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Hybrid Neoliberalism: Implications for Sustainable Development

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ABSTRACT

Neoliberalism is frequently blamed for challenges in achieving sustainable development; consequently some also question if sustainability is still a useful concept. Neoliberal influence on natural resource management has evolved over the last 30 years to a hybrid form that seeks to compensate for its negative social and environmental externalities. Through review of literature and critical analysis of three case studies of resource development in Australia and New Zealand, we argue that, in spite of modifications under hybrid approaches, neoliberalism still tests achievement of sustainability goals, due to privileging industry and shifting risk and costs to future generations, through inadequate regulation, neglect of public consultation, lack of transparency, and weak impact assessment. We suggest that while neoliberal approaches bring both benefits and disadvantages, sustainability principles must continue to be kept at the forefront of legislation, regulation and management.

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Introduction

Progress towards achieving sustainability has generally been disappointing in spite of global efforts to resolve the tensions between economic, social and environmental objectives. Much of the blame for lack of progress in transitioning to sustainable development has been laid at the door of the drive for continued growth, advanced nowadays through neoliberalism, in a time of increasing complexity (Coffey and Marston 2013; Benson and Craig 2014; Hannis 2017). From the latter part of the 20th century, nearly all nations, international development initiatives and many scholars have been influenced by neoliberalism, whereby the desire to “free up” the market to drive economic

growth has been pursued in tandem with the aim of sustainable development (UN 2002; Fisher 2006; Wagner 2006; Bakker 2010).

At the same time, a widespread and growing critique of neoliberalism based on experience suggested that a market-driven approach is not always compatible with sustainable development and may suit some contexts better than others (Ostrom 2010). Critics challenge neoliberalism's narrow conception of the environment (Büscher et al. 2012), the "privatisation, marketisation and commodification of nature" (Wanner 2015, p. 21), and valuations of nature that are limited by concepts such as service and capital (Corson, Macdonald, and Neimark 2013), bringing nature into the realm of economics (Coffey and Marston 2013). Recognising these limitations, even governments that are overtly neoliberal have adopted hybrid approaches that apply a mix of market-based processes and external interventions to enhance public benefits (Hodge and Adams 2014). Such hybrid or variegated approaches are recognizable in Australia and New Zealand and reflect "the contradictory evolution of neoliberal practice" (Peck 2010 in Coffey and Marston 2013, p. 181).

In this paper we examine how hybrid neoliberalism is practised in three case studies in Australia and NZ, to try to make sense of the implications for sustainability. In doing so we address the need identified by Higgins et al. (2014) for investigation of the interplay between neoliberalism and sustainable development principles in governing of the overall environment. This is "crucial in highlighting the adaptability and limits of neoliberal environmental governance" (ibid. p. 389) especially in the face of calls for replacing the sustainability concept with alternative governance approaches (such as resilience), which we believe would confront similar challenges and compromises (Benson and Craig 2014). Our contribution raises awareness of the consequences of a neo-liberal approach and reinforces the need to apply principles of good policy-making that consider consequences of a range or blend of options to achieve the competing objectives of sustainable development in, for the foreseeable future, a neoliberal world.

Neoliberalism and Natural Resource Management

Neoliberalism replaced Keynesianism as the dominant economic development philosophy across much of the world in the 1970s when Keynesianism failed to remedy the collapse of economic growth, and associated escalations in unemployment and inflation (Harvey 2007). Whereas Keynesian economics sought to advance the public interest through macroeconomic interventions in markets (e.g., government spending or taxation) (Nelson 1987), neoliberalism in what we will term its "utopian guise" was concerned with advancing the public interest through market-based interventions at the micro-economic level (e.g., enabling markets for fishery harvesting rights). In contrast with classical liberalism which recognized a need for various forms of state intervention to realize social objectives, neoliberalism assumes that interventions in support of the "self-regulating market are most likely to optimise the economic dimensions of social outcomes, with which it is primarily concerned" (McCarthy 2005, p. 997).

The intellectual rationale for neoliberalism draws from neoclassical economics, and is concerned with increasing economic efficiency through: removing impediments to competitive markets, ensuring full cost recovery for public services, privatizing public

utilities, establishing tradeable property rights, liberalizing international trade, and streamlining regulations. The Australian and NZ governments adopted neoliberalism principles from the mid-1980s with the governance paradigm of ‘New Public Management’ as one means of implementation (McLaughlin and Osborne 2002). New Public Management featured:

- government as ‘governing at a distance’ (Lockwood and Davidson 2010; Marshall 2010) by promoting market and market-like instruments (e.g., purchaser-provider contracts, voluntary industry standards, tradable permit schemes, etc.) to deliver public services (Carroll and Steane 2002);
- delegation or devolution of responsibilities to lower-level organizations (often voluntary, community or industry) to fill the vacuum (Castree 2010a) and as a way of increasing transparency and accountability of governance processes (Davidson and Lockwood 2009); and
- pushing for increased individual and community self-reliance (Castree 2010a).

Over the next decade reforms aimed to achieve efficiencies through “smaller government” (Higgins et al. 2014), including the removal of subsidies, privatizing aspects of the public sector, and introducing competition where possible (Kelsey 2014). This approach was central, for example, to Australia’s National Competition Policy (CoA 1993), and in NZ, deregulation of the agricultural sector (Burton and Peoples 2014).

