# Criminality, Justice and the Australian Multifunctional Countryside

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#### **Abstract**

Different socio-political and environmental forces change the way that rural societies, economies and ecologies are regulated and function, a set of dynamics that continues to this day. These varying forms of regulation enable and constrain different forms of market and non-market activity. The notion of the multifunctional countryside highlights the fact that many new interests and parties have asserted their influence into the physical and social landscapes of rural Australia, challenging the hegemony within many rural communities, and leading to the creation of a contested countryside. The development of new economic enterprises and even new industries via shifting regulation (e.g. ecosystem services) along with the arrival of new groups in rural Australia – physically and virtually – has opened the way for different forms of deviance to find their expression. In the context of climate change, rural criminality can take many varying trajectories. As competition for scarce resources increases, illegal capture (e.g. water) and flouting laws for perceived personal gain at the broader public expense is increasingly likely. While these likely scenarios will challenge the collective efficacy of rural communities, as social institutions they can choose to respond in environmentally just ways.

**Keywords**: multifunctionality; social construction; environmental justice; agriculture; Australia

#### Introduction

Public and private efforts to reduce greenhouse gas emissions have become increasingly urgent over the last decade or so as evidence continues to emerge confirming the existence of climate change, its likely causes, and its links to natural hazard events and the frequency of the last-mentioned (e.g. IPCC, 2018). While debate over these matters continues to simmer in some parts of the media, consensus was reached amongst the international community at the United Nations COP21 conference in Paris (held in 2015) that rapid decarbonisation of entire economies, including systems of production, distribution, consumption and ways of life, are necessary to limit the planet's mean temperature increase to 1.5 degrees C° above that of pre-industrial times. It is only through this dramatic change, it is argued, that human civilisation can hopefully avoid the most calamitous effects of climate change (IPCC, 2018).

As part of its Nationally Determined Contributions (NDCs) to this global goal, the Australian Federal Government has committed to a 43 per cent reduction in the nation's greenhouse gas emissions based on 2005 levels, further promising to achieve net zero emissions by 2050 (Australian Government, 2022). Accordingly, enormous research and regulatory efforts and expenditure have been invested into, *inter alia*, auditing entire industries so as to measure the major producers of greenhouse gases, establishing how these emission sources may be mitigated or 'offset' and the like. As has been observed by many researchers, the structural adjustments required to achieve this parametric shift in the orientation of *regional* economies are likely to be highly disruptive to established relationships between local and extra local businesses, employment markets and community life. As illustrated by this special issue, there is also general and genuine concern about the impacts of an increasing incidence of natural hazards, and of adjustment measures such as those briefly mentioned above, on community lawfulness and social cohesion (Breetzke, et al., 2016; Babcicky & Seebauer, 2020).

As already implied, the impacts of a society-wide switch to renewable energy sources and away from fossil fuel-intensive energy production will be experienced unevenly, socially and spatially. In Australia, governments at a variety of geographical scales are involved in assisting economies and societies make the necessary major adjustments, offering structural adjustment funds and various incentive and disincentive programmes to ease the transition process. Non-government organisations (NGOs) across a wide field of endeavour (e.g. environmental, economic), universities, and the media, have also become heavily involved in advocating for, and against, elements of the global decarbonisation effort. The politicisation of the drive for net zero carbon emissions by the year 2030 can be seen in tense debates over the continued, and, in some cases, the expanded operation of coal mines and gas extraction (see Brevini & Woronov, 2018; Arranz, et al., 2024). With the public's increasing sensitivity to the links between greenhouse gas emissions, climate change and the increased frequency and severity of natural hazards, some politicians and lobby groups have advocated for the boycotting and/or abolition of select activities such as coal mining and gas drilling, on the one hand, and greater incentives for the public uptake of electric vehicles on the other (see Quiggin, 2016; Greenpeace, 2016).

Agitation on the part of select sectors of society to criminalise some 'business-asusual' practices of key resource extraction and processing sectors represents a continuation of the pro-environmental and anti-industry protest activity that has fomented since the 1970s (Woods, 2003, 2008; O'Brien, 2019). In the contemporary case of the global 'climate emergency', public activism has focused overwhelmingly on environmental justice (EJ) arguments against the continued use of carbon-intensive methods of energy generation and other forms of production, including food and fibre, together with the need to combat the potential existential threat associated with global warming. Few independent observers would feel much sympathy for the transnational corporations affected by society's decision to retreat from fossil fuel dependence, yet there is no doubt that the 'rules have changed' as far as natural resource and energy extraction, generation and distribution are concerned. New markets, new investment plans, new regulations and laws have been put in place, metaphorically and literally, to facilitate this transition. For example, corporations that generate carbon pollution can pay for offsets so as to be accredited as 'carbon neutral', some State Governments have invested heavily in renewable energy production, such as wind and solar farms, while simultaneously decommissioning fossil fuel-powered electricity generation. These initiatives have not only brought into being new forms of market and nonmarket activity, but also rendered visible different management practices as legal or illegal. Importantly, this transition is substantially being played out in a concrete sense across nonmetropolitan regions and places (Beer, et al., 2013).

