in the messy struggles of resource extraction projects, resistance to said projects, and the need for concerned citizens to engage with the system to resist in the first place; indeed, for citizens to express their power in the processes of politics and decision making *in a space of their choosing* (Tonkiss, 2005).

When comparing the two case locations and the discussions I had with participants in each, I discovered two different approaches to sites of power struggles and resistance against the State and resource proponents. Tonkiss (2005, p. 60) states that '… power can be mapped around the spaces it occupies'. Whilst Tonkiss refers to the urban and city environments in that volume, I assume that in my case, this can be extrapolated to my rural township settings, mining sites, and in the difficult to access decision making spaces of government.

To explain the extrapolated context from Tonkiss' (2005) work to my own: In the Northern Rivers, it seemed to me that the activists predominantly engaged the struggle *in* their communities; in the Gloucester Valley case, the activists described an emphasis on locating their engagement with decision makers *outside* of their communities. What this may indicates is that activists for various reasons linked to emotional geographies, place histories, activist strategies, embedded knowledge in place, general community reaction to resistance, and indeed histories of mining in place *chose the sites of struggle* for treasured places against resource activities; indeed, they *chose the sites of struggle to express and engage with power*. Two quotes below, one from each case location, underscore the emphasis emerging from each place; footnotes guide emphasis:

From the Northern Rivers discussions:

> … we [activist leaders in the Northern Rivers] ran a corporate campaign, we ran a community campaign, we ran a legal campaign, we ran a media campaign, and we ran a non violent direct action campaign, and all those elements contributed … I think the community campaign[49] was by far the most important (RalphNR).

From the Gloucester Valley discussions:

> [LTG person] was saying "look it would be great to do that for the [Gloucester Valley] community, it would be great to get all these conversations going, but I'm not so sure now that this is [community activism] going to work in Gloucester". I said "I'm telling you it's not going to work in Gloucester … what we need is an exposing the risks document, so you [Groundswell Gloucester members] keep saying "these are the risks" but we need to actually put it in a format". And they came up with a brilliant document called 'Exposing the Risks'[50]. We then took that to government[51] and I said to the head of the EPA, we sat

[49] Illustrating the Northern Rivers campaigns focus on place-based community activism

[50] See Groundswell Gloucester (2014a)

[51] Illustrating Groundswell's emphasis on political activism.

> down with him, myself and [says 2 other names] and I put it down the table and I said "you are culpable!" And I use that word all that time, culpability, culpable "you are culpable if you do not take this into account when assessing AGL's coal seam gas project". [He said] "You can't say that to us!", I said "I just did, I want it on the record, you're culpable, we've given you this document to say scientifically this is not going to work, you know it!" (LauraGV).

The emphasis of the discussion I present here are the sites of struggle indicated in the quotes above, or the places where decision making power seems to be described, and where citizens chose to engage that power. I find that these locations may be chosen to some extent by collective actions. In the Northern Rivers case, the activists seemed to execute the majority of their strategy within their communities, essentially, they drew the State and police to their places. Activists in the Northern Rivers seemed to essentially drew attention to their plight, the damage to landscape and community, and the harms that industry will bring to the everyday *into* their region through open community engagement that was highly visible to others, and the media especially social media.

In the Gloucester case, the activists indicated that they primarily took scientific information, and iterations of the social and environmental impacts of coal and gas mining to the CEO of the gas company proponent, to the courts (located in Sydney), as well as to minister's departments of the NSW government (located in Macquarie Street, Sydney). I reiterate a point made earlier in this thesis, that some local NVDA protesting was happening in Gloucester, there were visible marches, the unplug from AGL online campaign, vigils and sit ins from the Knitting Nannas, and activism of that ilk.

The emphasis of action in the Gloucester case, however, explained to me by most participants at interview, however, was the work done by Groundswell Gloucester members, and some others, that took facts and information to

ministers and proponents, *in* those places of power and decision making. This *relocation of power and these chosen sites of struggle*, was a unique feature of the discussions I had with participants about activism relating to the Gloucester Valley case. Further discussion on these findings is explored in a Geoforum paper co authored by myself and my primary supervisor; see Bailey and Osborne (2020).

The difference in activism *emphasis* between the two case study locations indeed the different locations of protest would indicate that individuals and/or activist movements can create spaces of power of their choosing; linking again, back to the work of Tonkiss (2005). Further, it seems that the struggles against unwanted mining operations can occur in more than once place; each location seemingly being tailored, or at least possibly dependent on the individuals involved with resistance activities.

Drawing further on Tonkiss (2005), who explains that politics and social relations unfold in space. Here, we again discover further insight into the spaces that are created through politics and power. 'To think about politics and power is nearly always to invoke a set of spatial relations: from the surface of the body to the distribution of property…' (Tonkiss, 2005, p. 59); a correlation to what Ahmed describes with surfaces and interactions between bodies, places, and things and affective economies (Ahmed, 2004c).

Noting the interactions between the findings of Tonkiss and Ahmed here, I realise in my case study there is an entanglement of emotions that have steered decision making discussed in the previous chapter but more so here, these geographies have steered decision making around how citizens view space, power, and their interactions with them. In particular, the way that different emotional geographies in two separate case locations, have steered activists in each location to engage with spaces of power differently.

Part One: Summary and Conclusion

To summarise, my understanding is that activists in the Gloucester Valley realised that AGL had a retail arm, and also, the then CEO was willing to meet with them. As a result, Groundswell Gloucester representatives took their knowledge of the geology indeed many other things to places of decision making; not just to the CEO of AGL, but also to ministers in Macquarie Street that were setting the legislation and making approvals for gas extraction projects (OliverGV; JeromeGV; LauraGV). Whilst approaching the AGL CEO and government ministers with science, activists also took the plight of their community stating the damage that was already being done to these places of decision making, in particular again, the AGL CEO (LauraGV). By doing so, the activists took these knowledges, and located the place of their struggle outside of their community acknowledging again that there was some visible NVDA happening in town at the same time.

In the Northern Rivers, the activists seemed to capitalise on the lengthy place histories of environmental and social activism, and held on to those traditions to place the sites of struggle against the State *within* their communities, at locations of mining operations, and in the streets. Essentially, then, the interviews demonstrate a divergence on the different chosen places of struggle, the places that activists selected to engage with the debates and the State

I posit then, to extrapolate, the spatial geographies of power that emerge in resource struggles therefore, will seem to be individual to each case, each resource project, each proponent, each incumbent government, and indeed each community. It seems also that spatial geographies of power are not static, nor fixed to any given location. Even if the State structures the debates in ways

that seem to be controlling, citizens may relocate these struggles to places of choosing, as my research demonstrates.

I reiterate a point above, that I acknowledge the contribution on spatial geographies of power in this thesis is brief. Although I do acknowledge that, I feel that I am leaving this finding somewhat unresolved. To address any questions that may now circulate around spatial geographies, I draw attention to these in the Future Research Pathways section of the thesis conclusion, Chapter Eight.

From here, the thesis moves to the final research foci, which is a contribution towards the intersections of theory that were employed in the research frame. I will discuss what these theories contributed to the project, and how they intersect. I also engage in conversations already happening in these theoretical arenas, and I aim to make my contributions there.

Chapter Seven—Part Two

Research Focus Three

The Theoretical Intersections

&

Emotions in Relation to Place, Environmental Justice, and Political Ecology Conundrums.

Part Two: Introduction

Analyzing the emotional geographies of resource access, use and control thereby allows us to better understand the lived experiences of such realities, and to demonstrate how emotions and embodied subjectivities play a role in the ways that natural resources come to influence everyday life.

Farhana Sultana (2015, p. 643)

This thesis combined three fields of theory to problematise the issues, and frame the debates inherent to controversial extractive resources; political ecology drawing on emotional political ecology environmental justice, and emotional geographies. In the following, I explain how each theory assisted my development and understanding of the project, both contextually and theoretically, and how each intersects to create a reflexive, nuanced framework to explore and interpret the data.

Here, I also make a modest contribution to three discussions already happening in the literature that stem from the intersections of these theoretical fields of investigation. I make these contributions based on the findings that I have realised and discussed in previous sections. I offer my thinking in these arenas, and these arguments have been developed by orienting knowledge already available in these theoretical spaces.

Specifically, in this section, after providing some retrospective expression of the development of the theoretical framework of the thesis, I will offer some comment toward my understandings of place; in particular how I have come to understand how emotions shape place and place protective actions, at least in the contexts of my research. Then, I add some contribution to the discussions happening on the role of emotions in environmental justice studies. Lastly, I

will contribute to the discussions happening in the field of emotional political ecologies.

My contributions here are based on the discussions I had with my participants; although I do not aim to present my participant views as facts. To avoid overstating my findings, these musings are framed by literature already appearing in the review chapters of this thesis Chapters Two and Three which will be linked back into this chapter. I take this opportunity to acknowledge the work of authors in each subfield I include here, as they have done so much work prior to my engagement with the three theoretical subfields I employ in this thesis. Without these volumes of work, my understandings of place, emotional geographies, and political ecologies would be unsupported. Ergo, I make my own humble contributions to these dialogues, and by doing so, join these researchers in conversation.

A Reflection on the Theoretical Intersections

Part of understanding the nature of research and contributing knowledge in these arenas is a call for positioning the researcher in the project (Anderson & Jones, 2009), as well as taking time during and after research to reflect on the framings, approaches, and processes that occur between the researcher and participants (England, 1994; Nencel, 2014). These emersions and reflections are called for because the researcher's own 'positionality and biography directly affect fieldwork and that fieldwork is a dialogical process which is structured by the researcher and participants' (England, 1994, p. 80). Further, in qualitative geographies, the researcher's situatedness forms part of the frame that relates to data interpretation (Nencel, 2014).

It is this formative thinking that shaped the adding together of more than one theoretical body during the candidature timeline to form the analytic frame for this project. It needs to be clearly articulated at this point that the theoretical lens emerged over a period of some years, and was influenced by the conversations I had with participants that helped shape the study and the research focus. I therefore provide two places of retrospective thinking in this thesis, first here, and then later in Chapter Eight.

In Chapter One, I divulged that I have an informed position *against* new fossil fuels mining operations, and I grew up in the Northern Rivers; I must acknowledge both things would have had some bearing on my framing of the questions, and interpretation of the data, and even influenced my approach to the study. In this section, I step on from this declared positioning, and provide some reflection on the project now that the process of gathering data, interpreting results, and exploring the outcomes is done. I feel that this next step in my contribution to geography is best delivered here by exploring the

evolution of the theoretical framework that underpins the whole project. Later, in Chapter Eight, I reflect on more personal issues of my own emotions that emerged during the project, how these influenced my roles in the project, and my ambitions moving onward from PhD candidature.

During candidature, I allowed the research processes, data collection, and analysis lead me to the theories I needed. I do not claim to have discovered the theories I utilised for this research in a planned, or deliberate way. Each informed my thinking and assisted in the investigation at different places during the project timeline. Given, however, the methodology, approach, structure, and shifts in research focus that have been explained in previous chapters, I am happy that some retrospective thinking has taken place and I can present that here.

Essentially, I found that whilst exploring a political ecology conundrum, participants presented to me two unique emotional geographies in the communities I investigated one in each location of study. Political ecology theory therefore, framed the problem, and emotional geographies helped me understand *why* different communities defended their treasured places differently. The themes of environmental justice theorisation helped me to bridge the spaces between the broader political ecology framing of the project, and the emotional geographies theory that was employed to understand the data.

Through my reflection on the project history, during the closing stages and the writing up of findings, I have learned that environmental justice theory was/is like the lens that helped me bridge the spaces between the political ecology theory I used to frame the research conundrum, and the emotional geographies theory I used to interrogate and understand the participant interviews.

Within environmental justice theorisation, Schlosberg et al. (2018), guided an exploration of the axes of difference within contemporary environmental

justice studies. Essentially, these writings explore those contextual elements of the study that allowed early understandings of people of colour, and their struggles against the State and the status quo, and how this linked to my research conundrum that focused on white farming communities. It was never my intention to just take environmental justice theorisation to use in my project when little of the discussions I had with my research participants explained non white perspectives.

As an important caveat to the discussion here: I must add that in Australia, race divides and the struggles of our Indigenous populations is rarely if ever absent from the debates occurring in relation to natural resources, regardless of whether white folk discuss or acknowledge it or not. Even though no participant identified as Indigenous, and no one spoke of Indigeneity in my data set per se, I acknowledge sovereignty was never ceded in Australia. So, when I was talking to a white farmer or land owner about how *their* land is under threat from State mining interests, this was initially quite jarring for me, as I understand that land ownership is a product of settler colonial interests of resources.

The point, here, is best articulated by Moreton Robinson (2015, p. xix) … '[t]he existence of white supremacy as hegemony, ideology, epistemology, and ontology requires the possession of Indigenous lands as its proprietary anchor within capitalist economies'. From my research perspective, these white land ownerships, and discussions of mining threat I encountered, underscore the dispossession of Indigenous peoples of *their* lands, and this is further 'defined by struggles over land access' (Behrendt & Strelein, 2001, para. 2).

I felt an irony that the same land these farmers and rural citizens were speaking of was stolen from Indigenous peoples, and in my opinion one that is informed by others it *is still* stolen land; it was and always will be Indigenous land. Hence, taking the theory of environmental justice away from traditional

contexts of struggle of people of colour, therefore, felt as though I was continuing the processes of colonisation, and whitening the histories of this theoretical dialogue. I think that is why it took some time for me to figure out how environmental justice theory bridged the spaces of struggle in my dataset, and bridged the spaces between political ecology and emotional geographies theorisation for me in this case study.

How I sought to address the challenge of environmental justice theory having deep roots in disadvantage and placement of harmful industries near communities of colour, and using that theory to explore the participant perspectives in my dataset   predominantly white farming/rural communities experiencing injustice of harmful mining placement   was to acknowledge and respect the fact that environmental justice was initially, and historically, a protest movement, led by concerned community members such as The Mothers Of East LA; as example, and as explained in the literature review section (see again Byrne et al., 2002; Pardo, 1990; Platt, 1997; Pulido et al., 1996) These histories are presented in my literature review; therefore, I do not erase the roots of environmental justice theory.

So, even though I use environmental justice theory to explore a case study that was not able to scope the continuing struggles of Indigenous people in my study locations, the axes of difference in various research contexts (Schlosberg et al. 2018), and honouring the histories of people and activism that lead to theoretical arenas such as environmental justice theory assisted in the application of the theory in my case. Rather than just taking these theories and using them without acknowledging the emergence and necessity of these kinds of theoretical understandings, honouring the past and exploring the roots of environmental justice theory helps to allow a researcher to apply the theory to different case contexts.

For my specific research context, environmental justice theory, helped me to explore the injustices of unwanted facility placement near rural communities. I do extrapolate out from the roots of urban environmental justice histories I mention above to rural settings in my thesis, and I use axes of difference to step on from the struggles of communities of colour usually found in environmental justice projects, and I took that theory to whiter farming and rural communities. Specifically, I use discussion and descriptions relating to axes of difference that are explained by Schlosberg et al. (2018), to explore, in my case, the rural communities that are sometimes as far as mainstream decision making may be concerned possibly considered out of sight. Meaning that decision making regarding the placement of mining operations in my two case locations seemed to be happening in the place's government ministers are, in my case, predominantly Macquarie Street.

Linking to those environmental justice musings, within discussions of emotional political ecologies I also employed the broadening of political ecology theorisation to include emotions (Sultana, 2015) I found that there seems to already be an overlap there with environmental justice theory. Noting this emergent overlap, I certainly do not claim to be the first to blend the theories I employed in this project, what I can bring to this narrative, however, is my own perspectives on emotional political ecologies, and how environmental justice theory helped me to understand explore the complex issues presented in previous chapters. I make this contribution later in this chapter for the purposes of summarising.

Essentially, however, I found that the histories of struggle that underpin environmental justice theory seemed to, for me and this project at least, bring a richness to the theoretical frame that political ecology and emotional geographies could not do alone. As separate fields of theory, through case studies and literature I explored (see Chapter Two) to understand how each

theory is applied, I found that political ecology, emotional geographies, and environmental justice are indeed wonderful arenas of conversation when used in isolation; the three used together, however, for my journey, was like a symphony of theory, that allowed a fuller, more nuanced exploration of my own research data.

In a summary of the above, for my case study, political ecology theory explained and explored the cause of placement of an unwanted mining operation, and framed the threat, the role of the State, and the legislative structures that exist around mining approvals and decision making. Emotional geographies theory framed and assisted with the exploration and explanation of the stories I was told of threat and division in Gloucester, and the histories of activism that held community together in the Northern Rivers; and indeed, the emotional attachments of participants to their local places, communities, and environments.

These different emotional geographies assisted in the discussion in Chapter Six on why two different communities emphasised different activist strategies; contributing to a discussion on the importance of place histories and community within resource struggles. Environmental Justice theory provided the lens that explored marginalisation, government processes that seemed to cause or at least not prevent harm. Environmental justice also framed the resource curse, and the accessibility of concerned citizens   or feelings relating to lack thereof   in decision making pathway and structures; all ultimately leading to the need to protest and resist State and mining proponent interests.

With this summary, I have demonstrated how, and indeed why, these three theoretical frames were needed to explore the complexity of the issues I found in each case location. I now turn to the first of three specific conversations that I have engaged with during this thesis that relate to the theoretical framework detailed above.

Emotions and Place

What this thesis unearths about emotions and emotional attachments to treasured places and the lengths people will go to in order to protect their treasured places from mining is that emotions my participants spoke about seemed to be embedded into geographical landscapes prior to threat. These emotional attachments to place seem to pre exist threat, which was demonstrated in the Northern Rivers case. In other situations, as was the case for some participants in Gloucester, the mining threat was already present coal operations and connections were still made with landscapes with that industry already embedded.

The mining threat for Gloucester individuals, however, changed over time, triggering new hurt and loss. These connections that my participants had with their treasured places are based on histories of their attachment to place, and others, and their experiences of place histories. These emotional attachments triggered place defensive actions when threat arrived, and the emotions experienced during threat steered decision making that related to place protective actions as discussed in Chapter Six.