Even environmental policy discourse identified advantages of neoliberalism, by attributing cumulative environmental effects to individual choices and behaviors; this was fostered by terminology portraying the environment in economic terms of natural assets and capital (Coffey and Marston 2013). Neoliberalism gained some acceptance by the environmental movement in Australia and NZ through recognition of the links between economic growth/livelihood and a well-managed environment (Roth and Dressler 2012), exemplified in Australia by Payment for Environmental Services (PES) or for carbon credits in exchange for retiring land (Higgins, Dibden, and Cocklin 2012), and conservation covenants blending property ownership with conservation (Hodge and Adams 2014). Environmental Management Systems, industry codes of practice, and Property Management Planning also recognize legislated property rights while giving property owners responsibility for self-monitoring and accountability (Lockie and Higgins 2007). NZ examples include the Quota Management System for fisheries (Memon and Kirk 2011) and Emissions Trading Scheme (Bullock 2012).

Despite some positive outcomes, there is widespread critique of neoliberalism. Although neoliberalism is based on a commitment to freeing up markets, this commitment is tempered (in the utopian vision at least) by an understanding that markets sometimes fail to deliver economic efficiency (e.g., due to environmental externalities), and that government intervention can be justified to remedy these failings. However, this utopian understanding of neoliberalism is at odds with how it has actually been practised – where the push for “small government” has under-cut the capacity of governments to intervene (at least in ways intended to be effective rather than merely placate).

Harvey (2007, p. 29) argues persuasively that neoliberalism in practice has often veered from a focus on economic efficiency and “worked more as a system of

justification and legitimization” for a tacit agenda of redistributing wealth to powerful market players. Springer (2011) refers to implementation of the neoliberal agenda in Cambodia, where external global pressures for this agenda enabled well-connected officials to informally control market and material rewards, and the local patronage system allowed local elites to asset strip public resources – and this is not unique to Cambodia.

Harvey’s point is that the utopian vision for neoliberalism has come to serve as a smokescreen for how neoliberalism has predominantly come to be practised. Thus we make a distinction between (i) utopian neoliberalism (the sales pitch) and (ii) neoliberalism as it has often come to be practised under a tacit agenda (the product). Government’s role in this tacit agenda is to placate public concerns without seriously constraining market freedoms, e.g. through laws with ample scope for discretion in their application (Hudgins and Poole 2014). A key element of the tacit agenda involves conversion of state and common property rights to natural resources, such as water, into private property rights for allocation to quasi-governmental institutions or private market participants. It uses systems of valuation which reduce complex ecosystems to commodities through pricing, in some cases excluding the communities to which they are linked (Heynen and Robbins 2005; Harvey 2007).

Other critics suggest that neoliberalism has optimized economic development at the expense of broader public interests (Parkins et al. 2016, p. 270) and provided a means of guaranteeing profitability for privileged sectors at the cost of shifting risk and burdens onto communities and ecosystems (McCarthy 2004). Concerns are that environmental and social costs will be externalized if governments do not intervene, emphasizing the vital complementary role for governments and communities (Ostrom 2010; Curtis et al. 2014). For example, Burton and Peoples (2014) argue that if dairy expansion in NZ had internalized the costs of its contributions to environmental degradation, NZ dairy would lose its international competitiveness and reputation in the globalized market. Likewise making property safe for investment has ignored First Nation’s claims in regard to the Northern Gateway pipeline in Canada (Rossiter and Wood 2016). One outcome is “an attitude of indifference with respect to what we leave for future generations” (McNutt 2014, p. 1429).

Privileging of industry/economic rationality is also reflected in neoliberal devolution of responsibilities (Lockwood and Davidson 2010). When governments devolve responsibilities to community organizations, they often retain the power and fiscal dominance to dictate required outcomes, and the means for achieving them, frequently with onerous reporting and compliance regimes (Marshall 2007; Davidson and Lockwood 2009). Yet, governments encourage industry to self-regulate through specifying their own standards or codes of conduct and reporting mechanisms.

Scholars have described neoliberalism as a “near-global project” (McCarthy 2005, p. 997) that continues to evolve in a mostly ad-hoc manner. Acknowledging that application of neoliberalism often veers from its utopian vision to become heterogeneous or “impure” (Castree 2010a), researchers refer to “hybrid” neoliberal forms of governing (Higgins and Lockie 2002; Hodge and Adams 2014) that have evolved to compensate for the limitations identified above (Lockie and Higgins 2007). Those adaptations are justified in part by arguments that government intervention in markets is needed to address the occurrence of “market failures” (e.g. externalities, monopolies or public goods).

The hybrid form includes a range of complementary strategies such as regulation, standards, and regional investment, mediated by the social, cultural and political context (McCarthy 2005; Bakker 2010; Castree 2011). Hybrid arrangements have often followed from a “roll-out” of attempted solutions to crises attributable to “roll-back” of government intervention under neoliberalism in either its utopian or tacit guise (Peck and Tickell 2002).

Both Australian and New Zealand governments during the times of our case studies clearly enunciated that they would operate on neo-liberal principles as a default. Although Australia and New Zealand are among the world’s wealthiest nations per capita, and thus better placed than most nations to afford investments and tradeoffs involved in pursuing environmental sustainability, their progress in this area has been uneven (Jacobson et al. 2014).