In this troubled and complex context, this paper seeks to make a conceptual contribution to the rural criminology literature by exploring how altered approaches to the governance of natural resource management in Australia from the 1980s have affected the actual and perceived 'wrongness' and criminality of select land management practices by making them visible or invisible, and legible or illegible, in the realm of jurisprudence and, more normatively, the field of environmental justice. The remainder of this paper critically examines the set of regulatory changes applied to the extractive natural resources sectors in Australia over the past half century, along with the behavioural responses to them, that has led to the construction of a highly contested countryside in which farmers, miners and foresters face greater formal and informal regulatory controls and oversight than heretofore. In this tense environment, there is increased rivalry between interest groups, contestation that has occasionally led to criminal behaviour, including interpersonal violence. However, judging the wrongness and or injustice associated with these acts is not always a simple matter.

The next section briefly reviews the dominant conceptual approaches taken in rural criminology research to date, and explores how changes in the political relationship between agriculture, rural communities and the rest of society have influenced the governance of rural land use and rural communities. The paper then examines the social construction of contemporary controversies surrounding climate change, natural hazards and criminality. In doing so, it reviews the literature covering the general shift across Western societies and economies in the governance of agriculture and rural society from a condition of productivism to multifunctionality, and notes the increasing regulation of farming activity

and its potential off-site impacts, together with reactions to the increasing intensity of this scrutiny by resource owners

# **Explanation in rural criminology: Collective efficacy, 'green' criminology and social constructionism in the multifunctional countryside**

Traditionally, rural criminology has investigated the associations between the incidence of deviance, characteristics of the perpetrator(s) and the broader social and geographical or rural milieu within which criminal behaviour occurs (Donnermeyer, 2015). Over time, the discipline has contributed nuanced perspectives on the broadly social influences over criminal behaviour at individual and group scales. Like most social scientific approaches to 'the rural', early scholarship in the field generally (though certainly not universally) adhered to an ontology and epistemology of the social world that prioritised deductive and descriptive examinations of material aspects of rural life (see Phillips [1998] and Bell [2007] for discussions on this topic from the perspectives of rural social geography and rural sociology, respectively). In relation to rural criminology, its earlier concerns with describing material and tangible aspects of rural social relations can be seen in investigations of urban and rural differentials in criminal behaviour (however measured), and debates over the most rigorous means for measuring criminality across space (Donnermeyer, 2015; Hodgkinson & Martino, 2023). Inevitably and appropriately, researchers were forced to engage with definitional debates over the demarcation and measurement of 'rural' space (see Donnermeyer, 2015).

Relationships between climate change, natural disasters and rural crime are potentially bewildering in their complexity. While the links between climate change and the prevalence of natural hazards are apparently becoming clearer, the connections between hazard events and criminal behaviour appear less linear and deterministic. The theory of collective efficacy, which has become the dominant conceptual angle for research in this field, stresses the importance of institutional attachment and social cohesion in influencing community residents' relative adherence to and reproduction of desired community norms (Donnermeyer, 2015). Akin to the theory of social capital, collective efficacy presents a Janus-face on the association between environmental change, hazard events and local criminal behaviour. High levels of collective efficacy are evidenced by, inter alia, strong, community-wide attachments to key institutions such as a local school, sporting/social or service organisation. Collective efficacy is argued to be positively associated with adherence to community norms, including rule-following behaviour, and a relatively low incidence of violence and other forms of criminality (Babcicky & Seebauer, 2020). Well-functioning, cohesive rural communities, with relatively high proportions of their citizens enrolled as volunteers in local fire-fighting and other emergency response organisations, for example, are hence hypothesised to exhibit high levels of resilience in the wake of a natural hazard and to be relatively free from opportunistic property crimes, such as looting (Breetzke, et al., 2016; Babcicky & Seebauer, 2020).

Therefore, rather than being solely or primarily concerned with the proximal drivers of criminal behaviour, and their effects, the recently emergent literature on environmental or 'green' criminology has concentrated more on the structural forces and individual-scale

factors that generate, contribute to or simply facilitate ecological harms, while also highlighting the market and/or regulatory failures that facilitate environmentally damaging activities (White, 2012; Breetzke, et al., 2016; Barclay and Bartel, 2015). The notion of 'collective efficacy' connects this newer branch of criminology with its more traditional base (Donnermeyer, 2015; Breetzke, et al., 2016) but is also accompanied by a growing recognition that institutional arrangements of legal, economic and political power, operating at and across various geographical scales, play significant roles in influencing the conduct of natural resource management.