Essentially, based on my research, I posit that histories of place influence what happens in a place when threat emerges. I believe then, that understanding emotions that are produced and experienced in a place, therefore, may help us to better understand that place. I could extrapolate the findings further here and posit that people react to threat in an emotional way, which seems to be what occurred in both locations under scrutiny in this thesis.

The histories of place, and the networks of actors *in* place, seemed to influence activist strategy in these cases, and, I must use caution here; simply implying the activism in my case locations were *emotional reactions* simplify the debates

too much. On this, I also found that the simplified emotional reactions argument is used by the State to generalise and irrationalise the reactions people have to mining projects (Mysak, 2010).

Based on my findings, I argue that the complexity of the debate could be understood in a way that each place will have an individual history, and that history shapes people within it, their emotional attachments to place and each other, and these things matter. Essentially, I argue that emotional reactions are not at all something that can irrationalise or simplify community resistance to mining. I believe the emotional reactions that emerge when mining is announced or commenced near a community does the opposite. The reactions justify resistance, the reactions are a clear indicator that harm is or is about to happen, the reactions create a complexity that needs more attention from decision makers and, therefore, the EIA processes should react to them and focus more on the emotional impacts mining has on people.

Emotions relating to place attachment are unique to individuals, and they may also be shared, as described in the case study chapters and in Chapter Six. In turn, these emotions of place attachment have informed my own understandings of each case location. Emotional attachments to place orient people to change in place, and these changes in my case mining operations can be embraced or outright rejected. I believe the reactions in each case location I explored were rational, not irrational. Hence, all this influence's activist reactions to threat, which is inherently complex, and emotional reactions to mining threat shaped activist strategy. With these emotions of place attachment described, I posit then, that emotions that connect people to each other, place, and the self, then, are drivers of engagement. In my case, emotions seemed to steer decision making, and influence the way individuals and indeed groups resist unwanted place change, or orient individuals differently to threats relating to treasured places.

Based on my research, I believe that a sound understanding of the emotions that exist in a place may facilitate a better understanding of that place and the people who live there. Understanding emotions may then assist in understanding *why* people do what they do to protect their landscapes when threatened. Literature in policy making arenas already discusses 'laypeople's judgement is … based on other factors, including emotional responses' and questions 'whether that is a good thing' (Blancke, 2014, p. 39). This, as well as the findings I present above are important for researchers, as well as policy makers and decision makers outside of academia.

In my project, I have found that the laypeople described by Blancke (2014) here, are represented by the participants I spoke to for this project, and they *do* have a very nuanced and informed understanding of their places, and based on findings I have presented earlier in this thesis, citizen opinions and emotional matter. I believe these community knowledges and emotions should be considered a positive and informative factor to contemplate when deciding what happens in or near a community.

Via this project, I found that decision making processes, the impact assessment processes, the sites of decision making, all seemed to be abstracted from place, and therefore, would appear to be abstracted from the local people, the community, and the emotions in place prior to, and resulting from, mining threat. I found that these emotions are valid, therefore, they could be more closely considered and be part of the way that better legislation and decision making can be facilitated see the prospective future research section in Chapter 8. My research specifically investigated the emotional responses of mining injustice, therefore a commentary on the discussion of locating emotions in environmental justice theorisation is next.

Emotions and Environmental Justice

My research highlights the emotions that are place based in struggles for treasured places. Political ecology conundrums in my case have led to a perceived environmental injustice. Further, as per the above section, emotions seem to have underpinned reactions to threat from mining companies, therefore, emotions underpin place understandings and the perceived injustices that happened in each case location.

The findings in my research step on from work already happening in environmental justice arenas, particularly I draw on Schlosberg et al. (2018, p. 591) here who state that 'Australia illustrates a particular arena of environmental justice (EJ) theorizing that warrants closer scrutiny and development the relationship between cultural identity, place attachment, environmental policy, and the experience of injustice'. I concur with this notion, and I believe my research can join with this dialogue and contribute some new insights in this section, as well as possible future research pathways that will be presented in Chapter Eight.

Each of my participants, in both case locations, offered some in many cases a lot of background of their connection to place, and their connections to community, their feelings of being abandoned by government, processes, and legislations; as described in the case study chapters and in the discussion quotes employed in Chapter Six. Schlosberg et al. (2018) review the relationships between environmental (in)justice, and place; and it is here that I may contribute on the *feelings* that participants detailed regarding the perceived roles of the State and the EIA processes.

I found that place attachment, as far as my research participants views can demonstrate and I am sure of this point is not something that an Australian

EIA can *currently* scope. This is not an opinion that suggests that EIA guidelines do not indicate that place connections should or should not be considered. My point here is based on my participants iterations relating to the perceived harms caused by mining operations in both communities, EIA processes have *not* been effective in assessing place attachments in either of my case locations, in my opinion.

Further, I discovered through my interviews that place attachment cannot be passed off as simply a measure of a relationship with land that a decision making process can easily quantify, especially when the current in my opinion cookie cutter approach is adopted for mining proposal EIAs in NSW. Meaning, I believe that there seems to be little room for nuanced interrogation currently, or at least that is what I found in my case, and this mal assessment of place attachment and the harms that emerge as a result of overlooked perspectives, is an environmental injustice.

Place attachment then, I posit, is a *qualitative* measure, and is unique to each person and community; it is made more unique given the sharing of place with other member of community, and includes the connections these people have to each other, themselves, and their own treasured places. The current EIA process, based on the harms that were described to me by my participants, seems to have been unable to interrogate adequately those specifics of place and attachment that should be assessed. This in my case seemed to stem from tokenistic, late, rushed, and proponent driven community consultation, and EIA processes being set by the State. Literature that scrutinises EIA processes is replete with this kind of finding (See O'Faircheallaigh, 2010), and so my findings align with empirical research already available. This, I believe, is a long known and continuing environmental injustice that EIA processes continue to fail to adequately assess the harms of mining that impact communities.

The Forty Six people I interviewed for this project spoke clearly and concisely about their lack of trust in State process, indicating that the current decision making system is likely abstracted from individuals, place, and emotions. Claims of injustice were common through my entire dataset, so much that injustice and feelings participants had regarding failure of State processes to protect them from harm seemed to become like a unifying factor for resistance.

I argue, that one of the influences that steers *State* actions and polices are underpinned by the financial needs of the State itself. The processes set to engage citizens on matters of resource procurement for profit are therefore not trusted by citizens; my participants regularly pointed out that the State will profit from the mining operations. The State's need for resources and the emotional impacts experienced by communities as a result can be better framed by my final discussion on emotional political ecologies.

Emotional Political Ecologies.

Scholars in the space of emotional political ecologies have already oriented this arena as a subfield of political ecology theorisation (Doshi, 2017; Nightingale, 2012; Sultana, 2015); the histories of these conversations and forethought have been explored in the theoretical literature review in Chapter Two. Explained more recently as a continuation of the emotional turn in political ecology studies (González Hidalgo & Zografos, 2019), I offer some additional contribution to the conversations in emotional political ecology now that I have completed this stage of my research journey.

I concur that the boundaries of political ecology theory do need to encompass emotions; particularly for research projects such as mine that explore participant feelings and emotions that result from mining operations. Where political ecology conundrums lead to place based threat, the body is the site where emotions are experienced (Doshi, 2017), and this seems to influence how an individual engages with threat as my findings have demonstrated.

As Sultana (2011) has already demonstrated through her research, already presented in the literature review in this thesis, land access, use, control and ownership influences power relations relating to natural resources. I found too with my study that land ownership did in fact influence how others could interact with resources; the mining company setting security guards at the gates of property restricting access, as an example. The State approving the purchasing of private farm land for mine expansion as another example.

I believe this ownership and access influence was also underpinned by the role of the State, where mining proponents seemed to interact with pro mining individuals in some cases to affect the livelihoods of anti mining citizens. See the Gloucester Case chapter for extensive iterations of alleged bullying, and

threats from whom were described by my participants as pro mining citizens of the region. Essentially, my project has hallmarks of how 'nature society relations are lived and experienced on a daily basis' (Sultana, 2011, p. 163); I draw particular focus here, however, on how mining proponents and pro mining citizens, seemed to be able to divide and conquer a community Gloucester which then triggered emotional reactions, which in turn steered activist strategy.

Again, drawing on Doshi (2017), I found that power and different connections between individuals shape the way we understand landscapes; in my case the urban spaces my participants live and work. I also posit that power in political ecology conundrums is not static, it seems to shift from place to place and from individual to individual; including State influence. Power, as described by Doshi (2017, see chapter three for a nuanced description) in political ecology conundrums, links with the aforementioned interconnected relations of power relations as described in my case. Power in my case study, therefore, is not just that of State and structure. My participants describe how their protesting power worked, as it may at least in my two case locations draw the State to the sites of struggles that citizens choose, or, citizens may express their power in the places of decision making; as I discussed in the first part of this chapter in *the spatiality of power* section.

Emotional political ecology studies, as described by Sultana (2011), and Doshi (2017) as examples, discover the voices of those people that are adversely impacted by mining and who also resist State interests. In my case, these people are those in rural communities that are placed close to minerals deposits who are disproportionately subjected to negative impacts of mining. I found deep place based emotions and attachments connected with this positioning of mining in rural locations; indicating that the effects of political ecology

conundrums are emotive, and therefore, I again draw upon Doshi's (2017, p. 126) principles: 'affect and emotion are also material and embodied'.

When presented with a mining injustice, or indeed perhaps another kind of political ecology conundrum, decision making around these issues seems to be experienced in the self, prior to action, and for that reason bodies are indeed 'the sites for the formation of political subjectiveness' (Doshi, 2017, p. 127). I add that, for both researchers and those seeking to address policy shortfalls, understanding the emotions that arise with resource projects, may be foundational to scoping and measuring the full effects of political ecology conundrums; in particular, the negative impacts of mining. I posit, therefore, that how an individual is treated by the State, how an individual understands political engagement, and indeed whether an individual has access to safe spaces to describe themselves and the impacts of mining in a meaningful way, all carry emotional responses. All of these emotional attachments seem to steer or at least influence decision making.

In my case study locations, I found that emotions are already in a place through attachment, histories, lived experiences, as well as the attachments and bonds that individuals have with others. These emotions are tied to place, and steer reactions to threat when it arrives. Here, we find that to better understand place, and to better understand *why* citizens react differently to threat and indeed tailor resistance strategies against the State in different ways, emotions underpin all these things, and I believe underscores the important work already pushing the boundaries of political ecology studies to scope emotions (see Doshi, 2017; Sultana 2011).

Chapter Seven Conclusion

This chapter has presented the findings of the study that relate to the second and third research foci. In the above sections, I have demonstrated how citizens embroiled in struggles against the State seem to have chosen the sites of struggle and either draw the State to them, or meet the State within places of decision making   I have suggested that these different approaches have been based on the different emotional geographies present in each location; as described in Chapter Six. I do not argue that either approach or strategy is more correct, rather I have presented in this chapter my thinking about *why* different communities negotiated power and structure differently in this case study. This finding requires further study, as articulated in the next chapter.

Further, this chapter provided space for me to contribute to a few conversations already happening in research contexts relating to injustice, place, and emotions. I offer some input to the subfield of political ecology theory that encompasses emotions in that field of study; being emotional political ecology. From here, the thesis moves to the concluding chapter. I will present a summary of the key findings of the thesis, and explore how these can be extrapolated to real world contexts. I also offer some articulation of my future research agenda, based on questions that arose from the data for this project that fell outside of the scope of the project. I then close the thesis with some personal reflections on the project.

Chapter Eight

Conclusions and Reflections

Including:

The Significance of the Thesis Findings

Limitations of the Project

Prospective Future Research

&

The Candidate's Personal Reflections

Introduction to the Concluding Chapter

Most of these people had never been activists before; … until the tide of history … shocked them out of the complacent belief that the government could be relied upon to take care of their interests.

(Ricketts, 2012, p. 1)

This chapter brings the research discussions to a close, and reiterates the findings. Here, I explore a summary of the project and the thesis findings. I also bring a commentary on the project's limitations, exploring some issues that occurred during the research timeline that were not planned as well as some reflection on the research frame that may impact the extrapolation out of the thesis findings to a broader discussion.

I also explore some prospective future research pathways that presented to me during the candidature. There were a range of questions and ideas that emerged during the PhD timeline that fell outside the scope of the project described in Chapter One. Further, there were time constraints, budget limitations, and as a sole researcher even with excellent support I found that I had to draw the line between what I could bring to this thesis, and what I had to leave for later. The future research pathways I present later are linked to a range of questions that I asked myself of the data and the context of the project, however, I did not have time nor resources to complete and include in this thesis.

I close the thesis with some personal reflections that align with calls by other researchers to better place the investigator *within* the project (Creswell, 2014; Osborne, 2014). This, I have done previously to some extent in Chapter One, where I explained my opposition to new fossil fuel mining as being an informed position, rather than a bias, as well as my attachment to the Northern

Rivers case location having lived there in my early childhood. In addition to the above, in the reflections section later, I explore more my place as a person and my orientation to the thesis findings, my personal feelings at interview, and my own emotions regarding the conclusions I have drawn from the project.

To better structure this final chapter, a flow chart showing the research background, foci, contributions, and identifying future research pathways is provided below, see Figure 14. This visual representation of the research presented in this thesis contributes to the summarising the project, and sets up the issues needing to be discussed and concluded in this final chapter.

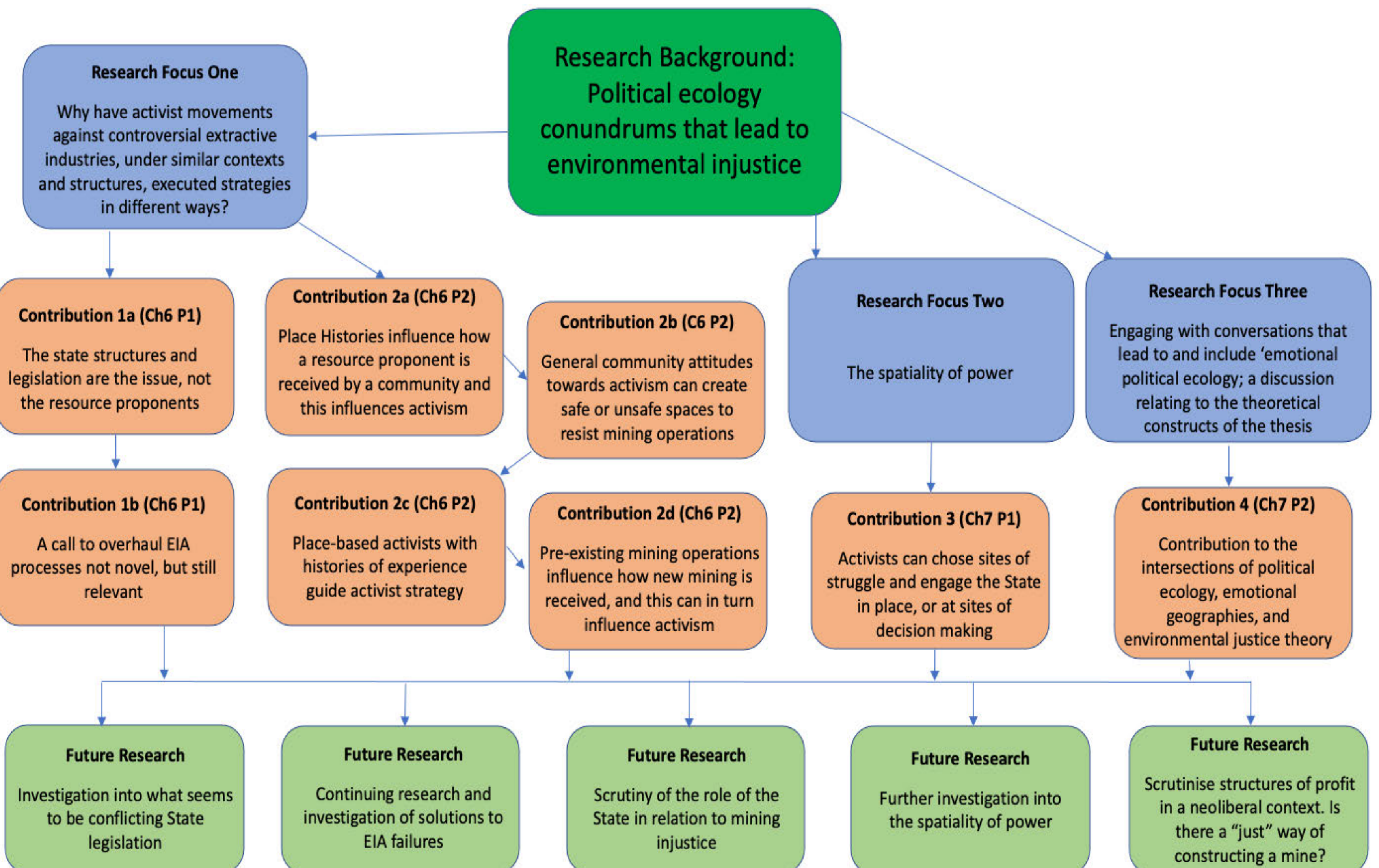

Figure 14: The flow of the research foci, contributions, and future research pathways

Significance of the Thesis Findings

The purpose of this thesis was to explore a political ecology conundrum. Essentially, to look beyond the *symptoms* of harm caused by controversial extractive industry placement near rural communities. I made inquiry into issues relating to the possible causal mechanisms of *why* communities engage in protest activities against the State and resource proponents, and in particular, my investigation was to specifically explore why communities seem to emphasise divergent strategy in different places.

To make my inquiries, I interrogated the *opinions, values, and ideologies* of citizens at two case locations in NSW regarding community resistance against controversial industry practices. I emphasise opinions here as these are what shapes decision making (see again Alexis & Rich 2020; Corry and Reiner, 2021; Ricketts, 2012). Whether rational, or irrational, based on real or perceived events or situation, what each participant believed to be the case shaped their opinions, which in turn, steered their own actions and decisions making.