Approach

In undertaking this study, we address Castree’s (2010b) call for a grounded analysis of cases at multiple scales, with some historical depth, to identify commonalities in the drivers, patterns and effects of neoliberalism. Our three case studies were chosen to explore the role of hybrid neoliberalism in nationally significant sustainable natural resource management issues: water policy reforms in Australia’s Murray-Darling Basin (MDB); management of coal seam gas development in the Australian state of Queensland; and offshore mining in NZ. They have commonalities with the diversity of natural resource challenges around the world. The selection criteria for cases were to: involve multiple and competing objectives with underlying values at stake; have a prominent public profile; have publicly available data, and the authors to have close working knowledge of the cases. The case of offshore mining in NZ also has significant repercussions for indigenous people. Moreover, the cases epitomize arguments around private versus public responsibility, with impacts evident across each of the sustainability pillars (social, economic and environmental).

Our analysis is based on a targeted critical literature review which identified the key features of neoliberalism such as removing impediments to competitive markets, establishing tradeable property rights, and streamlining regulations, among others, which have been implemented in natural resource management situations. Each case study was examined according to the alignment of its policy and governance arrangements with neoliberalism and the implications for sustainability outcomes. Co-authors critically reviewed the preliminary analysis made by the authors most familiar with each case. Sustainability outcomes were assessed against nationally-adopted principles in Australia and NZ, identified in a range of policies including the National Strategy for Ecologically Sustainable Development (NSED - COAG 1992), and Sustainable Development for New Zealand: Programme of Action (DPMC NZ 2003). These documents argue that decision-making processes should deal in an integrated way with long- and short-term outcomes across economic, environmental, social dimensions, including outcomes for equity intra- and inter-generations.

Through these policies both jurisdictions also accepted that where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not

be a reason for postponing measures to prevent degradation (i.e., the precautionary principle). Principles also included assessment of environmental and cumulative impacts, and participation of indigenous peoples. Thus it was considered that social and environmental issues must be considered in tandem, especially where indigenous rights apply.

Case A: Environmental Water Recovery in the Murray-Darling Basin

Context

The Murray-Darling Basin (MDB or the “Basin”) in south east Australia extends across five “Basin states”. Almost half the value of irrigated agriculture in Australia is from the Basin (ABS 2013), and irrigated agriculture consumes about 50% of the long-term water inflows to the Basin. Historical over-allocation of water to irrigation has contributed to significant environmental degradation, with 20 of the Basin’s 23 major river valleys rated as having poor or very poor ecological health (Davies et al. 2010).

In the late 19th and early 20th centuries, bureaucracies facilitated irrigation development through a clear economic development and expert-driven “command and control” approach. The public funded much of the off-farm infrastructure needed to enable irrigation, resulting in irrigators bearing less than the full costs for water, infrastructure and services involved. Until the early part of the 21st century, including the relatively wet period from the 1950s to the 1990s, Basin state governments issued many water licenses; over-allocation of water entitlements became more obvious when drier conditions returned (Wheeler 2014).

Development of Neoliberal Hybrid Approaches

Increased concern about the ecological impacts of water over-extraction led to a series of policy initiatives in 1994 under the Council of Australian Governments (COAG)¹ Water Reform Framework. The Commonwealth motivated the states with a series of tranche payments, conditional on implementation progress. These purchaser-provider inducements recognized the costs of implementation for the states, but also the need to stiffen the political will of state governments to persist with reform in the face of opposition from powerful vested interests – including irrigator peak bodies, state-based water bureaucracies, and politicians representing irrigation-dependent communities (Marshall and Alexandra 2016).

Although the Water Reform Framework was informed by the NSESD, neoliberalism enacted through the 1993 National Competition Policy was the over-riding rationale. Some unintended consequences of this market-oriented approach to water policy reform became evident. For example, introduction of water markets enabled volumetric water entitlements to be progressively traded to higher value irrigation uses, increasing the value of water at a time when administrators were attempting to recover irrigation water for the environment. Many unused “sleepers” and “dozer” licenses were also activated so the total of surface water extractions increased (Cruse, O’Keefe, and Dollery 2009), denting the credibility of the reform process (Bell and Quiggin 2008).

Meanwhile, opposition from those with vested interests in maintaining the preexisting public investment in the irrigation system slowed reform implementation considerably.

The 2004 COAG National Water Initiative (NWI) aimed to revitalize the 1994 agenda. Important features were water planning to set sustainable water extraction limits for each sub-basin of the MDB and the use of market purchases of entitlements and investments in water-saving infrastructure to recover water for environmental or other public benefit outcomes. Political pressure from irrigation interests resulted in a “government pays” approach to implementation (Cruse, Dollery, and Wallis 2005) rather than cost-sharing between governments (i.e. tax-payers) and irrigators (BDA Group 2003). Economists argued that the “buy-back” approach whereby government, as a market participant, purchases water rights from willing sellers to recover water for the environment is more economically efficient than investing in water-savings infrastructure (PC 2010; Grafton and Horne 2014).