#### The social construction of climate change, natural hazards and rural crime

Social constructionism provides a critical lens through which to interpret the changing associations between environmental harm, hazards, criminality and 'the rural'. Closely related to some recurrent themes in rural criminology, social constructionism emerged out of academic sociology during the late 1960s and early 1970s as researchers sought to develop more philosophically-nuanced explanations for deviant behaviour such as domestic violence, vandalism and civil disobedience (Berger & Luckman, 1967; Spector & Kitsuse, 1973). The key purpose of this perspective was the critical dissection of such public controversies, and the identification of the key protagonists including police, local members of parliament, local government, relevant services and agencies, the media, alleged perpetrators and victims, together with the structural forces and circumstances that influence such behaviours and incidents. The ultimate concern of social constructionism was the exposure and critique of the positionality and knowledge claims of various sides involved in a debate. For instance, social constructionism has been associated with poststructuralist feminist writing on gender, including that of Judith Butler (1993).

While different variants of social constructionism co-exist, most concentrate on deconstructing and re-interpreting the major concepts, forms of language, beliefs, jargon, devices, techniques and modes of communication used by dominant groups and forces in the advancement of their projects and campaigns (Argent, 2020). For the remainder of this paper, I apply a social constructionist and environmental justice lens to an examination of the changing ways in which the management of Australian agricultural land and related natural resources by farmers has been regulated by national, State and local governments, nongovernment organisations (NGOs) and the broader public over the past seventy years or so. A primary focus of the analysis is on the changing legal limits placed around particular farm management practices and how such practices and techniques have been rendered visible to legislators and the public and become subject to criminal sanctions. As part of this examination I consider an admittedly extreme case of militant landholder resistance to environmental laws proscribing land management practices that were once not only legally permissible but, in some cases, were seen as key to Australia's post-WWII nation-building strategies.

# The emergent multifunctional countryside in Australia: An environmental justice perspective

The environmental justice (EJ) framework emerged from international research into the normative dimensions of major resource development projects, including the socio-spatial distribution of benefits and disadvantages from these activities (Otsuki, 2016; Urkidi & Walter, 2011; see also Harvey, 1996; O'Rourke & Connolly, 2003). EJ is a heuristic for examining structural and agency-driven forces in influencing such projects' contributions to socio-spatial equity outcomes, and is constituted by three different but related forms of justice: distributional; recognition; and procedural.

### Distributional justice

Distributional justice relates to the more intuitively obvious aspects of how benefits and losses from development are allocated across space and society. Rather than being concerned with simple apportionment, this dimension focuses on assessing the relative fairness of goods, services and resource provision within and between areas, and how the distribution process subsequently affects the socio-economic status of recipient populations (see Harvey, 1996; Urkidi & Walter, 2011; Luke & Emmanouil, 2019). Applied to post-WWII rural Australia, a distributional justice perspective draws attention to the major 'winners' and 'losers' from the thorough-going expansion of the farm sector. Broadly speaking, individual farmers, both established and new entrants, generally benefited financially from the battery of policy and programmes that were introduced from 1954, while Indigenous peoples and the environment were significant 'losers'.

#### Recognition justice

Recognition justice draws attention to who and what is given rights to publicly express their views and/or agency in relation to natural resource extraction. Importantly, recognition justice draws attention to those who are excluded, accidentally or deliberately, from negotiations over the costs and benefits, harms and gains, of development as well to those empowered to sit at the deal-making table with the state and private capital. In accordance with the theory and lived reality of productivism, farmers, foresters, fishers and miners were largely unchallenged in their land-use management decision-making, and supported actively by the State. Meanwhile, the majority of the population without legally-recognised private property interests were effectively excluded. Indigenous people were especially voiceless and invisible, at least until the years leading up to the 1993 High Court recognition of Native Title (Trigger, et al., 2014). 'The environment' also lacked a recognisable 'voice' and/or effective advocate throughout the productivist epoch, though that would soon change.

#### Procedural justice

Procedural justice refers to the largely formal legal processes by which fair and unfair outcomes in criminal and dispute resolution procedures are decided. This dimension draws attention to the role of powerful protagonists such as the state and industry in formal decision-making regarding lawful access to and use of land and resources, legal obligations to

negotiate with resident communities likely to be affected by such developments, the need to comply with legislation concerning the protection of the environment, broadly construed. While the broad contours of procedural justice are ultimately set by constitutional law, the relative balance between the state, industry, the broader public and the environment can be dynamic, as in the case of the increasing prominence of environmental protection and the recognition of Aboriginal Native Title in Australian case law concerning economic development.