I aimed to explore perceptions of the research participants in relation to the role of the State, mining proponents, and mining operations. Generally, I aimed to discover if there *were* different perceptions of industry and government, whether these influenced why two different communities emphasised different activist strategies. As the study progressed, new research foci emerged. The *spatiality of power* became a finding, and with it, I could engage with the theory and make my own contributions.

In this section, I will highlight a project overview that will recap briefly the project scope and purpose. And where this section of the thesis steps on from discussions happening in earlier chapters, will be to provide a summary of the project findings to extrapolate out from the narrative where I hope the findings

will assist real world processes and improve on current management of resource extraction. It is not my intention to just restate the findings, as 'summaries are not conclusions' (Evans et al., 2011, p. 175). Research of this nature must contribute to society (Hammett et al., 2019; Pain et al., 2011), especially research such as mine that drew so much from two communities.

Project overview

Political ecology conundrums are inherently complex (Robbins, 2012); they highlight the linkages between society, the environment, economics, and those mechanisms that shift and move these spheres (Martin et al., 2019; Robbins, 2012). I explored particularly that sphere of society, including environmental contexts, and how they are impacted upon by State interests in mining. Economic contextual elements were factored due to gains set to flow from the procurement of minerals for local energy production, and predominately exported to global markets.

I understand from work and studies completed before undertaking this PhD journey, that the negative impacts of natural resource mining are wicked problems (Lockie et al., 2009; Mancini & Sala, 2018; McDonald et al., 2012; Pektova et al., 2009; Sincovich et al., 2018; van der Plank et al., 2016). History is replete with iterations and evidence regarding the negative impacts of mining on communities. As a problem of scale, however, increasing resource demands see increasing impacts globally.

I do not suggest, therefore, that the negative impacts of mining I found in my two case locations are the novel contributions of this thesis. What I find jarring is that these impacts are well known, documented, yet repeatedly reappear at new mining ventures, as my case study demonstrated. Because of this repeating history of known negative impacts, this leads to my suspicion that

what we lack, in my opinion, is the political will to better regulate and guide mining companies to meaningfully reduce negative impacts.

To extrapolate on this point a hindsight perspective that links my drive to ask the questions this thesis explored, and something one of my participants said 'the power of the establishment is actually what we're fighting, not so much the resource extraction companies because they are doing what they are allowed to do' (LauraGV). I find this to be a poignant iteration from one of my participants, and this directly links to a future research pathway that I will discuss in the next section. This quote from LauraGV implies that some citizens are very aware that the structures of mining approvals are where the harm stems from. My case study again demonstrates that citizens believe the State does not do enough to protect communities from the adverse impacts of mining operations. I agree, and it is this perspective that I held throughout formative years of tertiary education in environmental science and sustainability, and why I embarked on this research agenda.

This project was, therefore, contextually built upon these complex mining conundrums that negatively impact more than just physical landscapes and human health; my project specifically explored the emotional and, in my opinion, those seemingly negative impacts of resource procurement. The deeply embedded emotional geographies that were presented to me by my research participants *were expected*, this is not the first project that explores how people speak of harm caused by mining operations. What was unexpected was the *magnitude and severity* of negative emotional impacts, especially those spoken about in the Gloucester Valley case study location.

I acknowledge that negative emotions relating to mining operations are not an unusual finding (Ey et al., 2017; Osborne, 2014; Pini et al., 2010). Where my research finds its novelty, as I described in Chapter One, is how my research explored *why* two communities *emphasised different activist strategy because of*

different emotional geographies in each case location; rather than exploring the impacts as symptoms of mining, or just exploring *how* activists resisted. The project overview now will move to a summary of the project findings.

Project findings: summary

To coalesce the findings of this thesis, I discovered that community histories, place based actors, histories of past threat, and pre existing geographies all influence how different communities react to new threat or harm. I explored why community actors then tailor resistance strategy or engage in the struggles they have with the State and resource proponents. This finding is important in that it clearly demonstrates that communities, and the places they occupy, require specific investigation for the possible impacts of mining well before a mine is announced.

Ergo, I suggest that the 'one size fits all' approach of current EIA processes are abstracted from individual places, and do not meaningfully interrogate the unique characteristics of an individual community well enough, or indeed early enough, in the decision making processes of mining proposals. This finding that underscores known shortfalls of EIA processes is exacerbated by what is already described as late stage community consultation processes that are considered tokenistic, proponent driven, and structured by the State (O'Faircheallaigh, 2010) and as I explained in earlier chapters this then leads to citizen feelings of mistrust and abandonment. What these findings support, and how these findings can be extrapolated out to real world processes, is a contribution to demand an overhaul of EIA application, and a call for the State to meaningfully recognise, consult, engage, and understand individual communities in resources struggles *before* a mining proponent is engaged to explore resource extraction projects.

These general findings are not novel. My findings, however, underscore and contribute to the discussion on why these issues with EIA endure. I believe my research highlights, amongst other things, the seemingly abstracted nature of decision making that happens away from communities set to experience the negative mining impacts. I also include some commentary that mining decision making short falls are linked to decision maker oversight to the real emotions that citizens experience when 'mining comes to town'; this too needs to be built into any EIA overhaul and further investigation is necessary, as I will suggest in the next section relating to future research pathways.

Mining, in general, is inevitable we will always need resources I extend this statement to all kinds of *necessary* resources that are beyond the scope of this thesis. I remain firm on my informed position, however, that this does not apply to *new* fossil fuel mining operations. In the case of *necessary* mining, a better designed, early consultation process may alleviate much of the stress that communities feel over proposed resource projects. Further, more State attention to the struggles of communities in relation to mining placement may also lead to less perceived or real injustice. Again, I will follow up on this point in the next section on future research pathways; essentially is there a just and fair way of designing a mining operation?

Later in the project timeline, the spatial geographies of power became a significant finding of the project. Driven by similar elements as described above emotional geographers, place based actors, histories of place, perceived or real injustice, etcetera citizens chose their sites of struggle, and chose how they engaged the State. What this indicates, in my opinion and this point will require future research which I detail later is that the structures designed by the State for communities to engage with processes seem to be failing citizens, whether deliberately or by erroneous application of consultation.

Limitations of the Project

There are a few limitations to this project that must be addressed. These can be summarised as: a change in theoretical/analytical frame during data collection. My decision to only speak with activists, and not speak with Government, industry, or citizens in each case location that did not participate in activism. The second and the third research foci emerging during data collection, rather than being planned questions from the start of candidature. Restrictions on time and budget that may have impacted the thesis timeline and ability to fully scope the situation in both case locations, and limiting the project to a two case location comparison. And finally, my reflexive learning and understandings on a limitation relating to the missing Indigenous voice in my thesis.

Change of theoretical/analytical frame

I did not come to the theory of emotional geographies early in the project design. The Gloucester interview experiences and emerging data required a theoretical change of direction, and that did not happen until well after confirmation. Whilst the initial approach of the project was modelled on standpoints that were in place to design the interviews in a way that avoided the repetition of abuse, emotional geographies theorisation could have been better utilised early in the project to help frame the overarching debates and the research questions.

The implications for this change in direction of the theoretical frame could imply that the first year of candidature, and the framing of early stages of the project, could have been more aligned with my approach to the Gloucester interviews. Rather it was the stories I was told during the Gloucester interviews that introduced me to the body of literature that is emotional geographies, as my initial framing did not seem to scope fully what I was told in that case

location. I do not believe that this change affected the thesis quality, or the outcomes, as the change happened during data collection, and well before data analysis.

Given that the project shifted after confirmation candidature to explore the *why* of activism, rather than just the *how*, and emotional geographies were employed at that stage rather than at the beginning of the project. Retrofitting the frame and design seems to have covered this limitation quite well, however, ongoing research will discover if there are additional shortfalls that need to be addressed that relate to my personal theoretical understandings and frames.

Decision to speak only to activists

Given that I was speaking to activists about activism and their experiences, I felt it necessary to structure the research so that I did not subject these people to risk or harm. Resulting from this decision, I decided *not* to interview government nor industry, and the data is also heavily redacted to remove personal information, names, careers, and other such identifiers of my participants.

The decision not to interview government nor industry was based on the information coming to me during preliminary discussions with a representative of Lock the Gate Alliance, that some activists may have avoided the project if they felt they were compromising their movements. In fact, initial stages of the research project involved lengthy discussions with two key persons with Lock the Gate Alliance, where research agreements were made to protect some elements of strategy. Regardless of whether they were discussed by participants (and they were), these strategies were to be redacted from the data (which they were) and not disclosed via this thesis, nor any paper publication stemming from this project.

I do not feel that *not* including government nor industry participants is a significant limitation, as the project explores activists' *perceptions and emotions* relating to mining, the community, and the environment; and it is these perceptions and emotions that steered decision making. All the information I required relating to legislation and government was freely accessible to me via government publications and Hansard. In addition, I considered industry opinion on the activism fell outside of the scope of the project. Further, At the time of data collection, Metgasco was in the process of disbanding, so I assumed no representative would have been available. AGL, having a retail arm, I assumed would not admit wrongdoing at interview; assumptions are dangerous, however, I needed to be mindful of my aims, my budget, and my timelines, and the opportunity to pick these threads up post conferral.

Late emergence of second research focus

The secondary research foci emerged late into the PhD candidature. Research foci two the spatiality of power, emerged during data analysis. As I perused the interviews, it became apparent that one of the key differences between the two case locations was how activists approached, and used, power; and how they place power in their community, or expressed power in the places of decision making. I feel that the findings I provide on spatiality of power are still useful, as they contribute to the overall thesis findings, however, if how power is encountered and used by activists was part of my formative thinking for this project, perhaps my contributions here would have been fuller and more robust.

As a result, I feel the spatiality of power in part one of chapter seven has not been fully explored; although I maintain there is useful discussion there that warrants inclusion in this thesis. Whilst this issue may be easily reduced to the need to do more research on them as a pathway moving forward (see my

thoughts on this point in the next secion), there is still a limitation there as the findings are relevant, but underexplored, and this needs to be acknowledged.

Limitations on time and budget

As per other research projects at PhD level, there were restrictions on budget and resources, and there were significant delays along the way that could have affected the timeliness and quality of the research. Time delays meant that literature reviews and the project framing needed continual updating, which I have learned can be the norm for many long running qualitative projects. As a result, I reflect on ways that I would do the research differently if a had more of a fuller understanding of the theoretical frames at the start of the project, rather than having them evolve over time.

I understand that this evolution of knowledge may have influenced my own perceptions on the places I visited, and how these would have been articulated should the project had run to the original four year timeline; rather than the eventual six and a half (three and a half years full time, three years part time). I feel that ongoing research and retesting of the thesis findings in future work will highlight any discrepancy and allow for interrogation and correction of findings. This limitation may be tautological with the first, however, I feel that some reflection on timeline and impacts of delays is useful.

A final element that links to limitations of time and budget, was the necessity to choose only two case locations, rather than three or more. Three would have allowed for case study triangulation, this was overcome by triangulating the two case model with the literature. A larger study of three case locations or more would obviously be more rigorous and this must be acknowledged, however, the project design and implementation of the two case location study was deemed suitable at confirmation.

Reflexive learning of Indigenous engagement in this project

As it was stated in the early stages of this thesis, as well as at the top of both case study chapters; I did not have ethical clearance to deliberately target or seek the opinions of Indigenous people for this project. Initial ethical discussions for this project assumed that it would remain a 'community level' investigation, not necessarily an examination of Indigenous perspectives. At the time of data collection, and further research design processes, I did not see this as being much of a limitation.

Where my own learning takes a turn here, is that by not assuming Indigenous people might want to participate, the ethics process in itself, became a kind of barrier in a way. By the time interview phases were winding up in each location, it had become starkly evident that no Indigenous person had come forward to speak. I must assume, that via my community networks, that word would have travelled to activist in different spaces, that I was seeking input. I do however, feel that if I had a higher level of ethical clearance to seek out important Indigenous perspectives of mining and activism, I could have sought to at least invite someone to come and address this missing voice in my interview set.

It is not my intention to state that research should always target Indigenous opinions, there is good reason for these ethical processes, and they are fundamentally necessary to ensure that research aimed at Indigenous people is done sympathetically to cultural and historical sensitivities. In my case, however, I feel that the processes of ethical clearance being framed by western centric processes of assessment and clearance, presented a limitation. I realised much too late that I was missing these important voices, and I unable to rectify this shortfall in time to weave these perspectives throughout the thesis findings.

Prospective Future Research

A rich research tradition, possibly born out of basic research, calls for studies to conclude by showing how a study's findings (e.g., original positions found to be supported or not supported) now point to new research in need of being conducted. The main conclusion lies along the lines of "what we still don't know"

(Yin, 2011, p. 221, parentheses in original).

The sum of the findings presented in this thesis, or at least where my focus on causality is concerned, steers my thinking now toward the role of the State in relation to decisions regarding mining *vs* community and the environment. The role of the State *seemed* to be, in my opinion at the time of writing and at the time of data collection, very pro industry in its actions and intentions. The actions of the State also seemed to contradict some legislation that the government had in place at the time to protect community and the environment.

With those personal opinions stated, what follows here are some of my thoughts on NSW legislation and the *then* Government's decision making regarding several pieces of policy. These musings were not included in one of the discussion chapters, as I do not have the empirical data to state these things as facts. I reiterate, I did not interview government for very important reasons as stated in Chapter One.

These ideas that follow are questions that came to me as I was completing this project, and I suggest them here as possible future research project(s), that investigate these things specifically, and that project would need a data set that includes interviews or closer scrutiny of government legislation. The first three pathways link, and could form part of a larger investigation, or perhaps, these

could be best served as individual studies. Project planning and preliminary research design at later stages will have to observe linkages and complexities.

Investigation into what seems to be conflicting State legislation

At the time of data collection, the then sitting NSW Liberal National Baird Coalition Government *did* have policy relating to the protection and preservation of the environment the *Protection of the Environment Operations Act 1997* (Government of NSW, 2020). As well as legislation to safeguard individuals and communities; usually in the form of health department documents and others (numerous). Moreover, there were many regulations and frameworks to protect healthy and safe environments from the NSW Environmental Protection Authority (NSW EPA, 2021).

Yet at the same time, the same Government created and or amended existing legislation that supported the advancement of the coal and unconventional gas industries the *Petroleum Onshore Act 1991* (Government of NSW, 2000); and amended current legislation to increase protection of mine sites from interference by increasing penalties for breaches to an extreme level the *NSW Crimes Act 1900* (Government of NSW, 2018a). These amendments were made in places of decision making power, it seems without community consultation. Amendments then affected agency, in that the changes prevented activists from engaging with, or at least making penalties for trespass so large and risky, that activists avoided public demonstration or activism *on* mining sites. These legislative changes, it seems, shifted the way some activists engaged in protest actions, and where they located their sites of struggle. This finding contributes to the first part of Chapter Seven, *the spatiality of power*; however, I intend on exploring this with ongoing research that is required to fully explore my suspicions.

Ultimately, even acknowledging the long standing legislation to protect and preserve the environment and community, the same NSW State Government restricted concerned citizens from protecting their environment and social well being, cutting off their power and agency to protect their treasured places as I have addressed in Chapter Six and Seven. The Government also in turn seemed to promote *new* fossil fuel industry development, through the actions of approvals, even when significant health and environmental risks seemed imminent. The Government's continuing reliance on fossil fuels speaks volumes of the State's intentions to continue with these industries in the face of renewables, something that my participants found particularly hurtful and frustrating, fuelling resistance. I believe the legislative framing of mining, environment, and community wellbeing needs deeper investigation to discover and resolve conflicting policy.

Continuing research and investigation of solutions to EIA failures

I found that the NSW State EIA procedures seem to be too generalised, abstracted from community and place, and flawed in that they ran late in the approvals process for each industry in question in my thesis and case locations. I reiterate, this is not a novel finding (see O'Faircheallaigh, 2010). The then NSW State Government policies on resources facilitated harmful mining project placement close to communities, whilst at the same time restricted resistance to mining placement a move that *appears to be* deliberately aimed at supporting the mining industry. The mistrust and suspicion over these government actions was not un noticed by my research participants.

I feel that further research is required to address the gaps that continue to be found between EIA processes and project timelines I posit that addressing these gaps need to meaningfully include community engagement. Whilst, as stated, these gaps are not novel findings, what is poignant though, is that these gaps have long been identified and yet in my case I find that they are proven

to prevail. The findings of this thesis highlight gaps in scholarly research that I again believe is worthy of additional scholarly attention, and deeper investigation.

Scrutiny of the role of the State in relation to mining injustice

I use caution here, however, it was *perceived by many participants* that the then NSW State Government's actions to restrict mine resistance, and facilitate mine projects, was in collusion with the Mining Sector as discussed in previous chapters. The suspect nature of conflicting legislation, the spatial geographies of power being abstracted from place, and the seemingly tokenistic approach by State representatives to involve the community seems to speaks to a narrative stemming from multiple research participants that communities were essentially in the way of resources. Two important quotes follow:

> We've got all the documentation about how they all talk to each other, and how they can get around it and change the legislation, I mean it's corruption, and collusion (LauraGV).

> So, I mean it's very strong evidence [referring to negative impacts on community] and yet the mines that continue to be allowed to happen and nobody gets any compensation. I mean the collusion between the industry and the Government is wicked! (ClarkGV).

It would seem then, that there is reason to suggest that further investigation into the role of the State in relation to mining injustice. This could be multi facetted; meaning that the investigation can link with the first two prospective research pathways above that looks at conflicting legislation. The investigation, regardless of how it is shaped, needs to recognise that the focus needs to be the system, legislative framing, decision making, and political actors within the structures of mining approvals. I underscore an important point here, too often are the minerals companies 'blamed' for harm, however, these harms often are

not 'illegal' and this point was at the forefront of some discussions, summarised best by LauraGV:

> The power of the establishment is actually what we're fighting, not so much the resource extraction companies because they are doing what they are allowed to do. It is the establishment that has been infiltrated, the bureaucracy that has been infiltrated … this insidious kind of infiltration and the revolving door where they [government ministers] then go and work for the mining companies … they [government officials and resource proponents] all talk to each other [about] how they can get around it and change the legislation. I mean its corruption and collusion.