The National Plan for Water Security (CoA 2007) further upscaled implementation, combining market and non-market strategies. The Commonwealth committed to invest \$AUD10 billion in the MDB: \$AUD3.1 billion for buy-backs and assistance for unviable irrigators to exit the industry; and another at \$AUD5.8 billion for water-saving projects. In exchange, the Basin states referred some of their constitutional powers over water resource management to the Commonwealth resulting in the *Water Act 2007* overseen by the Murray-Darling Basin Authority (MDBA). Meanwhile the MDBA’s Basin Plan included “sustainable diversion limits” (SDLs) restricting water extractions from each sub-basin to enable adequate environmental flows to be enforced through State legislation (CoA 2012).

Irrigators’ strong negative reactions to a proposed water recovery target for the environment of 3000–4000 GL/year (MDBA 2010) resulted in a compromise of 2750 GL/year. Much of the backlash was attributed to the Commonwealth’s expert-driven process that excluded irrigators and their communities from decision making (Daniell 2011). Subsequent criticisms from irrigation peak groups further reduced surface water recovery to a legislated 1500 GL cap on buy-backs of surface water entitlements.

Water reform in the MDB resulted in a considerably hybridized variant of neoliberalism in which regulatory instruments (SDLs and the cap on buy-backs) and taxpayer-funded subsidies (of irrigation infrastructure) play key roles. On balance, this hybridization tilted implementation of the reform agenda in ways advantaging irrigators and their communities and disadvantaging the environment and taxpayers.

Implications for Sustainability

Although 76% of the Basin Plan’s water recovery target was reached by 30 June 2017 (MDBA 2017), questions remain about the adequacy of this target for long-term environmental sustainability (Pittock and Finlayson 2011). A decade ago, climate change, more farm dams and increased use of groundwater were predicted to reduce future annual inflows to the MDB by up to 25% (Bell and Quiggin 2008). However, the Plan capped extraction at a level agreeable to irrigation stakeholders, rather than the level scientists assessed to be sustainable in the long term (MDBA 2011). More recent issues about a lack of transparency regarding licensing and ineffective compliance and

enforcement of license conditions are likely to undermine the effectiveness of the Plan (Carmody 2017). Thus it is questionable whether the settings agreed under this hybridized approach can achieve the substantive environmental outcomes needed.

A plausible argument can be made that the hybrid implementation that occurred has enabled greater water recovery than if recovery efforts had relied on either subsidized infrastructure projects (PC 2010); or on regulation which would have resulted in an even greater political backlash from farmers. Compromises to address social and economic viability of communities may be inconsistent with a utopian neoliberal approach but enabled some progress towards environmental objectives. Nevertheless, it seems further reductions in extractions for irrigation will be needed to achieve sustainable outcomes in the MDB in the long term.

Case B: Coal Seam Gas Development in Southern Queensland

Context

The coal seam gas (CSG) industry expanded rapidly in southern Queensland, Australia from 2010, with 6734 wells drilled between 2010 and 2015 (Walton et al. 2015), and projected drilling of up to 40,000 wells over 25–50 years. Drilling is into water-filled coal seams to extract gas (mostly methane) that is condensed into liquefied natural gas (LNG). Underground gas belongs to the Queensland government which approves extraction by CSG companies. Companies negotiate property access and compensation with landholders who mainly use the surface for grazing and cropping.

Eighty percent of the LNG is exported, worth AUD\$16.55 billion in 2015–16 (APPEA 2015). The industry involved 18,000 direct and indirect jobs (mainly during construction), investment in infrastructure, and economic development in rural communities (QG 2010; APPEA 2015). Royalties were lower than expected at AUD\$129 million in 2015–16, but projected to increase to AUD\$518 million by 2018–19 (McCarthy 2015); and royalties (including LNG and coal) accounted for 5.9% of state revenue in 2017–18 (QG 2017).

Development of Neoliberal Hybrid Approaches

A hybrid approach to the CSG industry evolved over time, from an initially strong neoliberal stance that streamlined assessment processes and regulations in order to foster the industry. Legislation provided “an enabling environment for industry, allowing unlimited volumes of groundwater to be extracted as a by-product” (Tan, George, and Comino 2015, p. 1). While NWI (2004) water planning processes reduced water allocations for irrigated agriculture and introduced moratoriums on further development of agricultural bores, inequitably Queensland CSG operators were exempt from requiring a Water Extraction Licence under the *Water Act 2000 (Qld)* and an Underground Water Impact Report is not required until 14 months after production has commenced. Regulation of CSG was therefore light-handed compared to agriculture, and the outcome has been problematic environmentally.

Current and future negative public and private externalities are reported due to the extraction of 75–480 GL of groundwater per year (Biggs et al. 2012) resulting in aquifer

drawdown and localized surface and groundwater contamination from gas migration and leakages (NWC 2010a; Kaye et al. 2012; QWC 2012). Groundwater impacts may develop slowly but persist for long periods (Worley Parsons 2013). As a result of widespread concerns about these issues, the Gasfields Commission Queensland was established in 2013, as an independent statutory authority to review effectiveness of regulatory implementation. In 2014, the Queensland *Regional Planning Interests Act 2014* was introduced to protect priority agricultural areas, land uses and key aquifers. Belated regulations required each company to undertake social and environmental impact assessments, mitigate impacts, engage regularly with community groups and contribute to community programs. However the onus of proof is on landholders to prove water level losses in bores are caused by CSG before companies are required to “make good” any damage to aquifer levels.