# From the structured coherence of productivism to multifunctionality: a recapitulation and environmental justice interpretation

### Distributional justice

The period between the end of the Second World War in 1945 and the early 1970s was characterised across the Western developed world as the era of agricultural productivism (Ilbery & Bowler, 1996; Wilson, 2001; Argent, 2002). This was an epoch in which the prevailing public policy approach to the agricultural sector was interventionist and strongly supportive, involving national and sub-national governments creating secure economic and political conditions for farmers to maximise food and fibre production. Broadly and briefly, productivism was a state-centred response to a number of potential crises faced by a world emerging from the devastation of war, including looming famines, stagnant economies and labour shortages (Hooke, 1970; Hefford, 1985). With its established comparative advantage in export-oriented primary sector production, Australia swung its public policy and investment heft behind the expansion and intensification of the sector from the early 1950s (Hefford, 1985; Gruen, 1990). Amongst the most influential policies and programmes developed and implemented to this end were:

- Bounties on fertiliser and farm chemical purchases;
- Concessional terms for farm borrowing (i.e. lower than average interest rates on farm build-up loans, the establishment of institutions and special loan programmes to support farm development);
- Support of collective marketing arrangements for many agricultural commodities to better protect farmers from seasonal fluctuations in prices and to guard against oligopolistic behaviour by processors and retailers;
- Public funding for agricultural research and development and extension, provided chiefly by State and Federal Governments via their respective agriculture departments. These provided a quite comprehensive range of advice on virtually all facets of farm management, from practical on-farm matters (e.g. weed and other pest identification and eradication/management), land management (e.g. controlling soil erosion, salinity) to business performance (e.g. financial management, succession planning); and
- Provision of key public goods and services (e.g. utilities, schools, health facilities) to a relatively dispersed and low density rural population irrespective of prevailing economies of scale and scope (Hefford, 1985; Lawrence, 1987).

This policy stance certainly helped underpin the social, economic and demographic stability and prosperity of much of rural Australia for a couple of decades or so. However, as the nation, and much of the rest of the advanced Western world, was plunged into economic crisis via the OPEC oil price crisis of 1973 and concomitant balance-of-payments problems, sentiment within key sections of the Federal Government, including Treasury, began to turn against the use of dwindling public funds on subsidising private firms (Hefford, 1985; Lawrence, 1987). The farm sector did not confront this colder, harsher policy environment alone, with the manufacturing sector being subject to a 25 per cent cut in the tariffs protecting it from international competition from 1975 as part of a more general embrace of neoliberal principles and a concern to drive protectionism out of economic and industry policy (Pusey, 1991; Fagan & Webber, 1994).

In their insightful critique of neoliberalism as an idea and approach to policy making, Peck and Tickell (2002) distinguish between its two major variants or phases, based on the experiences of many nations that have been subject to neoliberal rule. The first stage, 'rollback neoliberalism', usually involves a sudden and dramatic retraction of the state apparatus from most areas of economy and society that it had been hitherto actively engaged in. This is the phase that most would associate with neoliberal rule: the privatisation or corporatisation of previously state-owned enterprises and the deregulation of various facets of the economy, including the currency, financial markets, the banking sector, employment relations, retail hours and the like. As the label suggests, during this initial stage, the aim was to retract the state's role to a strictly limited range of responsibilities, thus 'making room' for the famed hidden hand of the market to guide the strategic direction of whole economies. The rise of economic rationalism, an alternative term for neoliberalism that developed in Australia (see Carroll & Manne, 1992), saw many of the supportive measures for the farm and rural sector that had accumulated over the post-WWII era swept away over a relatively short period. Simultaneously, successive Federal Governments aggressively pursued a 'free trade' stance within the nation and internationally, an approach consistent with the orthodox neo-classical economic principles pronounced and promoted by global bodies such as the World Bank and the International Monetary Fund. Agriculture, though obviously important to Australia's economic fortunes, had to learn how to withstand the vicissitudes of international commodity markets without recourse to government support (Wonder, 1995). Australian Federal and State governments withdrew many of the policies and programmes that made rural life more affordable and enabled rural residents to access to the same basket of public goods and services as city populations.

The second 'roll-out' stage of neoliberal rule is an altogether more subtle and profound re-drawing of the relationship between the state, or what remains of it, society, economy and private citizens. Neoliberal ideology, drawing on elements of the writings of Friedrich Hayek, Milton Friedman and others, is 'rolled out' through society as state agencies seek to inculcate the populace with an entrepreneurial mindset in place of a dependence on government support, and non-government organisations such as church groups, philanthropists and other interest groups who toe the government's line assume a greater share of the responsibility for the funding and implementation of social welfare, employment and, *inter alia*, community leadership and self-help programmes (Herbert-Cheshire, 2000).