Further investigation into the spatiality of power

As mentioned in Chapter Seven Part One, the findings on the spatiality of power came late in data analysis, so their inclusion earlier were necessarily brief. To that end, there is additional research required relating to the spatiality of power. This research focus, also, was not an intended avenue of interrogation until data had been collected and initially scrutinised. Therefore, whilst I feel that the iterations at the top of Chapter Seven are still relevant, more time is needed to fully explore the spatiality of power, and underpin that finding with additional research and investigation.

Specifically, I believe my contributions on how activists chose sites of struggle; how they seemed to decide to engage with the State in Macquarie Street, or mining CEO's in their offices, or to primarily engage with community activism and NDVA, does flag the need for deeper investigation. Does this kind of finding   the 'selection' of spaces to fight for treasured places   emerge in other case studies regarding activism? Is it indeed a specific decision that activists make, or is it a random finding in my case study? Due to the late arrival of my investigations into this issue in my thesis, I contribute something to this thesis

based on my specific case study, however, I believe this does need additional scholarly attention and deeper investigation.

Research to explore if there is a *just and fair* way to construct a mine?

This reflection reiterates earlier iterations that government and related structures seem to be pro mining; I acknowledge that to some extent, they need to be for the purposes of infrastructure and development, and some economic gain. What, though, would resource procurement look like if vulnerable people were not disadvantaged by the resource curse? What if the negative impacts of mining near rural communities were fully addressed, compensated, and rehabilitated? Questions relating to what is produced, how much is produced, how it is produced, and how the impacts of production affect others are raised. How do we internalise the externalities of mining should no alternative be available? I refer here to resources other than fossil fuels, as we have limited alternatives to some required resources at this stage (iron ore, bauxite, and copper as examples), given that in my case contexts renewable energies pave a clear path away from new fossil fuel mining.

Part of these investigations would be to scrutinise structures of profit and distribution in a Neoliberal context. This is a reflection on the case study that looks back on the structures of profit that were at play in the two case studies, however, this was not fully explored in this case as this falls outside of the scope of the project described in Chapter One. Essentially, I am asking in future research pursuits if there is a *just* way of constructing a mine that is also *fair*? Would it be *environmentally just and fair* if people of colour, the poor, the otherwise marginalised, or the rural populations located near required resources, were not disproportionately affected; especially if the affected communities were on board and were sharing in profit, or meaningful infrastructure? Is what I describe here *real environmental justice*? If not, why not? What is missing?

The Candidate's Personal Reflections

There is nothing about neoliberalism that is deserving of our respect, and so in concert with a prefigurative politics of creation, my message is quite simply 'fuck it'… Fuck absolutely everything neoliberalism stands for, and fuck the Trojan horse that it rode in on!

(Springer, 2016, p. 288)

In the final section here, I reflect on my journey, my place within the project, and how my own story is reflected *through* the project, the findings, and the discussions. I do so in response to authors in critical geographies calling for more orientation of a researchers positing *within* the project (Creswell, 2014; Osborne, 2014). This reflection also aligns with Anderson and Jones (2009) work on the where of method, and the positioning myself *in place* for interviews.

Creswell (2014, p. 186) iterates that within reflexivity of qualitative research design 'the inquirer reflects about how their role in the study and their personal background, culture, and experiences hold potential for shaping their interpretations'. Here I find that some articulation of my orientation to the project was already explained at the top of the thesis as my personal informed views of *new* fossil fuels mining is one where I believe they are ultimately unnecessary. New mining of this nature creates impact and harm to the environment and communities, especially in an era where renewables are a clear alternative.

Now in hindsight, I find that my faith in the political system in Australia has been thoroughly shaken. Much like many of the quotes drawn from my participants, the overwhelming feeling that the State seemed to prioritise fossil

fuel mining interests and profit over communities and the environment is hard to look past. I found, through the lens of other people's stories, that the processes we have in place to assess mining proposals *might* be sound in theory, however, in practice, for reasons discussed in this thesis, I believe are flawed in their timing and application. These opinions of others have been scrutinised, compared to contemporary literatures and other research, and I concur.

In this line of thought, I must also recognise my continued discomfort with what seems to me to be legislation that protects mining interests from protest action, via the reworking of the Crimes Act 1900 and other legislation. A move by the then NSW State Government, at a time during increasing activism and resistance, to change legislation to restrict resistance must draw scrutiny as being a possible deliberate act by the State to safeguard mining operations. This changing of legislation also seemed to come at the expense of liberty, civic rights, and the right to protest, and at a cost to the environment. These personal reflections fall outside the scope of the research aims; however, they are reflected in the discussions I had with my research participants and must be acknowledged here (and elsewhere as necessary) as this would have had some bearing on my interpretation of the data.

I found myself at times becoming increasingly frustrated and angry at the situation my participants detailed. I was also discovering that what was happening in NSW at the time of data collection, by and large, was happening in other Australian States and Territories (see Lock The Gate Alliance, 2017b, as example); influenced by Federal tiers of governance and resource management. Extrapolating out, these personal feelings of injustice, command and control, restriction of liberty, and a turning away of Government from social and environmental issues has deeply affected my outlook regarding Australian democracy or what could be described as an Australian Oligarchy,

influenced so heavily by mining companies through political donations, hidden by a veil of democratic processes.

Yes, the iterations above all influenced my thesis, as my thesis is ultimately my position on the themes. How this occurred was due to my own connections to the places of study, the people I forged connections with, the friendships that emerged some ongoing years after and the very real concerns I have for remnant eco systems and agricultural regions due to my education and background as an environmental scientist. My own emotions moved and shifted during candidature, my own positions changed as I was told stories of others, investigated impacts, and witnessed first hand the harms being caused to rural communities.

The implications my own positionality and emotions have on the study is that my investigation was not one of a researcher being disconnected from the data and observing from afar, but from a position of being *in* the study and observing form a place of lived experience. This positioning, received strong support at conferences that I attended before submission of this thesis, and from supervisors. This personal positioning *within* research is not bias, as it is founded on an educated and informed position (Lyons[52], 2015. Pers Comm).

I truly *felt* the experiences and stories that my participants provided. I laughed with participants, cried on occasion, I was drawn into their lives and the dramas that had unfolded during the struggles that were described to me. Initially I was moved to a place of despair and frustration over the treatment of communities by a seemingly abstracted, uncaring, State minerals and resources processes. I find now, however, that my own emotions matter; through

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[52] Professor Krysten Lyons is a researcher at the University of Queensland, who 'delivers national and international impacts on issues that sit at the intersection of sustainability and development' (The University of Queensland, 2021, para. 1). Professor Lyons was my external assessor at my project confirmation seminar, and clearly explained to me the difference between 'bias and an informed position'.

research, I can engage with those *emotional* political ecology conundrums, explore community and environmental issues, and allow myself to be a *part of it*, to *feel* it, to allow emotions into my work. The experiences I have lived, and the connections I have forged with participants and country, will underpin, and drive future research. I have heard the term *academic activist* during my candidature, and I find now that I wholeheartedly embrace the term.

Appendix A

Alignment with the Australian National Research Priorities

Table 1: Thesis alignment with the Australian National Science and Research Priorities

Research Priority	Short Description	Aligns	Aligns how…
1. Food	'Research will aim to optimise food and fibre production and processing, enhance food safety and minimise waste. Research will also be critical to preserve our hard-won reputation for clean, safe and sustainable production'	Y	Contamination of water and land from fracking chemicals and wastewater gas operations in agricultural regions.
2. Soil and Water	'Research should therefore focus on critical assets such as the Great Barrier Reef, Northern Australia, key agricultural regions, aquifers and urban catchments, and build capacity for improved accuracy and precision in predicting change. Research will lead to better decision-making strategies in the context of potentially conflicting demands between development, the environment and landscape management'	Y	Contamination of water and land from fracking chemicals and waste water Aquifer and surface flow drawdown Competing water use allotments in regional areas Drought and industry water use
3. Transport	'Research will be critical to developing low cost, reliable, resilient and efficient transport systems that meet the needs of businesses and enable sustainable mobility, while lowering carbon emissions and other pollution'	N	N/A
4. Cybersecurity	'Research in cyber security including quantum technologies	N	N/A

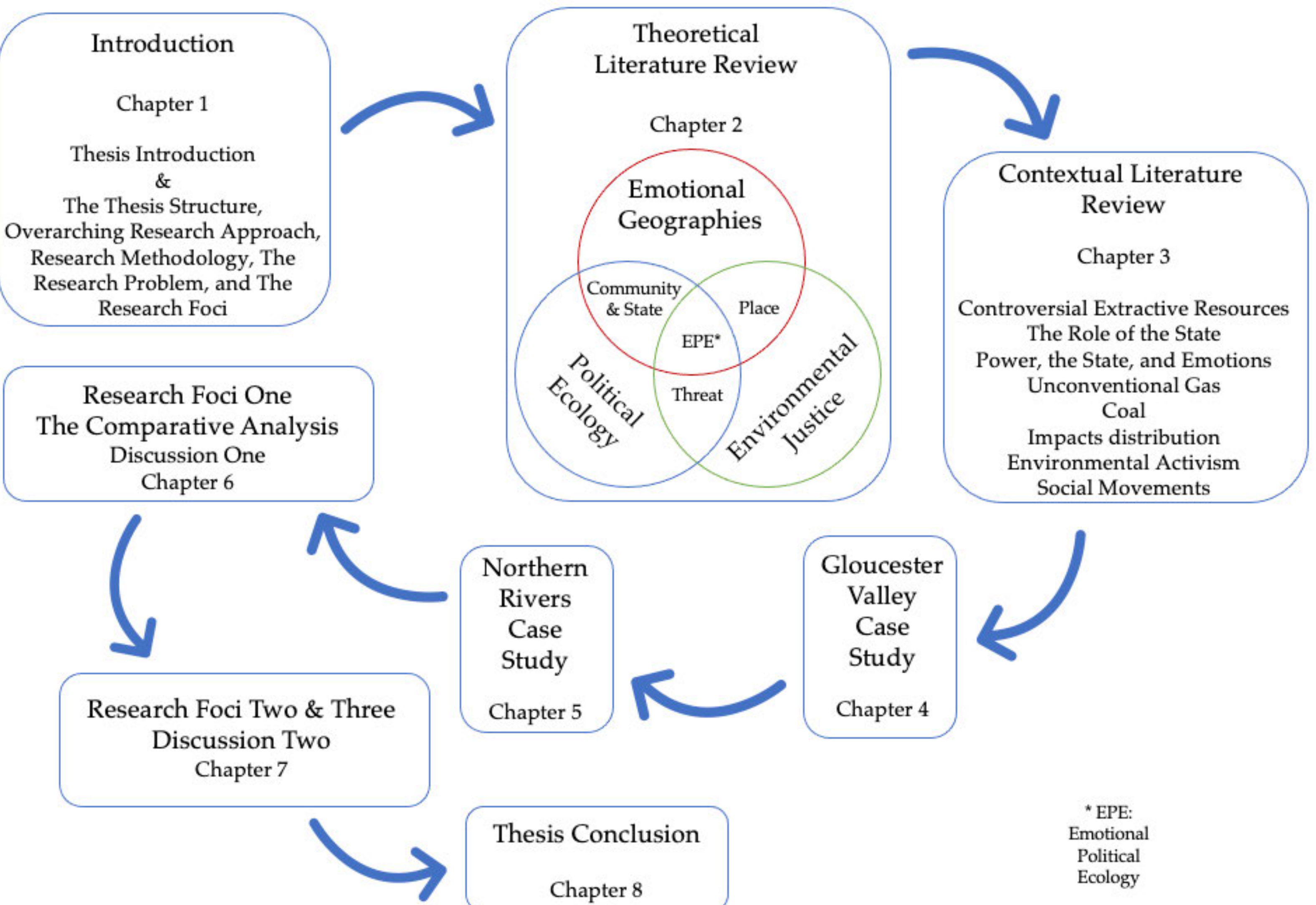
	will position Australia as a leader in fast moving and emerging areas such as distributed network management, machine learning, and intelligent and secure data management and retention'		
5. Energy	'Research will lead to the development of reliable, low-cost, sustainable energy supplies that are resilient to sudden shocks, as well as decadal trends in demand and climate, and to technologies that use energy more efficiently'	Y	Continuing reliance on fossil fuels for energy production Governmental ignorance towards renewable energy sectors
6. Resources	'Research will lead to a fundamental understanding of the structure, composition, and processes governing the formation and distribution of resources in Australia. This knowledge will support the exploration, the potential discovery of major new sources, production, distribution of the traditional resources such as strategic metals and minerals, coal and gas and those in increasing demand such as rare earth elements and groundwater'	Y	Production and distribution of fossil fuels to Australian and international markets Groundwater use and contamination Placement of resource mining operations close to community and treasured places
7. Advanced manufacturing	'Research will be critical in developing and supporting existing industries while	N	N/A

	enabling the development of a new and advanced manufacturing sector'		
8. Environmental Change	'Research will build Australia's capacity to respond to environmental change. It will require the integration of research outcomes from biological, physical, social and economic systems'	Y	Continuing overreliance of fossil fuel energy production Lack of long-term vision for mitigating and adapting to climate change
9. Health	'Research will be essential to building healthy and resilient communities throughout Australia. It will capitalise on Australia's strengths in science and technology to generate wider economic benefits through improved knowledge translation and commercialisation, and partnerships with industry'	Y	Placement of mining operations close to communities bringing well known health (physical and mental) stressors to citizens Lack of participation in decision making pathways with community involvement to resolve health issues

(Table adapted from: Government of Australia, 2015b. Short descriptions verbatim pp 2-4)

Appendix B

The Thesis Conceptual Framework - Enlarged Image



Introduction
Chapter 1
Thesis Introduction
&
The Thesis Structure, Overarching Research Approach, Research Methodology, The Research Problem, and The Research Foci
Theoretical Literature Review
Chapter 2
Emotional Geographies
Political Ecology
Environmental Justice
Community & State
Place
EPE*
Threat
Contextual Literature Review
Chapter 3
Controversial Extractive Resources
The Role of the State
Power, the State, and Emotions
Unconventional Gas
Coal
Impacts distribution
Environmental Activism
Social Movements
Gloucester Valley Case Study
Chapter 4
Northern Rivers Case Study
Chapter 5
Research Foci One
The Comparative Analysis
Discussion One
Chapter 6
Research Foci Two & Three
Discussion Two
Chapter 7
Thesis Conclusion
Chapter 8
* EPE: Emotional Political Ecology

Appendix C

NVivo Coding

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IMPORT
Data
Files
Literautre
Northern Rivers Inte...
Other recordings
Upper Hunter Interv...
File Classifications
Externals

ORGANIZE
Coding
Codes

Cases
Notes
Sets

EXPLORE
Queries
Visualizations

Home | Edit | Import | Create | Explo

Clipboard | Item | Organize | Visualize | Code

Name	Files	Refer...
Activism	47	1,464
Community	34	355
Corporate	19	52
Effective	43	324
Image control	10	34
Legal	4	11
Media	30	81
Mainstream	17	28
Social media	15	35
NGO and other advisin...	1	1
Non-effective	14	19
NVDA	36	220
Political	7	17
Research and Education	26	53
Scientific activism	19	81
Attributes	3	5
Negative	3	4
Neutral	1	1
Positive	0	0
Backlash	27	192
Attempted murder	8	28
Bullying	9	25
Intimidation	12	52
Physical Abuse	4	7
Restriction of business...	4	31
State Restriction	1	1
Verbal abuse	10	16
Community	44	680
Divided	28	168
Gloucester	23	312
Northern Rivers	18	95
United	1	1
Vs Gloucester comme...	11	39
Vs Nothern Rivers com...	15	60
Emotions	32	202
Environment	30	116
Air	2	7
Built - Town, City	0	0
Land - Agricultural	3	4
Land - Bush, Forest, '...	1	1
Water	29	104
Governance	33	189
Acts of legislation	6	9
CCC's	2	6
Change of legislation t...	5	16
Change of legislation t...	4	4
Courts and Law	9	20
Police	27	120
Police - Local	11	22
Police - not local &...	7	13

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Data
Files
Literautre
Northern Rivers Inte...
Other recordings
Upper Hunter Interv...
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ORGANIZE
Coding
Codes

Cases
Notes
Sets

EXPLORE
Queries
Visualizations

Home | Edit | Import | Create | Explo

Clipboard | Item | Organize | Visualize | Code

Name	Files	Refer...
Government	42	354
Collusion - Revolving d...	12	21
Department	5	9
Minister	5	12
Identity	0	0
Industry	43	360
Breach or fuck up	1	1
Coal	15	55
Duralie	1	2
Stratford	2	2
Rocky Hill	7	12
Company	6	16
GRL Gunnedah Glou...	4	7
Lucas Molopo	2	6
Whitehaven Coal	0	0
Yancoal	3	3
Divide and conquer ap...	20	52
Other industry than co...	5	11
Precautionary Principle	2	4
Unconventional Gas	35	189
AGL	22	85
Metgasco	6	19
Injustice	26	187
Collusion - between g...	12	25
Memorable Quotes	36	240
Metaphysical	10	37
Movement	32	224
BGSPA Barrington Glo...	4	11
Gasfield Free Northern...	2	2
GRIP	5	11
Groundswell Gloucester	13	40
Knitting Nannas	15	96
Lock the Gate	15	48
Other Gloucester	2	5
NIMBY	14	39
Type 1	5	19
Type 2	11	18
Type 3	0	0
Type 4	0	0
Place	36	211
Place attachment	27	70
Place protective action	10	17
Threat to place	31	121
Power	7	31

Appendix D

Participant Project Information Sheet

The supervisors listed in the information sheet are correct at the time of authoring the form (2015), and changed during candidature.