A 2015 Commonwealth government review of the socioeconomic impacts of CSG development (Thomas 2015) concluded that the rapid development of CSG led to uncertainty around potential adverse physical effects on communities and future generations, and that an independent analysis of the cumulative impacts of multiple CSG-LNG projects would have been informative for planning and regulatory purposes. Proponents are now required to consider the cumulative impacts of developments in a region, but this might better be set in landscape-wide planning at a regional scale due to cumulative impacts of individual CSG developments and the irreversibility of impacts (Williams, Stubbs, and Milligan 2012; Tan, George, and Comino 2015).

Implications for Sustainability

The apparent privileging of the CSG industry has implications for sustainability. Despite increasing regulation of the CSG industry, undesirable outcomes have continued. Environmental concerns include management of underground water quantity and quality for affected communities (Walton et al. 2015), as well as dissection of habitat and increased weed and animal disease risks (Williams, Stubbs and Milligan 2012). Disproportionate impacts on agriculture also include loss of agricultural land (some temporary) (RIRDC 2013), disruption of agricultural operations, additional management time and increased costs particularly for cropping enterprises (Huth et al. 2014), disturbance of landholders, effects on physical and mental health (McCarron 2013; Mactaggart et al. 2017), possible reduction in property value, and community change (Walton et al. 2015). Most of these issues are not factored into compensation agreements. Meanwhile market factors had severe social impacts. During the construction phase, major housing shortages in CSG communities resulted in rents quadrupling within 9 years (Rifkin et al. 2015). Similar house price increases were driven partly by external property speculators. While economic opportunities increased markedly, local people noticed major changes in community identity (Everingham et al. 2014), reduction in social capital, and increased crime (Rifkin et al. 2015; Mactaggart et al. 2017), with Fly in–Fly out workers becoming an enclave in rural towns which morphed into resource industry communities.

An ongoing criticism of CSG management is the limited effectiveness of regulation in reducing social, environmental, and cumulative externalities, low government staffing

levels and the lack of independent industry oversight (Swayne 2012; Williams, Stubbs and Milligan 2012; de Rijke 2013a; Tan, George, and Comino 2015). The Queensland government is also criticized for its adaptive management principles which assume that regulations “will be able to be changed ... within a sufficient timeframe to avoid adverse impacts” (Swayne 2012 p. 7). This however relies on transparent monitoring and reporting by a primarily self-regulated industry, and their willingness to invest in rectifying environmental damage.

Current and potential social, economic, environmental and cumulative impacts involve a level of uncertainty about risks faced by future generations. The National Water Commission (NWC 2010 p. 3), before its demise, recommended that “full costs, including externalities of any environmental, social and economic water impacts and their management should be borne by the CSG companies”. Consistent with a neo-liberal approach, to date this has not occurred in Queensland.

While neo-liberalism strives for a “level playing field” of competitive markets rather than favoring some industries over others, public perception is that different regimes apply to the CSG industry. This is exemplified by the limited consultation, lack of transparency, and the approach of adaptive implementation of regulation for the CSG industry, as well as the tolerance of negative impacts of CSG industry on agriculture.

Case C: New Zealand’s Marine Resources Regime

Context

NZ’s offshore jurisdiction, 20 times its land mass, is one of the largest exclusive economic zones in the world. In 2013 NZ’s petroleum and minerals sector accounted for 2.5 per cent of GDP (\$NZ4.1 billion) and 6.2 per cent of exports (\$NZ2.7 billion). The offshore region has significant potential for the further development of minerals, oil and gas resources (Barton 2011; Venture Taranaki 2015).

The NZ Government is committed to making the country globally attractive for oil and gas development, with nearly \$NZ7 billion invested in the sector during the 2000s, much in the relatively undeveloped offshore region (MBIE 2013). NZ streamlined its permitting processes, made seismic and interpretive data freely available, provided tax deductions and relatively low international company tax rates, and changed environmental legislation to foster prospecting and exploration subject to standard conditions. This led to an increase in offshore exploration activity by international companies in recent years, accompanied by public protests by environmental groups, communities and Māori.

Development of Neoliberal Hybrid Approaches

Resources in the NZ marine environment are mostly managed through forms of allocation, consistent with a neoliberal agenda that defines resource property rights. Defined areas of ocean floor “block offers” are available for bids from exploration companies with the aim of maximizing exploration activity (de Wit and Barton 2014). The government surveys of the sea floor to provide potential bidders with detailed information are considered by some to be a form of subsidy (WWF 2013). Bids are

approved by the Minister of Energy and Resources, with resource management decision-making by the Environmental Protection Agency.

NZ's primary environmental and sustainability legislation, the *Resource Management Act 1991* (RMA), applies to all land, and marine areas out to 12 miles from shore. Indigenous rights are affirmed by *kaitiakitanga* (a Māori concept akin to stewardship); recognizing the principles of the Treaty of Waitangi (*Te Tiriti o Waitangi*); and requiring consultation with *Iwi* (tribal groups) in more situations than with the public generally. The original intent of the RMA was that economic development would not be pursued at the cost of degradation of social or environmental conditions. However, reviews of the RMA, derived from a perception that it constrains economic development, put greater limits on public involvement, leading to streamlined consenting processes (particularly for large-scale developments), and less emphasis on core sustainability principles (Palmer 2013). These changes to the RMA, in spite of strong critique (Wright 2013, p. 9), reflect the dominance of the neoliberal agenda in NZ resource management.