Farmers became used to hearing government agriculture ministers, farm peak body representatives and bankers, amongst others, repeat the new mantra that they needed to 'get big or get out' (Argent, 2002). In New South Wales, the total number of farms declined by 27 per cent between 1981 and 1996, from 56,798 to 41,444. However, most of this decrease results from the ABS' nine-fold increase in the Estimated Value of Agricultural Operations (EVAO) threshold for inclusion in its published statistics from \$2,500 to \$22,500 in 1991–92 (Argent, 2002). Nonetheless, the average size of farms, and of farm debt, went in opposite directions. Farm debt more than doubled in real terms in the decade to 2009 (ABARES, 2015, 43). Total indebtedness of the agriculture, fishing and forestry industries rose 77 per cent between 2001 and 2009 from \$42.2 billion to \$74.7 billion (ABARES, 2015). In 2015, average broadacre farm debt was \$506,900 while the same measure for the dairy sector was significantly higher at \$880 200 (ABARES, 2015, p. 44). Support services and resources that farmers had become accustomed to accessing easily and at no economic cost (e.g. research and development, business advice) were also only available at commercial rates. Similarly, farmers' access to natural resources such as water for irrigation and stock watering, was more strictly controlled and, again, charged at market rates. Underlying this policy shift was the principle of 'the highest and best use' of scarce resources (Pritchard & Tonts, 2011). At the same time, farmers' legal rights to manage all aspects of their enterprise, including undertaking what were once regarded as 'normal' and otherwise routine activities, began to be challenged and, in some cases, circumscribed by public activism and legal authority.

In summary, it would be difficult to form a definitive judgement on the distributional justice associated with the wholesale, state-led expansion of the farm sector and the subsequent neoliberalisation of agricultural and rural policy from the 1980s, given the many complexities, and loaded value judgements, involved in weighing up individual- and society-scale antecedent conditions and post-hoc conditions, including the social and economic opportunity costs of public expenditure and the like. Nonetheless, by the 1970s it was abundantly clear that the socio-economic condition of the First Nations people, widely accepted as the most disadvantaged sector of the Australian population, had not been improved through the productivist period and, in fact, the level of disenfranchisement and dispossession of the Indigenous people had probably never been greater. Needless to say, the environment was a substantial 'loser'.

### Recognition justice

A key marker of the rise of the multifunctional countryside was the increasing public regulation of farming and rural land use. In this new era the state did not necessarily play the dominant role, with new entities emerging to represent 'the environment' and other non-human agents. In numerous instances, these 'new entities' were inspired and supported by 'new settlers' who primarily migrated from cities to non-metropolitan areas via counterurbanisation or 'population turnaround' migration currents (Berry, 1976; Champion, 1989; Hugo & Smailes, 1985). From a regulatory perspective, successive waves of ex-urban migration, together with the growth of domestic and international tourism to select rural regions, led to incremental changes in local land planning instruments and controls (Argent, 2011; Phillips, 2002, 1998). Particularly significant in this trend was the arrival of migrants

espousing 'aspirational ruralism' values (Woods, 2011), in which an increasingly contested countryside became colonised by relatively wealthy individuals and tourism enterprises, including resorts, up-market accommodation and restaurants. The in-flows of investment capital were vast, at least compared to previously-dominant 'modes of occupance', such as dairy farming and horticulture. Together, the 'progressive ruralism' and 'aspirational ruralism' mind- and value-sets of the new in-migrant currents have undercut the political control of the traditional farm sector over local land use, and changed the regulatory oversight of farm management.

Emphasising the fact that such complex changes rarely, if ever, play out evenly across space, the post-1970s counterurbanisation migration currents to the northern NSW coastal zone in Australia substantially augmented local populations and helped to rejuvenate them. The earlier waves of new migrants helped secure the viability of local kindergartens and schools and other social institutions. The new settlers were also a source of agricultural and related land use experimentation and diversification, e.g. new fruit and vegetable crops, native flowers, agri-forestry, and some, at the time, illegal but remunerative forms of horticulture such as marijuana cultivation. The cultural and economic bases of the Mid- and Far North Coast regions were irrevocably changed by the arrival of 'alternative lifestylers', 'urban refugees' and 'hippies'. The pro-environmental political beliefs of many of these new 'progressive ruralist' settlers (Woods, 2003) challenged the long-standing control of local councils, State and Federal seats of parliament that more politically conservative sections of the community had maintained; a form of 'reactive ruralism' in Woods' (2003) terms. Occasionally, these challenges were successful, with, for instance, Green Party members being elected to the NSW State Parliament at the expense of conservative Country/National members (Argent, 2011); a trend that has continued albeit intermittently since.

As in other parts of the world (see Woods, 2003), the growing prominence and influences of these new voices directly challenged the self-determination that landholders, including but not limited to farmers, assumed they had in managing their land, resources and livestock. Concomitantly, farmers were less likely to be uncritically regarded by governments as trusted stewards of the land and related natural resources. This shift took different forms, country to country, though the broad outlines were similar (see Bowler & Ilbery, 1996; Wilson, 2001; Argent, 2002; Evans, et al., 2003). The property rights of rural stakeholders came under greater scrutiny than heretofore; a fact that many farmers have found extremely confronting, given longstanding conventions around private property ownership (Barclay & Bartel, 2015). The literature on multifunctionality, the multifunctional countryside and new rural governance has emphasised that one of the key factors underlying this last mentioned process is the progressive decline of farmers' so-called social licence to operate (Barr, 2009) as non-farm, and in many cases, non-rural, interests have come to express their perspectives on resource management publicly.