Griffith University - Nathan Campus
170 Kessels Road, Nathan Qld. 4111

Griffith Ethics Reference Number 2016/061

Invitation to participate in a research project

I would like to invite you to participate in a research project that explores your community and the factors that encourage social movements and environmental activism. You have been contacted either because you have been suggested as a possible participant by another person, or your name appeared in background literature; for example, a newspaper article, a web site, a community organisation, or via academic sources.

This project forms the basis of a PhD candidature. The researcher, Mark, is keenly interested in community involvement in movements that push back against unwanted development. Mark has been inspired to conduct this research as he too has lived in a location adversely affected by growing industries. Your involvement in this research project may have benefits for communities that have been affected by unwanted development, including your own, and it may inform possible improvements to community consultation processes by governance agencies and private companies. So, whether you participated in social activism or not, your opinions are valuable. If this project interests you, then please consider participating.

<u>A little about the participation experience</u>:

You will be asked for your consent to record your interview using a small audio recording device (no video) to ensure accuracy. The interview will be conducted in a way that represents more of a 'chat' rather than rigid questioning or formal interviewing technique. The topic will be coal seam gas development, and any related social movement or protest action that you know about. The interviews are intended to be relaxed and they may take up to an hour of your time. You are invited to talk freely about your knowledge or

experience on the subject. There are no foreseeable risks to you associated with your participation in this research.

After your interview, the voice recording will be transcribed into written format. During that process, your name will be removed from the data. This process aims to ensure your confidentiality. Please note that any information you provide may be used in this PhD study and in any publications arising from it, but your name will never be used in conjunction with the PhD, or any publication. As required by Griffith University, all audio recordings will be erased after transcription. However, other research data (interview transcripts and analysis) will be retained in a locked cabinet and/or a password protected electronic file at Griffith University for a period of five years before being destroyed.

If you wish, you may peruse a transcript of your recording before the data is used so that you can make additions or corrections as needed. You will be asked at the time of interview if you want to see a transcript. In addition, you may email Mark via the details provided overleaf to request a convenient, plain language summary of the results of the research when they are reached.

The primary researcher, Mark Bailey, will conduct the interview. Before your interview begins, Mark will have a quick (unrecorded) chat with you and address any questions you may have about the project, your involvement, and your confidentiality. Before your interview begins, you will be asked to sign the participation consent form (attached).

Please do not sign the consent form until you meet with Mark, as he needs to witness your signature.

To participate, please contact Mark (details below) via email or telephone to indicate your willingness to be involved. Mark will arrange a time where he can meet with you to discuss the project, and proceed with an interview. Times are flexible and you may contact Mark to reschedule if your situation changes.

If you have any concerns about this project, please contact Mark to discuss. If you do not wish to contact the researcher, you may choose to contact someone else involved in the research project. You may also choose to contact the ethics board at Griffith University if you have concerns about the ethical nature of the research. Details of these contacts are:

Mr Mark Bailey. The researcher and interviewer—**your primary contact**
e-mail: mark.bailey5@griffithuni.edu.au
Telephone: (07) 3735 5534—business hours
Dr Catherine Howlett. Co-primary supervisor of the research project
e-mail: c.howlett@griffith.edu.au
Telephone: (07) 3735 3844—business hours
Dr Monica Seini. Associate supervisor of the research project
e-mail: m.seini@griffith.edu.au
Telephone: (07) 3735 3649—business hours
Dr Natalie Osborne: Co-primary supervisor of the research project
e-mail: n.osborne@griffith.edu.au
Telephone: (07) 5552 7419—business hours
Manager, Griffith Research Ethics
e-mail: research-ethics@griffith.edu.au
Telephone: (07) 3735 4375

Persons under the age of 18 are not permitted to participate in this research project. If you have been contacted and you are under the age of 18, simply ignore this letter. If you wish you may contact Mark to inform him of your inability to participate, so that you aren't contacted again. Additionally, for those that do choose to participate, know that your involvement in this project is voluntary and you may withdraw your participation at any stage of the project timeline up to the release of results.

The conduct of this research involves the collection of your identified personal information. The information collected is confidential and will not be disclosed to third parties without your consent, except to meet government, legal, or other regulatory authority requirements. A de-identified copy of this data may be used for other research purposes. However, your anonymity will at all times be safeguarded. For further information, consult the University's Privacy Plan at http://www.griffith.edu.au/about-griffith/plans-publications/griffith-university-privacy-plan - Or telephone (07) 3735 4375.

Thank you for your consideration. I look forward to hearing from you soon.

Regards,

Mark Bailey

Doctoral Researcher
Cities Research Centre
Griffith University

Appendix E

Participant Consent Form

The supervisors listed in the consent form are correct at the time of authoring the form (2015), and changed during candidature.

Griffith University - Nathan Campus #
170 Kessels Road - Nathan Qld. 4111

Griffith Ethics Reference Number 2016/061

Research participant consent form

I ……………………………………………………………………, have read the cover letter for this research project, and I have asked the interviewer any questions I have about my participation, my privacy, confidentiality, and the purpose of the research. By signing this form, I hereby state that I am fully aware of what my participation means. I have been given adequate time to consider my participation, and I have no further questions at this stage.

I understand that my participation is voluntary, and that I may withdraw my participation, including withdrawing the information I provide at interview at any stage, up to the time that the results are released. I am aware that my interview will be voice recorded, and the information I provide will be transcribed into word format. I am aware that when my recording is transcribed, my details will be removed for confidentiality purposes.

I would like to see a copy of the transcript of my interview: Y N

I am aware that I may contact the primary researcher, Mark Bailey, to ask further questions about my involvement if I feel it necessary. I am aware of the supervisory staff contact details should I need to contact someone else about this research. I am also aware of the contact details of the Griffith University Human Ethics Board, and I may contact them if I have ethical questions, or if I feel that a breach of human ethics has occurred. (Details of these contacts are over the page).

I hereby state that the information I provide is a true and accurate account of events according to me.

Signed:
Print name:
Date:
Signature of witness:
Witness name:
Date:

Project contacts:

Mr Mark Bailey. The researcher and interviewer—**Your primary contact**

e-mail: mark.bailey5@griffithuni.edu.au

Telephone: (07) 3735 5534—business hours

Dr Catherine Howlett. Co-primary supervisor of the research project

e-mail: c.howlett@griffith.edu.au

Telephone: (07) 3735 3844—business hours

Dr Monica Seini. Co-primary supervisor of the research project

e-mail: m.seini@griffith.edu.au

Telephone: (07) 3735 3649—business hours

Dr Natalie Osborne: Associate Supervisor of the research project

e-mail: n.osborne@griffith.edu.au

Telephone: (07) 5552 7419—business hours

The Manager, Griffith Research Ethics

e-mail: research-ethics@griffith.edu.au

Telephone: (07) 3735 4375

References

ABC. (2015). Abbot Point: federal government approves huge coal port expansion near great barrier reef. Retrieved: 4 February, 2016. http://www.abc.net.au/news/2015-12-22/massive-abbot-point-coal-port-expansion-gets-federal-approval/7047380.

ABS. (2017). Gloucester Statistical Area Level 2. Retrieved: 28 June, 2017. http://www.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/108051167?opendocument.

AGL. (2013). The Gloucester Gas Project: AGL Energy.

AGL. (2016). Review of gas assets and exit of gas exploration and production. *ASX and Media Releases.* Retrieved: 27 February, 2018. https://www.agl.com.au/about-agl/media-centre/asx-and-media-releases/2016/february/review-of-gas-assets-and-exit-of-gas-exploration-and-production.

Agyeman, J., & Evans, B. (2004). 'Just sustainability': the emerging discourse of environmental justice in Britain? *The Geographical Journal, 170*(2), 155-164.

Agyeman, J., Schlosberg, D., Craven, L., & Matthews, C. (2016). Trends and Directions in Environmental Justice: From Inequity to Everyday Life, Community, and Just Sustainabilities. *41*(1), 321-340. doi:10.1146/annurev-environ-110615-090052

Ahmed, S. (2004a). Affective Economies. *Project Muse, 22*(2), 117-139.

Ahmed, S. (2004b). Collective Feelings: Or, the Impressions Left by Others. *Theory, Culture & Society, 21*(2), 25-42. doi:10.1177/0263276404042133

Ahmed, S. (2004c). *The Cultural Politics of Emotion*. New York, NY, USA: Routledge.

AIATSIS. (2021). Welcome to Country. Retrieved: 20 November, 2021. https://aiatsis.gov.au/explore/welcome-country.

Albrecht, G. (2004). Solastalgia. *Alternatives Journal, 32*(4/5), 34-36.

Alder, E. S., & Clark, R. (2011). *An invitation to social research: how it's done*. Australia: Wadsworth Cengage Learning.

Alexis, J., & Rich, J. (2020). Organising twenty-first-century activism: from structure to strategy in Latin American social movements. *Latin American Research Review, 55*(3), 430 - 444. doi:10.25222/larr.452

Anderson, J., & Jones, K. (2009). The difference that place makes to methodology: uncovering the 'lived space' of young people's spatial practices. *Children's Geographies, 7*(3), 291-303.

Anderson, K., & Smith, S. J. (2001). Emotional Geographies. *Transactions of the Institute of British Geographers, 26*(1), 7-10.

Anguelovski, I. (2013). New directions in urban environmental justice: rebuilding community, addressing trauma, and remaking place. *Journal of Planning Education and Research, 33*(2), 160-175.

APPEA. (2018). About APPEA. Retrieved: 03 March, 2018. https://www.appea.com.au/about-appea/.

Archer, M. (1998). Introduction: realism in the social sciences. In M. Archer, R. Bhaskar, A. Collier, T. Lawson, & A. Norrie (Eds.), *Critical realism: Essential readings*. London, UK: Routledge.

Aryal, S., Maraseni, T., Qu, J., de Bruyn, L. L., Dhakal, Y. R., & Zeng, J. (2020). Key steps in environmental impact assessment: a comparative study of China, Queensland State of Australia and Nepal. *Environmental Monitoring and Assessment, 192*(2), 139. doi:10.1007/s10661-020-8098-4

Askins, K. (2016). Emotional citizenry: everyday geographies of befriending, belonging and intercultural encounter. *Transactions of the Institute of British Geographers, 41*(4), 515-527. doi:10.1111/tran.12135

Atari, D. O., Luginaah, I., & Baxter, J. (2010). "This is the mess that we are living in": residents everyday life experiences of living in a stigmatized community. *GeoJournal, 76*(5), 483-500. doi:10.1007/s10708-010-9365-7

Aussie Towns. (2020). Gloucester, NSW. Retrieved: 20 February, 2020. http://www.aussietowns.com.au/town/gloucester-nsw.

Bailey, M.-S., & Osborne, N. (2020). Extractive resources and emotional geographies: the battle for treasured places in the Gloucester Valley. *Geoforum, 116*, 153-162. doi:10.1016/j.geoforum.2020.07.006

Bain, D. (2019). Assessing longwall mining impacts on the forests above. Retrieved: 29 November, 2019. https://landsat.gsfc.nasa.gov/assessing-longwall-mining-impacts-on-forests-above/.

Baker, G., & Slater, S. (2008). *The increasing significance of coal seam gas in eastern Australia*. Paper presented at the PESA Eastern Australasian Basins Symposium III, Sydney.

Behrendt, L., & Strelein, L. (2001). Old habits die hard: Indigenous land rights and mining in Australia. *Cultural Survivial Quaterly Magazine*.

Bell, J., Saunders, M. I., Lovelock, C. E., & Possingham, H. P. (2014). Legal frameworks for unique ecosystems - how can the EPBC Act offsets policy address the impact and development on seagrass? *Environmental and Planning Law Journal, 31*(11), 34-46.

Bennett, K. (2009). Challenging emotions. *The Royal Geographical Society*, *41*(3), 244-251.

Bennett, K. (2013). Emotion and place promotion: Passionate about a former coalfield. *Emotion, Space and Society, 8*, 1-10. doi:https://doi.org/10.1016/j.emospa.2012.04.004

Bible, V. (2018). *Terania Creek and the forging of modern environemental activism*. Cham, Switzerland: Palgrave Macmillan.

Birch, K. (2015). Neoliberalism: the whys and wherefores … and future directions. *Sociology Compass, 9*(7), 571-584. doi:10.1111/soc4.12277

Biresselioglu, M. E., Demir, M. H., Gonca, A., Kolcu, O., & Yetim, A. (2019). How vulnerable are countries to resource curse?: A multidimensional assessment. *Energy Research & Social Science, 47*, 93-101. doi:https://doi.org/10.1016/j.erss.2018.08.015

Blaikie, P. (1985). *The political economy of soil erosion in developing countries*. London, UK: Longman.

Blaikie, P., & Brookfield, H. (1987). *Land degradation and soiciety*. London, UK: Routledge.

Blancke, S. (2014). ARE EMOTIONS RELIABLE GUIDES FOR POLICY MAKING? AN EVOLUTIONARY APPROACH */¿Son las emociones una guía adecuada para actuar en la esfera pública? Una perspectiva evolutiva. *Azafea, 16*, 39-56.

Blyton, G., Heitmeyer, D., & Maynard, J. (2004). *Wannin Thanbarran: a history of Aboriginal and European contact in Muswellbrook and the Upper Hunter Valley*. Newcastle, NSW, Australia: The University of Newcastle.

Bondi, L. (2005). Making connections and thinking through emotions: between geography and psychotherapy. *Transactions of teh Institute of Brittish Geographers, 30*(4), 433-448.

Bondi, L., Davidson, J., & Smith, M. (2005). Introduction: geography's 'emotional turn'. In L. Bondi, J. Davidson, & M. Smith (Eds.), *Emotional Geographies*. Aldershot, Hampshire, England: Ashgate Publishing Limited.

Brown, W. (2015). *Undoing the demos: neoliberalism's stealth revolution*. Brooklyn, New York, USA: Zone Books.

Browne, A. L., Stehlik, D., & Buckley, A. (2011). Social licences to operate: for better not for worse; for richer not for poorer? The impacts of unplanned mining closure for "fence line" residential communities. *Local Environment, 16*(7), 707-725.

Bruin, M. (2014). Indigenous elders condemn Northern Rivers gas exploration. Retrieved: 23 November, 2021. http://www.nationalunitygovernment.org/indigenous-elders-condemn-northern-rivers-gas-exploration.

Buechler, S. M. (1995). New social movement theories. *The sociological quarterly, 36*(3), 441-464.

Bullard, R. D. (1993). Anatomy of environmental racism and the environmental justice movement. In R. D. Bullard (Ed.), *Confronting environmental racism: voices from the grassroots* (pp. 15-39). Boston, MA, USA: South End Press.

Burgmann, V. (2003). *Power, profit, and protest*. Crows Nest, Australia: Allen and Unwin.

Burr, V. (2003). *What is social constructionism* (2nd ed.). New York, USA: Routledge.

Byrne, J., & MacCallum, D. (2013). Bordering on neglect: 'environmental justice' in Australian planning. *Australian Planner, 50*(2), 164-173. doi:10.1080/07293682.2013.776984

Byrne, J., Martinez, C., & Glover, L. (2002). A brief on environmental justice. In J. Byrne, L. Glover, & C. Martinez (Eds.), *Environmental justice: discources in internaiontal political economy*. New Brunswick, USA: Transaction Publishers.

Byrne, J., Sipe, N., & Searle, G. (2010). Green around the gills? The challenge of density for urban greenspace planning in SEQ. *Australian Planner, 47*(3), 162-177. doi:10.1080/07293682.2010.508204

Cahill, D., & Beder, S. (2005). Regulating the power shift: the state, capital and the electricity privatisation in Australia. *The Journal of Australian Political Economy, 55*, 5-22.

Carey, M. (2012). Coal seam gas: future bonanza or toxic legacy? *Viewpoint, 8*, 26-31.

Carley, S., Evans, T. P., & Konisky, D. M. (2018). Adaptation, culture, and the energy transition in American coal country. *Energy Research & Social Science, 37*, 133-139.

Carson, R. (1998). Design for nature writing. In L. Lear (Ed.), *Lost woods: the discovered writing of Rachel Carson*. Boston: Beacon Press.

Carter, R. M., & Morgan, R. K. (2018). Regulatory trust and failure – a case study of coal seam gas in New South Wales, Australia. *Journal of Environmental Planning and Management, 61*(10), 1789-1804. doi:10.1080/09640568.2017.1372277

Cashmore, M., Richardson, T., Hilding-Ryedvik, T., & Emmelin, L. (2010). Evaluating the effectiveness of impact assessment instruments: theorising the nature and implications of their political constitution. *Environmental Impact Assessment Review, 30*(6), 371-379. doi:http://dx.doi.org/10.1016/j.eiar.2010.01.004

Casolo, J., & Doshi, S. (2013). Domesticated Dispossessions? Towards a Transnational Feminist Geopolitics of Development. *Geopolitics, 18*(4), 800-834. doi:10.1080/14650045.2013.811644

Cassell, J. (2014). Bentley blockade. *Arena Magazine*(130), 12-13.

Celikates, R. (2014). Rethinking civil disobedience as a practice of contestation. Retrieved: 31 July, 2014. http://www.academia.edu/4662439/Rethinking_Civil_Disobedience_as_a_Practice_of_Contestation_MS_.

Černoch, F., Lehotský, L., Ocelík, P., Osička, J., & Vencourová, Ž. (2019). Anti-fossil frames: Examining narratives of the opposition to brown coal mining in the Czech Republic. *Energy Research & Social Science, 54*, 140-149. doi:https://doi.org/10.1016/j.erss.2019.04.011

Chapman, R., Plummer, P., & Tonts, M. (2015). The resource boom and socio-economic well-being in Australian resource towns: a temporal and spatial analysis. *Urban Geography, 36*(5), 629-653. doi:10.1080/02723638.2015.1018032

Chapman, R. J. K. (1992). *Setting agendas and defining problems: the Wesley Vale Pulp Mill proposal*. Geelong, Vic. Australia: Deakin University Press.

Chen, C., & Randall, A. (2013). The economic contest between coal seam gas mining and agriculture on prime farmland: it may be closer than we thought. *Journal of Economic & Social Policy, 15*(3), 87-118.