Beyond 12 miles from the shore, the *Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012* (EEZ&CS Act) applies, providing “tight rules for managing Aotearoa New Zealand’s exclusive economic zone and continental shelf” (Ruru and Suszko 2013). This is administered by the Environmental Protection Agency (EPA). While consistent with the purpose of the RMA, the EEZ&CS Act consenting process is closely aligned with neoliberal principles, with few formal opportunities for public engagement; e.g. oil and gas exploration does not require notification or public hearings. There is also no requirement for spatial planning, unlike under the RMA where the public can make submissions and be heard (de Wit and Barton 2014).

The EPA is required to consider applications for marine consents in line with sustainable management principles. In one case consent for proposed rock phosphate mining in marine environments was refused, suggesting that the balancing of economic and environmental interests is achievable. However, there is a surprising lack of constraint on marine developers, with no oversight of how an oil and gas well is drilled, and later decommissioned. This leaves the possibility of an inadequately closed-off well leaking (Barton 2011), potentially leaving a legacy cost.

Other legislation relating to the marine area brings a very different set of considerations. The *Marine and Coastal Area (Takutai Moana) Act 2011* placed ownership of the coastal marine area in the Crown, protected public use rights (access, recreation, navigation and fishing) and in doing so denied the right of Māori to claim customary marine use rights and title but did allow applications for customary marine rights and title where Māori could prove unbroken connection to the foreshore and seabed in each tribal area. So far no case for ownership has been tested under the legislation. Rights to seabed resources beyond 12 miles offshore remain legally undefined although tribal groups claim that these rights have never been extinguished. The Treaty of Waitangi has resulted in gradual settlement of claims on a case-by-case basis over the past 25 years, resulting in a new relationship between the Crown (the NZ Government) and *Iwi* (Tribal groups) whereby tribal groups are generally recognized as full partners in all dealings over their land and water territories.

The tension between the marine management regime and *Iwi* territorial claims was tested in 2010 when the NZ Government sold exploratory drilling rights for two blocks

in the offshore Raukumara Basin to Petrobas, a multinational petroleum corporation (Carr 2012). The Māori tribal group Te Whanau-a-Apanui (TWA) had inextinguishable (although not yet legally defined) rights relating to the offshore area under section 96 of the *Foreshore and Seabed Act 2004*. The Petrobas exploration right was seen as a restriction on TWA's right to exercise stewardship over their territories and resources, restricting customary gathering (e.g. subsistence gathering of seafood), and denying tribal interests in any non-marine resources, including oil and gas reserves. Many Iwi members were involved in vocal protests about both usurpation of their rights through the allocation of spatial rights forming a strong alliance with environmental groups based on potential environmental impacts. Reacting to protests potentially impacting NZ's attractiveness to exploration investors, the government introduced the "Anadarko amendment" in 2013, which removed the legal right to demonstrate at sea within 500 meters of ships or oil platforms. However, protests continued. The granting of 15-year exploration rights to Norwegian giant Statoil off the coast in the Far North of New Zealand led to further protests involving both Maori and environmental NGOs.

New Zealand's offshore resource management regime is thus shaped by an uneasy hybridization of neoliberalism. Governments have actively encouraged offshore mining by establishing commercial use-rights over common resources while reducing some forms of subsidization (Groser 2012). Legislative revision and threatened Indigenous rights enabled powerful market players while introducing an environmental management regime and outlawing protests at sea. The evolution of legal provisions, compared to a strategic integrated approach, has proliferated inconsistencies. For example, Section 45 of the EEZ&CS Act invites public or tribal engagement; yet other legal provisions limit engagement and deny the right to protest. The regime enables Iwi to apply for recognition of their rights, but at the same time limits expression of those rights to "customary" activities rather than full use-rights.

Implications for Sustainability

The ultimate outcome of the interaction between the three agendas of hybrid neoliberalism, environmental management and Indigenous rights in relation to NZ's offshore resources is as yet unclear. The lack of clarity is partly because, despite significant exploration by multinationals, there have been no major discoveries so much remains untested. Nevertheless, there is potential for a major offshore oil discovery to constrain the sustainability and Indigenous agendas in favor of economic development benefits.

Discussion

In arriving at our findings we have been cognizant, like previous researchers (e.g., Barnett and Pauling 2005; Burton and Peoples 2014) of the difficulties of assessing the implications of neoliberalism for sustainability given the impossibility of knowing what would have otherwise occurred (i.e. the counterfactual) (Castree 2011). We aimed to draw attention to the various forms of practical implementation of neoliberalism, without attempting to debate the finer points of neoliberal theory and its evolution (e.g. Peck 2013 differentiation of hybrid vs variegated neoliberalisation). We thus identify

how hybridization has played out in relation to progress toward sustainability, both in the literature and our case study analyses, rather than claiming that we provide “definitive, irrefutable proof of the impact of neoliberalism” (Burton and Peoples 2014, p. 92). See Table 1 for a summary.