Simultaneously, the access and extraction rights of public and private primary resource firms and agencies have been repeatedly and powerfully challenged by an increasingly vocal and media-savvy environmental movement. Drawing from some New South Wales examples, the joint public/private partnership Maules Creek coal mine was

strenuously resisted by protestors from the early 2010s concerned over the mine's potential impact on local flora and fauna as well as its future contribution to greenhouse gas emissions and climate change. The mine was developed on part of the State Government-owned Leard State Forest. Touted to become the nation's largest coal mine, the operations have faced demonstrations by one hundred onsite protestors, including high profile national rugby player and now independent senator, David Pocock, who was arrested and charged with hindering mining activity (Sturmer, 2015). Other NSW State Forests have been the scene of protests over native timber logging, the very purposes for which the forest reserves were first created. For example, the Bulga State Forest located on the Mid-North Coast was the site of protests and blockades during 2022 as community residents demonstrated against native timber harvesting and its potential impacts on, *inter alia*, local koala populations. At least one protestor was arrested for hindering the legal logging activities of the NSW Forestry Corporation (Jones, 2022).

#### Procedural justice

The focus of this paper thus far has been primarily on the institutional, demographic and cultural changes to the Australian farming and forestry sectors in the shift to a multifunctional countryside. These changes have been set out in policy documents and in scholarly reviews and commentaries, usually with marked impacts on the social, economic and natural landscape of rural Australia. In many respects, the re-regulation of Australian agriculture and farming has been an exercise in market-making. Key parts of 'nature' and the natural environment have been converted into commodities by governments and state instrumentalities applying the market mechanism to them as a means of enabling these commodities to be more 'rationally' allocated to their highest and best use, rather than effectively gifting them to farmers, foresters, miners and other natural resource managers. For example, open markets for inland fresh water now exist, and there is growing pressure for the creation of similar markets for other so-called ecosystem services, allowing landholders to receive payment for the provision of clean air, water, increased biodiversity and other services. Central to the neo-classical economic theory of markets is the idea that sovereign, rational individuals, as sellers or buyers, meet each other in the market place as equals and trade their wares and, ceteris paribus, the market clears, i.e. all goods presented at the market are purchased.

The history of agricultural irrigation schemes and water markets in Australia is long and controversial. In an otherwise arid country, substantial public and some notable private investment was sunk into inland irrigation infrastructure development during the late 1800s and deep into the 20<sup>th</sup> Century with numerous rural regions and towns owing their existence to these ambitious attempts to create new horticultural industries, such as wine grapes, and fruit and vegetables for fresh markets and preserving (Williams, 1975; Powell, 1988). The ecological toll created by the construction of water impoundments and other forms of 'hard' water regulation infrastructure during this era (Powell, 1988; Lawrence & Vanclay, 1992) eventually led to a series of legislative, institutional and regulatory interventions in the Murray Darling Basin (MDB), one of the country's most important 'food bowls'.

The establishment of the MDB Authority which oversaw reduced extraction limits for each major irrigation region within the Basin and the creation of a free market for irrigation water, within prescribed volume limits, across the MDB, was one of the most significant of these interventions (Smith and Pritchard, 2014). In an attempt to combat the severe environmental decline of the Basin's waterways, address irrigation farmers' growing fears regarding their secure access to water, and tackle concerns over the public subsidy to private irrigators, the first Basin Plan was released in 2010. This Plan was met with vehement opposition by many living within irrigation-dependent towns and regions within the Basin, though for the South Australian rural communities and farmers positioned along the Murray River at the bottom end of the Basin, most of the mooted changes were overwhelmingly welcomed. In some irrigation farming-dependent rural towns, such as Griffith, farmers met to publicly burn copies of the newly-released Plan (Gale, et al., 2014).

The introduction of new protocols, rules and regulatory structures governing access to and the use of inland water resources within the MDB followed broadly similar directions across affected States and Territories, redrawing the boundaries between the farm sector, governments and the environment. As with many of the other structural shifts in the creation of the multifunctional countryside, this era of water reform saw the reinterpretation of previously lawful on-farm activities as illegal or at least subject to criminal investigation. The New South Wales Natural Resources Access Regulator (NRAR) was created to oversee compliance with the State's Water Management Act (2000) and has prosecuted numerous landholders over water theft and other illegal activities. While some cases have involved illegal dam building and the blatant over-extraction of water for crop irrigation, charges were also laid against livestock farmers using stock water to grow fodder crops during a period of drought (Condon, 2020).