Cheshire, L., Everingham, J.-A., & Lawrence, G. (2014). Governing the impacts of mining and the impacts of mining governance: Challenges for rural and regional local governments in Australia. *Journal of Rural Studies, 36*, 330-339. doi:https://doi.org/10.1016/j.jrurstud.2013.10.010

Clean Energy Council. (2018). Clean energy Australia report. Retrieved: June 15, 2020. https://www.cleanenergycouncil.org.au/resources/resources-hub/clean-energy-australia-report.

Cohen, J. (1985). Strategy or Identiy?: new theoretical paradigms and contemporary soical movements. *Social Research, 52*, 663-716.

Collier, A. (1994). *Critical realism: an introduction to Roy Bhaskar's philosophy*. London: Verso.

Connor, L. H. (2016). Energy futures, state planning policies and coal mine contests in rural New South Wales. *Energy Policy, 99*(Supplement C), 233-241. doi:https://doi.org/10.1016/j.enpol.2016.05.026

Conradson, D. (2005). Freedom, space and perspective: moving encounters with other ecologies. In J. Davidson, L. Bondi, & M. Smith (Eds.), *Emotional Geographies*. London, UK: Routledge.

Coram, A., Moss, J., & Blashki, G. (2014). Harms unknown: health uncertainties cast doubt on the role of unconventional gas in Australia's energy future. *The Medical Journal of Australia, 200*(4), 210-213. doi:10.5694/mja13.11023

Corry, O., & Reiner, D. (2021). Protests and policies: how radical social movement activists engage with policy dilemmas. *Sociology, 55*(1), 197 - 217. doi:10.1177/00380385209431107

Cotton, M. (2014). Shale gas policy in the United Kingdom: an argumentative discourse analysis. *Energy Policy, 73*, 427-438.

Creswell, J. W. (2014). *Research Design* (4th ed.). London, UK: Sage Publications Inc.

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design: choosing among five approaches* (Fourth ed.). Los Angeles: SAGE.

Curran, G. (2021). Coal, climate and change: The narrative drivers of Australia's coal economy. *Energy Research & Social Science, 74*, 101955.

CWAA. (2017). Country Women's Association of Australia. Retrieved: 19 November, 2019. https://www.cwaa.org.au.

Daley, M. (2014). Gloucester Dreaming. Retrieved: 22 November, 2021. https://aidanricketts.com/gloucester-dreaming/.

Dallman, S., Ngo, M., Laris, P., & Thien, D. (2013). Political ecology of emotion and sacred space: The Winnemem Wintu struggles with California water policy. *Emotion, Space and Society, 6*, 33-43. doi:https://doi.org/10.1016/j.emospa.2011.10.006

Davidson, J., & Milligan, C. (2004). Embodying emotion sensing space: introducing emotional geographies. *Social & Cultural Geography, 5*(4), 523-532. doi:10.1080/1464936042000317677

Davis, R., & Franks, D. (2011). The costs of conflict with local communities in the extractive industry. *Proceedings of the First International Seminar on Social Responsibility in Mining, 30*, 1-13.

de Rijke, K. (2013a). The Agri-Gas Fields of Australia: Black Soil, Food, and Unconventional Gas. *Culture, Agriculture, Food and Environment, 35*(1), 41-53. doi:10.1111/cuag.12004

de Rijke, K. (2013b). Coal Seam Gas and social impact assessment: an anthropological contribution to current debates and practices. *Journal of Economic & Social Policy, 15*(3), 29-58.

de Rijke, K. (2013c). Hydraulically fractured. *Anthropology Today, 29*(2), 13-17.

Deem, R. (2016). *Gasfield Free NSW Northern Rivers*: Australian eBook Publisher.

Delina, L. L. (2021). Committing to coal? Scripts, sociotechnical imaginaries, and the resurgence of a coal regime in the Philippines. *Energy Research & Social Science, 81*, 102258.

Della Porta, D., & Diani, M. (2009). *Social movements: an introduction*. VIC, Australia: Blackwell Publishing.

Della Porta, D., & Tarrow, S. G. (2005). *Transnational protest and global activism*. Lanham, MD, USA: Rowman & Littlefield.

Devine-Wright, P. (2009). Rethinking NIMBYism: the role of place attachment and place identity in explaining place-protective action. *Journal of Community & Applied Social Psychology, 19*(6), 426-441.

Dickie, M. (2019). Wrote place for a coal mine - such lush, cultural country. Retrieved: 22 November, 2021. https://nit.com.au/wrong-place-for-a-coalmine-such-lush-cultural-country/.

Diesendorf, M. (2006). Wind power in Australia. *International Journal of Environmental Studies, 63*(6), 765-776.

Doshi, S. (2017). Embodied urban political ecology: five propositions. *Area, 49*(1), 125-128. doi:10.1111/area.12293

Eccleston, C. H. (2011). *Environmental impact assessment, a guide to best practice. Chapter 4: social impact assessment and environmental justice*: CRC Press.

Eesley, C., DeCelles, K., & Menox, M. (2016). Through the mud or in the boardroom: examining activist types and their strategies in targeting firms for social change. *Strategic Management Journal, 37*, 2425 - 2440. doi:10.1002/smj.2458

Elliott, M., & Thomas, I. (2009). *Environmental Impact Assessment in Australia*. Sydney: The Federation Press.

England, K. V. L. (1994). Getting Personal: Reflexivity, Positionality, and Feminist Research. *The Professional Geographer, 46*(1), 80-89. doi:10.1111/j.0033-0124.1994.00080.x

Erickson, K. (2008). Preface. In I. Convery, J. Baxter, & C. Bailey (Eds.), *Animan disease and human trauma*. Hampshire, UK: Palgrave Macmillan.

Erikson, K. (2008). Preface. In I. Convery, M. Mort, J. Baxter, & C. Bailey (Eds.), *Animal disease and human trauma*: Palgrave Macmillan.

Escobar, A. (2001). Culture sits in places: reflections on globalism and subaltern strategies of localization. *Political Geography, 20*(2), 139-174. doi:https://doi.org/10.1016/S0962-6298(00)00064-0

Evans, D., Gruba, P., & Zobel, J. (2011). *How to write a better thesis*. Melbourne, Victoria, Australia: Melbourne University Press.

Ey, M. (2018). "Soft, airy fairy stuff"? Re-evaluating 'social impacts' in gendered processes of natural resource extraction. *Emotion, Space and Society, 27*, 1-8. doi:https://doi.org/10.1016/j.emospa.2018.02.002

Ey, M., & Sherval, M. (2016). Exploring the minescape: engaging with the complexity of the extractive sector. *Area, 48*(2), 176-182. doi:10.1111/area.12245

Ey, M., Sherval, M., & Hodge, P. (2017). Value, Identity and Place: unearthing the emotional geographies of the extractive sector. *Australian Geographer, 48*(2), 153-168. doi:10.1080/00049182.2016.1251297

Eyerman, R., & Jamison, A. (1991). *Social movements: a cognitive approach*. Cambridge, UK: Polity Press in association with Basil Blackwell.

Faber, D., & McCarthy, D. (2003). Neo-liberalism, globalization and the struggle for ecological democracy: linking sustainability and environmental justice. In J. Agyeman, R. D. Bullard, & B. Evans (Eds.), *Just sustainabilities: Development in an unequal world* (pp. 38-63). London: Earthscan Publications Ltd.

Fan, M.-F. (2016). Environmental justice and the politics of risk: water resource controversies in Taiwan. *Human ecology, 44*(4), 425-434.

Farber, D. (1988). Introduction. In D. Faber (Ed.), *The struggle for ecological democracy: environmental justice movements in the United States*. New York: The Guilford Press.

Farnstein, S. S. (2010). *The just city*. Ithica, NY, USA: Cornell Universtiy Press.

Farrugia, D., Hanley, J., Sherval, M., Askland, H., Askew, M., Coffey, J., & Threadgold, S. (2018). The local politics of rural land use: Place, extraction industries and narratives of contemporary rurality. *0*(0), 1440783318773518. doi:10.1177/1440783318773518

Ferguson, B., & Mudd, G. M. (2011). Water Quality, Water Management and the Ranger Uranium Project: Guidelines, Trends and Issues. *Water, Air, & Soil Pollution, 217*(1), 347-363. doi:10.1007/s11270-010-0592-9

Fielding, K. S., McDonald, R., & Louis, W. R. (2008). Theory of planned behaviour, identity and intentions to engage in environmental activism. *Journal of Environmental Psychology, 28*(4), 318-326. doi:https://doi.org/10.1016/j.jenvp.2008.03.003

Figueroa, R. M. (2004). Bivalent environmental justice and the culture of poverty. *Rutgers Journal of Law & Urban Policy, 1*, 1-15.

Flick, U. (2004). Triangulation in qualitative research. In U. Flick, E. von Kardorff, & I. Steinke (Eds.), *A companion to qualitative research*. London: SAGE Publications.

Fox, J. (Writer). (2010). Gasland [Film]. In T. Aldesic, M. Gandour, J. Fox, & D. Roma (Producer). United States: New Video Group.

Gasfield Free Northern Rivers. (2017). Home. Retrieved: 20 November, 2017. http://csgfreenorthernrivers.org.

Gasfield Free Northern Rivers. (2018a). Invasive Gas mining in the Nothern Rivers. Retrieved: 2 April, 2018. http://csgfreenorthernrivers.org/csg-risks/csg-in-the-northern-rivers/.

Gasfield Free Northern Rivers. (2018b). Launch of GSG-free communities strategy. Retrieved: 09 April, 2018. http://csgfreenorthernrivers.org/uncategorized/launch-of-csg-free-communities-strategy/.

Geoscience Australia. (2014). Coal Seam Gas *Fact Sheet.* Retrieved: 11 August, 2014. http://www.australianminesatlas.gov.au/education/fact_sheets/coal_seam_gas.html.

Geoscience Australia. (2019). Coal. Retrieved: 28 November, 2019. https://www.ga.gov.au/data-pubs/data-and-publications-search/publications/australian-minerals-resource-assessment/coal.

Gerber, J. (1997). Beyond dualism – the social construction of nature and the natural and social construction of human beings. *Progress in Human Geography, 21*(1), 1-17. doi:10.1191/030913297671906269

Gesler, W. (2003). *Healing places*. Langman, MD: Rowman and Littleford.

Gillard, J. (2011). Julia Gillard. Retrieved: 24 June, 2020. https://primeministers.moadoph.gov.au/prime-ministers/julia-gillard.

Giugni, M., Bandler, M., & Eggert, N. (2006). *The global justice movement: How far does the classic social movement agenda go in explaining transnational contention?* Paper presented at the Civil Society and Social Movements Programme.

Gloucester Resources Limited v Minister for Planning [2019] NSWLEC 7, No. 2017/383563 (Land and Environment Court New South Wales 2019).

Gloucester Tourism. (2017). Industry. Retrieved: 27 June, 2017. https://gloucestertourism.com.au/industry/.

Goldman, B. A., & Fritton, L. (1994). *Toxic wastes and race revisited: an update of the 1987 report on the racial and socioeconomic characteristics of communities with hazardous waste sites*. Washington, DC, USA: The centre for policy alternatives, national association for the advancement of coloured people, United Church of Christ.

González-Hidalgo, M. (2017). The politics of reflexivity: Subjectivities, activism, environmental conflict and Gestalt Therapy in southern Chiapas. *Emotion, Space and Society, 25*, 54-62. doi:https://doi.org/10.1016/j.emospa.2017.05.003

González-Hidalgo, M., & Zografos, C. (2019). Emotions, power, and environmental conflict: Expanding the 'emotional turn'in political ecology. *Progress in Human Geography*, 0309132518824644.

Google. (2018). Maps. Retrieved: 08 May, 2018. https://www.google.com.au/maps/place/Gloucester+NSW+2422/@-32.0120642,151.8936709,12z/data=!3m1!4b1!4m5!3m4!1s0x6b74fefa68c4c935:0x40609b49043a1f0!8m2!3d-32.0233309!4d151.95875.

Google. (2020a). Glocuester, NSW. Retrieved: 14 February, 2020. https://www.google.com/maps/place/Gloucester+NSW+2422/@-32.2864068,151.5489769,9z/data=!4m5!3m4!1s0x6b74fefa68c4c935:0x40609b49043a1f0!8m2!3d-32.0233309!4d151.95875.

Google. (2020b). Lismore, NSW. Retrieved: 14 February, 2020. https://www.google.com/maps/place/Lismore+NSW+2480/@-28.9851006,152.4930779,9.15z/data=!4m5!3m4!1s0x6b909e6f055f909d:0x40609b49043f890!8m2!3d-28.8093154!4d153.2882876.

Gould, K., Schnaiberg, A., & Weinberg, A. (1996). *Local environmental struggles: citizen activism in the treadmill of production*. Cambridge, UK: Cambridge Universtiy Press.

Government of Australia. (2015a). *Science and research priorities*. Department of Industry Innovation and Science Canberra, ACT, Australia: Government of Australia Retrieved: 15 September, 2018. https://www.industry.gov.au/sites/g/files/net3906/f/2018-10/science_and_research_priorities_2015.pdf.

Government of Australia. (2015b). *Strategic science and reserach priorities* Retrieved: 15 September, 2018. http://www.chiefscientist.gov.au/wp-content/uploads/STRATEGIC-SCIENCE-AND-RESEARCH-PRIORITIES_181214web.pdf

Government of Australia. (2020). Fact sheet 4: EPBC Act Ammendments - Water Trigger. Retrieved: 18th June, 2020. https://www.environment.gov.au/epbc/publications/factsheet4-oss-epbc-act-amendments-water-trigger.

Government of NSW. (2000). Petroleum (Onshore) Act 1991 No. 84. Retrieved: 24 July, 2020. https://www.legislation.nsw.gov.au/#/view/act/1991/84.

Government of NSW. (2013). *Northern Rivers Regional Profile*. Retrieved: 15 September, 2018. Lismore Council, NSW, Australia: https://apo.org.au/sites/default/files/resource-files/2013-01/apo-nid159441.pdf

Government of NSW. (2014a). Coal Seam Gas. *Informing the Community.* Retrieved: 08 Mar, 2014. http://www.csg.nsw.gov.au/features/history-of-mining-oil-and-gas-production-in-nsw.

Government of NSW. (2014b). Find my council. Retrieved: 16 September, 2014. http://www.olg.nsw.gov.au/public/my-local-council/find-my-council.

Government of NSW. (2014c). Media Release: Metgasco drilling approval suspended. Retrieved: 26 September, 2014. http://www.resourcesandenergy.nsw.gov.au/__data/assets/pdf_file/0011/531875/140515-Metgasco-Drilling-Approval-Suspended.pdf.

Government of NSW. (2017). Preparing an environmental impact statement. Retrieved: 22 February, 2018. https://www.planning.nsw.gov.au/-/media/Files/DPE/Guidelines/guideline-4-draft-preparing-an-environmental-impact-statement-2017-06.pdf.

Government of NSW. (2018a). Crimes Act 1900 - Section 201. Retrieved: 12 March, 2018 http://www5.austlii.edu.au/au/legis/nsw/consol_act/ca190082/s201.html.

Government of NSW. (2018b). *Crimes Act 1900 No 40*. Department of Justice Sydney, NSW, Australia: Government of NSW,.

Government of NSW. (2020). Protection of the environmetnal operations Act. Retrieved: 24 July, 2020. https://www.legislation.nsw.gov.au/#/view/act/1997/156.

Government of NSW. (2021a). Nightcap National Park. Retrieved: 05 November, 2021. https://www.nationalparks.nsw.gov.au/visit-a-park/parks/nightcap-national-park.

Government of NSW. (2021b). Social Impact Assessment. Retrieved: 24 November, 2021. https://www.planning.nsw.gov.au/Policy-and-Legislation/Under-review-and-new-Policy-and-Legislation/Social-Impact-Assessment.

Grant-Smith, D., & Osborne, N. (2016). Dealing with discomfort: how the unspeakable confounds wicked planning problems. *Australian Planner, 53*(1), 46-53. doi:10.1080/07293682.2015.1135812

Greenburg, J. B., & Park, T. K. (1994). Political ecology. *Journal of Political Ecology, 1*(1), 1-12.

Groundswell Gloucester. (2014a). *Exposing the risks: fundamental flaws in AGL's application to frack CSG wells in Gloucester*. Retrieved: 23 August, 2018. http://www.groundswellgloucester.com/resources/downloads/Exposing-the-Risks.pdf

Groundswell Gloucester. (2014b). Extractive industry proposals in the Vale of Glocuester. Retrieved: 23 August, 2018. http://www.groundswellgloucester.com/resources/downloads/Extractive-Industries-Map.jpg.

Groundswell Gloucester. (2014c). Gloucester rejected - We feel cheated! [Press release]

Groundswell Gloucester. (2015a). *AGL's coal seam gasfield in Gloucester: a case study in poor environmental, social, and corporate governance (ESG)*. Retrieved: 24 August, 2018. http://www.groundswellgloucester.com/resources/downloads/ESG-and-AGL-in-Gloucester.pdf

Groundswell Gloucester. (2015b). *AGL's coal seam gasfield in Glocuester: A case study in poor Environmental, Social and Corporate Governance (ESG)*. Retrieved: 24 August, 2018. http://www.groundswellgloucester.com/resources/downloads/ESG-and-AGL-in-Gloucester.pdf

Groundswell Gloucester. (2015c). The beautiful Gloucester Valley is threatened by destructive coal and gas mining. Retrieved: 18 September, 2015. http://www.groundswellgloucester.com/index.html.

Groundswell Gloucester. (2016). AGL CSG. Retrieved: 22 August, 2019. https://www.groundswellgloucester.com/CSG.html.

Groundswell Gloucester. (2018a). Gloucester Resources Limited (GRL) - Rocky Hill Coal Project. Retrieved: 27 February, 2018. http://www.groundswellgloucester.com/coal/rocky-hill.html.

Groundswell Gloucester. (2018b). Stratford Coal Mine. Retrieved: 27 February, 2018. http://www.groundswellgloucester.com/coal/stratford.html.