A commitment to sustainable development means a commitment to impact assessment, equitable distribution of costs and benefits, participatory decision-making, the precautionary principle and intergenerational equity (NSED - COAG 1992; DPMC NZ 2003). We thus draw some conclusions about the experience of hybrid neoliberalism in relation to these principles in the three cases.

An obvious conclusion is that neoliberal precepts are not the sole influence on governance and environmental management, but play a defining and critical role in each case. The case studies also illustrate that neoliberal market instruments can contribute to efficient and effective development processes, making adjustments more palatable to industry stakeholders. We suggest that hybrid neoliberalism represents a continuation of the ongoing tension between economic development and environmental regulation that occurred from the 1970s onwards.

In spite of moderation under a hybridized approach, the cases illustrate the common critiques of neoliberalism: (a) privileging of industry interests; (b) costs shifted to the public and future generations; (c) public benefit measured mainly in immediate economic terms; and (d) streamlining of processes to reduce public involvement and transparency. We explain this as follows.

Consistent with the literature (Harvey 2007), each of the case studies revealed privileging of industries through legislation and incentives, including weak laws to address public concern about negative impacts that do not seriously constrain corporations in practice (Hudgins and Poole 2014):

- Weakened SDLs, payment for environmental water, retreat to costly infrastructure approaches and deficiencies in compliance served irrigators in the MDB to the detriment of downstream communities and the environment.
- Exemption from water rules, alleged government “bending” of standards and processes (Mercer, de Rijke, and Dressle 2014), and belated and inadequate regulation of impacts tacitly enabled capital accumulation by major CSG companies in Queensland to the disadvantage of rural communities and potential future costs to the environment; and
- Streamlining of regulation and implicit subsidies in NZ enabled potential profit for international offshore oil and gas exploration companies with implications for Indigenous rights and the environment.

Part of the hybridization we can observe, therefore, is that instruments benefitting commercial interests operate alongside the “pure market” agenda of neoliberalism, potentially giving double privilege to market players.

A characteristic of natural resource development and management is the potential for irreversible impacts that bear costs for future generations. The MDB water reform process appears to have only been partially successful in moderating state and private interests and over-riding personal and political agendas, resulting in a SDL that may not

Table 1. Comparison of the case studies.

Case Study	Themes		Hybrid Neoliberal features	Sustainability
Murray-Darling Basin	a) Environmental sustainability requires reallocation of water from irrigation b) Large public investments in water recovery were used to assuage concerns from irrigation interests		a) Market-based approach to environmental water recovery ('buy-backs') originally favored for economic efficiency reasons b) However, privileging of irrigation interests led to greater public investment in infrastructure-based recovery c) Limited stakeholder consultation initially was followed up with broader consultation once protests. a) Priority to creation of export wealth and royalties b) Legislation privileges the CSG industry over agriculture through inequitable regulation of water c) Inequitable benefit sharing and impacts on rural landholders d) Lack of transparency regarding information about CSG and risks	a) Progress with market-based approach meant greater recovery possible for the given budget b) Dominance of the infrastructure approach limited the overall environmental sustainability gains possible with the given budget
		a) Conflict between agriculture and CSG b) Development of short-term nonrenewable resource at expense of long-term environmental impact c) Uncertainty about long-term environmental impacts increases risks		a) Impact assessment regimes foster neoliberal agenda b) Long-term risk to water resources with little account taken of uncertainty c) Community destabilization d) Large social movement aligning agriculture, green and Indigenous interests e) 'Adaptive' response by government led to inadequate protection
Coal Seam Gas (CSG) in Southern Queensland			a) Not a purely neoliberal regime, but definitely one in which industry is favored over community and Indigenous interests, and global markets over local interests. b) Prioritisation of creation of monetary value through capital accumulation and economic growth c) Allocation of exclusive use rights – privatization of resources and space d) Focus on maintaining economic performance rather than distributing benefits	a) Evidence that offshore regime does have environmental 'teeth' despite reduced opportunities for public input b) However exploration and many other activities require no consenting process, subject to some environmental standards c) Economic development promoted short term economic gain rather than long term sustainable resource use. d) Poor balancing of cultural, environmental and economic interests. Community and Iwi voices raised through protest against the overriding of recognized tribal interests. Legislative and political process of intergenerational Kaitiakitanga neglected which includes: the exercise of guardianship; Mana whenua - rohe (area over which iwi has traditional authority); and governance with and by tangata whenua
New Zealand's Marine environment – offshore oil	a) Resource management regime reflects a hybrid of agendas b) Local versus international control over marine resources			

achieve future sustainability goals. The CSG case demonstrates the lack of strategic consideration of cumulative impacts, leading to uncertainty and potential unintended consequences, reflecting indifference to the future legacy (McNutt 2014). In this case too, adaptive management was misappropriated to serve industry interests as a way around the precautionary principle, thereby undermining long-term sustainability.