As noted earlier, during the apogee of the productivist era in Australia, farmers were supported, via legislation, financial incentives and research and development efforts, to clear native vegetation and control so-called pest floral and faunal species. As these arrangements were progressively repealed from the 1980s and replaced with more pro-environmental sustainability laws, Australian farmers' social licence to operate was increasingly challenged by governments and the public more broadly. As such, relations between these broad groupings have become increasingly marked by contestation and conflict, particularly over farmers' and other natural resource extractors' rights to access and manage natural resources as they see fit and in accordance with their assumed private property rights. As highlighted earlier, Barclay & Bartel's (2015) research revealed that a substantial minority of their sampled farmer respondents either disagreed with, or held neutral views on, the statement that "illegal land clearing was morally wrong". The same research revealed that respondents held flexible notions of what does and does not constitute criminal behaviour. For example, water theft was strongly condemned but in relation to vegetation clearance nearly twenty per cent of respondents disagreed with the statement that "...unauthorised land clearing on farms is wrong", and a further quarter neither agreed nor disagreed (Barclay & Bartel, 2015).

State and Territory Governments have constitutional authority to manage, in broad terms, the natural environment and its resources, and all have institutional architectures,

through government departments and agencies, in place to greater or lesser degrees for this purpose. For example, the New South Wales Department of Climate Change, Energy, the Environment and Water (DCCEEW) has responsibility for monitoring compliance with and enforcement of land management activities as they affect native vegetation (New South Wales Government, 2024). Native vegetation clearance has been strictly controlled and monitored for over a decade via a range of legislative instruments and farmers, amongst others, cannot usually clear natural vegetation without prior approval from the relevant government department or agency. Departments such as DCCEEW contain units dedicated to monitoring landholder compliance with this legislation via satellite imagery, aerial photography and onsite inspections and the investigation of alleged breaches of it.

The murder of New South Wales Office of Environment and Heritage (OEH) environmental compliance officer, Glen Turner, in July 2014 to some extent symbolised the changing interface between landholders, society and government following the winding back of the productivist regime of the post-WWII era: the dramatic changes to the regulatory and legal milieu that agriculture is now forced to operate within, together with the criminal lengths that some farmers are prepared to go to in order to defend their perceived property rights. Turner was one of 116 environmental monitoring/compliance officers murdered in the course of carrying out their duties across the globe in that one year (Holden, 2021). Turner's killer was Croppa Creek farmer, Ian Turnbull, a longstanding resident of the region who had built up his family's property portfolio in the region over decades. Within the OEH, Turnbull and his family had acquired a reputation for their open defiance of land clearing laws and of those who oversee and regulate landholder compliance with such legislation. In early 2012, Turner and two others from the OEH inspected two predominantly grazing and largely uncleared properties newly acquired by Turnbull and his family in the Croppa Creek area, finding both farms in the process of being extensively cleared by bulldozers for broadacre cropping. Crucially, Turnbull had not sought formal approval for the clearing, and the vegetation cleared was part of a critically endangered habitat for koalas and native birds. After the inspection and having discussed the issue with Turnbull, Turner was successful in having a 'stop-work' order placed on the clearing. However, that order was revoked in the NSW Land and Environment Court on Turnbull's appeal a month later (Holden, 2021).

Two years later, and in spite of vegetation clearance applications on the Turnbull properties being repeatedly declined, Turner was notified via an anonymous 'tip-off' that bulldozers were at work again on the Croppa Creek farms. With fellow OEH compliance officer, Robert Strange, Glen Turner made what would be a final inspection trip to the region. After a brief stand-off on Talga Lane, the dirt road that runs straight through the farmland, near to the smouldering stacks of felled trees and shrubs, Turnbull gunned down Turner, accusing him of harassment and of financially ruining the Turnbull family (Holden, 2021). Turnbull was later tried in the NSW Supreme Court and found guilty of murder, amongst other charges, and sentenced to 35 years in prison. Due to his age and pre-existing health conditions, Ian Turnbull died after serving less than two years of his sentence. Prior to his death, Turnbull was also found guilty of illegal land clearing and fined \$140,000. Since 2014, his son and nephew have also been convicted of the same offences, and fined over \$1.1 million (Murray, 2023). Ian Turnbull's widow and son were also forced to pay \$4.25 million

to Glen Turner's family and his OEH colleague for pain and suffering associated with the shooting (Murray, 2023).