Groundswell Gloucester. (2021). Groundswell Gloucester. Retrieved: 21 July, 2021. https://www.groundswellgloucester.com/.

Hamilton, C. (1993). Coping with industrial exploitation. In R. D. Bullard (Ed.), *Confronting environmental racism: voices from the grassroots*. Boston, MA, USA: South End Press.

Hammett, D., Jackson, L., & Vickers, D. (2019). The ethics of (not) giving back. *Area, 51*(2), 380-386. doi:10.1111/area.12471

Hawke, B. (Writer). (2014). Black Soil Blue [Television]. In B. Hawke (Producer), *Landline*. Sydney, NSW: ABC News.

Head, B. W. (2008a). Community engagement: Participation on whose terms? *Australian Journal of Political Science, 24*(3), 441-454.

Head, B. W. (2008b). Wicked problems in public policy. *Public Policy, 3*(2), 101-118.

Heisenberg, W. (1989). *From a life of physics*. Singapore: World Scientific Publishing Co. Pty. Ltd.

Herbert, L. (2014). CSG: Dividing the farming community. Retrieved: 31 July, 2014. http://www.abc.net.au/news/2014-05-16/coal-seam-gas-in-north-west-nsw/5456216.

Hilson, G. (2002). An overview of land use conflicts in mining communities. *Land Use Policy, 19*(1), 65-73.

Hodges, C. A. (1995). Mineral resources, environmental issues, and land use. *Science, 268*(5215), 1305-1312.

Höffe, O., & den Haan, J. (2013). *John Rawls, a theory of justice*. Leiden, The Netherlands: Brill.

Holland, J. (2007). Emotions and Research. *International Journal of Social Research Methodology, 10*(3), 195-209. doi:10.1080/13645570701541894

Horton, D. (1996). Aboriginal Australia Map. Retrieved: 14 November, 2017. http://www.abc.net.au/indigenous/map/.

Howitt, R. (2001). *Rethinking resource management: Justice, sustainability and indigenous people*. London, UK: Routledge.

Howlett, C., & Hartwig, L. D. (2017). The Friction of Fracking: Discursive Constraints on Aboriginal Participation in Coal Seam Gas in Northern

NSW. *The extractive industries and society, 4*(2), 329-336. doi:https://doi.org/10.1016/j.exis.2017.01.010

Howlett, C., & Lawrence, R. (2019). Accumulating Minerals and Dispossessing Indigenous Australians: Native Title Recognition as Settler-Colonialism. *Antipode, 51*(3), 818-837. doi:10.1111/anti.12516

Howlett, C., Seini, M., McCallum, D., & Osborne, N. (2011). Neoliberalism, Mineral Development and Indigenous People: a framework for analysis. *Australian Geographer, 42*(3), 309-323.

Hubbard, G., Backett-Milburn, K., & Kemmer, D. (2001). Working with emotion: Issues for the researcher in fieldwork and teamwork. *International Journal of Social Research Methodology, 4*(2), 119-137. doi:10.1080/13645570116992

Hubbard, P. (2005). The geographis of 'going out'" emotion and embodiment in teh evening economy. In J. Davidson, L. Bondi, & M. Smith (Eds.), *Emotional geographies*. London, UK: Routledge.

Huckle, J. (2019). Powerful geographical knowledge is critical knowledge underpinned by critical realism. *International Research in Geographical and Environmental Education, 28*(1), 70-84. doi:10.1080/10382046.2017.1366203

Hutton, D. (2012). Lessons from the Lock the Gate Movement. *Social Alternatives, 31*(1), 15-19.

Hutton, D., & Connors, L. (1999). *A history of the Australian environment movement*. Cambridge, UK: Cambridge University Press.

ICCR. (2015a). About critical realism. Retrieved: 29 September, 2015. http://international-criticalrealism.com/about-critical-realism/.

ICCR. (2015b). Basic critical realism. Retrieved: 29 September, 2015. http://international-criticalrealism.com/about-critical-realism/basic-critical-realism/.

IPCC. (2007). *Climate Change 2007: Synthesis Report*. Retrieved: 14 September, 2018. Internaitonal Panel on Climate Change: https://www.ipcc.ch/report/ar4/syr/

Ivanova, G., & Rolfe, J. (2011). Assessing development options in mining communities using stated preference techniques. *Resources Policy, 36*(3), 255-264. doi:https://doi.org/10.1016/j.resourpol.2011.03.001

Jackson, D. D. (2011). Scents of Place: The Dysplacement of a First Nations Community in Canada. *American Anthropologist, 113*(4), 606-618.

Jacquet, J. (2009). *Energy boomtowns and natural gas: Implications for Marcellus Shale local governments and rural communities*. Retrieved from State College, PA:

Jaspal, R., & Nerlich, B. (2013). Fracking in the UK press: Threat dynamics in an unfolding debate. *Public Understanding of Science*.

Johnson, F. (2014). *In the words of Neil DeGrasse Tyson*. Online Amazon.

Johnston, R. (2000). Power. In R. Johnston, D. Gregory, G. Pratt, & M. Watts (Eds.), *The dictionary of human geography* (4th ed.). Malden, MA, USA: Blackwell Publishing.

Jolley, C., & Rickards, L. (2020). Contesting coal and climate change using scale: emergent topologies in the Adani mine controversy. *Geographical Research, 58*(1), 6-23.

Jones, O. (2005). An ecology of emotion, memory, self and landscape. In J. Davidson, L. Bondi, & M. Smith (Eds.), *Emotional Geographies*. London, UK: Routledge.

Kahn, M. T. (2013). Theoretical frameworks in political ecology and participatory nature/forest conservation: The necissity for heterodox approach and the critical moment. *Journal of Political Ecology, 20*, 460-472.

Katz, C. (2001). Vagabond Capitalism and the Necessity of Social Reproduction. *Antipode, 33*(4), 709-728. doi:10.1111/1467-8330.00207

Kearns, R., & Collins, D. (2012). Feeling for the coast: the place of emotion in resistance to residential development. *Social & Cultural Geography, 13*(8), 937-955. doi:10.1080/14649365.2012.730150

Kemp, W. (2011). Land degradation and rebabilitation in coastal sand mining. Retrieved: 05 November, 2021. https://willkemp.net.au/enviroscience/land-degradation-and-rehabilitation-in-coastal-sand-mining/.

Kennedy, A., Schafft, K. A., & Howard, T. M. (2017). Taking away David's sling: environmental justice and land-use conflict in extractive resource development. *Local Environment, 22*(8), 952-968. doi:10.1080/13549839.2017.1309369

Khan, M. T. (2013). Theoretical frameworks in political ecology and participatory nature/forest concervation: the necessity for heterodox approach and the *critical moment*. *Journal of Political Ecology, 20*, 460-472.

Kia, A., & Ricketts, A. (2018). Enabling emergence: the Bentley Blockade and the struggle for a gasfield free Nothern Rivers. Retrieved: 23 November, 2021. https://aidanricketts.com/wp-content/uploads/2019/06/LR12018_Article03_Kia.Ricketts.pdf.

Klandermans, B. (1991). New social movements and resource mobilization: The European and the American approach revisited. *Politics & the Individual, 1*(2), 89-111.

Klandermans, B. (1997). *The social psychology of protest*. Oxford, UK: Blackwell Publishers.

Klandermans, B., Kriesi, H., & Tarrow, S. (1988). *From strucutre to action: Comparing social movement research accross cultures, Vol 1*. Greenwich, CT, USA: JAI Press.

Laliberté, N., & Schurr, C. (2015). Introduction. *Gender, Place & Culture, 23*(1), 72-78. doi:10.1080/0966369x.2014.992117

Langton, M. (2010). The resource curse. *Griffith Review, 28*.

Lawrie, M., Tonts, M., & Plummer, P. (2011). Boomtowns, Resource Dependence and Socio-economic Well-being. *Australian Geographer, 42*(2), 139-164. doi:10.1080/00049182.2011.569985

Lee, C. (1987). *Toxic waste and race in the United States: a national study of the racial and socioeconomic characteristics of communities with hazardous waste*

sites. New York, NY, USA: United Church of Christ Commission on Racial Justice.

Leopold, A. (1949). *A sand county almanac : and sketches here and there*. New York: Oxford University Press.

Lewin, P. G. (2017). "Coal is Not Just a Job, It's a Way of Life": The Cultural Politics of Coal Production in Central Appalachia. *Social Problems, 66*(1), 51-68. doi:10.1093/socpro/spx030

Lions Clubs International. (ND). Fact Sheet. Retrieved: 19 November, 2019. https://temp.lionsclubs.org/EN/pdfs/pr799.pdf.

Lismore and Nimbin Tourism. (2019a). Fast Facts. Retrieved: 28 February, 2019. https://www.visitlismore.com.au/about/fast-facts/p/242.

Lismore and Nimbin Tourism. (2019b). History and hertiage. Retrieved: 28 February, 2019. https://www.visitlismore.com.au/about/heritage-architecture/p/106#.XHccoC1L1TZ.

Lismore Council. (2017). History of Lismore. Retrieved: 14 November, 2017. https://www.lismore.nsw.gov.au/cp_themes/default/page.asp?p=DOC-IZM-41-35-16.

Lock The Gate Alliance. (2014a). CSG Myth Busting. Retrieved: 31 July, 2014. http://www.lockthegate.org.au/csg_myth_busting.

Lock The Gate Alliance. (2014b). Fracking. Retrieved: 20 June 2014. http://www.lockthegate.org.au/fracking.

Lock The Gate Alliance. (2017a). About Us. Retrieved: 20 November, 2017. http://www.lockthegate.org.au/about_us.

Lock The Gate Alliance. (2017b). Northern Territory - Frack Free NT Campaign. Retrieved: 13 September, 2018. http://www.lockthegate.org.au/frack_free_nt.

Lock The Gate Alliance. (2017c). Unconventional gas: jobs and economy. Retrieved: 24 August, 2019. https://www.lockthegate.org.au/jobs_and_economy.

Lock The Gate Alliance. (2019a). Coal mining: impacts and risks. Retrieved: 13 February, 2019. https://www.lockthegate.org.au/about_coal.

Lock The Gate Alliance. (2019b). Unconvenitonal gas: coal seam gas risks. Retrieved: 13 February, 2020.

Lock The Gate Alliance. (2019c). Unconventional gas: shale and tight gas & fracking risks. Retrieved: 13 February, 2019. https://www.lockthegate.org.au/about_shale_and_tight_gas.

Lockie, S. (2004). Collective Agency, Non-Human Causality and Environmental Social Movements: A Case Study of the Australian 'Landcare Movement'. *Journal of Sociology, 40*(1), 41-57.

Lockie, S., Franetovich, M., Sharma, S., & Rolfe, J. (2008). Democratisation versus engagement? Social and economic impact assessment and community participation in the coal mining industry of the Bowen Basin, Australia. *Impact Assessment and Project Appraisal, 26*(3), 177-187. doi:10.3152/146155108X357257

Lockie, S., Franettovich, M., Petkova-Timmer, V., Rolfe, J., & Ivanova, G. (2009). Coal mining and the resource community cycle: A longitudinal assessment of the social impacts of the Coppabella coal mine. *Environmental Impact Assessment Review, 29*(5), 330-339. doi:http://dx.doi.org/10.1016/j.eiar.2009.01.008

MacKenzie, B. (2015). Member for Lismore Thomas George responds to cow manure protest. Retrieved: 23 November, 2021. https://www.abc.net.au/news/rural/2015-03-12/farmers-dump-manure-lismore-coal-seam-gas/6313162.

Maddison, S., & Scalmer, S. (2006). *Activist wisdom: practical knowledge and creative tensions in social movements.* Sydney, Australia: UNSW Press.

Malin, S. A., & DeMaster, K. T. (2016). A devil's bargain: Rural environmental injustices and hydraulic fracturing on Pennsylvania's farms. *Journal of Rural Studies*.

Mancini, L., & Sala, S. (2018). Social impact assessment in the mining sector: Review and comparison of indicators frameworks. *Resources Policy, 57*, 98-111. doi:https://doi.org/10.1016/j.resourpol.2018.02.002

Marcos-Martinez, R., Measham, T. G., & Fleming-Muñoz, D. A. (2019). Economic impacts of early unconventional gas mining: Lessons from the coal seam gas industry in New South Wales, Australia. *Energy Policy, 125*, 338-346.

Marion Young, I. (1990). The ideal of community and the politics of difference. In L. Nicholson (Ed.), *Feminism/Postmodernism*. New York: Routledge.

Martin, J. V., Epstein, K., Bergmann, N., Kroepsch, A. C., Gosnell, H., & Robbins, P. (2019). Revisiting and revitalizing political ecology in the American West. *Geoforum, 107*, 227-230. doi:https://doi.org/10.1016/j.geoforum.2019.05.006

Martinez-Alier, J. (2014). The environmentalism of the poor. *Geoforum, 54*, 239-241. doi:https://doi.org/10.1016/j.geoforum.2013.04.019

Martinez-Alier, J., Temper, L., Del Bene, D., & Scheidel, A. (2016). Is there a global environmental justice movement? *The Journal of peasant studies, 43*(3), 731-755.

Masterman-Smith, H., Rafferty, J., Dunphy, J., & Laird, S. G. (2016). The emerging field of rural environmental justice studies in Australia: Reflections from an environmental community engagement program. *Journal of Rural Studies, 47*, 359-368. doi:https://doi.org/10.1016/j.jrurstud.2016.04.005

Maxwell, P. (2018). The end of the mining boom? A Western Australian perspective. *Mineral Economics, 31*(1), 153-170. doi:10.1007/s13563-017-0116-9

McClurg Mueller, C. (1992). Building social movement theory. In A. D. Morris & C. McClurg Mueller (Eds.), *Frontiers in social movement theory*. New Haven, CT, USA: Yale University Press.

McConnell, D. (2017). We don’t have a gas shortfall worth worrying about. *The Conversation*. Retrieved: 19 October, 2018.

https://theconversation.com/we-dont-have-a-gas-shortfall-worth-worrying-about-77857

McDonald, P., Mayes, R., & Pini, B. (2012). Mining Work, Family and Community: A Spatially-Oriented Approach to the Impact of the Ravensthorpe Nickel Mine Closure in Remote Australia. *Journal of Industrial Relations, 54*(1), 22-40.

McGregor, C. (2015). Direct climate action as public pedagogy: the cultural politics of the Camp for Climate Action. *Environmental Politics, 24*(3), 343 - 362.

McManus, P., Albrecht, G., & Graham, R. (2014). Psychoterratic geographies of the Upper Hunter region, Australia. *Geoforum, 51*(Supplement C), 58-65. doi:https://doi.org/10.1016/j.geoforum.2013.09.020

McQueen, K. (2020). The golden sands of Jerusalem Creek: early beach placer mining on the north coast of New South Wales. *Journal of Australiasian Mining History, 18*, 113 - 133.

Measham, T. G., & Fleming, D. A. (2014). Impacts of unconventional gas development on rural community decline. *Journal of Rural Studies, 36*, 376-385. doi:https://doi.org/10.1016/j.jrurstud.2014.04.003

Mid Coast Communities. (2016). Our Geographic Footprint. Retrieved: 23 August, 2018. https://midcoastcommunities.org.au/our-people/our-region/.

Miller, B. G. (2004). *Coal Energy Systems*. San Diego, UNITED STATES: Elsevier Science & Technology.

Minchin, L. (2015). Baird's back in NSW: experts react to the Coalition win. Retrieved: 23 November, 2021. https://theconversation.com/bairds-back-in-nsw-experts-react-to-the-coalition-win-39127.

Mitchell, E. (1946). *Soil and civilization / by Elyne Mitchell*. Sydney: Angus and Robertson.

MOAD, (2021). *Julia Gillard*. Museum of Australian Democracy at Old Parliament House. Retrieved 02 December, 2021. https://primeministers.moadoph.gov.au/prime-ministers/julia-gillard

Moon, E. (2017). Why does the Carmichael coal mine need to use so much water? *The Conversation*. Retrieved: 14 June, 2018. https://theconversation.com/why-does-the-carmichael-coal-mine-need-to-use-so-much-water-75923

Moreton-Robinson, A. (2015). *The white posessive* Retrieved: 22 May, 2018. https://ebookcentral-proquest-com.libraryproxy.griffith.edu.au/lib/griffith/reader.action?docID=2051599

Murrey, A. (2016). Slow dissent and the emotional geographies of resistance. *Singapore Journal of Tropical Geography, 37*(2), 224-248. doi:10.1111/sjtg.12147

Mysak, M. (2010). *The environmental is political: exploring the geography of environmental justice*: University of North Texas.

NEFA. (2018). About - North East Forest Alliance (NEFA). Retrieved: 07 April, 2018. https://www.nefa.org.au/about_nefa.

Nencel, L. (2014). Situating reflexivity: Voices, positionalities and representations in feminist ethnographic texts. *Women's Studies International Forum, 43*, 75-83. doi:https://doi.org/10.1016/j.wsif.2013.07.018

Newscorp Australia. (2019). The Daily Telegraph: about us. Retrieved: 22 August, 2019. https://www.dailytelegraph.com.au/help/about.

Nightingale, A. (2013). Fishing for Nature: The Politics of Subjectivity and Emotion in Scottish Inshore Fisheries Management. *Environment and Planning A: Economy and Space, 45*(10), 2362-2378. doi:10.1068/a45340

Nightingale, A. J. (2012). The Embodiment of Nature: Fishing, Emotion, and the Politics of Environmental Values. In E. Brady & P. Phemister (Eds.), *Human-Environment Relations: Transformative Values in Theory and Practice* (pp. 135-147). Dordrecht: Springer Netherlands.

Nogrady, B. (2019). Landmark Australian ruling rejects coal mine over global warming. Retrieved: 29 November, 2019. https://www.nature.com/articles/d41586-019-00545-8.

Norco Co-operative Limited. (2019). About Norco. Retrieved: 28 February, 2019. https://www.norco.com.au.

Norman, J. (2004). *Bob Brown: Gentle Revolutionary*. Crows Nest, Australia: Allen & Unwin.