Neoliberalism provides an intellectually-justified (by economics) and publicly-digestible discursive framework that corporations, and political and bureaucratic allies, deploy to fend off threats to their prospects of capital accumulation (Harvey 2007). In our case studies, governments justified the privileging of private interests (whether overtly admitted or not) by the resulting public benefit. However, like Willow (2016) referring to the Ohio shale energy debate, we found public benefits mainly described in economic terms: food productivity in the MDB; royalties and jobs from CSG; and export income in NZ, with short-term employment and economic development in regional areas a prime driver in all three cases. As with other hybrid neoliberal approaches, economic development was privileged over broader public interests (Parkins et al. 2016); social and environmental values were externalized due to lack of effective intervention by government (Burton and Peoples 2014); and government oversight was compromised by the attractiveness to governments of export and royalty revenue and regional economic development (Mercer, de Rijke, and Dressle 2014, p. 283). Similar to other parts of the world (Willow 2016), citizens expressed a more holistic perspective that links well-being to non-economic elements such as human health, community continuity, political empowerment, and environmental sustainability. In the New Zealand example, as in Canada (Rossiter and Wood 2016), Indigenous interests were diluted through competing and unclear legislative regimes. If sustainable development continues to be a goal of governments, we need a clearer definition of public benefit or public interest in policy and legislation that goes beyond immediate regional employment to include more holistic set of social, cultural and environmental values over the longer term (e.g. NWI (COAG 2004, p. 29)

Our cases support the contention that the pursuit of “smaller” government and “efficient” governance under hybrid neoliberalism (embraced by New Public Management in Australia) can circumvent public rights for consultation provided for under statutory mechanisms such as impact assessment, development or other appeal rights. Meritorious attributes of existing instruments, such as impact assessment have been downplayed (Womersley et al. 2014), reducing public trust in governments which are expected to apply these instruments impartially. For instance, public objection to CSG development focused on the lack of application of water legislation to mining and CSG, and impact assessments that did not adequately safeguard short and long-term human and environmental health. In NZ, regulation addressed a prior vacuum in environmental management in the region beyond 12 miles offshore, but in ways that limit public protest and input into decision making. Furthermore, tailored communication and lack of access to information may facilitate less democratic decision-making (Hudgins and Poole 2014). Mercer, de Rijke, and Dressle (2014) reported on Queensland government discourses in which perspectives other than those supporting major export income earners were seen as unreasonable and biased, with the state “shutting out expertise that does not conform to the goals of industry” (Hudgins and Poole 2014, p. 305). Indeed, the major protests evident in each of the cases make clear

that the public does not accept neoliberalism as a substitute for broader public participation, regulation and planning in environmental management.

Similar to the Canadian experience (Rossiter and Wood 2016), the NZ case suggests that making countries attractive for investment can diminish Indigenous claims. In NZ, where Māori interests have statutory guarantees under the Treaty of Waitangi and interacting legislation including the RMA, Indigenous voices and legal actions have been important in the debates about offshore resources management. Indigenous peoples lack the same standing in Australia: in spite of consultation with Aboriginal traditional owners in MDB Plan development, there is little evidence of their impact on the Plan.

The hybrid neoliberalism practised in the three case studies is characterized by inconsistencies, with piecemeal approaches to economic development. It is politically charged and contested, resulting in lack of trust in government by members of the public and Indigenous groups. Somewhat ironically, in these three cases, delegation of decisions to the market did not ease pressures on governments to bend neoliberal approaches. If these cases are legitimate tests of the application of neoliberal philosophies and its public acceptance, more realignments are necessary to achieve the three pillars of sustainability, and to safeguard public interests. Since communities expect that governments will look after the interests of future generations, we argue for retention and strengthening of sustainability principles in legislation, policy and strategic regulation, rather than abandoning the concept because it has not lived up to its promises.

We suggest a holistic sustainability discourse can be used “to actively or implicitly challenge neoliberal versions of reality ... inspiring practical action” in broader contestations about land and resource use (Willow 2016, p. 770). Ongoing critical analysis of future policy that integrates yet differentiates market and non-market approaches and subsequent outcomes in relation to sustainability may provide insight towards conceptual improvements in both neoliberalism and sustainability.

Conclusions

In this article, we respond to the call for continued analysis of the global experiment with neoliberalism through cases at multiple scales and in some depth to identify common patterns (Bakker 2010; Castree 2011). We do this by examining the application of neoliberal approaches to natural resource management (water, gas and seabed fossil fuels). (a) We identified ways in which hybrid neoliberal approaches have destabilized the sustainable development agenda. We found evidence of privileging of industry interests; (b) costs shifted to the public and future generations; (c) public benefit measured mainly in immediate economic terms; and (d) streamlining of processes to reduce public involvement and transparency. Our cases suggest that piecemeal hybrid approaches are inadequate in modifying the influence of neoliberalism’s market-focused philosophy to achieve the environmental, cultural and societal benefits that citizens have a right to expect from resource development under a sustainability paradigm.

We maintain that core principles of sustainable development cannot be abandoned; sustainability must remain central to the governance agenda as society addresses new concepts such as resilience and climate change, and latent ones such as Indigenous rights. Our message to policy-makers, environmental managers and the community is

that in our complex society, policy processes must take a strategic approach, evaluating and debating options and the range of instruments, not just those preoccupied with freeing up markets, to achieve broader objectives that contribute to societal well-being.

Note

1. COAG is the peak intergovernmental forum in Australia. Its members are the Prime Minister, state and territory premiers and chief ministers, and the president of the Australian Local Government Association.

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