#### Discussion and conclusion

In this paper I have deliberately concentrated on deviance, criminality and injustice in the natural resources sector, particularly agriculture, and their relationships with the shifting institutional and regulatory landscapes involving farming, greenhouse gas emissions abatement and biodiversity protection over the last century. In doing so, I employed the environmental justice framework to critically dissect arguments concerning the justness or otherwise of public policy decisions and the 'actions-at-a-distance' that they have triggered, and to discern so-called 'winners' from 'losers', on distributional, recognition and procedural grounds. As argued above, the decline in the agricultural sector's hegemonic control over the governance of rural land use across most Western nations, associated with the transition from a productivist to a more multifunctional agricultural regime and more general structured coherence (see Bowler & Ilbery, 1998; Wilson, 2001; Argent, 2002; Holmes, 2006), has led to the creation of a more polyvocal and contested countryside (Woods, 2003; Argent, 2011).

Seismic shifts in state ideologies and regulatory stances towards particular industry sectors that were once hegemonic within rural regions have restricted farmers' (and others') access to natural resources, redrawing the balance of distributional gains away from farmers, miners and foresters, and more towards Indigenous peoples, the environment and the interests of the general public. These changes could be argued to be more distributionally just than the situation that existed prior to the 1970s when the transition to a more multifunctional countryside began. They also reflect greater recognition justice given the new and wider set of interests that came to express themselves in the countryside, some of which directly challenged numerous farm practices concerning land management and the treatment of nonhuman natures. If sufficient numbers of a professional association, interest group and/or place-based collective feel aggrieved by a new piece of legislation or regulatory change, for example, they can, and have, created a climate of support for civil disobedience and resistance against such changes, creating the conditions for the occurrence of sociallydisruptive, but also potentially progressive deviance (see Babcicky & Seebauer, 2020) but also gaining greater public recognition for their cause. The sophisticated, though at times surreptitious, use of surveillance technology (e.g. drones, satellite-generated imagery) and social media has enabled environmentalist activist and animal welfare groups to develop powerful platforms to expose supposed instances of 'bad practice', including alleged animal cruelty and legislative breaches, to the policy community and broader public. Often, the exposés have served to highlight the ineffectiveness of a particular law and/or a targeted regulatory agency, and/or draw attention to the lack of trustworthiness of farmers, as a group, to adhere to laws and social mores. However, such activism has also provoked counteracting debates about protection against privacy invasion, and the potential victimisation of people conducting lawful activities. In the interests of fairness, from a recognition justice perspective, substantial proportions of farmers have been or are actively involved in improving native vegetation cover and biodiversity on their properties (39 and 50 per cent respectively (Schirmer, et al., 2015).

Natural resource management policy, including those dimensions that pertain particularly to agriculture, has become increasingly 'pro-environment', with powerful sanctions (sticks) and other institutional mechanisms (carrots) to try and inculcate land managers with a more acceptable and enlightened perspective. In a procedural justice sense, farmers find themselves in a less supportive environment than they operated in during the height of productivism, forced to work with or at least be cognisant of the interests of other local and regional human e.g. neighbours, local community residents, Indigenous people and non-human actors, together with non-local agents. As the above and previous research (e.g. Barclay & Bartel, 2015) have argued, some landowners have struggled with and against this new institutional and regulatory landscape, sensing that their capacity to manage their properties has been severely undermined, with some farm management practices criminalised, instead of being encouraged and rewarded, with their 'social licence to operate' and property rights under greater scrutiny than heretofore.

From a social constructionist perspective, an injustice is not necessarily perpetrated just because a given law is contravened and a third party witnesses or becomes aware of the breach and reports it; this would be a simplistic and restrictive definition of wrongdoing for it does not allow for the harms and injustices done to human and non-human actors even in legally permissible actions. A similarly critical perspective is provided by green criminology. Rather than accepting an act as 'bad' or 'harmful' because it is unlawful, green criminologists explore the nature of the alleged criminal activity, the evidence base, the victims, the extent and type of harm committed (White, 2012). Some farmers will no doubt agree with this perspective, noting that they are now subject to legal and financial sanctions for what was once regarded by them and previous generations as standard farm management practice. Some have resisted the new regime, resorting to criminal behaviour, such as natural resource 'theft' (e.g. water), the flouting of laws designed to address the nation's fast declining biodiversity and/or the need to combat climate change. In an extreme case, an environmental compliance officer, himself a small farmer, was murdered for carrying out his lawful duties of seeking to protect threatened, valuable habitat from being converted into cropping land. Apparently, some in the Moree and Croppa Creek area supported the unlawful and unjust actions of Ian Turnbull, regarding him a victim of an overly zealous environmental officer and State agency (Holden, 2021).

The collective efficacy (Donnermeyer, 2015) of many rural communities has been challenged and in some cases ruptured, by the conflict and contestation associated with the transition from an era of productivism to that of multifunctionality (Roche & Argent, 2015). A key element of that conflict has centred on the use and management of the environment. As we seek to address the existential threat posed by climate change and the increased incidence and severity of natural hazards, this contestation is only likely to continue, especially given the current drive to expand the renewable energy resources sector.

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