NSW EPA. (2021). Acts administered by the EPA. Retrieved: 05 November, 2021. https://www.epa.nsw.gov.au/licensing-and-regulation/legislation-and-compliance/acts-administered-by-the-epa.

NSW Mining. (2013). Mining Methods. Retrieved: 29 November, 2019. http://www.nswmining.com.au/industry/mining-methods.

O'Faircheallaigh, C. (2010). Public participation and environmental impact assessment: Purposes, implications, and lessons for public policy making. *Environmental Impact Assessment Review, 30*(1), 19-27. doi:http://dx.doi.org/10.1016/j.eiar.2009.05.001

O'Faircheallaigh, C. (2009). Public policy processes and sustainability in the minerals and energy industires. In J. P. Richards (Ed.), *Mining, society, and a sustainable world* (1. Aufl.;first; ed.). New York: Springer.

O'Hare, M. (1977). "Not on MY block you don't": facility siting and the strategic importance of compensation. *Public Policy, 33*, 1677-1689.

Osborne, N. (2014). *Stories of Stradbroke: emotional geographies of an island in transition.* (Doctor of Philosophy), Griffith University, Queensland, Australia. Retrieved: 14 January. 2016. https://research-repository.griffith.edu.au/bitstream/handle/10072/365645/Osborne_2015_02Thesis.pdf?sequence=1

Pacheco-Vega, R. (2015). Transnational environmental activism in North America: Wielding soft power through knowledge sharing? *Review of Policy Research, 32*(1), 146-162.

Pain, R., Kesby, M., & Askins, K. (2011). Geographies of impact: power, participation and potential. *Area, 43*(2), 183-188. doi:10.1111/j.1475-4762.2010.00978.x

Painuly, J. P. (2001). Barriers to renewable energy penetration; a framework for analysis. *Renewable Energy, 24*(1), 73-89.

Paragreen, N., & Woodley, A. (2013). Social licence to operate and the coal seam gas industry: what can be learnt from already established mining operations? *Rural Society, 23*(1).

Pardo, M. (1990). Mexican American Women Grassroots Community Activists: "Mothers of East Los Angeles". *Frontiers: A Journal of Women Studies, 11*(1), 1-7. doi:10.2307/3346696

Parr, H., Philo, C., & Burns, N. (2005). Not a display of emotions: emotional geographies in the Scottish Highlands. In J. Davidson, L. Bondi, & M. Smith (Eds.), *Emotional Geographies*. London, UK: Routledge.

Pektova, V., Lockie, S., Rolfe, J., & Ivanova, G. (2009). Mining developments and social impacts on communities: Bowen Basin case studies. *Rural Society, 19*(3), 211-228.

Peluso, N. L., & Watts, M. (2001). *Violent environments*: Cornell University Press.

Pile, S. (2010). Emotions and affect in recent human geography. *The Royal Geographical Society, 35*(1), 5-20.

Pini, B., Mayes, R., & McDonald, P. (2010). The emotional geography of a mine closure: a study of the Ravensthorpe nickel mine in Western Australia. *Social & Cultural Geography, 11*(6), 559-574. doi:10.1080/14649365.2010.497850

Platt, K. (1997). Chicana Strategies for Success and Survival: Cultural Poetics of Environmental Justice from the Mothers of East Los Angeles. *Frontiers: A Journal of Women Studies, 18*(2), 48-72. doi:10.2307/3346965

Prior, T., Giurco, D., Mudd, G., Mason, L., & Behrisch, J. (2012). Resource depletion, peak minerals and the implications for sustainable resource management. *Global Environmental Change, 22*(3), 577-587. doi:https://doi.org/10.1016/j.gloenvcha.2011.08.009

Pulido, L., Sidawi, S., & Vos, R. O. (1996). An archeology of environmental racism in Los Angeles. *Urban Geography, 17*(5), 419-439. doi:10.2747/0272-3638.17.5.419

Ransan-Cooper, H., A. Ercan, S., & Duus, S. (2018). When anger meets joy: how emotions mobilise and sustain the anti-coal seam gas movement in regional Australia. *Social Movement Studies, 17*(6), 635-657. doi:10.1080/14742837.2018.1515624

Rawls, J. (1971). *A theory of justice* (1st ed.). Cambridge, UK: Harvard University Press.

Redclift, M. (2009). *Wasted: Counting the costs of global consumption*. London, UK: Earthscan.

Regional Development Australia. (2019). Nothern Rivers Region. *Employment by Industry.* Retrieved: 28 February, 2019.

https://www.economyprofile.com.au/northernrivers/industries#bar-chart.

Ricketts, A. (2012). *The activists handbook*. London, UK: Zed Books.

Rickson, K. (2012). *Coming apart at the seams? Social impact assessment and the coal seam gas controversy in Queensland, Australia*. Paper presented at the 32nd Annual Conference of the International Association for Impact Assessment, IAIA12 Conference Proceedings.

Robbins, P. (2012). *Political ecology* (2nd ed.). West Sussex, UK: Wiley-Blackwell.

Roberts, J., Engel, B., & Chapman, J. (1991). Geology of the Camberwell, Dungog, and Bulahdelah 1:100,000 sheets. Retrieved: 14 January, 2018. https://search.geoscience.nsw.gov.au/product/618/943481.

Rocheleau, D. (2008). Political ecology in the key of policy: From chains of explanation to webs of relation. *Geoforum, 39*, 716-727.

Rocheleau, D., Thomas-Slayter, B., & Wangari, E. (1996). *Feminist political ecology. Global issues and local experiences*: Routledge; International Studies of Women and Place Series.

Saki, S. (2016). *GOB ventilation borehole design and performance optimization for longwall coal mining using computational fluid dynamics.* (Doctor of Philosophy PhD), Colorado School of Mines.

Schlosberg, D. (2003). The justice of environmental justice: reconciling equity, recognition, and participation in a political movement. In A. Light & A. De-Shalit (Eds.), *Moral and political reasoning in environmental practice*. Cambridge, Massachusetts/London, England: MIT Press.

Schlosberg, D. (2004). Reconceiving environmental justice: Global movements and political theories. *Environmental Politics, 13*(3), 517-540. doi:10.1080/0964401042000229025

Schlosberg, D. (2007). *Defining environmental justice: Theories, movements, and nature*. New York, NY, USA: Oxford University Press.

Schlosberg, D. (2013). Theorising environmental justice: the expanding sphere of a discourse. *Environmental Politics, 22*(1), 37-55.

Schlosberg, D., Rickards, L., & Byrne, J. (2018). Environmental justice and attachment to place. In R. Holifield, J. Chakraborty, & G. Walker (Eds.), *The Routledge handbook of environmental justice*. London, UK: Routledge.

Schmidt, C. W. (2011). Blind rush? Shale gas boom proceeds amid human health questions. *Environmental health perspectives, 119*(8).

Shariatmadari, H. (2009). Horizon. In H. Shariatmadari (Ed.), *How many people can live on planet Earth?*

Sherval, M., & Hardiman, K. (2014). Competing Perceptions of the Rural Idyll: responses to threats from coal seam gas development in Gloucester, NSW, Australia. *Australian Geographer, 45*(2), 185-203. doi:10.1080/00049182.2014.899028

Sincovich, A., Gregory, T., Wilson, A., & Brinkman, S. (2018). The social impacts of mining on local communities in Australia. *Rural Society, 27*(1), 18-34. doi:10.1080/10371656.2018.1443725

Singh, G. G., Lerner, J., Clarke Murray, C., Wong, J., Mach, M., Ranieri, B., . . . Chan, K. M. A. (2019). Response to Critique of "The Insignificance of Thresholds in Environmental Impact Assessment: An Illustrative Case Study in Canada". *Environmental Management, 64*(2), 133-137. doi:10.1007/s00267-019-01182-7

Sjöberg, L., & Drottz-Sjöberg, B. (2001). Fairness, risk and risk tolerance in the siting of a nuclear waste repository. *Journal of Risk Research, 4*(1), 75-101.

Slaymaker, O. (2017). Physical geographers' understanding of the real world. *The Canadian Geographer / Le Géographe canadien, 61*(1), 64-72. doi:https://doi.org/10.1111/cag.12334

Slootweg, R., Vanclay, F., & VAn Shooten, M. (2003). Integrating Environmental and Social Impact Assessment. In H. A. Becker & F. Vanclay (Eds.), *The International Handbook of Social Impact Assessment*. Cheltenham, United Kingdom: Edward Elgar Publishing Limited.

Smelser, N. J. (1962). *Theory of collective behaviour*. Free Press: New York, NY.

Smith, K. (2017). After win against SCG, Gloucester now battles Rocky HIll Coal. Retrieved: 22 November, 2021. https://www.greenleft.org.au/content/after-win-against-csg-gloucester-now-battles-rocky-hill-coal.

Smith, M., Davidson, J., Cameron, L., & Bondi, L. (2012). Introduction: Geography and emotion – emerging constellations. *Emotion, Place and Culture*, 1-18.

Spink, A., Hilman, M., Fryirs, K., Brierly, G., & Lloyd, K. (2010). Has river rehabilitation begun? Social perspectives from the Upper Hunter Catchment, New South Wales, Australia. *Geoforum, 41*(3), 399-409.

Springer, S. (2016). Fuck Neoliberalism. *ACME: An International Journal for Critical Geographers, 15*(2), 285 - 292.

Sraggon, B., & Patterson, J. (2011). Coal Seam Gas: By the numbers. Retrieved: 12 February, 2014. http://www.abc.net.au/news/specials/coal-seam-gas-by-the-numbers/drilling/.

Sultana, F. (2011). Suffering for water, suffering from water: Emotional geographies of resource access, control and conflict. *Geoforum, 42*(2), 163-172. doi:10.1016/j.geoforum.2010.12.002

Sultana, F. (2013). Water, Technology, and Development: Transformations of Development Technonatures in Changing Waterscapes. *Environment and Planning D: Society and Space, 31*(2), 337-353. doi:10.1068/d20010

Sultana, F. (2015). Emotional political ecology. In R. L. Bryant (Ed.), *The international handbook of political ecology*. Cheltenham, UK: Edward Elgar Publishing.

Suzuki, D. (2008). We should act like the animals we are. Retrieved: 20 February, 2020. http://www.precaution.org/lib/08/we_shud_act_like_animals_we_are.081018.htm.

Svarstad, H., & Benjaminsen, T. A. (2020). Reading radical environmental justice through a political ecology lens. *Geoforum, 108*, 1-11. doi:https://doi.org/10.1016/j.geoforum.2019.11.007

Swyngedouw, E. (2006). Metabolic urbanisation and cyborg cities. In N. C. Heynen, M. Kaika, & E. Swyngedouw (Eds.), *In the nature of cities: urbanm political ecology and the politics of urban metabolism* (pp. 21-44). New York, NY, USA: Routledge.

Syron, R., & Russell, L. (2018). The Kabook and Watoo People fo the Gringai Barrington River Gloucester, NSW. Retrieved: 19 November, 2021. https://hunterlivinghistories.com/2018/08/15/the-kabook-watoo/.

Tarrow, S. (1994). *Power in movement. Soical movemnst, collective action and mass politics in the modern state.* Cambridge, UK: Cambridge Universtiy Press.

Taylor, D. (2000). The rise of the environmental justice paradigm: injustice framing and the social construction of environmental discourses. *The American behavioural scientist, 43*(4), 508-580.

Temper, L., del Bene, D., & Martinez-Ailer, J. (2015). Mapping the frontiers and front lines of global environmental justice: the EJAtlas. *Journal of Political Ecology, 22*, 255-278.

Tesh, S. N., & Williams, B. A. (1996). Identity politics, disinterested politics, and environmental justice. *Polity, 28*(3), 285-305.

The Nationals. (2019). Our history. Retrieved: 26 August, 2019. http://nationals.org.au/about/our-history/.

The University of Queensland. (2021). UQ Researchers - Professor Kristen Lions. Retrieved: 16 July, 2021. https://researchers.uq.edu.au/researcher/1304.

Thien, D. (2005). Intimate distances: considering questions of 'us'. In J. Davidson, L. Bondi, & M. Smith (Eds.), *Emotional Geographies*. London, UK: Routledge.

Tonkiss, F. (2005). *Space, the city and socail theroy*. Cambridge, UK: Polity Press.

Toyne, P. (1994). *The reluctant nation*. Sydney, NSW, Australia: ABC books.

Tracy, S. J. (2013). *Qualitative research methods*. West Sussex, UK: John Wiley & Sons.

Tuan, Y.-F. (1990). *Topophilia: A study of environmental perceptions, attitudes, and values*: Columbia University Press.

Turton, D. J. (2015). Unconventional gas in Australia: Towards a legal geography. *Geographical Research, 53*(1), 53-67.

Turvey, N. (2006). *Terania Creek: rainforest wars*. Brisbane, QLD, Australia: Glass House Books.

Urry, J. (2005). The place of emotiongs within place. In J. Davidson, L. Bondi, & M. Smith (Eds.), *Emotional Geographies*. London: Routledge.

Vainikka, J. T. (2014). 'A citizen of all the different bits': emotional scaling of identity. *GeoJournal, 81*(1), 5-22. doi:10.1007/s10708-014-9596-0

Vainikka, J. T. (2015). *Identities and regions: exploring spatial narratives, legacies and practices with civic organizations in England and Finland*. Universtiy of Oulu, Finland: Nordia Geographical Publications.

Valadkhani, A., & O'Mahony, B. (2018). Identifying structural changes and regime switching in growing and declining inbound tourism markets in Australia. *Current Issues in Tourism, 21*(3), 277-300. doi:10.1080/13683500.2015.1072504

van der Plank, S., Walsh, B., & Behrens, P. (2016). The expected impacts of mining: Stakeholder perceptions of a proposed mineral sands mine in rural Australia. *Resources Policy, 48*, 129-136. doi:https://doi.org/10.1016/j.resourpol.2016.03.005

Van Stekelenburg, J., & Klandermans, B. (2009). Social movement theory: Past, present, and prospect. In S. Ellis & I. van Kessel (Eds.), *Movers and shakers: Social movements in Africa*. The Netherlands: Brill.

Veltmeyer, H., & Bowles, P. (2014). Extractivist resistance: The case of the Enbridge oil pipeline project in Northern British Columbia. *The extractive industries and society, 1*(1), 59-68.

Walker, G. (2012). *Environmental justice: concepts, evidence, and politics*. New York, NY, USA: Routledge.

Walker, G. P., & Bulkeley, H. (2006). Geographies of Environmental Justice. *Geoforum, 37*(5), 655-659.

Warnock, C. A. (2015). Global atmospheric pollution: climate change and ozone. In P. Salmon & D. Grinlinton (Eds.), *Environmental Law in New Zealand* (pp. 789-830). Wellington, New Zealand: Thomson-Reuters.

Warren, K. J. (2000). *Ecofeminist philosophy: a Western perspective on what it is and why it matters*. Oxford: Rowman & Littlefield.

Watts, J. (2018). *The town that said NO to AGL*. Glocuester, NSW, Australia: Self published via bookbound.com.au.

Wessels, J.-A. (2013). Factors that influence the independence of EIA follow-up verifiers: a developing country perspective. *Impact Assessment and Project Appraisal, 31*(3), 169-179. doi:10.1080/14615517.2013.820510

White, R. (2013). Resource extraction leaves something behind: environmental justice and mining. *International Journal for Crime, Justice and Social Democracy, 2*(1), 50-64.

Whiteman, G., & Mamen, K. (2002). *Meaningful consultation and participation in the mining sector: A review of the consultation and participation of indigenous peoples within the international mining sector*. Ottawa, Canada: The North-South Institute.

Williams, A., & Le Billon, P. (2017). *Corruption, natural resources and development: From resource curse to political ecology*: Edward Elgar Publishing.

Willow, A. (2014). The new politics of environmental degradation: un/expected landscapes of disempowerment and vulnerability. *Journal of Political Ecology, 21*(1), 237-257.

Willow, A. J., & Wylie, S. (2014). Politics, ecology, and the new anthropology of energy: exploring the emerging frontiers of hydraulic fracking. *Journal of Political Ecology, 21*, 222-236.

Wolch, J. R., Byrne, J., & Newell, J. P. (2014). Urban green space, public health, and environmental justice: The challenge of making cities 'just green enough'. *Landscape and Urban Planning, 125*, 234-244. doi:https://doi.org/10.1016/j.landurbplan.2014.01.017

Wolff, N. H., Mumby, P. J., Devlin, M., & Anthony, K. R. N. (2018). Vulnerability of the Great Barrier Reef to climate change and local pressures. *Global Change Biology, 24*(5), 1978-1991. doi:10.1111/gcb.14043

Wolsink, M. (2007a). Planning of renewables schemes: Deliberative and fair decision-making on landscape issues instead of reproachful accusations of non-cooperation. *Energy Policy, 35*(5), 2692-2704.

Wolsink, M. (2007b). Wind power implementation: The nature of public attitudes: Equity and fairness instead of 'backyard motives'. *Renewable and sustainable energy reviews, 11*, 1188-1207.

Wood, N., & Waite, L. (2011). Editorial: scales of belonging. *Emotion, Space and Society, 4*(4), 201-202. doi:10.1016/j.emospa.2011.06.005

Wu, C.-F., Wang, C.-M., Chang, T., & Yuan, C.-C. (2019). The nexus of electricity and economic growth in major economies: the United States-India-China triangle. *Energy, 188*, 116006. doi:https://doi.org/10.1016/j.energy.2019.116006

Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). Los Angeles SAGE.

Yin, R. K. (2011). *Qualitative research from start to finish*. New York, USA: The Guilford Press.

Zanbar, L., & Ellison, N. (2019). Personal and community factors as predictors of different types of community engagement. *Journal of Community Psychology, 47*(7), 1645-1665. doi:https://doi.org/10.1002/jcop.22219

Zimmerer, K., & Bassett, T. (2003). *Political ecology: An integrative approach to geography and environment-development studies* (K. Zimmerer & T. Bassett Eds.). New York, NY, USA: The Guilford Press.